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FOR INTERNAL REVIEW ONLY

ECOLOGICAL RISK ASSESSMENT FOR WG KRUMMRICH PLANT

SAUGET ST. CLAIR COUNTY, ILLINOIS

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ACRONYMS

AhR	Aryl Hydrocarbon Receptor
AWQC	Ambient Water Quality Criteria
COPC	Compounds of Potential Concern
DDA	Downstream of Discharge Area (Reference Area)
DDE	Dichlorodiphenyl dichloroythelene, a breakdown product of DDT
DDT	Dichlorodiphenyl trichloroethane, an insecticide
EDQL	Ecological Data Quality Level
EMPC	Estimated Maximum Potential Concentration
FFG	Functional Feeding Groups
IEPA	Illinois Environmental Protection Agency
J	Data Qualifier, Indicates Estimated Value
LEL	Lowest Effect Levels
LOAEL	Lowest Observed Adverse Effect Level
M	Data qualifier; indicates estimated maximum potential concentrations for dioxins
MCPA	2-Methyl-4-chlorophenoxyacetic acid, an herbicide
MCPP	2-(2-Methyl-4-chlorophexoxy) propanoic acid, an herbicide
NOAEL	No Observed Adverse Effect Level
PAH	Polynuclear Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyls
PDA	Plume Discharge Area (Study Area - WGK Plant aquatic habitat adjacent to Site R)
PEC	Probable Effects Concentrations
QAPP/FSP	Quality Assurance Project Plan/Field-Sampling Plan
RBC	Risk Based Concentration
SEL	Severe Effect Levels
SVOC	Semi-volatile Organic Compounds
TCDD	2,3,7,8-tetrachlorodibenzo-p-dioxin
TEC	Threshold Effect Concentrations
TEF	Toxic Equivalency Factor
TEQ	Toxic Equivalency Quotient
TOC	Total Organic Carbon
TRV	Toxicity Reference Value
U	Data Qualifier; indicates not detected above given detection limit
UDA	Upstream of Discharge Area (Reference Area)
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VOC	Volatile Organic Compounds

EXECUTIVE SUMMARY

This baseline ecological risk assessment for the aquatic habitat adjacent to the W.G. Krummrich Plant in Sauget, Illinois [USEPA Docket Number R8H-5-00-003], addresses surface water and sediment in the Mississippi River adjacent to Site R and extending approximately 300 feet into the river channel.

Historical groundwater data indicate that VOCs and SVOCs are present in groundwater at Site R. The reconnaissance survey generally determined the extent of potential contamination in the nearshore sediments and surface waters of the Mississippi River adjacent to Site R. The ecological sampling targeted the compounds known to be in groundwater, VOCs and SVOCs, in the ecologically important media of concern in the nearshore areas of the Mississippi River. Because data are limited on the presence of some compounds in groundwater, the list of analytes was expanded at the request of USEPA to also include pesticides, herbicides, dioxins/dibenzofurans, and PCBs.

In an aquatic system such as the Mississippi River, various physical, chemical, and biological transport mechanisms can affect the fate of COPCs. In this case the potential source of COPCs is groundwater. Therefore, we consider the following fate and transport routes in the analysis:

- migration from groundwater to sediment;
- migration from sediment into pore water and overlying surface water;
- direct migration from groundwater to porewater to surface water;
- dilution in overlying surface water;
- particulate runoff from the watershed;
- erosion in faster moving river segments;
- deposition in areas of sluggishly flowing waters; and
- resuspension of particulates from the river bed.

The major biological mechanisms affecting fate and transport are:

- biological uptake directly from environmental media;
- bioaccumulation through ingestion of prey or media; and
- biomagnification through the food chain.

Assessment endpoints include:

- Sustainability (survival, growth, and reproduction) of warm water fish species typical of those found in similar habitats (incorporates the assessment of aquatic invertebrates).

- Survival, growth, and reproduction of local populations of aquatic wildlife represented by osprey, great blue heron, and river otter.

Results indicate that:

- Fish species are at risk from exposure to sediment based on the results of toxicity testing.
- Fish prey, such as planktonic invertebrates, are at risk from exposure to surface water based on toxicity tests. Planktonic invertebrates do serve as a prey base for fish species, however, the assessment assumes that they are exposed to surface water at the sediment-surface water interface. In reality, they are exposed to dynamic water concentrations reflecting dilution and dispersion in the high-energy riverine environment. Benthic invertebrates are also at risk from exposure to sediment based on the laboratory toxicity tests. However, the inherent high-energy physical environment in the PDA in the Mississippi River limits the number of benthic invertebrates. Therefore, benthic invertebrates are not abundant and are not considered an important prey component for fish at the PDA.
- Fish are accumulating compounds, specifically MCPP, detected in PDA sediments but not detected in reference sediments.
- There is low potential risk to wildlife foraging on the media (sediment, surface water and fish) in PDA.
- There are a number of compounds without applicable sediment, surface water or tissue guidelines. Comparisons of PDA concentrations to reference concentrations indicate that a subset are found in concentrations in PDA media that exceed the concentrations in reference media.
- In general, the impacts occur within 300 feet of the shoreline. All toxicity tests resulting in potential toxicity occurred within 150 feet of shore, with the exception of one station (PDA-4) at 300 feet. This station is located downstream of the wing dam in an area where surface waters are more protected from the strong currents.
- VOCs, SVOCs and one herbicide are elevated at the surface water stations with toxicity, and VOCs, and herbicides are elevated at the sediment stations with toxicity.

1.0 INTRODUCTION

This baseline ecological risk assessment for the aquatic habitat adjacent to the W.G. Krummrich Plant in Sauget, Illinois [USEPA Docket Number R8H-5-00-003], addresses surface water and sediment in the Mississippi River adjacent to Site R. Figure 1-1 provides the site locus. The risk assessment follows the work plan for the project (Ecological Risk Assessment Work Plan for W.G. Krummrich Facility[1], Sauget, Illinois, Prepared for Solutia, Inc., St. Louis, MO, Menzie-Cura & Associates, Inc., October 17, 2000 (Working Draft)).

The ecological risk assessment focuses on the portion of the Mississippi River adjacent to Site R and extending approximately 300 feet into the river channel. The general boundaries of the study area were defined during a reconnaissance survey completed in September 2000 (Section 2.1; Figure 1-1). The study area will be referred to as the Plume Discharge Area (PDA) at the WGK Plant throughout the risk assessment.

1.1 Regulatory Guidance

The assessment follows current USEPA guidance in:

> *Ecological Risk Assessment Guidance For Superfund: Process For Designing and Conducting Ecological Risk Assessments* (USEPA, 1997); and
>
> *Guidelines for Ecological Risk Assessment* (EPA/630/R-95/002F, April 1998).

The assessment also applies the weight-of-evidence approach as outlined in:

> Menzie, C.A., M. Hope Henning, J. Cura, K. Finkelstein, J. Gentile, J. Maughan, D. Mitchell, S. Petron, B. Potocki, S. Svirsky, P. Tyler. 1996. Special report of the Massachusetts weight-of-evidence workgroup: A weight-of-evidence approach for evaluating ecological risks. *Human and Ecological Risk Assessment:* (HERA): **2**(2)277-304.

[1] **Note:** The Ecological Work Plan for the WG Krummrich Plant has not been officially approved by US EPA ← Remove

2.0 BACKGROUND

This section provides a description of the study area (PDA) and reference areas (downstream of discharge area - DDA, and upstream of discharge area - UDA).

2.1 PDA Study Area

In September 2000, Menzie-Cura & Associates, Inc. (MCA) conducted a reconnaissance survey to identify the area of concern. The reconnaissance survey included five transects between the northern and southern boundaries of Site R. Site R extends from Riverview Avenue approximately 2000 ft south to a high power transmission line tower on the eastern shore of the Mississippi River in Sauget, Illinois. The survey included one transect that extended beyond the midpoint of the river approximately 1300 feet from the eastern shoreline. Based on the volatile organic chemical (VOC) analyses, we concluded that the primary sampling program should occur within 300 feet of the eastern shoreline.

We developed a Quality Assurance Project Plan and Field Sampling Plan (MCA, November 2000). In October and November 2000, we completed the collection of surface water, sediment and fish tissue samples for analysis in the ecological risk assessment. Two transects with a coarse sand sediment type and one transect with silty sediments located south of a wing dam were included in the assessment. We located the transects at the midpoint of Site R and one each at half the distance from the midpoint to the southern and northern boundaries of Site R. Sample stations were located at 50, 150 and 300 feet from the shoreline (Figure 2-1, Figure 2-2, and Appendix B). These samples are referred to as PDA samples. During the sampling effort, water depths ranged from 4 ft to 14.5 ft. The river gage height varied from 2.03 feet to 0.08 feet, while flow varied from 78,800 cubic feet per second (CFS) to 97,500 cfs during the field sampling program (USGS, 2000). Both flow and gage height were below the annual average. The USGS Flow Data for the Mississippi River in St. Louis, MO for the year 2000 is:

	Mean Gage Height (feet)	Mean Stream Flow (CFS)
Max	25.38	387,000.00
Min	-2.39	65,000.00
Avg	6.04	135,716.44

Appendix F-1 provides additional flow data.

2.2 Reference Areas (DDA and UDA)

Reference areas for the ecological risk assessment were selected during the ecological site reconnaissance and during the main sampling event.

The following criteria were applied for the selection of reference areas:

a) physical similarity in terms of sediment type, flow/exposure, and depth
b) location away from direct influence of industrial discharges
c) both upstream and downstream of PDA

The selection of reference sampling stations was discussed with Mr. Eric Monschein of Tetra Tech, who served as the USEPA representative during the Reconnaissance Survey.

One reference area is located in close proximity to the PDA. Two stations, reviewed during the reconnaissance survey, were selected north of the old power plant. We included one station with coarse sediments and one station with silty sediments consistent with the two transect types found at the PDA. The upstream sample stations are referred to as Upstream from Discharge Area (UDA). A second reference area was selected downstream from the PDA along the Cahokia Chute. A coarse sediment station was selected approximately two miles downstream and a silty sediment station was selected four and a half miles downstream from the PDA. The downstream samples are referred to as Downstream of Discharge Area (DDA).

The reference station locations are identified in Figure 2-3 and photographs in Appendix B.

2.3 Comparison of PDA to Reference Areas (UDA and DDA)

2.3.1 Sediment

The PDA, UDA and DDA sediments compare well based on sediment grain size and total organic carbon (TOC) content (Appendix F-2). The PDA stations generally had a larger medium sand component, but were similar in terms of the fine sand component. The coarse stations contained over 90% fine/medium sand. The silty stations within the PDA, UDA and DDA have similar clay components, however the PDA stations contained a larger fine sand component. Grain size should not be a limiting comparative factor.

TOC was generally low throughout all stations (Appendix F-2). TOC varied from 324 mg/kg dry weight to 700 mg/kg dry weight in the PDA coarse sediment transects, while the comparable coarse sediment UDA and DDA reference stations had TOC concentrations of 438 mg/kg dw UDA to 311 mg/kg dry weight at DDA. The TOC was higher, as expected, at the silty stations. The PDA silty sediment transect had TOC concentrations that varied from 2,805 mg/kg dry weight to 10,200 mg/kg dry weight compared to the UDA TOC concentration of 11,800 mg/kg dry weight and a DDA TOC concentration of 8,170 mg/kg dry weight. The percent TOC was generally less than 1% throughout PDA, DDA and UDA (Appendix F-2). TOC is unlikely to be

a limiting comparative factor.

2.3.2 Surface Water

Surface water quality measurements are provided in Appendix F-3. Dissolved oxygen levels at sample collection depth at the sediment - surface water interface varied from 8.64 mg/L to 9.82 mg/L at PDA, 7.62 mg/L to 10.57 mg/L at UDA and 7.77 mg/L to 9.08 mg/L at DDA. Total dissolved solids (TDS) varied from 0.287 g/L to 0.344 g/L at PDA stations, from 0.29 g/L to 0.317 g/L at UDA stations and from 0.336 g/L to 0.367 g/L at DDA stations. Turbidity varied from 34.4 ntu to 39.2 ntu at PDA stations, from 37.8 ntu to 47.8 ntu at UDA stations, and from 50.2 ntu to 55.6 ntu at DDA stations. Turbidity appears to be elevated at DDA stations compared to UDA and PDA stations, however the difference is not expected to impact comparisons of sediment conditions.

2.3.3 Habitat

In general, the PDA is bounded by steep embankments lined with rip-rap. A few scattered structures, such as a wing dam and a sunken barge, offer some access points for aquatic birds and mammals and potential protection for fish. There were no bordering wetlands or appreciable bordering vegetation. The reference areas were selected to represent similar, industrial habitats. UDA is located upstream of the old power plant and immediately south of a railroad bridge. The shoreline at UDA is less obstructed. The upland portion is vegetated grading into a sandy shoreline. DDA is located near the Cahokia Chute and Arsenal Island. This reference area consists of a large sand bar, less developed uplands, banks that provide direct access to the river, and a number of partially sunken snags. Certain portions of DDA are protected from strong currents. All three habitats are located in an industrialized area. The river is a major shipping route and there are number of coal, grain and other barge terminals upstream of all areas (Appendix B).

3.0 SCREENING-LEVEL ASSESSMENT

The screening-level assessment provides a summary of the following (USEPA 1997):

- Environmental setting and contaminants known or suspected to exist at the site and the maximum concentrations present (for each medium);
- Contaminant fate and transport mechanisms that may exist at the site;
- The mechanisms of ecotoxicity associated with contaminants and likely categories of receptors that could be affected;
- The complete exposure pathways that might exist at the site from contaminant sources to receptors that could be affected; and
- Screening ecotoxicity values equivalent to chronic No Observed Adverse Effects Levels (NOAEL) based on conservative assumptions.

The screening-level assessment may conclude that site data indicate either:

> A negligible ecological risk and therefore the site requires no further study; or, there is (or might be) a risk of adverse ecological effects, and the ecological risk assessment process will continue.

Groundwater samples at Site R have exhibited elevated levels of organic chemicals. Because groundwater discharges into the Mississippi River and because volatile organic chemicals were observed in shoreline sediments within the river, it appears that this exposure pathway is complete. This screening analysis indicates that there is potential risk, and that the site warrants further investigation and an ecological risk assessment. The groundwater information essentially provides the screening analyses required in Steps 1 and 2 of the guidance (USEPA, 1997) to warrant further investigation. Therefore, the remainder of the ecological risk assessment focuses on Steps 3 through 7 of USEPA Guidance for a baseline ecological risk assessment at the PDA, in the Mississippi River adjacent to "Site R" as shown on Figure 2-3.

4.0 PROBLEM FORMULATION

The problem formulation phase of an ecological risk assessment develops the nature of the problem and presents a plan for analyzing data and characterizing risk. The problem formulation section of this assessment defines the assessment and presents a conceptual model that describes key relationships between potential stressors and assessment endpoints. Assessment endpoints are expressions of the environmental value to be protected at a site that are selected by the consensus of the regulators, the regulated community, and state or local concerns.

4.1 Conceptual Site Model

The foundation of an ecological risk assessment is the conceptual site model. According to USEPA guidance, the conceptual model addresses:

environmental setting and contaminants known or suspected to exist at the site;

contaminant fate and transport mechanisms;

mechanisms of ecotoxicity and likely categories of potentially affected receptors;

complete exposure pathways.

Figure 4-1 provides a diagram of the Ecological Conceptual Site Model. It illustrates transport of compounds from the PDA media through the potentially affected habitats to important ecological receptors.

4.1.1 Environmental Setting and Contaminants Known or Suspected to Exist at The Site

Historical groundwater data indicate that VOCs and semi-volatile organic compounds (SVOC) are present in groundwater at Site R. The reconnaissance survey generally determined the extent of potential contamination in the nearshore sediments and surface waters of the Mississippi River. The ecological sampling targeted the compounds known to be in groundwater, VOCs and SVOCs, in the ecologically important media of concern in the nearshore areas of the Mississippi River. Because data are limited on the presence of some compounds in groundwater, the list of analytes was expanded at the request of USEPA to also include pesticides, herbicides, dioxins/dibenzofurans, and PCBs. The compounds of potential concern (COPCs) are selected in Section 6 of this report

The environmental setting is the aquatic environment of the Mississippi River constrained by the banks of the river. We did not identify any wetland areas in the vicinity of the PDA. The shoreline consists of a steep bank of rocks ('rip-rap') (Appendix B).

4.1.2 Contaminant Fate and Transport Mechanisms

In an aquatic system such as the Mississippi River, various physical, chemical, and biological transport mechanisms can affect the fate of COPCs. The COPCs listed adsorb onto particulate matter to varying degrees. Chemicals with lower particle affinities, such as VOCs, may be more subject to volatilization and dissolution in and transport by surface water and partitioning to pore water. Increasing solubility generally correlates with increasing bioavailability; although, in general, the site-related chemicals of potential concern are not very soluble in water. Therefore, the conceptual model addresses mechanisms affecting COPC distribution in aquatic systems. These include:

migration from groundwater to sediment;

migration from sediment into pore water and overlying surface water;

direct migration from groundwater to porewater to surface water;

dilution in overlying surface water;

particulate runoff from the watershed;

erosion in faster moving river segments;

deposition in areas of sluggishly flowing waters; and

resuspension of particulates from the river bed.

The major biological mechanisms affecting fate and transport are:

biological uptake directly from environmental media;

bioaccumulation through ingestion of prey or media; and

biomagnification through the food chain.

Several of the COPCs are subject to one or all of these biological fate and transport mechanisms.

4.1.3 Mechanisms of Ecotoxicity and Likely Categories of Potentially Affected Receptors

The COPCs may affect the survival and reproductive capacity of benthic biota, fish, invertebrates, and wildlife. The categories of likely potentially affected receptors for an aquatic system such as the Mississippi River include:

The benthic macroinvertebrate community;

warm water fish (e.g., shad, drum, catfish);

piscivorous birds (e.g., great blue heron, osprey); and

aquatic mammals (e.g., river otter) that feed on fish.

Section 4.2 provides more detail on these receptors.

4.1.4 Complete Exposure Pathways

The USEPA guidance indicates that the risk assessment must identify complete exposure pathways before a quantitative evaluation of toxicity to insure that the assessment focuses on COPCs that may reach ecological receptors. The likely complete exposure pathways at the PDA are:

Sediment to benthic invertebrates via direct contact and ingestion;

Surface water to invertebrates and fish through direct contact and ingestion;

Benthic biota to higher order predators (e.g., fish) through the food chain; and,

Fish to piscivorous fish, mammals, or birds via ingestion.

Based on our habitat survey, we did not observe submerged or emergent aquatic vegetation at the PDA.

4.2 Identification of Receptors

This subsection of the ecological risk assessment identifies the receptors and provides the rationale for their selection as representative of the species that occur or are likely to occur near the PDA. This subsection also provides an ecological characterization of each receptor for use in developing the exposure assessment.

The selected species represent different feeding guilds. A guild is a group of animals within a habitat that use resources in the same way. Coexisting members of guilds are similar in terms of their habitat requirements, dietary habits, and functional relationships with other species in the habitat. Guilds may be organized into potential receptor groups. The use of the guild approach allows focused integration of many variables related to potential exposure. These variables include characteristics of COPCs (toxicity, bioaccumulation, and mode of action) and characteristics of potential receptors (habitat, range and feeding requirements, and relationships between species). This approach evaluates potential exposures by considering the major feeding guilds found in a habitat. It is assumed that evaluation of the potential effects of COPCs on the representative species will be indicative of the potential effects of COPCs to individual member classes of organisms within each feeding guild.

The selected receptors represent those types of organisms most likely to encounter the contaminants of concern at the PDA. They include a reasonable (although not comprehensive) cross-section of the major functional and structural components of the ecosystem under study

based on:

Relative abundance and ecological importance within the selected habitats;

Availability and quality of applicable toxicological literature;

Relative sensitivity to the contaminants of concern;

Trophic status;

Relative mobility and local feeding ranges;

Ability to bioaccumulate contaminants of concern.

The selected species represent the ecological community and its sensitivity to the contaminants of concern and were arrived at based, in part, on knowledge of the area and on discussions with the USEPA and local professional fishermen. The ecological receptors selected for evaluation include: benthic invertebrates as a prey base for fish, local fin fish, great blue heron, osprey, and river otter.

Benthic invertebrates

Benthic invertebrates are potential receptor species in the Mississippi River because they:

Live within the sediment and, therefore, have the greatest exposure to sediment;

Provide food for bottom-feeding fish species; and

Are relatively immobile (sessile) in habit, and therefore their general health and condition reflects local conditions.

Warm Water Fish Species

Warm water resident fish species were selected to reflect local sediment and water quality conditions. The typical warm water fish species such as the gizzard shad and bottom feeding fish such as channel catfish and drum are abundant local residents with a limited foraging range. In addition to these species, we also collected buffalofish in support of the human health risk assessment. These organisms are potential receptor species representing local fish because they are (Appendix F-4):

Common Mississippi River residents;

Exposed to sediment as well as surface water;

Represent fish and higher order predators feeding on smaller fish and invertebrates; and

Serve as a prey base for avian and mammalian species.

In this assessment, drum, gizzard shad and channel catfish represent major groups of fish in the Mississippi River. They represent a bottom feeder, forage fish and a predator/omnivore bottom feeding fish, respectively.

Gizzard Shad (*Dorosoma cepedianum*)

The gizzard shad is one of the most common and widely distributed fish in Missouri waterways. The gizzard shad is an omnivore feeding on free floating algae, small aquatic insect larvae, detritus and zooplankton. They inhabit pools and backwater areas and serve as an important prey base for game fish. The gizzard shad is the smallest of the three fish species we examine (Pflieger, 1997).

Gizzard shad are a potential receptor species because they:

Are exposed directly to surface water and feed on prey that inhabit the water column;

They are a common species; and

They serve as a prey base for higher trophic predators in the Mississippi River.

Gizzard shad represent a forage fish species in the Mississippi River.

Channel Catfish (*Ictalurus punctatus)*

The channel catfish is the most abundant catfish in Missouri waterways. The channel catfish prefers turbid pools and deep waters with structures. It is a bottom feeder with a diverse diet including fish, insects, crayfish, mollusks and plant material. The channel catfish is the largest of the three species we examined (Pflieger, 1997) (Appendix B).

Channel catfish are a potential receptor species because they:

Are exposed directly to surface water and sediment and feed on prey that inhabit the sediments;

They are a common species; and

They consume fish and also serve as a prey base for higher trophic predators in the Mississippi River.

Channel catfish represent a larger predator and bottom-feeding fish species in the Mississippi River.

Drum (*Aplodinotus grunniens)*

The drum is an abundant fish species in Missouri waterways. The drum is tolerant of high turbidity and lives in close association with the bottom. It is a bottom feeder with a diverse diet including mollusks, fish and aquatic insect larvae (Pflieger, 1997) (Appendix B).

Drum are a potential receptor species because:

They live on or in close association with the bottom;

They are a common species; and

They consume fish and also serve as a prey base for higher trophic predators in the Mississippi River.

Drum represent a bottom-feeding fish species in the Mississippi River.

Aquatic Birds

We have selected great blue heron and osprey to represent aquatic birds feeding at the PDA for at least a portion of the time.

Great Blue Heron (*Ardea herodias*)

The great blue heron inhabits salt and freshwater environments, typically shallow waters and shores of lakes, flooded gravel pits, marshes and oceans. In marsh environments, the great blue heron is an opportunistic feeder; they prefer fish, but they will also eat amphibians, reptiles, crustaceans, insects, birds, and mammals. The diet varies but may include up to 100% fish. Great blue heron tend to forage near nesting sites and forage by slowly wading in shallow waters in search of small fish or invertebrates (USEPA, 1993).

These organisms are potential receptor species because they:

Consume fish;

The foraging area is comparable to the PDA area (at the lower end of the foraging range); and

Heron represent a higher trophic level predator on the Mississippi River.

Great blue heron, therefore, represent piscivorous birds.

Osprey (*Pandion haliaetus*)

The osprey is a large bird of prey that is almost exclusively piscivorous. Osprey nest in dead trees or human-made structures in close proximity to open, shallow water and plentiful supplies of fish (USEPA 1993). They are associated with larger rivers, lakes and reservoirs (EPA 1993). Osprey hover and then dive at shallow swimming fish which they capture using their talons (USEPA 1993). They commonly consume the entire fish except the larger bones. The home range for an osprey is variable, but in general, osprey use a larger foraging area than the heron. In addition, the osprey consume larger fish than the heron.

Osprey are a potential receptor species because they:

Consume fish;

Live near the water; and

Represent a higher trophic level predator on the Mississippi River.

Osprey, therefore, represent a bird species with a larger foraging area that consume fish.

Aquatic Mammals

This assessment assumes that river otter represent aquatic mammals in the Mississippi River.

River Otter (*Lutra canadensis*)

The river otter can be found in primarily freshwater but also saltwater environments, but seems to prefer flowing-water habitats rather than still water. It has been found in lakes, marshes, streams, and seashores. It consumes largely fish, but is opportunistic and will consume aquatic invertebrates (crabs, crayfish, etc.), aquatic insects, amphibians, birds (e.g. ducks), small or young mammals, and turtles. They may also sift through sediment for food. The otter dens in banks, in hollow logs, or similar burrow-like places. Home range varies depending on habitat and sex, but an approximate measure is 300 hectares.

River otters are a potential receptor species because they:

Consume fish and aquatic invertebrates;

Live in or near the water; and

Are a higher trophic level predator in the Mississippi River.

Although we do not expect river otters to utilize the PDA because of the industrial shoreline, they are a higher trophic level, fishing-eating, sensitive aquatic mammal species and warrant inclusion as a representative of this guild.

5.0 SELECTION OF ASSESSMENT ENDPOINTS AND MEASURES OF EFFECTS

5.1 Assessment Endpoints

Assessment endpoints are expressions of the environmental value to be protected at a site. Assessment endpoints are often not directly measurable. Therefore, the assessment employs measures of effects. These are biological or measurable ecological characteristics which reflect the assessment endpoint (USEPA, 1997). Where the assessment endpoint is not directly measurable, the use of a measure of effect may result in some uncertainty in the risk characterization. Ultimately, the selection of assessment endpoints requires the consensus of the regulators, the regulated community, and state or local concerns. The following assessment endpoints were selected for this ecological risk assessment:

Sustainability (survival, growth, and reproduction) of warm water fish species typical of those found in similar habitats (incorporates the assessment of aquatic invertebrates).

Survival, growth, and reproduction of local populations of aquatic wildlife represented by osprey, great blue heron, and river otter.

The assessment evaluates risk relative to these assessment endpoints in the Mississippi River adjacent to the WGK Plant (PDA) (Table 5-1).

5.2 Measures of Effects

The measures of effect direct data collection needs for the baseline ecological risk assessment. They provide the actual measurements for estimating risk. A weight-of-evidence approach (Menzie et al., 1996) weighs each of the measures of effects by considering:

Strength of association between the measure of effects and assessment endpoint;

Data quality; and

Study design and execution.

Strength of association refers to how well a measure of effect represents an assessment endpoint. The greater the strength of association between the measurement and assessment endpoint, the greater the weight given to that measure of effect in the risk analysis.

The weight given a measure of effect also depends on the quality of the data as well as the overall study design and execution. The data developed in the QAPP and collected consistent with the Field Sampling Plan in the QAPP (Menzie-Cura & Associates, Inc., November 2000) provide information to evaluate each selected measure.

There is considerable uncertainty associated with estimating risks because ecological systems

are complex and exhibit high natural variability. Measures of effect typically have specific strengths and weaknesses related to the factors discussed above. Therefore, it is common practice to use more than one measure of effect to evaluate each assessment endpoint.

The assessment endpoints and associated measures of effect are summarized in Table 5-1.

6.0 EXPOSURE ASSESSMENT

This section describes the data used in this ecological risk assessment and selects COPCs for assessment.

6.1 Data used in Ecological Risk Assessment

The chemical data used in this assessment were collected in October/November 2000 specifically for this project. The data collection followed the Quality Assurance Project Plan/Field-Sampling Plan (QAPP/FSP) for the project (Ecological Risk Assessment Quality Assurance Project for WG Krummrich Facility, Prepared for Solutia, Inc., St. Louis, MO, by Menzie-Cura & Associates, Inc., November 15, 2000). The QAPP includes sampling and analysis for dioxin congeners, herbicides, PCBs, organochlorine pesticides, SVOCs, and VOCs.

The data and data validation are presented in:

> WG Krummrich Data Usability Review Reports, prepared for Solutia Inc., St. Louis, MO, by New Environmental Horizons, Inc., February 2001.

6.1.1 Sampling Locations

The chemical data used in this ecological risk assessment are described by medium:

Surface water[2]: Surface water samples were collected from approximately 2 ft above the bottom at each station. Surface water was collected at the sediment - surface water interface because groundwater is the source of COPCs. VOCs and SVOCs likely migrate from groundwater to sediment and/or pore water and surface water. The river system dilutes and disperses concentrations throughout the water column. Surface water sampling includes collection at the PDA (9 samples), UDA (2 samples) and DDA (2 samples). The locations are identified on Figure 2-3.

Sediment[3]: Surface sediment samples were collected from approximately the upper 0 to 6 inches from all thirteen sampling stations. This includes the PDA (9 samples), UDA (2 samples) and DDA (2 samples). The locations are identified on Figure 2-3.

Biota – Fish: Whole body tissues were analyzed for use in the ecological risk assessment. The

[2] **NOTE:** we observed odors in the surface water samples on the southern transect in close proximity to shore.
[3] **NOTE:** we observed odors in sediment collected in close proximity to shore in all transects.

data used in this risk assessment include: three composites of drum, three composites of gizzard shad and three composites of channel catfish from the PDA, 1 composite of each of the three species from UDA and one composite of each species from DDA. Buffalofish fillet-only composites were also analyzed from the same locations for application in the human health risk assessment.

The summary statistics for these data (by medium and PDA location or reference area) are presented in Appendix A-1, A-2 and A-3. Buffalofish data are provided in Table A-3, but no further analysis of the fillets are provided in the Ecological Risk Assessment. The data validators apply the following data qualifiers: **J** – (The associated numerical value is an estimated quantity due to quality control criteria exceedance(s). The value is usable for project decisions as an estimated result); **U** – (The compound was analyzed for, but was not detected. The associated numerical value is the sample detection/quantitation limit. The value is usable for project decisions as a nondetect result at the reported detection/quantitation limit); **UJ** – (The compound was analyzed for, but was not detected. The associated numerical value is the sample detection/quantitation limit and is an estimated quantity. The value is usable for project decisions as a nondetect result at the estimated detection/quantitation limit); **R** – (Reject data due to severe or cumulative exceedance of quality control criteria. The value is unusable (compound may or may not be present) for project decisions); **B** – (The compound was detected in a non-matrix matched Blank (e.g., Trip Blank or Equipment Blank)); **JB** - (combination of both J and B qualifiers). We use the J, JB, and B-qualified data and data without qualifiers with appropriate considerations provided in Section 10.0. We use one-half the reporting limit for U and UJ-qualified data. We do not use the R qualified data. The only R-qualified data were for dinoseb.

6.1.2 Calculation of PCB and dioxin/furan concentrations

Samples were analyzed for PCB homologs, and polychlorinated dioxin and polychlorinated furan congeners. PCBs, dioxins, and furans are complex mixtures of individual congeners that have different volatilities, solubilities, and rates of biodegradation and metabolism as well as different toxicities. This section discusses how these data were handled in this ecological risk assessment.

PCBs were not detected in any medium at the PDA and are, therefore, not included in the risk analysis.

Polychlorinated dioxin and polychlorinated furan congeners were evaluated collectively as a dioxin Toxic Equivalency Quotient (TEQ). 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) is the most potent of a group of compounds that bind to an intracellular protein called the aryl hydrocarbon receptor (AhR). Other dioxin congeners also bind to this receptor and have been shown to exert toxic responses similar to those exerted by TCDD. The biological activity of these compounds seems to correlate with their binding affinity to this receptor (WHO, 1998).

The toxic equivalency quotient (TEQ) approach was developed to represent the fractional toxicity of dioxin congeners relative to TCDD. TEQs are calculated as follows:

$$TEQ = \Sigma \left[(\text{Dioxin-like Congener Concentration})_i \cdot TEF_i\right]_n$$

where,

TEF = toxic equivalency factor for congener i, and
n = number of dioxin-like congeners in the mixture of concern.

Toxic equivalency factors (TEFs) for each dioxin-like congener are available for mammals (the same values used for humans), birds, and fish to account for differing wildlife sensitivities (Van den Berg et al., 1998).

TEQs for dioxins were calculated for each medium by multiplying the detected concentration (or one-half the detection limit) of each by its TEF and adding the products to obtain the dioxin TEQ. If a congener was never detected in a particular medium or area, it was not included in the total. Data designated with an "M" by the laboratory (but not the validators) indicates "estimated maximum potential concentration". These data were treated as specified in the data validation report.

6.1.3 COPC Selection Process

The selection of COPCs for ecological risk assessment was a multi-step process. The first step was comparison of combined surface water and sediment data to published benchmarks and reference concentrations. The general selection criteria listed from high weight to lower weight are as follows:

- Compounds detected at a frequency $\leq$ 5% at the PDA are excluded from further analysis in the specific medium
- Compounds for which the maximum concentration at PDA is less than the maximum concentration in both the UDA and DDA reference areas are excluded from further analysis in the specific medium
- Compounds for which the maximum concentration at PDA is less than all screening criteria are excluded from further analysis in the specific medium.

Table 6-1 compares maximum PDA concentrations to maximum concentrations in the two reference areas, UDA and DDA, and the table also compares the maximum concentration detected in PDA surface water to Illinois Surface Water Quality Standards (Illinois, 1999), National Recommended Water Quality Criteria (USEPA, 1999a), Great Lakes Initiative Tier II Water Quality Guidelines (summarized in Suter and Tsao, 1996), and other water quality guidelines assembled by Suter and Tsao (1996). Precedence was given to these standards and guidelines in the order given. If multiple values were available for a compound, the Illinois

value superceded the national value, which superceded the Great Lakes value. Compounds that exceeded the corresponding benchmarks were retained as COPCs. If a benchmark value was not available for a compound, but the maximum site concentration (PDA) exceeded the maximum concentration in UDA and/or DDA then the COPC was retained. Vinyl chloride, carbon tetrachloride and 2-butanone were detected in the UDA reference area and 2,4,5-T was detected in the DDA reference area, but were not detected at the PDA. Therefore, they are not retained as COPCs in the ERA.

Table 6-2 compares maximum PDA concentrations to maximum sediment concentrations in the two reference areas, UDA and DDA, and Table 6-2 also compares maximum sediment concentrations for PDA to consensus-based sediment quality guidelines for freshwater developed by MacDonald et al. (2000), Florida sediment quality guidelines (MacDonald, 1994), and Ontario Sediment Quality Guidelines (Persaud et al., 1993). If the concentration exceeded any of the benchmark values, the compound was retained as a COPC. In a few cases, benzo(a)anthracene, bis (2-ethylhexyl)phthalate, and chrysene, the compound was not detected in the PDA, but was detected in a reference area. These compounds were excluded from further analysis in sediment. In summary, compounds detected in sediment at a frequency $\geq$5% are retained in sediment because the maximum PDA concentration exceeds the maximum concentration in at least one reference area and criteria, where available.

As a final screen for COPCs presented in Table 6-3, maximum concentrations in PDA fish were compared to maximum concentrations in fish from UDA and DDA. Additional compounds were retained as COPCs that were detected in PDA biota at concentrations above those detected in biota from the reference areas, but that had not been detected in surface water and sediment.

For dioxin, if one congener screens in then all other congeners detected in at least one PDA sample are retained as COPCs and included in the TEQ calculation regardless of whether the concentration exceeded the reference concentration.

Table 6-4 provides a list of those compounds that were retained as COPCs in at least one medium. Table 6-5 provides a summary of the compounds by medium that were detected and screened in at the PDA and are, therefore, included in the assessment. A number of compounds were not detected, but either the reporting limit (RL) exceeded applicable Ecological Data Quality Levels (EDQLs) or other RBCs in the QAPP because of laboratory method limitations or the laboratory could not attain the RL specified in the QAPP. In general, if these compounds were not detected in any medium, they were excluded from the analysis. Compounds that were detected in at least one of the media are assessed in the comparison to criteria in Section 7.0 at one-half the RL. Further discussion of data quality issues are provided in Section 10.0.

7.0 ECOLOGICAL EFFECTS ASSESSMENT

The effects assessment summarizes and weighs available evidence regarding the potential for contaminants to cause adverse effects. These adverse effects may include impacts on growth, reproduction, and survival. The general approaches used to assess ecological effects are summarized below. Additional details are provided in the risk characterization section.

7.1 General Approach for Assessment of Ecological Effects

Various approaches are used to assess risk to ecological receptors. These individual lines of evidence are evaluated to provide an overall weight-of-evidence regarding risk. For benthic invertebrates and fish, these include:

- Comparison of concentrations of COPCs in sediment and surface water to established benchmarks;
- Evaluation of sediment and surface water toxicity data within the PDA and comparison to reference areas;
- Analysis of benthic community structure and comparison to reference locations;
- Examination of concentrations of COPCs in sediment and surface water in comparison to reference locations; and
- Comparison of concentrations of COPCs in tissue to toxicity reference values (TRVs) that have been reported to cause adverse effects in similar organisms.

For wildlife (birds and mammals), the approach is:

- Comparison of estimated dietary doses to TRVs that have been reported to cause adverse effects in similar organisms.

8.0 RISK CHARACTERIZATION

This section describes the measures of effect for each assessment endpoint, the data collected as part of those measures, and analyses performed with those measures to evaluate each assessment endpoint (Table 5-1).

8.1 Assessment Endpoint 1: Sustainability of Warm Water Fish

The COPCs may exert direct effects on warm water fish through exposure in the water, sediment, or prey, and indirectly by affecting their prey, the invertebrate community. The associated measures of effects assess exposure pathways and potential effects. Some rely upon direct observations of conditions; some involve measures of toxicity; and others use literature values.

8.1.1 Measure of effect 1a: body burdens of COPCs in selected fish species as a measure of exposure (compared to body burdens in fish from reference areas) and effects (compared to body burden benchmark values)

Rationale: Fish exposed to COPCs in their diets or in water may accumulate these COPCs in their tissues. Such accumulation may result in adverse effects on the survival, growth and reproduction of the fish. Concentrations of COPCs in tissue of fish from the PDA were compared to concentrations at reference sites (DDA and UDA) to assess the degree of exposure of fish at the PDA. Concentrations of COPCs were also compared to toxicity benchmarks as an indication of the potential for adverse effects on PDA fish due to exposure to COPCs.

Approach: Maximum concentrations of COPCs in whole fish from the PDA were compared to concentrations of fish collected from reference sites. Maximum concentrations of COPCs in whole fish from the PDA were also compared to relevant toxicity benchmarks that are based on measured body burdens. Comparison of the maximum concentration to No-Effect TRVs is a screening procedure used to identify potentially important exposures. In this case, no screening exceedances were identified so comparison of average concentrations to lowest observed adverse effect levels (LOAEL) is not performed.

Toxicity Reference Values (TRVs) for aquatic life are based on body burdens of COPCs in animal tissues that correspond with toxicological effects. Maximum concentrations measured in samples of gizzard shad, channel catfish, and drum were compared to TRVs in order to assess the potential for risk of harm to aquatic life exposed to COPCs present at the PDA.

The US Army Corps of Engineers Waterways Experiment Station (WES), the research and development branch of the US Army Corps of Engineers, have developed the Environmental Residue Effects Database (ERED) (USACE). ERED compiles reports from the literature on

adverse effects of COPCs based on whole body concentrations of COPCs in aquatic life. The database consists of such information for various fresh and saltwater species of fish and invertebrates. WES conducts a quality control review on entries and updates the database annually. A similar database compiled by US EPA (Jarvinen and Ankley, 1999) was also used. This Ecological Risk Assessment for WGK Plant used both sources for development of TRVs for organic contaminants.

Since the water adjacent to the WGK Plant is freshwater, only data for freshwater species were used to select an appropriate TRV. If the study provided only a lowest observed effect level (LOEL), the LOEL was divided by an uncertainty factor of 10 to estimate a no observed adverse effect level (NOAEL) in accordance with US EPA methodology (USEPA, 1995). Table 8-1 shows the test species, residue No-Effect TRV, final TRV, literature reference, and other notes for those chemicals for which we could locate TRVs. If multiple TRVs were available for one compound, the lowest No-Effect TRV was selected.

Evaluation: Concentrations of COPCs in PDA fish do not exceed any of the available No-Effects TRVs (Table 8-2). However, no TRVs were available for the following compounds detected in fish tissue:

- 2,4,5-T;
- 2,4,5,-TP;
- MCPP;
- Alpha-BHC; and
- 2-Methylphenol (o-cresol).

No-Effect TRVs for beta-BHC and 3-cresol were used as the No-Effect TRVs for alpha-BHC and o-cresol, respectively.

For compounds without TRVs, it is important to compare concentrations in PDA fish to those of reference fish to assess whether they are accumulating COPCs to a greater extent than reference fish. Table 8-3 compares concentrations detected in channel catfish, drum, and shad. Buffalofish are also included in Table 8-3 to identify any compounds detected in buffalofish that were not detected in the other species. The three species assessed in the ecological risk assessment (ERA) were analyzed on a whole body basis, while buffalofish were analyzed on a fillet-only basis. Compounds detected at higher concentrations (average and maximum concentration in at least one species exceeds at least one reference concentration) in PDA fish than in fish from UDA or DDA include dioxin congeners (primarily in shad and drum tissue), 2,4,5-T, 2,4,5-TP (silvex), MCPP (maximum in channel catfish), 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, alpha-BHC, alpha-chlordane, dieldrin, endosulfan I, endrin, endrin aldehyde, gamma-chlordane, heptachlor epoxide, 1,2-dichlorobenzene, 1,4-dichlorobenzene, and 2,4-dichlorophenol. Average and maximum concentrations of 2,4,5-T, 4,4'-DDE, endrin, endrin aldehyde, gamma-chlordane, heptachlor epoxide, 2,4,5-TP, MCPP, 1,2-dichlorobenzene, 2,4-dichlorophenol, 4,4'-DDT, alpha-chlordane, endosulfan I, alpha-BHC and 1,4 dichlorobenzene are greater in PDA fish than in fish from both DDA and UDA reference areas (Table 8-3).

Concentrations of 2-methylphenol in PDA fish are 2-fold greater than UDA fish, but are less than those in fish from DDA (Table 8-3). In general, the compounds are distributed across all three species. Gamma-BHC and methoxyclor were only detected in buffalofish fillets. These compounds are discussed further in Section 10.0.

8.1.2 Measure of effect 1b: COPC concentrations in surface water as compared to applicable water quality guidelines for protection of fish and wildlife

Purpose and Rationale. Water concentrations provide a measure of exposure, and water quality guidelines indicate levels above which effects may occur. This measure of effect evaluates the potential for water concentrations from the PDA to cause adverse effects.

Approach: The assessment compares measured concentrations of COPCs in surface water to water quality guidelines. Exposure of individual fish and the populations of fish partly depend on the exposure field and the distribution and behavior of the fish. Thus, the area over which water quality criteria are exceeded is an important consideration when evaluating exposure. We evaluate effects with respect to spatial extent and degree to which surface water concentrations exceed water quality criteria.

Evaluation: Table 8-4a compares detected surface water concentrations in the PDA to Illinois Water Quality Standards, National Recommended Water Quality Criteria (or Ambient Water Quality Criteria (AWQC)), Great Lakes Initiative Tier II values, and other water quality guidelines summarized by Suter and Tsao (1996).

Twenty-seven compounds were retained for analysis in the ERA in surface water.

The TEQ(mammal) and TEQ(bird) surface water concentrations from all PDA stations exceed the Tier II Secondary Chronic surface water guidelines (Great Lakes Initiative Tier II values). The average TEQ(mammal) surface water concentration from DDA and UDA also exceed the Tier II Secondary Chronic surface water guidelines. In addition, the concentration of m&p xylene in surface water at PDA-4 exceeds the Tier II Secondary Chronic surface water guideline.

Seventeen compounds (Total PCBs, 4,4'-DDD, 4,4'-DDT, alpha-chlordane, endrin, gamma-chlordane, heptachlor, heptachlor epoxide, methoxychlor, toxaphene, 4-bromophenylphenyl ether, anthracene, benzo(a)anthracene, benzo(a)pyrene, carbon disulfide, cis-1,3-dichloropropene, trans-1,3-dichloropropene) were not detected in surface water, however one-half the reporting limit exceeds the chronic water quality guideline at all PDA, UDA and DDA stations (Table 8-4b). At one-half the RL, toxaphene, benzo(a)anthracene, benzo(a)pyrene, cis-1,3-dichloropropene and trans-1,3-dichloropropene concentrations also exceed the acute guideline.

Guidelines are not available for a number of the COPCs. For comparative purposes, we examine the detected concentrations of COPCs in each PDA surface water sample in reference

to two times the average concentration of each COPC in DDA and UDA. Surface water concentrations of the following compounds exceeded two times the average concentration for at least one of the reference locations:

Dioxin Congeners (1,2,3,4,6,7,8,9-OCDF, 1,2,3,4,6,7,8-HpCDD, 1,2,3,4,7,8-HxCDF)
Herbicides (2,4,5-TP, dicamba, 2,4-D, dichloroprop)
SVOCs (2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2-Chlorophenol, 3-Methylphenol/4-methylphenol, 4-chloroaniline, nitrobenzene, and phenol).

Most of the exceedances of reference concentrations occur in stations PDA-2, PDA-3, PDA-4, and PDA-5 (Table 8-4a).

The maximum concentrations of COPCs in surface waters generally are found in the southern transects in stations in close proximity to shore (PDA-2, PDA-3 and PDA-5) (Table 8-4a).

8.1.3 Measure of effect 1c: Toxicity of river water and sediments to fish as measured by surface water and sediment toxicity tests

Purpose and Rationale: Toxicity tests of river water provide direct measures of the acute and chronic toxicity of the water. Measures of chronic toxicity were selected because of potential long-term exposures. Laboratory toxicity tests provide a greater level of "control" than can be achieved from field studies. Both sediment and surface water toxicity tests were conducted with fish in a laboratory. These tests expose larval fish to sediment and surface water from the PDA and reference locations (UDA and DDA) and to laboratory "control" sediment and water. Effects on survival and growth are measured and compared among samples. These tests are useful because they provide a direct measure of the toxicity of the mixture of COPCs found in PDA sediment and surface water. However, there is some uncertainty in interpreting results because of the changes in bioavailability of contaminants that can occur during sample handling, and because results obtained with test species under laboratory conditions may differ from actual effects in the field.

Approach. Surface water and sediment were collected as described in the WG Krummrich QAPP/FSP (MCA, November 2000). Water samples were collected close to the sediment - surface water interface. Surface water was collected at the sediment - surface water interface to capture maximum potential exposure because of the groundwater source of COPCs. VOCs and SVOCs are likely migrate from groundwater to sediment and/or pore water and surface water. The river system dilutes concentrations throughout the water column. Fish integrate exposure throughout the water column and the assumption that these species are exposed to the surface water at the sediment interface exclusively is conservative. Seven-day sediment and surface water chronic toxicity tests were conducted using fathead minnows (*Pimephales promelas*). These chronic tests span a sensitive life stage, larval development from an embryo. Endpoints assessed were survival and growth (mean weight per fish). In the surface water test, survival at

two days was also assessed; this is considered an acute toxicity endpoint.

Data for each endpoint from each test were analyzed statistically using an Analysis of Variance (ANOVA) followed by a post-hoc multiple comparison test (Tukey's HSD); an alpha level of 0.05 was used to assess statistical significance. (The testing laboratory's statistical analysis compared each sample to the control using individual t-tests, but that type of analysis leads to a large probability of false detection of effects, because each pairwise comparison has a 5% probability of Type I error. An ANOVA followed by a post-hoc multiple comparison is the appropriate analysis for a group of samples.) Survival data was first transformed using the arcsine square root transformation. Although the data did not always conform to assumptions of normality and homogeneity of variance, parametric tests were used because they provide greater power (i.e., greater ability to distinguish adverse effects), and the data would likely conform to assumptions if the sample size were large enough. Samples showing effects on survival significantly lower than the controls were excluded from analysis of growth data; it was assumed that the more sensitive endpoint (growth) is affected if survival is affected.

Evaluation: Laboratory reports, statistical analyses, and summary graphs of toxicity testing data are presented in Appendix C. For analysis of the results of the sediment tests, samples were divided into soft-sediment and sandy-sediment groups; the control sediment was included in the analysis of each of the two groups. Results are shown in Figures C-1 and C-2 and summarized in Table 8-5. In the sandy-sediment group, survival in samples PDA-5 (0%) and PDA-9 (13%) was significantly lower than the control and all other UDA, DDA and PDA samples except sample DDA-13. No other PDA samples had significantly lower survival than control or reference samples. Samples PDA-5 and PDA-9 were excluded from the growth analysis; there were no significant differences in growth among the remaining samples. In the soft-sediment group, survival in samples PDA-3 (45%) and PDA-3FD (60%) was significantly lower than the control and all other UDA, DDA and PDA samples. No other PDA samples had significantly lower survival than control or reference samples. Samples PDA-3 and PDA-3FD were excluded from the growth analysis; there were no significant differences in growth among the remaining samples.

For the surface water tests, all samples were analyzed together. There were five different control groups because samples were tested in five groups, based on the date of receipt by the testing laboratory. Because the control sample results did not differ significantly from each other for any endpoint, we judged it appropriate to combine results from the five tests into one statistical analysis. Results are shown in Figures C-3 through C-5 and summarized in Table 8-5. Survival at two days in sample DDA-13 (90%) was significantly lower than two of the control groups, both UDA samples and most of the PDA samples. Survival at seven days in samples DDA-13 (65%) and DDA-1 (68%) was significantly lower than all control groups and most of the PDA samples; DDA-1 was also significantly lower than the UDA samples. No PDA samples had significantly lower two-day or seven-day survival than control or reference samples. Samples DDA-1 and DDA-13 were excluded from the growth analysis; there were no significant differences in growth among the remaining samples. The testing laboratory noted

that samples DDA-1 and PDA-8 FD had variable survival (two replicates with low survival and two replicates with high survival), which may have been a result of bacterial or fungal growth in the replicates with low survival.

8.1.4 Measure of effect 1d: Sustainability of benthic macroinvertebrate communities that comprise a prey base

Purpose and Rationale. Benthic macroinvertebrates are an important source of food for many fish species. They experience direct sediment exposures due to their life histories. Exposures that result in reduced abundance, diversity, or biomass of these aquatic macroinvertebrates could indirectly effect fish populations. Further, quantitative studies of benthic macroinvertebrates have a long history of use in water quality studies.

The assessment uses the sediment triad approach as part of a weight-of-evidence analysis to evaluate the sustainability of benthic macroinvertebrate communities in the PDA. The sediment triad approach evaluates three elements of a benthic community:

Sediment chemistry measurements;

Field assessment of benthic macroinvertebrates; and

Sediment toxicity testing using indicator benthic macroinvertebrates.

8.1.4.1 Sediment Chemical Measurements

Concentrations of COPCs in sediment are compared to sediment benchmarks to evaluate whether adverse biological effects to benthic macroinvertebrates could occur. The sediment guidelines used in this assessment are the consensus-based Threshold Effect Concentrations (TECs) and Probable Effect Concentrations (PECs) developed by MacDonald et al. (2000) and the Ontario (Persaud et al., 1993) Lowest Effect Levels (LEL) and Severe Effects Levels (SEL). The SELs are adjusted to be consistent with station-specific sediment TOC concentrations. Sediment concentrations which exceed these benchmarks do not necessarily indicate that adverse effects to benthic macroinvertebrates have occurred. The assessment relies on multiple lines of evidence to assess if benthic macroinvertebrates are adversely affected by COPCs.

Table 8-6a compares sediment concentrations in the PDA to sediment quality guidelines.

In station PDA-3, the sediment concentration of naphthalene exceeds the TEC (Table 8-6a).

Five compounds (dieldrin, heptachlor, anthracene, dibenzo(a,h)anthracene and fluorene) were not detected in sediment, however one-half the reporting limit exceeds the sediment quality criteria at PDA, UDA and DDA stations (Table 8-6b). One-half the RL for dieldrin exceeds the TEC at all stations except PDA-6, and exceeds the LEL at PDA-5, PDA-4, PDA-2, UDA-12,

UDA-11 and DDA-1. Anthracene, dibenzo(a,h)anthracene and fluorene sediment concentrations (one-half the reporting limit) exceed TECs at all stations, while heptaclor and dibenzo(a,h)anthracene concentrations at all stations exceed the LEL. One-half the reporting limit of endrin at PDA-2 and benzo(a)anthracene at PDA-2 and PDA-4 exceeds the TEC. The TOC-adjusted SEL is exceeded at one-half the sediment reporting limit at PDA-5 through PDA-10 for dibenzo(a,h)anthracene and fluorene at PDA-6 through PDA-10. Finally, one-half the reporting limit for gamma-BHC at PDA-6, PDA-8, PDA-9 and PDA-10 exceeds the TOC adjusted SEL (Table 8-6). One-half the detection limit for these compounds from DDA and UDA samples also exceed criteria. Data quality issues are reviewed further in Section 10.0.

Sediment guidelines are not available for a number of the COPCs. For comparative purposes, we examine the detected concentrations of COPCs in PDA sediment on a sample-by-sample basis in reference to two times the average concentration of each COPC in DDA and UDA (Table 8-6a). Sediment concentrations of the following compounds exceeded two times the average concentration for at least one of the reference locations:

Dioxin Congeners (1,2,3,4,6,7,8,9-OCDD, 1,2,3,4,6,7,8,9-OCDF, 1,2,3,4,6,7,8-HpCDD, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDD, 1,2,3,6,7,8-HxCDF, 1,2,3,7,8-PeCDF, 2,3,4,6,7,8-HxCDF, 2,3,4,7,8-PeCDF, 2,3,7,8-TCDF,)

Herbicides (2,4-D, dichloroprop, MCPP, pentachlorophenol)

SVOCs (1,2-dichlorobenzene, 1,4-dichlorobenzene, 2,4,6-trichlorophenol, 2,4-dichlorophenol, 2,4-dimethylphenol, 2,4-dinitrotoluene, 2-nitroaniline, 3-methylphenol/4-methylphenol, 4-bromophenylphenyl ether, 4-chloroaniline, 1,2-Dichloroethane, MEK, MIBK, acetone, benzene, carbon disulfide, chlorobenzene, chloroethane, chloroform, cis-1,2-dichloroethene, ethylbenzene, m&p xylene, methylene chloride, tetrachloroethene, toluene, trans-1,2-dichloroethene, trichloroethene, vinyl chloride, and total xylenes). NOTE: Acetone, 2-butanone and methylene chloride are common laboratory contaminants.

The reference exceedances for each compound do not occur at every station. The larger number of exceedances occur in stations PDA-2, PDA-3 and PDA-5 (Table 8-6a).

The maximum concentrations of herbicides are found at station PDA-5. The SVOCs are more widely distributed throughout the PDA. VOCs are also widely distributed, with a number of maximum concentrations occurring at station PDA-2.

8.1.4.2 Field assessment of benthic macroinvertebrate community

Effects are evaluated by comparing the composition and abundance of benthic macroinvertebrates within the PDA to data from the reference areas, UDA and DDA, which reflect conditions in water bodies unaffected by the PDA.

At each planned sampling location, 3 Van Veen grab samples of sediment were collected from approximately the upper 6 inches of sediment and composited. The composite samples, if they consisted of coarse sediment, were preserved and sent directly to the lab. If the samples were silty, they were sieved (0.5 mm mesh size) and the benthic invertebrates collected and preserved in the field for transport to the analytical laboratory.

Effects are evaluated by comparing the composition and abundance of benthic macroinvertebrates within the sampling locations in the Mississippi (generally following USEPA Rapid Bioassessment Level I Protocols; Barbour et al., 1999). The reconnaissance survey indicated that the benthic community is sparse both in PDA sediment and in the coarse grained sediments at UDA and DDA. The high-energy environment and coarse sediments confound the community analysis. Data from the reference areas are included because the benthic community in DDA and UDA reflect conditions in water bodies unaffected by the PDA. We examine any observable reductions in the abundance and diversity of benthic macroinvertebrates, and assess the significance of this for the fish species that rely upon the macroinvertebrates for food.

Based on the reconnaissance survey, the benthic community analysis was conducted at three PDA stations, one sand station 50 ft from shore (PDA-8), one sand station 300 ft from shore (PDA-7) and one silty station 50 ft from shore (PDA-2); benthic community samples were collected from all four reference stations. Because of the limited community size, we provide qualitative summaries of the benthic community. The data are provided in Table 8-7.

Northern Transect

The Northern Transect contained stations PDA-8, PDA-9, and PDA-10. Water depth ranged from 10.9 ft to 14.5 ft. The substrate in the Northern Transect consisted primarily of fine-grained sand with some medium-grained sand. Coal flecks were observed in the sediment at PDA-8. TOC in sediment ranged from 352 to 437 mg/kg dry weight.

Analysis of the benthic invertebrate community at PDA-8 revealed three organisms, two pea mussels (*Pisidium* sp.) and a chironomid larva (*Paratendipes basidens*). One replicate contained no individuals. The only permanent structure in the vicinity of the Northern Transect was provided by the barge mooring cells upstream and further offshore from the transect.

Middle Transect

The Middle Transect contained stations PDA-5, PDA-6, and PDA-7. Water depth ranged from 10 ft to 11ft. The substrate in the Middle Transect consisted primarily of fine-grained and medium-grained sand. TOC in sediment ranged from 324 (PDA-6) to 700 (PDA-5) mg/kg dry weight.

Analysis of the benthic invertebrate community at PDA-7, 300 ft from shore, revealed 3 chironomid larvae (*P. basidens and Chernovskiia sp.*). One replicate contained no individuals.

The Middle Transect was immediately upstream of a sunken barge located along the shoreline, and a wing dam running perpendicular to the bank from the shore line. These objects provide most of the permanent structure, and thus habitat, within the PDA.

Southern Transect

The Southern Transect contained stations PDA-2, PDA-3, and PDA-4. Water depth ranged from 4 ft (PDA-3) to 11.5 ft (PDA-2). The substrate at PDA-2 and PDA-3, 45 ft and 152 ft from shore respectively, consisted of fine-grained and medium-grained sand covered with a layer of soft, sticky silt and clay. TOC in sediment ranged from 2,805 (PDA-3) to 10,200 (PDA-2) mg/kg dry weight.

Analysis of the benthic invertebrate community at PDA-2, 45 ft from shore, revealed two chironomid larvae (*Cryptochironomus fulvus*) and five caddisflies (*Potamyia flava*). One replicate contained no individuals. The Southern Transect was immediately downstream of the wing dam.

Several epilithic invertebrates were observed attached to the wingdam, rocks associated with the wing dam and rip rap along the bank. Caddisflies and their cases were seen in large numbers, likely *Potamya flava* based on the benthic community samples, attached to many solid surfaces including debris scattered along the wing dam and bank. Some small zebra mussels (*Dreissena polymorpha*) and Asiatic clams (*Corbicula fluminea*) were also observed (Appendix B).

Reference Areas

Upstream of Site (UDA)

Two reference stations, UDA-11 and UDA-12 (50 ft and 30 ft from shore respectively) were selected upstream of the PDA, immediately north of the old power plant. Water depth at UDA-11 was 15 ft and 9.1 ft at UDA-12. The substrate at UDA-11 consisted primarily of fine-grained sand. The substrate at UDA-12 consisted of fine-grained sand covered by a layer of soft, soupy clay and silt. TOC at UDA-11 was 438 mg/kg dry weight. TOC at UDA-12 was 11,800 mg/kg dry weight. Sediment from UDA-12 had a mild organic/sulfur odor.

Analysis of the benthic invertebrate community at UDA-11 revealed fourteen chironomid larvae (*Paratendipes basidens*) and one pea mussel (*Pisidium sp.*). Analysis of the benthic invertebrate community at UDA-12 revealed six chironomid larvae (*Paratendipes basidens*, *Coelotanypus sp.*, and *Cryptochironomus fulvus*), three oligochaetes (*Dero digitata* and *Limnodrilus claparedianus*), and two mayflies (*Hexagenia limbata*). One replicate from UDA-11 and one replicate from UDA-12 contained no individuals.

Downstream of Site (DDA)

Two reference stations, DDA-13 and DDA-1 (50 ft and 65 ft from shore respectively) were selected downstream (approximately two and four and one-half miles, respectively) of the PDA transects. Water depth at DDA-13 was 6.2 ft and the water depth at DDA-1 was 3.5 ft. The

substrate at DDA-13 consisted primarily of fine-grained sand. The substrate at DDA-1 consisted primarily of soft, sticky silt and clay with some detritus. TOC at DDA-13 was 311 mg/kg dry weight. TOC at DDA-1 was 8,170 mg/kg dry weight. No odors were detected.

Analysis of the benthic invertebrate community at DDA-13 revealed sixteen chironomid larvae (*Chernovskiia sp.* and *Paratendipes basidens*), one caddisfly (*Potamyia flava*), and one pea mussel (*Pisidium sp.*). Analysis of the benthic invertebrate community at DDA-1 revealed that this station contained the most diverse benthic community out of all PDA and reference stations. A total of 148 organisms representing eleven taxa were collected. Taxa included oligochaetes, chironomids, other dipterans (ceratopongids and ephydrids), and mayflies. The increased number of organisms and taxa at DDA-1 compared to the other sample stations is likely a result of available habitat. DDA-1 is located on the bank of Arsenal Island, which is formed by the Mississippi River and Cahokia Chute. The bank on the island is not developed and is lined with riparian vegetation. An exposed sandbar revealed a substrate composed of mainly sand with numerous partially buried logs and tree stumps, which provide good habitat and cover for many benthic invertebrates.

8.1.4.3 Sediment toxicity testing

Sediment samples were collected using similar methods to those used for collection of sediment for benthic community evaluation. A composite grab sample from the upper 6 inches of the sediment were collected and transported to the analytical laboratory for sediment toxicity bioassays.

Chronic 28-day sediment toxicity tests were conducted in a laboratory using a small benthic crustacean, the amphipod *Hyallela azteca.* Endpoints assessed were survival and growth. Statistically significant decreases in survival and/or growth of these macroinvertebrate species relative to controls/reference are considered a COPC-related effect when they can be related to exposures associated with COPCs in the sediments

Data for each endpoint were analyzed statistically using an Analysis of Variance (ANOVA) followed by a post-hoc multiple comparison test (Tukey's HSD); an alpha level of 0.05 was used to assess statistical significance. (The testing laboratory's statistical analysis compared each sample to the control using individual pairwise comparison tests, but that type of analysis leads to large probability of false detection of effects, because each pairwise comparison has a 5% probability of Type I error. An ANOVA followed by a post-hoc multiple comparison is the appropriate analysis for a group of samples.) Survival data were first transformed using the arcsine square root transformation. Although the data did not always conform to assumptions of normality and homogeneity of variance, parametric tests were used because they provide greater power (i.e., greater ability to distinguish adverse effects). Samples showing effects on survival significantly lower than the controls were excluded from analysis of growth data; it was assumed that the more sensitive endpoint (growth) is affected if survival is affected.

Laboratory reports, statistical analyses, and summary graphs of toxicity testing data are presented in Appendix C. Samples were divided into soft-sediment and sandy-sediment groups; the control sediment was included in the analysis of each of the two groups. Results are shown in Figures C-6 and C-7 and summarized in Table 8-5. In the sandy-sediment group, survival in sample PDA-5 (15%) was significantly lower than the control and all other UDA, DDA, and PDA samples. No other PDA samples had significantly lower survival than control or reference samples. In the soft-sediment group, there were no significant differences in survival among samples. Growth in the control in the amphipod sediment test was unexpectedly low, and thus did not provide a good basis for comparison. In both the soft-sediment and sandy-sediment groups, growth in PDA samples (excluding PDA-5) was not significantly lower than in reference (UDA and DDA) samples.

8.1.5 Measure of effect 1e: Sustainability of a planktonic invertebrate community that can serve as a prey base for fish

Purpose and Rationale. Water-column invertebrates are a source of food for many fish species. Exposures that result in reduced abundance of these invertebrates could indirectly affect fish populations. Surface water toxicity tests were conducted with water-column invertebrates in a laboratory. These tests expose the test organisms to surface water from the PDA and reference locations (UDA and DDA) and to laboratory "control" water. Toxicity tests provide a direct measure of the toxicity of the mixture of contaminants found in PDA surface water. Laboratory toxicity tests provide a greater level of "control" than can be achieved from field studies. However, there is some uncertainty in interpreting results because of the changes in bioavailability that can occur during sample handling, and because results obtained with test species under laboratory conditions may differ from actual effects in the field.

Approach. Surface water was collected using the procedures described in the WG Krummrich QAPP/FSP (November 2000). Surface water was collected at the sediment-surface water interface to capture maximum potential exposure because the source of COPCs to aquatic media is the groundwater. VOCs and SVOCs likely migrate from groundwater to sediment and/or pore water and surface water. The river system dilutes concentrations throughout the water column. Planktonic invertebrates integrate exposure throughout the water column and the assumption that these invertebrates are exposed to the surface water at the sediment interface exclusively is conservative. Seven-day surface water tests were conducted in a laboratory using the small crustacean *Ceriodaphnia dubia.* Endpoints assessed were survival at two and seven days and reproduction. Survival at two days is considered an acute endpoint, while seven-day survival and reproduction are chronic endpoints. Statistically significant decreases in survival and/or growth relative to controls/reference are considered a COPC-related effect when they can be related to exposures associated with COPCs in the surface water.

Data for each endpoint were analyzed statistically using an Analysis of Variance (ANOVA) followed by a post-hoc multiple comparison test (Tukey's HSD); an alpha level of 0.05 was

used to assess statistical significance. (The testing laboratory's statistical analysis compared each sample to the control using individual pairwise comparison tests, but that type of analysis leads to large probability of false detection of effects, because each pairwise comparison has a 5% probability of Type I error. An ANOVA followed by a post-hoc multiple comparison is the appropriate analysis for a group of samples.) Although the data did not always conform to assumptions of normality and homogeneity of variance, parametric tests were used because they provide greater power (i.e., greater ability to distinguish adverse effects). Samples showing effects on survival significantly lower than the controls were excluded from analysis of reproduction data; it was assumed that the more sensitive endpoint (reproduction) is affected if survival is affected.

Evaluation. Laboratory reports, statistical analyses, and summary graphs of toxicity testing data are presented in Appendix C. For statistical analysis, all samples were analyzed together. There were five different control groups because samples were tested in five groups, based on the date of receipt by the testing laboratory. Because the control sample results did not differ significantly from each other for any endpoint, we judged it appropriate to combine results from the five tests into one statistical analysis. Results are shown in Figures C-8 through C-10 and summarized in Table 8-5. Survival at two days in samples PDA-2 (0%), PDA-2FD (0%), PDA-3 (40%), and PDA-4 (20%) was significantly lower than control groups and all other samples. Survival at seven days in these samples was again significantly lower than control groups and all other samples, as follows: PDA-2 (0%); PDA-2FD (0%); PDA-3 (20%); and PDA-4 (10%). Reproduction was significantly lower than all controls and other samples in sample PDA-5. In samples, PDA-8, and PDA-9, reproduction was significantly lower than two of the controls and one of the other PDA samples, but was not significantly lower than reference samples.

Samples with reduced survival (as evaluated by the laboratory using pairwise statistical comparisons against the control) were further evaluated in dilution series tests. In these tests, a series of dilutions of PDA surface water was prepared (0, 6.35, 12.7, 25, 50, and 100% PDA surface water) for each PDA sampling location. Seven-day toxicity tests were performed using this dilution series; the concentration of PDA surface water resulting in no observed effects (the NOEC) and the lowest concentration of PDA surface water resulting in observed effects (the LOEC) were determined. For locations PDA-3, PDA-4, and PDA-5, the LOEC was 12.7% PDA surface water and the NOEC was 6.35% PDA surface water. For locations PDA-2 and PDA-2FD, even the lowest concentration of PDA surface water tested (6.35%) resulted in observed effects, so a NOEC could not be determined.

8.2 Assessment Endpoint 2: Survival, growth, and reproduction of local populations of aquatic wildlife as represented by the osprey, great blue heron, and river otter

The assessment uses three measures of effects to evaluate risks to aquatic wildlife. The assessment uses exposure models to evaluate different routes of exposure including ingestion of water, sediment and food (fish). This subsection describes these measures of effects.

8.2.1 Measure of effect 2a: Wildlife species composition and habitat use

Purpose and Rationale: Observations were made to determine the extent to which potential wildlife receptors use the PDA.

Approach: Observations are used to determine the composition of local wildlife and the quality of habitat at the PDA, as compared to reference locations. This type of qualitative analysis can indicate whether the PDA is utilized by wildlife to an extent similar to unaffected reference locations. However, due to the high natural variability in wildlife populations, such qualitative observations may not reveal effects.

Evaluation: Menzie-Cura & Associates, Inc. made observations at the PDA, DDA, and UDA during the reconnaissance survey and field sampling program in September, October and November 2000. We also reviewed the literature and interviewed local professional fisherman familiar with the natural history of the Mississippi River throughout Illinois/Missouri.

In general, the PDA is bordered by steep embankments with rip-rap. A few scattered structures, such as a wing dam and a sunken barge, offer some access points for aquatic birds and mammals and scattered protection for fish. There are no bordering wetlands and little upland vegetation. The shoreline at UDA is less obstructed and provides access for small and larger mammals as well as more wading opportunities for aquatic birds. It is located upstream of the old power plant and immediately south of a railroad bridge. The upland portion is vegetated grading into a sandy shoreline. DDA is located near the Cahokia Chute and Arsenal Island. This reference area provides the best habitat of the three areas and consists of a large sand bar, less developed uplands and banks that provide direct access to the river, and a number of sunken snags. In certain portions of DDA, wildlife could locate areas that offer protection from the strong currents. All three habitats are located in an industrialized area. The river is a major shipping route and there are number of coal, grain and other barge terminals upstream of these areas.

Both general observations and observations specific to the PDA are provided in the following section.

Fish

In the PDA, fish habitat is poor and food sources are limited, with the possible exception of plankton. The current is very strong, likely limiting the area to a travel corridor. Some cover is

offered in the form of partially sunken barges, rip-rap, wing dams, and barge mooring cells. Outside of these human-made structures, the substrate is mostly barren, shifting sand. These "barren" areas do not offer suitable habitat to most benthic invertebrates and fish (Ahrling, 2000 and Advent Group, Inc., 1990) and are likely used mainly as a travel corridor by fish. Minnows and sunfish are not seen in the PDA due to the strong current. A grain elevator used to load barges is on the eastern bank close to the PDA. Spilled grain may be the only abundant food source in the area. Species commonly seen near the PDA include gizzard shad, tooth herring, moon eye, drum, Chinese carp, common carp, quillback, sharknose gar, long nose gar, blue catfish, channel catfish, flat head catfish, liner/channel buffalo, smallmouth buffalo, and bigmouth buffalo (John Ahrling, Personal Communication, 2000, Appendix B).

Species collected during sampling include bigmouth buffalo, smallmouth buffalo, quillback, crappie, gizzard shad, grass carp, gold eye, blue catfish, flathead catfish, channel catfish, white catfish, white bass, paddle fish, drum, skipjack herring, walleye, shovelnose sturgeon, redhorse, and white sucker (Appendix F-5). Fish collected around the PDA in October and November, 2000 were in good condition with a few exceptions. One of two paddlefish captured was in poor condition, but the source of the poor condition was not apparent. The paddlefish is a migratory species and therefore, the condition cannot be presumed to be related to PDA. A smallmouth buffalo, in poor condition, was caught in the area of the upstream reference stations. A large channel catfish was caught with large sores anterior to the dorsal fin and a white catfish was caught with sores posterior to the dorsal fin. The injuries appeared to be due to the nets used to capture the fish and not due to disease.

Birds

Several species of bird are common in the general area including blue heron, egret, red tail hawk, American pelican, sea gulls, and bald eagle. A large bald eagle nesting site exists downstream of St. Louis, however bald eagle were not observed in the area during the time of field sampling in late October (John Ahrling, Personal Communication, 2000). A number of blue heron and mallard duck were observed in the vicinity of the wing dam within the PDA.

Mammals

Several species of mammal, which feed on fish, have been observed in the area including raccoon, opossum, fox, coyote, and muskrat. River otter have not been observed near the PDA (John Ahrling, Personal Communication, 2000).

Reptiles

Two common species of turtles were inadvertently caught in hoop and wing nets while sampling fish. Many were captured around the wing dam between the Mid and Southern Transects.

Invertebrates

The sandy substrate in the high current areas is constantly shifted by the current and does not serve as suitable habitat for invertebrates. A bivalve survey over a 50 mile stretch including over 75 dive stations, revealed only a few giant floaters and heel splitters (mussels) (John

Ahrling, Personal Communication, 2000). Mayfly, caddisfly, zebra mussels, and Asian clams were observed on rocks along the banks and other permanent structures, wing dams, wrecked vessels, and mooring cells (Field Observations and John Ahrling, Personal Communication, 2000; Appendix B).

Plants

Periphyton, algae living on rocks and other hard substrates, were observed in the vicinity of the wing dam.

Habitat Known to be Used by Federal Designated or Proposed Endangered or Threatened Species

According to the records of the Illinois Department of Natural Resources' Natural Heritage Inventory, the only federally endangered or threatened species that may use the PDA is the federally threatened bald eagle (*Haliaeetus leucocephalus*). Bald eagle is also an Illinois threatened species. In 1993, a pair of eagles unsuccessfully attempted to nest at the southern tip of Arsenal Island. The next year the pair returned to the island, but no monitoring was conducted to determine if they successfully nested. The nest has since blown down and no other nests have been constructed on the island. Bald eagles are not typically observed in the PDA during the time period when surveys and field work were performed (John Ahrling, Personal Communication, 2000).

Portions of the site area suitable for eagle foraging include waterbodies large enough to support large fish such as carp and catfish. The Mississippi River supports such fish and provides ample open water for foraging by eagles.

Habitat Known to be Used by State Designated Endangered or Threatened Species

A number of state-listed wading birds may utilize the PDA, particularly the area around the wing dam and along the bank. Illinois endangered species which may forage along the PDA include little blue heron (*Egretta caerulea*), snowy egret (*Egretta thula*), black-crowned night heron (*Nycticorax nycticorax*), yellow-crowned night heron (*Nyctanassa violacea*), and osprey (*Pandion haliaetus*).

Two endangered species of fish may use the PDA area for habitat or at least a travel corridor, the lake sturgeon (*Acipenser fulvescens*) and the pallid sturgeon (*Scaphirhynchus albus*).

No endangered or threatened invertebrates were observed at the PDA or reference locations.

No endangered or threatened mammals were observed at the PDA and are not known to utilize the PDA; the river otter is listed by the State of Illinois as threatened, however we do not expect river otter to utilize the PDA (John Ahrling, Personal Communication, 2000).

8.2.2 Measure of effect 2b: Concentration of COPCs in surface waters in comparison to wildlife benchmarks

Purpose and Rationale. Many wildlife species may use the Mississippi River as a drinking water source. The presence of COPCs in water could be a source of exposure to these species. This measure of effect examines this potential route of exposure.

Approach: This endpoint is evaluated by two methods. Concentrations of COPCs in surface water are compared to drinking water values for wildlife developed by Sample et al. (1996). In addition, surface water concentrations are used in multi-pathway exposure models for wildlife that develop exposure doses based on concentrations in sediment, water, and food in Section 8.2.3.

Evaluation: Surface water concentrations of COPCs in the PDA were compared to drinking water no observed adverse effects levels (NOAEL) developed by Sample et al. (1996). Table 8-8 summarizes these comparisons. Sample et al. (1996) provides NOAELs for water for several bird and mammal species. For each compound, the lowest NOAEL values for water were used as benchmarks. In PDA, surface water concentrations do not exceed any of the wildlife benchmarks. Note that there is no benchmark available for some constituents.

8.2.3 Measure of effect 2c: Concentration of COPCs in forage fish, predator and bottom fish for use in evaluating exposure via the food chain for great blue heron, osprey and river otter.

Purpose and Rationale: Some wildlife species such as the great blue heron, osprey and river otter eat primarily fish. Fish can accumulate COPCs and effectively transfer these compounds up the food chain to higher trophic level consumers, such as the heron, osprey and river otter. This measure of effect evaluates this potential route of exposure.

Approach: The COPC levels measured in fish are used in the multi-pathway exposure model for the great blue heron, osprey and river otter that incorporates concentrations in sediment, water, and food. Exposures of the great blue heron, osprey and river otter in the aquatic environment near the WGK Plant PDA are compared to: 1) appropriate NOAEL and LOAEL values, and 2) exposures that occur in reference areas (DDA and UDA). The food chain models were applied in two ways, chronic exposure of individuals and potential maximum exposure. We also ran the models with and without accounting for the foraging area of the receptor. For example, the osprey has a foraging range of 988 acres and the PDA is approximately 20 acres. Therefore, we adjusted the exposure dose relative to the ratio of the PDA area to the foraging area (we refer to this as an Area Use Factor [AUF]) of the receptor. The following food chain models were simulated to assess the potential for harm to piscivorous birds and mammals:

- Osprey – Chronic with AUF
- Osprey – Chronic without AUF

- Osprey – Potential Maximum with AUF
- Osprey – Potential Maximum without AUF
- Great blue heron – Chronic with AUF
- Great blue heron – Chronic without AUF
- Great blue heron – Potential Maximum with AUF
- Great blue heron – Potential Maximum without AUF
- River otter – Chronic with AUF
- River otter – Chronic without AUF
- River otter – Potential Maximum with AUF
- River otter – Potential Maximum without AUF

The exposure doses of COPCs to these receptors were calculated for PDA as well as for DDA and UDA. Fish tissue concentrations are an average of the three species (drum, shad and catfish) for which whole body tissue concentrations were measured. This may result in an overestimate of exposure for some compounds and an underesti rs; e.g., the osprey feeds on water column fish such as the shad and shad have eleva ncentrations compared to the other species. However, we include an analysis num concentration of each compound in fish tissue as an upper bound for the analys

Appendix D provides more detail on the exposure models, the exposure parameters, toxicity reference values for wildlife and the food chain model tables.

No toxicity reference value was available for MCPP for any bird species. In lieu of a compound-specific TRV, a toxicity reference value for MCPA was used for the MCPP TRV. MCPA and MCPP are similar in chemical structure and therefore are expected to have similar modes of toxicity. However, we do not know the degree to which these two compounds have similar magnitudes of toxicity. Chronic exposures to these compounds have not been well studied, but acute avian and fish studies conclude that these compounds have a low acute toxicity (EPA 1988; EXTOXNET 1995).

Evaluation:

Great Blue Heron

There was no risk posed to the great blue heron at the PDA, or the upstream and downstream locations using average or maximum concentrations of COPCs in fish and surface water and with and without an accounting for foraging areas.

Osprey

There was no risk posed to the osprey at the PDA, or the upstream and downstream locations using average or maximum concentrations of COPCs in fish and surface water and with and without an accounting for foraging areas.

River Otter

There was no risk posed to the river otter at the PDA, or the upstream and downstream locations using average or maximum concentrations of COPCs in fish, surface water and sediment and with and without an accounting for foraging areas.

9.0 WEIGHT OF EVIDENCE DISCUSSION OF ECOLOGICAL RISK

The assessment endpoints used in this evaluation are:

> Sustainability (survival, growth, and reproduction) of warm water fish species typical of those found in similar habitats (incorporates the assessment of aquatic invertebrates).
>
> Survival, growth, and reproduction of local populations of aquatic wildlife represented by osprey, great blue heron, and river otter.

The assessment evaluates risk relative to these assessment endpoints in the Mississippi River adjacent to the WGK Plant (PDA).

This section weighs the results of each measure of exposure or effect and draws conclusions with regard to each assessment endpoint. Table 9-1 presents this weight-of-evidence evaluation.

9.1 Sustainability (survival, growth, and reproduction) of warm water fish species typical of those found in similar habitats (incorporates the assessment of aquatic invertebrates)

Several COPCs including dioxin, herbicides, pesticides and SVOCs were detected in fish from the PDA at concentrations higher than those detected in fish from UDA and/or DDA reference areas indicating that fish at the PDA have a higher exposure. Of the COPCs detected in fish tissue, the PDA fish tissue concentrations with available TRVs do not exceed the No Effect TRVs. However, TRVs are not available for some COPCs, particularly the phenoxy herbicides. For those compounds without TRVs, the comparison indicates that PDA fish have a higher exposure than reference fish for a subset of detected COPCs. There is some uncertainty in this line of evidence because of the lack of TRVs for some compounds.

The only COPCs in surface water that exceeded available guidelines (Tier II secondary chronic) were dioxin TEQs for mammals and birds at all PDA stations and reference stations and m&p xylene at one PDA station. We cannot come to a conclusion of no significant risk from exposure to these COPCs in surface water based on the guideline comparison.

Sediment and surface water toxicity tests for analysis of survival and growth of fish result in toxicity at certain stations. The sediment toxicity tests indicated a significant reduction in survival at sand stations PDA-5 and PDA-9 and silt station PDA-3 (and PDA-3FD) in reference to controls; all three stations also resulted in a significant reduction in survival in comparison to all other PDA, UDA and DDA stations except DDA-13 (sand). PDA-5 is 50 ft from shore on

the middle transect, PDA-9 is 150 ft from shore on the northern transect and PDA-3 is 150 ft from shore on the southern transect. VOCs and herbicides (2,4-D, MCPP) are elevated at these stations. No significant reduction in growth was observed, excluding PDA-5, PDA-9 and PDA-3(3FD). The surface water toxicity tests resulted in a significant reduction in survival at 7 days in reference to the laboratory controls for both downstream reference areas. The sediment fish toxicity tests indicate potential reductions in survival for fish exposed to PDA sediment with effects localized to samples approximately 150 feet from shore or less.

The components of the sediment triad include the sediment COPC screening, benthic community analysis and benthic invertebrate sediment toxicity testing. The COPC screening resulted in one guideline exceedance for naphthalene. The naphthalene concentration in sediment at PDA-3 exceeded the TEC. Risk due to guideline exceedance is low, however there are a number of compounds without applicable guidelines. The benthic community analysis was confounded by the high energy conditions of the environment at PDA (coarse grain and high current exposure). The PDA benthic community included few taxa and low abundance. We found a similarly sparse community in the UDA samples. The DDA samples included a greater diversity and abundance. Because observations are confounded by the high energy nature of the environment, this component of the triad is inconclusive. Because of the nature of the environment, we predict that the benthic community is not a significant component of the fish prey base. Plankton, drift and periphytic communities are likely to be more important components of the fish prey base. Finally, the sediment toxicity tests with a benthic invertebrate resulted in a significantly lower survival in PDA-5 compared to the laboratory control and all other sand PDA, DDA and UDA stations. No silt stations resulted in a significant reduction in survival. Growth was not significantly lower in all stations with the exception of PDA-5. PDA-5 is approximately 50 feet from shore and has elevated VOCs (chlorobenzene, xylenes) and herbicides (2,4-D, MCPP and dichloroprop). The sediment triad component, toxicity testing, indicates impairment of the benthic community from exposure to sediments at PDA-5.

Surface water toxicity testing for the planktonic invertebrate, *Ceriodaphnia dubia*, resulted in significantly lower survival at 2 days and 7 days at PDA-2, PDA-2FD, PDA-3 and PDA-4 compared to control samples and all other samples. Both PDA-2 and PDA-2FD resulted in 0% survival at Day 2. Stations PDA-2 through PDA-4 comprise the southern, silty transect in the PDA (50, 150 and 300 ft from shore, respectively). These stations have elevated SVOCs (4-chloroaniline), VOCs (chlorobenzene) and herbicides (2,4-D). Reproduction also was significantly reduced at PDA-5 (50 ft from shore on the middle transect) compared to the controls and all other stations, and at PDA-8 and PDA-9 in reference to two controls, but not the reference areas. The surface water planktonic invertebrate tests indicate a potential risk to planktonic invertebrates in terms of survival, and at one station, reproduction. However, we assume that water column plankton are exposed to surface water at the sediment - surface water interface. The toxicity test exposes the plankton to this surface water for seven days. This is a conservative assumption because the surface water in the PDA undergoes dynamic mixing and dilution continuously and water column plankton integrate exposures throughout the water column in the high energy environment.

9.2 Survival, growth, and reproduction of local populations of aquatic wildlife represented by great blue heron, osprey, and river otter

Wildlife observations, specifically fish diversity, is similar at the PDA, DDA and UDA. Habitat between the areas differs physically (PDA steep and rocky shoreline) which may affect wildlife use, but this difference is not related to COPC concentrations.

Comparison of COPC concentrations in surface water to wildlife drinking water benchmarks (NOAELs) indicated that no COPC for which there is a benchmark exceeded that benchmark.

Analysis of wildlife (birds and mammals) that utilize the fish as a prey base and may be incidentally exposed to PDA surface water and/or sediment and consume fish indicates that there is no significant risk of harm from exposure to PDA media for any COPC with a TRV. However, no TRV was available for MCPP and other phenoxy herbicides and COPCs. MCPP is detected in PDA sediment and fish tissue, but not in DDA or UDA sediment or fish tissue. Therefore, there is some uncertainty in this endpoint.

10.0 SOURCES AND MANAGEMENT OF UNCERTAINTIES

To insure that uncertainties in the assessment have been identified and appropriately addressed, this section presents potential sources of uncertainty. This section of the report identifies the major sources of uncertainty along with actions that have been taken to manage this uncertainty within the assessment. The primary categories of uncertainty in this assessment are exposure assessment uncertainty, effects assessment uncertainty, field observation uncertainty, toxicity test uncertainty and TRV/food chain modeling uncertainty.

10.1 Exposure Assessment Uncertainty

A variety of measurement endpoints are selected to reduce the uncertainty inherent in the evaluation of exposure in complex ecological systems. While it is impossible to evaluate the condition of every species and local population using the PDA, it is important to select species that may use the PDA, are representative of larger feeding guilds, and have a high potential for exposure. Laboratory assessment of tissue concentrations in fish are not expected to include a great deal of uncertainty.

Data
The Data Usability Review Reports provide specific details regarding the quality of the data (NEH for Solutia, February 2001). The Data Usability Review Report provides a summary of results that have been negated (U) or qualified as having been present in a non-matrix matched blank (B) due to blank action. Other results were qualified as estimated (J, JB, and UJ) due to quality control exceedances. We treat the data consistent with the recommendations of the data validators (NEH 2001).

General data quality uncertainties occur in the following cases (Table 10-1):

Case 1: Compounds with a reporting limit (RL) for any medium developed in the QAPP that exceed the ecological data quality level (EDQL)/risk-based concentrations (RBC) because of laboratory method limitations, but the compounds were not detected in any media in the PDA, UDA, or DDA;

Case 2: Compounds detected in one medium in the PDA and at least one reference area (UDA or DDA or both). However, in another medium, the compound is listed as ND, but the QAPP ecological RL exceeds the EDQL/RBCs because of the laboratory method limitations; and,

Case 3: The laboratory could not meet the QAPP -specified RL.

We treated the compounds in these categories as follows:

Case 1: Because these compounds were not detected in any media, they are not

retained in the risk analysis. However, the surface water and sediment quality guideline comparison tables include a summary of non-detected compounds at 1/2 the detection limit. The summary is presented in Section 8.0.

Case 2: These compounds were assessed in the medium specified, with the exception of analytes detected in reference area media only (e.g., benzo(a)anthracene, chrysene and diethylphthalate). The compounds were not assessed in media in which they were not detected.

Case 3: For the compounds in sediment, we include an analysis of one-half the detection limit in the comparison tables and present the results in Section 8.0 as a sensitivity analysis. For compounds in fish tissue, we do not assess hexachloroethane because it is not detected in any media, chrysene because it is only detected in reference sediment, or bis(2)ethylhexylphthalate in fish because it is only detected in PDA surface water which was assessed.

The Data Usability Report (NEH 2001) states that "the accuracy for the herbicide Dinoseb was severely compromised in all surface waters, sediments and equipment blanks due to 0% recovery of this compound in the laboratory control samples and matrix spike (MS) and matrix spike duplicate (MSD) analyses associated with these samples". As a result, all data for Dinoseb were rejected [R] and are not usable for project objectives.

Pentachlorophenol appears under two different compound categories in the data. It appears in the 8270C analysis where it is a "critical" acid compound for monitoring effectiveness of the overall analysis and in the herbicide analysis (NEH 2001). Because the lab was able to get RLs for herbicides that were much lower than they could in the 8270C analysis, we assess pentachlorophenol as an herbicide in the analysis.

For a few dioxin/dibenzofuran congeners in a number of sediment samples, the target analytes were detected in the non-matrix matched blank. The results, therefore, might be biased high. However, dioxin/dibenzofurans in sediment are not a source of risk in this analysis.

In a number of cases and media, the average concentration (which includes values at one-half the reporting limit) exceeds the measured maximum concentration due to elevated reporting levels. Due to the complex matrix of some samples, the laboratory diluted the sample in order to reduce concentrations of compounds that interfered with the detection of target analytes. Dilution results in elevation of the reporting limits for these samples. As a result, detected or estimated concentrations in some samples are much higher than the reporting limits of the other samples. When calculating the average, a standard practice in risk assessment was used, which is to take one-half of the reporting limit for concentrations that were not detected in the samples. In a few cases, the reporting limits in some samples are higher than the actual detected concentrations in other samples. In these cases, the average concentration is greater than the

maximum detected value (Table 8-4 and Table 8-6). This is a statistical artifact. The actual average concentration does not exceed the maximum. However, this statistical artifact leads to a potential overestimate of the actual average concentration for these COPCs and a conservative estimate of risk. However, none of these compounds are associated with risk to aquatic biota or wildlife, based on comparison of body burdens or dietary doses to TRVs.

Buffalofish fillets were collected and analyzed for use in the Human Health Risk Assessment. We do not include the fillet data in the ecological risk assessment. However, two analytes were detected in the buffalo fillets, but were not detected in the other species or in sediment or surface water. Gamma-BHC (lindane) was detected in the UDA reference fish composite sample only. Methoxyclor was detected in the buffalofish fillet from the PDA composite and was not detected in any other media or fish. We estimated the whole body concentration for buffalofish for comparison to the methoxyclor whole body No Effect TRV. The fillet to whole body calculation was completed as follows:

Conc.(mg methoxyclor/kg fillet) x kg fillet/0.0167 kg lipid x 0.058 kg whole body lipid/kg whole body

= mg methoxyclor/kg whole body

This assumes:

Buffalofish, mean whole body % lipid: 5.8% - 15.1% (EPA 1997b)
Buffalofish, measured mean fillet %lipid: 1.67%

In this case the detected concentration of methoxyclor is J-qualified indicating that the concentration was estimated. The estimated average and maximum whole body concentration of methoxyclor in buffalofish exceeds the No Effect TRV for both whole body lipid concentrations. However, methoxyclor is not detected in the other fish species (and one-half the detection limit for those species does not exceed the No Effect TRV). There is uncertainty in the fillet to whole body estimation.

Sample Collection Methods
To assess the surface water VOC collection methodology, we compared various collection methods. The primary collection method utilized a peristaltic pump and special filling techniques (WGK QAPP, 2000) to minimize VOC loss. For comparative purposes, VOC samples were also collected using a Kemmerer water sampler and, in one case, using gravity/cohesion to collect the sample via the plastic tubing. The results are presented in Appendix F-6 and indicate that the variability in terms of relative percent difference using the criteria specified in the QAPP is similar between field duplicates collected by the same method and samples collected by two different methods. Therefore, the surface water collection method using a peristaltic pump and collection of water from within a few feet of the bottom is sufficient to meet the data quality goals for the ERA.

10.2 Effects Assessment Uncertainty

Sediment and surface water guidelines are applied with caution. The Ontario LELs and SELs are limited in terms of the specificity to particular environments and the biology of the species. Also, sample sizes underlying the guidelines are generally statistically small. We apply the guidelines recognizing the limitations and assigning a lower weight to their application compared to site-specific analyses such as the toxicity tests.

10.3 Field Observation Uncertainty

Field observations occurred over three weeks in September, October and November 2000 during the lowest flow and gage height. This limited analysis time creates uncertainty in the findings. We draw on the expertise of professional fishermen who have fished in the waters around the PDA, UDA and DDA for many years to provide insights regarding wildlife observations.

10.4 Toxicity Test Uncertainty

Uncertainty in interpreting toxicity test results stems from the following factors: the loss of contaminants and changes in contaminant bioavailability that can occur during sample handling and testing; differences between laboratory and field conditions; and non-contaminant-related confounding factors such as sediment grain size and organic matter content, ammonia levels, etc. For this assessment, possible underestimation of toxicity due to loss of volatile contaminants is probably the greatest contributor to uncertainty in the toxicity testing. Tables C-1 and C-2 show VOC concentrations over time in sediment samples PDA-5 and PDA-9. Subsamples were taken for VOC analysis at the time of collection in the field, Day 0 and Day 28 of the amphipod sediment toxicity test, and Day 0 and Day 7 of the fathead minnow sediment toxicity test. Loss of VOCs between field collection and initiation of the toxicity tests and between Day 0 and the final day of the toxicity tests generally exceeded 50%, the cutoff for acceptability of RPD for VOCs as specified in the QAPP (MCA, November 2000). It is likely that similar VOC loss from surface water samples also occurred. Thus, results of the toxicity tests may underestimate the true toxicity of PDA sediment and surface water.

10.5 Food Chain Modeling Uncertainty

There are inherent uncertainties in the use of the food chain model because the model incorporates simplifying assumptions to represent a complex ecological system. For example, food chain models assume that contaminants in food and incidentally ingested sediment are completely available to the receptor. This may overestimate risk depending on the fraction of the ingested dose that is available.

The actual diets of the species examined in the food chain models include a larger diversity of food types than are represented by our data. This assessment assumes that exposure from

consumption of particular prey types can be estimated on the basis of concentrations in particular food items that are representative of the prey type. For example, the food chain model assumes that measured concentrations in the gizzard shad, channel catfish and drum accurately represent concentrations in forage and omnivorous fish that serve as a prey base for the wildlife guilds we examine. These species are abundant in the Mississippi River and likely do comprise a portion of the diet of the wildlife species we review. More importantly, these species represent fish guilds. In addition, we assume that the great blue heron consumes fish only. However, this species consumes other prey items, such as frogs and invertebrates. Therefore, we have simplified this exposure for this receptor. In this case, we did not observe an abundance of potential, non-fish prey items. Therefore, the assumption that fish largely comprise the diet of the blue heron may in fact be accurate.

The phenoxy herbicides, and MCPP specifically, were detected in PDA sediments and fish tissues. We could not assess whether phenoxy herbicides, such as MCPP for birds and dichloroprop for mammals, pose risks to piscivorous birds and mammals because TRVs were not available for all phenoxy herbicides in the standard sources for wildlife toxicity information. This issue introduces a data gap in our assessment. We completed a literature review, contacted researchers in academia and discussed data availability with an herbicide/pesticide database manager at USEPA. We were unable to identify any quality studies from which to draw TRVs for the analysis of MCPP. MCPP is detected in PDA sediment and fish tissues, whereas the compound is not detected in either the UDA or DDA reference sediment or fish tissues. Finally, as a sensitivity analysis, we inserted the lowest TRV for any of the phenoxy herbicides into the food chain models for all phenoxy herbicides. For avian species, the lowest TRV is the TRV for MCPA. Exposure to the maximum concentration without an area-use factor does not exceed the NOAEL or the LOAEL for the osprey or heron. However, for mammals, the lowest TRV for phenoxy herbicides is the TRV for dicamba. River otter exposure to maximum concentrations of MCPP with an area-use factor results in no NOAEL or LOAEL exceedance. If the model is rerun without an area-use factor, the exposure dose exceeds the NOAEL and is equal to the LOAEL indicating the potential for harm. There is uncertainty in this calculation, but it provides a very general sensitivity analysis for MCPP. As discussed in previous sections, the Extension Toxicology Network (EXTOXNET, 1995) describes MCPP as 'virtually non-toxic to fish'.

TRVs could not be located for a number of COPCs. In those cases, we rely on comparisons of PDA concentrations to the concentrations in UDA and DDA media as a comparative guide to regional exposure to the compound.

There is uncertainty in the estimates of ingestion rates for wildlife. We rely on studies that present conservative estimates of quantity of food, water and soil in each species' diet (USEPA 1993; Beyer et al. 1994). For example, we assume that some species incidentally ingest sediment during feeding

The quantity of sediment that an animal ingests while consuming invertebrates is uncertain. The assumptions used in the food chain models are conservative to minimize the effect of the

uncertainty. For certain COPCs, sediment is a significant component of the total dose. In certain cases, and for certain compounds, tissue concentrations represent a significant component of the total dose.

The development of toxicological benchmarks involves uncertainty because they are derived from laboratory studies and must be extrapolated to the field. In many cases, extrapolations are also made between species. This is standard practice in ecological risk assessment and yields benchmarks that are likely to be conservative. Testing is often rigorous, however the tests are generally performed on standard laboratory species and then the results are adjusted for other species based on body weight. While the species assessed are not standard laboratory species, they are species with readily available toxicological benchmarks.

To capture uncertainty in the food chain assessment, this assessment calculated hazard indices using both a No Observed Adverse Effect Level (NOAEL) and the Lowest Observed Adverse Effect Level (LOAEL).

11.0 SUMMARY AND CONCLUSIONS

The baseline ecological risk assessment for the PDA on the Mississippi River at the WGK Plant in Sauget, Illinois, addresses surface water and sediment. The ecological risk assessment is limited to the portion of the Mississippi River extending north and south from the boundaries of Site R into the river approximately 300 feet from the shore.

Assessment endpoints and measures of effects were selected in the project work plan. The assessment endpoints are:

> Sustainability (survival, growth, and reproduction) of warm water fish species typical of those found in similar habitats (incorporates the assessment of aquatic invertebrates);
>
> Survival, growth, and reproduction of local populations of aquatic wildlife represented by great blue heron, osprey, and river otter.

Results indicate that:

> Fish species are at risk from direct exposure to PDA sediments and due to threats to the prey base in sediment and surface water based on toxicity test results. However, based on the benthic survey information, the physical environment inherent to the Mississippi River under high-energy conditions reduces the importance of the benthic community as a prey base for fish communities. Planktonic invertebrates do serve as a prey base for fish species, however, the assessment assumes that they are exposed to surface water at the sediment-surface water interface. In reality, they are exposed to dynamic water concentrations reflecting dilution and dispersion in the high-energy environment. Direct comparisons of COPC concentrations to guidelines indicate limited risk from exposure to a few compounds. PDA-specific COPCs, such as MCPP, are present in PDA sediment and fish tissue and are not detected in UDA or DDA samples indicating that the compounds are accumulating.
>
> The analysis of potential risk to local populations of wildlife as represented by two bird and one mammal receptor species exposed to PDA sediment, surface water and fish tissue indicates a low potential for risk. Observations do not indicate clear impacts to wildlife populations utilizing the PDA.
>
> In general, the impacts occur within 300 feet of shore. The toxicity tests indicate toxicity at four stations within 150 feet of shore. The surface water at one station, PDA-4, results in water column toxicity and is located approximately 300 feet from shore. This station is located downstream from the wing dam and is somewhat protected from river currents.

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TABLES

TABLE 5-1. ASSESSMENT ENDPOINTS AND ASSOCIATED MEASURES OF EFFECTS WGK Plant Ecological Risk Assessment Sauget, Illinois

Assessment Endpoint 1: Sustainability of warm water fish in the Mississippi River (PDA)

Measure of effect 1a: Body burdens of COPCs in selected fish species (bottom feeder, forager fish, and predator fish) as a measure of exposure (compared to body burdens in fish from reference areas) and effects (compared to benchmark values).

Measure of effect 1b: COPC concentrations in surface waters as compared to applicable water quality guidelines for protection of fish and wildlife.

Measure of effect 1c: Toxicity of river water and sediments to fish as measured by surface water and sediment toxicity tests

Measure of effect 1d: Sustainability of a benthic macroinvertebrate community that can serve as a prey base for fish:

Concentration of COPCs (VOC and SVOC) in sediment;

Assessment of benthic macroinvertebrate community structure (using EPA Rapid Bioassessment Protocol I, as described in *Rapid Bioassessment Protocols for Use in Streams and Rivers, Benthic Macroinvertebrates and Fish*, EPA/444/4-89-001.

Sediment toxicity tests.

Measure of effect 1e: Sustainability of a planktonic invertebrate community that can serve as prey base for fish:

Surface water toxicity tests.

Assessment Endpoint 2: Survival, growth, and reproduction of local populations of aquatic wildlife as represented by the great blue heron, osprey and river otter in the PDA in the Mississippi River

Measure of effect 2a: Wildlife species composition and habitat use.

Measure of effect 2b: Concentration of COPCs in surface waters in comparison to wildlife benchmarks.

Measure of effect 2c: Concentration of COPCs in forage fish, predator and bottom fish for use in evaluating exposure via the food chain for great blue heron, osprey and river otter.

Table 6-1 Surface Water Screening Table
W G Krummrich Site
Sauget Illinois

CAS Number	Analysis	Name	Units	Site (PDA) Site Maximum	Site (PDA) Site Average	Site (PDA) Frequency of Detection	Surface Water Quality Criteria SW IL Acute WQ[1]	SW IL Chronic WQ[1]	SW NAWQ CMC[2]	SW NAWQ CCC[2]	SW Tier II Secondary Acute[3]	SW Tier II Secondary Chronic[3]	Oak Ridge Lowest Chronic All Organisms[3]	Downstream (DDA) Reference Downstream Maximum	Downstream (DDA) Reference Downstream Average	Downstream (DDA) Reference 2 X Downstream Average	Upstream (UDA) Reference Upstream Maximum	Upstream (UDA) Reference Upstream Average	Upstream (UDA) Reference 2 X Upstream Average
3268-87-9	Dioxin	1,2,3,4,6,7,8,9-OCDD	pg/L	169	157 3	100 0%								222	220 5	441	195	182 3	364 6
39001-02-0	Dioxin	1,2,3,4,6,7,8,9-OCDF	pg/L	5 2	4 014	11 1%								ND	ND	ND	ND	ND	ND
35822-46-9	Dioxin	1,2,3,4,6,7,8-HpCDD	pg/L	7	4 603	44 4%								ND	ND	ND	ND	ND	ND
67562-39-4	Dioxin	1,2,3,4,6,7,8-HpCDF	pg/L	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
55673-89-7	Dioxin	1,2,3,4,7,8,9-HpCDF	pg/L	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
39227-28-6	Dioxin	1,2,3,4,7,8-HxCDD	pg/L	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
70648-26-9	Dioxin	1,2,3,4,7,8-HxCDF	pg/L	2 2	1 297	11 1%								ND	ND	ND	ND	ND	ND
57653-85-7	Dioxin	1,2,3,6,7,8-HxCDD	pg/L	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
57117-44-9	Dioxin	1,2,3,6,7,8-HxCDF	pg/L	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
19408-74-3	Dioxin	1,2,3,7,8,9-HxCDD	pg/L	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
72918-21-9	Dioxin	1,2,3,7,8,9-HxCDF	pg/L	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
40321-76-4	Dioxin	1,2,3,7,8-PeCDD	pg/L	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
57117-41-6	Dioxin	1,2,3,7,8-PeCDF	pg/L	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
60851-34-5	Dioxin	2,3,4,6,7,8-HxCDF	pg/L	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
57117-31-4	Dioxin	2,3,4,7,8-PeCDF	pg/L	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
1746-01-6	Dioxin	2,3,7,8-TCDD	pg/L	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
51207-31-9	Dioxin	2,3,7,8-TCDF	pg/L	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
37871-00-4	Dioxin	Total HpCDD	pg/L	12 9	8 397	66 7%								9 4	8 95	17 9	ND	ND	ND
38998-75-3	Dioxin	Total HpCDF	pg/L	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
34465-46-8	Dioxin	Total HxCDD	pg/L	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
55684-94-1	Dioxin	Total HxCDF	pg/L	2 2	1 353	11 1%								ND	ND	ND	ND	ND	ND
36088-22-9	Dioxin	Total PeCDD	pg/L	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
30402-15-4	Dioxin	Total PeCDF	pg/L	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
41903-57-5	Dioxin	Total TCDD	pg/L	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
55722-27-5	Dioxin	Total TCDF	pg/L	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
	Dioxin	TEQ Mammal	pg/L	0 307	0 192							3 10E-03[4]		0 0222	0 0221	0 0442	0 0195	0 0182	0 0364
93-76-5	Herbicides	2,4,5-T	ug/l	ND	ND	0 0%								0 11	0 16	0 36	ND	ND	ND
93-72-1	Herbicides	2 4 5-TP (Silvex)	ug/l	0 14	0 236	11 1%								ND	ND	ND	ND	ND	ND
94-75-7	Herbicides	2 4-D	ug/l	10	3 06	55 6%								0 63	0 48	0 96	ND	ND	ND
94-82-6	Herbicides	2,4-DB	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
75-99-0	Herbicides	Dalapon	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
1918-00-9	Herbicides	Dicamba	ug/l	0 11	0 546	11 1%								ND	ND	ND	ND	ND	ND
120-36-5	Herbicides	Dichlorprop	ug/l	1 85	2 59	22 2%								ND	ND	ND	ND	ND	ND
88-85-7	Herbicides	Dinoseb	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
94-74-6	Herbicides	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
7085-19-0	Herbicides	MCPP[2-(4-chloro-2-methylphenoxy)-propionic acid]	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
87-86-5	Herbicides	Pentachlorophenol (at pH 7 8)	ug/l	0 87	0 519	33 3%			19	15				ND	ND	ND	ND	ND	ND
2051-24-3	PCBs	Decachlorobiphenyl	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
C-DICHLOROB	PCBs	Dichlorobiphenyl	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
C-HEPTACHLOR	PCBs	Heptachlorobiphenyl	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
C-HEXACHLORO	PCBs	Hexachlorobiphenyl	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
C-MONOCHLORO	PCBs	Monochlorobiphenyl	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
C-NONACHLORO	PCBs	Nonachlorobiphenyl	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
C-OCTA-BIPHE	PCBs	Octachlorobiphenyl	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
C-PENTBIPHEN	PCBs	Pentachlorobiphenyl	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
C-TETRACHLOR	PCBs	Tetrachlorobiphenyl	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
C-TOTAL-PCB	PCBs	Total Polychlorinated Biphenyls	ug/l	ND	ND	0 0%				0 014[5]		0 14	0 1	ND	ND	ND	ND	ND	ND
C-TRICHLOROB	PCBs	Trichlorobiphenyl	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
72-54-8	Pesticides	4,4'-DDD	ug/l	ND	ND	0 0%					0 19[5]	0 011[5]	1 69[5]	ND	ND	ND	ND	ND	ND
72-55-9	Pesticides	4,4'-DDE	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
50-29-3	Pesticides	4,4'-DDT	ug/l	ND	ND	0 0%			1 1	0 001		0 013[5]	0 3[5]	ND	ND	ND	ND	ND	ND
309-00-2	Pesticides	Aldrin	ug/l	ND	ND	0 0%			3 0					ND	ND	ND	ND	ND	ND
319-84-6	Pesticides	alpha-BHC	ug/l	ND	ND	0 0%					39[5]	2 2[5]	95[5]	ND	ND	ND	ND	ND	ND
5103-71-9	Pesticides	alpha-Chlordane	ug/l	ND	ND	0 0%			2 4[5]	0 0043[5]			1 09[5]	ND	ND	ND	ND	ND	ND
319-85-7	Pesticides	beta-BHC	ug/l	ND	ND	0 0%					39[5]	2 2[5]	95[5]	ND	ND	ND	ND	ND	ND
319-86-8	Pesticides	delta-BHC	ug/l	ND	ND	0 0%					39[5]	2 2[5]	85[5]	ND	ND	ND	ND	ND	ND
60-57-1	Pesticides	Dieldrin	ug/l	ND	ND	0 0%			0 24	0 056				ND	ND	ND	ND	ND	ND
959-98-8	Pesticides	Endosulfan I	ug/l	ND	ND	0 0%			0 22[5]	0 056[5]		0 051		ND	ND	ND	ND	ND	ND
33213-65-9	Pesticides	Endosulfan II	ug/l	ND	ND	0 0%			0 22[5]	0 056[5]		0 051		ND	ND	ND	ND	ND	ND
1031-07-8	Pesticides	Endosulfan sulfate	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
72-20-8	Pesticides	Endrin	ug/l	ND	ND	0 0%			0 086	0 036				ND	ND	ND	ND	ND	ND
7421-93-4	Pesticides	Endrin aldehyde	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
53494-70-5	Pesticides	Endrin ketone	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
58-89-9	Pesticides	gamma-BHC (Lindane)	ug/l	ND	ND	0 0%			0 95				3 3	ND	ND	ND	ND	ND	ND
5103-74-2	Pesticides	gamma-Chlordane	ug/l	ND	ND	0 0%			2 4[5]	0 0043[5]			1 09[5]	ND	ND	ND	ND	ND	ND
76-44-8	Pesticides	Heptachlor	ug/l	ND	ND	0 0%			0 52	0 0038	0 125	0 0069	1 76	ND	ND	ND	ND	ND	ND

				Site (PDA)			Surface Water Quality Criteria							Downstream (DDA) Reference			Upstream (UDA) Reference		
CAS Number	Analysis	Name	Units	Site Maximum	Site Average	Frequency of Detection	SW IL Acute WQ[1]	SW IL Chronic WQ[1]	SW NAWQ CMC[2]	SW NAWQ CCC[2]	SW Tier II Secondary Acute[3]	SW Tier II Secondary Chronic[3]	Oak Ridge Lowest Chronic All Organisms[3]	Downstream Maximum	Downstream Average	2 X Downstream Average	Upstream Maximum	Upstream Average	2 X Upstream Average
1024-57-3	Pesticides	Heptachlor epoxide	ug/l	ND	ND	0.0%			0.52	0.0038				ND	ND	ND	ND	ND	ND
72-43-5	Pesticides	Methoxychlor	ug/l	ND	ND	0.0%				0.03		0.019		ND	ND	ND	ND	ND	ND
8001-35-2	Pesticides	Toxaphene	ug/l	ND	ND	0.0%			0.73	0.0002				ND	ND	ND	ND	ND	ND
87-61-6	SVOCs	1,2,3-Trichlorobenzene	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
120-82-1	SVOCs	1,2,4-Trichlorobenzene	ug/l	1.525	2.25	22.2%					700	110		ND	ND	ND	ND	ND	ND
95-50-1	SVOCs	1,2-Dichlorobenzene	ug/l	13.25	4.82	33.3%					260	14		ND	ND	ND	ND	ND	ND
108-70-3	SVOCs	1,3,5-Trichlorobenzene	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
541-73-1	SVOCs	1,3-Dichlorobenzene	ug/l	ND	ND	0.0%					630	71		ND	ND	ND	ND	ND	ND
106-46-7	SVOCs	1,4-Dichlorobenzene	ug/l	ND	ND	0.0%					150	15		ND	ND	ND	ND	ND	ND
108-60-1	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
15950-66-0	SVOCs	2,3,4-Trichlorophenol	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
933-75-5	SVOCs	2,3,5-Trichlorophenol	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
933-78-8	SVOCs	2,3,6-Trichlorophenol	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
95-95-4	SVOCs	2,4,5-Trichlorophenol	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
88-06-2	SVOCs	2,4,6-Trichlorophenol	ug/l	6	3.52	44.4%								ND	ND	ND	ND	ND	ND
120-83-2	SVOCs	2,4-Dichlorophenol	ug/l	31	9.64	44.4%								1	1.75	3.5	ND	ND	ND
105-67-9	SVOCs	2,4-Dimethylphenol	ug/l	3.7	2.52	33.3%								ND	ND	ND	ND	ND	ND
51-28-5	SVOCs	2,4-Dinitrophenol	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
121-14-2	SVOCs	2,4-Dinitrotoluene	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
606-20-2	SVOCs	2,6-Dinitrotoluene	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
91-58-7	SVOCs	2-Chloronaphthalene	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
95-57-8	SVOCs	2-Chlorophenol	ug/l	20	6.9	44.4%								0.36	1.43	2.86	ND	ND	ND
91-57-6	SVOCs	2-Methylnaphthalene	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
95-48-7	SVOCs	2-Methylphenol (o-Cresol)	ug/l	ND	ND	0.0%					230	13	459	ND	ND	ND	ND	ND	ND
88-74-4	SVOCs	2-Nitroaniline	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
88-75-5	SVOCs	2-Nitrophenol	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
91-94-1	SVOCs	3,3'-Dichlorobenzidine	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
609-19-8	SVOCs	3,4,5-Trichlorophenol	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
106-44-5	SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/l	11	3.93	33.3%								ND	ND	ND	ND	ND	ND
99-09-2	SVOCs	3-Nitroaniline	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
534-52-1	SVOCs	4,6-Dinitro-2-methylphenol	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
101-55-3	SVOCs	4-Bromophenylphenyl ether	ug/l	ND	ND	0.0%						1.5		ND	ND	ND	ND	ND	ND
59-50-7	SVOCs	4-Chloro-3-methylphenol	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
106-47-8	SVOCs	4-Chloroaniline	ug/l	45	14.1	44.4%								1.6	3.3	6.6	ND	ND	ND
7005-72-3	SVOCs	4-Chlorophenylphenyl ether	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
100-01-6	SVOCs	4-Nitroaniline	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
100-02-7	SVOCs	4-Nitrophenol	ug/l	ND	ND	0.0%					1200	300	481	ND	ND	ND	ND	ND	ND
83-32-9	SVOCs	Acenaphthene	ug/l	ND	ND	0.0%							74	ND	ND	ND	ND	ND	ND
208-96-8	SVOCs	Acenaphthylene	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
120-12-7	SVOCs	Anthracene	ug/l	ND	ND	0.0%					13	0.73	0.09	ND	ND	ND	ND	ND	ND
56-55-3	SVOCs	Benzo(a)anthracene	ug/l	ND	ND	0.0%					0.49	0.027	0.65	ND	ND	ND	ND	ND	ND
50-32-8	SVOCs	Benzo(a)pyrene	ug/l	ND	ND	0.0%					0.24	0.014	0.30	ND	ND	ND	ND	ND	ND
205-99-2	SVOCs	Benzo(b)fluoranthene	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
191-24-2	SVOCs	Benzo(g,h,i)perylene	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
207-08-9	SVOCs	Benzo(k)fluoranthene	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
111-91-1	SVOCs	bis(2-Chloroethoxy)methane	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
111-44-4	SVOCs	bis(2-Chloroethyl)ether	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/l	2.2	2.56	11.1%					27	3.0	912	ND	ND	ND	ND	ND	ND
85-68-7	SVOCs	Butylbenzylphthalate	ug/l	ND	ND	0.0%						19		ND	ND	ND	ND	ND	ND
86-74-8	SVOCs	Carbazole	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
218-01-9	SVOCs	Chrysene	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
84-74-2	SVOCs	Di-n-butylphthalate	ug/l	0.94	2.11	22.2%					190	35	697	ND	ND	ND	ND	ND	ND
117-84-0	SVOCs	Di-n-octylphthalate	ug/l	ND	ND	0.0%							708	ND	ND	ND	ND	ND	ND
53-70-3	SVOCs	Dibenz(a,h)anthracene	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
132-64-9	SVOCs	Dibenzofuran	ug/l	ND	ND	0.0%					88	3.7	1003	ND	ND	ND	ND	ND	ND
84-66-2	SVOCs	Diethylphthalate	ug/l	ND	ND	0.0%					1800	210	85600	ND	ND	ND	ND	ND	ND
131-11-3	SVOCs	Dimethylphthalate	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
206-44-0	SVOCs	Fluoranthene	ug/l	ND	ND	0.0%							15	ND	ND	ND	ND	ND	ND
86-73-7	SVOCs	Fluorene	ug/l	ND	ND	0.0%					70	3.9		ND	ND	ND	ND	ND	ND
118-74-1	SVOCs	Hexachlorobenzene	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
87-68-3	SVOCs	Hexachlorobutadiene	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
77-47-4	SVOCs	Hexachlorocyclopentadiene	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
67-72-1	SVOCs	Hexachloroethane	ug/l	ND	ND	0.0%					210	12		ND	ND	ND	ND	ND	ND
193-39-5	SVOCs	Indeno(1,2,3-cd)pyrene	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
78-59-1	SVOCs	Isophorone	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
621-64-7	SVOCs	N-Nitroso-di-n-propylamine	ug/l	ND	ND	0.0%								ND	ND	ND	ND	ND	ND
86-30-6	SVOCs	N-Nitrosodiphenylamine	ug/l	ND	ND	0.0%					3800	210	332	ND	ND	ND	ND	ND	ND

CAS Number	Analysis	Name	Units	Site (PDA)			Surface Water Quality Criteria							Downstream (DDA) Reference			Upstream (UDA) Reference		
				Site Maximum	Site Average	Frequency of Detection	SW IL Acute WQ[1]	SW IL Chronic WQ[1]	SW NAWQ CMC[2]	SW NAWQ CCC[2]	SW Tier II Secondary Acute[3]	SW Tier II Secondary Chronic[3]	Oak Ridge Lowest Chronic All Organisms[3]	Downstream Maximum	Downstream Average	2 X Downstream Average	Upstream Maximum	Upstream Average	2 X Upstream Average
91-20-3	SVOCs	Naphthalene	ug/l	ND	ND	0 0%					190	12	620	ND	ND	ND	ND	ND	ND
98-95-3	SVOCs	Nitrobenzene	ug/l	0 93	2 2	22 2%								ND	ND	ND	ND	ND	ND
85-01-8	SVOCs	Phenanthrene	ug/l	ND	ND	0 0%							200	ND	ND	ND	ND	ND	ND
108-95-2	SVOCs	Phenol	ug/l	16	3 89	11 1%								ND	ND	ND	ND	ND	ND
129-00-0	SVOCs	Pyrene	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
71-55-6	VOCs	1,1,1-Trichloroethane	ug/l	ND	ND	0 0%					200	11	3493	ND	ND	ND	ND	ND	ND
79-34-5	VOCs	1,1,2,2-Tetrachloroethane	ug/l	ND	ND	0 0%					2100	610	2400	ND	ND	ND	ND	ND	ND
79-00-5	VOCs	1,1,2-Trichloroethane	ug/l	ND	ND	0 0%					5200	1200	9400	ND	ND	ND	ND	ND	ND
75-34-3	VOCs	1,1-Dichloroethane	ug/l	ND	ND	0 0%					830	47	14680	ND	ND	ND	ND	ND	ND
75-35-4	VOCs	1,1-Dichloroethene	ug/l	ND	ND	0 0%					450	25		ND	ND	ND	ND	ND	ND
107-06-2	VOCs	1,2-Dichloroethane	ug/l	0 775	0 872	33 3%					6800	910	15200	ND	ND	ND	ND	ND	ND
78-87-5	VOCs	1,2-Dichloropropane	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
78-93-3	VOCs	2-Butanone (MEK)	ug/l	ND	ND	0 0%					240000	14000	282170	ND	ND	ND	9	7	14
591-78-6	VOCs	2-Hexanone	ug/l	ND	ND	0 0%					1800	99	32783	ND	ND	ND	ND	ND	ND
108-10-1	VOCs	4-Methyl-2-pentanone (MIBK)	ug/l	2 2	3 91	33 3%					2200	170	77400	ND	ND	ND	ND	ND	ND
67-64-1	VOCs	Acetone	ug/l	ND	ND	0 0%					28000	1500	507640	ND	ND	ND	ND	ND	ND
71-43-2	VOCs	Benzene	ug/l	1 8	1 17	22 2%					2300	130	525000	0 24	0 195	0 39	0 765	0 8925	1 785
75-27-4	VOCs	Bromodichloromethane	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
75-25-2	VOCs	Bromoform	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
74-83-9	VOCs	Bromomethane (Methyl bromide)	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
75-15-0	VOCs	Carbon disulfide	ug/l	ND	ND	0 0%					17	0 92	244	ND	ND	ND	ND	ND	ND
56-23-5	VOCs	Carbon tetrachloride	ug/l	ND	ND	0 0%					180	9 6	1970	ND	ND	ND	0 73	0 665	1 73
108-90-7	VOCs	Chlorobenzene	ug/l	24	7 59	66 7%					1100	64	1203	2 3	1 75	3 5	0 775	0 8875	1 775
75-00-3	VOCs	Chloroethane	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
67-66-3	VOCs	Chloroform	ug/l	ND	ND	0 0%					490	28	1240	ND	ND	ND	ND	ND	ND
74-87-3	VOCs	Chloromethane	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
156-59-2	VOCs	cis-1,2-Dichloroethene	ug/l	ND	ND	0 0%					1100[7]	590[7]	9538[7]	ND	ND	ND	ND	ND	ND
10061-01-5	VOCs	cis-1,3-Dichloropropene	ug/l	ND	ND	0 0%					0 99	0 055[8]	244	ND	ND	ND	ND	ND	ND
124-48-1	VOCs	Dibromochloromethane	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
100-41-4	VOCs	Ethylbenzene	ug/l	0 38	0 685	44 4%					130	7 3		ND	ND	ND	ND	ND	ND
108-38-3	VOCs	m&p-Xylene	ug/l	2 4	1 05	44 4%					32	1 8		ND	ND	ND	ND	ND	ND
75-09-2	VOCs	Methylene chloride (Dichloromethane)	ug/l	ND	ND	0 0%					26000	2200	42667	ND	ND	ND	ND	ND	ND
100-42-5	VOCs	Styrene	ug/l	ND	ND	0 0%								ND	ND	ND	ND	ND	ND
127-18-4	VOCs	Tetrachloroethene	ug/l	ND	ND	0 0%					630	96	750	ND	ND	ND	ND	ND	ND
108-88-3	VOCs	Toluene	ug/l	1 7	1 18	33 3%					120	6 8	1269	0 4	0 7	1 4	ND	ND	ND
156-60-5	VOCs	trans-1,2-Dichloroethene	ug/l	ND	ND	0 0%					1100[7]	590[7]	9535[7]	ND	ND	ND	ND	ND	ND
10061-02-6	VOCs	trans-1,3-Dichloropropene	ug/l	ND	ND	0 0%					0 99	0 055[8]	244	ND	ND	ND	ND	ND	ND
79-01-6	VOCs	Trichloroethene	ug/l	0 5	0 922	11 1%					440	47	7257	ND	ND	ND	ND	ND	ND
75-01-4	VOCs	Vinyl chloride	ug/l	ND	ND	0 0%								ND	ND	ND	0 675	0 8375	1 675
1330-20-7	VOCs	Xylenes Total	ug/l	2 7	1 15	44 4%					230	13	62308	ND	ND	ND	ND	ND	ND

Notes

[1]Illinois 1999 Title 35 of the Illinois Administrative Code Subtitle C Chapter 1 Part 302 Water Quality Standards Subpart B

[2]USEPA 1999 National Recommended Water Quality Criteria - Correction Office of Water EPA 82-2-Z-99-001 April 1999

[3]Suter G W II and C L Tsao 1996 Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota 1996 Revision Risk Assessment Health Sciences Research Division Oak Ridge Tennessee ES/ER/TM-96/R2

[4]USEPA 1995 Great Lakes Water Quality Initiative Criteria Documents for the Protection of Wildlife DDT Mercury 2 3 7 8-TCDD PCBs Office of Water EPA 820-B-95-008

[5]Value for PCBs

[6]Value for DDD p p

[7]Value for DDT

[8]Value for BHC - other

Value for Chlordane

[9]Value for alpha- and beta-Endosulfan

[7]Value for 1 2-Dichloroethene

[8]Value for 1 3-Dichloropropene

Not detected at the Site

Site maximum concentration is less than the UDA and DDA maximum concentrations

Site maximum concentration is less than the screening criteria

CAS Number	Analysis	Name	Units	Site (PDA)			Sediment Quality Criteria			Downstream (DDA) Reference			Upstream (UDA) Reference		
				Site Maximum	Site Average	Frequency of Detection	Sed Qual Guide[1] (TEC)	Sed FL SQAG[2] (TEL)	Sed Ontario[3] (LEL)	Downstream Maximum	Downstream Average	2 X Downstream Average	Upstream Maximum	Upstream Average	2 X Upstream Average
3268-87-9	Dioxin	1,2,3,4,6,7,8,9-OCDD	pg/g	911	165.5	100%				1180	596.2	1192.4	287	149.4	298.8
39001-02-0	Dioxin	1,2,3,4,6,7,8,9-OCDF	pg/g	74.9	10.76	56%				14.3	7.44	14.88	6.2	3.288	6.576
35822-46-9	Dioxin	1,2,3,4,6,7,8-HpCDD	pg/g	70.8	10.84	100%				31.3	15.75	31.5	11.1	5.7	11.4
67562-39-4	Dioxin	1,2,3,4,6,7,8-HpCDF	pg/g	10.4	1.515	11%				3	1.55	3.1	ND	ND	ND
55673-89-7	Dioxin	1,2,3,4,7,8,9-HpCDF	pg/g	0.79	0.3511	33%				ND	ND	ND	ND	ND	ND
39227-28-6	Dioxin	**1,2,3,4,7,8-HxCDD**	pg/g	ND	ND	ND				ND	ND	ND	ND	ND	ND
70648-26-9	Dioxin	1,2,3,4,7,8-HxCDF	pg/g	0.62	0.4178	78%				ND	ND	ND	0.27	0.1975	0.395
57653-85-7	Dioxin	1,2,3,6,7,8-HxCDD	pg/g	1.2	0.3183	22%				ND	ND	ND	0.37	0.2725	0.545
57117-44-9	Dioxin	1,2,3,6,7,8-HxCDF	pg/g	0.38	0.1944	22%				ND	ND	ND	ND	ND	ND
19408-74-3	Dioxin	**1,2,3,7,8,9-HxCDD**	pg/g	ND	ND	ND				ND	ND	ND	0.35	0.2625	0.525
72918-21-9	Dioxin	**1,2,3,7,8,9-HxCDF**	pg/g	ND	ND	ND				ND	ND	ND	ND	ND	ND
40321-76-4	Dioxin	***1,2,3,7,8-PeCDD***	pg/g	ND	ND	ND				ND	ND	ND	ND	ND	ND
57117-41-6	Dioxin	1,2,3,7,8-PeCDF	pg/g	0.48	0.2033	11%				ND	ND	ND	ND	ND	ND
65851-34-5	Dioxin	2,3,4,6,7,8-HxCDF	pg/g	0.195	0.1606	11%				ND	ND	ND	ND	ND	ND
57117-31-4	Dioxin	2,3,4,7,8-PeCDF	pg/g	0.18	0.17	11%				ND	ND	ND	ND	ND	ND
1746-01-6	Dioxin	**2,3,7,8-TCDD**	pg/g	ND	ND	ND				ND	ND	ND	ND	ND	ND
51207-31-9	Dioxin	2,3,7,8-TCDF	pg/g	0.8	0.3006	33%				ND	ND	ND	ND	ND	ND
37871-00-4	Dioxin	Total HpCDD	pg/g	146	22.53	100%				75.3	37.94	75.88	23	11.82	23.64
38998-75-3	Dioxin	Total HpCDF	pg/g	54.2	7.414	56%				12.9	6.5	13	5.3	2.713	5.426
34465-46-8	Dioxin	Total HxCDD	pg/g	11.7	2.058	44%				7.3	3.7	7.4	3.3	1.738	3.476
55684-94-1	Dioxin	Total HxCDF	pg/g	10.1	2.031	78%				2.3	1.2	2.4	2.4	1.263	2.526
38998-01-9	Dioxin	Total PeCDD	pg/g	0.25	0.2194	11%				ND	ND	ND	0.51	0.355	0.71
30402-15-4	Dioxin	Total PeCDF	pg/g	2.7	0.6689	33%				ND	ND	ND	0.56	0.3925	0.785
41903-57-5	Dioxin	Total TCDD	pg/g	42.8	6.798	44%				3.1	1.625	3.25	0.25	0.225	0.45
55722-27-5	Dioxin	Total TCDF	pg/g	1.4	0.4883	33%				ND	ND	ND	ND	ND	ND
	Dioxin	TEQ Mammal	pg/g	1.35	0.379					0.462	0.233	0.466	0.239	0.145	0.292
93-76-5	Herbicides	**2,4,5-T**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
93-72-1	Herbicides	**2,4,5-TP (Silvex)**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
94-75-7	Herbicides	2,4-D	ug/kg dw	2300	277	22%				ND	ND	ND	ND	ND	ND
94-82-6	Herbicides	**2,4-DB**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
75-99-0	Herbicides	**Dalapon**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
1918-00-9	Herbicides	**Dicamba**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
120-36-5	Herbicides	Dichloroprop	ug/kg dw	1100	165	44%				ND	ND	ND	ND	ND	ND
88-85-7	Herbicides	**Dinoseb**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
94-74-6	Herbicides	**MCPA(4-chloro-2-methylphenoxy)-acetic acid)**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
7085-19-0	Herbicides	MCPP[2-(4-chloro-2-methylphenoxy)propanoic acid]	ug/kg dw	160000	19500	56%				ND	ND	ND	ND	ND	ND
87-86-5	Herbicides	Pentachlorophenol	ug/kg dw	45	13.7	11%				1.6	7.8	15.6	1.55	8.03	16.06
2051-24-3	PCBs	**Decachlorobiphenyl**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
C-DICHLOROBI	PCBs	**Dichlorobiphenyl**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
C-HEPTACHLOR	PCBs	**Heptachlorobiphenyl**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
C-HEXACHLORO	PCBs	**Hexachlorobiphenyl**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
C-MONOCHLORO	PCBs	**Monochlorobiphenyl**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
C-NONACHLORO	PCBs	**Nonachlorobiphenyl**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
C-OCTA-BIPHE	PCBs	**Octachlorobiphenyl**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
C-PENTBIPHEN	PCBs	**Pentachlorobiphenyl**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
C-TETRACHLOR	PCBs	**Tetrachlorobiphenyl**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
C-TOTAL-PCB	PCBs	***Total Polychlorinated Biphenyls***	ug/kg dw	ND	ND	ND	59.8	21.6	70	ND	ND	ND	ND	ND	ND
C-TRICHLOROB	PCBs	**Trichlorobiphenyl**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
72-54-8	Pesticides	4,4'-DDD	ug/kg dw	1.6	2.04	11%	4.82	1.22	8	ND	ND	ND	ND	ND	ND
72-55-9	Pesticides	**4,4'-DDE**	ug/kg dw	ND	ND	ND	3.16	2.07	5	ND	ND	ND	ND	ND	ND
50-29-3	Pesticides	**4,4'-DDT***	ug/kg dw	ND	ND	ND	4.16	1.19	8	ND	ND	ND	ND	ND	ND
309-00-2	Pesticides	**Aldrin**	ug/kg dw	ND	ND	ND			2	ND	ND	ND	ND	ND	ND
319-84-6	Pesticides	**alpha-BHC**	ug/kg dw	ND	ND	ND			6	ND	ND	ND	ND	ND	ND
5103-71-9	Pesticides	**alpha-Chlordane****	ug/kg dw	ND	ND	ND	3.24	2.26	7	ND	ND	ND	ND	ND	ND
319-85-7	Pesticides	**beta-BHC**	ug/kg dw	ND	ND	ND			5	ND	ND	ND	ND	ND	ND
319-86-8	Pesticides	**delta-BHC**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
60-57-1	Pesticides	**Dieldrin**	ug/kg dw	ND	ND	ND	1.9	0.715	2	ND	ND	ND	ND	ND	ND
959-98-8	Pesticides	**Endosulfan I**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
33213-65-9	Pesticides	**Endosulfan II**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
1031-07-8	Pesticides	**Endosulfan sulfate**	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
72-20-8	Pesticides	**Endrin**	ug/kg dw	ND	ND	ND	2.22		3	ND	ND	ND	ND	ND	ND

CAS Number	Analysis	Name	Units	Site (PDA)			Sediment Quality Criteria			Downstream (DDA) Reference			Upstream (UDA) Reference		
				Site Maximum	Site Average	Frequency of Detection	Sed Qual Guide[1] (TEC)	Sed FL SQAG[2] (TEL)	Sed Ontario[3] (LEL)	Downstream Maximum	Downstream Average	2 X Downstream Average	Upstream Maximum	Upstream Average	2 X Upstream Average
7421-93-4	Pesticides	Endrin aldehyde	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
53494-70-5	Pesticides	Endrin ketone	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
58-89-9	Pesticides	gamma-BHC (Lindane)	ug/kg dw	ND	ND	ND	2.37	0.32	3	ND	ND	ND	ND	ND	ND
5103-74-2	Pesticides	gamma-Chlordane**	ug/kg dw	ND	ND	ND	3.24	2.26	7	ND	ND	ND	ND	ND	ND
76-44-8	Pesticides	Heptachlor	ug/kg dw	ND	ND	ND			0.3***	ND	ND	ND	ND	ND	ND
1024-57-3	Pesticides	Heptachlor epoxide	ug/kg dw	ND	ND	ND	2.47		5	ND	ND	ND	ND	ND	ND
72-43-5	Pesticides	Methoxychlor	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
8001-35-2	Pesticides	Toxaphene	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
87-61-6	SVOCs	1,2,3-Trichlorobenzene	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
120-82-1	SVOCs	1,2,4-Trichlorobenzene	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
95-50-1	SVOCs	1,2-Dichlorobenzene	ug/kg dw	110	100	22%				ND	ND	ND	ND	ND	ND
108-70-3	SVOCs	1,3,5-Trichlorobenzene	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
541-73-1	SVOCs	1,3-Dichlorobenzene	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
106-46-7	SVOCs	1,4-Dichlorobenzene	ug/kg dw	81.5	106	11%				ND	ND	ND	ND	ND	ND
108-60-1	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
15950-66-0	SVOCs	2,3,4-Trichlorophenol	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
933-78-8	SVOCs	2,3,5-Trichlorophenol	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
933-75-5	SVOCs	2,3,6-Trichlorophenol	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
95-95-4	SVOCs	2,4,5-Trichlorophenol	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
88-06-2	SVOCs	2,4,6-Trichlorophenol	ug/kg dw	470	144	22%				ND	ND	ND	ND	ND	ND
120-83-2	SVOCs	2,4-Dichlorophenol	ug/kg dw	1000	208	22%				ND	ND	ND	ND	ND	ND
105-67-9	SVOCs	2,4-Dimethylphenol	ug/kg dw	80	98.1	22%				ND	ND	ND	ND	ND	ND
51-28-5	SVOCs	2,4-Dinitrophenol	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
121-14-2	SVOCs	2,4-Dinitrotoluene	ug/kg dw	750	195	22%				ND	ND	ND	ND	ND	ND
606-20-2	SVOCs	2,6-Dinitrotoluene	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
91-58-7	SVOCs	2-Chloronaphthalene	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
95-57-8	SVOCs	2-Chlorophenol	ug/kg dw	360	137	11%				ND	ND	ND	ND	ND	ND
91-57-6	SVOCs	2-Methylnaphthalene	ug/kg dw	ND	ND	ND		20.2		ND	ND	ND	ND	ND	ND
95-48-7	SVOCs	2-Methylphenol (o-Cresol)	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
88-74-4	SVOCs	2-Nitroaniline	ug/kg dw	76	471	11%				ND	ND	ND	ND	ND	ND
88-75-5	SVOCs	2-Nitrophenol	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
91-94-1	SVOCs	3,3'-Dichlorobenzidine	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
609-19-8	SVOCs	3,4,5-Trichlorophenol	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
106-44-5	SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/kg dw	800	192	22%				ND	ND	ND	ND	ND	ND
99-09-2	SVOCs	3-Nitroaniline	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
534-52-1	SVOCs	4,6-Dinitro-2-methylphenol	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
101-55-3	SVOCs	4-Bromophenylphenyl ether	ug/kg dw	96.5	108	11%				ND	ND	ND	ND	ND	ND
59-50-7	SVOCs	4-Chloro-3-methylphenol	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
106-47-8	SVOCs	4-Chloroaniline	ug/kg dw	4800	1080	67%				ND	ND	ND	ND	ND	ND
7005-72-3	SVOCs	4-Chlorophenylphenyl ether	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
100-01-6	SVOCs	4-Nitroaniline	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
100-02-7	SVOCs	4-Nitrophenol	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
83-32-9	SVOCs	Acenaphthene	ug/kg dw	ND	ND	ND		6.71		ND	ND	ND	ND	ND	ND
208-96-8	SVOCs	Acenaphthylene	ug/kg dw	ND	ND	ND		5.87		ND	ND	ND	ND	ND	ND
120-12-7	SVOCs	Anthracene	ug/kg dw	ND	ND	ND	57.2	46.9	220	ND	ND	ND	ND	ND	ND
56-55-3	SVOCs	Benzo(a)anthracene	ug/kg dw	ND	ND	ND	108	74.8	320	46	75.5	151	ND	ND	ND
50-32-8	SVOCs	Benzo(a)pyrene	ug/kg dw	ND	ND	ND	150	88.8	370	ND	ND	ND	ND	ND	ND
205-99-2	SVOCs	Benzo(b)fluoranthene	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
191-24-2	SVOCs	Benzo(g,h,i)perylene	ug/kg dw	ND	ND	ND			170	ND	ND	ND	ND	ND	ND
207-08-9	SVOCs	Benzo(k)fluoranthene	ug/kg dw	ND	ND	ND			240	ND	ND	ND	ND	ND	ND
111-91-1	SVOCs	bis(2-Chloroethoxy)methane	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
111-44-4	SVOCs	bis(2-Chloroethyl)ether	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/kg dw	ND	ND	ND		182		ND	ND	ND	110	109	218
85-68-7	SVOCs	Butylbenzylphthalate	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
86-74-8	SVOCs	Carbazole	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
218-01-9	SVOCs	Chrysene	ug/kg dw	ND	ND	ND	166	108	340	49	77	154	ND	ND	ND
84-74-2	SVOCs	Di-n-butylphthalate	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
117-84-0	SVOCs	Di-n-octylphthalate	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
53-70-3	SVOCs	Dibenzo(a,h)anthracene	ug/kg dw	ND	ND	ND	33	6.22	60	ND	ND	ND	ND	ND	ND
132-64-9	SVOCs	Dibenzofuran	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
84-66-2	SVOCs	Diethylphthalate	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
131-11-3	SVOCs	Dimethylphthalate	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND

Table 6-2 Sediment Screening Table
W G Krummrich Site
Sauget, Illinois

CAS Number	Analysis	Name	Units	Site (PDA)			Sediment Quality Criteria			Downstream (DDA) Reference			Upstream (UDA) Reference		
				Site Maximum	Site Average	Frequency of Detection	Sed Qual Guide[1] (TEC)	Sed FL SQAG[2] (TEL)	Sed Ontario[3] (LEL)	Downstream Maximum	Downstream Average	2 X Downstream Average	Upstream Maximum	Upstream Average	2 X Upstream Average
206-44-0	SVOCs	Fluoranthene	ug/kg dw	ND	ND	ND	423	113	750	ND	ND	ND	ND	ND	ND
86-73-7	SVOCs	Fluorene	ug/kg dw	ND	ND	ND	77.4	21.2	190	ND	ND	ND	ND	ND	ND
118-74-1	SVOCs	Hexachlorobenzene	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
87-68-3	SVOCs	Hexachlorobutadiene	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
77-47-4	SVOCs	Hexachlorocyclopentadiene	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
67-72-1	SVOCs	Hexachloroethane	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
193-39-5	SVOCs	Indeno(1,2,3-cd)pyrene	ug/kg dw	ND	ND	ND			200	ND	ND	ND	ND	ND	ND
78-59-1	SVOCs	Isophorone	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
621-64-7	SVOCs	N-Nitroso-di-n-propylamine	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
86-30-6	SVOCs	N-Nitrosodiphenylamine	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
91-20-3	SVOCs	Naphthalene	ug/kg dw	190	118	11%	176	34.6		ND	ND	ND	ND	ND	ND
98-95-3	SVOCs	Nitrobenzene	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
85-01-8	SVOCs	Phenanthrene	ug/kg dw	ND	ND	ND	204	86.7	560	ND	ND	ND	ND	ND	ND
108-95-2	SVOCs	Phenol	ug/kg dw	5600	719	11%				ND	ND	ND	ND	ND	ND
129-00-0	SVOCs	Pyrene	ug/kg dw	ND	ND	ND	195	153	490	ND	ND	ND	ND	ND	ND
71-55-6	VOCs	1,1,1-Trichloroethane	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
79-34-5	VOCs	1,1,2,2-Tetrachloroethane	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
79-00-5	VOCs	1,1,2-Trichloroethane	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
75-34-3	VOCs	1,1-Dichloroethane	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
75-35-4	VOCs	1,1-Dichloroethene	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
107-06-2	VOCs	1,2-Dichloroethane	ug/kg dw	250	51.1	33%				ND	ND	ND	ND	ND	ND
78-87-5	VOCs	1,2-Dichloropropane	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
78-93-3	VOCs	2-Butanone (MEK)	ug/kg dw	91	18.6	33%				ND	ND	ND	23	12.9	25.8
591-78-6	VOCs	2-Hexanone	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
108-10-1	VOCs	4-Methyl-2-pentanone (MIBK)	ug/kg dw	150	35.2	56%				ND	ND	ND	ND	ND	ND
67-64-1	VOCs	Acetone	ug/kg dw	3000	416	67%				41	22.9	45.8	130	68.5	137
71-43-2	VOCs	Benzene	ug/kg dw	460	98.3	89%				ND	ND	ND	ND	ND	ND
75-27-4	VOCs	Bromodichloromethane	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
75-25-2	VOCs	Bromoform	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
74-83-9	VOCs	Bromomethane (Methyl bromide)	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
75-15-0	VOCs	Carbon disulfide	ug/kg dw	3.3	0.813	11%				ND	ND	ND	ND	ND	ND
56-23-5	VOCs	Carbon tetrachloride	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
108-90-7	VOCs	Chlorobenzene	ug/kg dw	7200	1950	89%				ND	ND	ND	ND	ND	ND
75-00-3	VOCs	Chloroethane	ug/kg dw	1.9	0.729	11%				ND	ND	ND	ND	ND	ND
67-66-3	VOCs	Chloroform	ug/kg dw	9.7	1.6	11%				ND	ND	ND	ND	ND	ND
74-87-3	VOCs	Chloromethane	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
156-59-2	VOCs	cis-1,2-Dichloroethene	ug/kg dw	5.8	1.65	44%				ND	ND	ND	ND	ND	ND
10061-01-5	VOCs	cis-1,3-Dichloropropene	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
124-48-1	VOCs	Dibromochloromethane	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
100-41-4	VOCs	Ethylbenzene	ug/kg dw	82	24.8	67%				ND	ND	ND	ND	ND	ND
108-38-3	VOCs	m&p-Xylene	ug/kg dw	630	122	67%				ND	ND	ND	ND	ND	ND
75-09-2	VOCs	Methylene chloride (Dichloromethane)	ug/kg dw	17	3.32	22%				ND	ND	ND	ND	ND	ND
100-42-5	VOCs	Styrene	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
127-18-4	VOCs	Tetrachloroethene	ug/kg dw	24	5.13	22%				ND	ND	ND	ND	ND	ND
108-88-3	VOCs	Toluene	ug/kg dw	7800	998	67%				1.8	1.1	2.2	5.6	3.08	6.16
156-60-5	VOCs	trans-1,2-Dichloroethene	ug/kg dw	0.91	0.619	11%				ND	ND	ND	ND	ND	ND
10061-02-6	VOCs	trans-1,3-Dichloropropene	ug/kg dw	ND	ND	ND				ND	ND	ND	ND	ND	ND
79-01-6	VOCs	Trichloroethene	ug/kg dw	42	5.94	22%				ND	ND	ND	ND	ND	ND
75-01-4	VOCs	Vinyl chloride	ug/kg dw	4	0.988	22%				ND	ND	ND	ND	ND	ND
1330-20-7	VOCs	Xylenes, Total	ug/kg dw	710	142	67%				ND	ND	ND	ND	ND	ND

Notes

[1]Consensus-Based Threshold Effect Concentration - MacDonald, D.D., C.G. Ingersoll, and T.A. Berger. 2000. Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems. Arch. Environ. Contam. Toxicol. 39: 20-31.

[2]Sediment Quality Assessment Guidelines - MacDonald Environmental Sciences Ltd. 1994. Approach to the Assessment of Sediment Quality in Florida Coastal Waters, Volume 1 -- Development and Evaluation of Sediment Quality Assessment Guidelines. Prepared for FLDEP. November 1994.

[3]Lowest Effect Level - Persaud, D., R. Jaagumagi, and A. Hayton. 1993. Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario. Ontario Ministry of Environment and Energy. August 1993.

*Ontario and Sediment Quality Guideline values are for 2,4'-DDT and 4,4'-DDT

**Florida, Ontario, and Sediment Quality Guideline values are for Chlordane

***No Effect Level for Heptachlor

Not detected at the Site (or detected in ≤ 5% of the samples)

Detected in reference samples but not at the Site

Average concentration is greater than the maximum concentration

Table 6-3 Whole Body Fish Tissue Screening Table
W G Krummrich Site
Sauget Illinois

Channel Catfish, Drum, Shad Whole Body				Site			Downstream (DDA) Reference			Upstream (UDA) Reference		
CAS	Analysis	Name	Units	Site Maximum	Site Average	Frequency of Detection	Downstream Maximum	Downstream Average	2 X Downstream Average	Upstream Maximum	Upstream Average	2 X Upstream Average
% Lipids		% Lipids	%	17	9 667	100 00%	14	6 667	13 334	10	8 333	16 666
3268-87-9	Dioxin	1 2 3 4 6 7 8 9-OCDD	pg/g	189	29 64	100 00%	119	44 93	89 86	79 7	30 87	61 74
39001-02-0	Dioxin	1 2 3 4 6 7 8 9-OCDF	pg/g	4 3	0 6817	11 11%	2 7	0 9733	1 9466	ND	ND	ND
35822-46-9	Dioxin	1 2 3 4 6 7 8-HpCDD	pg/g	7 1	2 91	100 00%	4 3	3 073	6 146	8 8	4 12	8 24
67562-39-4	Dioxin	1 2 3 4 6 7 8-HpCDF	pg/g	1	0 1367	11 11%	ND	ND	ND	0 59	0 2167	0 4334
55673-89-7	Dioxin	1,2,3,4,7,8,9-HpCDF	pg/g	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
39227-28-6	Dioxin	1 2 3 4 7 8-HxCDD	pg/g	0 3	0 1411	44 44%	0 58	0 22	0 44	0 33	0 2217	0 4434
70648-26-9	Dioxin	1 2 3 4 7 8-HxCDF	pg/g	0 84	0 3511	55 56%	0 71	0 3217	0 6434	0 85	0 5933	1 1866
57653-85-7	Dioxin	1 2 3 6 7 8-HxCDD	pg/g	1 2	0 8467	100 00%	2	0 9033	1 8066	1 8	1 153	2 306
57117-44-9	Dioxin	1 2 3 6 7 8-HxCDF	pg/g	0 22	0 1067	44 44%	0 34	0 1333	0 2666	0 26	0 1633	0 3266
19408-74-3	Dioxin	1 2 3 7 8 9-HxCDD	pg/g	0 58	0 3989	100 00%	0 78	0 4133	0 8266	1 1	0 6033	1 2066
72918-21-9	Dioxin	1,2,3,7,8,9-HxCDF	pg/g	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
40321-76-4	Dioxin	1 2 3 7 8-PeCDD	pg/g	0 64	0 3328	77 78%	1 2	0 4883	0 9766	1	0 5467	1 0934
57117-41-6	Dioxin	1 2 3 7 8-PeCDF	pg/g	0 43	0 07389	11 11%	ND	ND	ND	ND	ND	ND
60851-34-5	Dioxin	2 3 4 6 7 8-HxCDF	pg/g	0 48	0 1933	66 67%	0 86	0 4133	0 8266	0 3	0 215	0 43
57117-31-4	Dioxin	2 3 4 7 8-PeCDF	pg/g	0 64	0 3161	77 78%	1	0 41	0 82	0 59	0 2883	0 5766
1746-01-6	Dioxin	2 3 7 8-TCDD	pg/g	2 4	0 5794	66 67%	0 96	0 4417	0 8834	1 1	0 6	1 2
51207-31-9	Dioxin	2 3 7 8-TCDF	pg/g	5 7	1 404	100 00%	1	0 62	1 24	2 6	1 317	2 634
37871-00-4	Dioxin	Total HpCDD	pg/g	13 5	4 011	100 00%	8 5	4 617	9 234	12 4	5 5	11
38998-75-3	Dioxin	Total HpCDF	pg/g	13 6	3 664	88 89%	8 5	5 633	11 266	4 5	3 2	6 4
34465-46-8	Dioxin	Total HxCDD	pg/g	3 3	2 072	77 78%	3 9	1 677	3 354	4 9	2 717	5 434
55684-94-1	Dioxin	Total HxCDF	pg/g	81 6	20 5	100 00%	42 1	30 9	61 8	21 2	19 5	39
36088-22-9	Dioxin	Total PeCDD	pg/g	7 5	2 989	100 00%	3 2	2 3	4 6	3	2 367	4 734
30402-15-4	Dioxin	Total PeCDF	pg/g	124	43 07	100 00%	93 9	60 2	120 4	125	74 07	148 14
41903-57-5	Dioxin	Total TCDD	pg/g	7 2	2 458	77 78%	1 4	0 6917	1 3834	1 5	0 9567	1 9134
55722-27-5	Dioxin	Total TCDF	pg/g	187	77 36	100 00%	216	124 7	249 4	121	90 73	181 46
93-76-5	Herbicides	2 4 5-T	ug/kg	13	5 74	33 33%	ND	ND	ND	7 1	5 13	10 26
93-72-1	Herbicides	2 4 5-TP (Silvex)	ug/kg	8 7	4 87	55 56%	6 9	4 98	9 96	7 5	5 27	10 54
94-75-7	Herbicides	2,4-D	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
94-82-6	Herbicides	2,4-DB	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
75-99-0	Herbicides	Dalapon	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
1918-00-9	Herbicides	Dicamba	ug/kg	ND	ND	0 00%	ND	ND	ND	6 5	7 23	14 46
120-36-5	Herbicides	Dichlorprop	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
88-85-7	Herbicides	Dinoseb	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
94-74-6	Herbicides	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
7085-19-0	Herbicides	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	ug/kg	8600	2300	33 33%	ND	ND	ND	ND	ND	ND
87-86-5	Herbicides	Pentachlorophenol	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
2051-24-3	PCBs	Decachlorobiphenyl	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
C-DICHLOROBI	PCBs	Dichlorobiphenyl	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
C-HEPTACHLOR	PCBs	Heptachlorobiphenyl	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
C-HEXACHLORO	PCBs	Hexachlorobiphenyl	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
C-MONOCHLORO	PCBs	Monochlorobiphenyl	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
C-NONACHLORO	PCBs	Nonachlorobiphenyl	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
C-OCTA-BIPHE	PCBs	Octachlorobiphenyl	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
C-PENTBIPHEN	PCBs	Pentachlorobiphenyl	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
C-TETRACHLOR	PCBs	Tetrachlorobiphenyl	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
C-TOTAL-PCB	PCBs	Total Polychlorinated Biphenyls	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
C-TRICHLOROB	PCBs	Trichlorobiphenyl	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
72-54-8	Pesticides	4,4'-DDD	ug/kg	6 7	11 2	22 22%	12	16 5	33	ND	ND	ND
72-55-9	Pesticides	4 4'-DDE	ug/kg	60	18 4	88 89%	19	13 4	26 8	25	21	42
50-29-3	Pesticides	4 4'-DDT	ug/kg	13	12 6	11 11%	ND	ND	ND	7 6	15	30
309-00-2	Pesticides	Aldrin	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
319-84-6	Pesticides	alpha-BHC	ug/kg	2 6	11 4	11 11%	ND	ND	ND	ND	ND	ND
5103-71-9	Pesticides	alpha-Chlordane	ug/kg	14	11 7	22 22%	7 7	10 9	21 8	ND	ND	ND
319-85-7	Pesticides	beta-BHC	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
319-86-8	Pesticides	delta-BHC	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
60-57-1	Pesticides	Dieldrin	ug/kg	64	14 9	77 78%	19	13 9	27 8	32	21 2	42 4
959-98-8	Pesticides	Endosulfan I	ug/kg	4 3	11 6	11 11%	ND	ND	ND	3	13 5	27
33213-65-9	Pesticides	Endosulfan II	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND

Channel Catfish, Drum, Shad Whole Body				Site	Site		Downstream (DDA) Reference			Upstream (UDA) Reference		
CAS	Analysis	Name	Units	Site Maximum	Site Average	Frequency of Detection	Downstream Maximum	Downstream Average	2 X Downstream Average	Upstream Maximum	Upstream Average	2 X Upstream Average
% Lipids		% Lipids	%	17	9 667	100 00%	14	6 667	13 334	10	8 333	16 666
1031-07-8	Pesticides	Endosulfan sulfate	ug/kg	ND	ND	0 00%	12	16 5	33	ND	ND	ND
72-20-8	Pesticides	Endrin	ug/kg	15	12 2	22 22%	ND	ND	ND	ND	ND	ND
7421-93-4	Pesticides	Endrin aldehyde	ug/kg	10	11 5	22 22%	4 9	14 1	28 2	7 4	12 5	25
53494-70-5	Pesticides	Endrin ketone	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
58-89-9	Pesticides	gamma-BHC (Lindane)	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
5103-74-2	Pesticides	gamma-Chlordane	ug/kg	8 1	11	22 22%	3 5	13 7	27 4	5 8	14 4	28 8
76-44-8	Pesticides	Heptachlor	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
1024-57-3	Pesticides	Heptachlor epoxide	ug/kg	5 3	10 7	22 22%	ND	ND	ND	ND	ND	ND
72-43-5	Pesticides	Methoxychlor	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
8001-35-2	Pesticides	Toxaphene	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
87-61-6	SVOCs	1,2,3-Trichlorobenzene	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
120-82-1	SVOCs	1,2,4-Trichlorobenzene	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
95-50-1	SVOCs	1 2-Dichlorobenzene	ug/kg	240	228	44 44%	ND	ND	ND	ND	ND	ND
108-70-3	SVOCs	1,3,5-Trichlorobenzene	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
541-73-1	SVOCs	1,3-Dichlorobenzene	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
106-46-7	SVOCs	1 4-Dichlorobenzene	ug/kg	130	241	11 11%	ND	ND	ND	ND	ND	ND
108-60-1	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
15950-66-0	SVOCs	2,3,4-Trichlorophenol	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
933-78-8	SVOCs	2,3,5-Trichlorophenol	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
933-75-5	SVOCs	2,3,6-Trichlorophenol	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
95-95-4	SVOCs	2,4,5-Trichlorophenol	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
88-06-2	SVOCs	2,4,6-Trichlorophenol	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
120-83-2	SVOCs	2 4-Dichlorophenol	ug/kg	190	227	33 33%	ND	ND	ND	ND	ND	ND
105-67-9	SVOCs	2,4-Dimethylphenol	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
51-28-5	SVOCs	2,4-Dinitrophenol	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
121-14-2	SVOCs	2,4-Dinitrotoluene	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
606-20-2	SVOCs	2,6-Dinitrotoluene	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
91-58-7	SVOCs	2-Chloronaphthalene	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
95-57-8	SVOCs	2-Chlorophenol	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
91-57-6	SVOCs	2-Methylnaphthalene	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
95-48-7	SVOCs	2-Methylphenol (o-Cresol)	ug/kg	220	222	44 44%	340	317	634	110	207	414
88-74-4	SVOCs	2-Nitroaniline	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
88-75-5	SVOCs	2-Nitrophenol	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
91-94-1	SVOCs	3,3'-Dichlorobenzidine	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
609-19-8	SVOCs	3,4,5-Trichlorophenol	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
106-44-5	SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
99-09-2	SVOCs	3-Nitroaniline	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
534-52-1	SVOCs	4,6-Dinitro-2-methylphenol	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
101-55-3	SVOCs	4-Bromophenylphenyl ether	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
59-50-7	SVOCs	4-Chloro-3-methylphenol	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
106-47-8	SVOCs	4-Chloroaniline	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
7005-72-3	SVOCs	4-Chlorophenylphenyl ether	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
100-01-6	SVOCs	4-Nitroaniline	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
100-02-7	SVOCs	4-Nitrophenol	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
83-32-9	SVOCs	Acenaphthene	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
208-96-8	SVOCs	Acenaphthylene	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
120-12-7	SVOCs	Anthracene	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
56-55-3	SVOCs	Benzo(a)anthracene	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
50-32-8	SVOCs	Benzo(a)pyrene	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
205-99-2	SVOCs	Benzo(b)fluoranthene	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
191-24-2	SVOCs	Benzo(g,h,i)perylene	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
207-08-9	SVOCs	Benzo(k)fluoranthene	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
111-91-1	SVOCs	bis(2-Chloroethoxy)methane	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
111-44-4	SVOCs	bis(2-Chloroethyl)ether	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
85-68-7	SVOCs	Butylbenzylphthalate	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND
86-74-8	SVOCs	Carbazole	ug/kg	ND	ND	0 00%	ND	ND	ND	ND	ND	ND

Channel Catfish, Drum, Shad Whole Body				Site			Downstream (DDA) Reference			Upstream (UDA) Reference		
CAS	Analysis	Name	Units	Site Maximum	Site Average	Frequency of Detection	Downstream Maximum	Downstream Average	2 X Downstream Average	Upstream Maximum	Upstream Average	2 X Upstream Average
% Lipids		% Lipids	%	17	9.667	100.00%	14	6.667	13.334	10	8.333	16.666
218-01-9	SVOCs	Chrysene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
84-74-2	SVOCs	Di-n-butylphthalate	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
117-84-0	SVOCs	Di-n-octylphthalate	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
53-70-3	SVOCs	Dibenz(a,h)anthracene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
132-64-9	SVOCs	Dibenzofuran	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
84-66-2	SVOCs	Diethylphthalate	ug/kg	ND	ND	0.00%	ND	ND	ND	110	207	414
131-11-3	SVOCs	Dimethylphthalate	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
206-44-0	SVOCs	Fluoranthene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
86-73-7	SVOCs	Fluorene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
118-74-1	SVOCs	Hexachlorobenzene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
87-68-3	SVOCs	Hexachlorobutadiene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
77-47-4	SVOCs	Hexachlorocyclopentadiene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
67-72-1	SVOCs	Hexachloroethane	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
193-39-5	SVOCs	Indeno(1,2,3-cd)pyrene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
78-59-1	SVOCs	Isophorone	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
621-64-7	SVOCs	N-Nitroso-di-n-propylamine	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
86-30-6	SVOCs	N-Nitrosodiphenylamine	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
91-20-3	SVOCs	Naphthalene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
98-95-3	SVOCs	Nitrobenzene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
87-86-5 (S,OC)	SVOCs	Pentachlorophenol (SVOC)	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
85-01-8	SVOCs	Phenanthrene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
108-95-2	SVOCs	Phenol	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND
129-00-0	SVOCs	Pyrene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND	ND	ND

Not detected at the Site
Site maximum concentration is less than the UDA and DDA maximum concentrations
Average concentration is greater than the maximum concentration

REVERSE ORDER OF SW S.P. PARAMETER LIST

CAS	Analysis	Analyte
3268-87-9	Dioxin	1,2,3,4,6,7,8,9-OCDD
39001-02-0	Dioxin	1,2,3,4,6,7,8,9-OCDF
35822-46-9	Dioxin	1,2,3,4,6,7,8-HpCDD
67562-39-4	Dioxin	1,2,3,4,6,7,8-HpCDF
55673-89-7	Dioxin	1,2,3,4,7,8,9-HpCDF
39227-28-6	Dioxin	1,2,3,4,7,8-HxCDD
70648-26-9	Dioxin	1,2,3,4,7,8-HxCDF
57653-85-7	Dioxin	1,2,3,6,7,8-HxCDD
57117-44-9	Dioxin	1,2,3,6,7,8-HxCDF
19408-74-3	Dioxin	1,2,3,7,8,9-HxCDD
40321-76-4	Dioxin	1,2,3,7,8-PeCDD
57117-41-6	Dioxin	1,2,3,7,8-PeCDF
60851-34-5	Dioxin	2,3,4,6,7,8-HxCDF
57117-31-4	Dioxin	2,3,4,7,8-PeCDF
1746-01-6	Dioxin	2,3,7,8-TCDD
51207-31-9	Dioxin	2,3,7,8-TCDF
37871-00-4	Dioxin	Total HpCDD
38998-75-3	Dioxin	Total HpCDF
34465-46-8	Dioxin	Total HxCDD
55684-94-1	Dioxin	Total HxCDF
36088-22-9	Dioxin	Total PeCDD
30402-15-4	Dioxin	Total PeCDF
41903-57-5	Dioxin	Total TCDD
55722-27-5	Dioxin	Total TCDF
93-76-5	Herbicides	2,4,5-T
93-72-1	Herbicides	2,4,5-TP (Silvex)
94-75-7	Herbicides	2,4-D
1918-00-9	Herbicides	Dicamba
120-36-5	Herbicides	Dichloroprop
7085-19-0	Herbicides	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]
87-86-5	Herbicides	Pentachlorophenol
72-54-8	Pesticides	4,4'-DDD
72-55-9	Pesticides	4,4'-DDE
50-29-3	Pesticides	4,4'-DDT
319-84-6	Pesticides	alpha-BHC
5103-71-9	Pesticides	alpha-Chlordane
60-57-1	Pesticides	Dieldrin
959-98-8	Pesticides	Endosulfan I
72-20-8	Pesticides	Endrin
7421-93-4	Pesticides	Endrin aldehyde
5103-74-2	Pesticides	gamma-Chlordane
1024-57-3	Pesticides	Heptachlor epoxide
95-50-1	SVOCs	1,2-Dichlorobenzene
106-46-7	SVOCs	1,4-Dichlorobenzene
88-06-2	SVOCs	2,4,6-Trichlorophenol
120-83-2	SVOCs	2,4-Dichlorophenol
105-67-9	SVOCs	2,4-Dimethylphenol
121-14-2	SVOCs	2,4-Dinitrotoluene
95-57-8	SVOCs	2-Chlorophenol
95-48-7	SVOCs	2-Methylphenol (o-Cresol)
88-74-4	SVOCs	2-Nitroaniline
106-44-5	SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)
101-55-3	SVOCs	4-Bromophenylphenyl ether
106-47-8	SVOCs	4-Chloroaniline
91-20-3	SVOCs	Naphthalene
98-95-3	SVOCs	Nitrobenzene
108-95-2	SVOCs	Phenol
TSS	TSS	Total Suspended Solids
107-06-2	VOCs	1,2-Dichloroethane
78-93-3	VOCs	2-Butanone (MEK)
108-10-1	VOCs	4-Methyl-2-pentanone (MIBK)
67-64-1	VOCs	Acetone
71-43-2	VOCs	Benzene
75-15-0	VOCs	Carbon disulfide
108-90-7	VOCs	Chlorobenzene
75-00-3	VOCs	Chloroethane
67-66-3	VOCs	Chloroform
156-59-2	VOCs	cis-1,2-Dichloroethene
100-41-4	VOCs	Ethylbenzene
108-38-3	VOCs	m&p-Xylene
75-09-2	VOCs	Methylene chloride (Dichloromethane)
127-18-4	VOCs	Tetrachloroethene
108-88-3	VOCs	Toluene
156-60-5	VOCs	trans-1,2-Dichloroethene
79-01-6	VOCs	Trichloroethene
75-01-4	VOCs	Vinyl chloride
1330-20-7	VOCs	Xylenes, Total

Table 6-5. Compounds Assessed by Medium
W.G. Krummrich Plant Ecological Risk Assessment
Sauget, Illinois

Retained Compounds in Water		
CAS	Analysis	Analyte
3268-87-9	Dioxin	1,2,3,4,6,7,8,9-OCDD
39001-02-0	Dioxin	1,2,3,4,6,7,8,9-OCDF
35822-46-9	Dioxin	1,2,3,4,6,7,8-HpCDD
70648-26-9	Dioxin	1,2,3,4,7,8-HxCDF
37871-00-4	Dioxin	Total HpCDD
55684-94-1	Dioxin	Total HxCDF
93-72-1	Herbicides	2,4,5-TP (Silvex)
94-75-7	Herbicides	2,4-D
1918-00-9	Herbicides	Dicamba
120-36-5	Herbicides	Dichloroprop
87-86-5	Herbicides	Pentachlorophenol
95-50-1	SVOCs	1,2-Dichlorobenzene
88-06-2	SVOCs	2,4,6-Trichlorophenol
120-83-2	SVOCs	2,4-Dichlorophenol
105-67-9	SVOCs	2,4-Dimethylphenol
95-57-8	SVOCs	2-Chlorophenol
106-44-5	SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)
106-47-8	SVOCs	4-Chloroaniline
98-95-3	SVOCs	Nitrobenzene
108-95-2	SVOCs	Phenol
TSS	TSS	Total Suspended Solids
107-06-2	VOCs	1,2-Dichloroethane
108-10-1	VOCs	4-Methyl-2-pentanone (MIBK)
71-43-2	VOCs	Benzene
108-90-7	VOCs	Chlorobenzene
100-41-4	VOCs	Ethylbenzene
108-38-3	VOCs	m&p-Xylene
108-88-3	VOCs	Toluene
79-01-6	VOCs	Trichloroethene
1330-20-7	VOCs	Xylenes, Total

Retained Compounds in Sediment		
CAS	Analysis	Analyte
3268-87-9	Dioxin	1,2,3,4,6,7,8,9-OCDD
39001-02-0	Dioxin	1,2,3,4,6,7,8,9-OCDF
35822-46-9	Dioxin	1,2,3,4,6,7,8-HpCDD
67562-39-4	Dioxin	1,2,3,4,6,7,8-HpCDF
55673-89-7	Dioxin	1,2,3,4,7,8,9-HpCDF
70648-26-9	Dioxin	1,2,3,4,7,8-HxCDF
57653-85-7	Dioxin	1,2,3,6,7,8-HxCDD
57117-44-9	Dioxin	1,2,3,6,7,8-HxCDF
57117-41-6	Dioxin	1,2,3,7,8-PeCDF
60851-34-5	Dioxin	2,3,4,6,7,8-HxCDF
57117-31-4	Dioxin	2,3,4,7,8-PeCDF
51207-31-9	Dioxin	2,3,7,8-TCDF
37871-00-4	Dioxin	Total HpCDD
38998-75-3	Dioxin	Total HpCDF
34465-46-8	Dioxin	Total HxCDD
55684-94-1	Dioxin	Total HxCDF
36088-22-9	Dioxin	Total PeCDD
30402-15-4	Dioxin	Total PeCDF
41903-57-5	Dioxin	Total TCDD
55722-27-5	Dioxin	Total TCDF
94-75-7	Herbicides	2,4-D
120-36-5	Herbicides	Dichloroprop
7085-19-0	Herbicides	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]
87-86-5	Herbicides	Pentachlorophenol
72-54-8	Pesticides	4,4'-DDD
95-50-1	SVOCs	1,2-Dichlorobenzene
106-46-7	SVOCs	1,4-Dichlorobenzene
88-06-2	SVOCs	2,4,6-Trichlorophenol
120-83-2	SVOCs	2,4-Dichlorophenol
105-67-9	SVOCs	2,4-Dimethylphenol
121-14-2	SVOCs	2,4-Dinitrotoluene
95-57-8	SVOCs	2-Chlorophenol
88-74-4	SVOCs	2-Nitroaniline
106-44-5	SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)
101-55-3	SVOCs	4-Bromophenylphenyl ether
106-47-8	SVOCs	4-Chloroaniline
91-20-3	SVOCs	Naphthalene
108-95-2	SVOCs	Phenol
107-06-2	VOCs	1,2-Dichloroethane
78-93-3	VOCs	2-Butanone (MEK)
108-10-1	VOCs	4-Methyl-2-pentanone (MIBK)
67-64-1	VOCs	Acetone
71-43-2	VOCs	Benzene
75-15-0	VOCs	Carbon disulfide
108-90-7	VOCs	Chlorobenzene
75-00-3	VOCs	Chloroethane
67-66-3	VOCs	Chloroform
156-59-2	VOCs	cis-1,2-Dichloroethene
100-41-4	VOCs	Ethylbenzene
108-38-3	VOCs	m&p-Xylene
75-09-2	VOCs	Methylene chloride (Dichloromethane)
127-18-4	VOCs	Tetrachloroethene
108-88-3	VOCs	Toluene
156-60-5	VOCs	trans-1,2-Dichloroethene
79-01-6	VOCs	Trichloroethene
75-01-4	VOCs	Vinyl chloride
1330-20-7	VOCs	Xylenes, Total

Retained Compounds in Whole Body Fish Samples (Channel catfish, Drum, Gizzard Shad		
CAS	Analysis	Analyte
3268-87-9	Dioxin	1,2,3,4,6,7,8,9-OCDD
39001-02-0	Dioxin	1,2,3,4,6,7,8,9-OCDF
35822-46-9	Dioxin	1,2,3,4,6,7,8-HpCDD
67562-39-4	Dioxin	1,2,3,4,6,7,8-HpCDF
39227-28-6	Dioxin	1,2,3,4,7,8-HxCDD
70648-26-9	Dioxin	1,2,3,4,7,8-HxCDF
57653-85-7	Dioxin	1,2,3,6,7,8-HxCDD
57117-44-9	Dioxin	1,2,3,6,7,8-HxCDF
19408-74-3	Dioxin	1,2,3,7,8,9-HxCDD
40321-76-4	Dioxin	1,2,3,7,8-PeCDD
57117-41-6	Dioxin	1,2,3,7,8-PeCDF
60851-34-5	Dioxin	2,3,4,6,7,8-HxCDF
57117-31-4	Dioxin	2,3,4,7,8-PeCDF
1746-01-6	Dioxin	2,3,7,8-TCDD
51207-31-9	Dioxin	2,3,7,8-TCDF
37871-00-4	Dioxin	Total HpCDD
38998-75-3	Dioxin	Total HpCDF
34465-46-8	Dioxin	Total HxCDD
55684-94-1	Dioxin	Total HxCDF
36088-22-9	Dioxin	Total PeCDD
30402-15-4	Dioxin	Total PeCDF
41903-57-5	Dioxin	Total TCDD
55722-27-5	Dioxin	Total TCDF
93-76-5	Herbicides	2,4,5-T
93-72-1	Herbicides	2,4,5-TP (Silvex)
7085-19-0	Herbicides	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]
72-54-8	Pesticides	4,4'-DDD
72-55-9	Pesticides	4,4'-DDE
50-29-3	Pesticides	4,4'-DDT
319-84-6	Pesticides	alpha-BHC
5103-71-9	Pesticides	alpha-Chlordane
60-57-1	Pesticides	Dieldrin
959-98-8	Pesticides	Endosulfan I
72-20-8	Pesticides	Endrin
7421-93-4	Pesticides	Endrin aldehyde
5103-74-2	Pesticides	gamma-Chlordane
1024-57-3	Pesticides	Heptachlor epoxide
95-50-1	SVOCs	1,2-Dichlorobenzene
106-46-7	SVOCs	1,4-Dichlorobenzene
120-83-2	SVOCs	2,4-Dichlorophenol
95-48-7	SVOCs	2-Methylphenol (o-Cresol)

Table 8-1
Whole Body Toxicity Values for Fish
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Compound	Species Common Name	Chemical Common Name	Concentration -Wet (mg/kg)	Conc Units	Effect	Endpoint	Exposure Route	Body Part	Start Life Stage
Dioxin	Common carp	2,3,7,8-TCDD	0.0022	MG/KG	Behavior, Cellular, Morphology, Mortality	LOEL	Absorption	Whole Body	Adult
			0.00022			Calculated NOEL			
	Yellow perch	2,3,7,8-TCDD	0.000143	MG/KG	Growth, Morphology, Mortality	NOEL	Ingestion	Whole Body	Immature
	Lake trout	2,3,7,8-TCDD	***0.00005***		Mortality	NOEL	Absorption	Whole Body	Based on egg concentration
2,4,5-T			NA						
2,4,5-TP (Silvex)			NA						
MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]			NA						
DDD	Fathead minnow	4,4`-DDD	0.6	MG/KG	Reproduction	LOEL	Combined	Whole Body	Adult
			0.06			Calculated NOEL			
DDE	Mosquito fish	4,4`-DDE	29.2	MG/KG	Mortality	NOEL	Combined	Whole Body	NA
DDT	Fathead minnow	4,4`-DDT	3.8	MG/KG	Reproduction	LOEL	Combined	Whole Body	Adult
			0.38			Calculated NOEL			
alpha-BHC	Golden Ide	B-BHC	22.5	MG/KG	Mortality	NOEL	Absorption	Whole Body	NA
alpha-Chlordane	Pinfish	Chlordane	16.6	MG/KG	Mortality	LOEL	Combined	Whole Body	Adult
			1.66			Calculated NOEL			
Dieldrin	Bluegill	Dieldrin	3.7	MG/KG	Behavior	LOEL	Absorption	Whole Body	Immature
			0.37			Calculated NOEL			
Endosulfan	Pinfish	Endosulfan	0.195	MG/KG	Mortality	NOEL	Combined	Whole Body	Mature
Endrin	Golden Shiner	Endrin	0.15	MG/KG	Behavior	LOEL	Absorption	Whole Body	NA
			0.015			Calculated NOEL			
	Mosquito fish	Endrin	3.4	MG/KG	Mortality	LOEL	Combined	Whole Body	NA

If multiple values are available, selected value is bolded and italicized

Table 8-1
Whole Body Toxicity Values for Fish
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Compound	Species Common Name	Chemical Common Name	Concentration -Wet (mg/kg)	Conc Units	Effect	Endpoint	Exposure Route	Body Part	Start Life Stage
			0.34			Calculated NOEL			
	Catfish-Channel	Endrin	0.41	MG/KG	Mortality	NOEL	Absorption	Whole Body	Immature
Endrin aldehyde	Golden Shiner	Endrin	0.15	MG/KG	Behavior	LOEL	Absorption	Whole Body	NA
			0.015			Calculated NOEL			
	Mosquito fish	Endrin	3.4	MG/KG	Mortality	LOEL	Combined	Whole Body	NA
			0.34			Calculated NOEL			
	Catfish-Channel	Endrin	0.41	MG/KG	Mortality	NOEL	Absorption	Whole Body	Immature
gamma Chlordane	Pinfish	Chlordane	16.6	MG/KG	Mortality	LOEL	Combined	Whole Body	Adult
			1.66			Calculated NOEL			
Heptachlor epoxide	Pinfish	Heptachlor epoxide	3.2	MG/KG	Mortality	NOEL	Combined	Whole Body	Mature
Methoxychlor	Mosquito fish	Methoxychlor	0.128	MG/KG	Mortality	NOEL	Combined	Whole Body	NA
1,2-Dichlorobenzene	Fathead minnow	1,2-dichlorobenzene	720	MG/KG	Mortality	LD100	Combined	Whole Body	NA
	Guppy	1,2-dichlorobenzene	397	MG/KG	Mortality	LD100	Combined	Whole Body	NA
	Bluegill	1,2-dichlorobenzene	0.7	MG/KG	Mortality	NOEL	Absorption	Whole Body	Immature
	Trout - Rainbow	1,2-dichlorobenzene	1100	MG/KG	Mortality	ED50	Injection	Whole Body	NA
	Trout - Rainbow	1,2-dichlorobenzene	138	MG/KG	Mortality	ED100	Absorption	Whole Body	Immature
	Trout - Rainbow	1,2-dichlorobenzene	147	MG/KG	Mortality	ED100	Absorption	Whole Body	Immature
	Trout - Rainbow	1,2-dichlorobenzene	***0.67***	MG/KG	Survival	NOEL	Absorption	Whole Body	Subadult
	Fathead minnow	1,2-dichlorobenzene	340	MG/KG	Mortality	ED100	Absorption	Whole Body	Adult
1,4-Dichlorobenzene	Fathead minnow	1,4-dichlorobenzene	632	MG/KG	Mortality	LD100	Combined	Whole Body	NA
	Guppy	1,4-dichlorobenzene	1180	MG/KG	Mortality	LD100	Combined	Whole Body	NA
	Bluegill	1,4-dichlorobenzene	***0.61***	MG/KG	Mortality	NOEL	Absorption	Whole Body	Immature

If multiple values are available, selected value is bolded and italicized

Table 8-1
Whole Body Toxicity Values for Fish
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Compound	Species Common Name	Chemical Common Name	Concentration -Wet (mg/kg)	Conc Units	Effect	Endpoint	Exposure Route	Body Part	Start Life Stage
	Trout - Rainbow	1,4-dichlorobenzene	1490	MG/KG	Mortality	ED50	Injection	Whole Body	NA
	Trout - Rainbow	1,4-dichlorobenzene	1500	MG/KG	Mortality	ED50	Injection	Whole Body	NA
	Trout - Rainbow	1,4-dichlorobenzene	387	MG/KG	Physiological	ED50	Injection	Whole Body	NA
	Trout - Rainbow	1,4-dichlorobenzene	47	MG/KG	Mortality	ED100	Absorption	Whole Body	Immature
	Trout - Rainbow	1,4-dichlorobenzene	69.1	MG/KG	Mortality	ED100	Absorption	Whole Body	Immature
	Trout - Rainbow	1,4-dichlorobenzene	0.54	MG/KG	Survival	NOEL	Absorption	Whole Body	Subadult
	Trout - Rainbow	1,4-dichlorobenzene	26	MG/KG	Survival	NOEL	Absorption	Whole Body	Egg-Alevin
	Fathead minnow	1,4-dichlorobenzene	944	MG/KG	Mortality	ED100	Absorption	Whole Body	Adult
	Fathead minnow	1,4-dichlorobenzene	103	MG/KG	Growth	LOEL	Absorption	Whole Body	Egg-embryo
	Fathead minnow	1,4-dichlorobenzene	103	MG/KG	Mortality	LOEL	Absorption	Whole Body	Egg-embryo
	Fathead minnow	1,4-dichlorobenzene	69.5	MG/KG	Growth	NOEL	Absorption	Whole Body	Egg-embryo
	Fathead minnow	1,4-dichlorobenzene	69.5	MG/KG	Mortality	NOEL	Absorption	Whole Body	Egg-embryo
	Golden Ide	1,4-dichlorobenzene	2.5	MG/KG	Mortality	NOEL	Absorption	Whole Body	NA
2,4-Dichlorophenol	Trout - Rainbow	Mix of 2,4-dichlorophenol and 2.4.6-trichlorophenol	5.2	MG/KG	Biochemical (red and white blood cell count, liver glycogen and plasma glucose and lactate concentrations)	NA	Absorption	Liver	2 yr. old Trout
	Trout - Rainbow	Mix of 2,4-dichlorophenol and 2.4.6-trichlorophenol	0.8	MG/KG	Biochemical (red and white blood cell count, liver glycogen and plasma glucose and lactate concentrations)	NA	Absorption	Muscle	2 yr. old Trout
	Trout- Brown	2.4-Dichlorphenol	***18***	MG/KG	Reduced Survival	NA	Absorption	Whole Body	4.5 g
	Goldfish	2.4-Dichlorphenol	268	MG/KG	Reduced Survival	NA	Absorption	Whole Body	2 g
	Goldfish	2.4-Dichlorphenol	119-266	MG/KG	Reduced Survival	NA	Absorption	Whole Body	2.2 g

If multiple values are available, selected value is bolded and italicized

Table 8-1
Whole Body Toxicity Values for Fish
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Compound	Species Common Name	Chemical Common Name	Concentration -Wet (mg/kg)	Conc Units	Effect	Endpoint	Exposure Route	Body Part	Start Life Stage
	Goldfish	2.4-Dichlorphenol	98-142	MG/KG	Survival	NOEL	Absorption	Whole Body	2.2 g
2-Methylphenol (o-Cresol)	Trout - Rainbow	4-methylphenol	79	MG/KG	Mortality	ED50	Injection	Whole Body	NA
	Trout - Rainbow	4-methylphenol	79	MG/KG	Mortality	ED50	Injection	Whole Body	Immature
	Trout - Rainbow	4-methylphenol	94.1	MG/KG	Mortality	ED50	Ingestion	Whole Body	Immature
	Trout - Rainbow	4-methylphenol	76.5	MG/KG	Mortality	ED50	Injection	Whole Body	NA
	Trout - Rainbow	4-methylphenol	16.3	MG/KG	Physiological	ED50	Injection	Whole Body	NA
	Golden Ide	3-cresol	1	MG/KG	Mortality	NOEL	Absorption	Whole Body	NA

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selected value is bolded and italicized

Table 8-1
Whole Body Toxicity Values for Fish
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Compound	Year	Author	Journal
Dioxin	1991	Cook, P.M., D.W. Kuehl, M.K. Walker and R.E. Peterson	p. 143-167 in Gallow, M.A., et.al. Biol. Basis for Risk Assmt. of Dioxins and Related Compounds.
	1986	Kleeman, J.M., J.R. Olson, S.M. Chen and R.E. Peterson	Toxicol. Appl. Pharmacol. 83:402-411.
	1993	USEPA	EPA/600/R-93/055
2,4,5-T			
2,4,5-TP (Silvex)			
MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]			
DDD	1977	Jarvinen, A.W., M.J. Hoffman, and T.W. Thorslund	J. Fish. Res. Board. Can. 34:2089-2103
DDE	1974	Metcalf, R.L.	p. 17-38 in Hayes, W.J., Essays in Toxicology, Volume 5. Academic Press
DDT	1977	Jarvinen, A.W., M.J. Hoffman, and T.W. Thorslund	J. Fish. Res. Board. Can. 34:2089-2103
alpha-BHC	1985	Freitag, D., L. Ballhorn, H. Geyer and F. Korte	Chemosphere 14:1589-1616.
alpha-Chlordane	1976	Parrish, P.R., S.C. Schimmel, D.J. Hansen, J.M. Patrick, and J. Forester	Journal of Toxicology and Environmental Health, 1:485-494, 1976
Dieldrin	1967	Gakstatter, J.H. and C.M. Weiss	Trans. Amer. Fish. Soc. 96:301-307.
Endosulfan	1977	Schimmel, S.C., Patrick, J.M., Wilson, A.J.	Aquatic Toxicology and Hazard Evaluation, ASTM STP 634, American Society for Testing and Materials, pp. 241-252 (1977)
Endrin	1968	Ludke, J.L., D.E. Ferguson and W.D. Burke	Trans. Amer. Fish. Soc. 97:260-263.
	1973	Metcalf, R.L., I.P. Kapoor, P.Y. Lu, C.K. Schuth and P. Sherman	Environ. Health Perspect. 8:35-44.

If mulliple values are available,
selected value is bolded and italicized.

Table 8-1
Whole Body Toxicity Values for Fish
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Compound	Year	Author	Journal
	1973	Argyle, R.L., Williams, G.C., and H.K. Dupree	J. Fish. Res. Board Can. 30: 1743-1744
Endrin aldehyde	1968	Ludke, J.L., D.E. Ferguson and W.D. Burke	Trans. Amer. Fish. Soc. 97:260-263.
	1973	Metcalf, R.L., I.P. Kapoor, P.Y. Lu, C.K. Schuth and P. Sherman	Environ. Health Perspect. 8:35-44.
	1973	Argyle, R.L., Williams, G.C., and H.K. Dupree	J. Fish. Res. Board Can. 30: 1743-1744
gamma Chlordane	1976	Parrish, P.R., S.C. Schimmel, D.J. Hansen, J.M. Patrick, and J. Forester	Journal of Toxicology and Environmental Health, 1:485-494, 1976
Heptachlor epoxide	1976	Schimmel, S.C., Patrick, J.M., Forester, J.	Journal of Toxicology and Environmental Health, 1:955-965, 1976
Methoxychlor	1974	Metcalf, R.L.	p. 17-38 in Hayes, W.J., Essays in Toxicology, Volume 5. Academic Press
1,2-Dichlorobenzene	1993	Sijm, D.T.H.M., Schipper, M., Opperhuizen, A.	Environmental Toxicology and Chemistry, Vol. 12, pp. 117-1127, 1993
	1993	Sijm, D.T.H.M., Schipper, M., Opperhuizen, A.	Environmental Toxicology and Chemistry, Vol. 12, pp. 117-1127, 1993
	1980	Barrows, M.E., S.R. Petrocelli, K.J. Macek and J.J. Carroll	p. 379-392 in Haque, R., ed. Dynamics, Exposure and Hazard Assessment of Toxic Chemicals
	1988	Hodson, P.V., Dixon,D.G. and K.I.E. Kaiser	Environ. Toxicol. Chem. 7:443-454.
	1995	Van Wezel, A.P., Sijm, D.T., Seinen, W., Opperhiuzen, A.	Chemosphere 31: 3201-3209
	1995	Van Wezel, A.P., Sijm, D.T., Seinen, W., Opperhiuzen, A.	Chemosphere 31: 3201-3209
	1983	Oliver, B.G. and Niimi, A.J.	Environ. Sci. Technol 17: 287-291.
	1996	Van Wezel, A.P., De Vries, D.A.M., Sijm, D.T., Opperhuizen, A.	Ecotoxicol. and Environ. Safety 35: 236-241
1,4-Dichlorobenzene	1993	Sijm, D.T.H.M., Schipper, M., Opperhuizen, A.	Environmental Toxicology and Chemistry, Vol. 12, pp. 117-1127, 1993
	1993	Sijm, D.T.H.M., Schipper, M., Opperhuizen, A.	Environmental Toxicology and Chemistry, Vol. 12, pp. 117-1127, 1993
	1980	Barrows, M.E., S.R. Petrocelli, K.J. Macek and J.J. Carroll	p. 379-392 in Haque, R., ed. Dynamics, Exposure and Hazard Assessment of Toxic Chemicals

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Table 8-1
Whole Body Toxicity Values for Fish
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Compound	Year	Author	Journal
	1988	Hodson, P.V., Dixon,D.G. and K.I.E. Kaiser	Environ. Toxicol. Chem. 7:443-454.
	1984	Kaiser, K.L.E., D.G. Dixon and P.V. Hodson	p. 189-206 In Kaiser, K.I.E., Ed. QSAR In Environmental Toxicology
	1984	Kaiser, K.L.E., D.G. Dixon and P.V. Hodson	p. 189-206 In Kaiser, K.I.E., Ed. QSAR In Environmental Toxicology
	1995	Van Wezel, A.P., Sijm, D.T., Seinen, W., Opperhiuzen, A.	Chemosphere 31: 3201-3209
	1995	Van Wezel, A.P., Sijm, D.T., Seinen, W., Opperhiuzen, A.	Chemosphere 31: 3201-3209
	1983	Oliver, B.G. and Niimi, A.J.	Environ. Sci. Technol 17: 287-291.
	1982	Galassi, S., Calamari, D., and Setti, F.	Ecotoxicol. and Environ. Safety 6: 439-447.
	1996	Van Wezel, A.P., De Vries, D.A.M., Sijm, D.T., Opperhuizen, A.	Ecotoxicol. and Environ. Safety 35: 236-241
	1987	Carlson, A.R. and P.A. Kosian	Arch. Environ. Contam. Toxicol. 16:129-135.
	1987	Carlson, A.R. and P.A. Kosian	Arch. Environ. Contam. Toxicol. 16:129-135.
	1987	Carlson, A.R. and P.A. Kosian	Arch. Environ. Contam. Toxicol. 16:129-135.
	1987	Carlson, A.R. and P.A. Kosian	Arch. Environ. Contam. Toxicol. 16:129-135.
	1985	Freitag, D., L. Ballhorn, H. Geyer and F. Korte	Chemosphere 14:1589-1616.
2,4-Dichlorophenol	1988	Tana, J.J.	Water Science Technology 20(2):77-85.
	1988	Tana, J.J.	Water Science Technology 20(2):77-85.
	1981	Hattula, M.L., Wasenius, V-M., Reunanen, H. and Arstila, A.U.	Bull. Environ. Contam. Toxicol. 26: 295-298.
	1979	Kobayashi, K., Akitake, H. and Manabe, K.	Bull. Jpn. Soc. Sci. Fish 45: 173-175.
	1995	Kishino, T. and Kobayashi, K.	Water Res. 29: 431-442.

If multiple values are available,
selected value is bolded and italicized

Table 8-1
Whole Body Toxicity Values for Fish
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Compound	Year	Author	Journal
	1995	Kishino, T. and Kobayashi, K.	Water Res. 29: 431-442.
2-Methylphenol (o-Cresol)	1988	Hodson, P.V., Dixon,D.G. and K.I.E. Kaiser	Environ. Toxicol. Chem. 7:443-454.
	1984	Hodson, P.V., Dixon,D.G. and K.I.E. Kaiser	Environ. Toxicol. Chem. 3:243-254.
	1984	Hodson, P.V., Dixon,D.G. and K.I.E. Kaiser	Environ. Toxicol. Chem. 3:243-254.
	1984	Kaiser, K.L.E., D.G. Dixon and P.V. Hodson	p. 189-206 In Kaiser, K.I.E., Ed. QSAR In Environmental Toxicology
	1984	Kaiser, K.L.E., D.G. Dixon and P.V. Hodson	p. 189-206 In Kaiser, K.I.E., Ed. QSAR In Environmental Toxicology
	1985	Freitag, D., L. Ballhorn, H. Geyer and F. Korte	Chemosphere 14:1589-1616.

If multiple values are available,
selected value is bolded and italicized

TABLE 8-2
Comparison of Maximum Body Burdens in Fish to
No-Effect Toxicity Reference Values
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

CAS Number	Compound	Site Maximum (mg/kg) Fish	DDA Maximum (mg/kg) Fish	UDA Maximum (mg/kg) Fish	No-Effect Toxicity Reference Values (TRVs)
	Dioxin (TEQ)	4.02E-06	3.24E-06	2.88E-06	5.00E-05
93-76-5	2,4,5-T	1.30E-02	ND	7.10E-03	NA
93-72-1	2,4,5-TP (Silvex)	8.70E-03	6.90E-03	7.50E-03	NA
7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	8.60E+00	ND	ND	NA
72-54-8	4,4'-DDD	6.70E-03	1.20E-02	ND	6.00E-02
72-55-9	4,4'-DDE	6.00E-02	1.90E-02	2.50E-02	2.92E+01
50-29-3	4,4'-DDT	1.30E-02	ND	7.60E-03	3.80E-01
319-84-6	alpha-BHC	2.60E-03	ND	ND	2.25E+01 [a]
5103-71-9	alpha-Chlordane	1.40E-02	7.70E-03	ND	1.66E+00
60-57-1	Dieldrin	6.40E-02	1.90E-02	3.20E-02	3.70E-01
959-98-8	Endosulfan I	4.30E-03	ND	3.00E-03	1.95E-01
72-20-8	Endrin	1.50E-02	ND	ND	1.50E-02
7421-93-4	Endrin aldehyde	1.00E-02	4.90E-03	7.40E-03	1.50E-02
5103-74-2	gamma-Chlordane	8.10E-03	3.50E-03	5.80E-03	1.66E+00
1024-57-3	Heptachlor epoxide	5.30E-03	ND	ND	3.20E+00
95-50-1	1,2-Dichlorobenzene	2.40E-01	ND	ND	6.70E-01
106-46-7	1,4-Dichlorobenzene	1.30E-01	ND	ND	6.10E-01
120-83-2	2,4-Dichlorophenol	1.90E-01	ND	ND	1.80E+01
95-48-7	2-Methylphenol (o-Cresol)	2.20E-01	3.40E-01	1.10E-01	1.00E+00 [b]

[a] No TRV for alpha-BHC was available. This TRV is for beta-BHC.

[b] No TRV for o-cresol is available. TRV is for 3-cresol, which was the lowest TRV for compounds structurally similar to o-cresol.

Note: No body burdens exceed available No-Effect TRVs.

Table 8-3 Fish Comparison - Species-by-Species and by Area
W.G. Krummrich Site
Sauget, Illinois

Analysis	Compounds	Units	Channel Catfish Whole Body				Drum Whole Body				Gizzard Shad Whole Body				Big Mouth Buffalo Fillet			
			Site Average	Site Max	Upstream	Downstream	Site Average	Site Max	Upstream	Downstream	Site Average	Site Max	Upstream	Downstream	Site Average	Site Max	Upstream	Downstream
	% Lipids	%	7.67	10	9	14	6.33	13.00	10	3	15	17	6	3	1.67	2	4	2
Dioxin	1,2,3,4,6,7,8,9-OCDD	pg/g	9.1	10.6	8.1	11.3	9.533	16.50	4.8	4.5	70.3	189	79.7	119	3.6	5.8	7.5	2.8
Dioxin	1,2,3,4,6,7,8,9-OCDF	pg/g	ND	ND	ND	ND	ND	ND	ND	ND	1.595	4.3	ND	2.7	ND	ND	ND	ND
Dioxin	1,2,3,4,6,7,8-HpCDD	pg/g	3.7	4.1	2.8	4.3	1.563	2.50	0.76	0.62	3.467	7.1	6.8	4.3	0.6183	0.87	1.4	0.71
Dioxin	1,2,3,4,6,7,8-HpCDF	pg/g	ND	ND	ND	ND	ND	ND	ND	ND	0.3533	1	0.59	ND	ND	ND	ND	ND
Dioxin	1,2,3,4,7,8,9-HpCDF	pg/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dioxin	1,2,3,4,7,8-HxCDD	pg/g	0.2967	0.3	0.33	0.58	ND	ND	ND	ND	0.09	0.18	0.3	ND	ND	ND	ND	0.12
Dioxin	1,2,3,4,7,8-HxCDF	pg/g	0.2383	0.43	0.42	0.71	0.34	0.47	0.51	ND	0.475	0.84	0.85	ND	ND	ND	ND	ND
Dioxin	1,2,3,6,7,8-HxCDD	pg/g	1.133	1.2	1.3	2	0.6167	0.84	0.36	0.34	0.79	1.1	1.8	0.37	0.2367	0.26	0.62	0.31
Dioxin	1,2,3,6,7,8-HxCDF	pg/g	0.09167	0.17	0.19	0.34	0.145	0.22	0.26	ND	0.08333	0.19	ND	ND	ND	ND	ND	ND
Dioxin	1,2,3,7,8,9-HxCDD	pg/g	0.5033	0.58	0.51	0.78	0.3033	0.38	0.2	0.2	0.39	0.54	1.1	0.26	0.07333	0.14	0.25	ND
Dioxin	1,2,3,7,8,9-HxCDF	pg/g	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dioxin	1,2,3,7,8-PeCDD	pg/g	0.51	0.64	0.61	1.2	0.05833	0.10	ND	ND	0.43	0.51	1	0.24	0.1567	0.19	0.58	0.18
Dioxin	1,2,3,7,8-PeCDF	pg/g	ND	ND	ND	ND	ND	ND	ND	ND	0.175	0.43	ND	ND	ND	ND	ND	ND
Dioxin	2,3,4,6,7,8-HxCDF	pg/g	0.1483	0.22	0.27	0.86	0.1517	0.24	ND	0.2	0.28	0.48	0.3	0.18	ND	ND	0.16	ND
Dioxin	2,3,4,7,8-PeCDF	pg/g	0.5033	0.64	0.59	1	0.06167	0.13	ND	ND	0.3833	0.55	0.25	0.21	0.2067	0.24	0.79	0.22
Dioxin	2,3,7,8-TCDD	pg/g	0.6	0.83	0.53	0.96	ND	ND	0.17	ND	1.083	2.4	1.1	0.34	0.1667	0.26	3.3	0.3
Dioxin	2,3,7,8-TCDF	pg/g	0.6967	1.2	0.35	0.53	0.6767	1.30	1	0.33	2.84	5.7	2.6	1	0.6033	0.72	1.6	0.99
Dioxin	Total HpCDD	pg/g	3.9	4.3	3.1	4.6	2.233	3.60	1	0.75	5.9	13.5	12.4	8.5	0.755	1.1	1.7	0.81
Dioxin	Total HpCDF	pg/g	0.9917	2.1	2.2	5.3	3.267	6.10	2.9	8.5	6.733	13.6	4.5	3.1	0.65	0.9	2.4	0.8
Dioxin	Total HxCDD	pg/g	2.4	2.6	2.8	3.9	1.933	2.90	ND	ND	1.883	3.3	4.9	ND	ND	ND	2	ND
Dioxin	Total HxCDF	pg/g	10.43	15.3	18.9	42.1	18.87	27.00	18.4	38.5	34.2	81.8	21.2	12.1	3.333	4.8	11.6	4.6
Dioxin	Total PeCDD	pg/g	2.333	3.3	1.9	3.2	3.833	7.50	2.2	1.1	3	3.4	3	2.6	1.06	1.5	2.1	1.9
Dioxin	Total PeCDF	pg/g	31.57	41.8	47.8	93.9	35.3	43.20	49.4	62	62.33	124	125	24.7	8.433	13.4	27.6	12.2
Dioxin	Total TCDD	pg/g	0.8833	1.1	0.62	1.4	2.492	7.20	0.75	ND	4	5.9	1.5	0.61	1.177	2.1	3.7	0.72
Dioxin	Total TCDF	pg/g	70.5	105	121	218	63.3	79.30	84.2	128	98.27	187	67	30	16.3	23.7	46.3	22.5
Herbicides	2,4,5-T	ug/kg	4.87	8.3	ND	ND	8.22	13.00	7.1	ND	ND	ND	ND	ND	4.37	4.8	ND	ND
Herbicides	2,4,5-TP (Silvex)	ug/kg	4.07	3.9	ND	ND	4.62	6.40	7.5	6.9	5.92	8.7	ND	3.9	ND	ND	ND	ND
Herbicides	2,4-D	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Herbicides	2,4-DB	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Herbicides	Dalapon	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Herbicides	Dicamba	ug/kg	ND	ND	6.5	ND	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Herbicides	Dichloroprop	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Herbicides	Dinoseb	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Herbicides	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Herbicides	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	ug/kg	4100	8600	ND	ND	ND	ND	ND	ND	1800	3400	ND	ND	ND	ND	ND	ND
Herbicides	Pentachlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCBs	Decachlorobiphenyl	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCBs	Dichlorobiphenyl	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCBs	Heptachlorobiphenyl	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCBs	Hexachlorobiphenyl	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCBs	Monochlorobiphenyl	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCBs	Nonachlorobiphenyl	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCBs	Octachlorobiphenyl	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCBs	Pentachlorobiphenyl	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCBs	Tetrachlorobiphenyl	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCBs	*Total Polychlorinated Biphenyls*	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCBs	Trichlorobiphenyl	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides	4,4'-DDD	ug/kg	ND	ND	ND	ND	8.6	8.70	ND	12	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides	4,4'-DDE	ug/kg	20.3	26	ND	16	27	60.00	25	19	7.9	5.8	13	5.2	9.43	8.2	17	7.3
Pesticides	4,4'-DDT	ug/kg	ND	ND	ND	ND	12.7	13.00	7.6	ND	ND	ND	ND	ND	ND	ND	8.6	ND
Pesticides	Aldrin	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides	alpha-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	9.2	2.6	ND	ND	ND	ND	ND	ND
Pesticides	alpha-Chlordane	ug/kg	9.8	3.8	ND	7.7	13	14.00	ND	ND	ND	ND	ND	ND	ND	ND	5.8	ND
Pesticides	beta-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides	delta-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides	Dieldrin	ug/kg	9.23	11	ND	19	25.6	84.00	32	8.8	9.77	4.3	6.7	14	ND	ND	8.1	ND
Pesticides	Endosulfan I	ug/kg	ND	ND	ND	ND	9.77	4.30	3	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides	Endosulfan II	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides	Endosulfan sulfate	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND	ND	ND	ND
Pesticides	Endrin	ug/kg	13.3	15	ND	ND	10.8	7.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides	Endrin aldehyde	ug/kg	10.5	6.4	ND	ND	11.7	10.00	7.4	4.9	ND	ND	5.1	ND	ND	ND	7.3	ND
Pesticides	Endrin ketone	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides	gamma-BHC (Lindane)	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND
Pesticides	gamma-Chlordane	ug/kg	9.47	3.4	ND	ND	11	8.10	5.8	3.5	ND	ND	ND	ND	ND	ND	5.2	ND
Pesticides	Heptachlor	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides	Heptachlor epoxide	ug/kg	9.47	3.4	ND	ND	10.1	5.30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides	Methoxychlor	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	48	44	ND	ND
Pesticides	Toxaphene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	1,2,3-Trichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	1,2,4-Trichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	1,2-Dichlorobenzene	ug/kg	240	210	ND	ND	ND	ND	ND	ND	190	240	ND	ND	ND	ND	ND	ND
SVOCs	1,3,5-Trichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 8-3. Fish Comparison - Species-by-Species and by Area
W.G. Krummrich Site
Sauget, Illinois

Analysis	Compounds	Units	Channel Catfish Whole Body				Drum Whole Body				Gizzard Shad Whole Body				Big Mouth Buffalo Fillet			
			Site Average	Site Max	Upstream	Downstream	Site Average	Site Max	Upstream	Downstream	Site Average	Site Max	Upstream	Downstream	Site Average	Site Max	Upstream	Downstream
SVOCs	1,3-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	1,4-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	213	130	ND	ND	ND	ND	ND	ND
SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	2,3,4-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	2,3,5-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	2,3,6-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	2,4,5-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	2,4,6-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	2,4-Dichlorophenol	ug/kg	233	190	ND	ND	ND	ND	ND	ND	192	180	ND	ND	ND	ND	ND	ND
SVOCs	2,4-Dimethylphenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	2,4-Dinitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	2,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	2,6-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	2-Chloronaphthalene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	2-Chlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	2-Methylnaphthalene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	2-Methylphenol (o-Cresol)	ug/kg	230	180	ND	340	218	220.00	ND	290	217	140	110	320	ND	ND	ND	ND
SVOCs	2-Nitroaniline	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	2-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	3,4,5-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	3-Nitroaniline	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	4,6-Dinitro-2-methylphenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	4-Bromophenylphenyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	4-Chloro-3-methylphenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	4-Chloroaniline	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	4-Chlorophenylphenyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	4-Nitroaniline	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	4-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Acenaphthene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Acenaphthylene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Anthracene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Benzo(a)anthracene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Benzo(a)pyrene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Benzo(b)fluoranthene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Benzo(g,h,i)perylene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Benzo(k)fluoranthene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	bis(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	bis(2-Chloroethyl)ether	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	bis(2-Ethylhexyl)phthalate	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Butylbenzylphthalate	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Carbazole	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Chrysene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Di-n-butylphthalate	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Di-n-octylphthalate	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Dibenzo(a,h)anthracene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Dibenzofuran	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Diethylphthalate	ug/kg	ND	ND	ND	ND	ND	ND	110	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Dimethylphthalate	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Fluoranthene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Fluorene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Hexachlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Hexachlorobutadiene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Hexachlorocyclopentadiene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Hexachloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Indeno(1,2,3-cd)pyrene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Isophorone	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	N-Nitroso-di-n-propylamine	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	N-Nitrosodiphenylamine	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Naphthalene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Nitrobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Phenanthrene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Phenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	Pyrene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 8-4a Surface Water Guideline Comparison Table (Detected COPCs)
WGK Plant Ecological Risk Assessment
Sauget, Illinois

CAS Number	Analysis	Name	Units	SW-PDA-2		SW-PDA-3		SW-PDA-4		SW-PDA-5		SW-PDA-6		SW-PDA-7		SW-PDA-8		SW-PDA-9	
				Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q
3268-87-9	Dioxin	1,2,3,4,6,7,8,9-OCDD	pg/L	146		147		167		150		160		169		159		149	
39001-02-0	Dioxin	1,2,3,4,6,7,8,9-OCDF	pg/L	3.4	UJ	6.9	UJ	4.2	UJ	6.2	J	4.5	UJ	5.8	UJ	17.15	UJ	14.7	UJ
35822-46-9	Dioxin	1,2,3,4,6,7,8-HpCDD	pg/L	3.9	J	5.6	UJ	7	J	6.2	J	6.2	J	5	UJ	12.75	UJ	10.7	UJ
70648-26-9	Dioxin	1,2,3,4,7,8-HxCDF	pg/L	1.15	UJ	2	UJ	2	UJ	2.2	J	1.3	UJ	2	UJ	4.7	UJ	4.1	UJ
37871-00-4	Dioxin	Total HpCDD	pg/L	9.16	J	5.6	UJ	12.8	J	11.8		11.8		8.2		12.75	UJ	10.7	UJ
55684-94-1	Dioxin	Total HxCDF	pg/L	1.2	UJ	2.1	UJ	2.1	UJ	2.2		1.3	UJ	2.1	UJ	4.95	UJ	4.4	UJ
	Dioxin	TEQ Mammal	pg/L	0.111		0.143		0.187		0.298		0.133		0.142		0.316		0.274	
	Dioxin	TEQ Bird	pg/L	0.0762		0.118		0.124		0.242		0.0864		0.120		0.258		0.226	
93-72-1	Herbicides	2,4,5-TP (Silvex)	ug/l	0.5	U	0.5	U	0.5	U	0.14	J	0.5	U	0.5	U	0.5	U	0.5	U
94-75-7	Herbicides	2,4-D	ug/l	8	J	4.1		10		4.3		0.5	U	0.5	U	0.34	J	0.5	U
1918-00-9	Herbicides	Dicamba	ug/l	1.2	U	1.2	U	1.2	U	0.11	J	1.2	U	1.2	U	1.2	U	1.2	U
120-36-5	Herbicides	Dichloroprop	ug/l	1.86	J	6	U	0.49	J	6	U	6	U	6	U	6	U	6	U
87-86-5	Herbicides	Pentachlorophenol (at pH 7.8)	ug/l	0.575	J	0.23	J	0.87	J	1	U	1	U	1	U	1	U	1	U
120-82-1	SVOCs	1,2,4-Trichlorobenzene	ug/l	1.525	J	5	U	0.33	J	6.7	U	5	U	5	U	5	U	5	U
95-50-1	SVOCs	1,2-Dichlorobenzene	ug/l	13.25	J	2.3	J	11		6.7	U	5	U	5	U	5	U	5	U
88-06-2	SVOCs	2,4,6-Trichlorophenol	ug/l	8	J	2.4	J	7.4		1.4	J	5	U	5	U	5	U	5	U
120-83-2	SVOCs	2,4-Dichlorophenol	ug/l	31	J	9.3		30		6.2	J	5	U	5	U	5	U	5	U
105-67-9	SVOCs	2,4-Dimethylphenol	ug/l	1.9	J	1.2	J	3.7	J	6.7	U	5	U	5	U	5	U	5	U
95-57-8	SVOCs	2-Chlorophenol	ug/l	18.7	J	6		20		4.8	J	5	U	5	U	5	U	5	U
106-44-5	SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/l	5.9	J	2.6	J	13		6.7	U	5	U	5	U	5	U	5	U
106-47-8	SVOCs	4-Chloroaniline	ug/l	41	J	12		45		3.7	J	10	U	10	U	10	U	10	U
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/l	5	U	5	U	5	U	6.7	U	5	U	2.2	J	5	U	5	U
84-74-2	SVOCs	Di-n-butylphthalate	ug/l	5	U	5	U	5	U	6.7	U	0.34	J	5	U	5	U	5	U
98-95-3	SVOCs	Nitrobenzene	ug/l	5	U	0.64	J	0.83	J	6.7	U	5	U	5	U	5	U	5	U
108-95-2	SVOCs	Phenol	ug/l	5	U	5	U	5	U	16		5	U	5	U	5	U	5	U
107-06-2	VOCs	1,2-Dichloroethane	ug/l	0.775	J	2	U	0.49	J	0.58	J	2	U	2	U	2	U	2	U
108-10-1	VOCs	4-Methyl-2-pentanone (MIBK)	ug/l	1.52	J	2.2	J	3.6	J	10	U	10	U	10	U	10	U	10	U
71-43-2	VOCs	Benzene	ug/l	1.7		1.8	J	2	U	2	U	2	U	2	U	2	U	2	U
108-90-7	VOCs	Chlorobenzene	ug/l	22.2	J	24		12		4.2		2	U	2	U	1.2	J	0.7	J
100-41-4	VOCs	Ethylbenzene	ug/l	0.32	J	0.38	J	0.28	J	2	U	2	U	2	U	2	U	0.21	J
108-38-3	VOCs	m&p-Xylene	ug/l	0.746	J	0.67	J	2.4		0.7	J	2	U	2	U	2	U	2	U
108-88-3	VOCs	Toluene	ug/l	1.845		1.7	J	1.3	J	2	U	2	U	2	U	2	U	2	U
79-01-6	VOCs	Trichloroethene	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	0.3	J
1330-20-7	VOCs	Xylenes, Total	ug/l	0.946	J	0.97	J	2.7		0.7	J	2	U	2	U	2	U	2	U

Notes

[1] Illinois 1999. Title 35 of the Illinois Administrative Code. Subtitle C. Chapter 1. Part 302 Water Quality Standards. Subpart B.

[2] USEPA 1999. National Recommended Water Quality Criteria - Correction. Office of Water. EPA 822-Z-99-001 (April 1999).

[3] Suter, G.W. II and C.L. Tsao. 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. Risk Assessment. Health Sciences Research Division. Oak Ridge, Tennessee. ES/ER/TM-96/R2.

[4] USEPA. 1995. Great Lakes Water Quality Initiative Criteria Documents for the Protection of Wildlife: DDT, Mercury, 2,3,7,8-TCDD, PCBs. Office of Water. EPA 820-B-95-008.

One-half the detection limit exceeds a criterion or reference concentration.

Exceeds either reference concentration (2x Average)

Exceeds a criterion and 2x average reference

This compound was screened out; however, it is retained in this table for completeness.

Table 8-4a Surface Water Guideline Comparison Table (Detected COPCs)
WGK Plant Ecological Risk Assessment
Sauget, Illinois

CAS Number	Analysis	Name	Units	SW-PDA-10 Concentration	Validation Q	Surface Water Quality Criteria: SW IL Acute WQ[1]	SW IL Chronic WQ[1]	SW NAWQ CMC[2]	SW NAWQ CCC[2]	SW Tier II Secondary Acute[3]	SW Tier II Secondary Chronic[3]	Oak Ridge Lowest Chronic All Organisms[3]	DDA Reference 2 X Downstream Average	UDA Reference 2 X Upstream Average
3268-87-9	Dioxin	1,2,3,4,6,7,8,9-OCDD	pg/L	169									441	364.6
39001-02-0	Dioxin	1,2,3,4,6,7,8,9-OCDF	pg/L	5.2	UJ								ND	ND
35822-46-9	Dioxin	1,2,3,4,6,7,8-HpCDD	pg/L	4.2	UJ								ND	ND
70648-26-9	Dioxin	1,2,3,4,7,8-HxCDF	pg/L	1.7	UJ								ND	ND
37871-00-4	Dioxin	Total HpCDD	pg/L	9.4									17.9	ND
55684-94-1	Dioxin	Total HxCDF	pg/L	1.8	UJ								ND	ND
	Dioxin	TEQ Mammal	pg/L	0.123								3.10E-03[4]	0.0441	0.0365
	Dioxin	TEQ Bird	pg/L	0.104								2.6E-02[4]	0.0441	0.0365
93-72-1	Herbicides	2,4,5-TP (Silvex)	ug/l	0.5	U								ND	ND
94-75-7	Herbicides	2,4-D	ug/l	0.5	U								0.96	ND
1918-00-9	Herbicides	Dicamba	ug/l	1.2	U								ND	ND
120-36-5	Herbicides	Dichloroprop	ug/l	6	U								ND	ND
87-86-5	Herbicides	Pentachlorophenol (at pH 7.8)	ug/l	1	U			19	15				ND	ND
120-82-1	SVOCs	1,2,4-Trichlorobenzene	ug/l	5	U					700	110		ND	ND
95-50-1	SVOCs	1,2-Dichlorobenzene	ug/l	5	U					280	14		ND	ND
88-06-2	SVOCs	2,4,6-Trichlorophenol	ug/l	5	U								ND	ND
120-83-2	SVOCs	2,4-Dichlorophenol	ug/l	5	U								3.5	ND
105-67-9	SVOCs	2,4-Dimethylphenol	ug/l	5	U								ND	ND
95-57-8	SVOCs	2-Chlorophenol	ug/l	5	U								2.86	ND
1Co-44-5	SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/l	5	U								ND	ND
106-47-8	SVOCs	4-Chloroaniline	ug/l	10	U								6.6	ND
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/l	5	U					27	3.0	912	ND	ND
84-74-2	SVOCs	Di-n-butylphthalate	ug/l	0.28	J					190	35	697	ND	ND
98-95-3	SVOCs	Nitrobenzene	ug/l	5	U								ND	ND
108-95-2	SVOCs	Phenol	ug/l	5	U								ND	ND
107-06-2	VOCs	1,2-Dichloroethane	ug/l	2	U					8800	910	15200	ND	ND
108-10-1	VOCs	4-Methyl-2-pentanone (MIBK)	ug/l	10	U					2200	170	77400	ND	ND
71-43-2	VOCs	Benzene	ug/l	2	U					2300	130	525000	0.39	1.785
108-90-7	VOCs	Chlorobenzene	ug/l	2	U					1100	64	1203	3.5	1.775
100-41-4	VOCs	Ethylbenzene	ug/l	2	U					130	7.3		ND	ND
108-38-3	VOCs	m&p-Xylene	ug/l	2	U					32	1.8		ND	ND
108-88-3	VOCs	Toluene	ug/l	2	U					120	9.8	1289	1.4	ND
79-01-6	VOCs	Trichloroethene	ug/l	2	U					440	47	7257	ND	ND
1330-20-7	VOCs	Xylenes, Total	ug/l	2	U					230	13	62308	ND	ND

Notes

[1] Illinois. 1999. Title 35 of the Illinois Administrative Code. Subtitle C. Chapter 1. Part 302 Water Quality Standards. Subpart B.

[2] USEPA. 1999. National Recommended Water Quality Criteria - Correction. Office of Water. EPA 82-2-Z-99-001 (April 1999).

[3] Suter, G.W. II and C.L. Tsao. 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. Risk Assessment Health Sciences Research Division, Oak Ridge, Tennessee. ES/ER/TM-96/R2

[4] USEPA. 1995. Great Lakes Water Quality Initiative Criteria Documents for the Protection of Wildlife: DDT, Mercury, 2,3,7,8-TCDD, PCBs. Office of Water. EPA 820-B-95-008.

One-half the detection limit exceeds a criterion or reference concentration

Exceeds either reference concentration (2x Average)

Exceeds a criterion and 2x average reference

This compound was screened out; however, it is retained in this table for completeness.

CAS Number	Analysis	Name	Units	SW-PDA-2 Concentration	SW-PDA-2 Validation Q	SW-PDA-3 Concentration	SW-PDA-3 Validation Q	SW-PDA-4 Concentration	SW-PDA-4 Validation Q	SW-PDA-5 Concentration	SW-PDA-5 Validation Q	SW-PDA-6 Concentration	SW-PDA-6 Validation Q	SW-PDA-7 Concentration	SW-PDA-7 Validation Q	SW-PDA-8 Concentration	SW-PDA-8 Validation Q	SW-PDA-9 Concentration	SW-PDA-9 Validation Q	SW-PDA-10 Concentration	SW-PDA-10 Validation Q
67562-39-4	Dioxin	1,2,3,4,6,7,8-HpCDF	pg/L	1.5	UJ	2.7	UJ	2.5	UJ	1.6	UJ	1.6	UJ	2.6	UJ	6.45	UJ	5.7	UJ	2.2	UJ
55673-89-7	Dioxin	1,2,3,4,7,8,9-HpCDF	pg/L	1.9	UJ	3.7	UJ	2.9	UJ	2.2	UJ	2.2	UJ	3.5	UJ	8.35	UJ	7.4	UJ	3.1	UJ
39227-28-6	Dioxin	1,2,3,4,7,8-HxCDD	pg/L	1.75	UJ	3.3	UJ	2.8	UJ	2	UJ	2	UJ	3.1	UJ	7.55	UJ	6.3	UJ	2.5	UJ
57653-85-7	Dioxin	1,2,3,6,7,8-HxCDD	pg/L	1.75	UJ	3.2	UJ	2.8	UJ	1.9	UJ	2	UJ	3.1	UJ	7.6	UJ	6.3	UJ	2.4	UJ
57117-44-9	Dioxin	1,2,3,5,7,8-HxCDF	pg/L	1.1	UJ	1.9	UJ	1.9	UJ	1.2	UJ	1.2	UJ	1.9	UJ	4.45	UJ	3.9	UJ	1.6	UJ
19408-74-3	Dioxin	1,2,3,7,8,9-HxCDD	pg/L	1.7	UJ	3.2	UJ	2.6	UJ	1.9	UJ	2	UJ	3.1	UJ	7.45	UJ	6.2	UJ	2.4	UJ
72918-21-9	Dioxin	1,2,3,7,8,9-HxCDF	pg/L	1.35	UJ	2.6	UJ	2.3	UJ	1.6	UJ	1.6	UJ	2.5	UJ	6.05	UJ	5.3	UJ	2.1	UJ
40321-76-4	Dioxin	1,2,3,7,8-PeCDD	pg/L	1.65	UJ	2.5	UJ	3	UJ	1.6	UJ	1.7	UJ	2.6	UJ	6.1	UJ	6.2	UJ	1.8	UJ
57117-41-6	Dioxin	1,2,3,7,8-PeCDF	pg/L	1.3	UJ	1.9	UJ	2.3	UJ	1.4	UJ	1.2	UJ	1.9	UJ	5.2	UJ	4.8	UJ	1.4	UJ
60851-34-5	Dioxin	2,3,4,6,7,8-HxCDF	pg/L	1.2	UJ	2.1	UJ	2.1	UJ	1.3	UJ	1.3	UJ	2.1	UJ	4.95	UJ	4.3	UJ	1.8	UJ
57117-31-4	Dioxin	2,3,4,7,8-PeCDF	pg/L	1.3	UJ	1.9	UJ	2.2	UJ	1.4	UJ	1.2	UJ	1.9	UJ	5.1	UJ	4.8	UJ	1.4	UJ
1746-01-6	Dioxin	2,3,7,8-TCDD	pg/L	1.6	UJ	1.9	UJ	3.1	UJ	1.4	UJ	1.2	UJ	2.1	UJ	6.9	UJ	6.4	UJ	1.7	UJ
51207-31-9	Dioxin	2,3,7,8-TCDF	pg/L	1.2	UJ	1.7	UJ	2.1	UJ	1.1	UJ	1.1	UJ	1.6	UJ	4.1	UJ	4	UJ	1.4	UJ
38998-75-3	Dioxin	Total HpCDF	pg/L	1.7	UJ	3.1	UJ	2.7	UJ	1.9	UJ	1.8	UJ	3	UJ	7.3	UJ	6.5	UJ	2.6	UJ
34465-46-8	Dioxin	Total HxCDD	pg/L	1.75	UJ	3.2	UJ	2.7	UJ	1.9	UJ	2	UJ	3.1	UJ	7.55	UJ	6.3	UJ	2.5	UJ
36088-22-9	Dioxin	Total PeCDD	pg/L	1.65	UJ	2.5	UJ	3	UJ	1.6	UJ	1.7	UJ	2.6	UJ	6.1	UJ	6.2	UJ	1.8	UJ
30402-15-4	Dioxin	Total PeCDF	pg/L	1.3	UJ	1.9	UJ	2.3	UJ	1.4	UJ	1.2	UJ	1.9	UJ	5.15	UJ	4.8	UJ	1.4	UJ
41903-57-5	Dioxin	Total TCDD	pg/L	1.6	UJ	1.9	UJ	3.1	UJ	1.4	UJ	1.2	UJ	2.1	UJ	6.5	UJ	6.4	UJ	1.7	UJ
55722-27-5	Dioxin	Total TCDF	pg/L	1.2	UJ	1.7	UJ	2.1	UJ	1.1	UJ	1.1	UJ	1.6	UJ	4.1	UJ	4	UJ	1.4	UJ
93-76-5	Herbicides	2,4,5-T	ug/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
94-82-6	Herbicides	2,4-DB	ug/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
75-99-0	Herbicides	Dalapon	ug/L	120	U	120	U	120	U	120	U	120	U	120	U	120	U	120	U	120	U
88-85-7	Herbicides	Dinoseb	ug/L	6	U	6	U	6	U	6	R	6	R	6	R	6	U	6	U	6	R
94-74-6	Herbicides	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	ug/L	120	U	120	U	120	U	120	U	120	U	120	U	120	U	120	U	120	U
7085-19-0	Herbicides	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	ug/L	120	U	120	U	120	U	120	U	120	U	120	U	120	U	120	U	120	U
2051-24-3	PCBs	Decachlorobiphenyl	ug/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
C-DICHLORO	PCBs	Dichlorobiphenyl	ug/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
C-HEPTACHLOR	PCBs	Heptachlorobiphenyl	ug/L	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
C-HEXACHLORO	PCBs	Hexachlorobiphenyl	ug/L	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
C-MONOCHLORO	PCBs	Monochlorobiphenyl	ug/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
C-NONACHLORO	PCBs	Nonachlorobiphenyl	ug/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
C-OCTA-BIPHE	PCBs	Octachlorobiphenyl	ug/L	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
C-PENTABIPHEN	PCBs	Pentachlorobiphenyl	ug/L	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
C-TETRACHLOR	PCBs	Tetrachlorobiphenyl	ug/L	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
C-TOTAL-PCB	PCBs	Total Polychlorinated Biphenyls	ug/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
C-TRICHLOROB	PCBs	Trichlorobiphenyl	ug/L	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
72-54-8	Pesticides	4,4'-DDD	ug/L	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
72-55-9	Pesticides	4,4'-DDE	ug/L	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	U	0.1	UJ	0.1	UJ
50-29-3	Pesticides	4,4'-DDT	ug/L	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	U	0.1	UJ	0.1	UJ
309-00-2	Pesticides	Aldrin	ug/L	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	U	0.05	UJ	0.05	UJ
319-84-6	Pesticides	alpha-BHC	ug/L	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ	0.025	U	0.025	UJ	0.025	UJ
5103-71-9	Pesticides	alpha-Chlordane	ug/L	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	U	0.05	UJ	0.05	UJ
319-85-7	Pesticides	beta-BHC	ug/L	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ	0.025	U	0.025	UJ	0.025	UJ
319-86-8	Pesticides	delta-BHC	ug/L	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ	0.025	U	0.025	UJ	0.025	UJ
60-57-1	Pesticides	Dieldrin	ug/L	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	U	0.1	UJ	0.1	UJ
959-98-8	Pesticides	Endosulfan I	ug/L	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.06	UJ	0.05	UJ	0.05	U	0.05	UJ	0.05	UJ
33213-65-9	Pesticides	Endosulfan II	ug/L	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	U	0.1	UJ	0.1	UJ
1031-07-8	Pesticides	Endosulfan sulfate	ug/L	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	U	0.1	UJ	0.1	UJ
72-20-8	Pesticides	Endrin	ug/L	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	U	0.1	UJ	0.1	UJ
7421-93-4	Pesticides	Endrin aldehyde	ug/L	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	U	0.1	UJ	0.1	UJ
53494-70-5	Pesticides	Endrin ketone	ug/L	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	U	0.1	UJ	0.1	UJ
58-89-9	Pesticides	gamma-BHC (Lindane)	ug/L	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ	0.025	U	0.025	UJ	0.025	UJ
5103-74-2	Pesticides	gamma-Chlordane	ug/L	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	U	0.05	UJ	0.05	UJ
76-44-8	Pesticides	Heptachlor	ug/L	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	U	0.05	UJ	0.05	UJ
1024-57-3	Pesticides	Heptachlor epoxide	ug/L	0.05	UJ	0.05	UJ	0.05	UJ	0.06	UJ	0.06	UJ	0.05	UJ	0.05	U	0.05	UJ	0.05	UJ
72-43-5	Pesticides	Methoxychlor	ug/L	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	U	0.5	UJ	0.5	UJ
8001-35-2	Pesticides	Toxaphene	ug/L	5	UJ	5	UJ	5	UJ	5	UJ	5	UJ	5	UJ	5	U	5	UJ	5	UJ
87-61-6	SVOCs	1,2,3-Trichlorobenzene	ug/L	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
108-70-3	SVOCs	1,3,5-Trichlorobenzene	ug/L	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
541-73-1	SVOCs	1,3-Dichlorobenzene	ug/L	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
106-46-7	SVOCs	1,4-Dichlorobenzene	ug/L	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
108-60-1	SVOCs	2,2'-Oxybis(1-Chloropropane) (cis-2-chloroisopropyl ether)	ug/L	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
15950-66-0	SVOCs	2,3,4-Trichlorophenol	ug/L	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
933-78-8	SVOCs	2,3,5-Trichlorophenol	ug/L	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
933-75-5	SVOCs	2,3,6-Trichlorophenol	ug/L	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
95-95-4	SVOCs	2,4,5-Trichlorophenol	ug/L	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
51-28-5	SVOCs	2,4-Dinitrophenol	ug/L	25	U	25	U	25	U	33	U	25	U	25	U	25	U	25	U	25	U
121-14-2	SVOCs	2,4-Dinitrotoluene	ug/L	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
606-20-2	SVOCs	2,6-Dinitrotoluene	ug/L	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
91-58-7	SVOCs	2-Chloronaphthalene	ug/L	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U

Table 8-4b Surface Water Guideline Comparison Table (Non-Detected COPCs for RL Analysis)
WGK Plant Ecological Risk Assessment
Saugat Illinois

CAS Number	Analysis	Name	Units	SW-PDA-2		SW-PDA-3		SW-PDA-4		SW-PDA-5		SW-PDA-6		SW-PDA-7		SW-PDA-8		SW-PDA-9		SW-PDA-10	
				Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q
91-57-6	SVOCs	2-Methylnaphthalene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
95-48-7	SVOCs	2-Methylphenol (o-Cresol)	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
88-74-4	SVOCs	2-Nitroaniline	ug/l	25	U	25	U	25	U	33	U	25	U	25	U	25	U	25	U	25	U
88-75-5	SVOCs	2-Nitrophenol	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
91-94-1	SVOCs	3,3'-Dichlorobenzidine	ug/l	10	U	10	U	10	U	13	U	10	U	10	U	10	U	10	U	10	U
609-19-8	SVOCs	3,4,5-Trichlorophenol	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
99-09-2	SVOCs	3-Nitroaniline	ug/l	25	U	25	U	25	U	33	U	25	U	25	U	25	U	25	U	25	U
534-52-1	SVOCs	4,6-Dinitro-2-methylphenol	ug/l	25	U	25	U	25	U	33	U	25	U	25	U	25	U	25	U	25	U
101-55-3	SVOCs	4-Bromophenylphenyl ether	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
59-50-7	SVOCs	4-Chloro-3-methylphenol	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
7005-72-3	SVOCs	4-Chlorophenylphenyl ether	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
100-01-6	SVOCs	4-Nitroaniline	ug/l	25	U	25	U	25	U	33	U	25	U	25	U	25	U	25	U	25	U
100-02-7	SVOCs	4-Nitrophenol	ug/l	25	U	25	U	25	U	33	U	25	U	25	U	25	U	25	U	25	U
83-32-9	SVOCs	Acenaphthene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
208-96-8	SVOCs	Acenaphthylene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
120-12-7	SVOCs	Anthracene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
56-55-3	SVOCs	Benzo(a)anthracene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
50-32-8	SVOCs	Benzo(a)pyrene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
205-99-2	SVOCs	Benzo(b)fluoranthene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
191-24-2	SVOCs	Benzo(g,h,i)perylene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
207-08-9	SVOCs	Benzo(k)fluoranthene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
111-91-1	SVOCs	bis(2-Chloroethoxy)methane	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
111-44-4	SVOCs	bis(2-Chloroethyl)ether	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
85-68-7	SVOCs	Butylbenzylphthalate	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
86-74-8	SVOCs	Carbazole	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
218-01-9	SVOCs	Chrysene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
117-84-0	SVOCs	Di-n-octylphthalate	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
53-70-3	SVOCs	Dibenz(a,h)anthracene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
132-64-9	SVOCs	Dibenzofuran	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
84-66-2	SVOCs	Diethylphthalate	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
131-11-3	SVOCs	Dimethylphthalate	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
206-44-0	SVOCs	Fluoranthene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
86-73-7	SVOCs	Fluorene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
118-74-1	SVOCs	Hexachlorobenzene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
87-68-3	SVOCs	Hexachlorobutadiene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
77-47-4	SVOCs	Hexachlorocyclopentadiene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
67-72-1	SVOCs	Hexachloroethane	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
193-39-5	SVOCs	Indeno(1,2,3-cd)pyrene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
78-59-1	SVOCs	Isophorone	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
621-64-7	SVOCs	N-Nitroso-di-n-propylamine	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
86-30-6	SVOCs	N-Nitrosodiphenylamine	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
91-20-3	SVOCs	Naphthalene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
85-01-8	SVOCs	Phenanthrene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
129-00-0	SVOCs	Pyrene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U	5	U	5	U	5	U
71-55-6	VOCs	1,1,1-Trichloroethane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
79-34-5	VOCs	1,1,2,2-Tetrachloroethane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
79-00-5	VOCs	1,1,2-Trichloroethane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
75-34-3	VOCs	1,1-Dichloroethane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
75-35-4	VOCs	1,1-Dichloroethene	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
78-87-5	VOCs	1,2-Dichloropropane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
78-93-3	VOCs	2-Butanone (MEK)	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
591-78-6	VOCs	2-Hexanone	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
67-64-1	VOCs	Acetone	ug/l	25	U	25	U	25	U	25	U	25	U	25	U	25	U	25	U	25	U
75-27-4	VOCs	Bromodichloromethane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
75-25-2	VOCs	Bromoform	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
74-83-9	VOCs	Bromomethane (Methyl bromide)	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
75-15-0	VOCs	Carbon disulfide	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
56-23-5	VOCs	Carbon tetrachloride	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
75-00-3	VOCs	Chloroethane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
67-66-3	VOCs	Chloroform	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
74-87-3	VOCs	Chloromethane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
156-59-2	VOCs	cis-1,2-Dichloroethene	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
10061-01-5	VOCs	cis-1,3-Dichloropropene	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
124-48-1	VOCs	Dibromochloromethane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
75-09-2	VOCs	Methylene chloride (Dichloromethane)	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
100-42-5	VOCs	Styrene	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
127-18-4	VOCs	Tetrachloroethene	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
156-60-5	VOCs	trans-1,2-Dichloroethene	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
10061-02-6	VOCs	trans-1,3-Dichloropropene	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
75-01-4	VOCs	Vinyl chloride	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U

Notes

[1] Illinois 1999. Title 35 of the Illinois Administrative Code. Subtitle C: Chapter 1: Part 302 Water Quality Standards. Subpart B

[2] USEPA 1999. National Recommended Water Quality Criteria - Correction. Office of Water. EPA 82-Z-Z-99-001 (April 1999)

[3] Suter, G.W. II and C.L. Tsao. 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. Risk Assessment, Health Sciences Research Division, Oak Ridge, Tennessee. ES/ER/TM-96/R2

[4] Value for PCBs

[5] Value for DDD p,p

[6] Value for DDT

[7] Value for BHC (other)

[8] Value for Chlordane

[9] Value for alpha- and beta-Endosulfan

[A] Value for 1,2-Dichloroethene

[B] Value for 1,3-Dichloropropene

One-half the detection limit exceeds a criterion or reference concentration

Table 8-4b. Surface Water Guideline Comparison Table (Non-Detected COPCs for RL Analysis
WGK Plant Ecological Risk Assessment
Saugel, Illinois

CAS Number	Analysis	Name	Units	Surface Water Quality Criteria							DDA Reference	UDA Reference
				SW IL Acute WQ[1]	SW IL Chronic WQ[1]	SW NAWQ CMC[2]	SW NAWQ CCC[2]	SW Tier II Secondary Acute[3]	SW Tier II Secondary Chronic[3]	Oak Ridge Lowest Chronic All Organisms[3]	2 X Downstream Average	2 X Upstream Average
67562-39-4	Dioxin	1,2,3,4,6,7,8-HpCDF	pg/l								ND	ND
55673-89-7	Dioxin	1,2,3,4,7,8,9-HpCDF	pg/l								ND	ND
39227-28-6	Dioxin	1,2,3,4,7,8-HxCDD	pg/l								ND	ND
57653-85-7	Dioxin	1,2,3,6,7,8-HxCDD	pg/l								ND	ND
57117-44-9	Dioxin	1,2,3,6,7,8-HxCDF	pg/l								ND	ND
19408-74-3	Dioxin	1,2,3,7,8,9-HxCDD	pg/l								ND	ND
72918-21-9	Dioxin	1,2,3,7,8,9-HxCDF	pg/l								ND	ND
40321-76-4	Dioxin	1,2,3,7,8-PeCDD	pg/l								ND	ND
57117-41-6	Dioxin	1,2,3,7,8-PeCDF	pg/l								ND	ND
60851-34-5	Dioxin	2,3,4,6,7,8-HxCDF	pg/l								ND	ND
57117-31-4	Dioxin	2,3,4,7,8-PeCDF	pg/l								ND	ND
1746-01-6	Dioxin	2,3,7,8-TCDD	pg/l								ND	ND
51207-31-9	Dioxin	2,3,7,8-TCDF	pg/l								ND	ND
38998-75-3	Dioxin	Total HpCDF	pg/l								ND	ND
34465-46-8	Dioxin	Total HxCDD	pg/l								ND	ND
36088-22-9	Dioxin	Total PeCDD	pg/l								ND	ND
30402-15-4	Dioxin	Total PeCDF	pg/l								ND	ND
41903-57-5	Dioxin	Total TCDD	pg/l								ND	ND
55722-27-5	Dioxin	Total TCDF	pg/l								ND	ND
93-76-5	Herbicides	2,4,5-T	ug/l								0.36	ND
94-82-6	Herbicides	2,4-DB	ug/l								ND	ND
75-99-0	Herbicides	Dalapon	ug/l								ND	ND
88-85-7	Herbicides	Dinoseb	ug/l								ND	ND
94-74-6	Herbicides	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	ug/l								ND	ND
7085-19-0	Herbicides	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	ug/l								ND	ND
2051-24-3	PCBs	Decachlorobiphenyl	ug/l								ND	ND
C-DICHLOROBI	PCBs	Dichlorobiphenyl	ug/l								ND	ND
C-HEPTACHLOR	PCBs	Heptachlorobiphenyl	ug/l								ND	ND
C-HEXACHLORO	PCBs	Hexachlorobiphenyl	ug/l								ND	ND
C-MONOCHLORO	PCBs	Monochlorobiphenyl	ug/l								ND	ND
C-NONACHLORO	PCBs	Nonachlorobiphenyl	ug/l								ND	ND
C-OCTA-BIPHE	PCBs	Octachlorobiphenyl	ug/l								ND	ND
C-PENTBIPHEN	PCBs	Pentachlorobiphenyl	ug/l								ND	ND
C-TETRACHLOR	PCBs	Tetrachlorobiphenyl	ug/l								ND	ND
C-TOTAL-PCB	PCBs	Total Polychlorinated Biphenyls	ug/l				0.014[4]		0.14	0.1	ND	ND
C-TRICHLOROB	PCBs	Trichlorobiphenyl	ug/l								ND	ND
72-54-8	Pesticides	4,4'-DDD	ug/l					0.19[5]	0.011[5]	1.69[5]	ND	ND
72-55-9	Pesticides	4,4'-DDE	ug/l								ND	ND
50-29-3	Pesticides	4,4'-DDT	ug/l			1.1	0.001		0.013[4]	0.3[4]	ND	ND
309-00-2	Pesticides	Aldrin	ug/l			3.0					ND	ND
319-84-6	Pesticides	alpha-BHC	ug/l					39[4]	2.2[4]	95[4]	ND	ND
5103-71-9	Pesticides	alpha-Chlordane	ug/l			2.4[4]	0.0043[4]			1.09[4]	ND	ND
319-85-7	Pesticides	beta-BHC	ug/l					39[4]	2.2[4]	95[4]	ND	ND
319-86-8	Pesticides	delta-BHC	ug/l					39[4]	2.2[4]	95[4]	ND	ND
60-57-1	Pesticides	Dieldrin	ug/l			0.24	0.056				ND	ND
959-98-8	Pesticides	Endosulfan I	ug/l			0.22[7]	0.056[7]		0.051		ND	ND
33213-65-9	Pesticides	Endosulfan II	ug/l			0.22[7]	0.056[7]		0.051		ND	ND
1031-07-8	Pesticides	Endosulfan sulfate	ug/l								ND	ND
72-20-8	Pesticides	Endrin	ug/l			0.086	0.036				ND	ND
7421-93-4	Pesticides	Endrin aldehyde	ug/l								ND	ND
53494-70-5	Pesticides	Endrin ketone	ug/l								ND	ND
58-89-9	Pesticides	gamma-BHC (Lindane)	ug/l			0.95				3.3	ND	ND
5103-74-2	Pesticides	gamma-Chlordane	ug/l			2.4[4]	0.0043[4]			1.09[4]	ND	ND
76-44-8	Pesticides	Heptachlor	ug/l			0.52	0.0038	0.125	0.0069	1.26	ND	ND
1024-57-3	Pesticides	Heptachlor epoxide	ug/l			0.52	0.0038				ND	ND
72-43-5	Pesticides	Methoxychlor	ug/l				0.03		0.019		ND	ND
8001-35-2	Pesticides	Toxaphene	ug/l			0.73	0.0002				ND	ND
87-61-6	SVOCs	1,2,3-Trichlorobenzene	ug/l								ND	ND
108-70-3	SVOCs	1,3,5-Trichlorobenzene	ug/l								ND	ND
541-73-1	SVOCs	1,3-Dichlorobenzene	ug/l					630	71		ND	ND
106-46-7	SVOCs	1,4-Dichlorobenzene	ug/l					190	16		ND	ND
108-60-1	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/l								ND	ND
15950-66-0	SVOCs	2,3,4-Trichlorophenol	ug/l								ND	ND
933-78-8	SVOCs	2,3,5-Trichlorophenol	ug/l								ND	ND
933-75-5	SVOCs	2,3,6-Trichlorophenol	ug/l								ND	ND
95-95-4	SVOCs	2,4,5-Trichlorophenol	ug/l								ND	ND
51-28-5	SVOCs	2,4-Dinitrophenol	ug/l								ND	ND
121-14-2	SVOCs	2,4-Dinitrotoluene	ug/l								ND	ND
606-20-2	SVOCs	2,6-Dinitrotoluene	ug/l								ND	ND
91-58-7	SVOCs	2-Chloronaphthalene	ug/l								ND	ND

Table 6-4b. Surface Water Guideline Comparison Table (Non-Detected COPCs for RL Analysis)
WGK Plant Ecological Risk Assessment
Saugel, Illinois

CAS Number	Analysis	Name	Units	Surface Water Quality Criteria: SW IL Acute WQ[1]	SW IL Chronic WQ[1]	SW NAWQ CMC[2]	SW NAWQ CCC[2]	SW Tier II Secondary Acute[3]	SW Tier II Secondary Chronic[3]	Oak Ridge Lowest Chronic All Organisms[3]	DDA Reference 2 X Downstream Average	DDA Reference 2 X Upstream Average
91-57-6	SVOCs	2-Methylnaphthalene	ug/l								ND	ND
95-48-7	SVOCs	2-Methylphenol (o-Cresol)	ug/l					230	13	489	ND	ND
88-74-4	SVOCs	2-Nitroaniline	ug/l								ND	ND
88-75-5	SVOCs	2-Nitrophenol	ug/l								ND	ND
91-94-1	SVOCs	3,3'-Dichlorobenzidine	ug/l								ND	ND
609-19-8	SVOCs	3,4,5-Trichlorophenol	ug/l								ND	ND
99-09-2	SVOCs	3-Nitroaniline	ug/l								ND	ND
534-52-1	SVOCs	4,6-Dinitro-2-methylphenol	ug/l								ND	ND
101-55-3	SVOCs	4-Bromophenylphenyl ether	ug/l						1.5		ND	ND
59-50-7	SVOCs	4-Chloro-3-methylphenol	ug/l								ND	ND
7005-72-3	SVOCs	4-Chlorophenylphenyl ether	ug/l								ND	ND
100-01-6	SVOCs	4-Nitroaniline	ug/l								ND	ND
100-02-7	SVOCs	4-Nitrophenol	ug/l					1200	300	481	ND	ND
83-32-9	SVOCs	Acenaphthene	ug/l							74	ND	ND
208-96-8	SVOCs	Acenaphthylene	ug/l								ND	ND
120-12-7	SVOCs	Anthracene	ug/l					13	0.73	0.09	ND	ND
56-55-3	SVOCs	Benzo(a)anthracene	ug/l					0.49	0.027	0.65	ND	ND
50-32-8	SVOCs	Benzo(a)pyrene	ug/l					0.24	0.014	0.30	ND	ND
205-99-2	SVOCs	Benzo(b)fluoranthene	ug/l								ND	ND
191-24-2	SVOCs	Benzo(g,h,i)perylene	ug/l								ND	ND
207-08-9	SVOCs	Benzo(k)fluoranthene	ug/l								ND	ND
111-91-1	SVOCs	bis(2-Chloroethoxy)methane	ug/l								ND	ND
111-44-4	SVOCs	bis(2-Chloroethyl)ether	ug/l								ND	ND
85-68-7	SVOCs	Butylbenzylphthalate	ug/l						19		ND	ND
86-74-8	SVOCs	Carbazole	ug/l								ND	ND
218-01-9	SVOCs	Chrysene	ug/l								ND	ND
117-84-0	SVOCs	Di-n-octylphthalate	ug/l							708	ND	ND
53-70-3	SVOCs	Dibenzo(a,h)anthracene	ug/l								ND	ND
132-64-9	SVOCs	Dibenzofuran	ug/l					66	3.7	1003	ND	ND
84-66-2	SVOCs	Diethylphthalate	ug/l					1800	210	85600	ND	ND
131-11-3	SVOCs	Dimethylphthalate	ug/l								ND	ND
206-44-0	SVOCs	Fluoranthene	ug/l							15	ND	ND
86-73-7	SVOCs	Fluorene	ug/l					70	3.9		ND	ND
118-74-1	SVOCs	Hexachlorobenzene	ug/l								ND	ND
87-68-3	SVOCs	Hexachlorobutadiene	ug/l								ND	ND
77-47-4	SVOCs	Hexachlorocyclopentadiene	ug/l								ND	ND
67-72-1	SVOCs	Hexachloroethane	ug/l					210	12		ND	ND
193-39-5	SVOCs	Indeno(1,2,3-cd)pyrene	ug/l								ND	ND
78-59-1	SVOCs	Isophorone	ug/l								ND	ND
621-64-7	SVOCs	N-Nitroso-di-n-propylamine	ug/l								ND	ND
86-30-6	SVOCs	N-Nitrosodiphenylamine	ug/l					3300	210	332	ND	ND
91-20-3	SVOCs	Naphthalene	ug/l					190	12	620	ND	ND
85-01-8	SVOCs	Phenanthrene	ug/l							200	ND	ND
129-00-0	SVOCs	Pyrene	ug/l								ND	ND
71-55-6	VOCs	1,1,1-Trichloroethane	ug/l					200	11	3493	ND	ND
79-34-5	VOCs	1,1,2,2-Tetrachloroethane	ug/l					2100	610	2400	ND	ND
79-00-5	VOCs	1,1,2-Trichloroethane	ug/l					5200	1200	9400	ND	ND
75-34-3	VOCs	1,1-Dichloroethane	ug/l					830	47	14680	ND	ND
75-35-4	VOCs	1,1-Dichloroethene	ug/l					450	25		ND	ND
78-87-5	VOCs	1,2-Dichloropropane	ug/l								ND	ND
78-93-3	VOCs	2-Butanone (MEK)	ug/l					240000	14000	282170	ND	14
591-78-6	VOCs	2-Hexanone	ug/l					1800	99	32783	ND	ND
67-64-1	VOCs	Acetone	ug/l					28000	1500	507640	ND	ND
75-27-4	VOCs	Bromodichloromethane	ug/l								ND	ND
75-25-2	VOCs	Bromoform	ug/l								ND	ND
74-83-9	VOCs	Bromomethane (Methyl bromide)	ug/l								ND	ND
75-15-0	VOCs	Carbon disulfide	ug/l					17	0.92	244	ND	ND
56-23-5	VOCs	Carbon tetrachloride	ug/l					180	9.8	1970	ND	1.73
75-00-3	VOCs	Chloroethane	ug/l								ND	ND
67-66-3	VOCs	Chloroform	ug/l					490	28	1240	ND	ND
74-87-3	VOCs	Chloromethane	ug/l								ND	ND
156-59-2	VOCs	cis-1,2-Dichloroethene	ug/l					1100[g]	590[g]	9638[g]	ND	ND
10061-01-5	VOCs	cis-1,3-Dichloropropene	ug/l					0.99[h]	0.055[h]	244[h]	ND	ND
124-48-1	VOCs	Dibromochloromethane	ug/l								ND	ND
75-09-2	VOCs	Methylene chloride (Dichloromethane)	ug/l					26000	2200	42667	ND	ND
100-42-5	VOCs	Styrene	ug/l								ND	ND
127-18-4	VOCs	Tetrachloroethene	ug/l					930	98	750	ND	ND
156-60-5	VOCs	trans-1,2-Dichloroethene	ug/l					1100[g]	590[g]	9638[g]	ND	ND
10061-02-6	VOCs	trans-1,3-Dichloropropene	ug/l					0.99[h]	0.055[h]	244[h]	ND	ND
75-01-4	VOCs	Vinyl chloride	ug/l								ND	1.675

Notes:

[1]Illinois, 1999. Title 35 of the Illinois Administrative Code, Subtitle C, Chapter 1, Part 302 Water Quality Standards, Subpart B.

[2]USEPA, 1999. National Recommended Water Quality Criteria - Correction. Office of Water, EPA 82-2-Z-99-001 (April 1999).

[3]Suter, G.W. II and C.L. Tsao. 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. Risk Assessment, Health Sciences Research Division, Oak Ridge, Tennessee, ES/ER/TM-96/R2.

[4]Value for PCBs

[5]Value for DDD p,p

[6]Value for DDT

[7]Value for BHC (other)

[8]Value for Chlordane

[9]Value for alpha- and beta-Endosulfan

[g]Value for 1,2-Dichloroethene

[h]Value for 1,3-Dichloropropene

One-half the detection limit exceeds a criterion or reference concentration

Table 8-5
Toxicity Test Summary
WGK Plant Ecological Risk Assessment
Sauget, Illinois

STATION	SEDIMENT[1]				SURFACE WATER[2]					
	Amphipod 28-d Chronic Sediment Bioassay		Fathead Minnow 7-d Chronic Sediment Bioassay		Fathead Minnow Surface Water Bioassay			Ceriodaphnia Surface Water Bioassay		
	Survival	Growth	Survival	Growth	Acute 2d Survival	Chronic 7d Survival	Chronic 7d Growth	Acute 2d Survival	Chronic 7d Survival	Chronic 7d Reproduction
UDA-11	No	No	No	No	No	No	No	No	No	No
UDA-12	No	No	No	No	No	No	No	No	No	No
PDA-8	No	No	No	No	No	No	No	No	No	Yes
PDA-8 FD					No	No	No	No	No	No
PDA-9	No	No	Yes	Yes*	No	No	No	No	No	Yes
PDA-10	No	No	No	No	No	No	No	No	No	No
PDA-5	Yes	Yes*	Yes[3]	Yes*	No	No	No	No	No	Yes
PDA-6	No	No	No	No	No	No	No	No	No	No
PDA-7	No	No	No	No	No	No	No	No	No	No
PDA-2	No	No	No	No	No	No	No	Yes[3]	Yes[3]	Yes*
PDA-2 FD					No	No	No	Yes[3]	Yes[3]	Yes*
PDA-3	No	No	Yes	Yes*	No	No	No	Yes	Yes	Yes*
PDA-3 FD	No	No	Yes	Yes*						
PDA-4	No	No	No	No	No	No	No	Yes	Yes	Yes*
DDA-13	No	No	No	No	Yes	Yes	Yes*	No	No	No
DDA-1	No	No	No	No	No	Yes	Yes*	No	No	No

[1]"Yes" indicates a statistically significant reduction in the organism response when compared to the control group

[2]"Yes" indicates a statistically significant reduction in the organism response when compared to one or more of the control groups

[3] 0% survival in this sample

*Samples with effects on survival were excluded from statistical analysis of the more sensitive endpoint (growth or reproduction); it is assumed that the more sensitive endpoint is affected if survival is affected.

Table 8-6a Sediment Guideline Comparison Table (Detected COPCs)
W G Krummrich Plant Ecological Risk Assessment
Sauget, Illinois

CAS Number	Analysis	Name	Units	SD-PDA-2 Concentration	SD-PDA-2 Validation Q	SD-PDA-3 Concentration	SD-PDA-3 Validation Q	SD-PDA-4 Concentration	SD-PDA-4 Validation Q	SD-PDA-5 Concentration	SD-PDA-5 Validation Q	SD-PDA-6 Concentration	SD-PDA-6 Validation Q	SD-PDA-7 Concentration	SD-PDA-7 Validation Q	SD-PDA-8 Concentration	SD-PDA-8 Validation Q	SD-PDA-9 Concentration	SD-PDA-9 Validation Q
3268-87-9	Dioxin	1,2,3,4,6,7,8,9-OCDD	pg/g	911		231.5		219		27.4	B	12.9	J	11.7	J	35.8	B	21.7	B
39001-02-0	Dioxin	1,2,3,4,6,7,8,9-OCDF	pg/g	74.9		10	J	3.2	JB	0.75	JB	1	UJ	1	UJ	6.3	JB	0.7	UJ
35822-46-9	Dioxin	1,2,3,4,6,7,8-HpCDD	pg/g	70.8		9.05	J	8.2		2.3	JB	1.4	JB	1.4	JB	1.5	JB	2.1	JB
67562-39-4	Dioxin	1,2,3,4,6,7,8-HpCDF	pg/g	10.6		1.95	U	1.3	U	0.5	UJ	0.5	UJ	0.5	UJ	0.72	U	0.6	U
55673-89-7	Dioxin	1,2,3,4,7,8,9-HpCDF	pg/g	0.72	J	0.44	J	0.5	UJ	0.8	UJ	0.6	UJ	0.8	UJ	0.38	J	0.4	UJ
70648-26-9	Dioxin	1,2,3,4,7,8-HxCDF	pg/g	0.8	J	0.67	J	0.44	J	0.32	J	0.47	J	0.4	UJ	0.63	J	0.2	UJ
57653-85-7	Dioxin	1,2,3,6,7,8-HxCDD	pg/g	1.2	J	0.295	J	0.4	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.3	UJ	0.3	UJ
57117-44-9	Dioxin	1,2,3,6,7,8-HxCDF	pg/g	0.3	UJ	0.27	J	0.3	UJ	0.4	UJ	0.4	UJ	0.4	UJ	0.39	J	0.2	UJ
57117-41-6	Dioxin	1,2,3,7,8-PeCDF	pg/g	0.3	UJ	0.505	J	0.2	UJ	0.5	UJ	0.4	UJ	0.5	UJ	0.3	UJ	0.3	UJ
60851-34-5	Dioxin	2,3,4,6,7,8-HxCDF	pg/g	0.3	UJ	0.196	J	0.3	UJ	0.4	UJ	0.4	UJ	0.4	UJ	0.2	UJ	0.3	UJ
57117-31-4	Dioxin	2,3,4,7,8-PeCDF	pg/g	0.3	UJ	0.18	J	0.2	UJ	0.5	UJ	0.4	UJ	0.5	UJ	0.3	UJ	0.3	UJ
51207-31-9	Dioxin	2,3,7,8-TCDF	pg/g	0.2	UJ	0.665	J	0.47	J	0.8	J	0.4	UJ	0.5	UJ	0.2	UJ	0.2	UJ
37871-00-4	Dioxin	Total HpCDD	pg/g	146		19.5	J	17.4		5.9	B	2.5	B	3.2	JB	2.6	B	4.1	B
38998-75-3	Dioxin	Total HpCDF	pg/g	54.2	J	5.6	J	3.6	J	0.53	J	0.5	UJ	0.5	UJ	1.6	J	0.6	U
34465-46-8	Dioxin	Total HxCDD	pg/g	11.7	J	2.95	J	2.1		0.82		0.5	UJ	0.5	UJ	0.3	UJ	0.3	UJ
55684-94-1	Dioxin	Total HxCDF	pg/g	10.1	J	2.85	J	2.3	J	0.32	J	0.47	J	0.4	UJ	1.5	J	0.3	UJ
36088-22-9	Dioxin	Total PeCDD	pg/g	0.25	J	0.25	UJ	0.3	UJ	0.7	UJ	0.6	UJ	0.6	UJ	0.3	UJ	0.4	UJ
30402-15-4	Dioxin	Total PeCDF	pg/g	2.7	J	1.3625	J	0.8	U	0.5	UJ	0.4	UJ	0.5	UJ	0.3	UJ	0.3	UJ
41903-57-5	Dioxin	Total TCDD	pg/g	42.8	J	1.985	JB	0.72	B	1.6		0.6	UJ	0.6	UJ	0.2	UJ	0.3	UJ
55722-27-5	Dioxin	Total TCDF	pg/g	0.2	UJ	1.3475	J	0.4	J	0.8	J	0.4	UJ	0.5	UJ	0.2	UJ	0.2	UJ
	Dioxin	TEQ Mammal	pg/g	1.22		0.949		0.359		0.8		0.263		0.268		0.244		0.171	
	Dioxin	TEQ Bird	pg/g	0.649		0.978		0.666		0.8		0.516		0.599		0.369		0.311	
94-75-7	Herbicides	2,4-D	ug/kg dw	14	U	9.9	U	10	UJ	16		9.6	U	9.9	U	10	U	100	
120-36-5	Herbicides	Dichloroprop	ug/kg dw	180	UJ	22.2	J	130	UJ	110	J	110	U	120	U	10	J	7.9	J
7085-19-0	Herbicides	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	ug/kg dw	3500	U	2400	U	2500	UJ	1600	J	1100	J	1600	J	2400	U	2500	J
87-86-5	Herbicides	Pentachlorophenol	ug/kg dw	30	U	20	U	22	UJ	1.6	JB	3.6	U	20	U	21	U	20	U
72-54-8	Pesticides	4,4'-DDD	ug/kg dw	5.8	UJ	3.95	U	4.2	U	1.1	J	3.8	U	3.9	U	4	U	3.9	U
95-50-1	SVOCs	1,2-Dichlorobenzene	ug/kg dw	110	J	60	J	220	U	210	U	200	U	200	U	210	U	200	U
106-46-7	SVOCs	1,4-Dichlorobenzene	ug/kg dw	300	U	81.5	J	220	U	210	U	200	U	200	U	210	U	200	U
88-06-2	SVOCs	2,4,6-Trichlorophenol	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	69	J
120-83-2	SVOCs	2,4-Dichlorophenol	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	69	J
105-67-9	SVOCs	2,4-Dimethylphenol	ug/kg dw	78	J	60	J	220	U	210	U	200	U	200	U	210	U	200	U
121-14-2	SVOCs	2,4-Dinitrotoluene	ug/kg dw	750		200	J	220	U	210	U	200	U	200	U	210	U	200	U
95-57-8	SVOCs	2-Chlorophenol	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
88-74-4	SVOCs	2-Nitroaniline	ug/kg dw	1400	U	990	U	78	J	1000	U	960	U	990	U	1000	U	990	U
106-44-5	SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/kg dw	600		200	U	220	U	210	U	200	U	200	U	210	U	200	U
101-55-3	SVOCs	4-Bromophenylphenyl ether	ug/kg dw	300	U	66.5	J	220	U	210	U	200	U	200	U	210	U	200	U
106-47-8	SVOCs	4-Chloroaniline	ug/kg dw	2200		1700	J	230	J	410	U	380	U	390	U	100	J	61	J
91-20-3	SVOCs	Naphthalene	ug/kg dw	300	U	190	J	220	U	210	U	200	U	200	U	210	U	200	U
108-95-2	SVOCs	Phenol	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
107-06-2	VOCs	1,2-Dichloroethane	ug/kg dw	2.2	U	0.995	U	1.2	U	1.1		0.92	U	0.98	U	28		180	
78-93-3	VOCs	2-Butanone (MEK)	ug/kg dw	91	JB	6.4	B	6.2	U	11	B	4.6	U	4.9	U	5.2	U	4.6	U
108-10-1	VOCs	4-Methyl-2-pentanone (MIBK)	ug/kg dw	26		30	J	6.2	U	11		4.6	U	4.9	U	62		33	
67-64-1	VOCs	Acetone	ug/kg dw	320	JB	142.5	B	16	U	11	B	12	B	340	B	19	B	94	B
71-43-2	VOCs	Benzene	ug/kg dw	82		22.5		10		11		0.6		0.98	U	100		63	
75-15-0	VOCs	Carbon disulfide	ug/kg dw	3.3		0.995	U	1.2	U	0.92	U	0.92	U	0.98	U	1	U	0.92	U
108-90-7	VOCs	Chlorobenzene	ug/kg dw	7200		1100	J	95		110		96	J	0.98	U	1000		2900	
75-00-3	VOCs	Chloroethane	ug/kg dw	2.2	UJ	0.995	U	1.2	U	1.1		0.92	U	0.98	U	1	U	0.92	U
67-66-3	VOCs	Chloroform	ug/kg dw	2.2	UJ	0.995	U	1.2	U	1.1		0.92	U	0.98	U	1	U	0.92	U
156-59-2	VOCs	cis-1,2-Dichloroethene	ug/kg dw	2.2	UJ	0.995	U	1.2	U	1.1		1.6		0.98	U	2.8		1.2	
100-41-4	VOCs	Ethylbenzene	ug/kg dw	34		24.5		1.2	U	1.1		4.3		0.98	U	12		62	
108-38-3	VOCs	m&p-Xylene	ug/kg dw	64		17		1.2	U	1.1		4.2		0.98	U	8.2		120	
75-09-2	VOCs	Methylene chloride (Dichloromethane)	ug/kg dw	5.5	UJ	2.5	U	3.1	U	17		2.3	U	2.4	U	2.8	U	2.4	
127-18-4	VOCs	Tetrachloroethene	ug/kg dw	2.2	U	0.995	U	1.2	U	1.1		0.92	U	0.98	U	1	U	18	
108-88-3	VOCs	Toluene	ug/kg dw	7800		5.95		1.5		1.1		0.92	U	0.98	U	4.8		330	
156-60-5	VOCs	trans-1,2-Dichloroethene	ug/kg dw	2.2	U	0.995	U	1.2	U	1.1	J	0.92	U	0.98	U	1	U	0.92	U
79-01-6	VOCs	Trichloroethene	ug/kg dw	2.2	U	0.995	U	1.2	U	1.1		0.92	U	0.98	U	1	U	7.3	
75-01-4	VOCs	Vinyl chloride	ug/kg dw	2.2	UJ	0.995	U	1.2	U	1.1		0.92	U	0.98	U	1	U	0.92	J
1330-20-7	VOCs	Xylenes, Total	ug/kg dw	82		21.5		1.2	U	2.1		4.2		0.98	U	8.5		480	
	TOC	Percent Total Organic Carbon	%	1.02		0.2805		0.428		0.07		0.0324		0.0536		0.0437		0.0352	

Notes

Consensus-Based Threshold Effect Concentration - MacDonald, D.D., C.G. Ingersoll, and T.A. Berger. 2000. Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems. *Arch. Environ. Contam. Toxicol.* 39: 20-31.

[2]Consensus-Based Probable Effect Concentration - MacDonald, D.D., C.G. Ingersoll, and T.A. Berger. 2000. Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems. *Arch. Environ. Contam. Toxicol.* 39: 20-31.

[3]Lowest Effect Level - Persaud, D., R. Jaagumagi, and A. Hayton. 1993. Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario. Ontario Ministry of Environment and Energy. August. 1993.

[4]Severe Effect Level - Persaud, D., R. Jaagumagi, and A. Hayton. 1993. Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario. Ontario Ministry of Environment and Energy. August. 1993. SELs as provided by Ontario Ministry of the Environment are organic carbon normalized. The values are converted to bulk sediment values by multiplying by the actual TOC of the sediments.

Exceeds either reference concentration (2x average)

Exceeds the TEC and 2x average reference

Table 8-6a Sediment Guideline Comparison Table (Detected COPCs)
W G Krummrich Plant Ecological Risk Assessment
Sauget Illinois

CAS Number	Analysis	Name	Units	SD-PDA-10 Concentration	Validation Q	Sediment Quality Criteria: Sed Qual Guide[1] (TEC)	Sed Qual Guide[2] (PEC)	Sed Ontario[3] (LEL)	Ontario SEL[4] for SD-PDA-2	Ontario SEL[4] for SD-PDA-3	Ontario SEL[4] for SD-PDA-4	Ontario SEL[4] for SD-PDA-5	Ontario SEL[4] for SD-PDA-6	Ontario SEL[4] for SD-PDA-7	Ontario SEL[4] for SD-PDA-8	Ontario SEL[4] for SD-PDA-9	Ontario SEL[4] for SD-PDA-10	DDA Reference 2 X Downstream Average	UDA Reference 2 X Upstream Average
3268-87-9	Dioxin	1 2 3 4 6 7 8 9-OCDD	pg/g	18 1	J													1192 4	298 8
39001-02-0	Dioxin	1 2 3 4 6 7 8,9-OCDF	pg/g	0 6	UJ													14 88	6 576
35822-46-9	Dioxin	1 2 3 4 6 7 8-HpCDD	pg/g	0 78	JB													31 5	11 4
67562-39-4	Dioxin	1 2 3 4 6 7 8-HpCDF	pg/g	0 4	U													3 1	ND
55673-89-7	Dioxin	1,2,3,4,7,8,9-HpCDF	pg/g	0 4	UJ													ND	ND
70648-26-9	Dioxin	1,2,3,4,7,8-HxCDF	pg/g	0.39	J													ND	0 395
57653-85-7	Dioxin	1 2 3 6 7 8-HxCDD	pg/g	0 3	UJ													ND	0 545
57117-44-9	Dioxin	1 2 3 6 7 8-HxCDF	pg/g	0 2	UJ													ND	ND
57117-41-6	Dioxin	1 2 3 7 8-PeCDF	pg/g	0 2	UJ													ND	ND
60851-34-5	Dioxin	2 3 4 6 7 8-HxCDF	pg/g	0 2	UJ													ND	ND
57117-31-4	Dioxin	2 3 4 7 8-PeCDF	pg/g	0 2	UJ													ND	ND
51207-31-9	Dioxin	2 3 7 8-TCDF	pg/g	0 2	UJ													ND	ND
37871-00-4	Dioxin	Total HpCDD	pg/g	1 4	JB													75 88	23 64
38998-75-3	Dioxin	Total HpCDF	pg/g	0 4	U													13	5 426
34465-46-8	Dioxin	Total HxCDD	pg/g	0 3	UJ													7 4	3 476
55684-94-1	Dioxin	Total HxCDF	pg/g	0 36	J													2 4	2 526
36088-22-9	Dioxin	Total PeCDD	pg/g	0 3	UJ													ND	0 71
30402-15-4	Dioxin	Total PeCDF	pg/g	0.52	J													ND	0 765
41903-57-5	Dioxin	Total TCDD	pg/g	0 3	UJ													3 25	0 45
55722-27-5	Dioxin	Total TCDF	pg/g	0 2	UJ													ND	ND
	Dioxin	TEQ Mammal	pg/g	0 153														0 486	0 292
	Dioxin	TEQ Bird	pg/g	0.277														0 163	0.139
94-75-7	Herbicides	2,4-D	ug/kg dw	10	U													ND	ND
120-36-5	Herbicides	Dichloroprop	ug/kg dw	120	U													ND	ND
7085-19-0	Herbicides	MCPP(2-(4-chloro-2-methylphenoxy)-propanoic acid)	ug/kg dw	2100	J													ND	ND
87-86-5	Herbicides	Pentachlorophenol	ug/kg dw	20	U													15 8	16 06
72-54-8	Pesticides	4,4'-DDD	ug/kg dw	4	U	4 82	28 0	8	61	17	28	4 2	1 9	3 2	2 6	2 1	2 8	ND	ND
95-50-1	SVOCs	1 2-Dichlorobenzene	ug/kg dw	210	U													ND	ND
106-46-7	SVOCs	1,4-Dichlorobenzene	ug/kg dw	210	U													ND	ND
88-06-2	SVOCs	2,4,6-Trichlorophenol	ug/kg dw	470														ND	ND
120-83-2	SVOCs	2,4-Dichlorophenol	ug/kg dw	1000														ND	ND
105-67-9	SVOCs	2,4-Dimethylphenol	ug/kg dw	210	U													ND	ND
121-14-2	SVOCs	2,4-Dinitrotoluene	ug/kg dw	210	U													ND	ND
95-57-8	SVOCs	2-Chlorophenol	ug/kg dw	360														ND	ND
88-74-4	SVOCs	2-Nitroaniline	ug/kg dw	1000	U													ND	ND
106-44-5	SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/kg dw	210														ND	ND
101-55-3	SVOCs	4-Bromophenylphenyl ether	ug/kg dw	210	U													ND	ND
106-47-8	SVOCs	4-Chloroaniline	ug/kg dw	1000														ND	ND
91-20-3	SVOCs	Naphthalene	ug/kg dw	210	U	176	561											ND	ND
108-95-2	SVOCs	Phenol	ug/kg dw	5800														ND	ND
107-06-2	VOCs	1 2-Dichloroethane	ug/kg dw	1 1	U													ND	ND
78-93-3	VOCs	2-Butanone (MEK)	ug/kg dw	5 3	U													ND	25 8
108-10-1	VOCs	4-Methyl-2-pentanone (MIBK)	ug/kg dw	5 3	U													ND	ND
67-64-1	VOCs	Acetone	ug/kg dw	13	U													45 8	137
71-43-2	VOCs	Benzene	ug/kg dw	1.2														ND	ND
75-15-0	VOCs	Carbon disulfide	ug/kg dw	1 1	U													ND	ND
108-90-7	VOCs	Chlorobenzene	ug/kg dw	34														ND	ND
75-00-3	VOCs	Chloroethane	ug/kg dw	1 1	U													ND	ND
67-66-3	VOCs	Chloroform	ug/kg dw	1 1	U													ND	ND
156-59-2	VOCs	cis-1 2-Dichloroethene	ug/kg dw	1 1	U													ND	ND
100-41-4	VOCs	Ethylbenzene	ug/kg dw	1 1	U													ND	ND
108-38-3	VOCs	m&p-Xylene	ug/kg dw	1 1	U													ND	ND
75-09-2	VOCs	Methylene chloride (Dichloromethane)	ug/kg dw	2 6	U													ND	ND
127-18-4	VOCs	Tetrachloroethene	ug/kg dw	1 1	U													ND	ND
108-88-3	VOCs	Toluene	ug/kg dw	1 1	U													2 2	6 16
156-60-5	VOCs	trans-1 2-Dichloroethene	ug/kg dw	1 1	U													ND	ND
79-01-6	VOCs	Trichloroethene	ug/kg dw	1 1	U													ND	ND
75-01-4	VOCs	Vinyl chloride	ug/kg dw	1 1	U													ND	ND
1330-20-7	VOCs	Xylenes Total	ug/kg dw	1 1	U													ND	ND
	TOC	Percent Total Organic Carbon	%	0 0433															

Notes

[1] Consensus-Based Threshold Effect Concentration - MacDonald D D C G Ingersoll and T A Berger 2000 Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems *Arch Environ Contam Toxicol* 39 20-31

[2] Consensus-Based Probable Effect Concentration - MacDonald D D C G Ingersoll and T A Berger 2000 Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems *Arch Environ Contam Toxicol* 39 20-31

[3] Lowest Effect Level - Persaud D R Jaagumagi and A Hayton 1993 Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario Ontario Ministry of Environment and Energy August 1993

[4] Severe Effect Level - Persaud D R Jaagumagi and A Hayton 1993 Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario Ontario Ministry of Environment and Energy August 1993 SELs as provided by Ontario Ministry of the Environment are organic carbon normalized The values are converted to bulk sediment values by multiplying by the actual TOC of the sediments.

Exceeds either reference concentration (2x average)

Exceeds the TEC and 2x average reference

Table 8-6b. Sediment Guideline Comparison Table (Non-Detected COPCs for RL Analysis)
W.G. Krummrich Plant Ecological Risk Assessment
Sauget, Illinois

CAS Number	Analysis	Name	Units	SD-PDA-2		SD-PDA-3		SD-PDA-4		SD-PDA-5		SD-PDA-6		SD-PDA-7		SD-PDA-8		SD-PDA-9	
				Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q
39227-28-6	Dioxin	1,2,3,4,7,8-HxCDD	pg/g	0.5	UJ	0.35	UJ	0.4	UJ	0.6	UJ	0.5	UJ	0.5	UJ	0.3	UJ	0.3	UJ
19408-74-3	Dioxin	1,2,3,7,8,9-HxCDD	pg/g	0.5	UJ	0.3	UJ	0.4	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.3	UJ	0.3	UJ
72918-21-9	Dioxin	1,2,3,7,8,9-HxCDF	pg/g	0.4	UJ	0.3	UJ	0.4	UJ	0.5	UJ	0.4	UJ	0.5	UJ	0.2	UJ	0.3	UJ
40321-76-4	Dioxin	1,2,3,7,8-PeCDD	pg/g	0.3	UJ	0.25	UJ	0.3	UJ	0.7	UJ	0.6	UJ	0.6	UJ	0.3	UJ	0.4	UJ
1746-01-6	Dioxin	2,3,7,8-TCDD	pg/g	0.3	UJ	0.2	UJ	0.3	UJ	0.7	UJ	0.6	UJ	0.6	UJ	0.2	UJ	0.3	UJ
93-76-5	Herbicides	2,4,5-T	ug/kg dw	14	U	9.9	U	10	UJ	10	U	9.6	U	9.9	U	10	U	9.9	U
93-72-1	Herbicides	2,4,5-TP (Silvex)	ug/kg dw	14	U	9.9	U	10	UJ	10	U	9.6	U	9.9	U	10	U	9.9	U
94-82-6	Herbicides	2,4-DB	ug/kg dw	14	U	9.9	U	10	UJ	10	U	9.6	U	9.9	U	10	U	9.9	U
75-99-0	Herbicides	Dalapon	ug/kg dw	3500	U	2400	U	2500	UJ	2500	U	2300	U	2400	U	2400	U	2400	U
1918-00-9	Herbicides	Dicamba	ug/kg dw	35	U	24	U	25	UJ	25	U	23	U	24	U	24	U	24	U
88-85-7	Herbicides	Dinoseb	ug/kg dw	180	U	120	U	130	UJ	120	R	110	R	120	R	120	U	120	U
94-74-6	Herbicides	MCPA (4-chloro-2-methylphenoxy) acetic acid)	ug/kg dw	3500	U	2400	U	2500	UJ	2500	U	2300	U	2400	U	2400	U	2400	U
2051-24-3	PCBs	Decachlorobiphenyl	ug/kg dw	30	U	20	U	22	U	21	U	20	U	20	U	21	U	20	U
C-DICHLOROBI	PCBs	Dichlorobiphenyl	ug/kg dw	5.8	U	3.95	U	4.2	U	4.1	U	3.8	U	3.9	U	4	U	3.9	U
C-HEPTACHLOR	PCBs	Heptachlorobiphenyl	ug/kg dw	18	U	12	U	13	U	12	U	12	U	12	U	12	U	12	U
C-HEXACHLORO	PCBs	Hexachlorobiphenyl	ug/kg dw	12	U	8	U	8.5	U	8.4	U	7.8	U	8	U	8.2	U	8	U
C-MONOCHLORO	PCBs	Monochlorobiphenyl	ug/kg dw	5.8	U	3.95	U	4.2	U	4.1	U	3.8	U	3.9	U	4	U	3.9	U
C-NONACHLORO	PCBs	Nonachlorobiphenyl	ug/kg dw	30	U	20	U	22	U	21	U	20	U	20	U	21	U	20	U
C-OCTA-BIPHE	PCBs	Octachlorobiphenyl	ug/kg dw	18	U	12	U	13	U	12	U	12	U	12	U	12	U	12	U
C-PENTBIPHEN	PCBs	Pentachlorobiphenyl	ug/kg dw	12	U	8	U	8.5	U	8.4	U	7.8	U	8	U	8.2	U	8	U
C-TETRACHLOR	PCBs	Tetrachlorobiphenyl	ug/kg dw	12	U	8	U	8.5	U	8.4	U	7.8	U	8	U	8.2	U	8	U
C-TOTAL-PCB	PCBs	Total Polychlorinated Biphenyls	ug/kg dw	30	U	20	U	22	U	21	U	20	U	20	U	21	U	20	U
C-TRICHLOROB	PCBs	Trichlorobiphenyl	ug/kg dw	5.8	U	3.95	U	4.2	U	4.1	U	3.8	U	3.9	U	4	U	3.9	U
72-55-9	Pesticides	4,4'-DDE	ug/kg dw	5.8	UJ	3.95	U	4.2	U	4.1	U	3.8	U	3.9	U	4	U	3.9	U
50-29-3	Pesticides	4,4'-DDT*	ug/kg dw	5.8	UJ	3.95	U	4.2	U	4.1	U	3.8	U	3.9	U	4	U	3.9	U
309-00-2	Pesticides	Aldrin	ug/kg dw	3	UJ	2	U	2.2	U	2.1	U	2	U	2	U	2.1	U	2	U
319-84-6	Pesticides	alpha-BHC	ug/kg dw	1.5	UJ	1	U	1.1	U	1.1	U	1	U	1	U	1	U	1	U
5103-71-9	Pesticides	alpha-Chlordane**	ug/kg dw	3	UJ	2	U	2.2	U	2.1	U	2	U	2	U	2.1	U	2	U
319-85-7	Pesticides	beta-BHC	ug/kg dw	1.5	UJ	1	U	1.1	U	1.1	U	1	U	1	U	1	U	1	U
319-86-8	Pesticides	delta-BHC	ug/kg dw	1.5	UJ	1	U	1.1	U	1.1	U	1	U	1	U	1	U	1	U
60-57-1	Pesticides	Dieldrin	ug/kg dw	5.8	UJ	3.95	U	4.2	U	4.1	U	3.8	U	3.9	U	4	U	3.9	U
959-98-8	Pesticides	Endosulfan I	ug/kg dw	3	UJ	2	U	2.2	U	2.1	U	2	U	2	U	2.1	U	2	U
33213-65-9	Pesticides	Endosulfan II	ug/kg dw	5.8	UJ	3.95	U	4.2	U	4.1	U	3.8	U	3.9	U	4	U	3.9	U
1031-07-8	Pesticides	Endosulfan sulfate	ug/kg dw	5.8	UJ	3.95	U	4.2	U	4.1	U	3.8	U	3.9	U	4	U	3.9	U
72-20-8	Pesticides	Endrin	ug/kg dw	5.8	UJ	3.95	U	4.2	U	4.1	U	3.8	U	3.9	U	4	U	3.9	U
7421-93-4	Pesticides	Endrin aldehyde	ug/kg dw	5.8	UJ	3.95	U	4.2	U	4.1	U	3.8	U	3.9	U	4	U	3.9	U
53494-70-5	Pesticides	Endrin ketone	ug/kg dw	5.8	UJ	3.95	U	4.2	U	4.1	U	3.8	U	3.9	U	4	U	3.9	U
58-89-9	Pesticides	gamma-BHC (Lindane)	ug/kg dw	1.5	UJ	1	U	1.1	U	1.1	U	1	U	1	U	1	U	1	U
5103-74-2	Pesticides	gamma-Chlordane**	ug/kg dw	3	UJ	2	U	2.2	U	2.1	U	2	U	2	U	2.1	U	2	U
76-44-8	Pesticides	Heptachlor	ug/kg dw	3	UJ	2	U	2.2	U	2.1	U	2	U	2	U	2.1	U	2	U
1024-57-3	Pesticides	Heptachlor epoxide	ug/kg dw	3	UJ	2	U	2.2	U	2.1	U	2	U	2	U	2.1	U	2	U
72-43-5	Pesticides	Methoxychlor	ug/kg dw	30	UJ	20	U	22	U	21	U	20	U	20	U	21	U	20	U
8001-35-2	Pesticides	Toxaphene	ug/kg dw	300	UJ	200	U	220	U	210	U	200	U	200	U	210	U	200	U
87-61-6	SVOCs	1,2,3-Trichlorobenzene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
120-82-1	SVOCs	1,2,4-Trichlorobenzene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
108-70-3	SVOCs	1,3,5-Trichlorobenzene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
541-73-1	SVOCs	1,3-Dichlorobenzene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
108-60-1	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
15950-66-0	SVOCs	2,3,4-Trichlorophenol	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
933-78-8	SVOCs	2,3,5-Trichlorophenol	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
933-75-5	SVOCs	2,3,6-Trichlorophenol	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
95-95-4	SVOCs	2,4,5-Trichlorophenol	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
51-28-5	SVOCs	2,4-Dinitrophenol	ug/kg dw	1400	U	990	U	1000	U	1000	U	960	U	990	U	1000	U	990	U
606-20-2	SVOCs	2,6-Dinitrotoluene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
91-58-7	SVOCs	2-Chloronaphthalene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
91-57-6	SVOCs	2-Methylnaphthalene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
95-48-7	SVOCs	2-Methylphenol (o-Cresol)	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
88-75-5	SVOCs	2-Nitrophenol	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
91-94-1	SVOCs	3,3'-Dichlorobenzidine	ug/kg dw	1200	U	790	U	840	U	820	U	770	U	780	U	800	U	780	U
609-19-8	SVOCs	3,4,5-Trichlorophenol	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
99-09-2	SVOCs	3-Nitroaniline	ug/kg dw	1400	U	990	U	1000	U	1000	U	960	U	990	U	1000	U	990	U
534-52-1	SVOCs	4,6-Dinitro-2-methylphenol	ug/kg dw	1400	U	990	U	1000	U	1000	U	960	U	990	U	1000	U	990	U
59-50-7	SVOCs	4-Chloro-3-methylphenol	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
7005-72-3	SVOCs	4-Chlorophenylphenyl ether	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
100-01-6	SVOCs	4-Nitroaniline	ug/kg dw	1400	U	990	U	1000	U	1000	U	960	U	990	U	1000	U	990	U
100-02-7	SVOCs	4-Nitrophenol	ug/kg dw	1400	U	990	U	1000	U	1000	U	960	U	990	U	1000	U	990	U

CAS Number	Analysis	Name	Units	SD-PDA-2		SD-PDA-3		SD-PDA-4		SD-PDA-5		SD-PDA-6		SD-PDA-7		SD-PDA-8		SD-PDA-9	
				Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q	Concentration	Validation Q
83-32-9	SVOCs	Acenaphthene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
208-96-8	SVOCs	Acenaphthylene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
120-12-7	SVOCs	Anthracene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
56-55-3	SVOCs	Benzo(a)anthracene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
50-32-8	SVOCs	Benzo(a)pyrene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
205-99-2	SVOCs	Benzo(b)fluoranthene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
191-24-2	SVOCs	Benzo(g,h,i)perylene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
207-08-9	SVOCs	Benzo(k)fluoranthene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
111-91-1	SVOCs	bis(2-Chloroethoxy)methane	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
111-44-4	SVOCs	bis(2-Chloroethyl)ether	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
85-68-7	SVOCs	Butylbenzylphthalate	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
86-74-8	SVOCs	Carbazole	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
218-01-9	SVOCs	Chrysene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
84-74-2	SVOCs	Di-n-butylphthalate	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
117-84-0	SVOCs	Di-n-octylphthalate	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
53-70-3	SVOCs	Dibenz(a,h)anthracene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
132-64-9	SVOCs	Dibenzofuran	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
84-66-2	SVOCs	Diethylphthalate	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
131-11-3	SVOCs	Dimethylphthalate	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
206-44-0	SVOCs	Fluoranthene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
86-73-7	SVOCs	Fluorene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
118-74-1	SVOCs	Hexachlorobenzene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
87-68-3	SVOCs	Hexachlorobutadiene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
77-47-4	SVOCs	Hexachlorocyclopentadiene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
67-72-1	SVOCs	Hexachloroethane	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
193-39-5	SVOCs	Indeno(1,2,3-cd)pyrene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
78-59-1	SVOCs	Isophorone	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
621-64-7	SVOCs	N-Nitroso-di-n-propylamine	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
86-30-6	SVOCs	N-Nitrosodiphenylamine	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
98-95-3	SVOCs	Nitrobenzene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
85-01-8	SVOCs	Phenanthrene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
129-00-0	SVOCs	Pyrene	ug/kg dw	300	U	200	U	220	U	210	U	200	U	200	U	210	U	200	U
71-55-6	VOCs	1,1,1-Trichloroethane	ug/kg dw	2 2	U	0 995	U	1 2	U	0 92	U	0 92	U	0 98	U	1	U	0 92	U
79-34-5	VOCs	1,1,2,2-Tetrachloroethane	ug/kg dw	2 2	U	0 995	U	1 2	U	0 92	U	0 92	U	0 98	U	1	U	0 92	U
79-00-5	VOCs	1,1,2-Trichloroethane	ug/kg dw	2 2	U	0 995	U	1 2	U	0 92	U	0 92	U	0 98	U	1	U	0 92	U
75-34-3	VOCs	1,1-Dichloroethane	ug/kg dw	2 2	UJ	0 995	U	1 2	U	0 92	U	0 92	U	0 98	U	1	U	0 92	U
75-35-4	VOCs	1,1-Dichloroethene	ug/kg dw	2 2	UJ	0 995	U	1 2	U	0 92	U	0 92	U	0 98	U	1	U	0 92	U
78-87-5	VOCs	1,2-Dichloropropane	ug/kg dw	2 2	U	0 995	U	1 2	U	0 92	U	0 92	U	0 98	U	1	U	0 92	U
591-78-6	VOCs	2-Hexanone	ug/kg dw	11	U	4 95	U	6 2	U	4 8	U	4 6	U	4 9	U	5 2	U	4 6	U
75-27-4	VOCs	Bromodichloromethane	ug/kg dw	2 2	U	0 995	U	1 2	U	0 92	U	0 92	U	0 98	U	1	U	0 92	U
75-25-2	VOCs	Bromoform	ug/kg dw	2 2	U	0 995	U	1 2	U	0 92	U	0 92	U	0 98	U	1	U	0 92	U
74-83-9	VOCs	Bromomethane (Methyl bromide)	ug/kg dw	2 2	U	0 995	U	1 2	U	0 92	U	0 92	U	0 98	U	1	U	0 92	U
56-23-5	VOCs	Carbon tetrachloride	ug/kg dw	2 2	U	0 995	U	1 2	U	0 92	U	0 92	U	0 98	U	1	U	0 92	U
74-87-3	VOCs	Chloromethane	ug/kg dw	2 2	UJ	0 995	U	1 2	U	0 92	U	0 92	U	0 98	U	1	U	0 92	U
10061-01-5	VOCs	cis-1,3-Dichloropropene	ug/kg dw	2 2	U	0 995	U	1 2	U	0 92	U	0 92	U	0 98	U	1	U	0 92	U
124-48-1	VOCs	Dibromochloromethane	ug/kg dw	2 2	U	0 995	U	1 2	U	0 92	U	0 92	U	0 98	U	1	U	0 92	U
100-42-5	VOCs	Styrene	ug/kg dw	2 2	U	0 995	U	1 2	U	0 92	U	0 92	U	0 98	U	1	U	0 92	U
10061-02-6	VOCs	trans-1,3-Dichloropropene	ug/kg dw	2 2	U	0 995	U	1 2	U	0 92	U	0 92	U	0 98	U	1	U	0 92	U
	TOC	Percent Total Organic Carbon	%	1 02		0 2805		0 428		0 07		0 0324		0 0538		0 0437		0 0352	

Notes

Consensus-Based Threshold Effect Concentration - MacDonald, D D , C G Ingersoll, and T A Berger, 2000 *Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems* *Arch Environ Contam Toxicol* 39 20-31

Consensus-Based Probable Effect Concentration - MacDonald, D D , C G Ingersoll, and T A Berger, 2000 Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems *Arch Environ Contam Toxicol* 39 20-31

Lowest Effect Level - Persaud, D , R Jaagumagi, and A Hayton, 1993 Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario, Ontario Ministry of Environment and Energy, August, 1993

Severe Effect Level - Persaud, D , R Jaagumagi, and A Hayton, 1993 Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario, Ontario Ministry of Environment and Energy, August, 1993 SELs as provided by Ontario Ministry of the Environment are organic carbon normalized The values are converted to bulk sediment values by multiplying by the actual TOC of the sediments

* Ontario and Sediment Quality Guideline values are for 2,4'-DDT and 4,4'-DDT

**Ontario and Sediment Quality Guideline values are for Chlordane

***No Effect Level for Heptachlor

One-half the detection limit exceeds a criterion

Table 8-6b. Sediment Guideline Comparison Table (Non-Detected COPCs for RL Ana...)
W.G. Krummrich Plant Ecological Risk Assessment
Sauget, Illinois

CAS Number	Analysis	Name	Units	SD-PDA-10 Concentration	Validation Q	Sediment Quality Criteria: Sed Qual Guide[1] (TEC)	Sed Qual Guide[2] (PEC)	Sed Ontario[3] (LEL)	Ontario SEL[4] for SD-PDA-2	Ontario SEL[4] for SD-PDA-3	Ontario SEL[4] for SD-PDA-4	Ontario SEL[4] for SD-PDA-5	Ontario SEL[4] for SD-PDA-6	Ontario SEL[4] for SD-PDA-7	Ontario SEL[4] for SD-PDA-8	Ontario SEL[4] for SD-PDA-9	Ontario SEL[4] for SD-PDA-10	DDA Reference 2 X Downstream Average	UDA Reference 2 X Upstream Average
39227-28-6	Dioxin	1,2,3,4,7,8-HxCDD	pg/g	0.3	UJ													ND	ND
19408-74-3	Dioxin	1,2,3,7,8,9-HxCDD	pg/g	0.3	UJ													ND	0.525
72918-21-9	Dioxin	1,2,3,7,8,9-HxCDF	pg/g	0.3	UJ													ND	ND
40321-76-4	Dioxin	1,2,3,7,8-PeCDD	pg/g	0.3	UJ													ND	ND
1746-01-6	Dioxin	2,3,7,8-TCDD	pg/g	0.3	UJ													ND	ND
93-76-5	Herbicides	2,4,5-T	ug/kg dw	10	U													ND	ND
93-72-1	Herbicides	2,4,5-TP (Silvex)	ug/kg dw	10	U													ND	ND
94-82-6	Herbicides	2,4-DB	ug/kg dw	10	U													ND	ND
75-99-0	Herbicides	Dalapon	ug/kg dw	2400	U													ND	ND
1918-00-9	Herbicides	Dicamba	ug/kg dw	24	U													ND	ND
88-85-7	Herbicides	Dinoseb	ug/kg dw	120	R													ND	ND
94-74-6	Herbicides	MCPA[(4-chloro-2-methylphenoxy) acetic acid]	ug/kg dw	2400	U													ND	ND
2051-24-3	PCBs	Decachlorobiphenyl	ug/kg dw	21	U													ND	ND
C-DICHLOROBI	PCBs	Dichlorobiphenyl	ug/kg dw	4	U													ND	ND
C-HEPTACHLOR	PCBs	Heptachlorobiphenyl	ug/kg dw	12	U													ND	ND
C-HEXACHLORO	PCBs	Hexachlorobiphenyl	ug/kg dw	8.2	U													ND	ND
C-MONOCHLORO	PCBs	Monochlorobiphenyl	ug/kg dw	4	U													ND	ND
C-NONACHLORO	PCBs	Nonachlorobiphenyl	ug/kg dw	21	U													ND	ND
C-OCTA-BIPHE	PCBs	Octachlorobiphenyl	ug/kg dw	12	U													ND	ND
C-PENTBIPHEN	PCBs	Pentachlorobiphenyl	ug/kg dw	8.2	U													ND	ND
C-TETRACHLOR	PCBs	Tetrachlorobiphenyl	ug/kg dw	8.2	U													ND	ND
C-TOTAL-PCB	PCBs	Total Polychlorinated Biphenyls	ug/kg dw	21	U	59.8	676	70	5406	1487	2268	371	172	284	232	187	229	ND	ND
C-TRICHLOROB	PCBs	Trichlorobiphenyl	ug/kg dw	4	U													ND	ND
72-55-9	Pesticides	4,4'-DDE	ug/kg dw	4	U	3.16	31.3	5	194	53	81	13	6.2	10	8.3	6.7	8.2	ND	ND
50-29-3	Pesticides	4,4'-DDT*	ug/kg dw	4	U	4.16	62.9	8	724	199	304	50	23	38	31	25	31	ND	ND
309-00-2	Pesticides	Aldrin	ug/kg dw	2.1	U			2	82	22	34	5.6	2.6	4.3	3.5	2.8	3.5	ND	ND
319-84-6	Pesticides	alpha-BHC	ug/kg dw	1	U			6	102	28	43	7	3.2	5.4	4.4	3.5	4.3	ND	ND
5103-71-9	Pesticides	alpha-Chlordane**	ug/kg dw	2.1	U	3.24	17.6	7	81	17	26	4.2	1.9	3.2	2.6	2.1	2.6	ND	ND
319-85-7	Pesticides	beta-BHC	ug/kg dw	1	U			5	214	59	90	15	6.8	11	9.2	7.4	9.1	ND	ND
319-86-8	Pesticides	delta-BHC	ug/kg dw	1	U													ND	ND
60-57-1	Pesticides	Dieldrin	ug/kg dw	4	U	1.9	61.8	2	928	255	389	64	29	49	40	32	39	ND	ND
959-98-8	Pesticides	Endosulfan I	ug/kg dw	2.1	U													ND	ND
33213-65-9	Pesticides	Endosulfan II	ug/kg dw	4	U													ND	ND
1031-07-8	Pesticides	Endosulfan sulfate	ug/kg dw	4	U													ND	ND
72-20-8	Pesticides	Endrin	ug/kg dw	4	U	2.22	207	3	1328	365	556	91	42	70	57	46	56	ND	ND
7421-93-4	Pesticides	Endrin aldehyde	ug/kg dw	4	U													ND	ND
53494-70-5	Pesticides	Endrin ketone	ug/kg dw	4	U													ND	ND
58-89-9	Pesticides	gamma-BHC (Lindane)	ug/kg dw	1	U	2.37	4.99	3	10	2.8	4.3	0.7	0.32	0.54	0.44	0.35	0.43	ND	ND
5103-74-2	Pesticides	gamma-Chlordane**	ug/kg dw	2.1	U	3.24		7	81	17	26	4.2	1.9	3.2	2.6	2.1	2.6	ND	ND
76-44-8	Pesticides	Heptachlor	ug/kg dw	2.1	U			0.3***										ND	ND
1024-57-3	Pesticides	Heptachlor epoxide	ug/kg dw	2.1	U	2.47	16.0	5	51	14	21	3.5	1.6	2.7	2.2	1.8	2.2	ND	ND
72-43-5	Pesticides	Methoxychlor	ug/kg dw	21	U													ND	ND
8001-35-2	Pesticides	Toxaphene	ug/kg dw	210	U													ND	ND
87-61-6	SVOCs	1,2,3-Trichlorobenzene	ug/kg dw	210	U													ND	ND
120-82-1	SVOCs	1,2,4-Trichlorobenzene	ug/kg dw	210	U													ND	ND
108-70-3	SVOCs	1,3,5-Trichlorobenzene	ug/kg dw	210	U													ND	ND
541-73-1	SVOCs	1,3-Dichlorobenzene	ug/kg dw	210	U													ND	ND
108-60-1	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/kg dw	210	U													ND	ND
15950-66-0	SVOCs	2,3,4-Trichlorophenol	ug/kg dw	210	U													ND	ND
933-78-8	SVOCs	2,3,5-Trichlorophenol	ug/kg dw	210	U													ND	ND
933-7-5	SVOCs	2,3,6-Trichlorophenol	ug/kg dw	210	U													ND	ND
95-95-4	SVOCs	2,4,5-Trichlorophenol	ug/kg dw	210	U													ND	ND
51-28-5	SVOCs	2,4-Dinitrophenol	ug/kg dw	1000	U													ND	ND
606-20-2	SVOCs	2,6-Dinitrotoluene	ug/kg dw	210	U													ND	ND
91-58-7	SVOCs	2-Chloronaphthalene	ug/kg dw	210	U													ND	ND
91-57-6	SVOCs	2-Methylnaphthalene	ug/kg dw	210	U													ND	ND
95-48-7	SVOCs	2-Methylphenol (o-Cresol)	ug/kg dw	210	U													ND	ND
88-75-5	SVOCs	2-Nitrophenol	ug/kg dw	210	U													ND	ND
91-94-1	SVOCs	3,3'-Dichlorobenzidine	ug/kg dw	800	U													ND	ND
609-19-8	SVOCs	3,4,5-Trichlorophenol	ug/kg dw	210	U													ND	ND
99-09-2	SVOCs	3-Nitroaniline	ug/kg dw	1000	U													ND	ND
534-52-1	SVOCs	4,6-Dinitro-2-methylphenol	ug/kg dw	1000	U													ND	ND
59-50-7	SVOCs	4-Chloro-3-methylphenol	ug/kg dw	210	U													ND	ND
7005-72-3	SVOCs	4-Chlorophenylphenyl ether	ug/kg dw	210	U													ND	ND
100-01-6	SVOCs	4-Nitroaniline	ug/kg dw	1000	U													ND	ND
100-02-7	SVOCs	4-Nitrophenol	ug/kg dw	1000	U													ND	ND

Table 8-6b Sediment Guideline Comparison Table (Non-Detected COPCs for RL Ana...
W.G. Krummrich Plant Ecological Risk Assessment
Sauget, Illinois

CAS Number	Analysis	Name	Units	SD-PDA-10 Concentration	Validation Q	Sediment Quality Criteria											DDA Reference	UDA Reference
						Sed Qual Guide[1] (TEC)	Sed Qual Guide[2] (PEC)	Sed Ontario[3] (LEL)	Ontario SEL[4] for SD-PDA-2	Ontario SEL[4] for SD-PDA-3	Ontario SEL[4] for SD-PDA-4	Ontario SEL[4] for SD-PDA-5	Ontario SEL[4] for SD-PDA-6	Ontario SEL[4] for SD-PDA-7	Ontario SEL[4] for SD-PDA-8	Ontario SEL[4] for SD-PDA-9	Ontario SEL[4] for SD-PDA-10	2 X Downstream Average	2 X Upstream Average
83-32-9	SVOCs	Acenaphthene	ug/kg dw	210	U												ND	ND
208-96-8	SVOCs	Acenaphthylene	ug/kg dw	210	U												ND	ND
120-12-7	SVOCs	Anthracene	ug/kg dw	210	U	57.2	845	220	3774	1038	1584	259	120	188	162	130	160	ND	ND
56-55-3	SVOCs	Benzo(a)anthracene	ug/kg dw	210	U	108	1050	320	15096	4151	6334	1036	480	793	647	521	641	151	ND
50-32-8	SVOCs	Benzo(a)pyrene	ug/kg dw	210	U	150	1450	370	14686	4039	6163	1008	467	772	629	507	624	ND	ND
205-99-2	SVOCs	Benzo(b)fluoranthene	ug/kg dw	210	U													ND	ND
191-24-2	SVOCs	Benzo(g,h,i)perylene	ug/kg dw	210	U			170	3284	898	1370	224	104	172	140	113	139	ND	ND
207-08-9	SVOCs	Benzo(k)fluoranthene	ug/kg dw	210	U			240	13668	3759	5735	938	434	718	586	472	580	ND	ND
111-91-1	SVOCs	bis(2-Chloroethoxy)methane	ug/kg dw	210	U													ND	ND
111-44-4	SVOCs	bis(2-Chloroethyl)ether	ug/kg dw	210	U													ND	ND
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/kg dw	210	U													ND	216
85-68-7	SVOCs	Butylbenzylphthalate	ug/kg dw	210	U													ND	ND
86-74-8	SVOCs	Carbazole	ug/kg dw	210	U													ND	ND
218-01-9	SVOCs	Chrysene	ug/kg dw	210	U	166	1290	340	4692	1290	1969	322	149	247	201	162	199	154	ND
84-74-2	SVOCs	Di-n-butylphthalate	ug/kg dw	210	U													ND	ND
117-84-0	SVOCs	Di-n-octylphthalate	ug/kg dw	210	U													ND	ND
53-70-3	SVOCs	Dibenzo(a,h)anthracene	ug/kg dw	210	U	33		60	1326	365	556	91	42	70	57	46	56	ND	ND
132-64-9	SVOCs	Dibenzofuran	ug/kg dw	210	U													ND	ND
84-66-2	SVOCs	Diethylphthalate	ug/kg dw	210	U													ND	ND
131-11-3	SVOCs	Dimethylphthalate	ug/kg dw	210	U													ND	ND
206-44-0	SVOCs	Fluoranthene	ug/kg dw	210	U	423	2230	750	10404	2861	4366	714	330	547	446	359	442	ND	ND
86-73-7	SVOCs	Fluorene	ug/kg dw	210	U	77.4	536	190	1832	449	685	112	52	86	70	56	69	ND	ND
118-74-1	SVOCs	Hexachlorobenzene	ug/kg dw	210	U													ND	ND
87-68-3	SVOCs	Hexachlorobutadiene	ug/kg dw	210	U													ND	ND
77-47-4	SVOCs	Hexachlorocyclopentadiene	ug/kg dw	210	U													ND	ND
67-72-1	SVOCs	Hexachloroethane	ug/kg dw	210	U													ND	ND
193-39-5	SVOCs	Indeno(1,2,3-cd)pyrene	ug/kg dw	210	U			200	3284	898	1370	224	104	172	140	113	139	ND	ND
78-59-1	SVOCs	Isophorone	ug/kg dw	210	U													ND	ND
621-64-7	SVOCs	N-Nitroso-di-n-propylamine	ug/kg dw	210	U													ND	ND
86-30-6	SVOCs	N-Nitrosodiphenylamine	ug/kg dw	210	U													ND	ND
98-95-3	SVOCs	Nitrobenzene	ug/kg dw	210	U													ND	ND
85-01-8	SVOCs	Phenanthrene	ug/kg dw	210	U	204	1170	560	9690	2665	4068	665	308	509	415	334	411	ND	ND
129-00-0	SVOCs	Pyrene	ug/kg dw	210	U	195	1520	490	8670	2384	3638	595	275	456	371	299	368	ND	ND
71-55-6	VOCs	1,1,1-Trichloroethane	ug/kg dw	1.1	U													ND	ND
79-34-5	VOCs	1,1,2,2-Tetrachloroethane	ug/kg dw	1.1	U													ND	ND
79-00-5	VOCs	1,1,2-Trichloroethane	ug/kg dw	1.1	U													ND	ND
75-34-3	VOCs	1,1-Dichloroethane	ug/kg dw	1.1	U													ND	ND
75-35-4	VOCs	1,1-Dichloroethene	ug/kg dw	1.1	U													ND	ND
78-87-5	VOCs	1,2-Dichloropropane	ug/kg dw	1.1	U													ND	ND
591-78-6	VOCs	2-Hexanone	ug/kg dw	5.3	U													ND	ND
75-27-4	VOCs	Bromodichloromethane	ug/kg dw	1.1	U													ND	ND
75-25-2	VOCs	Bromoform	ug/kg dw	1.1	U													ND	ND
74-83-9	VOCs	Bromomethane (Methyl bromide)	ug/kg dw	1.1	U													ND	ND
56-23-5	VOCs	Carbon tetrachloride	ug/kg dw	1.1	U													ND	ND
74-87-3	VOCs	Chloromethane	ug/kg dw	1.1	U													ND	ND
10061-01-5	VOCs	cis-1,3-Dichloropropene	ug/kg dw	1.1	U													ND	ND
124-48-1	VOCs	Dibromochloromethane	ug/kg dw	1.1	U													ND	ND
100-42-5	VOCs	Styrene	ug/kg dw	1.1	U													ND	ND
10061-02-6	VOCs	trans-1,3-Dichloropropene	ug/kg dw	1.1	U													ND	ND
	TOC	Percent Total Organic Carbon	%	0.0433															

Notes

[1]Consensus-Based Threshold Effect Concentration - MacDonald, D.D., C.G. Ingersoll, and T.A. Berger. 2000. Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems. *Arch. Environ. Contam. Toxicol.* 39: 20-31.

[2]Consensus-Based Probable Effect Concentration - MacDonald, D.D., C.G. Ingersoll, and T.A. Berger. 2000. Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems. *Arch. Environ. Contam. Toxicol.* 39: 20-31.

[3]Lowest Effect Level - Persaud, D., R. Jaagumagi, and A. Hayton. 1993. Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario. Ontario Ministry of Environment and Energy. August. 1993.

[4]Severe Effect Level - Persaud, D., R. Jaagumagi, and A. Hayton. 1993. Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario. Ontario Ministry of Environment and Energy. August. 1993. SELs as provided by Ontario Ministry of the Environment are organic carbon normalized. The values are converted to bulk sediment values by multiplying by the actual TOC of the sediments.

* Ontario and Sediment Quality Guideline values are for 2,4'-DDT and 4,4'-DDT

**Ontario and Sediment Quality Guideline values are for Chlordane

***No Effect Level for Heptachlor

One-half the detection limit exceeds a criterion

Table 8-7. Summary of Benthic Invertebrate Community Data
W.G. Krummrich Plant Ecological Risk Assessment
Sauget, Illinois

<50' from shore, Upstream Reference, Sandy Sediment	UDA-11 A	UDA-11 B	UDA-11 C
# Organisms	0	8	7
# Taxa	0	1	2
Dominant Taxa	NA	Chironomidae (Paratendipes basidens)	Chironomidae (Paratendipes basidens)
2nd Dominant Taxa	NA	NA	Pelecypoda (Pisidium sp.)
30' from shore, Upstream Reference, Soft Sediment	UDA-12 A	UDA-12 B	UDA-12 C
# Organisms	4	0	7
# Taxa	3	0	3
Dominant Taxa	Ephemeroptera (Hexagenia limbata)	NA	Chironomidae (Cryptochironomus fulvus)
2nd Dominant Taxa	Chironomidae	NA	Oligochaeta (Limnodrilus claparedianus)
50' from Shore, Soft Sediment	PDA-2 A	PDA-2 B	PDA-2 C
# Organisms	1	0	6
# Taxa	1	0	2
Dominant Taxa	Chironomidae	NA	Trichoptera (Potamyia flava)
2nd Dominant Taxa	NA	NA	Chironomidae (Cryptochironomus fulvus)
300' from Shore, Sandy Sediment	PDA-7 A	PDA-7 B	PDA-7 C
# Organisms	2	0	1
# Taxa	2	0	1
Dominant Taxa	Chironomidae (Chernovskiia sp./Paratendipes basidens)	NA	Chironomidae (Paratendipes basidens)
2nd Dominant Taxa	NA	NA	NA
50' from Shore, Soft Sediment	PDA-8 A	PDA-8 B	PDA-8 C
# Organisms	1	2	0
# Taxa	1	2	0
Dominant Taxa	Pelecypoda (Pisidium sp.)	Chironomidae/Pelecypoda	NA
2nd Dominant Taxa	NA	NA	NA
65' from shore, Downstream Reference, Soft Sediment	DDA-1 A	DDA-1 B	DDA-1 C
# Organisms	62	54	32
# Taxa	8	6	6
Dominant Taxa	Oligochaeta (Limnodrilus claparedianus)	Oligochaeta (Limnodrilus claparedianus)	Chironomidae (Chironomus decorus)
2nd Dominant Taxa	Chironomidae (Chironomus decorus)	Chironomidae (Chironomus decorus)	Oligochaeta (Limnodrilus claparedianus)
Downstream Reference, Sandy Sediment	DDA-13 A	DDA-13 B	DDA-13 C
# Organisms	1	7	10
# Taxa	1	2	2
Dominant Taxa	Chironomidae (Chernovskiia sp.)	Chironomidae (Paratendipes basidens)	Chironomidae (Paratendipes basidens)
2nd Dominant Taxa	NA	Trichoptera (Potamyia flava)	Pelecypoda (Pisidium sp.)

Table 8-8 Surface Water Comparisons to Wildlife Drinking Water Guidelines
WGK Plant Ecological Risk Assessment
Sauget, Illinois

CAS Number	Analysis	Name	Units	SW-PDA-2 Concentration	Validation Q	SW-PDA-3 Concentration	Validation Q	SW-PDA-4 Concentration	Validation Q	SW-PDA-5 Concentration	Validation Q	SW-PDA-6 Concentration	Validation Q	SW-PDA-7 Concentration	Validation Q
3268-87-9	Dioxin	1,2,3,4,6,7,8,9-OCDD	pg/L	146		147		167		150		160		169	
39001-02-0	Dioxin	1,2,3,4,6,7,8,9-OCDF	pg/L	3.4	UJ	6.9	UJ	4.2	UJ	5.2	J	4.5	UJ	5.8	UJ
35822-46-9	Dioxin	1,2,3,4,6,7,8-HpCDD	pg/L	3.8	J	5.6	UJ	7	J	6.2	J	5.2	J	5	UJ
67562-39-4	Dioxin	1,2,3,4,6,7,8-HpCDF	pg/L	1.5	UJ	2.7	UJ	2.5	UJ	1.6	UJ	1.6	UJ	2.6	UJ
55673-89-7	Dioxin	1,2,3,4,7,8,9-HpCDF	pg/L	1.9	UJ	3.7	UJ	2.9	UJ	2.2	UJ	2.2	UJ	3.5	UJ
39227-28-6	Dioxin	1,2,3,4,7,8-HxCDD	pg/L	1.75	UJ	3.3	UJ	2.8	UJ	2	UJ	2	UJ	3.1	UJ
70648-26-9	Dioxin	1,2,3,4,7,8-HxCDF	pg/L	1.15	UJ	2	UJ	2	UJ	2.2	J	1.3	UJ	2	UJ
57653-85-7	Dioxin	1,2,3,6,7,8-HxCDD	pg/L	1.75	UJ	3.2	UJ	2.8	UJ	1.9	UJ	2	UJ	3.1	UJ
57117-44-9	Dioxin	1,2,3,6,7,8-HxCDF	pg/L	1.1	UJ	1.9	UJ	1.9	UJ	1.2	UJ	1.2	UJ	1.9	UJ
19408-74-3	Dioxin	1,2,3,7,8,9-HxCDD	pg/L	1.7	UJ	3.2	UJ	2.6	UJ	1.9	UJ	2	UJ	3.1	UJ
72918-21-9	Dioxin	1,2,3,7,8,9-HxCDF	pg/L	1.35	UJ	2.6	UJ	2.3	UJ	1.6	UJ	1.6	UJ	2.5	UJ
40321-76-4	Dioxin	1,2,3,7,8-PeCDD	pg/L	1.65	UJ	2.5	UJ	3	UJ	1.6	UJ	1.7	UJ	2.6	UJ
57117-41-6	Dioxin	1,2,3,7,8-PeCDF	pg/L	1.3	UJ	1.9	UJ	2.3	UJ	1.4	UJ	1.2	UJ	1.9	UJ
60851-34-5	Dioxin	2,3,4,6,7,8-HxCDF	pg/L	1.2	UJ	2.1	UJ	2.1	UJ	1.3	UJ	1.3	UJ	2.1	UJ
57117-31-4	Dioxin	2,3,4,7,8-PeCDF	pg/L	1.3	UJ	1.9	UJ	2.2	UJ	1.4	UJ	1.2	UJ	1.9	UJ
1746-01-6	Dioxin	2,3,7,8-TCDD	pg/L	1.6	UJ	1.9	UJ	3.1	UJ	1.4	UJ	1.2	UJ	2.1	UJ
51207-31-9	Dioxin	2,3,7,8-TCDF	pg/L	1.2	UJ	1.7	UJ	2.1	UJ	1.1	UJ	1.1	UJ	1.6	UJ
37871-00-4	Dioxin	Total HpCDD	pg/L	9.15	J	5.6	UJ	12.9	J	11.5		11.9		6.2	
38998-75-3	Dioxin	Total HpCDF	pg/L	1.7	UJ	3.1	UJ	2.7	UJ	1.9	UJ	1.8	UJ	3	UJ
34465-46-8	Dioxin	Total HxCDD	pg/L	1.75	UJ	3.2	UJ	2.7	UJ	1.9	UJ	2	UJ	3.1	UJ
55684-94-1	Dioxin	Total HxCDF	pg/L	1.2	UJ	2.1	UJ	2.1	UJ	2.2		1.3	UJ	2.1	UJ
36088-22-9	Dioxin	Total PeCDD	pg/L	1.65	UJ	2.5	UJ	3	UJ	1.6	UJ	1.7	UJ	2.6	UJ
30402-15-4	Dioxin	Total PeCDF	pg/L	1.3	UJ	1.9	UJ	2.3	UJ	1.4	UJ	1.2	UJ	1.9	UJ
41903-57-5	Dioxin	Total TCDD	pg/L	1.6	UJ	1.9	UJ	3.1	UJ	1.4	UJ	1.2	UJ	2.1	UJ
55722-27-5	Dioxin	Total TCDF	pg/L	1.2	UJ	1.7	UJ	2.1	UJ	1.1	UJ	1.1	UJ	1.6	UJ
	Dioxin	Total TEQ - Mammal	pg/L	0.111		0.143		0.187		0.298		0.133		0.142	
	Dioxin	Total TEQ - Bird	pg/L	0.0762		0.118		0.124		0.242		0.0864		0.120	
93-76-5	Herbicides	2,4,5-T	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
93-72-1	Herbicides	2,4,5-TP (Silvex)	ug/l	0.5	U	0.5	U	0.5	U	0.14	J	0.5	U	0.5	U
94-75-7	Herbicides	2,4-D	ug/l	8	J	4.1		10		4.3		0.5	U	0.5	U
94-82-6	Herbicides	2,4-DB	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
75-99-0	Herbicides	Dalapon	ug/l	120	U	120	U	120	U	120	U	120	U	120	U
1918-00-9	Herbicides	Dicamba	ug/l	1.2	U	1.2	U	1.2	U	0.11	J	1.2	U	1.2	U
120-36-5	Herbicides	Dichloroprop	ug/l	1.85	J	6	U	0.49	J	6	U	6	U	6	U
88-85-7	Herbicides	Dinoseb	ug/l	6	U	6	U	6	U	6	R	6	R	6	R
94-74-6	Herbicides	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	ug/l	120	U	120	U	120	U	120	U	120	U	120	U
7085-19-0	Herbicides	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	ug/l	120	U	120	U	120	U	120	U	120	U	120	U
87-86-5	Herbicides	Pentachlorophenol	ug/l	0.575	J	0.23	J	0.87	J	1	U	1	U	1	U
2051-24-3	PCBs	Decachlorobiphenyl	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
C-DICHLOROBI	PCBs	Dichlorobiphenyl	ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
C-HEPTACHLOR	PCBs	Heptachlorobiphenyl	ug/l	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
C-HEXACHLORO	PCBs	Hexachlorobiphenyl	ug/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
C-MONOCHLORO	PCBs	Monochlorobiphenyl	ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
C-NONACHLORO	PCBs	Nonachlorobiphenyl	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
C-OCTA-BIPHE	PCBs	Octachlorobiphenyl	ug/l	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
C-PENTBIPHEN	PCBs	Pentachlorobiphenyl	ug/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
C-TETRACHLOR	PCBs	Tetrachlorobiphenyl	ug/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
C-TOTAL-PCB	PCBs	Total Polychlorinated Biphenyls	ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
C-TRICHLOROB	PCBs	Trichlorobiphenyl	ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
72-54-8	Pesticides	4,4'-DDD	ug/l	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
72-55-9	Pesticides	4,4'-DDE	ug/l	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
50-29-3	Pesticides	4,4'-DDT	ug/l	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
309-00-2	Pesticides	Aldrin	ug/l	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
319-84-6	Pesticides	alpha-BHC	ug/l	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ
5103-71-9	Pesticides	alpha-Chlordane	ug/l	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
319-85-7	Pesticides	beta-BHC	ug/l	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ
319-86-8	Pesticides	delta-BHC	ug/l	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ
60-57-1	Pesticides	Dieldrin	ug/l	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
959-98-8	Pesticides	Endosulfan I	ug/l	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
33213-65-9	Pesticides	Endosulfan II	ug/l	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
1031-07-8	Pesticides	Endosulfan sulfate	ug/l	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
72-20-8	Pesticides	Endrin	ug/l	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
7421-93-4	Pesticides	Endrin aldehyde	ug/l	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
53494-70-5	Pesticides	Endrin ketone	ug/l	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ	0.1	UJ
58-89-9	Pesticides	gamma-BHC (Lindane)	ug/l	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ	0.025	UJ
5103-74-2	Pesticides	gamma-Chlordane	ug/l	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
76-44-8	Pesticides	Heptachlor	ug/l	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
1024-57-3	Pesticides	Heptachlor epoxide	ug/l	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ	0.05	UJ
72-43-5	Pesticides	Methoxychlor	ug/l	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ

Table 8-8. Surface Water Comparisons to Wildlife Drinking Water Guidelines
WGK Plant Ecological Risk Assessment
Saugel, Illinois

CAS Number	Analysis	Name	Units	SW-PDA-2 Concentration	Validation Q	SW-PDA-3 Concentration	Validation Q	SW-PDA-4 Concentration	Validation Q	SW-PDA-5 Concentration	Validation Q	SW-PDA-6 Concentration	Validation Q	SW-PDA-7 Concentration	Validation Q
8001-35-2	Pesticides	Toxaphene	ug/l	5	UJ	5	UJ	5	UJ	5	UJ	5	UJ	5	UJ
87-61-6	SVOCs	1,2,3-Trichlorobenzene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
120-82-1	SVOCs	1,2,4-Trichlorobenzene	ug/l	1.525	J	5	U	0.33	J	6.7	U	5	U	5	U
95-50-1	SVOCs	1,2-Dichlorobenzene	ug/l	13.25	J	3.3	J	11		6.7	U	5	U	5	U
108-70-3	SVOCs	1,3,5-Trichlorobenzene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
541-73-1	SVOCs	1,3-Dichlorobenzene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
106-46-7	SVOCs	1,4-Dichlorobenzene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
108-60-1	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
15950-66-0	SVOCs	2,3,4-Trichlorophenol	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
933-78-8	SVOCs	2,3,5-Trichlorophenol	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
933-7-5	SVOCs	2,3,6-Trichlorophenol	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
95-95-4	SVOCs	2,4,5-Trichlorophenol	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
88-06-2	SVOCs	2,4,6-Trichlorophenol	ug/l	8	J	2.4	J	7.4		1.4	J	5	U	5	U
120-83-2	SVOCs	2,4-Dichlorophenol	ug/l	31	J	9.3		30		5.8	J	5	U	5	U
105-67-9	SVOCs	2,4-Dimethylphenol	ug/l	1.9	J	1.2	J	3.7	J	6.7	U	5	U	5	U
51-28-5	SVOCs	2,4-Dinitrophenol	ug/l	25	U	25	U	25	U	33	U	25	U	25	U
121-14-2	SVOCs	2,4-Dinitrotoluene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
606-20-2	SVOCs	2,6-Dinitrotoluene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
91-58-7	SVOCs	2-Chloronaphthalene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
95-57-8	SVOCs	2-Chlorophenol	ug/l	18.7	J	6		20		4.9	J	5	U	5	U
91-57-6	SVOCs	2-Methylnaphthalene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
95-48-7	SVOCs	2-Methylphenol (o-Cresol)	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
88-74-4	SVOCs	2-Nitroaniline	ug/l	25	U	25	U	25	U	33	U	25	U	25	U
88-75-5	SVOCs	2-Nitrophenol	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
91-94-1	SVOCs	3,3'-Dichlorobenzidine	ug/l	10	U	10	U	10	U	13	U	10	U	10	U
609-19-8	SVOCs	3,4,5-Trichlorophenol	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
106-44-5	SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/l	5.9	J	2.6	J	11		6.7	U	5	U	5	U
99-09-2	SVOCs	3-Nitroaniline	ug/l	25	U	25	U	25	U	33	U	25	U	25	U
534-52-1	SVOCs	4,6-Dinitro-2-methylphenol	ug/l	25	U	25	U	25	U	33	U	25	U	25	U
101-55-3	SVOCs	4-Bromophenylphenyl ether	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
59-50-7	SVOCs	4-Chloro-3-methylphenol	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
106-47-8	SVOCs	4-Chloroaniline	ug/l	41	J	12		45		3.7	J	10	U	10	U
7005-72-3	SVOCs	4-Chlorophenylphenyl ether	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
100-01-6	SVOCs	4-Nitroaniline	ug/l	25	U	25	U	25	U	33	U	25	U	25	U
100-02-7	SVOCs	4-Nitrophenol	ug/l	25	U	25	U	25	U	33	U	25	U	25	U
83-32-9	SVOCs	Acenaphthene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
208-96-8	SVOCs	Acenaphthylene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
120-12-7	SVOCs	Anthracene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
56-55-3	SVOCs	Benzo(a)anthracene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
50-32-8	SVOCs	Benzo(a)pyrene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
205-99-2	SVOCs	Benzo(b)fluoranthene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
191-24-2	SVOCs	Benzo(g,h,i)perylene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
207-08-9	SVOCs	Benzo(k)fluoranthene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
111-91-1	SVOCs	bis(2-Chloroethoxy)methane	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
111-44-4	SVOCs	bis(2-Chloroethyl)ether	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/l	5	U	5	U	5	U	6.7	U	5	U	2.2	J
85-68-7	SVOCs	Butylbenzylphthalate	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
86-74-8	SVOCs	Carbazole	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
218-01-9	SVOCs	Chrysene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
84-74-2	SVOCs	Di-n-butylphthalate	ug/l	5	U	5	U	5	U	6.7	U	0.34	J	5	U
117-84-0	SVOCs	Di-n-octylphthalate	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
53-70-3	SVOCs	Dibenzo(a,h)anthracene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
132-64-9	SVOCs	Dibenzofuran	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
84-66-2	SVOCs	Diethylphthalate	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
131-11-3	SVOCs	Dimethylphthalate	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
206-44-0	SVOCs	Fluoranthene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
86-73-7	SVOCs	Fluorene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
118-74-1	SVOCs	Hexachlorobenzene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
87-68-3	SVOCs	Hexachlorobutadiene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
77-47-4	SVOCs	Hexachlorocyclopentadiene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
67-72-1	SVOCs	Hexachloroethane	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
193-39-5	SVOCs	Indeno(1,2,3-cd)pyrene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
78-59-1	SVOCs	Isophorone	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
621-64-7	SVOCs	N-Nitroso-di-n-propylamine	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
86-30-6	SVOCs	N-Nitrosodiphenylamine	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
91-20-3	SVOCs	Naphthalene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
98-95-3	SVOCs	Nitrobenzene	ug/l	5	U	0.54	J	0.93	J	6.7	U	5	U	5	U
85-01-8	SVOCs	Phenanthrene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
108-95-2	SVOCs	Phenol	ug/l	5	U	5	U	5	U	35		5	U	5	U

Table 8-8 Surface Water Comparisons to Wildlife Drinking Water Guidelines
WGK Plant Ecological Risk Assessment
Sauget, Illinois

CAS Number	Analysis	Name	Units	SW-PDA-2 Concentration	Validation Q	SW-PDA-3 Concentration	Validation Q	SW-PDA-4 Concentration	Validation Q	SW-PDA-5 Concentration	Validation Q	SW-PDA-6 Concentration	Validation Q	SW-PDA-7 Concentration	Validation Q
129-00-0	SVOCs	Pyrene	ug/l	5	U	5	U	5	U	6.7	U	5	U	5	U
71-55-6	VOCs	1,1,1-Trichloroethane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
79-34-5	VOCs	1,1,2,2-Tetrachloroethane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
79-00-5	VOCs	1,1,2-Trichloroethane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
75-34-3	VOCs	1,1-Dichloroethane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
75-35-4	VOCs	1,1-Dichloroethene	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
107-06-2	VOCs	1,2-Dichloroethane	ug/l	0.775	J	2	U	0.49	J	0.58	J	2	U	2	U
78-87-5	VOCs	1,2-Dichloropropane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
78-93-3	VOCs	2-Butanone (MEK)	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
591-78-6	VOCs	2-Hexanone	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
108-10-1	VOCs	4-Methyl-2-pentanone (MIBK)	ug/l	1.52	J	2.2	J	1.5	J	10	U	10	U	10	U
67-64-1	VOCs	Acetone	ug/l	25	U	25	U	25	U	25	U	25	U	25	U
71-43-2	VOCs	Benzene	ug/l	1.7		1.8	J	2	U	2	U	2	U	2	U
75-27-4	VOCs	Bromodichloromethane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
75-25-2	VOCs	Bromoform	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
74-83-9	VOCs	Bromomethane (Methyl bromide)	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
75-15-0	VOCs	Carbon disulfide	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
56-23-5	VOCs	Carbon tetrachloride	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
108-90-7	VOCs	Chlorobenzene	ug/l	22.2	J	24		13		4.2		2	U	2	U
75-00-3	VOCs	Chloroethane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
67-66-3	VOCs	Chloroform	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
74-87-3	VOCs	Chloromethane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
156-59-2	VOCs	cis-1,2-Dichloroethene	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
10061-01-5	VOCs	cis-1,3-Dichloropropene	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
124-48-1	VOCs	Dibromochloromethane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
100-41-4	VOCs	Ethylbenzene	ug/l	0.32	J	0.38	J	0.28	J	2	U	2	U	2	U
108-38-3	VOCs	m&p-Xylene	ug/l	0.745	J	0.97	J	2.4		0.7	J	2	U	2	U
75-09-2	VOCs	Methylene chloride (Dichloromethane)	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
100-42-5	VOCs	Styrene	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
127-18-4	VOCs	Tetrachloroethene	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
108-88-3	VOCs	Toluene	ug/l	1.645		1.7	J	1.3	J	2	U	2	U	2	U
156-60-5	VOCs	trans-1,2-Dichloroethene	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
10061-02-6	VOCs	trans-1,3-Dichloropropene	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
79-01-6	VOCs	Trichloroethene	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
75-01-4	VOCs	Vinyl chloride	ug/l	2	U	2	U	2	U	2	U	2	U	2	U
1330-20-7	VOCs	Xylenes, Total	ug/l	0.945	J	0.97	J	2.7		0.7	J	2	U	2	U

Notes
[1]Sample, BE, DM Opresko, GW Suter 1996. Toxicological Benchmarks for Wildlife 1996 Revision. Prepared for U.S. Department of Energy Oak Ridge National Laboratory June 1996 ES/ER/TM-86/R3
[2]Value for DDT and metabolites
[3]Value for total chlordane
[4]Value for BHC - mixed isomers
[5]Value for Endosulfan
[6]Value for Endrin
[7]Value for Heptachlor
[8]Value for 1,2-Dichloroethene
[9]Value for Xylenes - mixed isomers

Table 8-8. Surface Water Comparisons to Wildlife Drinking Water Guidelines
WGK Plant Ecological Risk Assessment
Sauget, Illinois

CAS Number	Analysis	Name	Units	SW-PDA-8 Concentration	Validation Q	SW-PDA-9 Concentration	Validation Q	SW-PDA-10 Concentration	Validation Q	NOAEL-Based Benchmarks[1] Water	NOAEL-Based Benchmarks[1] Endpoint Species
3268-87-9	Dioxin	1,2,3,4,6,7,8,9-OCDD	pg/L	159		149		169			
39001-02-0	Dioxin	1,2,3,4,6,7,8,9-OCDF	pg/L	17.15	UJ	14.7	UJ	5.2	UJ		
35822-46-9	Dioxin	1,2,3,4,6,7,8-HpCDD	pg/L	12.75	UJ	10.7	UJ	4.2	UJ		
67562-39-4	Dioxin	1,2,3,4,6,7,8-HpCDF	pg/L	6.45	UJ	5.7	UJ	2.2	UJ		
55673-89-7	Dioxin	1,2,3,4,7,8,9-HpCDF	pg/L	8.35	UJ	7.4	UJ	3.1	UJ		
39227-28-6	Dioxin	1,2,3,4,7,8-HxCDD	pg/L	7.55	UJ	6.3	UJ	2.5	UJ		
70648-26-9	Dioxin	1,2,3,4,7,8-HxCDF	pg/L	4.7	UJ	4.1	UJ	1.7	UJ		
57653-85-7	Dioxin	1,2,3,6,7,8-HxCDD	pg/L	7.6	UJ	6.3	UJ	2.4	UJ		
57117-44-9	Dioxin	1,2,3,6,7,8-HxCDF	pg/L	4.45	UJ	3.9	UJ	1.6	UJ	690000	Whitetail Deer
19408-74-3	Dioxin	1,2,3,7,8,9-HxCDD	pg/L	7.45	UJ	6.2	UJ	2.4	UJ		
72918-21-9	Dioxin	1,2,3,7,8,9-HxCDF	pg/L	6.05	UJ	5.3	UJ	2.1	UJ		
40321-76-4	Dioxin	1,2,3,7,8-PeCDD	pg/L	6.1	UJ	6.2	UJ	1.8	UJ		
57117-41-6	Dioxin	1,2,3,7,8-PeCDF	pg/L	5.2	UJ	4.8	UJ	1.4	UJ	690000	Whitetail Deer
60851-34-5	Dioxin	2,3,4,6,7,8-HxCDF	pg/L	4.95	UJ	4.3	UJ	1.8	UJ		
57117-31-4	Dioxin	2,3,4,7,8-PeCDF	pg/L	5.1	UJ	4.8	UJ	1.4	UJ	70000	Whitetail Deer
1746-01-6	Dioxin	2,3,7,8-TCDD	pg/L	6.5	UJ	6.4	UJ	1.7	UJ	700	Little Brown Bat
51207-31-9	Dioxin	2,3,7,8-TCDF	pg/L	4.1	UJ	4	UJ	1.4	UJ	4300	Rough-winged Swallow
37871-00-4	Dioxin	Total HpCDD	pg/L	12.75	UJ	10.7	UJ	9.4			
38998-75-3	Dioxin	Total HpCDF	pg/L	7.3	UJ	6.5	UJ	2.6	UJ		
34465-46-8	Dioxin	Total HxCDD	pg/L	7.55	UJ	6.3	UJ	2.5	UJ		
55684-94-1	Dioxin	Total HxCDF	pg/L	4.95	UJ	4.4	UJ	1.8	UJ		
36088-22-9	Dioxin	Total PeCDD	pg/L	6.1	UJ	6.2	UJ	1.8	UJ		
30402-15-4	Dioxin	Total PeCDF	pg/L	5.15	UJ	4.8	UJ	1.4	UJ		
41903-57-5	Dioxin	Total TCDD	pg/L	6.5	UJ	6.4	UJ	1.7	UJ		
55722-27-5	Dioxin	Total TCDF	pg/L	4.1	UJ	4	UJ	1.4	UJ		
	Dioxin	Total TEQ - Mammal	pg/L	0.316		0.274		0.123		700	Little Brown Bat
	Dioxin	Total TEQ - Bird	pg/L	0.258		0.226		0.104		80200	Rough-winged Swallow
93-76-5	Herbicides	2,4,5-T	ug/l	0.5	U	0.5	U	0.5	U		
93-72-1	Herbicides	2,4,5-TP (Silvex)	ug/l	0.5	U	0.5	U	0.5	U		
94-75-7	Herbicides	2,4-D	ug/l	0.34	J	0.5	U	0.5	U		
94-82-6	Herbicides	2,4-DB	ug/l	0.5	U	0.5	U	0.5	U		
75-99-0	Herbicides	Dalapon	ug/l	120	U	120	U	120	U		
1918-00-9	Herbicides	Dicamba	ug/l	1.2	U	1.2	U	1.2	U		
120-36-5	Herbicides	Dichloroprop	ug/l	6	U	6	U	6	U		
88-85-7	Herbicides	Dinoseb	ug/l	6	U	6	U	6	R		
94-74-6	Herbicides	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	ug/l	120	U	120	U	120	U		
7085-19-0	Herbicides	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	ug/l	120	U	120	U	120	U		
87-86-5	Herbicides	Pentachlorophenol	ug/l	1	U	1	U	1	U	1028	Whitetail Deer
2051-24-3	PCBs	Decachlorobiphenyl	ug/l	0.5	U	0.5	U	0.5	U		
C-DICHLOROBI	PCBs	Dichlorobiphenyl	ug/l	0.1	U	0.1	U	0.1	U		
C-HEPTACHLOR	PCBs	Heptachlorobiphenyl	ug/l	0.3	U	0.3	U	0.3	U		
C-HEXACHLORO	PCBs	Hexachlorobiphenyl	ug/l	0.2	U	0.2	U	0.2	U		
C-MONOCHLORO	PCBs	Monochlorobiphenyl	ug/l	0.1	U	0.1	U	0.1	U		
C-NONACHLORO	PCBs	Nonachlorobiphenyl	ug/l	0.5	U	0.5	U	0.5	U		
C-OCTA-BIPHE	PCBs	Octachlorobiphenyl	ug/l	0.3	U	0.3	U	0.3	U		
C-PENTBIPHEN	PCBs	Pentachlorobiphenyl	ug/l	0.2	U	0.2	U	0.2	U		
C-TETRACHLOR	PCBs	Tetrachlorobiphenyl	ug/l	0.2	U	0.2	U	0.2	U		
C-TOTAL-PCB	PCBs	Total Polychlorinated Biphenyls	ug/l	0.5	U	0.5	U	0.5	U		
C-TRICHLOROB	PCBs	Trichlorobiphenyl	ug/l	0.1	U	0.1	U	0.1	U		
72-54-8	Pesticides	4,4'-DDD	ug/l	0.1	U	0.1	UJ	0.1	UJ	12 [2]	Rough-winged Swallow
72-55-9	Pesticides	4,4'-DDE	ug/l	0.1	U	0.1	UJ	0.1	UJ	12 [2]	Rough-winged Swallow
50-29-3	Pesticides	4,4'-DDT	ug/l	0.1	U	0.1	UJ	0.1	UJ	12 [2]	Rough-winged Swallow
309-00-2	Pesticides	Aldrin	ug/l	0.05	U	0.05	UJ	0.05	UJ	857	Whitetail Deer
319-84-6	Pesticides	alpha-BHC	ug/l	0.025	U	0.025	UJ	0.025	UJ	100 [4]	River Otter
5103-71-9	Pesticides	alpha-Chlordane	ug/l	0.05	U	0.05	UJ	0.05	UJ	9200 [3]	Rough-winged Swallow
319-85-7	Pesticides	beta-BHC	ug/l	0.025	U	0.025	UJ	0.025	UJ	1710	Whitetail Deer
319-86-8	Pesticides	delta-BHC	ug/l	0.025	U	0.025	UJ	0.025	UJ	100 [4]	River Otter
60-57-1	Pesticides	Dieldrin	ug/l	0.1	U	0.1	UJ	0.1	UJ	86	Whitetail Deer
959-98-8	Pesticides	Endosulfan I	ug/l	0.05	U	0.05	UJ	0.05	UJ	640 [5]	Whitetail Deer
33213-65-9	Pesticides	Endosulfan II	ug/l	0.1	U	0.1	UJ	0.1	UJ	640 [5]	Whitetail Deer
1031-07-8	Pesticides	Endosulfan sulfate	ug/l	0.1	U	0.1	UJ	0.1	UJ	840 [5]	Whitetail Deer
72-20-8	Pesticides	Endrin	ug/l	0.1	U	0.1	UJ	0.1	UJ	43 [6]	Rough-winged Swallow
7421-93-4	Pesticides	Endrin aldehyde	ug/l	0.1	U	0.1	UJ	0.1	UJ	43 [6]	Rough-winged Swallow
53494-70-5	Pesticides	Endrin ketone	ug/l	0.1	U	0.1	UJ	0.1	UJ	43 [6]	Rough-winged Swallow
58-89-9	Pesticides	gamma-BHC (Lindane)	ug/l	0.025	U	0.025	UJ	0.025	UJ	8590	Rough-winged Swallow
5103-74-2	Pesticides	gamma-Chlordane	ug/l	0.05	U	0.05	UJ	0.05	UJ	9200 [3]	Rough-winged Swallow
76-44-8	Pesticides	Heptachlor	ug/l	0.05	U	0.05	UJ	0.05	UJ	557	Whitetail Deer
1024-57-3	Pesticides	Heptachlor epoxide	ug/l	0.05	U	0.05	UJ	0.05	UJ	557 [7]	Whitetail Deer
72-43-5	Pesticides	Methoxychlor	ug/l	0.5	U	0.5	UJ	0.5	UJ	17100	Whitetail Deer

Table 8-8 Surface Water Comparisons to Wildlife Drinking Water Guidelines
WGK Plant Ecological Risk Assessment
Sauget, Illinois

CAS Number	Analysis	Name	Units	SW-PDA-8 Concentration	Validation Q	SW-PDA-9 Concentration	Validation Q	SW-PDA-10 Concentration	Validation Q	NOAEL-Based Benchmarks[1] Water	NOAEL-Based Benchmarks[1] Endpoint Species
8001-35-2	Pesticides	Toxaphene	ug/l	5	U	5	UJ	5	UJ	34300	Whitetail Deer
87-61-6	SVOCs	1,2,3-Trichlorobenzene	ug/l	5	U	5	U	5	U		
120-82-1	SVOCs	1,2,4-Trichlorobenzene	ug/l	5	U	5	U	5	U		
95-50-1	SVOCs	1,2-Dichlorobenzene	ug/l	5	U	5	U	5	U		
108-70-3	SVOCs	1,3,5-Trichlorobenzene	ug/l	5	U	5	U	5	U		
541-73-1	SVOCs	1,3-Dichlorobenzene	ug/l	5	U	5	U	5	U		
106-46-7	SVOCs	1,4-Dichlorobenzene	ug/l	5	U	5	U	5	U		
108-60-1	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/l	5	U	5	U	5	U		
15950-66-0	SVOCs	2,3,4-Trichlorophenol	ug/l	5	U	5	U	5	U		
933-78-8	SVOCs	2,3,5-Trichlorophenol	ug/l	5	U	5	U	5	U		
933-7-5	SVOCs	2,3,6-Trichlorophenol	ug/l	5	U	5	U	5	U		
95-95-4	SVOCs	2,4,5-Trichlorophenol	ug/l	5	U	5	U	5	U		
88-06-2	SVOCs	2,4,6-Trichlorophenol	ug/l	5	U	5	U	5	U		
120-83-2	SVOCs	2,4-Dichlorophenol	ug/l	5	U	5	U	5	U		
105-67-9	SVOCs	2,4-Dimethylphenol	ug/l	5	U	5	U	5	U		
51-28-5	SVOCs	2,4-Dinitrophenol	ug/l	25	U	25	U	25	U		
121-14-2	SVOCs	2,4-Dinitrotoluene	ug/l	5	U	5	U	5	U		
606-20-2	SVOCs	2,6-Dinitrotoluene	ug/l	5	U	5	U	5	U		
91-58-7	SVOCs	2-Chloronaphthalene	ug/l	5	U	5	U	5	U		
95-57-8	SVOCs	2-Chlorophenol	ug/l	5	U	5	U	5	U		
91-57-6	SVOCs	2-Methylnaphthalene	ug/l	5	U	5	U	5	U		
95-48-7	SVOCs	2-Methylphenol (o-Cresol)	ug/l	5	U	5	U	5	U		
88-74-4	SVOCs	2-Nitroaniline	ug/l	25	U	25	U	25	U		
88-75-5	SVOCs	2-Nitrophenol	ug/l	5	U	5	U	5	U		
91-94-1	SVOCs	3,3'-Dichlorobenzidine	ug/l	10	U	10	U	10	U		
609-19-8	SVOCs	3,4,5-Trichlorophenol	ug/l	5	U	5	U	5	U		
106-44-5	SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/l	5	U	5	U	5	U		
99-09-2	SVOCs	3-Nitroaniline	ug/l	25	U	25	U	25	U		
534-52-1	SVOCs	4,6-Dinitro-2-methylphenol	ug/l	25	U	25	U	25	U		
101-55-3	SVOCs	4-Bromophenylphenyl ether	ug/l	5	U	5	U	5	U		
59-50-7	SVOCs	4-Chloro-3-methylphenol	ug/l	5	U	5	U	5	U		
106-47-8	SVOCs	4-Chloroaniline	ug/l	10	U	10	U	10	U		
7005-72-3	SVOCs	4-Chlorophenylphenyl ether	ug/l	5	U	5	U	5	U		
100-01-6	SVOCs	4-Nitroaniline	ug/l	25	U	25	U	25	U		
100-02-7	SVOCs	4-Nitrophenol	ug/l	25	U	25	U	25	U		
83-32-9	SVOCs	Acenaphthene	ug/l	5	U	5	U	5	U		
208-96-8	SVOCs	Acenaphthylene	ug/l	5	U	5	U	5	U		
120-12-7	SVOCs	Anthracene	ug/l	5	U	5	U	5	U		
56-55-3	SVOCs	Benzo(a)anthracene	ug/l	5	U	5	U	5	U		
50-32-8	SVOCs	Benzo(a)pyrene	ug/l	5	U	5	U	5	U	2320	Whitetail Deer
205-99-2	SVOCs	Benzo(b)fluoranthene	ug/l	5	U	5	U	5	U		
191-24-2	SVOCs	Benzo(g,h,i)perylene	ug/l	5	U	5	U	5	U		
207-08-9	SVOCs	Benzo(k)fluoranthene	ug/l	5	U	5	U	5	U		
111-91-1	SVOCs	bis(2-Chloroethoxy)methane	ug/l	5	U	5	U	5	U		
111-44-4	SVOCs	bis(2-Chloroethyl)ether	ug/l	5	U	5	U	5	U		
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/l	5	U	5	U	5	U	4730	Rough-winged Swallow
85-68-7	SVOCs	Butylbenzylphthalate	ug/l	5	U	5	U	5	U		
86-74-8	SVOCs	Carbazole	ug/l	5	U	5	U	5	U		
218-01-9	SVOCs	Chrysene	ug/l	5	U	5	U	5	U		
84-74-2	SVOCs	Di-n-butylphthalate	ug/l	5	U	5	U	0.28	J	470	Rough-winged Swallow
117-84-0	SVOCs	Di-n-octylphthalate	ug/l	5	U	5	U	5	U		
53-70-3	SVOCs	Dibenzo(a,h)anthracene	ug/l	5	U	5	U	5	U		
132-64-9	SVOCs	Dibenzofuran	ug/l	5	U	5	U	5	U		
84-66-2	SVOCs	Diethylphthalate	ug/l	5	U	5	U	5	U	10623000	Whitetail Deer
131-11-3	SVOCs	Dimethylphthalate	ug/l	5	U	5	U	5	U		
206-44-0	SVOCs	Fluoranthene	ug/l	5	U	5	U	5	U		
86-73-7	SVOCs	Fluorene	ug/l	5	U	5	U	5	U		
118-74-1	SVOCs	Hexachlorobenzene	ug/l	5	U	5	U	5	U		
87-68-3	SVOCs	Hexachlorobutadiene	ug/l	5	U	5	U	5	U		
77-47-4	SVOCs	Hexachlorocyclopentadiene	ug/l	5	U	5	U	5	U		
67-72-1	SVOCs	Hexachloroethane	ug/l	5	U	5	U	5	U		
193-39-5	SVOCs	Indeno(1,2,3-cd)pyrene	ug/l	5	U	5	U	5	U		
78-59-1	SVOCs	Isophorone	ug/l	5	U	5	U	5	U		
621-64-7	SVOCs	N-Nitroso-di-n-propylamine	ug/l	5	U	5	U	5	U		
86-30-6	SVOCs	N-Nitrosodiphenylamine	ug/l	5	U	5	U	5	U		
91-20-3	SVOCs	Naphthalene	ug/l	5	U	5	U	5	U		
98-95-3	SVOCs	Nitrobenzene	ug/l	5	U	5	U	5	U		
85-01-8	SVOCs	Phenanthrene	ug/l	5	U	5	U	5	U		
108-95-2	SVOCs	Phenol	ug/l	5	U	5	U	5	U		

Table 8-8. Surface Water Comparisons to Wildlife Drinking Water Guidelines
WGK Plant Ecological Risk Assessment
Sauget, Illinois

CAS Number	Analysis	Name	Units	SW-PDA-8 Concentration	SW-PDA-8 Validation Q	SW-PDA-9 Concentration	SW-PDA-9 Validation Q	SW-PDA-10 Concentration	SW-PDA-10 Validation Q	NOAEL-Based Benchmarks[1] Water	NOAEL-Based Benchmarks[1] Endpoint Species
129-00-0	SVOCs	Pyrene	ug/l	5	U	5	U	5	U		
71-55-6	VOCs	1,1,1-Trichloroethane	ug/l	2	U	2	U	2	U	2409000	Whitetail Deer
79-34-5	VOCs	1,1,2,2-Tetrachloroethane	ug/l	2	U	2	U	2	U		
79-00-5	VOCs	1,1,2-Trichloroethane	ug/l	2	U	2	U	2	U		
75-34-3	VOCs	1,1-Dichloroethane	ug/l	2	U	2	U	2	U		
75-35-4	VOCs	1,1-Dichloroethene	ug/l	2	U	2	U	2	U	33000	River Otter
107-06-2	VOCs	1,2-Dichloroethane	ug/l	2	U	2	U	2	U	73900	Rough-winged Swallow
78-87-5	VOCs	1,2-Dichloropropane	ug/l	2	U	2	U	2	U		
78-93-3	VOCs	2-Butanone (MEK)	ug/l	10	U	10	U	10	U		
591-78-6	VOCs	2-Hexanone	ug/l	10	U	10	U	10	U		
108-10-1	VOCs	4-Methyl-2-pentanone (MIBK)	ug/l	10	U	10	U	10	U	107100	Whitetail Deer
67-64-1	VOCs	Acetone	ug/l	25	U	25	U	25	U	42800	Whitetail Deer
71-43-2	VOCs	Benzene	ug/l	2	U	2	U	2	U	61100	Whitetail Deer
75-27-4	VOCs	Bromodichloromethane	ug/l	2	U	2	U	2	U		
75-25-2	VOCs	Bromoform	ug/l	2	U	2	U	2	U		
74-83-9	VOCs	Bromomethane (Methyl bromide)	ug/l	2	U	2	U	2	U		
75-15-0	VOCs	Carbon disulfide	ug/l	2	U	2	U	2	U		
56-23-5	VOCs	Carbon tetrachloride	ug/l	2	U	2	U	2	U	68500	Whitetail Deer
108-90-7	VOCs	Chlorobenzene	ug/l	1.2	J	0.7	J	2	U		
75-00-3	VOCs	Chloroethane	ug/l	2	U	2	U	2	U		
67-66-3	VOCs	Chloroform	ug/l	2	U	2	U	2	U	64000	Whitetail Deer
74-87-3	VOCs	Chloromethane	ug/l	2	U	2	U	2	U		
156-59-2	VOCs	cis-1,2-Dichloroethene	ug/l	2	U	2	U	2	U	104800 [8]	Whitetail Deer
10061-01-5	VOCs	cis-1,3-Dichloropropene	ug/l	2	U	2	U	2	U		
124-48-1	VOCs	Dibromochloromethane	ug/l	2	U	2	U	2	U		
100-41-4	VOCs	Ethylbenzene	ug/l	2	U	0.21	J	2	U		
108-38-3	VOCs	m&p-Xylene	ug/l	2	U	2	U	2	U		
75-09-2	VOCs	Methylene chloride (Dichloromethane)	ug/l	5	U	5	U	5	U	25100	Whitetail Deer
100-42-5	VOCs	Styrene	ug/l	2	U	2	U	2	U		
127-18-4	VOCs	Tetrachloroethene	ug/l	2	U	2	U	2	U	3250	Whitetail Deer
108-88-3	VOCs	Toluene	ug/l	2	U	2	U	2	U	60300	Whitetail Deer
156-60-5	VOCs	trans-1,2-Dichloroethene	ug/l	2	U	2	U	2	U	104800 [8]	Whitetail Deer
10061-02-6	VOCs	trans-1,3-Dichloropropene	ug/l	2	U	2	U	2	U		
79-01-6	VOCs	Trichloroethene	ug/l	2	U	0.3	J	2	U	1623	Whitetail Deer
75-01-4	VOCs	Vinyl chloride	ug/l	2	U	2	U	2	U	728	Whitetail Deer
1330-20-7	VOCs	Xylenes, Total	ug/l	2	U	2	U	2	U	4868 [9]	Whitetail Deer

Notes:
[1]Sample, BE, DM Opresko, GW Suter. 1996. Toxicological Benchmarks for Wildlife: 1996 Revision. Prepared for U.S. Department of Energy. Oak Ridge National Laboratory. June 1996. ES/ER/TM-86/R3
[2]Value for DDT and metabolites
[3]Value for total chlordane
[4]Value for BHC - mixed isomers
[5]Value for Endosulfan
[6]Value for Endrin
[7]Value for Heptachlor
[8]Value for 1,2-Dichloroethene
[9]Value for Xylenes - mixed isomers

Table 9-1
Weight of Evidence Evaluation of Ecological Risk
WGK Plant Ecological Risk Assessment
Sauget, Illinois

Harm Magnitude	Assessment Endpoint 1 *Sustainability of warm water fish* Weighting Factors (Increasing Confidence or Weight)			Assessment Endpoint 2 *Survival, growth, and reproduction of aquatic wildlife species* Weighting Factors (Increasing Confidence or Weight)		
	Low Weight	Medium Weight	High Weight	Low Weight	Medium Weight	High Weight
Yes High		1d - Toxicity of sediment to benthic invertebrates	1c - Toxicity of river water and sediment to fish			
		1e - Toxicity of river water to planktonic invertebrates				
Yes Low	1d - COPC concentrations in sediment compared to guidelines (for compounds with guidelines) 1b - COPC concentrations in SW compared to guidelines (for compounds with guidelines)					
Indeterminate	1d - Assessment of benthic community	1a - fish body burdens indicate higher exposure to some COPCS than reference areas		2b - Concentration of COPCs in surface water compared to wildlife benchmarks (compounds without guideline)	2c - Wildlife food chain exposure (compounds without TRVs) 2a - Wildlife species composition and habitat	
No Risk		1a - Fish tissue body burdens do not exceed TRVs for compounds with TRVs		2b - Concentration of COPCs in surface water compared to wildlife benchmarks (compounds with guidelines)	2c - Wildlife food chain exposure (compounds with TRVs)	

Line of Evidence Category Key	FIELD OBSERVATIONS/GENERAL DATA LABORATORY TEST LAB DATA/LITERATURE GUIDELINES MODELING

Table 10-1. Data Quality Issue Summary
WGK Plant Ecological Risk Assessment
Sauget, Illinois

CASE 1 **Compounds with QAPP ecological reporting limits for any medium that exceed EDQL/RBCs because of method limitations, but were not detected in any media:**	**CASE 2** **Compounds detected in one medium in PDA and at least one reference (UDA or DDA or both), but in another medium the QAPP ecological reporting limits exceed EDQL/RBCs because of method limitations, and were labelled as ND: (*list includes medium* detected in)**	**CASE 3** **The laboratory could not meet the RL outlined in the QAPP for the following compounds and the compounds were not detected in the medium listed below (therefore they were not included in the risk analysis):**
Chloromethane (VOC - sediment/surface water only)	Sediment	Sediment:
Bromomethane (VOC - sediment/surface water only)	Benzo(a)anthracene (detected in reference only)	Bis(2-chloroethyl)ether
1,1-Dichloroethane (VOC - sediment/surface water only)	Chrysene (detected in reference only)	Benzo(k)fluoranthene
Bromodichloromethane (VOC - sediment/surface water only)	Total PeCDD	Indeno(1,2,3-cd)pyrene
2,2'-oxybis (1-chloropropane)		Benzo(g,h,i)perylene
N-nitroso-di-n-propylamine		Gamma-BHC
2-Nitrophenol	Surface Water	Total PCBs
hexachlorobutadiene	Bis(2-ethylhexyl)phthalate	Bis(2)ethylhexylphthalate (detected in reference only)
4-Chloro-3-methylphenol		
2-Methylnaphthalene	Fish	
2,4,5-Trichlorophenol	Diethylphthalate (detected in reference only)	
2-Chloronaphthalene	2-Methylphenol	
Dimethylphthalate	Endosulfan 1	Fish:
Acenaphthylene	Dieldrin	Hexachloroethane
2,6-Dinitrotoluene	4,4'-DDE	Chrysene
3-Nitroaniline	4,4'-DDT	Bis(2)ethylhexylphthalate
Acenaphthene	Endrin Aldehyde	
2,4-Dinitrophenol	2,3,7,8-TCDD	
4-Nitrophenol		
Fluorene		
4-Nitroaniline		
4,6-Dinitro-2-methylphenol		
N-Nitrosodiphenylamine		
Hexachlorobenzene		
Phenanthrene		
Anthracene		
Fluoranthene		
Pyrene		
3,3'-Dichlorobenzidine		
Benzo(k)fluoranthene		
Benzo(a)pyrene		
Indeno(1,2,3-cd)pyrene		
Dibenzo(a,h)anthracene		
Gamma-BHC (lindane)		
Heptachlor		
Endosulfan II		
Methoxyclor		
Toxaphene		
Total PCBs		
Dinoseb (Data Rejected for ERA)		

FIGURES

Figure 1-1. Site Locus (PDA)
WGK Plant Ecological Risk Assessment
Sauget, IL

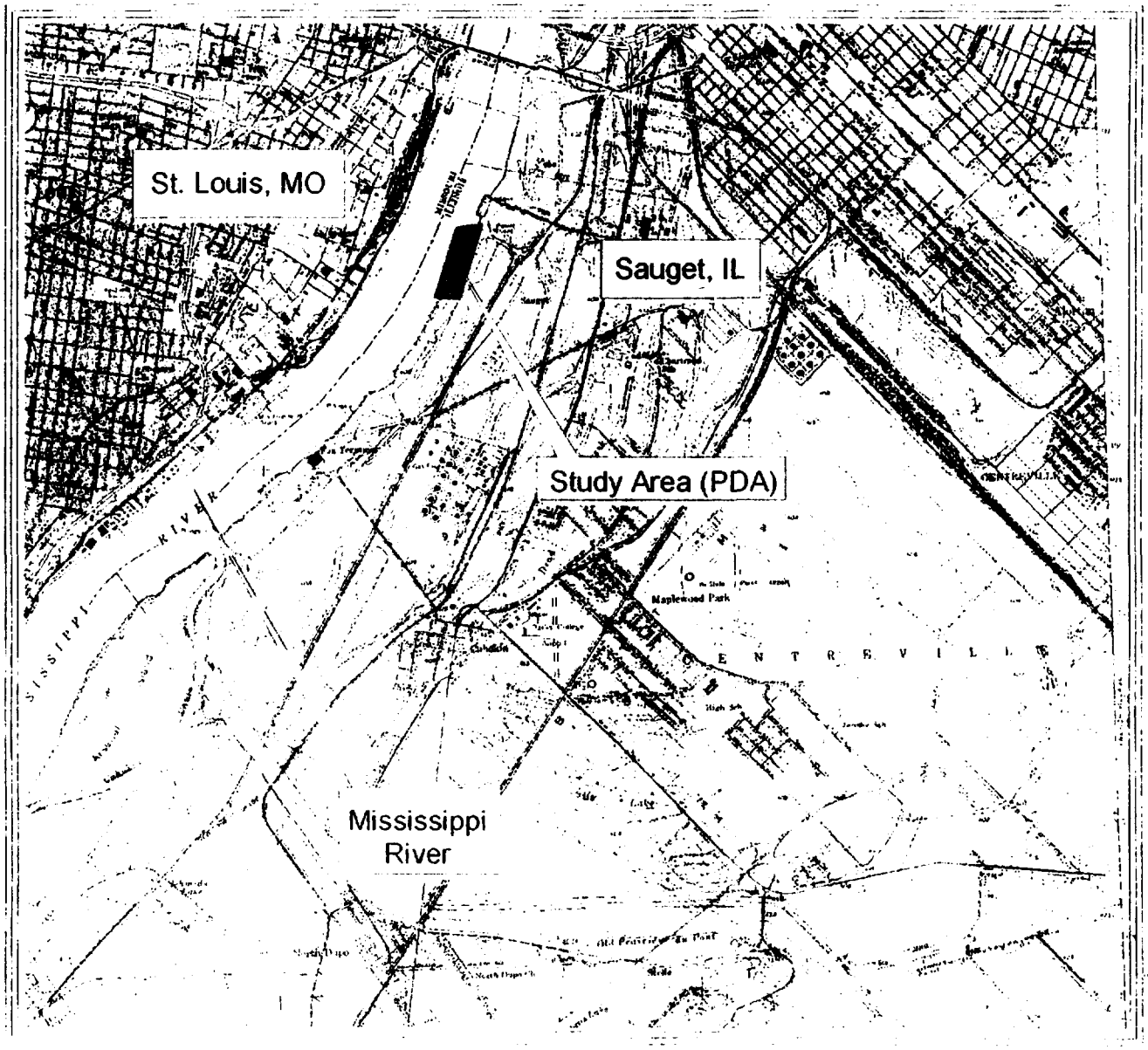
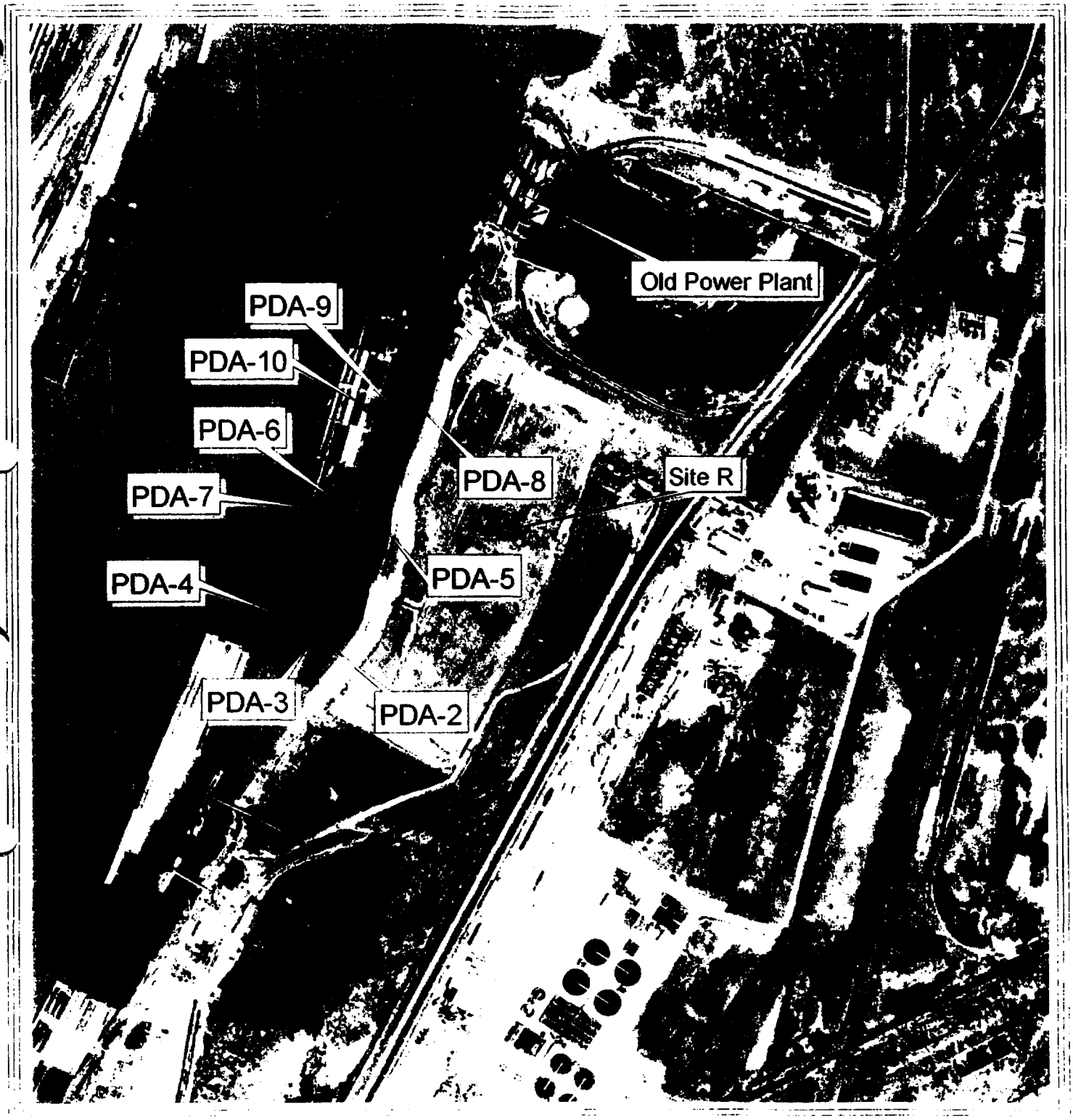
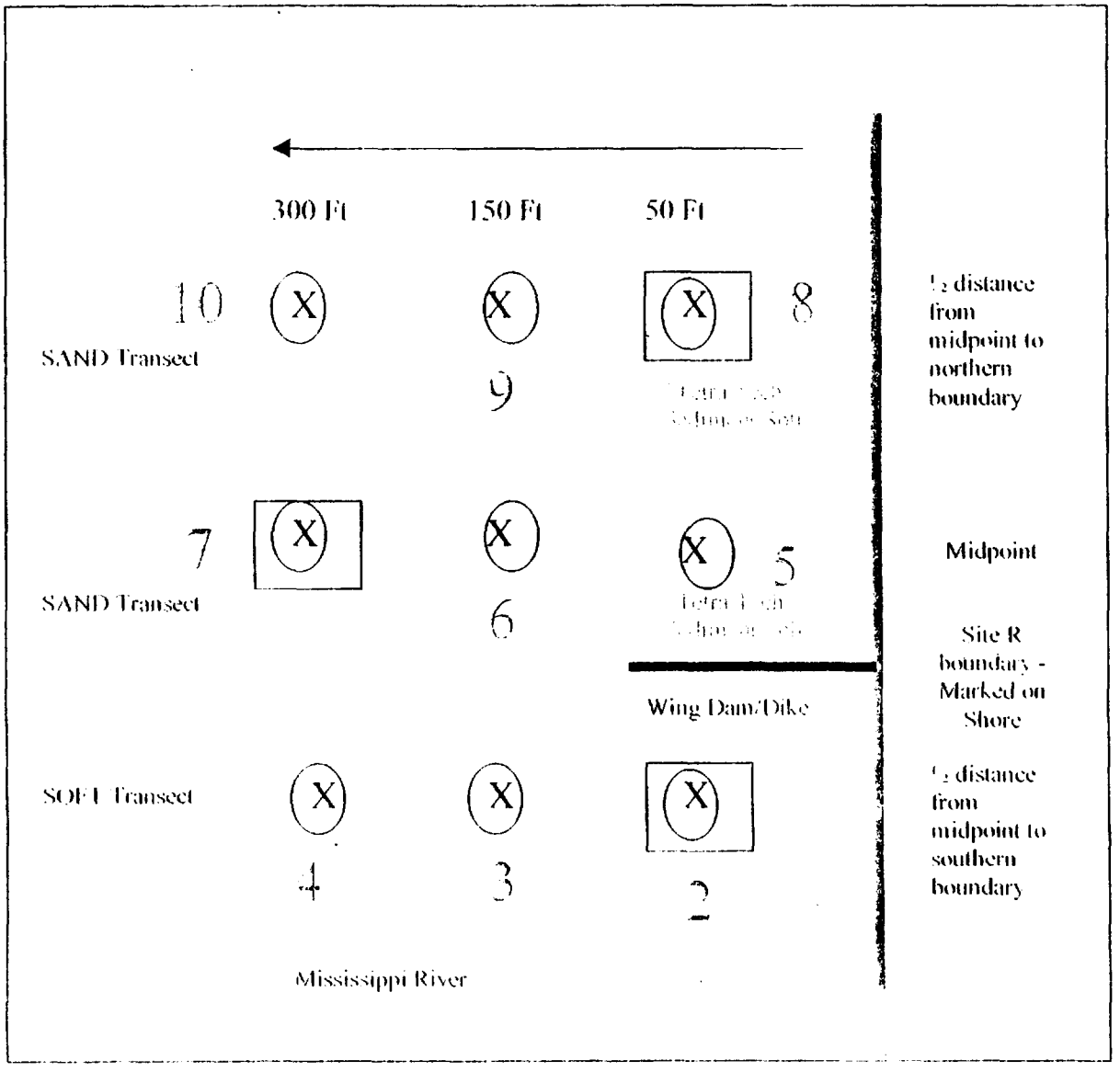


Figure 2-1. PDA Transect Layout
WGK Plant Ecological Risk Assessment
Sauget, Illinois



NOTE:
North Stations = PDA10, PDA9, PDA8
Middle Stations = PDA7, PDA6, PDA5
South Stations (South of Dike) = PDA4, PDA3, PDA2

FIGURE 2-2: PDA Transect Layout (Schematic)
WGK Plant Ecological Risk Assessment
Sauget, Illinois



X — Sediment Collection and Sediment Bioassay

( ) — Water and bioassays at bottom only

[ ] — Benthic Community

Reference Numbers:
UDA-Sand =
UDA – Soft =
DDA – Sand =
DDA – Soft =

North

Figure 2-3. PDA, UDA and DDA Locus Map
WGK Plant Ecological Risk Assessment
Sauget, Illinois

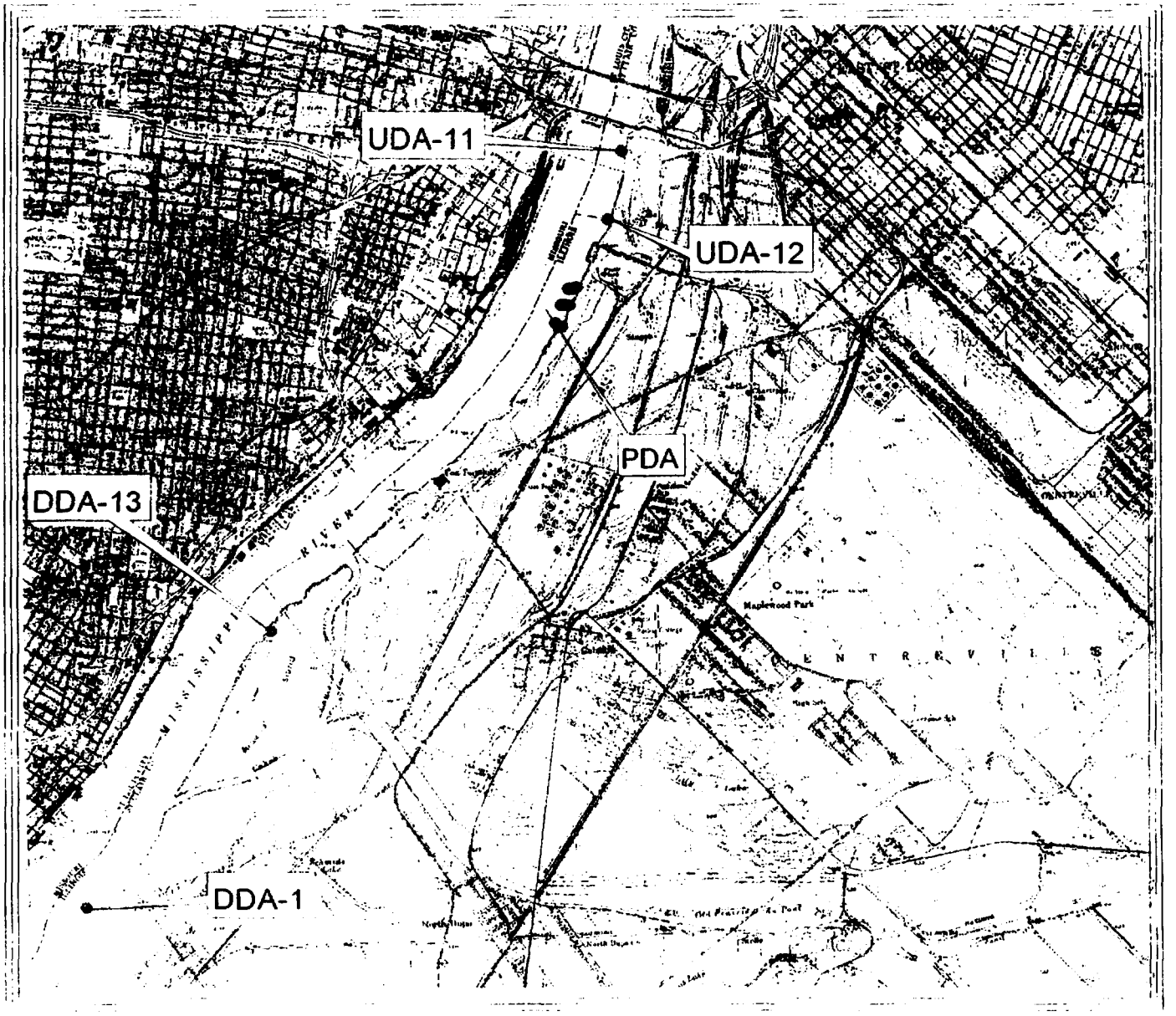
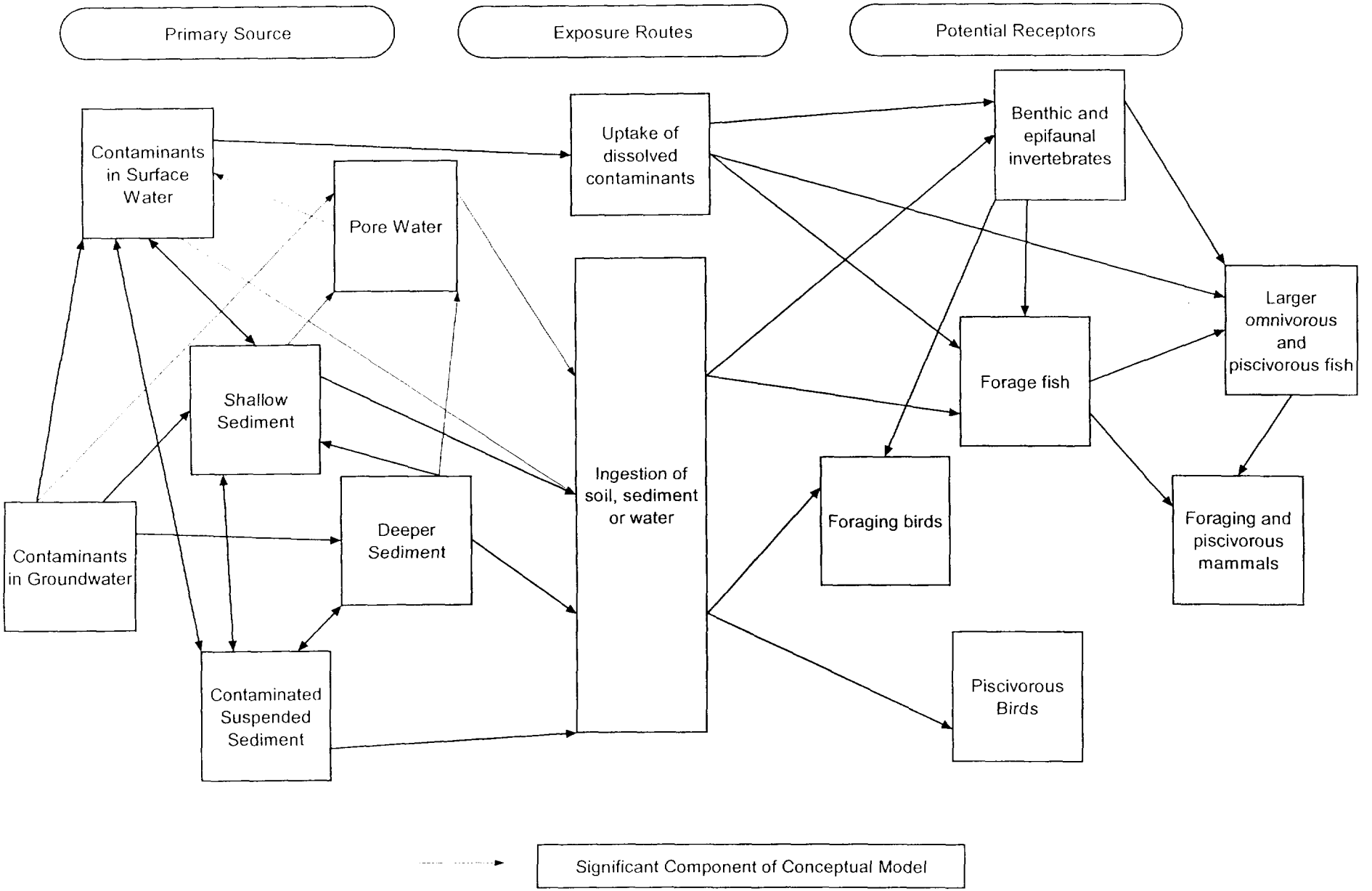


Figure 1. Ecological Conceptual Model
WGK Plant Ecological Risk Assessment
Sauget, Illinois



APPENDIX A

DATA TABLES

CAS Number	Analysis	Name	Units	Site (PDA) Site Maximum	Site (PDA) Site Average	Site (PDA) Frequency of Detection	Downstream (DDA) Reference Downstream Maximum	Downstream (DDA) Reference Downstream Average	Upstream (UDA) Reference Upstream Maximum	Upstream (UDA) Reference Upstream Average
3268-87-9	Dioxin	1,2,3,4,6,7,8,9-OCDD	pg/g	911	165.5	100%	1180	596.2	287	149 4
39001-02-0	Dioxin	1,2,3,4,6,7,8,9-OCDF	pg/g	74.9	10.76	56%	14.3	7.44	6.2	3.288
35822-46-9	Dioxin	1,2,3,4,6,7,8-HpCDD	pg/g	70.8	10.84	100%	31.3	15.75	11.1	5.7
67562-39-4	Dioxin	1,2,3,4,6,7,8-HpCDF	pg/g	10.4	1.515	11%	3	1.55	ND	ND
55673-89-7	Dioxin	1,2,3,4,7,8,9-HpCDF	pg/g	0.79	0.3511	33%	ND	ND	ND	ND
39227-28-6	Dioxin	1,2,3,4,7,8-HxCDD	pg/g	ND	ND	ND	ND	ND	ND	ND
70648-26-9	Dioxin	1,2,3,4,7,8-HxCDF	pg/g	0.62	0.4178	78%	ND	ND	0.27	0.1975
57653-85-7	Dioxin	1,2,3,6,7,8-HxCDD	pg/g	1.2	0.3183	22%	ND	ND	0.37	0.2725
57117-44-9	Dioxin	1,2,3,6,7,8-HxCDF	pg/g	0.38	0.1944	22%	ND	ND	ND	ND
19408-74-3	Dioxin	1,2,3,7,8,9-HxCDD	pg/g	ND	ND	ND	ND	ND	0.35	0.2625
72918-21-9	Dioxin	1,2,3,7,8,9-HxCDF	pg/g	ND	ND	ND	ND	ND	ND	ND
40321-76-4	Dioxin	1,2,3,7,8-PeCDD	pg/g	ND	ND	ND	ND	ND	ND	ND
57117-41-6	Dioxin	1,2,3,7,8-PeCDF	pg/g	0.48	0.2033	11%	ND	ND	ND	ND
60851-34-5	Dioxin	2,3,4,6,7,8-HxCDF	pg/g	0.195	0.1606	11%	ND	ND	ND	ND
57117-31-4	Dioxin	2,3,4,7,8-PeCDF	pg/g	0.18	0.17	11%	ND	ND	ND	ND
1746-01-6	Dioxin	2,3,7,8-TCDD	pg/g	ND	ND	ND	ND	ND	ND	ND
51207-31-9	Dioxin	2,3,7,8-TCDF	pg/g	0.8	0.3006	33%	ND	ND	ND	ND
37871-00-4	Dioxin	Total HpCDD	pg/g	146	22.53	100%	75.3	37.94	23	11.82
38998-75-3	Dioxin	Total HpCDF	pg/g	54.2	7.414	56%	12.9	6.5	5.3	2.713
34465-46-8	Dioxin	Total HxCDD	pg/g	11.7	2.058	44%	7.3	3.7	3.3	1.738
55684-94-1	Dioxin	Total HxCDF	pg/g	10.1	2.031	78%	2.3	1.2	2.4	1.263
36088-22-9	Dioxin	Total PeCDD	pg/g	0.25	0.2194	11%	ND	ND	0.51	0.355
30402-15-4	Dioxin	Total PeCDF	pg/g	2.7	0.6669	33%	ND	ND	0.66	0.3925
41903-57-5	Dioxin	Total TCDD	pg/g	42.8	6.798	44%	3.1	1.625	0.25	0.225
55722-27-5	Dioxin	Total TCDF	pg/g	1.4	0.4883	33%	ND	ND	ND	ND
	Dioxin	TEQ Mammal	pg/g	1.35	0.379		0.462	0.233	0.239	0.145
93-76-5	Herbicides	2,4,5-T	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
93-72-1	Herbicides	2,4,5-TP (Silvex)	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
94-75-7	Herbicides	2,4-D	ug/kg dw	2300	277	22%	ND	ND	ND	ND
94-82-6	Herbicides	2,4-DB	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
75-99-0	Herbicides	Dalapon	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
1918-00-9	Herbicides	Dicamba	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
120-36-5	Herbicides	Dichloroprop	ug/kg dw	1100	165	44%	ND	ND	ND	ND
88-85-7	Herbicides	Dinoseb	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
94-74-6	Herbicides	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
7085-19-0	Herbicides	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	ug/kg dw	160000	19500	56%	ND	ND	ND	ND
87-86-5	Herbicides	Pentachlorophenol	ug/kg dw	45	13.7	11%	1.6	7.8	1.55	8.03
2051-24-3	PCBs	Decachlorobiphenyl	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
C-DICHLOROBI	PCBs	Dichlorobiphenyl	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
C-HEPTACHLOR	PCBs	Heptachlorobiphenyl	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
C-HEXACHLORO	PCBs	Hexachlorobiphenyl	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
C-MONOCHLORO	PCBs	Monochlorobiphenyl	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
C-NONACHLORO	PCBs	Nonachlorobiphenyl	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
C-OCTA-BIPHE	PCBs	Octachlorobiphenyl	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
C-PENTBIPHEN	PCBs	Pentachlorobiphenyl	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
C-TETRACHLOR	PCBs	Tetrachlorobiphenyl	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
C-TOTAL-PCB	PCBs	Total Polychlorinated Biphenyls	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
C-TRICHLOROB	PCBs	Trichlorobiphenyl	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
72-54-8	Pesticides	4,4'-DDD	ug/kg dw	1.6	2.04	11%	ND	ND	ND	ND
72-55-9	Pesticides	4,4'-DDE	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
50-29-3	Pesticides	4,4'-DDT*	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
309-00-2	Pesticides	Aldrin	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
319-84-6	Pesticides	alpha-BHC	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
5103-71-9	Pesticides	alpha-Chlordane**	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
319-85-7	Pesticides	beta-BHC	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
319-86-8	Pesticides	delta-BHC	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
60-57-1	Pesticides	Dieldrin	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
959-98-8	Pesticides	Endosulfan I	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
33213-65-9	Pesticides	Endosulfan II	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
1031-07-8	Pesticides	Endosulfan sulfate	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
72-20-8	Pesticides	Endrin	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
7421-93-4	Pesticides	Endrin aldehyde	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
53494-70-5	Pesticides	Endrin ketone	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
58-89-9	Pesticides	gamma-BHC (Lindane)	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
5103-74-2	Pesticides	gamma-Chlordane**	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
76-44-8	Pesticides	Heptachlor	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
1024-57-3	Pesticides	Heptachlor epoxide	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
72-43-5	Pesticides	Methoxychlor	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
8001-35-2	Pesticides	Toxaphene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
87-61-6	SVOCs	1,2,3-Trichlorobenzene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
120-82-1	SVOCs	1,2,4-Trichlorobenzene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
95-50-1	SVOCs	1,2-Dichlorobenzene	ug/kg dw	110	100	22%	ND	ND	ND	ND
108-70-3	SVOCs	1,3,5-Trichlorobenzene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
541-73-1	SVOCs	1,3-Dichlorobenzene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
106-46-7	SVOCs	1,4-Dichlorobenzene	ug/kg dw	81.5	106	11%	ND	ND	ND	ND

CAS Number	Analysis	Name	Units	Site (PDA) Site Maximum	Site (PDA) Site Average	Site (PDA) Frequency of Detection	Downstream (DDA) Reference Downstream Maximum	Downstream (DDA) Reference Downstream Average	Upstream (UDA) Reference Upstream Maximum	Upstream (UDA) Reference Upstream Average
108-60-1	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
15950-66-0	SVOCs	2,3,4-Trichlorophenol	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
933-78-8	SVOCs	2,3,5-Trichlorophenol	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
933-7-5	SVOCs	2,3,6-Trichlorophenol	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
95-95-4	SVOCs	2,4,5-Trichlorophenol	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
88-06-2	SVOCs	2,4,6-Trichlorophenol	ug/kg dw	470	144	22%	ND	ND	ND	ND
120-83-2	SVOCs	2,4-Dichlorophenol	ug/kg dw	1000	208	22%	ND	ND	ND	ND
105-67-9	SVOCs	2,4-Dimethylphenol	ug/kg dw	80	98.1	22%	ND	ND	ND	ND
51-28-5	SVOCs	2,4-Dinitrophenol	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
121-14-2	SVOCs	2,4-Dinitrotoluene	ug/kg dw	750	195	22%	ND	ND	ND	ND
606-20-2	SVOCs	2,6-Dinitrotoluene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
91-58-7	SVOCs	2-Chloronaphthalene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
95-57-8	SVOCs	2-Chlorophenol	ug/kg dw	360	137	11%	ND	ND	ND	ND
91-57-6	SVOCs	2-Methylnaphthalene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
95-48-7	SVOCs	2-Methylphenol (o-Cresol)	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
88-74-4	SVOCs	2-Nitroaniline	ug/kg dw	76	471	11%	ND	ND	ND	ND
88-75-5	SVOCs	2-Nitrophenol	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
91-94-1	SVOCs	3,3'-Dichlorobenzidine	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
609-19-8	SVOCs	3,4,5-Trichlorophenol	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
106-44-5	SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/kg dw	800	192	22%	ND	ND	ND	ND
99-09-2	SVOCs	3-Nitroaniline	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
534-52-1	SVOCs	4,6-Dinitro-2-methylphenol	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
101-55-3	SVOCs	4-Bromophenylphenyl ether	ug/kg dw	96.5	108	11%	ND	ND	ND	ND
59-50-7	SVOCs	4-Chloro-3-methylphenol	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
106-47-8	SVOCs	4-Chloroaniline	ug/kg dw	4800	1080	67%	ND	ND	ND	ND
7005-72-3	SVOCs	4-Chlorophenylphenyl ether	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
100-01-6	SVOCs	4-Nitroaniline	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
100-02-7	SVOCs	4-Nitrophenol	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
83-32-9	SVOCs	Acenaphthene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
208-96-8	SVOCs	Acenaphthylene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
120-12-7	SVOCs	Anthracene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
56-55-3	SVOCs	Benzo(a)anthracene	ug/kg dw	ND	ND	ND	46	75.5	ND	ND
50-32-8	SVOCs	Benzo(a)pyrene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
205-99-2	SVOCs	Benzo(b)fluoranthene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
191-24-2	SVOCs	Benzo(g,h,i)perylene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
207-08-9	SVOCs	Benzo(k)fluoranthene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
111-91-1	SVOCs	bis(2-Chloroethoxy)methane	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
111-44-4	SVOCs	bis(2-Chloroethyl)ether	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/kg dw	ND	ND	ND	ND	ND	110	109
85-68-7	SVOCs	Butylbenzylphthalate	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
86-74-8	SVOCs	Carbazole	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
218-01-9	SVOCs	Chrysene	ug/kg dw	ND	ND	ND	49	77	ND	ND
84-74-2	SVOCs	Di-n-butylphthalate	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
117-84-0	SVOCs	Di-n-octylphthalate	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
53-70-3	SVOCs	Dibenzo(a,h)anthracene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
132-64-9	SVOCs	Dibenzofuran	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
84-66-2	SVOCs	Diethylphthalate	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
131-11-3	SVOCs	Dimethylphthalate	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
206-44-0	SVOCs	Fluoranthene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
86-73-7	SVOCs	Fluorene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
118-74-1	SVOCs	Hexachlorobenzene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
87-68-3	SVOCs	Hexachlorobutadiene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
77-47-4	SVOCs	Hexachlorocyclopentadiene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
67-72-1	SVOCs	Hexachloroethane	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
193-39-5	SVOCs	Indeno(1,2,3-cd)pyrene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
78-59-1	SVOCs	Isophorone	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
621-64-7	SVOCs	N-Nitroso-di-n-propylamine	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
86-30-6	SVOCs	N-Nitrosodiphenylamine	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
91-20-3	SVOCs	Naphthalene	ug/kg dw	190	118	11%	ND	ND	ND	ND
98-95-3	SVOCs	Nitrobenzene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
85-01-8	SVOCs	Phenanthrene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
108-95-2	SVOCs	Phenol	ug/kg dw	5600	719	11%	ND	ND	ND	ND
129-00-0	SVOCs	Pyrene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
71-55-6	VOCs	1,1,1-Trichloroethane	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
79-34-5	VOCs	1,1,2,2-Tetrachloroethane	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
79-00-5	VOCs	1,1,2-Trichloroethane	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
75-34-3	VOCs	1,1-Dichloroethane	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
75-35-4	VOCs	1,1-Dichloroethene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
107-06-2	VOCs	1,2-Dichloroethane	ug/kg dw	250	51.1	33%	ND	ND	ND	ND
78-87-5	VOCs	1,2-Dichloropropane	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
78-93-3	VOCs	2-Butanone (MEK)	ug/kg dw	91	18.6	33%	ND	ND	23	12.9
591-78-6	VOCs	2-Hexanone	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
108-10-1	VOCs	4-Methyl-2-pentanone (MIBK)	ug/kg dw	150	35.2	56%	ND	ND	ND	ND
67-64-1	VOCs	Acetone	ug/kg dw	3000	416	67%	41	22.9	130	68.5
71-43-2	VOCs	Benzene	ug/kg dw	460	98.3	89%	ND	ND	ND	ND
75-27-4	VOCs	Bromodichloromethane	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
75-25-2	VOCs	Bromoform	ug/kg dw	ND	ND	ND	ND	ND	ND	ND

CAS Number	Analysis	Name	Units	Site (PDA)			Downstream (DDA) Reference		Upstream (UDA) Reference	
				Site Maximum	Site Average	Frequency of Detection	Downstream Maximum	Downstream Average	Upstream Maximum	Upstream Average
74-83-9	VOCs	Bromomethane (Methyl bromide)	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
75-15-0	VOCs	Carbon disulfide	ug/kg dw	3.3	0.813	11%	ND	ND	ND	ND
56-23-5	VOCs	Carbon tetrachloride	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
108-90-7	VOCs	Chlorobenzene	ug/kg dw	7200	1950	89%	ND	ND	ND	ND
75-00-3	VOCs	Chloroethane	ug/kg dw	1.9	0.729	11%	ND	ND	ND	ND
67-66-3	VOCs	Chloroform	ug/kg dw	9.7	1.6	11%	ND	ND	ND	ND
74-87-3	VOCs	Chloromethane	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
156-59-2	VOCs	cis-1,2-Dichloroethene	ug/kg dw	5.8	1.65	44%	ND	ND	ND	ND
10061-01-5	VOCs	cis-1,3-Dichloropropene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
124-48-1	VOCs	Dibromochloromethane	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
100-41-4	VOCs	Ethylbenzene	ug/kg dw	82	24.8	67%	ND	ND	ND	ND
108-38-3	VOCs	m&p-Xylene	ug/kg dw	630	122	67%	ND	ND	ND	ND
75-09-2	VOCs	Methylene chloride (Dichloromethane)	ug/kg dw	17	3.32	22%	ND	ND	ND	ND
100-42-5	VOCs	Styrene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
127-18-4	VOCs	Tetrachloroethene	ug/kg dw	24	5.13	22%	ND	ND	ND	ND
108-88-3	VOCs	Toluene	ug/kg dw	7800	998	67%	1.8	1.1	5.6	3.08
156-60-5	VOCs	trans-1,2-Dichloroethene	ug/kg dw	0.91	0.619	11%	ND	ND	ND	ND
10061-02-6	VOCs	trans-1,3-Dichloropropene	ug/kg dw	ND	ND	ND	ND	ND	ND	ND
79-01-6	VOCs	Trichloroethene	ug/kg dw	42	5.94	22%	ND	ND	ND	ND
75-01-4	VOCs	Vinyl chloride	ug/kg dw	4	0.988	22%	ND	ND	ND	ND
1330-20-7	VOCs	Xylenes, Total	ug/kg dw	710	142	67%	ND	ND	ND	ND

Note:
ND = not detected

Appendix A-2. Summary Statistics - Surface Water
W.G. Krummrich Site
Sauget, Illinois

Internal Review Draft v1.0

CAS Number	Analysis	Name	Units	Site (PDA) Site Maximum	Site (PDA) Site Average	Site (PDA) Frequency of Detection	Downstream (DDA) Reference Downstream Maximum	Downstream (DDA) Reference Downstream Average	Upstream (UDA) Reference Upstream Maximum	Upstream (UDA) Reference Upstream Average
3268-87-9	Dioxin	1,2,3,4,6,7,8,9-OCDD	pg/L	169	157.3	100.0%	222	220.5	195	182.3
39001-02-0	Dioxin	1,2,3,4,6,7,8,9-OCDF	pg/L	5.2	4.014	11.1%	ND	ND	ND	ND
35822-46-9	Dioxin	1,2,3,4,6,7,8-HpCDD	pg/L	7	4.603	44.4%	ND	ND	ND	ND
67562-39-4	Dioxin	1,2,3,4,6,7,8-HpCDF	pg/L	ND	ND	0.0%	ND	ND	ND	ND
55673-89-7	Dioxin	1,2,3,4,7,8,9-HpCDF	pg/L	ND	ND	0.0%	ND	ND	ND	ND
39227-28-6	Dioxin	1,2,3,4,7,8-HxCDD	pg/L	ND	ND	0.0%	ND	ND	ND	ND
70648-26-9	Dioxin	1,2,3,4,7,8-HxCDF	pg/L	2.2	1.297	11.1%	ND	ND	ND	ND
57653-85-7	Dioxin	1,2,3,6,7,8-HxCDD	pg/L	ND	ND	0.0%	ND	ND	ND	ND
57117-44-9	Dioxin	1,2,3,6,7,8-HxCDF	pg/L	ND	ND	0.0%	ND	ND	ND	ND
19408-74-3	Dioxin	1,2,3,7,8,9-HxCDD	pg/L	ND	ND	0.0%	ND	ND	ND	ND
72918-21-9	Dioxin	1,2,3,7,8,9-HxCDF	pg/L	ND	ND	0.0%	ND	ND	ND	ND
40321-76-4	Dioxin	1,2,3,7,8-PeCDD	pg/L	ND	ND	0.0%	ND	ND	ND	ND
57117-41-6	Dioxin	1,2,3,7,8-PeCDF	pg/L	ND	ND	0.0%	ND	ND	ND	ND
60851-34-5	Dioxin	2,3,4,6,7,8-HxCDF	pg/L	ND	ND	0.0%	ND	ND	ND	ND
57117-31-4	Dioxin	2,3,4,7,8-PeCDF	pg/L	ND	ND	0.0%	ND	ND	ND	ND
1746-01-6	Dioxin	2,3,7,8-TCDD	pg/L	ND	ND	0.0%	ND	ND	ND	ND
51207-31-9	Dioxin	2,3,7,8-TCDF	pg/L	ND	ND	0.0%	ND	ND	ND	ND
37871-00-4	Dioxin	Total HpCDD	pg/L	12.9	8.397	66.7%	9.4	8.95	ND	ND
38998-75-3	Dioxin	Total HpCDF	pg/L	ND	ND	0.0%	ND	ND	ND	ND
34465-46-8	Dioxin	Total HxCDD	pg/L	ND	ND	0.0%	ND	ND	ND	ND
55684-94-1	Dioxin	Total HxCDF	pg/L	2.2	1.353	11.1%	ND	ND	ND	ND
36088-22-9	Dioxin	Total PeCDD	pg/L	ND	ND	0.0%	ND	ND	ND	ND
30402-15-4	Dioxin	Total PeCDF	pg/L	ND	ND	0.0%	ND	ND	ND	ND
41903-57-5	Dioxin	Total TCDD	pg/L	ND	ND	0.0%	ND	ND	ND	ND
55722-27-5	Dioxin	Total TCDF	pg/L	ND	ND	0.0%	ND	ND	ND	ND
	Dioxin	TEQ Mammal	pg/L	0.307	0.192		0.0222	0.0221	0.0195	0.0182
93-76-5	Herbicides	2,4,5-T	ug/l	ND	ND	0.0%	0.11	0.18	ND	ND
93-72-1	Herbicides	2,4,5-TP (Silvex)	ug/l	0.14	0.238	11.1%	ND	ND	ND	ND
94-75-7	Herbicides	2,4-D	ug/l	10	3.08	55.6%	0.63	0.48	ND	ND
94-82-6	Herbicides	2,4-DB	ug/l	ND	ND	0.0%	ND	ND	ND	ND
75-99-0	Herbicides	Dalapon	ug/l	ND	ND	0.0%	ND	ND	ND	ND
1918-00-9	Herbicides	Dicamba	ug/l	0.11	0.546	11.1%	ND	ND	ND	ND
120-36-5	Herbicides	Dichloroprop	ug/l	1.85	2.59	22.2%	ND	ND	ND	ND
88-85-7	Herbicides	Dinoseb	ug/l	ND	ND	0.0%	ND	ND	ND	ND
94-74-6	Herbicides	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	ug/l	ND	ND	0.0%	ND	ND	ND	ND
7085-19-0	Herbicides	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	ug/l	ND	ND	0.0%	ND	ND	ND	ND
87-86-5	Herbicides	Pentachlorophenol (at pH 7.8)	ug/l	0.87	0.519	33.3%	ND	ND	ND	ND
2051-24-3	PCBs	Decachlorobiphenyl	ug/l	ND	ND	0.0%	ND	ND	ND	ND
C-DICHLOROBI	PCBs	Dichlorobiphenyl	ug/l	ND	ND	0.0%	ND	ND	ND	ND
C-HEPTACHLOR	PCBs	Heptachlorobiphenyl	ug/l	ND	ND	0.0%	ND	ND	ND	ND
C-HEXACHLORO	PCBs	Hexachlorobiphenyl	ug/l	ND	ND	0.0%	ND	ND	ND	ND
C-MONOCHLORO	PCBs	Monochlorobiphenyl	ug/l	ND	ND	0.0%	ND	ND	ND	ND
C-NONACHLORO	PCBs	Nonachlorobiphenyl	ug/l	ND	ND	0.0%	ND	ND	ND	ND
C-OCTA-BIPHE	PCBs	Octachlorobiphenyl	ug/l	ND	ND	0.0%	ND	ND	ND	ND
C-PENTBIPHEN	PCBs	Pentachlorobiphenyl	ug/l	ND	ND	0.0%	ND	ND	ND	ND
C-TETRACHLOR	PCBs	Tetrachlorobiphenyl	ug/l	ND	ND	0.0%	ND	ND	ND	ND
C-TOTAL-PCB	PCBs	Total Polychlorinated Biphenyls	ug/l	ND	ND	0.0%	ND	ND	ND	ND
C-TRICHLOROB	PCBs	Trichlorobiphenyl	ug/l	ND	ND	0.0%	ND	ND	ND	ND
72-54-8	Pesticides	4,4'-DDD	ug/l	ND	ND	0.0%	ND	ND	ND	ND
72-55-9	Pesticides	4,4'-DDE	ug/l	ND	ND	0.0%	ND	ND	ND	ND
50-29-3	Pesticides	4,4'-DDT	ug/l	ND	ND	0.0%	ND	ND	ND	ND
309-00-2	Pesticides	Aldrin	ug/l	ND	ND	0.0%	ND	ND	ND	ND
319-84-6	Pesticides	alpha-BHC	ug/l	ND	ND	0.0%	ND	ND	ND	ND
5103-71-9	Pesticides	alpha-Chlordane	ug/l	ND	ND	0.0%	ND	ND	ND	ND
319-85-7	Pesticides	beta-BHC	ug/l	ND	ND	0.0%	ND	ND	ND	ND
319-86-8	Pesticides	delta-BHC	ug/l	ND	ND	0.0%	ND	ND	ND	ND
60-57-1	Pesticides	Dieldrin	ug/l	ND	ND	0.0%	ND	ND	ND	ND
959-98-8	Pesticides	Endosulfan I	ug/l	ND	ND	0.0%	ND	ND	ND	ND
33213-65-9	Pesticides	Endosulfan II	ug/l	ND	ND	0.0%	ND	ND	ND	ND
1031-07-8	Pesticides	Endosulfan sulfate	ug/l	ND	ND	0.0%	ND	ND	ND	ND
72-20-8	Pesticides	Endrin	ug/l	ND	ND	0.0%	ND	ND	ND	ND
7421-93-4	Pesticides	Endrin aldehyde	ug/l	ND	ND	0.0%	ND	ND	ND	ND
53494-70-5	Pesticides	Endrin ketone	ug/l	ND	ND	0.0%	ND	ND	ND	ND
58-89-9	Pesticides	gamma-BHC (Lindane)	ug/l	ND	ND	0.0%	ND	ND	ND	ND
5103-74-2	Pesticides	gamma-Chlordane	ug/l	ND	ND	0.0%	ND	ND	ND	ND
76-44-8	Pesticides	Heptachlor	ug/l	ND	ND	0.0%	ND	ND	ND	ND
1024-57-3	Pesticides	Heptachlor epoxide	ug/l	ND	ND	0.0%	ND	ND	ND	ND
72-43-5	Pesticides	Methoxychlor	ug/l	ND	ND	0.0%	ND	ND	ND	ND
8001-35-2	Pesticides	Toxaphene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
87-61-6	SVOCs	1,2,3-Trichlorobenzene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
120-82-1	SVOCs	1,2,4-Trichlorobenzene	ug/l	1.525	2.25	22.2%	ND	ND	ND	ND
95-50-1	SVOCs	1,2-Dichlorobenzene	ug/l	13.25	4.82	33.3%	ND	ND	ND	ND
108-70-3	SVOCs	1,3,5-Trichlorobenzene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
541-73-1	SVOCs	1,3-Dichlorobenzene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
106-46-7	SVOCs	1,4-Dichlorobenzene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
108-60-1	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/l	ND	ND	0.0%	ND	ND	ND	ND

CAS Number	Analysis	Name	Units	Site (PDA) Site Maximum	Site (PDA) Site Average	Site (PDA) Frequency of Detection	Downstream (DDA) Reference Downstream Maximum	Downstream (DDA) Reference Downstream Average	Upstream (UDA) Reference Upstream Maximum	Upstream (UDA) Reference Upstream Average
15950-66-0	SVOCs	2,3,4-Trichlorophenol	ug/l	ND	ND	0.0%	ND	ND	ND	ND
933-78-8	SVOCs	2,3,5-Trichlorophenol	ug/l	ND	ND	0.0%	ND	ND	ND	ND
933-7-5	SVOCs	2,3,6-Trichlorophenol	ug/l	ND	ND	0.0%	ND	ND	ND	ND
95-95-4	SVOCs	2,4,5-Trichlorophenol	ug/l	ND	ND	0.0%	ND	ND	ND	ND
88-06-2	SVOCs	2,4,6-Trichlorophenol	ug/l	8	3.52	44.4%	ND	ND	ND	ND
120-83-2	SVOCs	2,4-Dichlorophenol	ug/l	31	9.84	44.4%	1	1.75	ND	ND
105-67-9	SVOCs	2,4-Dimethylphenol	ug/l	3.7	2.52	33.3%	ND	ND	ND	ND
51-28-5	SVOCs	2,4-Dinitrophenol	ug/l	ND	ND	0.0%	ND	ND	ND	ND
121-14-2	SVOCs	2,4-Dinitrotoluene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
606-20-2	SVOCs	2,6-Dinitrotoluene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
91-58-7	SVOCs	2-Chloronaphthalene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
95-57-8	SVOCs	2-Chlorophenol	ug/l	20	6.9	44.4%	0.36	1.43	ND	ND
91-57-6	SVOCs	2-Methylnaphthalene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
95-48-7	SVOCs	2-Methylphenol (o-Cresol)	ug/l	ND	ND	0.0%	ND	ND	ND	ND
88-74-4	SVOCs	2-Nitroaniline	ug/l	ND	ND	0.0%	ND	ND	ND	ND
88-75-5	SVOCs	2-Nitrophenol	ug/l	ND	ND	0.0%	ND	ND	ND	ND
91-94-1	SVOCs	3,3'-Dichlorobenzidine	ug/l	ND	ND	0.0%	ND	ND	ND	ND
609-19-8	SVOCs	3,4,5-Trichlorophenol	ug/l	ND	ND	0.0%	ND	ND	ND	ND
106-44-5	SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/l	11	3.93	33.3%	ND	ND	ND	ND
99-09-2	SVOCs	3-Nitroaniline	ug/l	ND	ND	0.0%	ND	ND	ND	ND
534-52-1	SVOCs	4,6-Dinitro-2-methylphenol	ug/l	ND	ND	0.0%	ND	ND	ND	ND
101-55-3	SVOCs	4-Bromophenylphenyl ether	ug/l	ND	ND	0.0%	ND	ND	ND	ND
59-50-7	SVOCs	4-Chloro-3-methylphenol	ug/l	ND	ND	0.0%	ND	ND	ND	ND
106-47-8	SVOCs	4-Chloroaniline	ug/l	45	14.1	44.4%	1.6	3.3	ND	ND
7005-72-3	SVOCs	4-Chlorophenylphenyl ether	ug/l	ND	ND	0.0%	ND	ND	ND	ND
100-01-6	SVOCs	4-Nitroaniline	ug/l	ND	ND	0.0%	ND	ND	ND	ND
100-02-7	SVOCs	4-Nitrophenol	ug/l	ND	ND	0.0%	ND	ND	ND	ND
83-32-9	SVOCs	Acenaphthene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
208-96-8	SVOCs	Acenaphthylene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
120-12-7	SVOCs	Anthracene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
56-55-3	SVOCs	Benzo(a)anthracene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
50-32-8	SVOCs	Benzo(a)pyrene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
205-99-2	SVOCs	Benzo(b)fluoranthene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
191-24-2	SVOCs	Benzo(g,h,i)perylene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
207-08-9	SVOCs	Benzo(k)fluoranthene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
111-91-1	SVOCs	bis(2-Chloroethoxy)methane	ug/l	ND	ND	0.0%	ND	ND	ND	ND
111-44-4	SVOCs	bis(2-Chloroethyl)ether	ug/l	ND	ND	0.0%	ND	ND	ND	ND
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/l	2.2	2.56	11.1%	ND	ND	ND	ND
85-68-7	SVOCs	Butylbenzylphthalate	ug/l	ND	ND	0.0%	ND	ND	ND	ND
86-74-8	SVOCs	Carbazole	ug/l	ND	ND	0.0%	ND	ND	ND	ND
218-01-9	SVOCs	Chrysene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
84-74-2	SVOCs	Di-n-butylphthalate	ug/l	0.34	2.11	22.2%	ND	ND	ND	ND
117-84-0	SVOCs	Di-n-octylphthalate	ug/l	ND	ND	0.0%	ND	ND	ND	ND
53-70-3	SVOCs	Dibenzo(a,h)anthracene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
132-64-9	SVOCs	Dibenzofuran	ug/l	ND	ND	0.0%	ND	ND	ND	ND
84-66-2	SVOCs	Diethylphthalate	ug/l	ND	ND	0.0%	ND	ND	ND	ND
131-11-3	SVOCs	Dimethylphthalate	ug/l	ND	ND	0.0%	ND	ND	ND	ND
206-44-0	SVOCs	Fluoranthene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
86-73-7	SVOCs	Fluorene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
118-74-1	SVOCs	Hexachlorobenzene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
87-68-3	SVOCs	Hexachlorobutadiene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
77-47-4	SVOCs	Hexachlorocyclopentadiene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
67-72-1	SVOCs	Hexachloroethane	ug/l	ND	ND	0.0%	ND	ND	ND	ND
193-39-5	SVOCs	Indeno(1,2,3-cd)pyrene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
78-59-1	SVOCs	Isophorone	ug/l	ND	ND	0.0%	ND	ND	ND	ND
621-64-7	SVOCs	N-Nitroso-di-n-propylamine	ug/l	ND	ND	0.0%	ND	ND	ND	ND
86-30-6	SVOCs	N-Nitrosodiphenylamine	ug/l	ND	ND	0.0%	ND	ND	ND	ND
91-20-3	SVOCs	Naphthalene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
98-95-3	SVOCs	Nitrobenzene	ug/l	0.93	2.2	22.2%	ND	ND	ND	ND
85-01-8	SVOCs	Phenanthrene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
108-95-2	SVOCs	Phenol	ug/l	15	3.89	11.1%	ND	ND	ND	ND
129-00-0	SVOCs	Pyrene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
71-55-6	VOCs	1,1,1-Trichloroethane	ug/l	ND	ND	0.0%	ND	ND	ND	ND
79-34-5	VOCs	1,1,2,2-Tetrachloroethane	ug/l	ND	ND	0.0%	ND	ND	ND	ND
79-00-5	VOCs	1,1,2-Trichloroethane	ug/l	ND	ND	0.0%	ND	ND	ND	ND
75-34-3	VOCs	1,1-Dichloroethane	ug/l	ND	ND	0.0%	ND	ND	ND	ND
75-35-4	VOCs	1,1-Dichloroethene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
107-06-2	VOCs	1,2-Dichloroethane	ug/l	0.775	0.872	33.3%	ND	ND	ND	ND
78-87-5	VOCs	1,2-Dichloropropane	ug/l	ND	ND	0.0%	ND	ND	ND	ND
78-93-3	VOCs	2-Butanone (MEK)	ug/l	ND	ND	0.0%	ND	ND	9	7
591-78-6	VOCs	2-Hexanone	ug/l	ND	ND	0.0%	ND	ND	ND	ND
108-10-1	VOCs	4-Methyl-2-pentanone (MIBK)	ug/l	2.2	3.91	33.3%	ND	ND	ND	ND
67-64-1	VOCs	Acetone	ug/l	ND	ND	0.0%	ND	ND	ND	ND
71-43-2	VOCs	Benzene	ug/l	1.8	1.17	22.2%	0.24	0.195	0.785	0.8925
75-27-4	VOCs	Bromodichloromethane	ug/l	ND	ND	0.0%	ND	ND	ND	ND
75-25-2	VOCs	Bromoform	ug/l	ND	ND	0.0%	ND	ND	ND	ND
74-83-9	VOCs	Bromomethane (Methyl bromide)	ug/l	ND	ND	0.0%	ND	ND	ND	ND
75-15-0	VOCs	Carbon disulfide	ug/l	ND	ND	0.0%	ND	ND	ND	ND

Appendix A-2. Summary Statistics - Surface Water
W.G. Krummrich Site
Sauget, Illinois

CAS Number	Analysis	Name	Units	Site (PDA) Site Maximum	Site (PDA) Site Average	Site (PDA) Frequency of Detection	Downstream (DDA) Reference Downstream Maximum	Downstream (DDA) Reference Downstream Average	Upstream (UDA) Reference Upstream Maximum	Upstream (UDA) Reference Upstream Average
56-23-5	VOCs	Carbon tetrachloride	ug/l	ND	ND	0.0%	ND	ND	0.73	0.865
108-90-7	VOCs	Chlorobenzene	ug/l	24	7.59	66.7%	2.3	1.75	0.775	0.8875
75-00-3	VOCs	Chloroethane	ug/l	ND	ND	0.0%	ND	ND	ND	ND
67-66-3	VOCs	Chloroform	ug/l	ND	ND	0.0%	ND	ND	ND	ND
74-87-3	VOCs	Chloromethane	ug/l	ND	ND	0.0%	ND	ND	ND	ND
156-59-2	VOCs	cis-1,2-Dichloroethene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
10061-01-5	VOCs	cis-1,3-Dichloropropene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
124-48-1	VOCs	Dibromochloromethane	ug/l	ND	ND	0.0%	ND	ND	ND	ND
100-41-4	VOCs	Ethylbenzene	ug/l	0.38	0.688	44.4%	ND	ND	ND	ND
108-38-3	VOCs	m&p-Xylene	ug/l	2.4	1.09	44.4%	ND	ND	ND	ND
75-09-2	VOCs	Methylene chloride (Dichloromethane)	ug/l	ND	ND	0.0%	ND	ND	ND	ND
100-42-5	VOCs	Styrene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
127-18-4	VOCs	Tetrachloroethene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
108-88-3	VOCs	Toluene	ug/l	1.7	1.18	33.3%	0.4	0.7	ND	ND
156-60-5	VOCs	trans-1,2-Dichloroethene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
10061-02-6	VOCs	trans-1,3-Dichloropropene	ug/l	ND	ND	0.0%	ND	ND	ND	ND
79-01-6	VOCs	Trichloroethene	ug/l	0.3	0.922	11.1%	ND	ND	ND	ND
75-01-4	VOCs	Vinyl chloride	ug/l	ND	ND	0.0%	ND	ND	0.675	0.8375
1330-20-7	VOCs	Xylenes, Total	ug/l	2.7	1.15	44.4%	ND	ND	ND	ND

Note:
ND = not detected

Channel Catfish, Drum, Shad Whole Body				Site			Downstream (DDA) Reference		Upstream (UDA) Reference	
CAS	Analysis	Name	Units	Site Maximum	Site Average	Frequency of Detection	Downstream Maximum	Downstream Average	Upstream Maximum	Upstream Average
% Lipids		% Lipids	%	17	9.667	100.00%	14	6.667	10	8.333
3268-87-9	Dioxin	1,2,3,4,6,7,8,9-OCDD	pg/g	189	29.64	100.00%	119	44.93	79.7	30.87
39001-02-0	Dioxin	1,2,3,4,6,7,8,9-OCDF	pg/g	4.3	0.6817	11.11%	2.7	0.9733	ND	ND
35822-46-9	Dioxin	1,2,3,4,6,7,8-HpCDD	pg/g	7.1	2.91	100.00%	4.3	3.073	8.8	4.12
67562-39-4	Dioxin	1,2,3,4,6,7,8-HpCDF	pg/g	1	0.1367	11.11%	ND	ND	0.59	0.2167
55673-89-7	Dioxin	1,2,3,4,7,8,9-HpCDF	pg/g	ND	ND	0.00%	ND	ND	ND	ND
39227-28-6	Dioxin	1,2,3,4,7,8-HxCDD	pg/g	0.3	0.1411	44.44%	0.58	0.22	0.33	0.2217
70648-26-9	Dioxin	1,2,3,4,7,8-HxCDF	pg/g	0.84	0.3511	55.56%	0.71	0.3217	0.85	0.5933
57653-85-7	Dioxin	1,2,3,6,7,8-HxCDD	pg/g	1.2	0.8467	100.00%	2	0.9033	1.8	1.153
57117-44-9	Dioxin	1,2,3,6,7,8-HxCDF	pg/g	0.22	0.1067	44.44%	0.34	0.1333	0.26	0.1633
19408-74-3	Dioxin	1,2,3,7,8,9-HxCDD	pg/g	0.58	0.3989	100.00%	0.78	0.4133	1.1	0.6033
72918-21-9	Dioxin	1,2,3,7,8,9-HxCDF	pg/g	ND	ND	0.00%	ND	ND	ND	ND
40321-76-4	Dioxin	1,2,3,7,8-PeCDD	pg/g	0.64	0.3328	77.78%	1.2	0.4883	1	0.5467
57117-41-6	Dioxin	1,2,3,7,8-PeCDF	pg/g	0.43	0.07389	11.11%	ND	ND	ND	ND
60851-34-5	Dioxin	2,3,4,6,7,8-HxCDF	pg/g	0.48	0.1933	66.67%	0.86	0.4133	0.3	0.215
57117-31-4	Dioxin	2,3,4,7,8-PeCDF	pg/g	0.64	0.3161	77.78%	1	0.41	0.59	0.2883
1746-01-6	Dioxin	2,3,7,8-TCDD	pg/g	2.4	0.5794	66.67%	0.96	0.4417	1.1	0.6
51207-31-9	Dioxin	2,3,7,8-TCDF	pg/g	5.7	1.404	100.00%	1	0.62	2.6	1.317
37871-00-4	Dioxin	Total HpCDD	pg/g	13.5	4.011	100.00%	8.5	4.617	12.4	5.5
38998-75-3	Dioxin	Total HpCDF	pg/g	13.6	3.664	88.89%	8.5	5.633	4.5	3.2
34465-46-8	Dioxin	Total HxCDD	pg/g	3.3	2.072	77.78%	3.9	1.677	4.9	2.717
55684-94-1	Dioxin	Total HxCDF	pg/g	81.6	20.5	100.00%	42.1	30.9	21.2	19.5
36088-22-9	Dioxin	Total PeCDD	pg/g	7.5	2.989	100.00%	3.2	2.3	3	2.367
30402-15-4	Dioxin	Total PeCDF	pg/g	124	43.07	100.00%	93.9	60.2	125	74.07
41903-57-5	Dioxin	Total TCDD	pg/g	7.2	2.458	77.78%	1.4	0.6917	1.5	0.9567
55722-27-5	Dioxin	Total TCDF	pg/g	187	77.36	100.00%	216	124.7	121	90.73
93-76-5	Herbicides	2,4,5-T	ug/kg	13	5.74	33.33%	ND	ND	7.1	5.13
93-72-1	Herbicides	2,4,5-TP (Silvex)	ug/kg	8.7	4.87	55.56%	6.9	4.98	7.5	5.27
94-75-7	Herbicides	2,4-D	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
94-82-6	Herbicides	2,4-DB	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
75-99-0	Herbicides	Dalapon	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
1918-00-9	Herbicides	Dicamba	ug/kg	ND	ND	0.00%	ND	ND	6.5	7.23
120-36-5	Herbicides	Dichloroprop	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
88-85-7	Herbicides	Dinoseb	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
94-74-6	Herbicides	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
7085-19-0	Herbicides	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	ug/kg	8600	2300	33.33%	ND	ND	ND	ND
87-86-5	Herbicides	Pentachlorophenol	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
2051-24-3	PCBs	Decachlorobiphenyl	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
C-DICHLOROBI	PCBs	Dichlorobiphenyl	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
C-HEPTACHLOR	PCBs	Heptachlorobiphenyl	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
C-HEXACHLORO	PCBs	Hexachlorobiphenyl	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
C-MONOCHLORO	PCBs	Monochlorobiphenyl	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
C-NONACHLORO	PCBs	Nonachlorobiphenyl	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
C-OCTA-BIPHE	PCBs	Octachlorobiphenyl	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
C-PENTBIPHEN	PCBs	Pentachlorobiphenyl	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
C-TETRACHLOR	PCBs	Tetrachlorobiphenyl	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
C-TOTAL-PCB	PCBs	Total Polychlorinated Biphenyls	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
C-TRICHLOROB	PCBs	Trichlorobiphenyl	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
72-54-8	Pesticides	4,4'-DDD	ug/kg	6.7	11.2	22.22%	12	16.5	ND	ND

Channel Catfish, Drum, Shad Whole Body				Site			Downstream (DDA) Reference		Upstream (UDA) Reference	
CAS	Analysis	Name	Units	Site Maximum	Site Average	Frequency of Detection	Downstream Maximum	Downstream Average	Upstream Maximum	Upstream Average
% Lipids		% Lipids	%	17	9.667	100.00%	14	6.667	10	8.333
72-55-9	Pesticides	4,4'-DDE	ug/kg	60	18.4	88.89%	19	13.4	25	21
50-29-3	Pesticides	4,4'-DDT	ug/kg	13	12.6	11.11%	ND	ND	7.6	15
309-00-2	Pesticides	Aldrin	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
319-84-6	Pesticides	alpha-BHC	ug/kg	2.6	11.4	11.11%	ND	ND	ND	ND
5103-71-9	Pesticides	alpha-Chlordane	ug/kg	14	11.7	22.22%	7.7	10.9	ND	ND
319-85-7	Pesticides	beta-BHC	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
319-86-8	Pesticides	delta-BHC	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
60-57-1	Pesticides	Dieldrin	ug/kg	64	14.9	77.78%	19	13.9	32	21.2
959-98-8	Pesticides	Endosulfan I	ug/kg	4.3	11.6	11.11%	ND	ND	3	13.5
33213-65-9	Pesticides	Endosulfan II	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
1031-07-8	Pesticides	Endosulfan sulfate	ug/kg	ND	ND	0.00%	12	16.5	ND	ND
72-20-8	Pesticides	Endrin	ug/kg	15	12.2	22.22%	ND	ND	ND	ND
7421-93-4	Pesticides	Endrin aldehyde	ug/kg	10	11.5	22.22%	4.9	14.1	7.4	12.5
53494-70-5	Pesticides	Endrin ketone	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
58-89-9	Pesticides	gamma-BHC (Lindane)	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
5103-74-2	Pesticides	gamma-Chlordane	ug/kg	8.1	11	22.22%	3.5	13.7	5.8	14.4
76-44-8	Pesticides	Heptachlor	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
1024-57-3	Pesticides	Heptachlor epoxide	ug/kg	5.3	10.7	22.22%	ND	ND	ND	ND
72-43-5	Pesticides	Methoxychlor	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
8001-35-2	Pesticides	Toxaphene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
87-61-6	SVOCs	1,2,3-Trichlorobenzene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
120-82-1	SVOCs	1,2,4-Trichlorobenzene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
95-50-1	SVOCs	1,2-Dichlorobenzene	ug/kg	240	228	44.44%	ND	ND	ND	ND
108-70-3	SVOCs	1,3,5-Trichlorobenzene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
541-73-1	SVOCs	1,3-Dichlorobenzene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
106-46-7	SVOCs	1,4-Dichlorobenzene	ug/kg	130	241	11.11%	ND	ND	ND	ND
108-60-1	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
15950-66-0	SVOCs	2,3,4-Trichlorophenol	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
933-78-8	SVOCs	2,3,5-Trichlorophenol	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
933-7-5	SVOCs	2,3,6-Trichlorophenol	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
95-95-4	SVOCs	2,4,5-Trichlorophenol	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
88-06-2	SVOCs	2,4,6-Trichlorophenol	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
120-83-2	SVOCs	2,4-Dichlorophenol	ug/kg	190	227	33.33%	ND	ND	ND	ND
105-67-9	SVOCs	2,4-Dimethylphenol	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
51-28-5	SVOCs	2,4-Dinitrophenol	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
121-14-2	SVOCs	2,4-Dinitrotoluene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
606-20-2	SVOCs	2,6-Dinitrotoluene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
91-58-7	SVOCs	2-Chloronaphthalene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
95-57-8	SVOCs	2-Chlorophenol	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
91-57-6	SVOCs	2-Methylnaphthalene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
95-48-7	SVOCs	2-Methylphenol (o-Cresol)	ug/kg	220	222	44.44%	340	317	110	207
88-74-4	SVOCs	2-Nitroaniline	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
88-75-5	SVOCs	2-Nitrophenol	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
91-94-1	SVOCs	3,3'-Dichlorobenzidine	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
609-19-8	SVOCs	3,4,5-Trichlorophenol	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
106-44-5	SVOCs	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
99-09-2	SVOCs	3-Nitroaniline	ug/kg	ND	ND	0.00%	ND	ND	ND	ND

Appendix A-3. Summary Statistics - Fish Tissue
W.G. Krummrich Site
Sauget, Illinois

Channel Catfish, Drum, Shad Whole Body				Site			Downstream (DDA) Reference		Upstream (UDA) Reference	
CAS	Analysis	Name	Units	Site Maximum	Site Average	Frequency of Detection	Downstream Maximum	Downstream Average	Upstream Maximum	Upstream Average
% Lipids		% Lipids	%	17	9.667	100.00%	14	6.667	10	8.333
534-52-1	SVOCs	4,6-Dinitro-2-methylphenol	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
101-55-3	SVOCs	4-Bromophenylphenyl ether	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
59-50-7	SVOCs	4-Chloro-3-methylphenol	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
106-47-8	SVOCs	4-Chloroaniline	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
7005-72-3	SVOCs	4-Chlorophenylphenyl ether	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
100-01-6	SVOCs	4-Nitroaniline	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
100-02-7	SVOCs	4-Nitrophenol	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
83-32-9	SVOCs	Acenaphthene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
208-96-8	SVOCs	Acenaphthylene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
120-12-7	SVOCs	Anthracene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
56-55-3	SVOCs	Benzo(a)anthracene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
50-32-8	SVOCs	Benzo(a)pyrene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
205-99-2	SVOCs	Benzo(b)fluoranthene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
191-24-2	SVOCs	Benzo(g,h,i)perylene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
207-08-9	SVOCs	Benzo(k)fluoranthene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
111-91-1	SVOCs	bis(2-Chloroethoxy)methane	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
111-44-4	SVOCs	bis(2-Chloroethyl)ether	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
117-81-7	SVOCs	bis(2-Ethylhexyl)phthalate	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
85-68-7	SVOCs	Butylbenzylphthalate	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
86-74-8	SVOCs	Carbazole	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
218-01-9	SVOCs	Chrysene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
84-74-2	SVOCs	Di-n-butylphthalate	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
117-84-0	SVOCs	Di-n-octylphthalate	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
53-70-3	SVOCs	Dibenzo(a,h)anthracene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
132-64-9	SVOCs	Dibenzofuran	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
84-66-2	SVOCs	Diethylphthalate	ug/kg	ND	ND	0.00%	ND	ND	110	207
131-11-3	SVOCs	Dimethylphthalate	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
206-44-0	SVOCs	Fluoranthene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
86-73-7	SVOCs	Fluorene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
118-74-1	SVOCs	Hexachlorobenzene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
87-68-3	SVOCs	Hexachlorobutadiene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
77-47-4	SVOCs	Hexachlorocyclopentadiene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
67-72-1	SVOCs	Hexachloroethane	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
193-39-5	SVOCs	Indeno(1,2,3-cd)pyrene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
78-59-1	SVOCs	Isophorone	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
621-64-7	SVOCs	N-Nitroso-di-n-propylamine	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
86-30-6	SVOCs	N-Nitrosodiphenylamine	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
91-20-3	SVOCs	Naphthalene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
98-95-3	SVOCs	Nitrobenzene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
87-86-5 (SVOC)	SVOCs	Pentachlorophenol (SVOC)	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
85-01-8	SVOCs	Phenanthrene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
108-95-2	SVOCs	Phenol	ug/kg	ND	ND	0.00%	ND	ND	ND	ND
129-00-0	SVOCs	Pyrene	ug/kg	ND	ND	0.00%	ND	ND	ND	ND

Note:
ND = not detected

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference				% Lipids	% Lipids	% Lipids	14			%
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	11 3		0 1	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0 34	UJ	0 1	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	4 3		0 09	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0 05	UJ	0 05	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0 07	UJ	0 07	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0 58	J	0 06	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0 71	J	0 04	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	2	J	0 06	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0 34	J	0 04	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0 78	J	0 06	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0 05	UJ	0 05	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	1 2	J	0 05	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0 04	UJ	0 04	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0 86	J	0 04	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	1	J	0 04	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0 96		0 05	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0 53		0 04	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	37871-00-4	Total HpCDD	4 6		0 09	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	38998-75-3	Total HpCDF	5 3	J	0 06	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	34465-46-8	Total HxCDD	3 9	J	0 06	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	55684-94-1	Total HxCDF	42 1	J	0 04	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	36088-22-9	Total PeCDD	3 2	J	0 05	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	30402-15-4	Total PeCDF	93 9	J	0 04	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	41903-57-5	Total TCDD	1 4	J	0 05	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Dioxin	SW8290	55722-27-5	Total TCDF	216	J	0 04	pg/g
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Herbicides	8151	93-76-5	2,4,5-T	8 3	U	8 3	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	8 3	U	8 3	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Herbicides	8151	94-75-7	2,4-D	8 3	U	8 3	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Herbicides	8151	94-82-6	2,4-DB	8 3	U	8 3	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Herbicides	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Herbicides	8151	1918-00-9	Dicamba	20	U	20	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Herbicides	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Herbicides	8151	88-85-7	Dinoseb	100	U	100	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Herbicides	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			PCBs	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	72-54-8	4,4'-DDD	50	U	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	72-55-9	4,4'-DDE	16	J	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	50-29-3	4,4'-DDT	50	U	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	309-00-2	Aldrin	50	U	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	319-84-6	alpha-BHC	50	U	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	5103-71-9	alpha-Chlordane	7.7	J	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	319-85-7	beta-BHC	50	U	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	319-86-8	delta-BHC	50	U	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	60-57-1	Dieldrin	19	J	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	959-98-8	Endosulfan I	50	U	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	33213-65-9	Endosulfan II	50	U	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	1031-07-8	Endosulfan sulfate	50	U	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	72-20-8	Endrin	50	U	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	7421-93-4	Endrin aldehyde	50	U	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	53494-70-5	Endrin ketone	50	U	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	50	U	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	5103-74-2	gamma-Chlordane	50	U	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	76-44-8	Heptachlor	50	U	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	1024-57-3	Heptachlor epoxide	50	U	50	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	72-43-5	Methoxychlor	200	U	200	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			Pesticides	8081A	8001-35-2	Toxaphene	1700	U	1700	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	340	J	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	120-12-7	Anthracene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	86-74-8	Carbazole	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	218-01-9	Chrysene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	86-73-7	Fluorene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	78-59-1	Isophorone	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	108-95-2	Phenol	510	U	510	ug/kg
Fish	DDA Channel Catfish-Comp#1	02-Nov-00	Composite	Reference			SVOCs	8270C	129-00-0	Pyrene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference				% Lipids	% Lipids	% Lipids	3			%
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	119		0.3	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	2.7	J	0.2	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	4.3		0.2	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.1	UJ	0.1	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.2	UJ	0.2	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.1	UJ	0.1	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.37	U	0.09	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.37	J	0.1	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.08	UJ	0.08	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.26	J	0.1	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.1	UJ	0.1	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.24	J	0.1	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.09	UJ	0.09	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.18	J	0.09	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.21	J	0.09	pg/g

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0 34	J	0 09	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	1		0 08	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	37871-00-4	Total HpCDD	6 5		0.2	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	38998-75-3	Total HpCDF	3 1	J	0 1	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	34465-46-8	Total HxCDD	1 3	UJ	0 1	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	55684-94-1	Total HxCDF	12 1	J	0 09	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	36088-22-9	Total PeCDD	2 6	J	0 1	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	30402-15-4	Total PeCDF	24 7	J	0 09	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	41903-57-5	Total TCDD	0 61	J	0 09	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Dioxin	SW8290	55722-27-5	Total TCDF	30	J	0 08	pg/g
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Herbicides	8151	93-76-5	2,4,5-T	8 3	U	8 3	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	3 9	J	8 3	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Herbicides	8151	94-75-7	2,4-D	8 3	U	8 3	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Herbicides	8151	94-82-6	2,4-DB	8 3	U	8 3	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Herbicides	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Herbicides	8151	1918-00-9	Dicamba	20	U	20	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Herbicides	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Herbicides	8151	88-85-7	Dinoseb	100	U	100	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Herbicides	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			PCBs	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	72-54-8	4,4'-DDD	25	UJ	25	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	72-55-9	4,4'-DDE	5 2	J	25	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	50-29-3	4,4'-DDT	25	UJ	25	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	309-00-2	Aldrin	25	UJ	25	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	319-84-6	alpha-BHC	25	UJ	25	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	5103-71-9	alpha-Chlordane	25	UJ	25	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	319-85-7	beta-BHC	25	UJ	25	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	319-86-8	delta-BHC	25	UJ	25	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	60-57-1	Dieldrin	14	J	25	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	959-98-8	Endosulfan I	25	UJ	25	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	33213-65-9	Endosulfan II	25	UJ	25	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	1031-07-8	Endosulfan sulfate	12	J	25	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	72-20-8	Endrin	25	UJ	25	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	7421-93-4	Endrin aldehyde	25	UJ	25	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	53494-70-5	Endrin ketone	25	UJ	25	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	25	UJ	25	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	5103-74-2	gamma-Chlordane	25	UJ	25	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	76-44-8	Heptachlor	25	UJ	25	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	1024-57-3	Heptachlor epoxide	25	UJ	25	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	72-43-5	Methoxychlor	100	UJ	100	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			Pesticides	8081A	8001-35-2	Toxaphene	850	UJ	850	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	606-20-2	2,6-Dinitrololuene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	320	J	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	120-12-7	Anthracene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	86-74-8	Carbazole	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	218-01-9	Chrysene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	86-73-7	Fluorene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	78-59-1	Isophorone	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	108-95-2	Phenol	510	U	510	ug/kg
Fish	DDA Comp Shad	25-Oct-00	Composite	Reference			SVOCs	8270C	129-00-0	Pyrene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference				% Lipids	% Lipids	% Lipids	2			%
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	2.8	J	0.2	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.14	U	0.1	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	0.71	J	0.1	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.07	UJ	0.07	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.1	UJ	0.1	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.12	J	0.09	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.19	U	0.06	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.31	J	0.09	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.06	UJ	0.06	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.08	UJ	0.09	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.08	UJ	0.08	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.18	J	0.09	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.07	UJ	0.07	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.06	UJ	0.06	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.22	J	0.07	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0.3	J	0.07	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0.99		0.06	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	37871-00-4	Total HpCDD	0.81		0.1	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	38998-75-3	Total HpCDF	0.8	J	0.08	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	34465-46-8	Total HxCDD	0.51	UJ	0.09	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	55684-94-1	Total HxCDF	4.6	J	0.06	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	36088-22-9	Total PeCDD	1.9	J	0.09	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	30402-15-4	Total PeCDF	12.2	J	0.07	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	41903-57-5	Total TCDD	0.72	J	0.07	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Dioxin	SW8290	55722-27-5	Total TCDF	22.5	J	0.06	pg/g
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Herbicides	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Herbicides	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Herbicides	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Herbicides	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Herbicides	8151	1918-00-9	Dicamba	20	U	20	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Herbicides	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Herbicides	8151	88-85-7	Dinoseb	100	U	100	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Herbicides	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			PCBs	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	72-55-9	4,4'-DDE	7.3	J	25	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	309-00-2	Aldrin	25	U	25	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	60-57-1	Dieldrin	25	U	25	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	72-20-8	Endrin	25	U	25	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	7421-93-4	Endrin aldehyde	25	U	25	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			Pesticides	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	120-12-7	Anthracene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	86-74-8	Carbazole	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	218-01-9	Chrysene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	86-73-7	Fluorene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	78-59-1	Isophorone	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	108-95-2	Phenol	510	U	510	ug/kg
Fish	DDA DA-1 Buffalo Fillet	26-Oct-00	Composite	Reference			SVOCs	8270C	129-00-0	Pyrene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference				% Lipids	% Lipids	% Lipids	3			%
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	4.5	J	0.1	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.1	U	0.1	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	0.62	J	0.09	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.05	UJ	0.05	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.07	UJ	0.07	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.06	UJ	0.06	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.14	U	0.04	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.34	J	0.06	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.04	UJ	0.04	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.2	J	0.06	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.05	UJ	0.05	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.05	UJ	0.05	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.04	UJ	0.04	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.2	J	0.04	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.04	UJ	0.04	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0.05	UJ	0.05	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0.33	J	0.04	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	37871-00-4	Total HpCDD	0.75		0.09	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	38998-75-3	Total HpCDF	8.5	J	0.06	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	34465-46-8	Total HxCDD	0.96	UJ	0.06	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	55684-94-1	Total HxCDF	38.5	J	0.04	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	36088-22-9	Total PeCDD	1.1	J	0.05	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	30402-15-4	Total PeCDF	62	J	0.04	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	41903-57-5	Total TCDD	0.13	UJ	0.05	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Dioxin	SW8290	55722-27-5	Total TCDF	128	J	0.04	pg/g
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Herbicides	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	6.9	J	8.3	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Herbicides	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Herbicides	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Herbicides	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Herbicides	8151	1918-00-9	Dicamba	20	U	20	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Herbicides	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Herbicides	8151	88-85-7	Dinoseb	100	U	100	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Herbicides	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			PCBs	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	72-54-8	4,4'-DDD	12	J	25	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	72-55-9	4,4'-DDE	19	J	25	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	309-00-2	Aldrin	25	U	25	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	60-57-1	Dieldrin	8 8	J	25	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	72-20-8	Endrin	25	U	25	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	7421-93-4	Endrin aldehyde	4 9	J	25	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	5103-74-2	gamma-Chlordane	3 5	J	25	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			Pesticides	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	290	J	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	120-12-7	Anthracene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	86-74-8	Carbazole	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	218-01-9	Chrysene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	86-73-7	Fluorene	510	U	510	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	78-59-1	Isophorone	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	108-95-2	Phenol	510	U	510	ug/kg
Fish	DDA Drum-Comp#1	27-Oct-00	Composite	Reference			SVOCs	8270C	129-00-0	Pyrene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site				% Lipids	% Lipids	% Lipids	1			%
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	2.2	J	0.1	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.19	UJ	0.1	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	0.39	U	0.09	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.05	UJ	0.05	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.06	UJ	0.06	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.06	UJ	0.06	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.12	U	0.04	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.19	J	0.06	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.04	UJ	0.04	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.06	UJ	0.06	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.05	UJ	0.05	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.14	J	0.05	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.04	UJ	0.04	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.04	UJ	0.04	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.19	J	0.04	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0.1	U	0.04	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0.44	J	0.04	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	37871-00-4	Total HpCDD	0.55	U	0.09	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	38998-75-3	Total HpCDF	0.33	J	0.05	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	34465-46-8	Total HxCDD	0.19	U	0.06	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	55684-94-1	Total HxCDF	1.4	J	0.04	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	36088-22-9	Total PeCDD	1.5	J	0.05	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	30402-15-4	Total PeCDF	2.8	J	0.04	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	41903-57-5	Total TCDD	2.1		0.04	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Dioxin	SW8290	55722-27-5	Total TCDF	7.1	J	0.04	pg/g
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Herbicides	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Herbicides	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Herbicides	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Herbicides	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Herbicides	8151	1918-00-9	Dicamba	20	U	20	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Herbicides	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Herbicides	8151	88-85-7	Dinoseb	100	U	100	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Herbicides	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			PCBs	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	72-55-9	4,4'-DDE	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	309-00-2	Aldrin	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	60-57-1	Dieldrin	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	72-20-8	Endrin	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	7421-93-4	Endrin aldehyde	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			Pesticides	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	120-12-7	Anthracene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	86-74-8	Carbazole	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	218-01-9	Chrysene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	86-73-7	Fluorene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	78-59-1	Isophorone	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	108-95-2	Phenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#1	01-Nov-00	Composite	Site			SVOCs	8270C	129-00-0	Pyrene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site				% Lipids	% Lipids	% Lipids	2			%
Fish	PDA Buffalo Fil[illegible]mp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	2.8	J	0.1	pg/g

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0 29	U	0.1	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	0 79	J	0.09	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0 05	UJ	0.05	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0 07	UJ	0 07	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0 09	U	0.06	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0 21	U	0 04	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0 26	J	0 06	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0 04	UJ	0.04	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0 14	J	0 06	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0 05	UJ	0 05	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0 19	J	0 05	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0 04	UJ	0 04	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0 09	U	0 04	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0 19	J	0 04	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0 19	J	0 05	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0 72		0 04	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	37871-00-4	Total HpCDD	0 89	J	0 09	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	38998-75-3	Total HpCDF	0 9	J	0 06	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	34465-46-8	Total HxCDD	1	UJ	0 06	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	55684-94-1	Total HxCDF	4 8	J	0 04	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	36088-22-9	Total PeCDD	0 96	J	0 05	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	30402-15-4	Total PeCDF	13 4	J	0 04	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	41903-57-5	Total TCDD	0 56	J	0 05	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Dioxin	SW8290	55722-27-5	Total TCDF	23 7	J	0 04	pg/g
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Herbicides	8151	93-76-5	2,4,5-T	8 3	U	8 3	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	8 3	U	8 3	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Herbicides	8151	94-75-7	2,4-D	8 3	U	8 3	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Herbicides	8151	94-82-6	2,4-DB	8 3	U	8 3	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Herbicides	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Herbicides	8151	1918-00-9	Dicamba	20	U	20	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Herbicides	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Herbicides	8151	88-85-7	Dinoseb	100	U	100	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Herbicides	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			PCBs	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	72-55-9	4,4'-DDE	7 6	J	25	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	309-00-2	Aldrin	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	60-57-1	Dieldrin	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	72-20-8	Endrin	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	7421-93-4	Endrin aldehyde	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	72-43-5	Methoxychlor	44	J	25	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			Pesticides	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	120-12-7	Anthracene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	86-74-8	Carbazole	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	218-01-9	Chrysene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	86-73-7	Fluorene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	78-59-1	Isophorone	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	108-95-2	Phenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#2	01-Nov-00	Composite	Site			SVOCs	8270C	129-00-0	Pyrene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site				% Lipids	% Lipids	% Lipids	2			%
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	5 8	J	0 1	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0 4	UJ	0 08	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	0 87	J	0 07	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0 05	UJ	0 05	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0 06	UJ	0 06	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0 08	U	0 08	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0 13	U	0 04	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0 26	J	0 05	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0 05	UJ	0 03	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0 1	U	0 05	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0 05	UJ	0 05	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0 14	J	0 05	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0 04	UJ	0 04	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0 09	U	0 04	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0 24	J	0 04	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0 26	J	0 05	pg/g
Fish	PDA Buffalo Fil[illegible]#3	01-Nov-00	Composite	Site			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0 65		0 04	pg/g

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	37871-00-4	Total HpCDD	1.1		0.07	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	38998-75-3	Total HpCDF	0.72	J	0.05	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	34465-46-8	Total HxCDD	0.84	UJ	0.05	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	55684-94-1	Total HxCDF	3.8	J	0.04	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	36088-22-9	Total PeCDD	0.78	J	0.05	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	30402-15-4	Total PeCDF	9.1	J	0.04	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	41903-57-5	Total TCDD	0.87		0.05	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Dioxin	SW8290	55722-27-5	Total TCDF	18.1	J	0.04	pg/g
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Herbicides	8151	93-76-5	2,4,5-T	4.8	J	8.3	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Herbicides	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Herbicides	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Herbicides	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Herbicides	8151	1918-00-9	Dicamba	20	U	20	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Herbicides	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Herbicides	8151	88-85-7	Dinoseb	100	U	100	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Herbicides	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			PCBs	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	72-55-9	4,4'-DDE	8.2	J	25	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	309-00-2	Aldrin	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	60-57-1	Dieldrin	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	72-20-8	Endrin	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	7421-93-4	Endrin aldehyde	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			Pesticides	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	120-12-7	Anthracene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	86-74-8	Carbazole	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	218-01-9	Chrysene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	86-73-7	Fluorene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	78-59-1	Isophorone	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	108-95-2	Phenol	510	U	510	ug/kg
Fish	PDA Buffalo Fillet Comp#3	01-Nov-00	Composite	Site			SVOCs	8270C	129-00-0	Pyrene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site				% Lipids	% Lipids	% Lipids	6			%
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	7.7	J	0.1	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.21	UJ	0.08	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	3	J	0.07	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.04	UJ	0.04	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.05	UJ	0.05	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.29	J	0.05	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.29	UJ	0.03	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	1.1	J	0.05	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.11	UJ	0.03	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.37	J	0.04	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.04	UJ	0.04	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.47	J	0.04	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.03	UJ	0.03	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.13	UJ	0.03	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.52	J	0.03	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0.6		0.04	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0.35	J	0.03	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	37871-00-4	Total HpCDD	3.2	J	0.07	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	38998-75-3	Total HpCDF	0.83	J	0.05	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	34465-46-8	Total HxCDD	2.2	J	0.05	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	55684-94-1	Total HxCDF	8.3	J	0.03	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	36088-22-9	Total PeCDD	1.8	J	0.04	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	30402-15-4	Total PeCDF	21.5	J	0.03	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	41903-57-5	Total TCDD	0.87	J	0.04	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	55722-27-5	Total TCDF	45.9	J	0.03	pg/g
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	93-76-5	2,4,5-T	6.3	J	8.3	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	3.9	J	8.3	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	1918-00-9	Dicamba	20	U	20	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
Fish	PDA Channel Ca[illegible]mp#1	02-Nov-00	Composite	Site			Herbicide	8151	88-85-7	Dinoseb	100	U	100	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2700	J	2000	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			PCBs	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	72-55-9	4,4'-DDE	15	J	25	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	309-00-2	Aldrin	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	60-57-1	Dieldrin	7.2	J	25	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	72-20-8	Endrin	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	7421-93-4	Endrin aldehyde	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	120-12-7	Anthracene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	[illegible]	86-74-8	Carbazole	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	218-01-9	Chrysene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	86-73-7	Fluorene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	78-59-1	Isophorone	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	108-95-2	Phenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	129-00-0	Pyrene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site				% Lipids	% Lipids	% Lipids	10			%
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	9		0.2	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0 23	U	0 2	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	4 1		0 1	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0 08	UJ	0 08	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0 1	UJ	0 1	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0 3	J	0 09	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0 43	J	0 08	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	1 2	J	0 09	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.17	J	0 06	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0 58	J	0 09	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0 08	UJ	0 08	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0 64	J	0 08	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.07	UJ	0 07	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0 22	J	0 07	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0 64	J	0 07	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0 83		0 08	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	1.2		0.07	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	37871-00-4	Total HpCDD	4.3		0.1	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	38998-75-3	Total HpCDF	0 09	UJ	0.09	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	34465-46-8	Total HxCDD	2 6	J	0 09	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	55684-94-1	Total HxCDF	7 7	J	0 07	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	36088-22-9	Total PeCDD	3 3	J	0 08	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	30402-15-4	Total PeCDF	31 4	J	0 07	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	41903-57-5	Total TCDD	1.1	J	0 08	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Dioxin	SW8290	55722-27-5	Total TCDF	60.6	J	0.07	pg/g
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Herbicides	8151	93-76-5	2,4,5-T	8.3	U	8 3	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Herbicides	8151	94-75-7	2,4-D	8.3	U	8 3	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Herbicides	8151	94-82-6	2,4-DB	8.3	U	8 3	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Herbicides	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Herbicides	8151	1918-00-9	Dicamba	20	U	20	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Herbicides	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Herbicides	8151	88-85-7	Dinoseb	100	U	100	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	8600	J	2000	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Herbicides	8151	87-86-5	Pentachlorophenol	24	U	17	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			PCBs	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Pesticides	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
Fish	PDA Channel Ca[illegible]mp#2	27-Oct-00	Composite	Site			Pesticide[illegible]	8081A	72-55-9	4,4'-DDE	20	U	25	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Pesticides	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Pesticides	8081A	309-00-2	Aldrin	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Pesticides	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Pesticides	8081A	5103-71-9	alpha-Chlordane	3.8	J	25	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Pesticides	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Pesticides	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Pesticides	8081A	60-57-1	Dieldrin	9.5	J	25	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Pesticides	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Pesticides	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Pesticides	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Pesticides	8081A	72-20-8	Endrin	15	J	25	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Pesticides	8081A	7421-93-4	Endrin aldehyde	6.4	J	25	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Pesticides	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Pesticides	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Pesticides	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Pesticides	8081A	1024-57-3	Heptachlor epoxide	3.4	J	25	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Pesticides	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			Pesticides	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	210	J	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	190	J	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	180	J	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	120-12-7	Anthracene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	86-74-8	Carbazole	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	218-01-9	Chrysene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	86-73-7	Fluorene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	78-59-1	Isophorone	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	108-95-2	Phenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#2	27-Oct-00	Composite	Site			SVOCs	8270C	129-00-0	Pyrene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site				% Lipids	% Lipids	% Lipids	7			%
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	10.6		0.08	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.23	U	0.08	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	4		0.05	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.03	UJ	0.03	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.04	UJ	0.04	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.3	J	0.04	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.28	U	0.02	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	1.1	J	0.04	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.1	UJ	0.02	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.56	J	0.04	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.03	UJ	0.03	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.42	J	0.03	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.03	UJ	0.03	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.16	J	0.03	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.35	J	0.03	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0.37	J	0.03	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0.54		0.03	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	37871-00-4	Total HpCDD	4.2		0.05	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	38998-75-3	Total HpCDF	2.1	J	0.04	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	34465-46-8	Total HxCDD	2.4	J	0.04	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	55684-94-1	Total HxCDF	15.3	J	0.03	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	36088-22-9	Total PeCDD	1.9	J	0.03	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	30402-15-4	Total PeCDF	41.8	J	0.03	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	41903-57-5	Total TCDD	0.68	J	0.03	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Dioxin	SW8290	55722-27-5	Total TCDF	105	J	0.03	pg/g
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Herbicides	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Herbicides	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Herbicides	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Herbicides	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Herbicides	8151	1918-00-9	Dicamba	20	U	20	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Herbicides	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Herbicides	8151	88-85-7	Dinoseb	100	U	100	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Herbicides	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			PCBs	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	72-55-9	4,4'-DDE	26		25	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	309-00-2	Aldrin	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	60-57-1	Dieldrin	11	J	25	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	72-20-8	Endrin	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	7421-93-4	Endrin aldehyde	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	5103-74-2	gamma-Chlordane	3.4	J	25	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	76-44-8	Heptachlor	25	U	25	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			Pesticides	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	120-12-7	Anthracene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	86-74-8	Carbazole	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	218-01-9	Chrysene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	86-73-7	Fluorene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	78-59-1	Isophorone	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	108-95-2	Phenol	510	U	510	ug/kg
Fish	PDA Channel Catfish-Comp#3	03-Nov-00	Composite	Site			SVOCs	8270C	129-00-0	Pyrene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site				% Lipids	% Lipids	% Lipids	17			%
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	6.8		0.1	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.72	U	0.1	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	1.3	J	0.08	pg/g

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0 05	UJ	0 05	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0 07	UJ	0 07	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0 1	U	0 07	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0 25	U	0 04	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0 45	J	0 07	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0 07	U	0 04	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0 24	J	0 07	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0 06	UJ	0 06	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0 32	J	0 08	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0 13	UJ	0 04	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0 12	U	0 05	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0 19	J	0 04	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0 28	J	0 04	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0 92		0 04	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	37871-00-4	Total HpCDD	1 6		0 08	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	38998-75-3	Total HpCDF	0 5	J	0 06	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	34465-46-8	Total HxCDD	1 3	UJ	0 07	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	55684-94-1	Total HxCDF	5	J	0 05	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	36088-22-9	Total PeCDD	2 5	J	0 06	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	30402-15-4	Total PeCDF	29 9	J	0 04	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	41903-57-5	Total TCDD	2 8	J	0 04	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	55722-27-5	Total TCDF	35 1	J	0 04	pg/g
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Herbicides	8151	93-76-5	2,4,5-T	8 3	U	8 3	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	4 9	J	8 3	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Herbicides	8151	94-75-7	2,4-D	8 3	U	8 3	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Herbicides	8151	94-82-6	2,4-DB	8 3	U	8 3	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Herbicides	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Herbicides	8151	1918-00-9	Dicamba	20	U	20	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Herbicides	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Herbicides	8151	88-85-7	Dinoseb	100	U	100	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	3400	J	2000	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Herbicides	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			PCBs	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	72-54-8	4,4'-DDD	25	UJ	25	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	72-55-9	4,4'-DDE	25	UJ	25	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	50-29-3	4,4'-DDT	25	UJ	25	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	309-00-2	Aldrin	25	UJ	25	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	319-84-6	alpha-BHC	2 8	J	25	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	5103-71-9	alpha-Chlordane	25	UJ	25	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	319-85-7	beta-BHC	25	UJ	25	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	319-86-8	delta-BHC	25	UJ	25	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	60-57-1	Dieldrin	25	UJ	25	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	959-98-8	Endosulfan I	25	UJ	25	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	33213-65-9	Endosulfan II	25	UJ	25	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	1031-07-8	Endosulfan sulfate	25	UJ	25	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	72-20-8	Endrin	25	UJ	25	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	7421-93-4	Endrin aldehyde	25	UJ	25	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	53494-70-5	Endrin ketone	25	UJ	25	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	25	UJ	25	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	5103-74-2	gamma-Chlordane	25	UJ	25	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	76-44-8	Heptachlor	25	UJ	25	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	1024-57-3	Heptachlor epoxide	25	UJ	25	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	72-43-5	Methoxychlor	100	UJ	100	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	8001-35-2	Toxaphene	850	UJ	850	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	190	J	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOC	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	180	J	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	120-12-7	Anthracene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	86-74-8	Carbazole	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	218-01-9	Chrysene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	86-73-7	Fluorene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	78-59-1	Isophorone	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	108-95-2	Phenol	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	129-00-0	Pyrene	510	U	510	ug/kg
Fish	PDA Comp#1 Shad	27-Oct-00	Composite	Site				% Lipids	% Lipids	% Lipids	15			%
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	15 1		0 2	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0 25	U	0 1	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	2	J	0 1	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0 07	UJ	0 07	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0 09	UJ	0 09	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0 08	UJ	0 08	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0 84	J	0 05	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0 82	J	0 08	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0 05	UJ	0 05	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0 39	J	0 08	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0 07	UJ	0 07	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0 46	J	0 07	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0 06	UJ	0 06	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0 48	J	0 06	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0 41	J	0 06	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	2 4		0 06	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	1 9		0 05	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	37871-00-4	Total HpCDD	2 6		0 1	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	38998-75-3	Total HpCDF	13 6	J	0 08	pg/g

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	34465-46-8	Total HxCDD	1.7	J	0.08	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	55684-94-1	Total HxCDF	81.6	J	0.06	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	36088-22-9	Total PeCDD	3.4	J	0.07	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	30402-15-4	Total PeCDF	124	J	0.06	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	41903-57-5	Total TCDD	3.3	J	0.06	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	55722-27-5	Total TCDF	187	J	0.05	pg/g
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Herbicides	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	8.7		8.3	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Herbicides	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Herbicides	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Herbicides	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Herbicides	8151	1918-00-9	Dicamba	20	U	20	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Herbicides	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Herbicides	8151	88-85-7	Dinoseb	100	U	100	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Herbicides	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			PCBs	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	72-55-9	4,4'-DDE	5.4	J	25	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	309-00-2	Aldrin	25	U	25	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	60-57-1	Dieldrin	4.3	J	25	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	72-20-8	Endrin	25	U	25	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	7421-93-4	Endrin aldehyde	25	U	25	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	240	J	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	140	J	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	120-12-7	Anthracene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	86-74-8	Carbazole	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	218-01-9	Chrysene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	86-73-7	Fluorene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	78-59-1	Isophorone	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	108-95-2	Phenol	510	U	510	ug/kg
Fish	PDA Comp#2 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	129-00-0	Pyrene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site				% Lipids	% Lipids	% Lipids	13			%
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	189	J	0.04	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	4.3	J	0.03	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	7.1		0.03	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	1	J	0.02	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.03	UJ	0.03	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.18	J	0.02	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.46	J	0.02	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	1.1	J	0.02	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.19	J	0.02	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.54	J	0.02	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.02	UJ	0.02	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.51	J	0.02	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.43	J	0.02	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.3	J	0.02	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.55	J	0.02	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0.57		0.02	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	5.7		0.01	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	37871-00-4	Total HpCDD	13.5		0.03	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	38998-75-3	Total HpCDF	6.1	J	0.02	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	34465-46-8	Total HxCDD	3.3	J	0.02	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	55684-94-1	Total HxCDF	16	J	0.02	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	36088-22-9	Total PeCDD	3.1	J	0.02	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	30402-15-4	Total PeCDF	33.1	J	0.02	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	41903-57-5	Total TCDD	5.9	J	0.02	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Dioxin	SW8290	55722-27-5	Total TCDF	72.7	J	0.01	pg/g
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Herbicides	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Herbicides	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Herbicides	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Herbicides	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Herbicides	8151	1918-00-9	Dicamba	20	U	20	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Herbicides	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Herbicides	8151	88-85-7	Dinoseb	100	U	100	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Herbicides	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			PCBs	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	72-55-9	4,4'-DDE	5.8	J	25	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	309-00-2	Aldrin	25	U	25	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	60-57-1	Dieldrin	25	U	25	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	72-20-8	Endrin	25	U	25	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	7421-93-4	Endrin aldehyde	25	U	25	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			Pesticides	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	140	J	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	130	J	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	140	J	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	108-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	120-12-7	Anthracene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
Fish	PDA Comp 1	27-Oct-00	Composite	Site			SVOC	8270C	111-44-	bis(2-Chloroethyl)ether	510	U	510	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	86-74-8	Carbazole	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	218-01-9	Chrysene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	86-73-7	Fluorene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	78-59-1	Isophorone	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	108-95-2	Phenol	510	U	510	ug/kg
Fish	PDA Comp#3 Shad	27-Oct-00	Composite	Site			SVOCs	8270C	129-00-0	Pyrene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site				% Lipids	% Lipids	% Lipids	3			%
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	16.5		0.2	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	1.5	U	0.2	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	2.5	J	0.1	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.08	UJ	0.08	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.1	UJ	0.1	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.1	UJ	0.1	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.45	J	0.06	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.84	J	0.1	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.22	J	0.06	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.38	J	0.1	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.08	UJ	0.08	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.09	UJ	0.09	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.07	UJ	0.07	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.24	J	0.07	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.07	UJ	0.07	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0.14	UJ	0.08	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0.44	J	0.06	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	37871-00-4	Total HpCDD	3.6		0.1	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	38998-75-3	Total HpCDF	6.1	J	0.09	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	34465-46-8	Total HxCDD	2.3	J	0.1	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	55684-94-1	Total HxCDF	27	J	0.07	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	36088-22-9	Total PeCDD	1.9	J	0.09	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	30402-15-4	Total PeCDF	40.6	J	0.07	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	41903-57-5	Total TCDD	0.38	UJ	0.08	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Dioxin	SW8290	55722-27-5	Total TCDF	64.6	J	0.06	pg/g
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	93-76-5	2,4,5-T	13	J	8.3	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	6.4	J	8.3	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	1918-00-9	Dicamba	20	U	20	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	88-85-7	Dinoseb	100	U	100	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Herbicides	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			PCBs	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	72-54-8	4,4'-DDD	6.6	J	25	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	72-55-9	4,4'-DDE	13	J	25	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	309-00-2	Aldrin	25	U	25	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	60-57-1	Dieldrin	6.7	J	25	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	72-20-8	Endrin	25	U	25	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	7421-93-4	Endrin aldehyde	25	U	25	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			Pesticides	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	180	J	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	120-12-7	Anthracene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	86-74-8	Carbazole	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	218-01-9	Chrysene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	86-73-7	Fluorene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	78-59-1	Isophorone	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	108-95-2	Phenol	510	U	510	ug/kg
Fish	PDA Drum Comp#1	02-Nov-00	Composite	Site			SVOCs	8270C	129-00-0	Pyrene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site				% Lipids	% Lipids	% Lipids	3			%
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	5.3		0.1	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.1	UJ	0.1	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	0.99	J	0.1	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.06	UJ	0.06	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.07	UJ	0.07	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.06	UJ	0.06	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.2	U	0.04	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.43	J	0.06	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.11	U	0.04	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.24	J	0.06	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.05	UJ	0.05	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.06	UJ	0.06	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.04	UJ	0.04	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.11	U	0.04	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.04	UJ	0.04	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0.05	UJ	0.05	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0.29	J	0.04	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	37871-00-4	Total HpCDD	1.2		0.1	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	38998-75-3	Total HpCDF	2.3	J	0.06	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	34465-46-8	Total HxCDD	1.2	UJ	0.06	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	55684-94-1	Total HxCDF	10.6	J	0.04	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	36088-22-9	Total PeCDD	1.5	J	0.06	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	30402-15-4	Total PeCDF	22.1	J	0.04	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	41903-57-5	Total TCDD	0.17	UJ	0.05	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Dioxin	SW8290	55722-27-5	Total TCDF	46	J	0.04	pg/g
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Herbicides	8151	93-76-5	2,4,5-T	7.5	J	8.3	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	3.3	J	8.3	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Herbicides	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Herbicides	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Herbicides	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Herbicides	8151	1918-00-9	Dicamba	20	U	20	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Herbicides	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Herbicides	8151	88-85-7	Dinoseb	100	U	100	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Herbicides	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			PCBs	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	72-55-9	4,4'-DDE	8	J	25	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	309-00-2	Aldrin	25	U	25	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	60-57-1	Dieldrin	6.2	J	25	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	72-20-8	Endrin	25	U	25	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	7421-93-4	Endrin aldehyde	25	U	25	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			Pesticides	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	220	J	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	108-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	120-12-7	Anthracene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	86-74-8	Carbazole	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	218-01-9	Chrysene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	86-73-7	Fluorene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	78-59-1	Isophorone	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	108-95-2	Phenol	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site			SVOCs	8270C	129-00-0	Pyrene	510	U	510	ug/kg
Fish	PDA Drum Comp#2	02-Nov-00	Composite	Site				% Lipids	% Lipids	% Lipids	13			%
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	6 8		0 1	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0 43	U	0 1	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	1 2	J	0 09	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0 05	UJ	0 05	pg/g
Fish	PDA Drum	03-Nov-00	Composite	Site			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0 07	U	0 07	pg/g

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.06	UJ	0.06	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.47	J	0.04	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.58	J	0.06	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.16	J	0.04	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.29	J	0.06	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.05	UJ	0.05	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.1	J	0.05	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.04	UJ	0.04	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.16	J	0.04	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.13	J	0.04	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0.14	U	0.06	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	1.3	J	0.04	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	37871-00-4	Total HpCDD	1.9		0.09	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	38998-75-3	Total HpCDF	1.4	J	0.06	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	34465-46-8	Total HxCDD	2.9	J	0.06	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	55684-94-1	Total HxCDF	13	J	0.04	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	36088-22-9	Total PeCDD	7.5	J	0.05	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	30402-15-4	Total PeCDF	43.2	J	0.04	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	41903-57-5	Total TCDD	7.2	J	0.06	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Dioxin	SW8290	55722-27-5	Total TCDF	79.3	J	0.04	pg/g
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Herbicides	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Herbicides	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Herbicides	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Herbicides	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Herbicides	8151	1918-00-9	Dicamba	20	U	20	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Herbicides	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Herbicides	8151	88-85-7	Dinoseb	100	U	100	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Herbicides	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			PCBs	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	72-54-8	4,4'-DDD	6.7	J	25	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	72-55-9	4,4'-DDE	60		25	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	50-29-3	4,4'-DDT	13	J	25	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	309-00-2	Aldrin	25	U	25	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	5103-71-9	alpha-Chlordane	14	J	25	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	60-57-1	Dieldrin	64	J	25	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	959-98-8	Endosulfan I	4.3	J	25	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	72-20-8	Endrin	7.5	J	25	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	7421-93-4	Endrin aldehyde	10	J	25	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	5103-74-2	gamma-Chlordane	8.1	J	25	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	1024-57-3	Heptachlor epoxide	5.3	J	25	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			Pesticides	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	120-12-7	Anthracene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	86-74-8	Carbazole	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	218-01-9	Chrysene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	86-73-7	Fluorene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	78-59-1	Isophorone	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	108-95-2	Phenol	510	U	510	ug/kg
Fish	PDA Drum-Comp#4	03-Nov-00	Composite	Site			SVOCs	8270C	129-00-0	Pyrene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference				% Lipids	% Lipids	% Lipids	4			%
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	7 5		0 2	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0 34	U	0.2	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	1 4	J	0 1	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0 08	UJ	0 08	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0 1	UJ	0 1	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0 1	UJ	0 1	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0 27	U	0 06	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0 82	J	0 09	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0 11	U	0 06	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0 25	J	0 09	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0 08	UJ	0 08	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0 58	J	0 09	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0 07	UJ	0 07	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0 16	J	0 07	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0 79	J	0 07	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	3 3		0 08	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	1 6	J	0 06	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	37871-00-4	Total HpCDD	1 7		0 1	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	38998-75-3	Total HpCDF	2 4	J	0 09	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	34465-46-8	Total HxCDD	2	J	0 1	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	55684-94-1	Total HxCDF	11 6	J	0 07	pg/g

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	36088-22-9	Total PeCDD	2 1	J	0 09	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	30402-15-4	Total PeCDF	27 6	J	0 07	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	41903-57-5	Total TCDD	3 7	J	0 08	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Dioxin	SW8290	55722-27-5	Total TCDF	46 3	J	0 06	pg/g
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Herbicides	8151	93-76-5	2,4,5-T	8 3	U	8 3	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	8 3	U	8 3	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Herbicides	8151	94-75-7	2,4-D	8 3	U	8 3	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Herbicides	8151	94-82-6	2,4-DB	8 3	U	8 3	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Herbicides	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Herbicides	8151	1918-00-9	Dicamba	20	U	20	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Herbicides	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Herbicides	8151	88-85-7	Dinoseb	100	U	100	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Herbicides	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			PCBs	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	72-55-9	4,4'-DDE	17	J	25	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	50-29-3	4,4'-DDT	8 6	J	25	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	309-00-2	Aldrin	25	U	25	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	5103-71-9	alpha-Chlordane	5 8	J	25	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	60-57-1	Dieldrin	8 1	J	25	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	72-20-8	Endrin	25	U	25	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	7421-93-4	Endrin aldehyde	7 3	J	25	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	1 2	J	25	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	5103-74-2	gamma-Chlordane	5 2	J	25	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			Pesticides	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	120-12-7	Anthracene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	86-74-8	Carbazole	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	218-01-9	Chrysene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	86-73-7	Fluorene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	78-59-1	Isophorone	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	108-95-2	Phenol	510	U	510	ug/kg
Fish	UDA Buffalo Fillet	25-Oct-00	Composite	Reference			SVOCs	8270C	129-00-0	Pyrene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference				% Lipids	% Lipids	% Lipids	9			%
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	8.1	J	0.2	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.32	UJ	0.1	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	2.8		0.1	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.06	UJ	0.06	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.08	UJ	0.08	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.33	J	0.08	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.42	J	0.05	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	1.3	J	0.08	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.19	J	0.05	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.51	J	0.08	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.07	UJ	0.07	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.61	J	0.07	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.06	UJ	0.06	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.27	J	0.06	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.59	J	0.06	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0.53		0.07	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0.35	J	0.05	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	37871-00-4	Total HpCDD	3.1		0.1	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	38998-75-3	Total HpCDF	2.2	J	0.07	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	34465-46-8	Total HxCDD	2.6	J	0.08	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	55684-94-1	Total HxCDF	18.9	J	0.06	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	36088-22-9	Total PeCDD	1.9	J	0.07	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	30402-15-4	Total PeCDF	47.8	J	0.06	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	41903-57-5	Total TCDD	0.62	J	0.07	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Dioxin	SW8290	55722-27-5	Total TCDF	121	J	0.05	pg/g
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Herbicides	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Herbicides	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Herbicides	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Herbicides	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Herbicides	8151	1918-00-9	Dicamba	6.5	J	20	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Herbicides	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Herbicides	8151	88-85-7	Dinoseb	100	U	100	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Herbicides	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
Fish	UDA Channel Ca mp#1	26-Oct-00	Composite	Reference			PCBs	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			PCBs	680	C-TOTAL-PCB	*Total Polychlorinated Biphenyls*	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	72-54-8	4,4'-DDD	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	72-55-9	4,4'-DDE	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	50-29-3	4,4'-DDT	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	309-00-2	Aldrin	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	319-84-6	alpha-BHC	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	5103-71-9	alpha-Chlordane	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	319-85-7	beta-BHC	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	319-86-8	delta-BHC	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	60-57-1	Dieldrin	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	959-98-8	Endosulfan I	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	33213-65-9	Endosulfan II	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	1031-07-8	Endosulfan sulfate	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	72-20-8	Endrin	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	7421-93-4	Endrin aldehyde	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	53494-70-5	Endrin ketone	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	5103-74-2	gamma-Chlordane	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	76-44-8	Heptachlor	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	1024-57-3	Heptachlor epoxide	50	U	50	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	72-43-5	Methoxychlor	200	U	200	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			Pesticides	8081A	8001-35-2	Toxaphene	1700	U	1700	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	108-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	120-12-7	Anthracene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	86-74-8	Carbazole	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	218-01-9	Chrysene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	86-73-7	Fluorene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	78-59-1	Isophorone	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	108-95-2	Phenol	510	U	510	ug/kg
Fish	UDA Channel Catfish-Comp#1	26-Oct-00	Composite	Reference			SVOCs	8270C	129-00-0	Pyrene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference				% Lipids	% Lipids	% Lipids	10			%
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	4 8	J	0 1	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0 28	U	0 1	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	0 76	J	0 1	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0 06	UJ	0 06	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0 08	UJ	0 08	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0 07	UJ	0 07	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0 51	J	0 05	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0 36	J	0 07	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0 26	J	0 04	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.2	J	0 07	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0 06	UJ	0 06	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0 06	UJ	0 06	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0 05	UJ	0 05	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0 15	U	0 05	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0 05	UJ	0 05	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0 17	J	0 06	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	1	J	0 04	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	37871-00-4	Total HpCDD	1		0 1	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	38998-75-3	Total HpCDF	2 9	J	0 07	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	34465-46-8	Total HxCDD	1 3	U	0 07	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	55684-94-1	Total HxCDF	18 4	J	0 05	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	36088-22-9	Total PeCDD	2 2	J	0 06	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	30402-15-4	Total PeCDF	49 4	J	0 05	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	41903-57-5	Total TCDD	0 75	J	0 06	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Dioxin	SW8290	55722-27-5	Total TCDF	84 2	J	0 04	pg/g
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Herbicides	8151	93-76-5	2,4,5-T	7 1	J	8 3	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	7 5	J	8 3	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Herbicides	8151	94-75-7	2,4-D	8 3	U	8 3	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Herbicides	8151	94-82-6	2,4-DB	8 3	U	8 3	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Herbicides	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Herbicides	8151	1918-00-9	Dicamba	5.2	J	20	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Herbicides	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Herbicides	8151	88-85-7	Dinoseb	100	U	100	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Herbicides	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			PCBs	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	72-55-9	4,4'-DDE	25	J	25	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	50-29-3	4,4'-DDT	7 6	J	25	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	309-00-2	Aldrin	25	U	25	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	60-57-1	Dieldrin	32	J	25	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	959-98-8	Endosulfan I	3	J	25	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	72-20-8	Endrin	25	U	25	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	7421-93-4	Endrin aldehyde	7.4	J	25	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	5103-74-2	gamma-Chlordane	5.8	J	25	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			Pesticides	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	120-12-7	Anthracene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	86-74-8	Carbazole	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	218-01-9	Chrysene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	84-66-2	Diethylphthalate	110	J	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	86-73-7	Fluorene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	78-59-1	Isophorone	510	U	510	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	108-95-2	Phenol	510	U	510	ug/kg
Fish	UDA Drum Comp	02-Nov-00	Composite	Reference			SVOCs	8270C	129-00-0	Pyrene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference				% Lipids	% Lipids	% Lipids	6			%
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	79.7		0.3	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	1.2	U	0.2	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	8.8		0.2	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.59	J	0.1	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.2	UJ	0.2	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.3	J	0.1	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.85	J	0.09	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	1.8	J	0.1	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.08	UJ	0.08	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	1.1	J	0.1	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.1	UJ	0.1	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	1	J	0.1	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.09	UJ	0.09	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.3	J	0.09	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.25	J	0.09	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	1.1		0.09	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	2.6		0.08	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	37871-00-4	Total HpCDD	12.4		0.2	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	38998-75-3	Total HpCDF	4.5	J	0.1	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	34465-46-8	Total HxCDD	4.9	J	0.1	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	55684-94-1	Total HxCDF	21.2	J	0.09	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	36088-22-9	Total PeCDD	3	J	0.1	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	30402-15-4	Total PeCDF	125	J	0.09	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	41903-57-5	Total TCDD	1.5		0.09	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Dioxin	SW8290	55722-27-5	Total TCDF	67	J	0.08	pg/g
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Herbicides	8151	93-76-5	2,4,5-T	8.3	U	8.3	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	8.3	U	8.3	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Herbicides	8151	94-75-7	2,4-D	8.3	U	8.3	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Herbicides	8151	94-82-6	2,4-DB	8.3	U	8.3	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Herbicides	8151	75-99-0	Dalapon	2000	U	2000	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Herbicides	8151	1918-00-9	Dicamba	20	U	20	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Herbicides	8151	120-36-5	Dichloroprop	100	U	100	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Herbicides	8151	88-85-7	Dinoseb	100	U	100	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2000	U	2000	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2000	U	2000	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Herbicides	8151	87-86-5	Pentachlorophenol	17	U	17	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			PCBs	680	2051-24-3	Decachlorobiphenyl	50	U	50	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	10	U	10	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	30	U	30	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	20	U	20	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	10	U	10	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	50	U	50	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	30	U	30	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	20	U	20	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	20	U	20	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	50	U	50	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	10	U	10	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	72-54-8	4,4'-DDD	25	U	25	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	72-55-9	4,4'-DDE	13	J	25	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	50-29-3	4,4'-DDT	25	U	25	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	309-00-2	Aldrin	25	U	25	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	319-84-6	alpha-BHC	25	U	25	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	5103-71-9	alpha-Chlordane	25	U	25	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	319-85-7	beta-BHC	25	U	25	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	319-86-8	delta-BHC	25	U	25	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	60-57-1	Dieldrin	6.7	J	25	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	959-98-8	Endosulfan I	25	U	25	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	33213-65-9	Endosulfan II	25	U	25	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	1031-07-8	Endosulfan sulfate	25	U	25	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	72-20-8	Endrin	25	U	25	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	7421-93-4	Endrin aldehyde	5.1	J	25	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	53494-70-5	Endrin ketone	25	U	25	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	25	U	25	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	5103-74-2	gamma-Chlordane	25	U	25	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	76-44-8	Heptachlor	25	U	25	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	1024-57-3	Heptachlor epoxide	25	U	25	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	72-43-5	Methoxychlor	100	U	100	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			Pesticides	8081A	8001-35-2	Toxaphene	850	U	850	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOC	8270C	87-61-6	1,2,3-Trichlorobenzene	510		510	ug/kg

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	2500	U	2500	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	91-58-7	2-Chloronaphthalene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	95-57-8	2-Chlorophenol	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	91-57-6	2-Methylnaphthalene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	110	J	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	88-74-4	2-Nitroaniline	2500	U	2500	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	88-75-5	2-Nitrophenol	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	2000	U	2000	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	108-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	99-09-2	3-Nitroaniline	2500	U	2500	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	2500	U	2500	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	106-47-8	4-Chloroaniline	990	U	990	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	100-01-6	4-Nitroaniline	2500	U	2500	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	100-02-7	4-Nitrophenol	2500	U	2500	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	83-32-9	Acenaphthene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	208-96-8	Acenaphthylene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	120-12-7	Anthracene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	56-55-3	Benzo(a)anthracene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	50-32-8	Benzo(a)pyrene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	85-68-7	Butylbenzylphthalate	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	86-74-8	Carbazole	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	218-01-9	Chrysene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	84-74-2	Di-n-butylphthalate	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	117-84-0	Di-n-octylphthalate	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	132-64-9	Dibenzofuran	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	84-66-2	Diethylphthalate	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	131-11-3	Dimethylphthalate	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	206-44-0	Fluoranthene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	86-73-7	Fluorene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	118-74-1	Hexachlorobenzene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	87-68-3	Hexachlorobutadiene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	67-72-1	Hexachloroethane	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	78-59-1	Isophorone	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	91-20-3	Naphthalene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	98-95-3	Nitrobenzene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	2500	U	2500	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	85-01-8	Phenanthrene	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	108-95-2	Phenol	510	U	510	ug/kg
Fish	UDA-UE Comp Shad	27-Oct-00	Composite	Reference			SVOCs	8270C	129-00-0	Pyrene	510	U	510	ug/kg
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	1180		2.5	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	14.3		2	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	31.3		2.2	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	3	J	1.2	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	1.6	UJ	1.6	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	1.4	UJ	1.4	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.8	UJ	0.8	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	1.3	UJ	1.3	pg/g

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0 8	UJ	0 8	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	1 3	UJ	1 3	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	1 1	UJ	1 1	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	1 5	UJ	1 5	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0 8	UJ	0 8	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0 9	UJ	0 9	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0 8	UJ	0 8	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0 9	UJ	0 9	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0 8	UJ	0 8	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Dioxin	SW8290	37871-00-4	Total HpCDD	75 3		2 2	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Dioxin	SW8290	38998-75-3	Total HpCDF	12 9		1 4	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Dioxin	SW8290	34465-46-8	Total HxCDD	7 3		1 3	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Dioxin	SW8290	55684-94-1	Total HxCDF	2 3	J	0 9	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Dioxin	SW8290	36088-22-9	Total PeCDD	1 5	UJ	1 5	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Dioxin	SW8290	30402-15-4	Total PeCDF	0 8	UJ	0 8	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Dioxin	SW8290	41903-57-5	Total TCDD	3 1	JB	0 9	pg/g
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Dioxin	SW8290	55722-27-5	Total TCDF	0 8	UJ	0 8	pg/g
Sediment	SD-DDA-1			Reference	3 5	3 5	Grain Size	ASTM D 422	%Cobbles	Cobble	0			%
Sediment	SD-DDA-1			Reference	3 5	3 5	Grain Size	ASTM D 422	%Clay	Fines (Clay)	24 9			%
Sediment	SD-DDA-1			Reference	3 5	3 5	Grain Size	ASTM D 422	%Silt	Fines (Silt)	67 2			%
Sediment	SD-DDA-1			Reference	3 5	3 5	Grain Size	ASTM D 422	%Coarse Gravel	Gravel (Coarse)	0			%
Sediment	SD-DDA-1			Reference	3 5	3 5	Grain Size	ASTM D 422	%Fine Gravel	Gravel (Fine)	0			%
Sediment	SD-DDA-1			Reference	3 5	3 5	Grain Size	ASTM D 422	%Coarse Sand	Sand (Coarse)	0			%
Sediment	SD-DDA-1			Reference	3 5	3 5	Grain Size	ASTM D 422	%Fine Sand	Sand (Fine)	7 5			%
Sediment	SD-DDA-1			Reference	3 5	3 5	Grain Size	ASTM D 422	%Medium Sand	Sand (Medium)	0 4			%
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Herbicides	8151	93-76-5	2,4,5-T	14	UJ	14	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	14	UJ	14	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Herbicides	8151	94-75-7	2,4-D	14	UJ	14	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Herbicides	8151	94-82-6	2,4-DB	14	UJ	14	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Herbicides	8151	75-99-0	Dalapon	3300	UJ	3300	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Herbicides	8151	1918-00-9	Dicamba	33	UJ	33	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Herbicides	8151	120-36-5	Dichloroprop	160	UJ	160	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Herbicides	8151	88-85-7	Dinoseb	160	UJ	160	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	3300	UJ	3300	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	3300	UJ	3300	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Herbicides	8151	87-86-5	Pentachlorophenol	28	UJ	28	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	PCBs	680	2051-24-3	Decachlorobiphenyl	28	U	28	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	5 4	U	5 4	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	16	U	16	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	11	U	11	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	5 4	U	5 4	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	28	U	28	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	16	U	16	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	11	U	11	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	11	U	11	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	28	U	28	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	5 4	U	5 4	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	72-54-8	4,4'-DDD	5 4	U	5 4	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	72-55-9	4,4'-DDE	5 4	U	5 4	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	50-29-3	4,4'-DDT	5 4	U	5 4	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	309-00-2	Aldrin	2 8	U	2 8	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	319-84-6	alpha-BHC	1 4	U	1 4	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	5103-71-9	alpha-Chlordane	2 8	U	2 8	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	319-85-7	beta-BHC	1 4	U	1 4	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	319-86-8	delta-BHC	1 4	U	1 4	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	60-57-1	Dieldrin	5 4	U	5 4	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	959-98-8	Endosulfan I	2 8	U	2 8	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	33213-65-9	Endosulfan II	5 4	U	5 4	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	1031-07-8	Endosulfan sulfate	5 4	U	5 4	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	72-20-8	Endrin	5 4	U	5 4	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	7421-93-4	Endrin aldehyde	5 4	U	5 4	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	53494-70-5	Endrin ketone	5 4	U	5 4	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	1 4	U	1 4	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	5103-74-2	gamma-Chlordane	2 8	U	2 8	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	76-44-8	Heptachlor	2 8	U	2 8	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	1024-57-3	Heptachlor epoxide	2 8	U	2 8	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	72-43-5	Methoxychlor	28	U	28	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	Pesticides	8081A	8001-35-2	Toxaphene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3 5	3 5	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	280	U	280	ug/kg dw
Sediment	SD-D	27-Oct-00		Reference	3 5	3 5	SVOC	8270C	933-78-8	2,3,5-Trichlorophenol	280		280	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	1400	U	1400	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	91-58-7	2-Chloronaphthalene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	95-57-8	2-Chlorophenol	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	91-57-6	2-Methylnaphthalene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	88-74-4	2-Nitroaniline	1400	U	1400	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	88-75-5	2-Nitrophenol	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	1100	U	1100	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	99-09-2	3-Nitroaniline	1400	U	1400	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	1400	U	1400	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	106-47-8	4-Chloroaniline	540	U	540	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	100-01-6	4-Nitroaniline	1400	U	1400	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	100-02-7	4-Nitrophenol	1400	U	1400	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	83-32-9	Acenaphthene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	208-96-8	Acenaphthylene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	120-12-7	Anthracene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	56-55-3	Benzo(a)anthracene	46	J	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	50-32-8	Benzo(a)pyrene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	85-68-7	Butylbenzylphthalate	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	86-74-8	Carbazole	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	218-01-9	Chrysene	49	J	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	84-74-2	Di-n-butylphthalate	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	117-84-0	Di-n-octylphthalate	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	132-64-9	Dibenzofuran	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	84-66-2	Diethylphthalate	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	131-11-3	Dimethylphthalate	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	206-44-0	Fluoranthene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	86-73-7	Fluorene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	118-74-1	Hexachlorobenzene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	87-68-3	Hexachlorobutadiene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	67-72-1	Hexachloroethane	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	78-59-1	Isophorone	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	91-20-3	Naphthalene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	98-95-3	Nitrobenzene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	1400	U	1400	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	85-01-8	Phenanthrene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	108-95-2	Phenol	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	SVOCs	8270C	129-00-0	Pyrene	280	U	280	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	Total Organic Carbon	9060/Calculation	%TOC	Percent Total Organic Carbon	0.817			%
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	Total Organic Carbon	9060	TOC	Total Organic Carbon	8170			mg/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	75-34-3	1,1-Dichloroethane	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	75-35-4	1,1-Dichloroethene	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	107-06-2	1,2-Dichloroethane	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	78-87-5	1,2-Dichloropropane	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	78-93-3	2-Butanone (MEK)	8.4	U	8.4	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	591-78-6	2-Hexanone	8.4	U	8.4	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	8.4	U	8.4	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	67-64-1	Acetone	41	B	21	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	71-43-2	Benzene	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	75-27-4	Bromodichloromethane	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	75-25-2	Bromoform	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	1.7	U	1.7	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	75-15-0	Carbon disulfide	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	56-23-5	Carbon tetrachloride	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	108-90-7	Chlorobenzene	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	75-00-3	Chloroethane	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	67-66-3	Chloroform	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	74-87-3	Chloromethane	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	124-48-1	Dibromochloromethane	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	100-41-4	Ethylbenzene	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	108-38-3	m&p-Xylene	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	4.2	U	4.2	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	100-42-5	Styrene	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	127-18-4	Tetrachloroethene	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	108-88-3	Toluene	1.8		1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	79-01-6	Trichloroethene	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	75-01-4	Vinyl chloride	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-1	27-Oct-00		Reference	3.5	3.5	VOCs	8260B	1330-20-7	Xylenes, Total	1.7	U	1.7	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	12.3		0.7	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.58	J	0.6	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	0.4	UJ	0.4	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.2	UJ	0.2	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.3	UJ	0.3	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.2	UJ	0.2	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.2	UJ	0.2	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.2	UJ	0.2	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.2	UJ	0.2	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.2	UJ	0.2	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.2	UJ	0.2	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.3	UJ	0.3	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.2	UJ	0.2	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.2	UJ	0.2	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.2	UJ	0.2	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0.3	UJ	0.3	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0.2	UJ	0.2	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	37871-00-4	Total HpCDD	0.58	J	0.4	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	38998-75-3	Total HpCDF	0.2	UJ	0.2	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	34465-46-8	Total HxCDD	0.2	UJ	0.2	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	55684-94-1	Total HxCDF	0.2	UJ	0.2	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	36088-22-9	Total PeCDD	0.3	UJ	0.3	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	30402-15-4	Total PeCDF	0.2	UJ	0.2	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	41903-57-5	Total TCDD	0.3	UJ	0.3	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Dioxin	SW8290	55722-27-5	Total TCDF	0.2	UJ	0.2	pg/g
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Grain Size	ASTM D 422	%Cobbles	Cobble	0			%
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Grain Size	ASTM D 422	%Clay	Fines (Clay)	1			%
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Grain Size	ASTM D 422	%Silt	Fines (Silt)	0.4			%
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Grain Size	ASTM D 422	%Coarse Gravel	Gravel (Coarse)	0			%
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Grain Size	ASTM D 422	%Fine Gravel	Gravel (Fine)	0			%
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Grain Size	ASTM D 422	%Coarse Sand	Sand (Coarse)	0.1			%
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Grain Size	ASTM D 422	%Fine Sand	Sand (Fine)	94.8			%
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Grain Size	ASTM D 422	%Medium Sand	Sand (Medium)	3.7			%
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Herbicides	8151	93-76-5	2,4,5-T	10	U	10	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	10	U	10	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Herbicides	8151	94-75-7	2,4-D	10	U	10	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Herbicides	8151	94-82-6	2,4-DB	10	U	10	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Herbicides	8151	75-99-0	Dalapon	2400	U	2400	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Herbicides	8151	1918-00-9	Dicamba	24	U	24	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Herbicides	8151	120-36-5	Dichloroprop	120	U	120	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Herbicides	8151	88-85-7	Dinoseb	120	R	120	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2400	U	2400	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2400	U	2400	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Herbicides	8151	87-86-5	Pentachlorophenol	16	J	20	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	PCBs	680	2051-24-3	Decachlorobiphenyl	21	U	21	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	4	U	4	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	8.2	U	8.2	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	4	U	4	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	21	U	21	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	8.2	U	8.2	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	8.2	U	8.2	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	21	U	21	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	4	U	4	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	72-54-8	4,4'-DDD	4	U	4	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	72-55-9	4,4'-DDE	4	U	4	ug/kg dw
Sediment	SD-DDA-	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	50-29-3	4,4'-DDT	4	U	4	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	309-00-2	Aldrin	2.1	U	2.1	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	319-84-6	alpha-BHC	1	U	1	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	5103-71-9	alpha-Chlordane	2.1	U	2.1	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	319-85-7	beta-BHC	1	U	1	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	319-86-8	delta-BHC	1	U	1	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	60-57-1	Dieldrin	4	U	4	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	959-98-8	Endosulfan I	2.1	U	2.1	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	33213-65-9	Endosulfan II	4	U	4	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	1031-07-8	Endosulfan sulfate	4	U	4	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	72-20-8	Endrin	4	U	4	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	7421-93-4	Endrin aldehyde	4	U	4	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	53494-70-5	Endrin ketone	4	U	4	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	1	U	1	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	5103-74-2	gamma-Chlordane	2.1	U	2.1	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	76-44-8	Heptachlor	2.1	U	2.1	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	1024-57-3	Heptachlor epoxide	2.1	U	2.1	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	72-43-5	Methoxychlor	21	U	21	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	Pesticides	8081A	8001-35-2	Toxaphene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	1000	U	1000	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	91-58-7	2-Chloronaphthalene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	95-57-8	2-Chlorophenol	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	91-57-6	2-Methylnaphthalene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	88-74-4	2-Nitroaniline	1000	U	1000	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	88-75-5	2-Nitrophenol	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	800	U	800	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	99-09-2	3-Nitroaniline	1000	U	1000	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	1000	U	1000	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	106-47-8	4-Chloroaniline	400	U	400	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	100-01-6	4-Nitroaniline	1000	U	1000	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	100-02-7	4-Nitrophenol	1000	U	1000	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	83-32-9	Acenaphthene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	208-96-8	Acenaphthylene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	120-12-7	Anthracene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	56-55-3	Benzo(a)anthracene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	50-32-8	Benzo(a)pyrene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	85-68-7	Butylbenzylphthalate	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	86-74-8	Carbazole	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	218-01-9	Chrysene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	84-74-2	Di-n-butylphthalate	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	117-84-0	Di-n-octylphthalate	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	132-64-9	Dibenzofuran	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	84-66-2	Diethylphthalate	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	131-11-3	Dimethylphthalate	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	206-44-0	Fluoranthene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	86-73-7	Fluorene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	118-74-1	Hexachlorobenzene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	87-68-3	Hexachlorobutadiene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6.2	6.2	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	210	U	210	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	SVOCs	8270C	67-72-1	Hexachloroethane	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	SVOCs	8270C	78-59-1	Isophorone	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	SVOCs	8270C	91-20-3	Naphthalene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	SVOCs	8270C	98-95-3	Nitrobenzene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	1000	U	1000	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	SVOCs	8270C	85-01-8	Phenanthrene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	SVOCs	8270C	108-95-2	Phenol	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	SVOCs	8270C	129-00-0	Pyrene	210	U	210	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	Total Organic Carbon	9060/Calculation	%TOC	Percent Total Organic Carbon	0 0311			%
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	Total Organic Carbon	9060	TOC	Total Organic Carbon	311			mg/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	75-34-3	1,1-Dichloroethane	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	75-35-4	1,1-Dichloroethene	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	107-06-2	1,2-Dichloroethane	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	78-87-5	1,2-Dichloropropane	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	78-93-3	2-Butanone (MEK)	3 9	U	3 9	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	591-78-6	2-Hexanone	3 9	U	3 9	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	3 9	U	3 9	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	67-64-1	Acetone	9 7	U	9 7	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	71-43-2	Benzene	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	75-27-4	Bromodichloromethane	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	75-25-2	Bromoform	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	75-15-0	Carbon disulfide	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	56-23-5	Carbon tetrachloride	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	108-90-7	Chlorobenzene	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	75-00-3	Chloroethane	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	67-66-3	Chloroform	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	74-87-3	Chloromethane	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	124-48-1	Dibromochloromethane	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	100-41-4	Ethylbenzene	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	108-38-3	m&p-Xylene	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	1 9	U	1 9	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	100-42-5	Styrene	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	127-18-4	Tetrachloroethene	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	108-88-3	Toluene	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	79-01-6	Trichloroethene	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	75-01-4	Vinyl chloride	0 78	U	0 78	ug/kg dw
Sediment	SD-DDA-13	23-Oct-00		Reference	6 2	6 2	VOCs	8260B	1330-20-7	Xylenes, Total	0 78	U	0 78	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	18 1	J	0 8	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0 6	UJ	0 6	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	0 78	JB	0 5	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0 4	U	0 3	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0 4	UJ	0 4	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0 39	J	0 2	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0 2	UJ	0 2	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0 2	UJ	0 2	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0 2	UJ	0 2	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0 2	UJ	0 2	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0 2	UJ	0 2	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	37871-00-4	Total HpCDD	1 4	JB	0 5	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	38998-75-3	Total HpCDF	0 4	U	0 3	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	34465-46-8	Total HxCDD	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	55684-94-1	Total HxCDF	0 39	J	0 2	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	36088-22-9	Total PeCDD	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	30402-15-4	Total PeCDF	0 52	J	0 2	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	41903-57-5	Total TCDD	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Dioxin	SW8290	55722-27-5	Total TCDF	0 2	UJ	0 2	pg/g
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Grain Size	ASTM D 422	%Cobbles	Cobble	0			%
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Grain Size	ASTM D 422	%Clay	Fines (Clay)	1			%
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Grain Size	ASTM D 422	%Silt	Fines (Silt)	0 5			%
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Grain Size	ASTM D 422	%Coarse Gravel	Gravel (Coarse)	0			%
Sediment	SD-PDA	24-Oct-00		Site	13 5	13 5	Grain Size	ASTM D 422	%Fine Gravel	Gravel (Fine)	0			%

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Grain Size	ASTM D 422	%Coarse Sand	Sand (Coarse)	0 2			%
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Grain Size	ASTM D 422	%Fine Sand	Sand (Fine)	91 4			%
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Grain Size	ASTM D 422	%Medium Sand	Sand (Medium)	6 9			%
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Herbicides	8151	93-76-5	2,4,5-T	10	U	10	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	10	U	10	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Herbicides	8151	94-75-7	2,4-D	10	U	10	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Herbicides	8151	94-82-6	2,4-DB	10	U	10	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Herbicides	8151	75-99-0	Dalapon	2400	U	2400	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Herbicides	8151	1918-00-9	Dicamba	24	U	24	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Herbicides	8151	120-36-5	Dichloroprop	120	U	120	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Herbicides	8151	88-85-7	Dinoseb	120	R	120	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2400	U	2400	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2100	J	2400	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Herbicides	8151	87-86-5	Pentachlorophenol	20	U	20	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	PCBs	680	2051-24-3	Decachlorobiphenyl	21	U	21	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	4	U	4	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	8 2	U	8 2	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	4	U	4	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	21	U	21	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	8 2	U	8 2	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	8 2	U	8 2	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	21	U	21	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	4	U	4	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	72-54-8	4,4'-DDD	4	U	4	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	72-55-9	4,4'-DDE	4	U	4	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	50-29-3	4,4'-DDT	4	U	4	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	309-00-2	Aldrin	2 1	U	2 1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	319-84-6	alpha-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	5103-71-9	alpha-Chlordane	2 1	U	2 1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	319-85-7	beta-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	319-86-8	delta-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	60-57-1	Dieldrin	4	U	4	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	959-98-8	Endosulfan I	2 1	U	2 1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	33213-65-9	Endosulfan II	4	U	4	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	1031-07-8	Endosulfan sulfate	4	U	4	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	72-20-8	Endrin	4	U	4	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	7421-93-4	Endrin aldehyde	4	U	4	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	53494-70-5	Endrin ketone	4	U	4	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	1	U	1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	5103-74-2	gamma-Chlordane	2 1	U	2 1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	76-44-8	Heptachlor	2 1	U	2 1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	1024-57-3	Heptachlor epoxide	2 1	U	2 1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	72-43-5	Methoxychlor	21	U	21	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	Pesticides	8081A	8001-35-2	Toxaphene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	470		210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	1000		210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	1000	U	1000	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	91-58-7	2-Chloronaphthalene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	95-57-8	2-Chlorophenol	360		210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	91-57-6	2-Methylnaphthalene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	88-74-4	2-Nitroaniline	1000	U	1000	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	88-75-5	2-Nitrophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	800	U	800	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	210		210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	99-09-2	3-Nitroaniline	1000	U	1000	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	1000	U	1000	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13 5	13 5	SVOCs	8270C	106-47-8	4-Chloroaniline	4800		420	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	100-01-6	4-Nitroaniline	1000	U	1000	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	100-02-7	4-Nitrophenol	1000	U	1000	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	83-32-9	Acenaphthene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	208-96-8	Acenaphthylene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	120-12-7	Anthracene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	56-55-3	Benzo(a)anthracene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	50-32-8	Benzo(a)pyrene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	85-68-7	Butylbenzylphthalate	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	86-74-8	Carbazole	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	218-01-9	Chrysene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	84-74-2	Di-n-butylphthalate	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	117-84-0	Di-n-octylphthalate	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	132-64-9	Dibenzofuran	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	84-66-2	Diethylphthalate	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	131-11-3	Dimethylphthalate	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	206-44-0	Fluoranthene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	86-73-7	Fluorene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	118-74-1	Hexachlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	87-68-3	Hexachlorobutadiene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	67-72-1	Hexachloroethane	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	78-59-1	Isophorone	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	91-20-3	Naphthalene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	98-95-3	Nitrobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	1000	U	1000	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	85-01-8	Phenanthrene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	108-95-2	Phenol	5600		210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	SVOCs	8270C	129-00-0	Pyrene	210	U	210	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	Total Organic Carbon	9060/Calculation	%TOC	Percent Total Organic Carbon	0.0433			%
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	Total Organic Carbon	9060	TOC	Total Organic Carbon	433			mg/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	75-34-3	1,1-Dichloroethane	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	75-35-4	1,1-Dichloroethene	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	107-06-2	1,2-Dichloroethane	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	78-87-5	1,2-Dichloropropane	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	78-93-3	2-Butanone (MEK)	5.3	U	5.3	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	591-78-6	2-Hexanone	5.3	U	5.3	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	5.3	U	5.3	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	67-64-1	Acetone	13	U	13	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	71-43-2	Benzene	1.2		1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	75-27-4	Bromodichloromethane	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	75-25-2	Bromoform	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	75-15-0	Carbon disulfide	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	56-23-5	Carbon tetrachloride	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	108-90-7	Chlorobenzene	34		1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	75-00-3	Chloroethane	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	67-66-3	Chloroform	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	74-87-3	Chloromethane	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	124-48-1	Dibromochloromethane	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	100-41-4	Ethylbenzene	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	108-38-3	m&p-Xylene	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	2.6	U	2.6	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	100-42-5	Styrene	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	127-18-4	Tetrachloroethene	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	108-88-3	Toluene	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	79-01-6	Trichloroethene	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	75-01-4	Vinyl chloride	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-10	24-Oct-00		Site	13.5	13.5	VOCs	8260B	1330-20-7	Xylenes, Total	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	911		1.2	pg/g
Sediment	SD-PDA-	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	74.9		0.9	pg/g

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	70.8		0.8	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	10.4		0.4	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.79	J	0.6	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.5	UJ	0.5	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.6	J	0.3	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	1.2	J	0.5	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.5	UJ	0.5	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.4	UJ	0.4	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0.2	UJ	0.2	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	37871-00-4	Total HpCDD	146		0.8	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	38998-75-3	Total HpCDF	54.2	J	0.5	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	34465-46-8	Total HxCDD	11.7	J	0.5	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	55684-94-1	Total HxCDF	10.1	J	0.3	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	36088-22-9	Total PeCDD	0.25	J	0.3	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	30402-15-4	Total PeCDF	2.7	J	0.3	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	41903-57-5	Total TCDD	42.8	J	0.3	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Dioxin	SW8290	55722-27-5	Total TCDF	0.2	UJ	0.2	pg/g
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Grain Size	ASTM D 422	%Cobbles	Cobble	0			%
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Grain Size	ASTM D 422	%Clay	Fines (Clay)	22.1			%
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Grain Size	ASTM D 422	%Silt	Fines (Silt)	20.5			%
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Grain Size	ASTM D 422	%Coarse Gravel	Gravel (Coarse)	0			%
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Grain Size	ASTM D 422	%Fine Gravel	Gravel (Fine)	0			%
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Grain Size	ASTM D 422	%Coarse Sand	Sand (Coarse)	0			%
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Grain Size	ASTM D 422	%Fine Sand	Sand (Fine)	57			%
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Grain Size	ASTM D 422	%Medium Sand	Sand (Medium)	0.4			%
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Herbicides	8151	93-76-5	2,4,5-T	14	U	14	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	14	U	14	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Herbicides	8151	94-75-7	2,4-D	14	U	14	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Herbicides	8151	94-82-6	2,4-DB	14	U	14	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Herbicides	8151	75-99-0	Dalapon	3500	U	3500	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Herbicides	8151	1918-00-9	Dicamba	35	U	35	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Herbicides	8151	120-36-5	Dichloroprop	180	UJ	180	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Herbicides	8151	88-85-7	Dinoseb	180	U	180	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	3500	U	3500	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	3500	U	3500	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Herbicides	8151	87-86-5	Pentachlorophenol	30	U	30	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	PCBs	680	2051-24-3	Decachlorobiphenyl	30	U	30	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	5.8	U	5.8	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	18	U	18	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	5.8	U	5.8	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	30	U	30	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	18	U	18	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	30	U	30	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	5.8	U	5.8	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	72-54-8	4,4'-DDD	5.8	UJ	5.8	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	72-55-9	4,4'-DDE	5.8	UJ	5.8	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	50-29-3	4,4'-DDT	5.8	UJ	5.8	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	309-00-2	Aldrin	3	UJ	3	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	319-84-6	alpha-BHC	1.5	UJ	1.5	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	5103-71-9	alpha-Chlordane	3	UJ	3	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	319-85-7	beta-BHC	1.5	UJ	1.5	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	319-86-8	delta-BHC	1.5	UJ	1.5	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	60-57-1	Dieldrin	5.8	UJ	5.8	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	959-98-8	Endosulfan I	3	UJ	3	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	33213-65-9	Endosulfan II	5.8	UJ	5.8	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	1031-07-8	Endosulfan sulfate	5.8	UJ	5.8	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	72-20-8	Endrin	5.8	UJ	5.8	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	7421-93-4	Endrin aldehyde	5.8	UJ	5.8	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	53494-70-5	Endrin ketone	5.8	UJ	5.8	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	1.5	UJ	1.5	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	5103-74-2	gamma-Chlordane	3	UJ	3	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	76-44-8	Heptachlor	3	UJ	3	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	1024-57-3	Heptachlor epoxide	3	UJ	3	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	72-43-5	Methoxychlor	30	UJ	30	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Pesticides	8081A	8001-35-2	Toxaphene	300	UJ	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	110	J	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	300	U	300	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	78	J	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	1400	U	1400	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	750		300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	91-58-7	2-Chloronaphthalene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	95-57-8	2-Chlorophenol	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	91-57-6	2-Methylnaphthalene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	88-74-4	2-Nitroaniline	1400	U	1400	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	88-75-5	2-Nitrophenol	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	1200	U	1200	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	800		300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	99-09-2	3-Nitroaniline	1400	U	1400	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	1400	U	1400	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	106-47-8	4-Chloroaniline	2200		580	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	100-01-6	4-Nitroaniline	1400	U	1400	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	100-02-7	4-Nitrophenol	1400	U	1400	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	83-32-9	Acenaphthene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	208-96-8	Acenaphthylene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	120-12-7	Anthracene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	56-55-3	Benzo(a)anthracene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	50-32-8	Benzo(a)pyrene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	85-68-7	Butylbenzylphthalate	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	86-74-8	Carbazole	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	218-01-9	Chrysene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	84-74-2	Di-n-butylphthalate	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	117-84-0	Di-n-octylphthalate	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	132-64-9	Dibenzofuran	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	84-66-2	Diethylphthalate	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	131-11-3	Dimethylphthalate	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	206-44-0	Fluoranthene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	86-73-7	Fluorene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	118-74-1	Hexachlorobenzene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	87-68-3	Hexachlorobutadiene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	67-72-1	Hexachloroethane	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	78-59-1	Isophorone	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	91-20-3	Naphthalene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	98-95-3	Nitrobenzene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	1400	U	1400	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	85-01-8	Phenanthrene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	108-95-2	Phenol	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	SVOCs	8270C	129-00-0	Pyrene	300	U	300	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Total Organic Carbon	9060/Calculation	%TOC	Percent Total Organic Carbon	1.02			%
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	Total Organic Carbon	9060	TOC	Total Organic Carbon	10200			mg/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	75-34-3	1,1-Dichloroethane	2.2	UJ	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	75-35-4	1,1-Dichloroethene	2.2	UJ	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	107-06-2	1,2-Dichloroethane	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	78-87-5	1,2-Dichloropropane	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	78-93-3	2-Butanone (MEK)	91	JB	25	ug/kg dw
Sediment	SD-PD	25-Oct-00		Site	11.5	11.5	VOCs	8260B	591-78-6	2-Hexanone	11	U	11	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	25		2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	67-64-1	Acetone	320	JB	28	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	71-43-2	Benzene	92		2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	75-27-4	Bromodichloromethane	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	75-25-2	Bromoform	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	75-15-0	Carbon disulfide	3.3		2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	56-23-5	Carbon tetrachloride	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	108-90-7	Chlorobenzene	7200		170	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	75-00-3	Chloroethane	2.2	UJ	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	67-66-3	Chloroform	2.2	UJ	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	74-87-3	Chloromethane	2.2	UJ	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2.2	UJ	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	124-48-1	Dibromochloromethane	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	100-41-4	Ethylbenzene	38		2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	108-38-3	m&p-Xylene	64		2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5.5	UJ	5.5	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	100-42-5	Styrene	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	127-18-4	Tetrachloroethene	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	108-88-3	Toluene	7800		170	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	79-01-6	Trichloroethene	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	75-01-4	Vinyl chloride	2.2	UJ	2.2	ug/kg dw
Sediment	SD-PDA-2	25-Oct-00		Site	11.5	11.5	VOCs	8260B	1330-20-7	Xylenes, Total	82		2.2	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	261		1.3	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	7.7	JB	1	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	11	J	0.9	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	2.2	U	0.4	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.6	UJ	0.6	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.5	UJ	0.5	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.51	J	0.3	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.4	UJ	0.4	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.4	UJ	0.4	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.4	UJ	0.4	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0.67	J	0.2	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	37871-00-4	Total HpCDD	23.6	J	0.9	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	38998-75-3	Total HpCDF	6.4	J	0.5	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	34465-46-8	Total HxCDD	3.4	J	0.5	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	55684-94-1	Total HxCDF	2.4	J	0.3	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	36088-22-9	Total PeCDD	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	30402-15-4	Total PeCDF	0.93	U	0.3	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	41903-57-5	Total TCDD	2.5	JB	0.3	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Dioxin	SW8290	55722-27-5	Total TCDF	0.99	J	0.2	pg/g
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Grain Size	ASTM D 422	%Cobbles	Cobble	0			%
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Grain Size	ASTM D 422	%Clay	Fines (Clay)	7			%
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Grain Size	ASTM D 422	%Silt	Fines (Silt)	5.8			%
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Grain Size	ASTM D 422	%Coarse Gravel	Gravel (Coarse)	0			%
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Grain Size	ASTM D 422	%Fine Gravel	Gravel (Fine)	0			%
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Grain Size	ASTM D 422	%Coarse Sand	Sand (Coarse)	2			%
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Grain Size	ASTM D 422	%Fine Sand	Sand (Fine)	47.4			%
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Grain Size	ASTM D 422	%Medium Sand	Sand (Medium)	37.8			%
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Herbicides	8151	93-76-5	2,4,5-T	10	U	10	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	10	U	10	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Herbicides	8151	94-75-7	2,4-D	10	U	10	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Herbicides	8151	94-82-6	2,4-DB	10	U	10	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Herbicides	8151	75-99-0	Dalapon	2400	U	2400	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Herbicides	8151	1918-00-9	Dicamba	24	U	24	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Herbicides	8151	120-36-5	Dichloroprop	4.4	J	120	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Herbicides	8151	88-85-7	Dinoseb	120	U	120	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2400	U	2400	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2400	U	2400	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Herbicides	8151	87-86-5	Pentachlorophenol	20	U	20	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	PCBs	680	2051-24-3	Decachlorobiphenyl	20	U	20	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	4	U	4	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	8.1	U	8.1	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	4	U	4	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	20	U	20	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	8.1	U	8.1	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	8 1	U	8.1	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	20	U	20	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	4	U	4	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	72-54-8	4,4'-DDD	4	U	4	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	72-55-9	4,4'-DDE	4	U	4	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	50-29-3	4,4'-DDT	4	U	4	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	309-00-2	Aldrin	2	U	2	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	319-84-6	alpha-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	5103-71-9	alpha-Chlordane	2	U	2	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	319-85-7	beta-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	319-86-8	delta-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	60-57-1	Dieldrin	4	U	4	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	959-98-8	Endosulfan I	2	U	2	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	33213-65-9	Endosulfan II	4	U	4	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	1031-07-8	Endosulfan sulfate	4	U	4	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	72-20-8	Endrin	4	U	4	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	7421-93-4	Endrin aldehyde	4	U	4	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	53494-70-5	Endrin ketone	4	U	4	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	1	U	1	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	5103-74-2	gamma-Chlordane	2	U	2	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	76-44-8	Heptachlor	2	U	2	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	1024-57-3	Heptachlor epoxide	2	U	2	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	72-43-5	Methoxychlor	20	U	20	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Pesticides	8081A	8001-35-2	Toxaphene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	63	J	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	1000	U	1000	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	200	UJ	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	91-58-7	2-Chloronaphthalene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	95-57-8	2-Chlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	91-57-6	2-Methylnaphthalene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	88-74-4	2-Nitroaniline	1000	U	1000	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	88-75-5	2-Nitrophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	800	U	800	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	99-09-2	3-Nitroaniline	1000	U	1000	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	1000	U	1000	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	106-47-8	4-Chloroaniline	1400		400	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	100-01-6	4-Nitroaniline	1000	U	1000	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	100-02-7	4-Nitrophenol	1000	U	1000	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	83-32-9	Acenaphthene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	208-96-8	Acenaphthylene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	120-12-7	Anthracene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	56-55-3	Benzo(a)anthracene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	50-32-8	Benzo(a)pyrene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	85-68-7	Butylbenzylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	86-74-8	Carbazole	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	218-01-9	Chrysene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	84-74-2	Di-n-butylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	117-84-0	Di-n-octylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	132-64-9	Dibenzofuran	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	84-66-2	Diethylphthalate	200	U	200	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	131-11-3	Dimethylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	206-44-0	Fluoranthene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	86-73-7	Fluorene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	118-74-1	Hexachlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	87-68-3	Hexachlorobutadiene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	67-72-1	Hexachloroethane	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	78-59-1	Isophorone	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	91-20-3	Naphthalene	200	UJ	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	98-95-3	Nitrobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	1000	U	1000	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	85-01-8	Phenanthrene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	108-95-2	Phenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	SVOCs	8270C	129-00-0	Pyrene	200	U	200	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Total Organic Carbon	9060/Calculation	%TOC	Percent Total Organic Carbon	0.356			%
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	Total Organic Carbon	9060	TOC	Total Organic Carbon	3560			mg/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	75-34-3	1,1-Dichloroethane	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	75-35-4	1,1-Dichloroethene	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	107-06-2	1,2-Dichloroethane	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	78-87-5	1,2-Dichloropropane	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	78-93-3	2-Butanone (MEK)	5	U	5	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	591-78-6	2-Hexanone	4.9	U	4.9	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	24	J	5	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	67-64-1	Acetone	230	B	12	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	71-43-2	Benzene	20		0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	75-27-4	Bromodichloromethane	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	75-25-2	Bromoform	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	75-15-0	Carbon disulfide	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	56-23-5	Carbon tetrachloride	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	108-90-7	Chlorobenzene	6300	J	78	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	75-00-3	Chloroethane	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	67-66-3	Chloroform	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	74-87-3	Chloromethane	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	124-48-1	Dibromochloromethane	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	100-41-4	Ethylbenzene	21		0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	108-38-3	m&p-Xylene	14		0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	2.5	U	2.5	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	100-42-5	Styrene	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	127-18-4	Tetrachloroethene	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	108-88-3	Toluene	7.3		0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	79-01-6	Trichloroethene	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	75-01-4	Vinyl chloride	0.99	U	0.99	ug/kg dw
Sediment	SD-PDA-3	25-Oct-00		Site	4	4	VOCs	8260B	1330-20-7	Xylenes, Total	18		0.99	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	202		0.7	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	12.3	J	0.5	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	7.1	J	0.4	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	1.7	U	0.2	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.58	J	0.3	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.2	UJ	0.2	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.73	J	0.2	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.33	J	0.2	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.39	J	0.1	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.2	UJ	0.2	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.2	UJ	0.2	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.2	UJ	0.2	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.81	J	0.1	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.24	J	0.2	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.21	J	0.1	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0.1	UJ	0.1	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0.5	J	0.1	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	37871-00-4	Total HpCDD	15.4	J	0.4	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	38998-75-3	Total HpCDF	4.8	J	0.3	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	34465-46-8	Total HxCDD	2.5	J	0.2	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	55684-94-1	Total HxCDF	3.3	J	0.2	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	36088-22-9	Total PeCDD	0.2	UJ	0.2	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	30402-15-4	Total PeCDF	2.3	J	0.1	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	41903-57-5	Total TCDD	0.83	JB	0.1	pg/g

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Dioxin	SW8290	55722-27-5	Total TCDF	1.7	J	0 1	pg/g
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Grain Size	ASTM D 422	%Cobbles	Cobble	0			%
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Grain Size	ASTM D 422	%Clay	Fines (Clay)	4 7			%
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Grain Size	ASTM D 422	%Silt	Fines (Silt)	1			%
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Grain Size	ASTM D 422	%Coarse Gravel	Gravel (Coarse)	0			%
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Grain Size	ASTM D 422	%Fine Gravel	Gravel (Fine)	8 5			%
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Grain Size	ASTM D 422	%Coarse Sand	Sand (Coarse)	7			%
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Grain Size	ASTM D 422	%Fine Sand	Sand (Fine)	34 9			%
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Grain Size	ASTM D 422	%Medium Sand	Sand (Medium)	43 9			%
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Herbicides	8151	93-76-5	2,4,5-T	9 8	U	9 8	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	9 8	U	9 8	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Herbicides	8151	94-75-7	2,4-D	9 8	U	9 8	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Herbicides	8151	94-82-6	2,4-DB	9 8	U	9 8	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Herbicides	8151	75-99-0	Dalapon	2400	U	2400	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Herbicides	8151	1918-00-9	Dicamba	24	U	24	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Herbicides	8151	120-36-5	Dichloroprop	120	UJ	120	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Herbicides	8151	88-85-7	Dinoseb	120	U	120	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2400	U	2400	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2400	U	2400	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Herbicides	8151	87-86-5	Pentachlorophenol	20	U	20	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	PCBs	680	2051-24-3	Decachlorobiphenyl	20	U	20	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	7 9	U	7 9	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	20	U	20	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	7 9	U	7 9	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	7 9	U	7 9	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	20	U	20	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	72-54-8	4,4'-DDD	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	72-55-9	4,4'-DDE	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	50-29-3	4,4'-DDT	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	309-00-2	Aldrin	2	U	2	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	319-84-6	alpha-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	5103-71-9	alpha-Chlordane	2	U	2	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	319-85-7	beta-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	319-86-8	delta-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	60-57-1	Dieldrin	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	959-98-8	Endosulfan I	2	U	2	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	33213-65-9	Endosulfan II	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	1031-07-8	Endosulfan sulfate	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	72-20-8	Endrin	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	7421-93-4	Endrin aldehyde	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	53494-70-5	Endrin ketone	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	5103-74-2	gamma-Chlordane	2	U	2	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	76-44-8	Heptachlor	2	U	2	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	1024-57-3	Heptachlor epoxide	2	U	2	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	72-43-5	Methoxychlor	20	U	20	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Pesticides	8081A	8001-35-2	Toxaphene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	38	J	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	60	J	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	980	U	980	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	460	J	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	91-58-7	2-Chloronaphthalene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	95-57-8	2-Chlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	91-57-6	2-Methylnaphthalene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	88-74-4	2-Nitroaniline	980	U	980	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	88-75-5	2-Nitrophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	780	U	780	ug/kg dw
Sediment	SD-PDA	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	200	U	200	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	99-09-2	3-Nitroaniline	980	U	980	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	980	U	980	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	93	J	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	106-47-8	4-Chloroaniline	2000		390	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	100-01-6	4-Nitroaniline	980	U	980	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	100-02-7	4-Nitrophenol	980	U	980	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	83-32-9	Acenaphthene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	208-96-8	Acenaphthylene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	120-12-7	Anthracene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	56-55-3	Benzo(a)anthracene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	50-32-8	Benzo(a)pyrene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	85-68-7	Butylbenzylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	86-74-8	Carbazole	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	218-01-9	Chrysene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	84-74-2	Di-n-butylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	117-84-0	Di-n-octylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	132-64-9	Dibenzofuran	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	84-66-2	Diethylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	131-11-3	Dimethylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	206-44-0	Fluoranthene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	86-73-7	Fluorene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	118-74-1	Hexachlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	87-68-3	Hexachlorobutadiene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	67-72-1	Hexachloroethane	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	78-59-1	Isophorone	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	91-20-3	Naphthalene	280	J	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	98-95-3	Nitrobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	980	U	980	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	85-01-8	Phenanthrene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	108-95-2	Phenol	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	SVOCs	8270C	129-00-0	Pyrene	200	U	200	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Total Organic Carbon	9060/Calculation	%TOC	Percent Total Organic Carbon	0.205			%
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	Total Organic Carbon	9060	TOC	Total Organic Carbon	2050			mg/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	75-34-3	1,1-Dichloroethane	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	75-35-4	1,1-Dichloroethene	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	107-06-2	1,2-Dichloroethane	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	78-87-5	1,2-Dichloropropane	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	78-93-3	2-Butanone (MEK)	8.3	B	5	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	591-78-6	2-Hexanone	5	U	5	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	48	J	5	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	67-64-1	Acetone	55	B	12	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	71-43-2	Benzene	25		1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	75-27-4	Bromodichloromethane	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	75-25-2	Bromoform	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	75-15-0	Carbon disulfide	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	56-23-5	Carbon tetrachloride	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	108-90-7	Chlorobenzene	1900	J	120	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	75-00-3	Chloroethane	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	67-66-3	Chloroform	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	74-87-3	Chloromethane	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	124-48-1	Dibromochloromethane	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	100-41-4	Ethylbenzene	28		1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	108-38-3	m&p-Xylene	20		1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	2.5	U	2.5	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	100-42-5	Styrene	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	127-18-4	Tetrachloroethene	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	108-88-3	Toluene	4.6		1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	1	U	1	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	79-01-6	Trichloroethene	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	75-01-4	Vinyl chloride	1	U	1	ug/kg dw
Sediment	SD-PDA-3-FD	25-Oct-00	Field Duplicate	Site	4	4	VOCs	8260B	1330-20-7	Xylenes, Total	25		1	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	219		1 1	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	3 2	JB	0 8	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	8 2		0 8	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	1 3	U	0 4	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.5	UJ	0.5	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.4	UJ	0.4	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.44	J	0.3	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0 4	UJ	0 4	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0 3	UJ	0.3	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0 4	UJ	0 4	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0 4	UJ	0 4	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.2	UJ	0 2	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0 3	UJ	0.3	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.2	UJ	0 2	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0.47	J	0.3	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	37871-00-4	Total HpCDD	17.4		0.8	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	38998-75-3	Total HpCDF	3 6	J	0 4	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	34465-46-8	Total HxCDD	2 1		0 4	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	55684-94-1	Total HxCDF	2 3	J	0 3	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	36088-22-9	Total PeCDD	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	30402-15-4	Total PeCDF	0.8	U	0 2	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	41903-57-5	Total TCDD	0.72	B	0 3	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Dioxin	SW8290	55722-27-5	Total TCDF	1 4	J	0 3	pg/g
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Grain Size	ASTM D 422	%Cobbles	Cobble	0			%
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Grain Size	ASTM D 422	%Clay	Fines (Clay)	8			%
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Grain Size	ASTM D 422	%Silt	Fines (Silt)	4 6			%
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Grain Size	ASTM D 422	%Coarse Gravel	Gravel (Coarse)	0			%
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Grain Size	ASTM D 422	%Fine Gravel	Gravel (Fine)	0 8			%
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Grain Size	ASTM D 422	%Coarse Sand	Sand (Coarse)	4			%
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Grain Size	ASTM D 422	%Fine Sand	Sand (Fine)	42 4			%
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Grain Size	ASTM D 422	%Medium Sand	Sand (Medium)	40 1			%
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Herbicides	8151	93-76-5	2,4,5-T	10	UJ	10	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	10	UJ	10	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Herbicides	8151	94-75-7	2,4-D	10	UJ	10	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Herbicides	8151	94-82-6	2,4-DB	10	UJ	10	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Herbicides	8151	75-99-0	Dalapon	2500	UJ	2500	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Herbicides	8151	1918-00-9	Dicamba	25	UJ	25	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Herbicides	8151	120-36-5	Dichloroprop	130	UJ	130	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Herbicides	8151	88-85-7	Dinoseb	130	UJ	130	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2500	UJ	2500	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2500	UJ	2500	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Herbicides	8151	87-86-5	Pentachlorophenol	22	UJ	22	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	PCBs	680	2051-24-3	Decachlorobiphenyl	22	U	22	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	4.2	U	4.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	13	U	13	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	8 5	U	8 5	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	4.2	U	4 2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	22	U	22	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	13	U	13	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	8 5	U	8 5	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	8 5	U	8 5	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	22	U	22	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	4.2	U	4 2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Pesticides	8081A	72-54-8	4,4'-DDD	4.2	U	4.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Pesticides	8081A	72-55-9	4,4'-DDE	4.2	U	4.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Pesticides	8081A	50-29-3	4,4'-DDT	4.2	U	4.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Pesticides	8081A	309-00-2	Aldrin	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Pesticides	8081A	319-84-6	alpha-BHC	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Pesticides	8081A	5103-71-9	alpha-Chlordane	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Pesticides	8081A	319-85-7	beta-BHC	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Pesticides	8081A	319-86-8	delta-BHC	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Pesticides	8081A	60-57-1	Dieldrin	4.2	U	4.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Pesticides	8081A	959-98-8	Endosulfan I	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Pesticides	8081A	33213-65-9	Endosulfan II	4.2	U	4.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Pesticides	8081A	1031-07-8	Endosulfan sulfate	4.2	U	4.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Pesticides	8081A	72-20-8	Endrin	4.2	U	4.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Pesticides	8081A	7421-93-4	Endrin aldehyde	4.2	U	4.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Pesticides	8081A	53494-70-5	Endrin ketone	4.2	U	4.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Pesticides	8081A	5103-74-2	gamma-Chlordane	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Pesticides	8081A	76-44-8	Heptachlor	2.2	U	2.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	Pesticides	8081A	1024-57-3	Heptachlor epoxide	2.2	U	2.2	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	Pesticides	8081A	72-43-5	Methoxychlor	22	U	22	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	Pesticides	8081A	8001-35-2	Toxaphene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	1000	U	1000	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	91-58-7	2-Chloronaphthalene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	95-57-8	2-Chlorophenol	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	91-57-6	2-Methylnaphthalene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	88-74-4	2-Nitroaniline	76	J	1000	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	88-75-5	2-Nitrophenol	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	840	U	840	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	99-09-2	3-Nitroaniline	1000	U	1000	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	1000	U	1000	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	106-47-8	4-Chloroaniline	230	J	420	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	100-01-6	4-Nitroaniline	1000	U	1000	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	100-02-7	4-Nitrophenol	1000	U	1000	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	83-32-9	Acenaphthene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	208-96-8	Acenaphthylene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	120-12-7	Anthracene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	56-55-3	Benzo(a)anthracene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	50-32-8	Benzo(a)pyrene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	85-68-7	Butylbenzylphthalate	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	86-74-8	Carbazole	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	218-01-9	Chrysene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	84-74-2	Di-n-butylphthalate	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	117-84-0	Di-n-octylphthalate	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	132-64-9	Dibenzofuran	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	84-66-2	Diethylphthalate	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	131-11-3	Dimethylphthalate	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	206-44-0	Fluoranthene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	86-73-7	Fluorene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	118-74-1	Hexachlorobenzene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	87-68-3	Hexachlorobutadiene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	67-72-1	Hexachloroethane	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	78-59-1	Isophorone	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	91-20-3	Naphthalene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	98-95-3	Nitrobenzene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	1000	U	1000	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	85-01-8	Phenanthrene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	108-95-2	Phenol	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	SVOCs	8270C	129-00-0	Pyrene	220	U	220	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	Total Organic Carbon	9060/Calculation	%TOC	Percent Total Organic Carbon	0.428			%
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	Total Organic Carbon	9060	TOC	Total Organic Carbon	4280			mg/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	1.2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	1.2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6.6	6.6	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	1.2	U	1.2	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	75-34-3	1,1-Dichloroethane	1 2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	75-35-4	1,1-Dichloroethene	1 2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	107-06-2	1,2-Dichloroethane	1 2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	78-87-5	1,2-Dichloropropane	1 2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	78-93-3	2-Butanone (MEK)	6 2	U	6.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	591-78-6	2-Hexanone	6 2	U	6.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	6 2	U	6.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	67-64-1	Acetone	16	U	16	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	71-43-2	Benzene	19		1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	75-27-4	Bromodichloromethane	1 2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	75-25-2	Bromoform	1 2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	1 2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	75-15-0	Carbon disulfide	1 2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	56-23-5	Carbon tetrachloride	1.2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	108-90-7	Chlorobenzene	85		1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	75-00-3	Chloroethane	1 2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	67-66-3	Chloroform	1 2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	74-87-3	Chloromethane	1 2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	1.2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	1.2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	124-48-1	Dibromochloromethane	1 2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	100-41-4	Ethylbenzene	1 2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	108-38-3	m&p-Xylene	1.2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	3 1	U	3.1	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	100-42-5	Styrene	1 2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	127-18-4	Tetrachloroethene	1 2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	108-88-3	Toluene	1 5		1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	1 2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	1.2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	79-01-6	Trichloroethene	1 2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	75-01-4	Vinyl chloride	1.2	U	1.2	ug/kg dw
Sediment	SD-PDA-4	25-Oct-00		Site	6 6	6 6	VOCs	8260B	1330-20-7	Xylenes, Total	1.2	U	1.2	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	27.4	B	1.2	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.75	JB	0.9	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	2.3	JB	0.8	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.5	UJ	0.5	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.6	UJ	0.8	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.6	UJ	0.8	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.32	J	0.4	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.5	UJ	0.5	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.4	UJ	0.4	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.5	UJ	0.5	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.5	UJ	0.5	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.7	UJ	0.7	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.5	UJ	0.5	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.4	UJ	0.4	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.5	UJ	0.5	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0.7	UJ	0.7	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0.8	J	0.5	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	37871-00-4	Total HpCDD	5.9	B	0.8	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	38998-75-3	Total HpCDF	0.53	J	0.6	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	34465-46-8	Total HxCDD	0.82		0.5	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	55684-94-1	Total HxCDF	0.32	J	0.5	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	36088-22-9	Total PeCDD	0.7	UJ	0.7	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	30402-15-4	Total PeCDF	0.5	UJ	0.5	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	41903-57-5	Total TCDD	15		0.7	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Dioxin	SW8290	55722-27-5	Total TCDF	0.8	J	0.5	pg/g
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Grain Size	ASTM D 422	%Cobbles	Cobble	0			%
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Grain Size	ASTM D 422	%Clay	Fines (Clay)	0.8			%
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Grain Size	ASTM D 422	%Silt	Fines (Silt)	1.1			%
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Grain Size	ASTM D 422	%Coarse Gravel	Gravel (Coarse)	0			%
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Grain Size	ASTM D 422	%Fine Gravel	Gravel (Fine)	4 1			%
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Grain Size	ASTM D 422	%Coarse Sand	Sand (Coarse)	2 2			%
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Grain Size	ASTM D 422	%Fine Sand	Sand (Fine)	80 2			%
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Grain Size	ASTM D 422	%Medium Sand	Sand (Medium)	11 6			%
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Herbicides	8151	93-76-5	2,4,5-T	10	U	10	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	10	U	10	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Herbicides	8151	94-75-7	2,4-D	2300		10	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Herbicides	8151	94-82-6	2,4-DB	10	U	10	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Herbicides	8151	75-99-0	Dalapon	2500	U	2500	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Herbicides	8151	1918-00-9	Dicamba	25	U	25	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Herbicides	8151	120-36-5	Dichloroprop	1100	J	6200	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Herbicides	8151	88-85-7	Dinoseb	120	R	120	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2500	U	2500	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	160000	J	120000	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Herbicides	8151	87-86-5	Pentachlorophenol	45	JB	21	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	PCBs	680	2051-24-3	Decachlorobiphenyl	21	U	21	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	PCBs	680	C-DICHLOROB	Dichlorobiphenyl	4.1	U	4.1	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	8.4	U	8.4	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	4.1	U	4.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	21	U	21	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	8.4	U	8.4	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	8.4	U	8.4	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	21	U	21	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	4.1	U	4.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	72-54-8	4,4'-DDD	1.6	J	4.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	72-55-9	4,4'-DDE	4.1	U	4.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	50-29-3	4,4'-DDT	4.1	U	4.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	309-00-2	Aldrin	2.1	U	2.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	319-84-6	alpha-BHC	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	5103-71-9	alpha-Chlordane	2.1	U	2.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	319-85-7	beta-BHC	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	319-86-8	delta-BHC	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	60-57-1	Dieldrin	4.1	U	4.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	959-98-8	Endosulfan I	2.1	U	2.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	33213-65-9	Endosulfan II	4.1	U	4.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	1031-07-8	Endosulfan sulfate	4.1	U	4.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	72-20-8	Endrin	4.1	U	4.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	7421-93-4	Endrin aldehyde	4.1	U	4.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	53494-70-5	Endrin ketone	4.1	U	4.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	1.1	U	1.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	5103-74-2	gamma-Chlordane	2.1	U	2.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	76-44-8	Heptachlor	2.1	U	2.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	1024-57-3	Heptachlor epoxide	2.1	U	2.1	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	72-43-5	Methoxychlor	21	U	21	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Pesticides	8081A	8001-35-2	Toxaphene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	1000	U	1000	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	91-58-7	2-Chloronaphthalene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	95-57-8	2-Chlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	91-57-6	2-Methylnaphthalene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	88-74-4	2-Nitroaniline	1000	U	1000	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	88-75-5	2-Nitrophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	820	U	820	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	99-09-2	3-Nitroaniline	1000	U	1000	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	1000	U	1000	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	106-47-8	4-Chloroaniline	410	U	410	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	100-01-6	4-Nitroaniline	1000	U	1000	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	100-02-7	4-Nitrophenol	1000	U	1000	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	83-32-9	Acenaphthene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	208-96-8	Acenaphthylene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	120-12-7	Anthracene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	56-55-3	Benzo(a)anthracene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	50-32-8	Benzo(a)pyrene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	85-68-7	Butylbenzylphthalate	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	86-74-8	Carbazole	210	U	210	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	218-01-9	Chrysene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	84-74-2	Di-n-butylphthalate	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	117-84-0	Di-n-octylphthalate	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	132-64-9	Dibenzofuran	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	84-66-2	Diethylphthalate	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	131-11-3	Dimethylphthalate	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	206-44-0	Fluoranthene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	86-73-7	Fluorene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	118-74-1	Hexachlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	87-68-3	Hexachlorobutadiene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	67-72-1	Hexachloroethane	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	78-59-1	Isophorone	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	91-20-3	Naphthalene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	98-95-3	Nitrobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	1000	U	1000	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	85-01-8	Phenanthrene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	108-95-2	Phenol	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	SVOCs	8270C	129-00-0	Pyrene	210	U	210	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Total Organic Carbon	9060/Calculation	%TOC	Percent Total Organic Carbon	0.07			%
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	Total Organic Carbon	9060	TOC	Total Organic Carbon	700			mg/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	75-34-3	1,1-Dichloroethane	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	75-35-4	1,1-Dichloroethene	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	107-06-2	1,2-Dichloroethane	250		80	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	78-87-5	1,2-Dichloropropane	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	78-93-3	2-Butanone (MEK)	56	B	4.6	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	591-78-6	2-Hexanone	4.6	U	4.6	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	150		4.6	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	67-64-1	Acetone	3000	B	1000	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	71-43-2	Benzene	460		80	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	75-27-4	Bromodichloromethane	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	75-25-2	Bromoform	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	75-15-0	Carbon disulfide	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	56-23-5	Carbon tetrachloride	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	108-90-7	Chlorobenzene	1800		80	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	75-00-3	Chloroethane	1.9		0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	67-66-3	Chloroform	9.7		0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	74-87-3	Chloromethane	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	5.8		0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	124-48-1	Dibromochloromethane	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	100-41-4	Ethylbenzene	61		0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	108-38-3	m&p-Xylene	630		80	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	17		2.3	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	100-42-5	Styrene	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	127-18-4	Tetrachloroethene	24		0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	108-88-3	Toluene	840		80	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	0.91	J	0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	79-01-6	Trichloroethene	42		0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	75-01-4	Vinyl chloride	4		0.92	ug/kg dw
Sediment	SD-PDA-5	24-Oct-00		Site	10	10	VOCs	8260B	1330-20-7	Xylenes, Total	710		80	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	12.9	J	1.3	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	1	UJ	1	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	1.4	JB	0.7	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.5	UJ	0.5	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.6	UJ	0.6	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.5	UJ	0.5	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.47	J	0.4	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.5	UJ	0.5	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.4	UJ	0.4	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.5	UJ	0.5	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.4	UJ	0.4	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.6	UJ	0.6	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.4	UJ	0.4	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.4	UJ	0.4	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.4	UJ	0.4	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0.6	UJ	0.6	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0.4	UJ	0.4	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	37871-00-4	Total HpCDD	2.5	B	0.7	pg/g

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	38998-75-3	Total HpCDF	0.5	UJ	0.5	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	34465-46-8	Total HxCDD	0.5	UJ	0.5	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	55684-94-1	Total HxCDF	0.47	J	0.4	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	36088-22-9	Total PeCDD	0.6	UJ	0.6	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	30402-15-4	Total PeCDF	0.4	UJ	0.4	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	41903-57-5	Total TCDD	0.6	UJ	0.6	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Dioxin	SW8290	55722-27-5	Total TCDF	0.4	UJ	0.4	pg/g
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Grain Size	ASTM D 422	%Cobbles	Cobble	0			%
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Grain Size	ASTM D 422	%Clay	Fines (Clay)	0.5			%
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Grain Size	ASTM D 422	%Silt	Fines (Silt)	0.2			%
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Grain Size	ASTM D 422	%Coarse Gravel	Gravel (Coarse)	0			%
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Grain Size	ASTM D 422	%Fine Gravel	Gravel (Fine)	0			%
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Grain Size	ASTM D 422	%Coarse Sand	Sand (Coarse)	4.9			%
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Grain Size	ASTM D 422	%Fine Sand	Sand (Fine)	44.5			%
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Grain Size	ASTM D 422	%Medium Sand	Sand (Medium)	49.9			%
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Herbicides	8151	93-76-5	2,4,5-T	9.6	U	9.5	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	9.6	U	9.5	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Herbicides	8151	94-75-7	2,4-D	9.6	U	9.5	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Herbicides	8151	94-82-6	2,4-DB	9.6	U	9.5	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Herbicides	8151	75-99-0	Dalapon	2300	U	2300	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Herbicides	8151	1918-00-9	Dicamba	23	U	23	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Herbicides	8151	120-36-5	Dichloroprop	110	U	110	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Herbicides	8151	88-85-7	Dinoseb	110	R	110	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2300	U	2300	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	4100	J	2300	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Herbicides	8151	87-86-5	Pentachlorophenol	3.6	U	20	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	PCBs	680	2051-24-3	Decachlorobiphenyl	20	U	20	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	3.8	U	3.8	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	7.8	U	7.8	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	3.8	U	3.8	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	20	U	20	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	7.8	U	7.8	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	7.8	U	7.8	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	20	U	20	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	3.8	U	3.8	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	72-54-8	4,4'-DDD	3.8	U	3.8	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	72-55-9	4,4'-DDE	3.8	U	3.8	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	50-29-3	4,4'-DDT	3.8	U	3.8	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	309-00-2	Aldrin	2	U	2	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	319-84-6	alpha-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	5103-71-9	alpha-Chlordane	2	U	2	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	319-85-7	beta-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	319-86-8	delta-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	60-57-1	Dieldrin	3.8	U	3.8	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	959-98-8	Endosulfan I	2	U	2	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	33213-65-9	Endosulfan II	3.8	U	3.8	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	1031-07-8	Endosulfan sulfate	3.8	U	3.8	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	72-20-8	Endrin	3.8	U	3.8	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	7421-93-4	Endrin aldehyde	3.8	U	3.8	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	53494-70-5	Endrin ketone	3.8	U	3.8	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	1	U	1	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	5103-74-2	gamma-Chlordane	2	U	2	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	76-44-8	Heptachlor	2	U	2	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	1024-57-3	Heptachlor epoxide	2	U	2	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	72-43-5	Methoxychlor	20	U	20	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Pesticides	8081A	8001-35-2	Toxaphene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	960	U	960	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	91-58-7	2-Chloronaphthalene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	95-57-8	2-Chlorophenol	200	U	200	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	91-57-6	2-Methylnaphthalene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	88-74-4	2-Nitroaniline	960	U	960	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	88-75-5	2-Nitrophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	770	U	770	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	99-09-2	3-Nitroaniline	960	U	960	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	960	U	960	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	106-47-8	4-Chloroaniline	380	U	380	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	100-01-6	4-Nitroaniline	960	U	960	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	100-02-7	4-Nitrophenol	960	U	960	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	83-32-9	Acenaphthene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	208-96-8	Acenaphthylene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	120-12-7	Anthracene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	56-55-3	Benzo(a)anthracene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	50-32-8	Benzo(a)pyrene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	85-68-7	Butylbenzylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	86-74-8	Carbazole	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	218-01-9	Chrysene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	84-74-2	Di-n-butylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	117-84-0	Di-n-octylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	132-64-9	Dibenzofuran	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	84-66-2	Diethylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	131-11-3	Dimethylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	206-44-0	Fluoranthene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	86-73-7	Fluorene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	118-74-1	Hexachlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	87-68-3	Hexachlorobutadiene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	67-72-1	Hexachloroethane	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	78-59-1	Isophorone	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	91-20-3	Naphthalene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	98-95-3	Nitrobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	960	U	960	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	85-01-8	Phenanthrene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	108-95-2	Phenol	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	SVOCs	8270C	129-00-0	Pyrene	200	U	200	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Total Organic Carbon	9060/Calculation	%TOC	Percent Total Organic Carbon	0.0324			%
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	Total Organic Carbon	9060	TOC	Total Organic Carbon	324			mg/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	75-34-3	1,1-Dichloroethane	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	75-35-4	1,1-Dichloroethene	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	107-06-2	1,2-Dichloroethane	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	78-87-5	1,2-Dichloropropane	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	78-93-3	2-Butanone (MEK)	4.6	U	4.6	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	591-78-6	2-Hexanone	4.6	U	4.6	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	4.6	U	4.6	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	67-64-1	Acetone	150	B	11	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	71-43-2	Benzene	6.5		0.92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	75-27-4	Bromodichloromethane	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	75-25-2	Bromoform	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	75-15-0	Carbon disulfide	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	56-23-5	Carbon tetrachloride	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	108-90-7	Chlorobenzene	98	J	0.92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	75-00-3	Chloroethane	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	67-66-3	Chloroform	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	74-87-3	Chloromethane	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	1.5		0.92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	124-48-1	Dibromochloromethane	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10.5	10.5	VOCs	8260B	100-41-4	Ethylbenzene	4.3		0.92	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-6	24-Oct-00		Site	10 5	10 5	VOCs	8260B	108-38-3	m&p-Xylene	4 2		0 92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10 5	10 5	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	2 3	U	2 3	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10 5	10 5	VOCs	8260B	100-42-5	Styrene	0 92	U	0 92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10 5	10 5	VOCs	8260B	127-18-4	Tetrachloroethene	0 92	U	0 92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10 5	10 5	VOCs	8260B	108-88-3	Toluene	0 92	U	0 92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10 5	10 5	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	0 92	U	0 92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10 5	10 5	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	0 92	U	0 92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10 5	10 5	VOCs	8260B	79-01-6	Trichloroethene	0 92	U	0 92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10 5	10 5	VOCs	8260B	75-01-4	Vinyl chloride	0 92	U	0 92	ug/kg dw
Sediment	SD-PDA-6	24-Oct-00		Site	10 5	10 5	VOCs	8260B	1330-20-7	Xylenes, Total	4 2		0 92	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	11 7	J	1 3	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	1	UJ	1	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	1 4	JB	0 9	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0 5	UJ	0 5	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0 6	UJ	0 6	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0 5	UJ	0 5	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0 4	UJ	0 4	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0 5	UJ	0 5	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0 4	UJ	0 4	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0 5	UJ	0 5	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.5	UJ	0 5	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0 6	UJ	0 6	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.5	UJ	0 5	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0 4	UJ	0 4	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.5	UJ	0 5	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0 6	UJ	0 6	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0 5	UJ	0 5	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	37871-00-4	Total HpCDD	3 2	JB	0 9	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	38998-75-3	Total HpCDF	0 5	UJ	0 5	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	34465-46-8	Total HxCDD	0 5	UJ	0 5	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	55684-94-1	Total HxCDF	0 4	UJ	0 4	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	36088-22-9	Total PeCDD	0 6	UJ	0 6	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	30402-15-4	Total PeCDF	0 5	UJ	0 5	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	41903-57-5	Total TCDD	0 6	UJ	0 6	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Dioxin	SW8290	55722-27-5	Total TCDF	0 5	UJ	0 5	pg/g
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Grain Size	ASTM D 422	%Cobbles	Cobble	0			%
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Grain Size	ASTM D 422	%Clay	Fines (Clay)	1			%
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Grain Size	ASTM D 422	%Silt	Fines (Silt)	0.1			%
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Grain Size	ASTM D 422	%Coarse Gravel	Gravel (Coarse)	0			%
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Grain Size	ASTM D 422	%Fine Gravel	Gravel (Fine)	0.1			%
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Grain Size	ASTM D 422	%Coarse Sand	Sand (Coarse)	1			%
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Grain Size	ASTM D 422	%Fine Sand	Sand (Fine)	69			%
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Grain Size	ASTM D 422	%Medium Sand	Sand (Medium)	28 8			%
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Herbicides	8151	93-76-5	2,4,5-T	9 9	U	9 9	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	9 9	U	9 9	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Herbicides	8151	94-75-7	2,4-D	9 9	U	9 9	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Herbicides	8151	94-82-6	2,4-DB	9 9	U	9 9	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Herbicides	8151	75-99-0	Dalapon	2400	U	2400	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Herbicides	8151	1918-00-9	Dicamba	24	U	24	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Herbicides	8151	120-36-5	Dichloroprop	120	U	120	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Herbicides	8151	88-85-7	Dinoseb	120	R	120	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2400	U	2400	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	1600	J	2400	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Herbicides	8151	87-86-5	Pentachlorophenol	20	U	20	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	PCBs	680	2051-24-3	Decachlorobiphenyl	20	U	20	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	8	U	8	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	20	U	20	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	8	U	8	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	8	U	8	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	20	U	20	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	72-54-8	4,4'-DDD	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	72-55-9	4,4'-DDE	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	50-29-3	4,4'-DDT	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	309-00-2	Aldrin	2	U	2	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	319-84-6	alpha-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	5103-71-9	alpha-Chlordane	2	U	2	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	319-85-7	beta-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	319-86-8	delta-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	60-57-1	Dieldrin	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	959-98-8	Endosulfan I	2	U	2	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	33213-65-9	Endosulfan II	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	1031-07-8	Endosulfan sulfate	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	72-20-8	Endrin	3 9	U	3 9	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	7421-93-4	Endrin aldehyde	3.9	U	3.9	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	53494-70-5	Endrin ketone	3.9	U	3.9	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	1	U	1	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	5103-74-2	gamma-Chlordane	2	U	2	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	76-44-8	Heptachlor	2	U	2	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	1024-57-3	Heptachlor epoxide	2	U	2	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	72-43-5	Methoxychlor	20	U	20	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Pesticides	8081A	8001-35-2	Toxaphene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	990	U	990	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	91-58-7	2-Chloronaphthalene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	95-57-8	2-Chlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	91-57-6	2-Methylnaphthalene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	88-74-4	2-Nitroaniline	990	U	990	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	88-75-5	2-Nitrophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	780	U	780	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	99-09-2	3-Nitroaniline	990	U	990	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	990	U	990	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	106-47-8	4-Chloroaniline	390	U	390	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	100-01-6	4-Nitroaniline	990	U	990	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	100-02-7	4-Nitrophenol	990	U	990	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	83-32-9	Acenaphthene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	208-96-8	Acenaphthylene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	120-12-7	Anthracene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	56-55-3	Benzo(a)anthracene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	50-32-8	Benzo(a)pyrene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	85-68-7	Butylbenzylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	86-74-8	Carbazole	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	218-01-9	Chrysene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	84-74-2	Di-n-butylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	117-84-0	Di-n-octylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	132-64-9	Dibenzofuran	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	84-66-2	Diethylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	131-11-3	Dimethylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	206-44-0	Fluoranthene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	86-73-7	Fluorene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	118-74-1	Hexachlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	87-68-3	Hexachlorobutadiene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	67-72-1	Hexachloroethane	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	78-59-1	Isophorone	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	91-20-3	Naphthalene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	98-95-3	Nitrobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	990	U	990	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	85-01-8	Phenanthrene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	108-95-2	Phenol	200	U	200	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	SVOCs	8270C	129-00-0	Pyrene	200	U	200	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Total Organic Carbon	9060/Calculation	%TOC	Percent Total Organic Carbon	0.0536			%
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	Total Organic Carbon	9060	TOC	Total Organic Carbon	536			mg/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	75-34-3	1,1-Dichloroethane	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	75-35-4	1,1-Dichloroethene	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	107-06-2	1,2-Dichloroethane	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	78-87-5	1,2-Dichloropropane	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	78-93-3	2-Butanone (MEK)	4.9	U	4.9	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	591-78-6	2-Hexanone	4.9	U	4.9	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	4.9	U	4.9	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	67-64-1	Acetone	12	U	12	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	71-43-2	Benzene	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	75-27-4	Bromodichloromethane	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	75-25-2	Bromoform	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	75-15-0	Carbon disulfide	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	56-23-5	Carbon tetrachloride	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	108-90-7	Chlorobenzene	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	75-00-3	Chloroethane	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	67-66-3	Chloroform	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	74-87-3	Chloromethane	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	124-48-1	Dibromochloromethane	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	100-41-4	Ethylbenzene	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	108-38-3	m&p-Xylene	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	2.4	U	2.4	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	100-42-5	Styrene	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	127-18-4	Tetrachloroethene	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	108-88-3	Toluene	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	79-01-6	Trichloroethene	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	75-01-4	Vinyl chloride	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-7	24-Oct-00		Site	11	11	VOCs	8260B	1330-20-7	Xylenes, Total	0.98	U	0.98	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	35.8	B	0.6	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	6.3	JB	0.5	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	1.5	JB	0.4	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.72	U	0.2	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.38	J	0.3	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.62	J	0.2	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.38	J	0.2	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.2	UJ	0.2	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.2	UJ	0.2	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0.2	UJ	0.2	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0.2	UJ	0.2	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	37871-00-4	Total HpCDD	2.8	B	0.4	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	38998-75-3	Total HpCDF	1.8	J	0.3	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	34465-46-8	Total HxCDD	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	55684-94-1	Total HxCDF	1.5	J	0.2	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	36088-22-9	Total PeCDD	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	30402-15-4	Total PeCDF	0.3	UJ	0.3	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	41903-57-5	Total TCDD	0.2	UJ	0.2	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Dioxin	SW8290	55722-27-5	Total TCDF	0.2	UJ	0.2	pg/g
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Grain Size	ASTM D 422	%Cobbles	Cobble	0			%
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Grain Size	ASTM D 422	%Clay	Fines (Clay)	0			%
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Grain Size	ASTM D 422	%Silt	Fines (Silt)	1.3			%
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Grain Size	ASTM D 422	%Coarse Gravel	Gravel (Coarse)	0			%
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Grain Size	ASTM D 422	%Fine Gravel	Gravel (Fine)	0			%
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Grain Size	ASTM D 422	%Coarse Sand	Sand (Coarse)	0.1			%
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Grain Size	ASTM D 422	%Fine Sand	Sand (Fine)	92.7			%
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Grain Size	ASTM D 422	%Medium Sand	Sand (Medium)	5.9			%
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Herbicides	8151	93-76-5	2,4,5-T	10	U	10	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	10	U	10	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Herbicides	8151	94-75-7	2,4-D	10	U	10	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Herbicides	8151	94-82-6	2,4-DB	10	U	10	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Herbicides	8151	75-99-0	Dalapon	2400	U	2400	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Herbicides	8151	1918-00-9	Dicamba	24	U	24	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Herbicides	8151	120-36-5	Dichloroprop	18	J	120	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Herbicides	8151	88-85-7	Dinoseb	120	U	120	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2400	U	2400	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2400	U	2400	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Herbicides	8151	87-86-5	Pentachlorophenol	21	U	21	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	PCBs	680	2051-24-3	Decachlorobiphenyl	21	U	21	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	4	U	4	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	8.2	U	8.2	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	4	U	4	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	21	U	21	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	8.2	U	8.2	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	8.2	U	8.2	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	21	U	21	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	4	U	4	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	72-54-8	4,4'-DDD	4	U	4	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	72-55-9	4,4'-DDE	4	U	4	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	50-29-3	4,4'-DDT	4	U	4	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	309-00-2	Aldrin	2.1	U	2.1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	319-84-6	alpha-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	5103-71-9	alpha-Chlordane	2.1	U	2.1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	319-85-7	beta-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	319-86-8	delta-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	60-57-1	Dieldrin	4	U	4	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	959-98-8	Endosulfan I	2.1	U	2.1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	33213-65-9	Endosulfan II	4	U	4	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	1031-07-8	Endosulfan sulfate	4	U	4	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	72-20-8	Endrin	4	U	4	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	7421-93-4	Endrin aldehyde	4	U	4	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	53494-70-5	Endrin ketone	4	U	4	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	5103-74-2	gamma-Chlordane	2.1	U	2.1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	76-44-8	Heptachlor	2.1	U	2.1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	1024-57-3	Heptachlor epoxide	2.1	U	2.1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	72-43-5	Methoxychlor	21	U	21	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	Pesticides	8081A	8001-35-2	Toxaphene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	1000	U	1000	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	91-58-7	2-Chloronaphthalene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	95-57-8	2-Chlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	91-57-6	2-Methylnaphthalene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	88-74-4	2-Nitroaniline	1000	U	1000	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	88-75-5	2-Nitrophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	800	U	800	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	108-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	99-09-2	3-Nitroaniline	1000	U	1000	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	1000	U	1000	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	106-47-8	4-Chloroaniline	180	J	400	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	100-01-6	4-Nitroaniline	1000	U	1000	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	100-02-7	4-Nitrophenol	1000	U	1000	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	83-32-9	Acenaphthene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	208-96-8	Acenaphthylene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	120-12-7	Anthracene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	56-55-3	Benzo(a)anthracene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	50-32-8	Benzo(a)pyrene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10.9	10.9	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	210	U	210	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	85-68-7	Butylbenzylphthalate	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	86-74-8	Carbazole	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	218-01-9	Chrysene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	84-74-2	Di-n-butylphthalate	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	117-84-0	Di-n-octylphthalate	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	132-64-9	Dibenzofuran	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	84-66-2	Diethylphthalate	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	131-11-3	Dimethylphthalate	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	206-44-0	Fluoranthene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	86-73-7	Fluorene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	118-74-1	Hexachlorobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	87-68-3	Hexachlorobutadiene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	67-72-1	Hexachloroethane	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	78-59-1	Isophorone	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	91-20-3	Naphthalene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	98-95-3	Nitrobenzene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	1000	U	1000	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	85-01-8	Phenanthrene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	108-95-2	Phenol	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	SVOCs	8270C	129-00-0	Pyrene	210	U	210	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	Total Organic Carbon	9060/Calculation	%TOC	Percent Total Organic Carbon	0.0437			%
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	Total Organic Carbon	9060	TOC	Total Organic Carbon	437			mg/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	75-34-3	1,1-Dichloroethane	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	75-35-4	1,1-Dichloroethene	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	107-06-2	1,2-Dichloroethane	26		1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	78-87-5	1,2-Dichloropropane	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	78-93-3	2-Butanone (MEK)	5 2	U	5.2	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	591-78-6	2-Hexanone	5 2	U	5.2	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	62		5 2	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	67-64-1	Acetone	19	B	13	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	71-43-2	Benzene	190		86	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	75-27-4	Bromodichloromethane	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	75-25-2	Bromoform	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	75-15-0	Carbon disulfide	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	56-23-5	Carbon tetrachloride	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	108-90-7	Chlorobenzene	1600		86	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	75-00-3	Chloroethane	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	67-66-3	Chloroform	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	74-87-3	Chloromethane	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2 9		1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	124-48-1	Dibromochloromethane	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	100-41-4	Ethylbenzene	12		1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	108-38-3	m&p-Xylene	5 2		1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	2.6	U	2 6	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	100-42-5	Styrene	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	127-18-4	Tetrachloroethene	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	108-88-3	Toluene	4 6		1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	79-01-6	Trichloroethene	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	75-01-4	Vinyl chloride	1	U	1	ug/kg dw
Sediment	SD-PDA-8	26-Oct-00		Site	10 9	10.9	VOCs	8260B	1330-20-7	Xylenes, Total	8 5		1	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	21 7	B	1	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0 7	UJ	0 7	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	2 1	JB	0 6	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0 6	U	0 3	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0 4	UJ	0 4	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0 2	UJ	0 2	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0 2	UJ	0 2	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0 4	UJ	0 4	pg/g

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0 2	UJ	0 2	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	37871-00-4	Total HpCDD	4 1	B	0 6	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	38998-75-3	Total HpCDF	0 6	U	0 3	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	34465-46-8	Total HxCDD	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	55684-94-1	Total HxCDF	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	36088-22-9	Total PeCDD	0 4	UJ	0 4	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	30402-15-4	Total PeCDF	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	41903-57-5	Total TCDD	0 3	UJ	0 3	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Dioxin	SW8290	55722-27-5	Total TCDF	0 2	UJ	0 2	pg/g
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Grain Size	ASTM D 422	%Cobbles	Cobble	0			%
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Grain Size	ASTM D 422	%Clay	Fines (Clay)	0			%
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Grain Size	ASTM D 422	%Silt	Fines (Silt)	0 6			%
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Grain Size	ASTM D 422	%Coarse Gravel	Gravel (Coarse)	0			%
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Grain Size	ASTM D 422	%Fine Gravel	Gravel (Fine)	0			%
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Grain Size	ASTM D 422	%Coarse Sand	Sand (Coarse)	0 3			%
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Grain Size	ASTM D 422	%Fine Sand	Sand (Fine)	64 4			%
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Grain Size	ASTM D 422	%Medium Sand	Sand (Medium)	34 7			%
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Herbicides	8151	93-76-5	2,4,5-T	9 9	U	9 9	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	9 9	U	9 9	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Herbicides	8151	94-75-7	2,4-D	160		9 9	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Herbicides	8151	94-82-6	2,4-DB	9 9	U	9 9	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Herbicides	8151	75-99-0	Dalapon	2400	U	2400	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Herbicides	8151	1918-00-9	Dicamba	24	U	24	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Herbicides	8151	120-36-5	Dichloroprop	7 9	J	120	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Herbicides	8151	88-85-7	Dinoseb	120	U	120	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2400	U	2400	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2500	J	2400	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Herbicides	8151	87-86-5	Pentachlorophenol	20	U	20	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	PCBs	680	2051-24-3	Decachlorobiphenyl	20	U	20	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	8	U	8	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	20	U	20	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	8	U	8	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	8	U	8	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	20	U	20	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	72-54-8	4,4'-DDD	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	72-55-9	4,4'-DDE	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	50-29-3	4,4'-DDT	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	309-00-2	Aldrin	2	U	2	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	319-84-6	alpha-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	5103-71-9	alpha-Chlordane	2	U	2	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	319-85-7	beta-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	319-86-8	delta-BHC	1	U	1	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	60-57-1	Dieldrin	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	959-98-8	Endosulfan I	2	U	2	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	33213-65-9	Endosulfan II	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	1031-07-8	Endosulfan sulfate	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	72-20-8	Endrin	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	7421-93-4	Endrin aldehyde	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	53494-70-5	Endrin ketone	3 9	U	3 9	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	1	U	1	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	5103-74-2	gamma-Chlordane	2	U	2	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	76-44-8	Heptachlor	2	U	2	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	1024-57-3	Heptachlor epoxide	2	U	2	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	72-43-5	Methoxychlor	20	U	20	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Pesticides	8081A	8001-35-2	Toxaphene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	59	J	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	99	J	200	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	990	U	990	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	91-58-7	2-Chloronaphthalene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	95-57-8	2-Chlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	91-57-6	2-Methylnaphthalene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	88-74-4	2-Nitroaniline	990	U	990	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	88-75-5	2-Nitrophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	780	U	780	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	99-09-2	3-Nitroaniline	990	U	990	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	990	U	990	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	106-47-8	4-Chloroaniline	61	J	390	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	100-01-6	4-Nitroaniline	990	U	990	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	100-02-7	4-Nitrophenol	990	U	990	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	83-32-9	Acenaphthene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	208-96-8	Acenaphthylene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	120-12-7	Anthracene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	56-55-3	Benzo(a)anthracene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	50-32-8	Benzo(a)pyrene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	85-68-7	Butylbenzylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	86-74-8	Carbazole	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	218-01-9	Chrysene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	84-74-2	Di-n-butylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	117-84-0	Di-n-octylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	132-64-9	Dibenzofuran	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	84-66-2	Diethylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	131-11-3	Dimethylphthalate	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	206-44-0	Fluoranthene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	86-73-7	Fluorene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	118-74-1	Hexachlorobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	87-68-3	Hexachlorobutadiene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	67-72-1	Hexachloroethane	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	78-59-1	Isophorone	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	91-20-3	Naphthalene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	98-95-3	Nitrobenzene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	990	U	990	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	85-01-8	Phenanthrene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	108-95-2	Phenol	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	SVOCs	8270C	129-00-0	Pyrene	200	U	200	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Total Organic Carbon	9060/Calculation	%TOC	Percent Total Organic Carbon	0 0352			%
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	Total Organic Carbon	9060	TOC	Total Organic Carbon	352			mg/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	0 92	U	0 92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	0 92	U	0 92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	0 92	U	0 92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	VOCs	8260B	75-34-3	1,1-Dichloroethane	0 92	U	0 92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	VOCs	8260B	75-35-4	1,1-Dichloroethene	0 92	U	0 92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	VOCs	8260B	107-06-2	1,2-Dichloroethane	180		73	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	VOCs	8260B	78-87-5	1,2-Dichloropropane	0 92	U	0 92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	VOCs	8260B	78-93-3	2-Butanone (MEK)	4 6	U	4 6	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	VOCs	8260B	591-78-6	2-Hexanone	4 6	U	4 6	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	33		4 6	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	VOCs	8260B	67-64-1	Acetone	94	B	11	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	VOCs	8260B	71-43-2	Benzene	93		73	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	VOCs	8260B	75-27-4	Bromodichloromethane	0 92	U	0 92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	VOCs	8260B	75-25-2	Bromoform	0 92	U	0 92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	0 92	U	0 92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	VOCs	8260B	75-15-0	Carbon disulfide	0 92	U	0 92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	VOCs	8260B	56-23-5	Carbon tetrachloride	0 92	U	0 92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	VOCs	8260B	108-90-7	Chlorobenzene	2600		73	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14 5	14 5	VOCs	8260B	75-00-3	Chloroethane	0 92	U	0 92	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-PDA-9	26-Oct-00		Site	14.5	14.5	VOCs	8260B	67-66-3	Chloroform	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14.5	14.5	VOCs	8260B	74-87-3	Chloromethane	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14.5	14.5	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	1.4		0.92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14.5	14.5	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14.5	14.5	VOCs	8260B	124-48-1	Dibromochloromethane	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14.5	14.5	VOCs	8260B	100-41-4	Ethylbenzene	82		73	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14.5	14.5	VOCs	8260B	108-38-3	m&p-Xylene	380		73	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14.5	14.5	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	2.4		0.92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14.5	14.5	VOCs	8260B	100-42-5	Styrene	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14.5	14.5	VOCs	8260B	127-18-4	Tetrachloroethene	18		0.92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14.5	14.5	VOCs	8260B	108-88-3	Toluene	330		73	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14.5	14.5	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14.5	14.5	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	0.92	U	0.92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14.5	14.5	VOCs	8260B	79-01-6	Trichloroethene	7.3		0.92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14.5	14.5	VOCs	8260B	75-01-4	Vinyl chloride	0.69	J	0.92	ug/kg dw
Sediment	SD-PDA-9	26-Oct-00		Site	14.5	14.5	VOCs	8260B	1330-20-7	Xylenes, Total	450		93	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	10.8		1.1	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0.9	UJ	0.9	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	0.7	UJ	0.7	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.3	UJ	0.3	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.4	UJ	0.4	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.4	UJ	0.4	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.3	UJ	0.3	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.4	UJ	0.4	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.2	UJ	0.2	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.4	UJ	0.4	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.3	UJ	0.3	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.5	UJ	0.5	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.3	UJ	0.3	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.3	UJ	0.3	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.3	UJ	0.3	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0.5	UJ	0.5	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0.3	UJ	0.3	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	37871-00-4	Total HpCDD	0.7	UJ	0.7	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	38998-75-3	Total HpCDF	0.3	UJ	0.3	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	34465-46-8	Total HxCDD	0.4	UJ	0.4	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	55684-94-1	Total HxCDF	0.3	UJ	0.3	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	36088-22-9	Total PeCDD	0.5	UJ	0.5	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	30402-15-4	Total PeCDF	0.3	UJ	0.3	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	41903-57-5	Total TCDD	0.5	UJ	0.5	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Dioxin	SW8290	55722-27-5	Total TCDF	0.3	UJ	0.3	pg/g
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Grain Size	ASTM D 422	%Cobbles	Cobble	0			%
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Grain Size	ASTM D 422	%Clay	Fines (Clay)	0			%
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Grain Size	ASTM D 422	%Silt	Fines (Silt)	0.7			%
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Grain Size	ASTM D 422	%Coarse Gravel	Gravel (Coarse)	0			%
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Grain Size	ASTM D 422	%Fine Gravel	Gravel (Fine)	0.4			%
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Grain Size	ASTM D 422	%Coarse Sand	Sand (Coarse)	0.5			%
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Grain Size	ASTM D 422	%Fine Sand	Sand (Fine)	98.2			%
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Grain Size	ASTM D 422	%Medium Sand	Sand (Medium)	2.2			%
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Herbicides	8151	93-76-5	2,4,5-T	10	U	10	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	10	U	10	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Herbicides	8151	94-75-7	2,4-D	10	U	10	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Herbicides	8151	94-82-6	2,4-DB	10	U	10	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Herbicides	8151	75-99-0	Dalapon	2400	U	2400	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Herbicides	8151	1918-00-9	Dicamba	24	U	24	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Herbicides	8151	120-36-5	Dichloroprop	120	U	120	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Herbicides	8151	88-85-7	Dinoseb	120	R	120	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2400	U	2400	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2400	U	2400	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Herbicides	8151	87-86-5	Pentachlorophenol	1.8	J	20	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	PCBs	680	2051-24-3	Decachlorobiphenyl	21	U	21	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	4	U	4	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	8.2	U	8.2	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	4	U	4	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	21	U	21	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	12	U	12	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	8.2	U	8.2	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	8.2	U	8.2	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	21	U	21	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	4	U	4	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	72-54-8	4,4'-DDD	4	U	4	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	72-55-9	4,4'-DDE	4	U	4	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	50-29-3	4,4'-DDT	4	U	4	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	309-00-2	Aldrin	2.1	U	2.1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	319-84-6	alpha-BHC	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	5103-71-9	alpha-Chlordane	2.1	U	2.1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	319-85-7	beta-BHC	1	U	1	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	319-86-8	delta-BHC	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	60-57-1	Dieldrin	4	U	4	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	959-98-8	Endosulfan I	2.1	U	2.1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	33213-65-9	Endosulfan II	4	U	4	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	1031-07-8	Endosulfan sulfate	4	U	4	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	72-20-8	Endrin	4	U	4	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	7421-93-4	Endrin aldehyde	4	U	4	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	53494-70-5	Endrin ketone	4	U	4	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	5103-74-2	gamma-Chlordane	2.1	U	2.1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	76-44-8	Heptachlor	2.1	U	2.1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	1024-57-3	Heptachlor epoxide	2.1	U	2.1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	72-43-5	Methoxychlor	21	U	21	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Pesticides	8081A	8001-35-2	Toxaphene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	933-75-5	2,3,6-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	1000	U	1000	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	91-58-7	2-Chloronaphthalene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	95-57-8	2-Chlorophenol	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	91-57-6	2-Methylnaphthalene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	88-74-4	2-Nitroaniline	1000	U	1000	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	88-75-5	2-Nitrophenol	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	800	U	800	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	99-09-2	3-Nitroaniline	1000	U	1000	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	1000	U	1000	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	106-47-8	4-Chloroaniline	400	U	400	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	100-01-6	4-Nitroaniline	1000	U	1000	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	100-02-7	4-Nitrophenol	1000	U	1000	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	83-32-9	Acenaphthene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	208-96-8	Acenaphthylene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	120-12-7	Anthracene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	56-55-3	Benzo(a)anthracene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	50-32-8	Benzo(a)pyrene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	85-68-7	Butylbenzylphthalate	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	86-74-8	Carbazole	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	218-01-9	Chrysene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	84-74-2	Di-n-butylphthalate	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	117-84-0	Di-n-octylphthalate	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	132-64-9	Dibenzofuran	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	84-66-2	Diethylphthalate	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	131-11-3	Dimethylphthalate	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	206-44-0	Fluoranthene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	86-73-7	Fluorene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	118-74-1	Hexachlorobenzene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	87-68-3	Hexachlorobutadiene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	67-72-1	Hexachloroethane	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	78-59-1	Isophorone	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	621-64-7	N-Nitroso-di-n propylamine	210	U	210	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	91-20-3	Naphthalene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	98-95-3	Nitrobenzene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	1000	U	1000	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	85-01-8	Phenanthrene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	108-95-2	Phenol	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	SVOCs	8270C	129-00-0	Pyrene	210	U	210	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Total Organic Carbon	9060/Calculation	%TOC	Percent Total Organic Carbon	0 0576			%
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	Total Organic Carbon	9060	TOC	Total Organic Carbon	576			mg/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	75-34-3	1,1-Dichloroethane	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	75-35-4	1,1-Dichloroethene	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	107-06-2	1,2-Dichloroethane	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	78-87-5	1,2-Dichloropropane	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	78-93-3	2-Butanone (MEK)	5 1	U	5 1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	591-78-6	2-Hexanone	5 1	U	5 1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	5 1	U	5 1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	67-64-1	Acetone	13	U	13	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	71-43-2	Benzene	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	75-27-4	Bromodichloromethane	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	75-25-2	Bromoform	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	75-15-0	Carbon disulfide	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	56-23-5	Carbon tetrachloride	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	108-90-7	Chlorobenzene	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	75-00-3	Chloroethane	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	67-66-3	Chloroform	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	74-87-3	Chloromethane	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	124-48-1	Dibromochloromethane	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	100-41-4	Ethylbenzene	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	108-38-3	m&p-Xylene	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	2 5	U	2.5	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	100-42-5	Styrene	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	127-18-4	Tetrachloroethene	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	108-88-3	Toluene	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	79-01-6	Trichloroethene	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	75-01-4	Vinyl chloride	1	U	1	ug/kg dw
Sediment	SD-UDA-11	23-Oct-00		Reference	15	15	VOCs	8260B	1330-20-7	Xylenes, Total	1	U	1	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	12 8		0.8	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	0 6	UJ	0.6	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	0 5	UJ	0.5	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	0.2	UJ	0.2	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0.3	UJ	0.3	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	0.3	UJ	0.3	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0.2	UJ	0.2	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0.3	UJ	0.3	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.2	UJ	0.2	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0.3	UJ	0.3	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0.2	UJ	0.2	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0.3	UJ	0.3	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0.2	UJ	0.2	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0.2	UJ	0.2	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0.2	UJ	0.2	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0.3	UJ	0.3	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0.2	UJ	0.2	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	37871-00-4	Total HpCDD	0.94		0.5	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	38998-75-3	Total HpCDF	0.2	UJ	0.2	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	34465-46-8	Total HxCDD	0.3	UJ	0.3	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	55684-94-1	Total HxCDF	0.2	UJ	0.2	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	36088-22-9	Total PeCDD	0.3	UJ	0.3	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	30402-15-4	Total PeCDF	0.2	UJ	0.2	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	41903-57-5	Total TCDD	0.3	UJ	0.3	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Dioxin	SW8290	55722-27-5	Total TCDF	0.2	UJ	0.2	pg/g
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Grain Size	ASTM D 422	%Cobbles	Cobble	0			%
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Grain Size	ASTM D 422	%Clay	Fines (Clay)	1 3			%
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Grain Size	ASTM D 422	%Silt	Fines (Silt)	0 2			%
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Grain Size	ASTM D 422	%Coarse Gravel	Gravel (Coarse)	0			%
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Grain Size	ASTM D 422	%Fine Gravel	Gravel (Fine)	0			%
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Grain Size	ASTM D 422	%Coarse Sand	Sand (Coarse)	0 5			%
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Grain Size	ASTM D 422	%Fine Sand	Sand (Fine)	90 5			%
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Grain Size	ASTM D 422	%Medium Sand	Sand (Medium)	7 5			%
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Herbi	8151	93	2,4,5-T	11		11	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	11	U	11	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Herbicides	8151	94-75-7	2,4-D	11	U	11	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Herbicides	8151	94-82-6	2,4-DB	11	U	11	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Herbicides	8151	75-99-0	Dalapon	2600	U	2600	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Herbicides	8151	1918-00-9	Dicamba	26	U	26	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Herbicides	8151	120-36-5	Dichloroprop	130	U	130	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Herbicides	8151	88-85-7	Dinoseb	130	R	130	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	2600	U	2600	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	2600	U	2600	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Herbicides	8151	87-86-5	Pentachlorophenol	1.3	J	20	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	PCBs	680	2051-24-3	Decachlorobiphenyl	22	U	22	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	4.3	U	4.3	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	13	U	13	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	8.7	U	8.7	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	4.3	U	4.3	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	22	U	22	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	13	U	13	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	8.7	U	8.7	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	8.7	U	8.7	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	22	U	22	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	4.3	U	4.3	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	72-54-8	4,4'-DDD	4.3	U	4.3	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	72-55-9	4,4'-DDE	4.3	U	4.3	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	50-29-3	4,4'-DDT	4.3	U	4.3	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	309-00-2	Aldrin	2.2	U	2.2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	319-84-6	alpha-BHC	1.1	U	1.1	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	5103-71-9	alpha-Chlordane	2.2	U	2.2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	319-85-7	beta-BHC	1.1	U	1.1	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	319-86-8	delta-BHC	1.1	U	1.1	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	60-57-1	Dieldrin	4.3	U	4.3	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	959-98-8	Endosulfan I	2.2	U	2.2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	33213-65-9	Endosulfan II	4.3	U	4.3	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	1031-07-8	Endosulfan sulfate	4.3	U	4.3	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	72-20-8	Endrin	4.3	U	4.3	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	7421-93-4	Endrin aldehyde	4.3	U	4.3	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	53494-70-5	Endrin ketone	4.3	U	4.3	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	1.1	U	1.1	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	5103-74-2	gamma-Chlordane	2.2	U	2.2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	76-44-8	Heptachlor	2.2	U	2.2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	1024-57-3	Heptachlor epoxide	2.2	U	2.2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	72-43-5	Methoxychlor	22	U	22	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Pesticides	8081A	8001-35-2	Toxaphene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	1100	U	1100	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	91-58-7	2-Chloronaphthalene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	95-57-8	2-Chlorophenol	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	91-57-6	2-Methylnaphthalene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	88-74-4	2-Nitroaniline	1100	U	1100	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	88-75-5	2-Nitrophenol	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	860	U	860	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	99-09-2	3-Nitroaniline	1100	U	1100	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	1100	U	1100	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	106-47-8	4-Chloroaniline	430	U	430	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	100-01-6	4-Nitroaniline	1100	U	1100	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	100-02-7	4-Nitrophenol	1100	U	1100	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	83-32-9	Acenaphthene	220	U	220	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	208-96-8	Acenaphthylene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	120-12-7	Anthracene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	56-55-3	Benzo(a)anthracene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	50-32-8	Benzo(a)pyrene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	85-68-7	Butylbenzylphthalate	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	86-74-8	Carbazole	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	218-01-9	Chrysene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	84-74-2	Di-n-butylphthalate	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	117-84-0	Di-n-octylphthalate	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	132-64-9	Dibenzofuran	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	84-66-2	Diethylphthalate	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	131-11-3	Dimethylphthalate	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	206-44-0	Fluoranthene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	86-73-7	Fluorene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	118-74-1	Hexachlorobenzene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	87-68-3	Hexachlorobutadiene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	67-72-1	Hexachloroethane	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	78-59-1	Isophorone	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	91-20-3	Naphthalene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	98-95-3	Nitrobenzene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	1100	U	1100	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	85-01-8	Phenanthrene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	108-95-2	Phenol	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	SVOCs	8270C	129-00-0	Pyrene	220	U	220	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Total Organic Carbon	9060/Calculation	%TOC	Percent Total Organic Carbon	0 03			%
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	Total Organic Carbon	9060	TOC	Total Organic Carbon	300			mg/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	75-34-3	1,1-Dichloroethane	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	75-35-4	1,1-Dichloroethene	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	107-06-2	1,2-Dichloroethane	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	78-87-5	1,2-Dichloropropane	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	78-93-3	2-Butanone (MEK)	6	U	6	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	591-78-6	2-Hexanone	6	U	6	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	6	U	6	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	67-64-1	Acetone	15	U	15	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	71-43-2	Benzene	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	75-27-4	Bromodichloromethane	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	75-25-2	Bromoform	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	75-15-0	Carbon disulfide	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	56-23-5	Carbon tetrachloride	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	108-90-7	Chlorobenzene	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	75-00-3	Chloroethane	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	67-66-3	Chloroform	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	74-87-3	Chloromethane	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	124-48-1	Dibromochloromethane	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	100-41-4	Ethylbenzene	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	108-38-3	m&p-Xylene	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	3	U	3	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	100-42-5	Styrene	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	127-18-4	Tetrachloroethene	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	108-88-3	Toluene	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	79-01-6	Trichloroethene	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	75-01-4	Vinyl chloride	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	15	VOCs	8260B	1330-20-7	Xylenes, Total	1 2	U	1 2	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	287		0 5	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	6 2	JB	0 4	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	11 1		0 3	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	1 6	U	0 2	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	0 2	U	0 2	pg/g
Sediment	SD-[illegible]	26-Oct-00		Reference	[illegible]	9 1	Dio	SW8290	39227-2[illegible]	1,2,3,4,7,8-HxCDD	0 2	[illegible]	0 2	pg/g

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	0 27	J	0 1	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	0 37	J	0 2	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0 1	UJ	0 1	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	0 35	J	0 2	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	0 2	UJ	0 2	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	0 2	UJ	0 2	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	0 1	UJ	0 1	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	0 1	UJ	0 1	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	0 1	UJ	0 1	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	0 2	UJ	0 2	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0 1	UJ	0 1	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	37871-00-4	Total HpCDD	23		0 3	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	38998-75-3	Total HpCDF	5 3	J	0 2	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	34465-46-8	Total HxCDD	3 3		0 2	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	55684-94-1	Total HxCDF	2 4	J	0 1	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	36088-22-9	Total PeCDD	0 51	J	0 2	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	30402-15-4	Total PeCDF	0 66	J	0 1	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	41903-57-5	Total TCDD	0 25	B	0 2	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Dioxin	SW8290	55722-27-5	Total TCDF	1 1	UJ	0 1	pg/g
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Grain Size	ASTM D 422	%Cobbles	Cobble	0			%
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Grain Size	ASTM D 422	%Clay	Fines (Clay)	24 2			%
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Grain Size	ASTM D 422	%Silt	Fines (Silt)	56 7			%
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Grain Size	ASTM D 422	%Coarse Gravel	Gravel (Coarse)	0			%
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Grain Size	ASTM D 422	%Fine Gravel	Gravel (Fine)	0			%
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Grain Size	ASTM D 422	%Coarse Sand	Sand (Coarse)	0			%
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Grain Size	ASTM D 422	%Fine Sand	Sand (Fine)	18 8			%
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Grain Size	ASTM D 422	%Medium Sand	Sand (Medium)	0 3			%
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Herbicides	8151	93-76-5	2,4,5-T	14	U	14	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	14	U	14	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Herbicides	8151	94-75-7	2,4-D	14	U	14	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Herbicides	8151	94-82-6	2,4-DB	14	U	14	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Herbicides	8151	75-99-0	Dalapon	3400	U	3400	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Herbicides	8151	1918-00-9	Dicamba	34	U	34	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Herbicides	8151	120-36-5	Dichloroprop	170	UJ	170	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Herbicides	8151	88-85-7	Dinoseb	170	U	170	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	3400	U	3400	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	3400	U	3400	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Herbicides	8151	87-86-5	Pentachlorophenol	29	U	29	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	PCBs	680	2051-24-3	Decachlorobiphenyl	29	U	29	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	5 6	U	5 6	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	17	U	17	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	11	U	11	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	5 6	U	5 6	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	29	U	29	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	17	U	17	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	11	U	11	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	11	U	11	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	29	U	29	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	5 6	U	5 6	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	72-54-8	4,4'-DDD	5 6	U	5 6	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	72-55-9	4,4'-DDE	5 6	U	5 6	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	50-29-3	4,4'-DDT	5 6	U	5 6	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	309-00-2	Aldrin	2 9	U	2 9	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	319-84-6	alpha-BHC	1 4	U	1 4	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	5103-71-9	alpha-Chlordane	2 9	U	2 9	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	319-85-7	beta-BHC	1 4	U	1 4	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	319-86-8	delta-BHC	1 4	U	1 4	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	60-57-1	Dieldrin	5 6	U	5 6	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	959-98-8	Endosulfan I	2 9	U	2 9	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	33213-65-9	Endosulfan II	5 6	U	5 6	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	1031-07-8	Endosulfan sulfate	5 6	U	5 6	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	72-20-8	Endrin	5 6	U	5 6	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	7421-93-4	Endrin aldehyde	5 6	U	5 6	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	53494-70-5	Endrin ketone	5 6	U	5 6	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	1 4	U	1 4	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	5103-74-2	gamma-Chlordane	2 9	U	2 9	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	76-44-8	Heptachlor	2 9	U	2 9	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	1024-57-3	Heptachlor epoxide	2 9	U	2 9	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	72-43-5	Methoxychlor	29	U	29	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	Pesticides	8081A	8001-35-2	Toxaphene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9 1	9 1	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	290	U	290	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	1400	U	1400	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	91-58-7	2-Chloronaphthalene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	95-57-8	2-Chlorophenol	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	91-57-6	2-Methylnaphthalene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	88-74-4	2-Nitroaniline	1400	U	1400	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	88-75-5	2-Nitrophenol	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	1100	U	1100	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	99-09-2	3-Nitroaniline	1400	U	1400	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	1400	U	1400	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	106-47-8	4-Chloroaniline	560	U	560	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	100-01-6	4-Nitroaniline	1400	U	1400	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	100-02-7	4-Nitrophenol	1400	U	1400	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	83-32-9	Acenaphthene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	208-96-8	Acenaphthylene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	120-12-7	Anthracene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	56-55-3	Benzo(a)anthracene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	50-32-8	Benzo(a)pyrene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	110	J	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	85-68-7	Butylbenzylphthalate	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	86-74-8	Carbazole	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	218-01-9	Chrysene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	84-74-2	Di-n-butylphthalate	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	117-84-0	Di-n-octylphthalate	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	132-64-9	Dibenzofuran	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	84-66-2	Diethylphthalate	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	131-11-3	Dimethylphthalate	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	206-44-0	Fluoranthene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	86-73-7	Fluorene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	118-74-1	Hexachlorobenzene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	87-68-3	Hexachlorobutadiene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	67-72-1	Hexachloroethane	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	78-59-1	Isophorone	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	91-20-3	Naphthalene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	98-95-3	Nitrobenzene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	1400	U	1400	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	85-01-8	Phenanthrene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	108-95-2	Phenol	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	SVOCs	8270C	129-00-0	Pyrene	290	U	290	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	Total Organic Carbon	9060/Calculation	%TOC	Percent Total Organic Carbon	1.18			%
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	Total Organic Carbon	9060	TOC	Total Organic Carbon	11800			mg/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	75-34-3	1,1-Dichloroethane	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	75-35-4	1,1-Dichloroethene	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	107-06-2	1,2-Dichloroethane	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	78-87-5	1,2-Dichloropropane	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	78-93-3	2-Butanone (MEK)	23	B	13	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	591-78-6	2-Hexanone	13	U	13	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	13	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	67-64-1	Acetone	130	B	34	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	71-43-2	Benzene	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	75-27-4	Bromodichloromethane	2.7	U	2.7	ug/kg dw

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	75-25-2	Bromoform	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	75-15-0	Carbon disulfide	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	56-23-5	Carbon tetrachloride	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	108-90-7	Chlorobenzene	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	75-00-3	Chloroethane	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	67-66-3	Chloroform	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	74-87-3	Chloromethane	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	124-48-1	Dibromochloromethane	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	100-41-4	Ethylbenzene	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	108-38-3	m&p-Xylene	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	6.7	U	6.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	100-42-5	Styrene	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	127-18-4	Tetrachloroethene	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	108-88-3	Toluene	5.6		2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	79-01-6	Trichloroethene	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	75-01-4	Vinyl chloride	2.7	U	2.7	ug/kg dw
Sediment	SD-UDA-12	26-Oct-00		Reference	9.1	9.1	VOCs	8260B	1330-20-7	Xylenes, Total	2.7	U	2.7	ug/kg dw
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	99.9		4.3	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	17.6	J	3.5	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	7.4	J	3	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	1.7	UJ	1.7	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	2	UJ	2	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	2.2	UJ	2.2	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	1.5	UJ	1.5	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	2.3	UJ	2.3	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	1.4	UJ	1.4	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	2.1	UJ	2.1	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	1.7	UJ	1.7	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	2.6	UJ	2.6	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	1.9	UJ	1.9	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	1.5	UJ	1.5	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	1.9	UJ	1.9	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	2.5	UJ	2.5	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	1.9	UJ	1.9	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	37871-00-4	Total HpCDD	14.4	J	3	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	38998-75-3	Total HpCDF	6.2		1.9	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	34465-46-8	Total HxCDD	2.2	UJ	2.2	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	55684-94-1	Total HxCDF	1.5	UJ	1.5	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	36088-22-9	Total PeCDD	2.6	UJ	2.6	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	30402-15-4	Total PeCDF	1.9	UJ	1.9	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	41903-57-5	Total TCDD	9.2		2.5	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	55722-27-5	Total TCDF	1.9	UJ	1.9	pg/L
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	93-76-5	2,4,5-T	0.5	U	0.5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	94-75-7	2,4-D	0.5	U	0.5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	94-82-6	2,4-DB	0.5	U	0.5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	1918-00-9	Dicamba	1.2	U	1.2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	120-36-5	Dichloroprop	6	U	6	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	88-85-7	Dinoseb	6	U	6	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	120	U	120	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	87-86-5	Pentachlorophenol	0.048	J	1	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	2051-24-3	Decachlorobiphenyl	0.5	U	0.5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	0.1	U	0.1	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0.3	U	0.3	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	0.2	U	0.2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	0.1	U	0.1	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0.5	U	0.5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0.3	U	0.3	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0.2	U	0.2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	C-TOTAL-PCB	Total Polychlonnated Biphenyls	0.5	U	0.5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	0.1	U	0.1	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	72-54-8	4,4'-DDD	0.1	UJ	0.1	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	72-55-9	4,4'-DDE	0.1	UJ	0.1	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	50-29-3	4,4'-DDT	0.1	UJ	0.1	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	309-00-2	Aldrin	0.05	UJ	0.05	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	319-84-6	alpha-BHC	0.025	UJ	0.025	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	5103-71-9	alpha-Chlordane	0.05	UJ	0.05	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	319-85-7	beta-BHC	0.025	UJ	0.025	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	319-86-8	delta-BHC	0.025	UJ	0.025	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	60-57-1	Dieldrin	0.1	UJ	0.1	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	959-98-8	Endosulfan I	0.05	UJ	0.05	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	33213-65-9	Endosulfan II	0.1	UJ	0.1	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	1031-07-8	Endosulfan sulfate	0.1	UJ	0.1	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	72-20-8	Endrin	0.1	UJ	0.1	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	7421-93-4	Endrin aldehyde	0.1	UJ	0.1	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	53494-70-5	Endrin ketone	0.1	UJ	0.1	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0.025	UJ	0.025	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	5103-74-2	gamma-Chlordane	0.05	UJ	0.05	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	76-44-8	Heptachlor	0.05	UJ	0.05	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	1024-57-3	Heptachlor epoxide	0.05	UJ	0.05	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	72-43-5	Methoxychlor	0.5	UJ	0.5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	8001-35-2	Toxaphene	5	UJ	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	25	U	25	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	91-58-7	2-Chloronaphthalene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	95-57-8	2-Chlorophenol	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	91-57-6	2-Methylnaphthalene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	88-74-4	2-Nitroaniline	25	U	25	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	88-75-5	2-Nitrophenol	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	10	U	10	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	99-09-2	3-Nitroaniline	25	U	25	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	25	U	25	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	106-47-8	4-Chloroaniline	10	U	10	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	100-01-6	4-Nitroaniline	25	U	25	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	100-02-7	4-Nitrophenol	25	U	25	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	83-32-9	Acenaphthene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	208-96-8	Acenaphthylene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	120-12-7	Anthracene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	56-55-3	Benzo(a)anthracene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	50-32-8	Benzo(a)pyrene	5	UJ	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	5	UJ	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	5	UJ	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	5	UJ	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	85-68-7	Butylbenzylphthalate	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	86-74-8	Carbazole	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	218-01-9	Chrysene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	84-74-2	Di-n-butylphthalate	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	117-84-0	Di-n-octylphthalate	5	UJ	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	5	UJ	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	132-64-9	Dibenzofuran	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	131-11-3	Dimethylphthalate	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	206-44-0	Fluoranthene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	86-73-7	Fluorene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	118-74-1	Hexachlorobenzene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	87-68-3	Hexachlorobutadiene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	67-72-1	Hexachloroethane	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	5	UJ	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	78-59-1	Isophorone	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	5	U	5	ug/l
Water	SD-PD	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOC	8270C	91-20	Naphthalene	5		5	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	98-95-3	Nitrobenzene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	25	U	25	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	85-01-8	Phenanthrene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	108-95-2	Phenol	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	129-00-0	Pyrene	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	78-93-3	2-Butanone (MEK)	5.7	J	10	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	67-64-1	Acetone	8.7	J	25	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	108-90-7	Chlorobenzene	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SD-PDA-2 EB	25-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	23.9	UJ	23.9	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	18.2	UJ	18.2	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	14	UJ	14	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	6.9	UJ	6.9	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	9.1	UJ	9.1	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	8.6	UJ	8.6	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	5.6	UJ	5.6	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	8.1	UJ	8.1	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	4.8	UJ	4.8	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	8	UJ	8	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	6.6	UJ	6.6	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	8.6	UJ	8.6	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	5.9	UJ	5.9	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	5.5	UJ	5.5	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	6.2	UJ	6.2	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	6.8	UJ	6.8	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	3.8	UJ	3.8	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	37871-00-4	Total HpCDD	14	UJ	14	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	38998-75-3	Total HpCDF	7.8	UJ	7.8	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	34465-46-8	Total HxCDD	8.2	UJ	8.2	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	55684-94-1	Total HxCDF	5.5	UJ	5.5	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	36088-22-9	Total PeCDD	8.6	UJ	8.6	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	30402-15-4	Total PeCDF	6	UJ	6	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	41903-57-5	Total TCDD	6.8	UJ	6.8	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Dioxin	SW8290	55722-27-5	Total TCDF	3.8	UJ	3.8	pg/L
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	93-76-5	2,4,5-T	0.5	U	0.5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	94-75-7	2,4-D	0.5	U	0.5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	94-82-6	2,4-DB	0.5	U	0.5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	1918-00-9	Dicamba	1.2	U	1.2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	120-36-5	Dichloroprop	6	U	6	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	88-85-7	Dinoseb	6	R	6	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	120	U	120	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Herbicides	8151	87-86-5	Pentachlorophenol	1	U	1	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	2051-24-3	Decachlorobiphenyl	0.5	U	0.5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	0.1	U	0.1	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0.3	U	0.3	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	0.2	U	0.2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	0.1	U	0.1	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0.5	U	0.5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0.3	U	0.3	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0.2	U	0.2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	0.5	U	0.5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	0.1	U	0.1	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	72-54-8	4,4'-DDD	0.1	U	0.1	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	72-55-9	4,4'-DDE	0.1	U	0.1	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	50-29-3	4,4'-DDT	0.1	U	0.1	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	309-00-2	Aldrin	0.05	U	0.05	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	319-84-6	alpha-BHC	0.025	U	0.025	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	5103-71-9	alpha-Chlordane	0.05	U	0.05	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	319-85-7	beta-BHC	0.025	U	0.025	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	319-86-8	delta-BHC	0.025	U	0.025	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	60-57-1	Dieldrin	0.1	U	0.1	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	959-98-8	Endosulfan I	0.05	U	0.05	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	33213-65-9	Endosulfan II	0.1	U	0.1	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	1031-07-8	Endosulfan sulfate	0.1	U	0.1	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	72-20-8	Endrin	0.1	U	0.1	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	7421-93-4	Endrin aldehyde	0.1	U	0.1	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	53494-70-5	Endrin ketone	0.1	U	0.1	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0.025	U	0.025	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	5103-74-2	gamma-Chlordane	0.05	U	0.05	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	76-44-8	Heptachlor	0.05	U	0.05	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	1024-57-3	Heptachlor epoxide	0.05	U	0.05	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	72-43-5	Methoxychlor	0.5	U	0.5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			Pesticides	8081A	8001-35-2	Toxaphene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	25	U	25	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	91-58-7	2-Chloronaphthalene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	95-57-8	2-Chlorophenol	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	91-57-6	2-Methylnaphthalene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	88-74-4	2-Nitroaniline	25	U	25	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	88-75-5	2-Nitrophenol	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	10	U	10	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	99-09-2	3-Nitroaniline	25	U	25	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	25	U	25	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	106-47-8	4-Chloroaniline	10	U	10	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	100-01-6	4-Nitroaniline	25	U	25	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	100-02-7	4-Nitrophenol	25	U	25	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	83-32-9	Acenaphthene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	208-96-8	Acenaphthylene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	120-12-7	Anthracene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	56-55-3	Benzo(a)anthracene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	50-32-8	Benzo(a)pyrene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	85-68-7	Butylbenzylphthalate	5	U	5	ug/l
Water	SD-UD	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOC	8270C	86-74	Carbazole	5		5	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	218-01-9	Chrysene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	84-74-2	Di-n-butylphthalate	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	117-84-0	Di-n-octylphthalate	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	132-64-9	Dibenzofuran	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	131-11-3	Dimethylphthalate	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	206-44-0	Fluoranthene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	86-73-7	Fluorene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	118-74-1	Hexachlorobenzene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	87-68-3	Hexachlorobutadiene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	67-72-1	Hexachloroethane	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	78-59-1	Isophorone	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	91-20-3	Naphthalene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	98-95-3	Nitrobenzene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	25	U	25	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	85-01-8	Phenanthrene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	108-95-2	Phenol	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			SVOCs	8270C	129-00-0	Pyrene	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	108-90-7	Chlorobenzene	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SD-UDA-11-EB	23-Oct-00	Sediment Equipment Blank	QA/QC			VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	222		9.3	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	7.2	UJ	7.2	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	5.9	UJ	5.9	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	3.2	UJ	3.2	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	4.4	UJ	4.4	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	3.6	UJ	3.6	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	2.2	UJ	2.2	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	3.5	UJ	3.5	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	2.1	UJ	2.1	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	3.5	UJ	3.5	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	2.8	UJ	2.8	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	3.2	UJ	3.2	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	3.1	UJ	3.1	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	2.3	UJ	2.3	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	3.1	UJ	3.1	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	2.2	UJ	2.2	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	1.8	UJ	1.8	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	37871-00-4	Total HpCDD	9.4		5.9	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	38998-75-3	Total HpCDF	3.7	UJ	3.7	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	34465-46-8	Total HxCDD	3.5	UJ	3.5	pg/L

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	55684-94-1	Total HxCDF	2.3	UJ	2.3	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	36088-22-9	Total PeCDD	3.2	UJ	3.2	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	30402-15-4	Total PeCDF	3.1	UJ	3.1	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	41903-57-5	Total TCDD	2.2	UJ	2.2	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Dioxin	SW8290	55722-27-5	Total TCDF	1.8	UJ	1.8	pg/L
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Herbicides	8151	93-76-5	2,4,5-T	0.5	U	0.5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Herbicides	8151	94-75-7	2,4-D	0.83		0.5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Herbicides	8151	94-82-6	2,4-DB	0.5	U	0.5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Herbicides	8151	1918-00-9	Dicamba	1.2	U	1.2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Herbicides	8151	120-36-5	Dichloroprop	6	U	6	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Herbicides	8151	88-85-7	Dinoseb	6	U	6	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	120	U	120	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Herbicides	8151	87-86-5	Pentachlorophenol	1	U	1	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	PCBs	680	2051-24-3	Decachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	0.5	U	0.5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	72-54-8	4,4'-DDD	0.1	U	0.1	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	72-55-9	4,4'-DDE	0.1	U	0.1	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	50-29-3	4,4'-DDT	0.1	U	0.1	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	309-00-2	Aldrin	0.05	U	0.05	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	319-84-6	alpha-BHC	0.025	U	0.025	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	5103-71-9	alpha-Chlordane	0.05	U	0.05	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	319-85-7	beta-BHC	0.025	U	0.025	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	319-86-8	delta-BHC	0.025	U	0.025	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	60-57-1	Dieldrin	0.1	U	0.1	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	959-98-8	Endosulfan I	0.05	U	0.05	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	33213-65-9	Endosulfan II	0.1	U	0.1	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	1031-07-8	Endosulfan sulfate	0.1	U	0.1	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	72-20-8	Endrin	0.1	U	0.1	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	7421-93-4	Endrin aldehyde	0.1	U	0.1	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	53494-70-5	Endrin ketone	0.1	U	0.1	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0.025	U	0.025	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	5103-74-2	gamma-Chlordane	0.05	U	0.05	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	76-44-8	Heptachlor	0.05	U	0.05	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	1024-57-3	Heptachlor epoxide	0.05	U	0.05	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	72-43-5	Methoxychlor	0.5	U	0.5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	Pesticides	8081A	8001-35-2	Toxaphene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	25	U	25	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	91-58-7	2-Chloronaphthalene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	95-57-8	2-Chlorophenol	0.38	J	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	91-57-6	2-Methylnaphthalene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	88-74-4	2-Nitroaniline	25	U	25	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	88-75-5	2-Nitrophenol	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	10	U	10	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	108-44-5	3-Methylphenol/4-Methylphenol (m&p Cresol)	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	99-09-2	3-Nitroaniline	25	U	25	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	25	U	25	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	5	U	5	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	106-47-8	4-Chloroaniline	10	U	10	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	100-01-6	4-Nitroaniline	25	U	25	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	100-02-7	4-Nitrophenol	25	U	25	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	83-32-9	Acenaphthene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	208-96-8	Acenaphthylene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	120-12-7	Anthracene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	56-55-3	Benzo(a)anthracene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	50-32-8	Benzo(a)pyrene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	85-68-7	Butylbenzylphthalate	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	86-74-8	Carbazole	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	218-01-9	Chrysene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	84-74-2	Di-n-butylphthalate	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	117-84-0	Di-n-octylphthalate	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	132-64-9	Dibenzofuran	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	131-11-3	Dimethylphthalate	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	206-44-0	Fluoranthene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	86-73-7	Fluorene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	118-74-1	Hexachlorobenzene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	87-68-3	Hexachlorobutadiene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	67-72-1	Hexachloroethane	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	78-59-1	Isophorone	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	91-20-3	Naphthalene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	98-95-3	Nitrobenzene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	25	U	25	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	85-01-8	Phenanthrene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	108-95-2	Phenol	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	SVOCs	8270C	129-00-0	Pyrene	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	TSS	160.2	TSS	Total Suspended Solids	23		5	mg/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	71-43-2	Benzene	0.15	J	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	108-90-7	Chlorobenzene	1.2	J	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	108-88-3	Toluene	0.4	J	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-DDA-1	27-Oct-00		Reference	3.5	1	VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	219		12.1	pg/L

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	9.3	UJ	9.3	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	7.3	UJ	7.3	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	3.5	UJ	3.5	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	4.9	UJ	4.9	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	4.2	UJ	4.2	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	2.5	UJ	2.5	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	4.1	UJ	4.1	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	2.3	UJ	2.3	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	4.1	UJ	4.1	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	3.1	UJ	3.1	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	3.1	UJ	3.1	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	2.5	UJ	2.5	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	2.6	UJ	2.6	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	2.5	UJ	2.5	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	2.5	UJ	2.5	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	2.1	UJ	2.1	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	37871-00-4	Total HpCDD	8.5		7.3	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	38998-75-3	Total HpCDF	4.1	UJ	4.1	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	34465-46-8	Total HxCDD	4.1	UJ	4.1	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	55684-94-1	Total HxCDF	2.6	UJ	2.6	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	36088-22-9	Total PeCDD	3.1	UJ	3.1	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	30402-15-4	Total PeCDF	2.5	UJ	2.5	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	41903-57-5	Total TCDD	2.5	UJ	2.5	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Dioxin	SW8290	55722-27-5	Total TCDF	2.1	UJ	2.1	pg/L
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Herbicides	8151	93-76-5	2,4,5-T	0.11	J	0.5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Herbicides	8151	94-75-7	2,4-D	0.33	J	0.5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Herbicides	8151	94-82-6	2,4-DB	0.5	U	0.5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Herbicides	8151	1918-00-9	Dicamba	1.2	U	1.2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Herbicides	8151	120-36-5	Dichloroprop	6	U	6	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Herbicides	8151	88-85-7	Dinoseb	6	R	6	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	120	U	120	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Herbicides	8151	87-86-5	Pentachlorophenol	1	U	1	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	PCBs	680	2051-24-3	Decachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	0.5	U	0.5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	72-54-8	4,4'-DDD	0.1	U	0.1	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	72-55-9	4,4'-DDE	0.1	U	0.1	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	50-29-3	4,4'-DDT	0.1	U	0.1	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	309-00-2	Aldrin	0.05	U	0.05	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	319-84-6	alpha-BHC	0.025	U	0.025	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	5103-71-9	alpha-Chlordane	0.05	U	0.05	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	319-85-7	beta-BHC	0.025	U	0.025	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	319-86-8	delta-BHC	0.025	U	0.025	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	60-57-1	Dieldrin	0.1	U	0.1	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	959-98-8	Endosulfan I	0.05	U	0.05	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	33213-65-9	Endosulfan II	0.1	U	0.1	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	1031-07-8	Endosulfan sulfate	0.1	U	0.1	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	72-20-8	Endrin	0.1	U	0.1	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	7421-93-4	Endrin aldehyde	0.1	U	0.1	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	53494-70-5	Endrin ketone	0.1	U	0.1	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0.025	U	0.025	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	5103-74-2	gamma-Chlordane	0.05	U	0.05	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	76-44-8	Heptachlor	0.05	U	0.05	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	1024-57-3	Heptachlor epoxide	0.05	U	0.05	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	72-43-5	Methoxychlor	0.5	U	0.5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	Pesticides	8081A	8001-35-2	Toxaphene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	933-7	2,3,5-Trichlorophenol	5	U	5	ug/l
Water	SW	23-Oct-00		Reference		3.7	SV	8270C	933-	2,3,6-Trichlorophenol	5		5	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	1	J	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	25	U	25	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	91-58-7	2-Chloronaphthalene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	95-57-8	2-Chlorophenol	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	91-57-6	2-Methylnaphthalene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	88-74-4	2-Nitroaniline	25	U	25	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	88-75-5	2-Nitrophenol	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	10	U	10	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	99-09-2	3-Nitroaniline	25	U	25	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	25	U	25	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	106-47-8	4-Chloroaniline	1.8	J	10	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	100-01-6	4-Nitroaniline	25	U	25	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	100-02-7	4-Nitrophenol	25	U	25	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	83-32-9	Acenaphthene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	208-96-8	Acenaphthylene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	120-12-7	Anthracene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	56-55-3	Benzo(a)anthracene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	50-32-8	Benzo(a)pyrene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	85-68-7	Butylbenzylphthalate	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	86-74-8	Carbazole	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	218-01-9	Chrysene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	84-74-2	Di-n-butylphthalate	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	117-84-0	Di-n-octylphthalate	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	132-64-9	Dibenzofuran	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	131-11-3	Dimethylphthalate	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	206-44-0	Fluoranthene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	86-73-7	Fluorene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	118-74-1	Hexachlorobenzene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	87-68-3	Hexachlorobutadiene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	67-72-1	Hexachloroethane	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	78-59-1	Isophorone	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	91-20-3	Naphthalene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	98-95-3	Nitrobenzene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	25	U	25	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	85-01-8	Phenanthrene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	108-95-2	Phenol	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	SVOCs	8270C	129-00-0	Pyrene	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	TSS	160.2	TSS	Total Suspended Solids	38		5	mg/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	71-43-2	Benzene	0.24	J	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	108-90-7	Chlorobenzene	2.3		2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-DDA-13	23-Oct-00		Reference	6.2	3.7	VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	189		8.7	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	5.2	UJ	5.2	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	4.2	UJ	4.2	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	2.2	UJ	2.2	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	3.1	UJ	3.1	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	2.5	UJ	2.5	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	1.7	UJ	1.7	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	2.4	UJ	2.4	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	1.6	UJ	1.6	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	2.4	UJ	2.4	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	2.1	UJ	2.1	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	1.8	UJ	1.8	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	1.4	UJ	1.4	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	1.8	UJ	1.8	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	1.4	UJ	1.4	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	1.7	UJ	1.7	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	1.4	UJ	1.4	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	37871-00-4	Total HpCDD	9.4		4.2	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	38998-75-3	Total HpCDF	2.6	UJ	2.6	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	34465-46-8	Total HxCDD	2.5	UJ	2.5	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	55684-94-1	Total HxCDF	1.8	UJ	1.8	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	36088-22-9	Total PeCDD	1.8	UJ	1.8	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	30402-15-4	Total PeCDF	1.4	UJ	1.4	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	41903-57-5	Total TCDD	1.7	UJ	1.7	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Dioxin	SW8290	55722-27-5	Total TCDF	1.4	UJ	1.4	pg/L
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Herbicides	8151	93-76-5	2,4,5-T	0.5	U	0.5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Herbicides	8151	94-75-7	2,4-D	0.5	U	0.5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Herbicides	8151	94-82-6	2,4-DB	0.5	U	0.5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Herbicides	8151	1918-00-9	Dicamba	1.2	U	1.2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Herbicides	8151	120-36-5	Dichloroprop	6	U	6	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Herbicides	8151	88-85-7	Dinoseb	6	R	6	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	120	U	120	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Herbicides	8151	87-86-5	Pentachlorophenol	1	U	1	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	PCBs	680	2051-24-3	Decachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	0.5	U	0.5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Pesticides	8081A	72-54-8	4,4'-DDD	0.1	UJ	0.1	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Pesticides	8081A	72-55-9	4,4'-DDE	0.1	UJ	0.1	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Pesticides	8081A	50-29-3	4,4'-DDT	0.1	UJ	0.1	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Pesticides	8081A	309-00-2	Aldrin	0.05	UJ	0.05	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Pesticides	8081A	319-84-6	alpha-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Pesticides	8081A	5103-71-9	alpha-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Pesticides	8081A	319-85-7	beta-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Pesticides	8081A	319-86-8	delta-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Pesticides	8081A	60-57-1	Dieldrin	0.1	UJ	0.1	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Pesticides	8081A	959-98-8	Endosulfan I	0.05	UJ	0.05	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Pesticides	8081A	33213-65-	Endosulfan II	0.1	UJ	0.1	ug/l
Water	SW-	24-Oct-00		Site		11	Pes	8081A	1031-	Endosulfan sulfate	0.1		0.1	ug/l
Water	SW-	24-Oct-00		Site		11	Pe	8081A	72-20	Endrin	0.1		0.1	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Pesticides	8081A	7421-93-4	Endrin aldehyde	0.1	UJ	0.1	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Pesticides	8081A	53494-70-5	Endrin ketone	0.1	UJ	0.1	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0.025	UJ	0.025	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Pesticides	8081A	5103-74-2	gamma-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Pesticides	8081A	76-44-8	Heptachlor	0.05	UJ	0.05	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Pesticides	8081A	1024-57-3	Heptachlor epoxide	0.05	UJ	0.05	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Pesticides	8081A	72-43-5	Methoxychlor	0.5	UJ	0.5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	Pesticides	8081A	8001-35-2	Toxaphene	5	UJ	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	25	U	25	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	91-58-7	2-Chloronaphthalene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	95-57-8	2-Chlorophenol	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	91-57-6	2-Methylnaphthalene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	88-74-4	2-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	88-75-5	2-Nitrophenol	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	10	U	10	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	108-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	99-09-2	3-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	25	U	25	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	106-47-8	4-Chloroaniline	10	U	10	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	100-01-6	4-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	100-02-7	4-Nitrophenol	25	U	25	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	83-32-9	Acenaphthene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	208-96-8	Acenaphthylene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	120-12-7	Anthracene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	56-55-3	Benzo(a)anthracene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	50-32-8	Benzo(a)pyrene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	85-68-7	Butylbenzylphthalate	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	86-74-8	Carbazole	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	218-01-9	Chrysene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	84-74-2	Di-n-butylphthalate	0.28	J	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	117-84-0	Di-n-octylphthalate	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	132-64-9	Dibenzofuran	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	131-11-3	Dimethylphthalate	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	206-44-0	Fluoranthene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	86-73-7	Fluorene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	118-74-1	Hexachlorobenzene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	87-68-3	Hexachlorobutadiene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	67-72-1	Hexachloroethane	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	78-59-1	Isophorone	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	91-20-3	Naphthalene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	98-95-3	Nitrobenzene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	25	U	25	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	85-01-8	Phenanthrene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	108-95-2	Phenol	5	U	5	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	SVOCs	8270C	129-00-0	Pyrene	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	TSS	160.2	TSS	Total Suspended Solids	32		5	mg/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	108-90-7	Chlorobenzene	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-PDA-10	24-Oct-00		Site	13.5	11	VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	160		4.1	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	3.2	UJ	3.2	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	3.4	J	2.7	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	1.3	UJ	1.3	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	1.8	UJ	1.8	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	1.5	UJ	1.5	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	1	UJ	1	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	1.5	UJ	1.5	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	0.9	UJ	0.9	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	1.5	UJ	1.5	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	1.2	UJ	1.2	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	1.2	UJ	1.2	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	1	UJ	1	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	1	UJ	1	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	1	UJ	1	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	1	UJ	1	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	0.9	UJ	0.9	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	37871-00-4	Total HpCDD	8.2	J	2.7	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	38998-75-3	Total HpCDF	1.8	UJ	1.8	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	34465-46-8	Total HxCDD	1.5	UJ	1.5	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	55684-94-1	Total HxCDF	1	UJ	1	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	36088-22-9	Total PeCDD	1.2	UJ	1.2	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	30402-15-4	Total PeCDF	1	UJ	1	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	41903-57-5	Total TCDD	1	UJ	1	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Dioxin	SW8290	55722-27-5	Total TCDF	0.9	UJ	0.9	pg/L
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Herbicides	8151	93-76-5	2,4,5-T	0.5	U	0.5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Herbicides	8151	94-75-7	2,4-D	12	J	0.5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Herbicides	8151	94-82-6	2,4-DB	0.5	U	0.5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Herbicides	8151	1918-00-9	Dicamba	1.2	U	1.2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Herbicides	8151	120-36-5	Dichloroprop	0.7	J	6	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Herbicides	8151	88-85-7	Dinoseb	6	U	6	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	120	U	120	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Herbicides	8151	87-86-5	Pentachlorophenol	0.93	J	1	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	PCBs	680	2051-24-3	Decachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-PDA-2	25-Oct-00		Site	[illegible]	9	PCBs	680	C-HEXA[illegible]RO	Hexachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	[illegible]	9	PCBs	680	C-MONO[illegible]RO	Monochlorobiphenyl	0.1	U	0.1	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	0.5	U	0.5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	72-54-8	4,4'-DDD	0.1	UJ	0.1	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	72-55-9	4,4'-DDE	0.1	UJ	0.1	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	50-29-3	4,4'-DDT	0.1	UJ	0.1	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	309-00-2	Aldrin	0.05	UJ	0.05	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	319-84-6	alpha-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	5103-71-9	alpha-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	319-85-7	beta-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	319-86-8	delta-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	60-57-1	Dieldrin	0.1	UJ	0.1	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	959-98-8	Endosulfan I	0.05	UJ	0.05	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	33213-65-9	Endosulfan II	0.1	UJ	0.1	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	1031-07-8	Endosulfan sulfate	0.1	UJ	0.1	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	72-20-8	Endrin	0.1	UJ	0.1	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	7421-93-4	Endrin aldehyde	0.1	UJ	0.1	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	53494-70-5	Endrin ketone	0.1	UJ	0.1	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0.025	UJ	0.025	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	5103-74-2	gamma-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	76-44-8	Heptachlor	0.05	UJ	0.05	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	1024-57-3	Heptachlor epoxide	0.05	UJ	0.05	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	72-43-5	Methoxychlor	0.5	UJ	0.5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	Pesticides	8081A	8001-35-2	Toxaphene	5	UJ	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	0.55	J	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	21	J	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	13	J	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	50	J	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	25	U	25	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	91-58-7	2-Chloronaphthalene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	95-57-8	2-Chlorophenol	29	J	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	91-57-6	2-Methylnaphthalene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	88-74-4	2-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	88-75-5	2-Nitrophenol	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	10	U	10	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	8	J	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	99-09-2	3-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	25	U	25	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	106-47-8	4-Chloroaniline	67	J	10	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	100-01-6	4-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	100-02-7	4-Nitrophenol	25	U	25	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	83-32-9	Acenaphthene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	208-96-8	Acenaphthylene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	120-12-7	Anthracene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	56-55-3	Benzo(a)anthracene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	50-32-8	Benzo(a)pyrene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	85-68-7	Butylbenzylphthalate	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	86-74-8	Carbazole	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	218-01-9	Chrysene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	84-74-2	Di-n-butylphthalate	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11.5	9	SVOCs	8270C	117-84-0	Di-n-octylphthalate	5	U	5	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	SVOCs	8270C	132-64-9	Dibenzofuran	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	SVOCs	8270C	131-11-3	Dimethylphthalate	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	SVOCs	8270C	206-44-0	Fluoranthene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	SVOCs	8270C	86-73-7	Fluorene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	SVOCs	8270C	118-74-1	Hexachlorobenzene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	SVOCs	8270C	87-68-3	Hexachlorobutadiene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	SVOCs	8270C	67-72-1	Hexachloroethane	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	SVOCs	8270C	78-59-1	Isophorone	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	SVOCs	8270C	91-20-3	Naphthalene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	SVOCs	8270C	98-95-3	Nitrobenzene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	25	U	25	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	SVOCs	8270C	85-01-8	Phenanthrene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	SVOCs	8270C	108-95-2	Phenol	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	SVOCs	8270C	129-00-0	Pyrene	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	TSS	160 2	TSS	Total Suspended Solids	19		5	mg/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	107-06-2	1,2-Dichloroethane	0 55	J	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	2 2	J	10	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	71-43-2	Benzene	2 4		2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	108-90-7	Chlorobenzene	35	J	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	100-41-4	Ethylbenzene	0 52	J	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	108-38-3	m&p-Xylene	1 1	J	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	108-88-3	Toluene	2 4		2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-PDA-2	25-Oct-00		Site	11 5	9	VOCs	8260B	1330-20-7	Xylenes, Total	1 5	J	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11 5	9	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	132		4 5	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11 5	9	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	3 6	UJ	3 6	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11 5	9	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	4 4	J	2 9	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11 5	9	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	1 7	UJ	1 7	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11 5	9	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	2	UJ	2	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11 5	9	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	2	UJ	2	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11 5	9	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	1 3	UJ	1 3	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11 5	9	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	2	UJ	2	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11 5	9	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	1 3	UJ	1 3	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11 5	9	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	1 9	UJ	1 9	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11 5	9	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	1 5	UJ	1 5	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11 5	9	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	2 1	UJ	2 1	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11 5	9	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	1 6	UJ	1 6	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11 5	9	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	1 4	UJ	1 4	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11 5	9	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	1 6	UJ	1 6	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11 5	9	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	2 2	UJ	2 2	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11 5	9	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	1 5	UJ	1 5	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11 5	9	Dioxin	SW8290	37871-00-4	Total HpCDD	10 1	J	2 9	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11 5	9	Dioxin	SW8290	38998-75-3	Total HpCDF	1 8	UJ	1 8	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11 5	9	Dioxin	SW8290	34465-46-8	Total HxCDD	2	UJ	2	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site		9	Dioxin	SW8290	55684	Total HxCDF	1 4		1 4	pg/L
Water	SW-P	25-Oct-00	Field Duplicate	Site		9	Dioxin	SW8290	36088	Total PeCDD	2 1		2 1	pg/L

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Dioxin	SW8290	30402-15-4	Total PeCDF	1.6	UJ	1.6	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Dioxin	SW8290	41903-57-5	Total TCDD	2.2	UJ	2.2	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Dioxin	SW8290	55722-27-5	Total TCDF	1.5	UJ	1.5	pg/L
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Herbicides	8151	93-76-5	2,4,5-T	0.5	U	0.5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Herbicides	8151	94-75-7	2,4-D	4	J	0.5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Herbicides	8151	94-82-6	2,4-DB	0.5	U	0.5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Herbicides	8151	1918-00-9	Dicamba	1.2	U	1.2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Herbicides	8151	120-36-5	Dichloroprop	6	U	6	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Herbicides	8151	88-85-7	Dinoseb	6	U	6	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	120	U	120	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Herbicides	8151	87-86-5	Pentachlorophenol	0.22	J	1	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	PCBs	680	2051-24-3	Decachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	0.5	U	0.5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	72-54-8	4,4'-DDD	0.1	UJ	0.1	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	72-55-9	4,4'-DDE	0.1	UJ	0.1	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	50-29-3	4,4'-DDT	0.1	UJ	0.1	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	309-00-2	Aldrin	0.05	UJ	0.05	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	319-84-6	alpha-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	5103-71-9	alpha-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	319-85-7	beta-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	319-86-8	delta-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	60-57-1	Dieldrin	0.1	UJ	0.1	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	959-98-8	Endosulfan I	0.05	UJ	0.05	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	33213-65-9	Endosulfan II	0.1	UJ	0.1	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	1031-07-8	Endosulfan sulfate	0.1	UJ	0.1	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	72-20-8	Endrin	0.1	UJ	0.1	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	7421-93-4	Endrin aldehyde	0.1	UJ	0.1	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	53494-70-5	Endrin ketone	0.1	UJ	0.1	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0.025	UJ	0.025	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	5103-74-2	gamma-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	76-44-8	Heptachlor	0.05	UJ	0.05	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	1024-57-3	Heptachlor epoxide	0.05	UJ	0.05	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	72-43-5	Methoxychlor	0.5	UJ	0.5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	Pesticides	8081A	8001-35-2	Toxaphene	5	UJ	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	5.5	J	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	3	J	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	12	J	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	1.3	J	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	25	U	25	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	91-58-7	2-Chloronaphthalene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	95-57-8	2-Chlorophenol	8.4	J	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	91-57-6	2-Methylnaphthalene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	88-74-4	2-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	88-75-5	2-Nitrophenol	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	10	U	10	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	3.8	J	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	99-09-2	3-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	25	U	25	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	106-47-8	4-Chloroaniline	15	J	10	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	100-01-6	4-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	100-02-7	4-Nitrophenol	25	U	25	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	83-32-9	Acenaphthene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	208-96-8	Acenaphthylene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	120-12-7	Anthracene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	56-55-3	Benzo(a)anthracene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	50-32-8	Benzo(a)pyrene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	85-68-7	Butylbenzylphthalate	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	86-74-8	Carbazole	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	218-01-9	Chrysene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	84-74-2	Di-n-butylphthalate	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	117-84-0	Di-n-octylphthalate	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	132-64-9	Dibenzofuran	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	131-11-3	Dimethylphthalate	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	206-44-0	Fluoranthene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	86-73-7	Fluorene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	118-74-1	Hexachlorobenzene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	87-68-3	Hexachlorobutadiene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	67-72-1	Hexachloroethane	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	78-59-1	Isophorone	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	91-20-3	Naphthalene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	98-95-3	Nitrobenzene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	25	U	25	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	85-01-8	Phenanthrene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	108-95-2	Phenol	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	SVOCs	8270C	129-00-0	Pyrene	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	TSS	160.2	TSS	Total Suspended Solids	27		5	mg/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	0.84	J	10	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	108-90-7	Chlorobenzene	9.4	J	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	100-41-4	Ethylbenzene	0.12	J	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	108-38-3	m&p-Xylene	0.39	J	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	108-88-3	Toluene	0.89	J	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-PDA-2-FD	25-Oct-00	Field Duplicate	Site	11.5	9	VOCs	8260B	1330-20-7	Xylenes, Total	0.39	J	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	11.5	15	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	147		8.9	pg/L
Water	SW-P	25-Oct-00		Site	11.5	15	Dio	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	6.9		6.9	pg/L
Water	SW-	25-Oct-00		Site	11.5	15	Di	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	5.6		5.6	pg/L

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	2.7	UJ	2.7	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	3.7	UJ	3.7	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	3.3	UJ	3.3	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	2	UJ	2	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	3.2	UJ	3.2	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	1.9	UJ	1.9	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	3.2	UJ	3.2	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	2.6	UJ	2.6	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	2.5	UJ	2.5	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	1.9	UJ	1.9	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	2.1	UJ	2.1	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	1.9	UJ	1.9	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	1.9	UJ	1.9	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	1.7	UJ	1.7	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	37871-00-4	Total HpCDD	5.6	UJ	5.6	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	38998-75-3	Total HpCDF	3.1	UJ	3.1	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	34465-46-8	Total HxCDD	3.2	UJ	3.2	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	55684-94-1	Total HxCDF	2.1	UJ	2.1	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	36088-22-9	Total PeCDD	2.5	UJ	2.5	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	30402-15-4	Total PeCDF	1.9	UJ	1.9	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	41903-57-5	Total TCDD	1.9	UJ	1.9	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Dioxin	SW8290	55722-27-5	Total TCDF	1.7	UJ	1.7	pg/L
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Herbicides	8151	93-76-5	2,4,5-T	0.5	U	0.5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Herbicides	8151	94-75-7	2,4-D	4.1		0.5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Herbicides	8151	94-82-6	2,4-DB	0.5	U	0.5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Herbicides	8151	1918-00-9	Dicamba	1.2	U	1.2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Herbicides	8151	120-36-5	Dichloroprop	6	U	6	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Herbicides	8151	88-85-7	Dinoseb	6	U	6	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	120	U	120	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Herbicides	8151	87-86-5	Pentachlorophenol	0.23	J	1	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	PCBs	680	2051-24-3	Decachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	0.5	U	0.5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	72-54-8	4,4'-DDD	0.1	UJ	0.1	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	72-55-9	4,4'-DDE	0.1	UJ	0.1	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	50-29-3	4,4'-DDT	0.1	UJ	0.1	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	309-00-2	Aldrin	0.05	UJ	0.05	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	319-84-6	alpha-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	5103-71-9	alpha-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	319-85-7	beta-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	319-86-8	delta-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	60-57-1	Dieldrin	0.1	UJ	0.1	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	959-98-8	Endosulfan I	0.05	UJ	0.05	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	33213-65-9	Endosulfan II	0.1	UJ	0.1	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	1031-07-8	Endosulfan sulfate	0.1	UJ	0.1	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	72-20-8	Endrin	0.1	UJ	0.1	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	7421-93-4	Endrin aldehyde	0.1	UJ	0.1	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	53494-70-5	Endrin ketone	0.1	UJ	0.1	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0.025	UJ	0.025	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	5103-74-2	gamma-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	76-44-8	Heptachlor	0.05	UJ	0.05	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	1024-57-3	Heptachlor epoxide	0.05	UJ	0.05	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	72-43-5	Methoxychlor	0.5	UJ	0.5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	Pesticides	8081A	8001-35-2	Toxaphene	5	UJ	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	3.3	J	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	2.4	J	5	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	9.3		5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	1.2	J	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	25	U	25	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	91-58-7	2-Chloronaphthalene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	95-57-8	2-Chlorophenol	6		5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	91-57-6	2-Methylnaphthalene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	88-74-4	2-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	88-75-5	2-Nitrophenol	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	10	U	10	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	2.6	J	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	99-09-2	3-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	25	U	25	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	106-47-8	4-Chloroaniline	12		10	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	100-01-6	4-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	100-02-7	4-Nitrophenol	25	U	25	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	83-32-9	Acenaphthene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	208-96-8	Acenaphthylene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	120-12-7	Anthracene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	56-55-3	Benzo(a)anthracene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	50-32-8	Benzo(a)pyrene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	85-68-7	Butylbenzylphthalate	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	86-74-8	Carbazole	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	218-01-9	Chrysene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	84-74-2	Di-n-butylphthalate	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	117-84-0	Di-n-octylphthalate	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	132-64-9	Dibenzofuran	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	131-11-3	Dimethylphthalate	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	206-44-0	Fluoranthene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	86-73-7	Fluorene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	118-74-1	Hexachlorobenzene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	87-68-3	Hexachlorobutadiene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	67-72-1	Hexachloroethane	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	78-59-1	Isophorone	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	91-20-3	Naphthalene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	98-95-3	Nitrobenzene	0.54	J	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	25	U	25	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	85-01-8	Phenanthrene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	108-95-2	Phenol	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	SVOCs	8270C	129-00-0	Pyrene	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	TSS	160.2	TSS	Total Suspended Solids	28		5	mg/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	2.2	J	10	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	71-43-2	Benzene	1.8	J	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	108-90-7	Chlorobenzene	24		2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	100-41-4	Ethylbenzene	0.38	J	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	108-38-3	m&p-Xylene	0.97	J	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	108-88-3	Toluene	1.7	J	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-PDA-3	25-Oct-00		Site	4	1.5	VOCs	8260B	1330-20-7	Xylenes, Total	0.97	J	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	167		5.2	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	4.2	UJ	4.2	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	7	J	4	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	2.5	UJ	2.5	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	2.9	UJ	2.9	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	2.8	UJ	2.8	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	2	UJ	2	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	2.8	UJ	2.8	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	1.9	UJ	1.9	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	2.6	UJ	2.6	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	2.3	UJ	2.3	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	3	UJ	3	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	2.3	UJ	2.3	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	2.1	UJ	2.1	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	2.2	UJ	2.2	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	3.1	UJ	3.1	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	2.1	UJ	2.1	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	37871-00-4	Total HpCDD	12.9	J	4	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	38998-75-3	Total HpCDF	2.7	UJ	2.7	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	34465-46-8	Total HxCDD	2.7	UJ	2.7	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	55684-94-1	Total HxCDF	2.1	UJ	2.1	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	36088-22-9	Total PeCDD	3	UJ	3	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	30402-15-4	Total PeCDF	2.3	UJ	2.3	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	41903-57-5	Total TCDD	3.1	UJ	3.1	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Dioxin	SW8290	55722-27-5	Total TCDF	2.1	UJ	2.1	pg/L
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Herbicides	8151	93-76-5	2,4,5-T	0.5	U	0.5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Herbicides	8151	94-75-7	2,4-D	10		0.5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Herbicides	8151	94-82-6	2,4-DB	0.5	U	0.5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Herbicides	8151	1918-00-9	Dicamba	1.2	U	1.2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Herbicides	8151	120-36-5	Dichloroprop	0.49	J	6	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Herbicides	8151	88-85-7	Dinoseb	6	U	6	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	120	U	120	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Herbicides	8151	87-86-5	Pentachlorophenol	0.87	J	1	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	PCBs	680	2051-24-3	Decachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	0.5	U	0.5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Pesticides	8081A	72-54-8	4,4'-DDD	0.1	UJ	0.1	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Pesticides	8081A	72-55-9	4,4'-DDE	0.1	UJ	0.1	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Pesticides	8081A	50-29-3	4,4'-DDT	0.1	UJ	0.1	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Pesticides	8081A	309-00-2	Aldrin	0.05	UJ	0.05	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Pesticides	8081A	319-84-6	alpha-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Pesticides	8081A	5103-71-9	alpha-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Pesticides	8081A	319-85-7	beta-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Pesticides	8081A	319-86-8	delta-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Pesticides	8081A	60-57-1	Dieldrin	0.1	UJ	0.1	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Pesticides	8081A	959-98-8	Endosulfan I	0.05	UJ	0.05	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Pesticides	8081A	33213-65-9	Endosulfan II	0.1	UJ	0.1	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Pesticides	8081A	1031-07-8	Endosulfan sulfate	0.1	UJ	0.1	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Pesticides	8081A	72-20-8	Endrin	0.1	UJ	0.1	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Pesticides	8081A	7421-93-4	Endrin aldehyde	0.1	UJ	0.1	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6.6	4.1	Pesticides	8081A	53494-70-5	Endrin ketone	0.1	UJ	0.1	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0 025	UJ	0 025	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	Pesticides	8081A	5103-74-2	gamma-Chlordane	0 05	UJ	0 05	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	Pesticides	8081A	76-44-8	Heptachlor	0 05	UJ	0 05	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	Pesticides	8081A	1024-57-3	Heptachlor epoxide	0 05	UJ	0 05	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	Pesticides	8081A	72-43-5	Methoxychlor	0 5	UJ	0 5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	Pesticides	8081A	8001-35-2	Toxaphene	5	UJ	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	0.33	J	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	11		5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	7 4		5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	30		5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	3 7	J	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	25	U	25	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	91-58-7	2-Chloronaphthalene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	95-57-8	2-Chlorophenol	20		5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	91-57-6	2-Methylnaphthalene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	88-74-4	2-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	88-75-5	2-Nitrophenol	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	10	U	10	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	11		5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	99-09-2	3-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	25	U	25	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	106-47-8	4-Chloroaniline	45		10	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	100-01-6	4-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	100-02-7	4-Nitrophenol	25	U	25	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	83-32-9	Acenaphthene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	208-96-8	Acenaphthylene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	120-12-7	Anthracene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	56-55-3	Benzo(a)anthracene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	50-32-8	Benzo(a)pyrene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	85-68-7	Butylbenzylphthalate	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	86-74-8	Carbazole	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	218-01-9	Chrysene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	84-74-2	Di-n-butylphthalate	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	117-84-0	Di-n-octylphthalate	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	132-64-9	Dibenzofuran	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	131-11-3	Dimethylphthalate	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	206-44-0	Fluoranthene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	86-73-7	Fluorene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	118-74-1	Hexachlorobenzene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	87-68-3	Hexachlorobutadiene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	67-72-1	Hexachloroethane	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	78-59-1	Isophorone	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	91-20-3	Naphthalene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	98-95-3	Nitrobenzene	0 93	J	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	25	U	25	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	85-01-8	Phenanthrene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	108-95	Phenol	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	8270C	129	Pyrene	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	SVOCs	160 2	TS	Total Suspended Solids	27		5	mg/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	107-06-2	1,2-Dichloroethane	0 49	J	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	1 5	J	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	108-90-7	Chlorobenzene	13		2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	100-41-4	Ethylbenzene	0.28	J	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	108-38-3	m&p-Xylene	2.4		2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	108-88-3	Toluene	1.3	J	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-PDA-4	25-Oct-00		Site	6 6	4 1	VOCs	8260B	1330-20-7	Xylenes, Total	2 7		2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	14 2	J	5 7	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	4 5	UJ	4 5	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	3 6	UJ	3 6	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	2 2	UJ	2 2	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	2 6	UJ	2 6	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	2 4	UJ	2 4	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	1 6	J	1 7	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	2 5	UJ	2 5	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	1 6	UJ	1 6	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	2 3	UJ	2 3	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	1 9	UJ	1 9	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	2 5	UJ	2 5	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	1 9	UJ	1 9	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	1 7	UJ	1 7	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	1 8	UJ	1 8	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	2 7	UJ	2 7	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	1 7	UJ	1 7	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	37871-00-4	Total HpCDD	3 6	UJ	3 6	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	38998-75-3	Total HpCDF	2 4	UJ	2 4	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	34465-46-8	Total HxCDD	2 4	UJ	2 4	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	55684-94-1	Total HxCDF	1 6	J	1 7	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	36088-22-9	Total PeCDD	2.5	UJ	2 5	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	30402-15-4	Total PeCDF	1 9	UJ	1 9	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	41903-57-5	Total TCDD	2 7	UJ	2 7	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	55722-27-5	Total TCDF	1 7	UJ	1 7	pg/L
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	93-76-5	2,4,5-T	0 5	U	0 5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0 5	U	0 5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	94-75-7	2,4-D	0 5	U	0 5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	94-82-6	2,4-DB	0 5	U	0 5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	1918-00-9	Dicamba	1 2	U	1 2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	120-36-5	Dichloroprop	6	U	6	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	88-85-7	Dinoseb	6	U	6	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	58	J	120	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	87-86-5	Pentachlorophenol	1	U	1	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	2051-24-3	Decachlorobiphenyl	0 5	U	0 5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	0 1	U	0 1	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0 3	U	0 3	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	0 2	U	0 2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	0 1	U	0 1	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0 5	U	0 5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0 3	U	0 3	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	0.5	U	0.5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	72-54-8	4,4'-DDD	0.1	U	0.1	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	72-55-9	4,4'-DDE	0.1	U	0.1	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	50-29-3	4,4'-DDT	0.1	U	0.1	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	309-00-2	Aldrin	0.05	U	0.05	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	319-84-6	alpha-BHC	0.025	U	0.025	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	5103-71-9	alpha-Chlordane	0.05	U	0.05	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	319-85-7	beta-BHC	0.025	U	0.025	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	319-86-8	delta-BHC	0.025	U	0.025	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	60-57-1	Dieldrin	0.1	U	0.1	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	959-98-8	Endosulfan I	0.05	U	0.05	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	33213-65-9	Endosulfan II	0.1	U	0.1	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	1031-07-8	Endosulfan sulfate	0.1	U	0.1	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	72-20-8	Endrin	0.1	U	0.1	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	7421-93-4	Endrin aldehyde	0.1	U	0.1	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	53494-70-5	Endrin ketone	0.1	U	0.1	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0.025	U	0.025	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	5103-74-2	gamma-Chlordane	0.05	U	0.05	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	76-44-8	Heptachlor	0.05	U	0.05	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	1024-57-3	Heptachlor epoxide	0.05	U	0.05	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	72-43-5	Methoxychlor	0.5	U	0.5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	8001-35-2	Toxaphene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	0.89	J	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	25	U	25	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	91-58-7	2-Chloronaphthalene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	95-57-8	2-Chlorophenol	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	91-57-6	2-Methylnaphthalene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	88-74-4	2-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	88-75-5	2-Nitrophenol	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	10	U	10	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	99-09-2	3-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	25	U	25	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	106-47-8	4-Chloroaniline	10	U	10	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	100-01-6	4-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	100-02-7	4-Nitrophenol	25	U	25	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	83-32-9	Acenaphthene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	208-96-8	Acenaphthylene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	120-12-7	Anthracene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	56-55-3	Benzo(a)anthracene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	50-32-8	Benzo(a)pyrene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	85-68-7	Butylbenzylphthalate	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	86-74-8	Carbazole	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	218-01-9	Chrysene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	84-74-2	Di-n-butylphthalate	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	117-84-0	Di-n-octylphthalate	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	132-64-9	Dibenzofuran	5	U	5	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	131-11-3	Dimethylphthalate	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	206-44-0	Fluoranthene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	86-73-7	Fluorene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	118-74-1	Hexachlorobenzene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	87-68-3	Hexachlorobutadiene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	67-72-1	Hexachloroethane	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	78-59-1	Isophorone	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	91-20-3	Naphthalene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	98-95-3	Nitrobenzene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	25	U	25	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	85-01-8	Phenanthrene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	108-95-2	Phenol	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	129-00-0	Pyrene	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	108-90-7	Chlorobenzene	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-PDA-4-EB	25-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	71-43-2	Benzene	1.3	J	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	108-90-7	Chlorobenzene	14		2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	108-38-3	m&p-Xylene	0.92	J	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	8.4		2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	108-88-3	Toluene	1.2	J	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-PDA-4-STRAW	25-Oct-00	Straw	Site	6.6	4.1	VOCs	8260B	1330-20-7	Xylenes, Total	0.92	J	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	150		4.6	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	5.2	J	3.6	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	6.2	J	3.1	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	1.6	UJ	1.6	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	2.2	UJ	2.2	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	2	UJ	2	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	2.2	J	1.3	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	1.9	UJ	1.9	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	1.2	UJ	1.2	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	1.9	UJ	1.9	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	1.6	UJ	1.6	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	1.6	UJ	1.6	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	1.4	UJ	1.4	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	1.3	UJ	1.3	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	1.4	UJ	1.4	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	1.4	UJ	1.4	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	1.1	UJ	1.1	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	37871-00-4	Total HpCDD	11.5		3.1	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	38998-75-3	Total HpCDF	1.9	UJ	1.9	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	34465-46-8	Total HxCDD	1.9	UJ	1.9	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	55684-94-1	Total HxCDF	2.2		1.3	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	36088-22-9	Total PeCDD	1.6	UJ	1.6	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	30402-15-4	Total PeCDF	1.4	UJ	1.4	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	41903-57-5	Total TCDD	1.4	UJ	1.4	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Dioxin	SW8290	55722-27-5	Total TCDF	1.1	UJ	1.1	pg/L
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Herbicides	8151	93-76-5	2,4,5-T	0.5	U	0.5	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0.14	J	0.5	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Herbicides	8151	94-75-7	2,4-D	4.3		0.5	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Herbicides	8151	94-82-6	2,4-DB	0.5	U	0.5	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Herbicides	8151	1918-00-9	Dicamba	0.11	J	1.2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Herbicides	8151	120-36-5	Dichloroprop	6	U	6	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Herbicides	8151	88-85-7	Dinoseb	6	R	6	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	120	U	120	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Herbicides	8151	87-86-5	Pentachlorophenol	1	U	1	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	PCBs	680	2051-24-3	Decachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	0.5	U	0.5	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Pesticides	8081A	72-54-8	4,4'-DDD	0.1	UJ	0.1	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Pesticides	8081A	72-55-9	4,4'-DDE	0.1	UJ	0.1	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Pesticides	8081A	50-29-3	4,4'-DDT	0.1	UJ	0.1	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Pesticides	8081A	309-00-2	Aldrin	0.05	UJ	0.05	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Pesticides	8081A	319-84-6	alpha-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Pesticides	8081A	5103-71-9	alpha-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Pesticides	8081A	319-85-7	beta-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Pesticides	8081A	319-86-8	delta-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Pesticides	8081A	60-57-1	Dieldrin	0.1	UJ	0.1	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Pesticides	8081A	959-98-8	Endosulfan I	0.05	UJ	0.05	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Pesticides	8081A	33213-65-9	Endosulfan II	0.1	UJ	0.1	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Pesticides	8081A	1031-07-8	Endosulfan sulfate	0.1	UJ	0.1	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Pesticides	8081A	72-20-8	Endrin	0.1	UJ	0.1	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Pesticides	8081A	7421-93-4	Endrin aldehyde	0.1	UJ	0.1	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Pesticides	8081A	53494-70-5	Endrin ketone	0.1	UJ	0.1	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0.025	UJ	0.025	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Pesticides	8081A	5103-74-2	gamma-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Pesticides	8081A	76-44-8	Heptachlor	0.05	UJ	0.05	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	Pesticides	8081A	1024-57-3	Heptachlor epoxide	0.05		0.05	ug/l
Water	SW-	24-Oct-00		Site	10	7.5	Pes	8081A	72-	Methoxychlor	0.5		0.5	ug/l
Water	SW-	24-Oct-00		Site	10	7.5	Pes	8081A	800	Toxaphene	5		5	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	1.4	J	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	5.8	J	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	33	U	33	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	91-58-7	2-Chloronaphthalene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	95-57-8	2-Chlorophenol	4.9	J	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	91-57-6	2-Methylnaphthalene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	88-74-4	2-Nitroaniline	33	U	33	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	88-75-5	2-Nitrophenol	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	13	U	13	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	99-09-2	3-Nitroaniline	33	U	33	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	33	U	33	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	106-47-8	4-Chloroaniline	3.7	J	13	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	100-01-6	4-Nitroaniline	33	U	33	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	100-02-7	4-Nitrophenol	33	U	33	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	83-32-9	Acenaphthene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	208-96-8	Acenaphthylene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	120-12-7	Anthracene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	56-55-3	Benzo(a)anthracene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	50-32-8	Benzo(a)pyrene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	85-68-7	Butylbenzylphthalate	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	86-74-8	Carbazole	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	218-01-9	Chrysene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	84-74-2	Di-n-butylphthalate	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	117-84-0	Di-n-octylphthalate	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	132-64-9	Dibenzofuran	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	131-11-3	Dimethylphthalate	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	206-44-0	Fluoranthene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	86-73-7	Fluorene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	118-74-1	Hexachlorobenzene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	87-68-3	Hexachlorobutadiene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	67-72-1	Hexachloroethane	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	78-59-1	Isophorone	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	91-20-3	Naphthalene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	98-95-3	Nitrobenzene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	33	U	33	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	85-01-8	Phenanthrene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	108-95-2	Phenol	15		6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	SVOCs	8270C	129-00-0	Pyrene	6.7	U	6.7	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	TSS	160.2	TSS	Total Suspended Solids	31		5	mg/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	107-06-2	1,2-Dichloroethane	0.58	J	2	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	108-90-7	Chlorobenzene	4.2		2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	108-38-3	m&p-Xylene	0.7	J	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-PDA-5	24-Oct-00		Site	10	7.5	VOCs	8260B	1330-20-7	Xylenes, Total	0.7	J	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	11.4	UJ	11.4	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	8.6	UJ	8.6	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	5.6	UJ	5.6	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	2.9	UJ	2.9	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	4	UJ	4	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	3.6	UJ	3.6	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	2.1	UJ	2.1	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	3.6	UJ	3.6	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	2	UJ	2	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	3.5	UJ	3.5	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	2.7	UJ	2.7	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	2.3	UJ	2.3	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	1.8	UJ	1.8	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	2.2	UJ	2.2	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	1.8	UJ	1.8	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	2	UJ	2	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	1.8	UJ	1.8	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	37871-00-4	Total HpCDD	5.6	UJ	5.6	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	38998-75-3	Total HpCDF	3.3	UJ	3.3	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	34465-46-8	Total HxCDD	3.6	UJ	3.6	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	55684-94-1	Total HxCDF	2.2	UJ	2.2	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	36088-22-9	Total PeCDD	2.3	UJ	2.3	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	30402-15-4	Total PeCDF	1.8	UJ	1.8	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	41903-57-5	Total TCDD	2	UJ	2	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	55722-27-5	Total TCDF	1.8	UJ	1.8	pg/L
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	93-76-5	2,4,5-T	0.5	U	0.5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	94-75-7	2,4-D	0.5	U	0.5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	94-82-6	2,4-DB	0.5	U	0.5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	1918-00-9	Dicamba	1.2	U	1.2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	120-36-5	Dichloroprop	6	U	6	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	88-85-7	Dinoseb	6	R	6	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	120	U	120	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	87-86-5	Pentachlorophenol	0.073	J	1	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	2051-24-3	Decachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	0.5	U	0.5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-TRICHLOR	Trichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-[illegible]	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pes[illegible]	8081A	72-5[illegible]	4,4'-DDD	0.13	U	0.13	ug/l
Water	SW-[illegible]	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pes[illegible]	8081A	72-55-[illegible]	4,4'-DDE	0.13	U	0.13	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	50-29-3	4,4'-DDT	0.13	U	0.13	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	309-00-2	Aldrin	0.066	U	0.066	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	319-84-6	alpha-BHC	0.033	U	0.033	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	5103-71-9	alpha-Chlordane	0.066	U	0.066	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	319-85-7	beta-BHC	0.033	U	0.033	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	319-86-8	delta-BHC	0.033	U	0.033	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	60-57-1	Dieldrin	0.13	U	0.13	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	959-98-8	Endosulfan I	0.066	U	0.066	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	33213-65-9	Endosulfan II	0.13	U	0.13	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	1031-07-8	Endosulfan sulfate	0.13	U	0.13	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	72-20-8	Endrin	0.13	U	0.13	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	7421-93-4	Endrin aldehyde	0.13	U	0.13	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	53494-70-5	Endrin ketone	0.13	U	0.13	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0.033	U	0.033	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	5103-74-2	gamma-Chlordane	0.066	U	0.066	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	76-44-8	Heptachlor	0.066	U	0.066	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	1024-57-3	Heptachlor epoxide	0.066	U	0.066	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	72-43-5	Methoxychlor	0.66	U	0.66	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	8001-35-2	Toxaphene	6.6	U	6.6	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	25	U	25	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	91-58-7	2-Chloronaphthalene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	95-57-8	2-Chlorophenol	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	91-57-6	2-Methylnaphthalene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	88-74-4	2-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	88-75-5	2-Nitrophenol	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	10	U	10	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	99-09-2	3-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	25	U	25	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	106-47-8	4-Chloroaniline	10	U	10	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	100-01-6	4-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	100-02-7	4-Nitrophenol	25	U	25	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	83-32-9	Acenaphthene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	208-96-8	Acenaphthylene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	120-12-7	Anthracene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	56-55-3	Benzo(a)anthracene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	50-32-8	Benzo(a)pyrene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	85-68-7	Butylbenzylphthalate	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	86-74-8	Carbazole	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	218-01-9	Chrysene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	84-74-2	Di-n-butylphthalate	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	117-84-0	Di-n-octylphthalate	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	132-64-9	Dibenzofuran	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	131-11-3	Dimethylphthalate	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	206-44-0	Fluoranthene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	86-73-7	Fluorene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	118-74-1	Hexachlorobenzene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	87-68-3	Hexachlorobutadiene	5	U	5	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	67-72-1	Hexachloroethane	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	78-59-1	Isophorone	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	91-20-3	Naphthalene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	98-95-3	Nitrobenzene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	25	U	25	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	85-01-8	Phenanthrene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	108-95-2	Phenol	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	129-00-0	Pyrene	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	71-43-2	Benzene	0 28	J	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	108-90-7	Chlorobenzene	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	100-41-4	Ethylbenzene	0 29	J	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	108-88-3	Toluene	1 2	J	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-PDA-5-EB	24-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	71-43-2	Benzene	0 78	J	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	108-90-7	Chlorobenzene	5 4		2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7 5	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7.5	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7.5	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7.5	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-PDA-5-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10	7.5	VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	160		5.8	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	4.5	UJ	4.5	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	5.2	J	3.2	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	1.6	UJ	1.6	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	2.2	UJ	2.2	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	2	UJ	2	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	1.3	UJ	1.3	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	2	UJ	2	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	1.2	UJ	1.2	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	2	UJ	2	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	1.6	UJ	1.6	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	1.7	UJ	1.7	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	1.2	UJ	1.2	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	1.3	UJ	1.3	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	1.2	UJ	1.2	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	1.2	UJ	1.2	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	1.1	UJ	1.1	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	37871-00-4	Total HpCDD	11.9		3.2	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	38998-75-3	Total HpCDF	1.8	UJ	1.8	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	34465-46-8	Total HxCDD	2	UJ	2	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	55684-94-1	Total HxCDF	1.3	UJ	1.3	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	36088-22-9	Total PeCDD	1.7	UJ	1.7	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	30402-15-4	Total PeCDF	1.2	UJ	1.2	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	41903-57-5	Total TCDD	1.2	UJ	1.2	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Dioxin	SW8290	55722-27-5	Total TCDF	1.1	UJ	1.1	pg/L
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Herbicides	8151	93-76-5	2,4,5-T	0.5	U	0.5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Herbicides	8151	94-75-7	2,4-D	0.5	U	0.5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Herbicides	8151	94-82-6	2,4-DB	0.5	U	0.5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Herbicides	8151	1918-00-9	Dicamba	1.2	U	1.2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Herbicides	8151	120-36-5	Dichloroprop	6	U	6	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Herbicides	8151	88-85-7	Dinoseb	6	R	6	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	120	U	120	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Herbicides	8151	87-86-5	Pentachlorophenol	1	U	1	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	PCBs	680	2051-24-3	Decachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	0.5	U	0.5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	72-54-8	4,4'-DDD	0.1	UJ	0.1	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	72-55-9	4,4'-DDE	0.1	UJ	0.1	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	50-29-3	4,4'-DDT	0.1	UJ	0.1	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	309-00-2	Aldrin	0.05	UJ	0.05	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	319-84-6	alpha-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	5103-71-9	alpha-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	319-85-7	beta-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	319-86-8	delta-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	60-57-1	Dieldrin	0.1	UJ	0.1	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	959-98-8	Endosulfan I	0.05	UJ	0.05	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	33213-65-9	Endosulfan II	0.1	UJ	0.1	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	1031-07-8	Endosulfan sulfate	0.1	UJ	0.1	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	72-20-8	Endrin	0.1	UJ	0.1	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	7421-93-4	Endrin aldehyde	0.1	UJ	0.1	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	53494-70-5	Endrin ketone	0.1	UJ	0.1	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0.025	UJ	0.025	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	5103-74-2	gamma-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	76-44-8	Heptachlor	0.05	UJ	0.05	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	1024-57-3	Heptachlor epoxide	0.05	UJ	0.05	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	72-43-5	Methoxychlor	0.5	UJ	0.5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	Pesticides	8081A	8001-35-2	Toxaphene	5	UJ	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	5	U	5	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	25	U	25	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	91-58-7	2-Chloronaphthalene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	95-57-8	2-Chlorophenol	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	91-57-6	2-Methylnaphthalene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	88-74-4	2-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	88-75-5	2-Nitrophenol	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	10	U	10	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	99-09-2	3-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	25	U	25	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	106-47-8	4-Chloroaniline	10	U	10	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	100-01-6	4-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	100-02-7	4-Nitrophenol	25	U	25	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	83-32-9	Acenaphthene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	208-96-8	Acenaphthylene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	SVOCs	8270C	120-12-7	Anthracene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	56-55-3	Benzo(a)anthracene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	50-32-8	Benzo(a)pyrene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	85-68-7	Butylbenzylphthalate	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	86-74-8	Carbazole	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	218-01-9	Chrysene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	84-74-2	Di-n-butylphthalate	0.34	J	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	117-84-0	Di-n-octylphthalate	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	132-64-9	Dibenzofuran	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	131-11-3	Dimethylphthalate	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	206-44-0	Fluoranthene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	86-73-7	Fluorene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	118-74-1	Hexachlorobenzene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	87-68-3	Hexachlorobutadiene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	67-72-1	Hexachloroethane	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	78-59-1	Isophorone	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	91-20-3	Naphthalene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	98-95-3	Nitrobenzene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	25	U	25	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	85-01-8	Phenanthrene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	108-95-2	Phenol	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	SVOCs	8270C	129-00-0	Pyrene	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	TSS	160 2	TSS	Total Suspended Solids	27		5	mg/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10 5	8	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-	24-Oct-00		Site	5	8	VO	8260B	67-6	Acetone	25		25	ug/l
Water	SW	24-Oct-00		Site		8	VO	8260B	71-	Benzene	2		2	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	108-90-7	Chlorobenzene	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-PDA-6	24-Oct-00		Site	10.5	8	VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	169		7.6	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	5.8	UJ	5.8	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	5	UJ	5	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	2.6	UJ	2.6	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	3.5	UJ	3.5	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	3.1	UJ	3.1	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	2	UJ	2	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	3.1	UJ	3.1	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	1.9	UJ	1.9	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	3.1	UJ	3.1	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	2.5	UJ	2.5	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	2.6	UJ	2.6	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	1.9	UJ	1.9	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	2.1	UJ	2.1	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	1.9	UJ	1.9	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	2.1	UJ	2.1	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	1.6	UJ	1.6	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	37871-00-4	Total HpCDD	6.2		5	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	38998-75-3	Total HpCDF	3	UJ	3	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	34465-46-8	Total HxCDD	3.1	UJ	3.1	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	55684-94-1	Total HxCDF	2.1	UJ	2.1	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	36088-22-9	Total PeCDD	2.6	UJ	2.6	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	30402-15-4	Total PeCDF	1.9	UJ	1.9	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	41903-57-5	Total TCDD	2.1	UJ	2.1	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Dioxin	SW8290	55722-27-5	Total TCDF	1.6	UJ	1.6	pg/L
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Herbicides	8151	93-76-5	2,4,5-T	0.5	U	0.5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Herbicides	8151	94-75-7	2,4-D	0.5	U	0.5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Herbicides	8151	94-82-6	2,4-DB	0.5	U	0.5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Herbicides	8151	1918-00-9	Dicamba	1.2	U	1.2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Herbicides	8151	120-36-5	Dichloroprop	6	U	6	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Herbicides	8151	88-85-7	Dinoseb	6	R	6	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	120	U	120	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Herbicides	8151	87-86-5	Pentachlorophenol	1	U	1	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	PCBs	680	2051-24-3	Decachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	0.5	U	0.5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	72-54-8	4,4'-DDD	0.1	UJ	0.1	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	72-55-9	4,4'-DDE	0.1	UJ	0.1	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	50-29-3	4,4'-DDT	0.1	UJ	0.1	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	309-00-2	Aldrin	0.05	UJ	0.05	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	319-84-6	alpha-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	5103-71-9	alpha-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	319-85-7	beta-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	319-86-8	delta-BHC	0.025	UJ	0.025	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	60-57-1	Dieldrin	0.1	UJ	0.1	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	959-98-8	Endosulfan I	0.05	UJ	0.05	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	33213-65-9	Endosulfan II	0.1	UJ	0.1	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	1031-07-8	Endosulfan sulfate	0.1	UJ	0.1	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	72-20-8	Endrin	0.1	UJ	0.1	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	7421-93-4	Endrin aldehyde	0.1	UJ	0.1	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	53494-70-5	Endrin ketone	0.1	UJ	0.1	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0.025	UJ	0.025	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	5103-74-2	gamma-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	76-44-8	Heptachlor	0.05	UJ	0.05	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	1024-57-3	Heptachlor epoxide	0.05	UJ	0.05	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	72-43-5	Methoxychlor	0.5	UJ	0.5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	Pesticides	8081A	8001-35-2	Toxaphene	5	UJ	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	25	U	25	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	91-58-7	2-Chloronaphthalene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	95-57-8	2-Chlorophenol	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	91-57-6	2-Methylnaphthalene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	88-74-4	2-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	88-75-5	2-Nitrophenol	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	10	U	10	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	99-09-2	3-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	25	U	25	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	106-47-8	4-Chloroaniline	10	U	10	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	100-01-6	4-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	100-02-7	4-Nitrophenol	25	U	25	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	83-32-9	Acenaphthene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	208-96-8	Acenaphthylene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	120-12-7	Anthracene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	56-55-3	Benzo(a)anthracene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	50-32-8	Benzo(a)pyrene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	2.2	J	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	85-68-7	Butylbenzylphthalate	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	86-74-8	Carbazole	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	218-01-9	Chrysene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	84-74-2	Di-n-butylphthalate	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	117-84-0	Di-n-octylphthalate	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	132-64-9	Dibenzofuran	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	131-11-3	Dimethylphthalate	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	206-44-0	Fluoranthene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	86-73-7	Fluorene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	118-74-1	Hexachlorobenzene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	87-68-3	Hexachlorobutadiene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	67-72-1	Hexachloroethane	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	78-59-1	Isophorone	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	5	U	5	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	91-20-3	Naphthalene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	98-95-3	Nitrobenzene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	25	U	25	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	85-01-8	Phenanthrene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	108-95-2	Phenol	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	SVOCs	8270C	129-00-0	Pyrene	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	TSS	160.2	TSS	Total Suspended Solids	29		5	mg/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	108-90-7	Chlorobenzene	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-PDA-7	24-Oct-00		Site	11	8.5	VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	108-90-7	Chlorobenzene	0.56	J	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-PDA-7-Niskin	26-Oct-00	Kemmerer Sample Device	Site	11	8.8	VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	159		11.8	pg/L

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	9 8	UJ	9 8	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	7 8	UJ	7 8	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	4	UJ	4	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	5 1	UJ	5 1	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	4 6	UJ	4 6	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	3	UJ	3	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	4 6	UJ	4 6	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	2 8	UJ	2 8	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	4 5	UJ	4 5	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	3 8	UJ	3 8	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	3 7	UJ	3 7	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	3 2	UJ	3 2	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	3 1	UJ	3 1	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	3 1	UJ	3 1	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	3 9	UJ	3 9	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	2 4	UJ	2 4	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	37871-00-4	Total HpCDD	7 8	UJ	7 8	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	38998-75-3	Total HpCDF	4 5	UJ	4 5	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	34465-46-8	Total HxCDD	4 6	UJ	4 6	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	55684-94-1	Total HxCDF	3 1	UJ	3 1	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	36088-22-9	Total PeCDD	3 7	UJ	3 7	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	30402-15-4	Total PeCDF	3 1	UJ	3 1	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	41903-57-5	Total TCDD	3 9	UJ	3 9	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Dioxin	SW8290	55722-27-5	Total TCDF	2 4	UJ	2 4	pg/L
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Herbicides	8151	93-76-5	2,4,5-T	0 5	U	0 5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0 5	U	0 5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Herbicides	8151	94-75-7	2,4-D	0 43	J	0 5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Herbicides	8151	94-82-6	2,4-DB	0 5	U	0 5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Herbicides	8151	1918-00-9	Dicamba	1 2	U	1 2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Herbicides	8151	120-36-5	Dichloroprop	6	U	6	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Herbicides	8151	88-85-7	Dinoseb	6	U	6	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	120	U	120	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Herbicides	8151	87-86-5	Pentachlorophenol	1	U	1	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	PCBs	680	2051-24-3	Decachlorobiphenyl	0 5	U	0 5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	0 1	U	0 1	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0 3	U	0 3	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	0 2	U	0 2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	0 1	U	0 1	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0 5	U	0 5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0 3	U	0 3	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0 2	U	0 2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0 2	U	0 2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	0 5	U	0 5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	0 1	U	0 1	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	72-54-8	4,4'-DDD	0 1	U	0 1	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	72-55-9	4,4'-DDE	0 1	U	0 1	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	50-29-3	4,4'-DDT	0 1	U	0 1	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	309-00-2	Aldrin	0 05	U	0 05	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	319-84-6	alpha-BHC	0 025	U	0 025	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	5103-71-9	alpha-Chlordane	0 05	U	0 05	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	319-85-7	beta-BHC	0 025	U	0 025	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	319-86-8	delta-BHC	0 025	U	0 025	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	60-57-1	Dieldrin	0 1	U	0 1	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	959-98-8	Endosulfan I	0 05	U	0 05	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	33213-65-9	Endosulfan II	0 1	U	0 1	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	1031-07-8	Endosulfan sulfate	0 1	U	0 1	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	72-20-8	Endrin	0 1	U	0 1	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	7421-93-4	Endrin aldehyde	0 1	U	0 1	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	53494-70-5	Endrin ketone	0 1	U	0 1	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0 025	U	0 025	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	5103-74-2	gamma-Chlordane	0 05	U	0 05	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	76-44-8	Heptachlor	0 05	U	0 05	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	1024-57-3	Heptachlor epoxide	0 05	U	0 05	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	72-43-5	Methoxychlor	0 5	U	0 5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	Pesticides	8081A	8001-35-2	Toxaphene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site		8 4	SVOCs	8270C	933-78	2,3,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site		8 4	SVOCs	8270C	933-75	2,3,6-Trichlorophenol	5	U	5	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	25	U	25	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	91-58-7	2-Chloronaphthalene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	95-57-8	2-Chlorophenol	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	91-57-6	2-Methylnaphthalene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	88-74-4	2-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	88-75-5	2-Nitrophenol	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	10	U	10	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	99-09-2	3-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	25	U	25	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	106-47-8	4-Chloroaniline	10	U	10	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	100-01-6	4-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	100-02-7	4-Nitrophenol	25	U	25	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	83-32-9	Acenaphthene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	208-96-8	Acenaphthylene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	120-12-7	Anthracene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	56-55-3	Benzo(a)anthracene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	50-32-8	Benzo(a)pyrene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	85-68-7	Butylbenzylphthalate	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	86-74-8	Carbazole	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	218-01-9	Chrysene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	84-74-2	Di-n-butylphthalate	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	117-84-0	Di-n-octylphthalate	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	132-64-9	Dibenzofuran	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	131-11-3	Dimethylphthalate	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	206-44-0	Fluoranthene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	86-73-7	Fluorene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	118-74-1	Hexachlorobenzene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	87-68-3	Hexachlorobutadiene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	67-72-1	Hexachloroethane	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	78-59-1	Isophorone	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	91-20-3	Naphthalene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	98-95-3	Nitrobenzene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	25	U	25	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	85-01-8	Phenanthrene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	108-95-2	Phenol	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	SVOCs	8270C	129-00-0	Pyrene	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	TSS	160.2	TSS	Total Suspended Solids	30		5	mg/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10.9	8.4	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	VOCs	8260B	108-90-7	Chlorobenzene	1 3	J	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	VOCs	8260B	75-01-4	Vinyl chloride	·2	U	2	ug/l
Water	SW-PDA-8	26-Oct-00		Site	10 9	8 4	VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	159		29 5	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	24 5	UJ	24 5	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	17 7	UJ	17 7	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	8 9	UJ	8 9	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	11 6	UJ	11 6	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	10 5	UJ	10 5	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	6 4	UJ	6 4	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	10 6	UJ	10 6	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	6 1	UJ	6 1	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	10 4	UJ	10 4	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	8 3	UJ	8 3	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	8 5	UJ	8 5	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	7 2	UJ	7 2	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	6 8	UJ	6 8	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	7 1	UJ	7 1	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	9 1	UJ	9 1	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	5 8	UJ	5 8	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	37871-00-4	Total HpCDD	17 7	UJ	17 7	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	38998-75-3	Total HpCDF	10 1	UJ	10 1	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	34465-46-8	Total HxCDD	10 5	UJ	10 5	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	55684-94-1	Total HxCDF	6 8	UJ	6 8	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	36088-22-9	Total PeCDD	8 5	UJ	8 5	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	30402-15-4	Total PeCDF	7 2	UJ	7 2	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	41903-57-5	Total TCDD	9 1	UJ	9 1	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Dioxin	SW8290	55722-27-5	Total TCDF	5 8	UJ	5 8	pg/L
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Herbicides	8151	93-76-5	2,4,5-T	0 5	U	0 5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0 5	U	0 5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Herbicides	8151	94-75-7	2,4-D	0 5	U	0 5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Herbicides	8151	94-82-6	2,4-DB	0 5	U	0 5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Herbicides	8151	1918-00-9	Dicamba	1 2	U	1 2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Herbicides	8151	120-36-5	Dichloroprop	6	U	6	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Herbicides	8151	88-85-7	Dinoseb	6	U	6	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	120	U	120	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Herbicides	8151	87-86-5	Pentachlorophenol	1	U	1	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	PCBs	680	2051-24-3	Decachlorobiphenyl	0 5	U	0 5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	0 1	U	0 1	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0 3	U	0 3	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	0 2	U	0 2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	0 1	U	0 1	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0 5	U	0 5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0 3	U	0 3	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0 2	U	0 2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0 2	U	0 2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	0 5	U	0 5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	0 1	U	0 1	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Pesticides	8081A	72-54-8	4,4'-DDD	0 1	UJ	0 1	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Pesticides	8081A	72-55-9	4,4'-DDE	0 1	UJ	0 1	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Pesticides	8081A	50-29-3	4,4'-DDT	0 1	UJ	0 1	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Pesticides	8081A	309-00-2	Aldrin	0 05	UJ	0 05	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Pesticides	8081A	319-84-6	alpha-BHC	0 025	UJ	0 025	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Pesticides	8081A	5103-71-9	alpha-Chlordane	0 05	UJ	0 05	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Pesticides	8081A	319-85-7	beta-BHC	0 025	UJ	0 025	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Pesticides	8081A	319-86-8	delta-BHC	0 025	UJ	0 025	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Pesticides	8081A	60-57-1	Dieldrin	0 1	UJ	0 1	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Pesticides	8081A	959-98-8	Endosulfan I	0 05	UJ	0 05	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10 9	8 4	Pesticides	8081A	33213-65-9	Endosulfan II	0 1	UJ	0 1	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site		8 4	Pesticides	8081A	1031-07	Endosulfan sulfate	0 1		0 1	ug/l
Water	SW-	26-Oct-00	Field Duplicate	Site		8 4	Pes	8081A	72-2	Endrin	0 1		0 1	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	Pesticides	8081A	7421-93-4	Endrin aldehyde	0.1	UJ	0.1	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	Pesticides	8081A	53494-70-5	Endrin ketone	0.1	UJ	0.1	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0.025	UJ	0.025	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	Pesticides	8081A	5103-74-2	gamma-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	Pesticides	8081A	76-44-8	Heptachlor	0.05	UJ	0.05	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	Pesticides	8081A	1024-57-3	Heptachlor epoxide	0.05	UJ	0.05	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	Pesticides	8081A	72-43-5	Methoxychlor	0.5	UJ	0.5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	Pesticides	8081A	8001-35-2	Toxaphene	5	UJ	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	25	U	25	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	91-58-7	2-Chloronaphthalene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	95-57-8	2-Chlorophenol	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	91-57-6	2-Methylnaphthalene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	88-74-4	2-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	88-75-5	2-Nitrophenol	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	10	U	10	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	99-09-2	3-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	25	U	25	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	106-47-8	4-Chloroaniline	10	U	10	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	100-01-6	4-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	100-02-7	4-Nitrophenol	25	U	25	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	83-32-9	Acenaphthene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	208-96-8	Acenaphthylene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	120-12-7	Anthracene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	56-55-3	Benzo(a)anthracene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	50-32-8	Benzo(a)pyrene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	85-68-7	Butylbenzylphthalate	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	86-74-8	Carbazole	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	218-01-9	Chrysene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	84-74-2	Di-n-butylphthalate	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	117-84-0	Di-n-octylphthalate	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	132-64-9	Dibenzofuran	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	131-11-3	Dimethylphthalate	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	206-44-0	Fluoranthene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	86-73-7	Fluorene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	118-74-1	Hexachlorobenzene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	87-68-3	Hexachlorobutadiene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	67-72-1	Hexachloroethane	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	78-59-1	Isophorone	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	91-20-3	Naphthalene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	98-95-3	Nitrobenzene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	25	U	25	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	85-01-8	Phenanthrene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	108-95-2	Phenol	5	U	5	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	SVOCs	8270C	129-00-0	Pyrene	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	TSS	160.2	TSS	Total Suspended Solids	25		5	mg/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	108-90-7	Chlorobenzene	1.1	J	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-PDA-8 FD	26-Oct-00	Field Duplicate	Site	10.9	8.4	VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	75-35-4	1,1-Dichloroethene	0.65	J	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	71-43-2	Benzene	0.88	J	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	108-90-7	Chlorobenzene	2.4		2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	127-18-4	Tetrachloroethene	0.73	J	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	79-01-6	Trichloroethene	0.74	J	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-PDA-8-Bottom	26-Oct-00	Bottom Sample	Site	10.9	8.4	VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	71-43-2	Benzene	0.28	J	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	108-90-7	Chlorobenzene	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	74-87-3	Chloromethane	2		2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-PDA-8-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	71-43-2	Benzene	0.17	J	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	108-90-7	Chlorobenzene	0.87	J	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-PDA-8FD-Niskin	26-Oct-00	Kemmerer Sample Device	Site	10.9	8.4	VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	149		17.7	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	14.7	UJ	14.7	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	10.7	UJ	10.7	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	5.7	UJ	5.7	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	7.4	UJ	7.4	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	6.3	UJ	6.3	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	4.1	UJ	4.1	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	6.3	UJ	6.3	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	3.9	UJ	3.9	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	6.2	UJ	6.2	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	5.3	UJ	5.3	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	6.2	UJ	6.2	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	4.8	UJ	4.8	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	4.3	UJ	4.3	pg/L

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	4.8	UJ	4.8	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	6.4	UJ	6.4	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	4	UJ	4	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	37871-00-4	Total HpCDD	10.7	UJ	10.7	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	38998-75-3	Total HpCDF	6.5	UJ	6.5	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	34465-46-8	Total HxCDD	6.3	UJ	6.3	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	55684-94-1	Total HxCDF	4.4	UJ	4.4	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	36088-22-9	Total PeCDD	6.2	UJ	6.2	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	30402-15-4	Total PeCDF	4.8	UJ	4.8	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	41903-57-5	Total TCDD	6.4	UJ	6.4	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Dioxin	SW8290	55722-27-5	Total TCDF	4	UJ	4	pg/L
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Herbicides	8151	93-76-5	2,4,5-T	0.5	U	0.5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Herbicides	8151	94-75-7	2,4-D	0.5	U	0.5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Herbicides	8151	94-82-6	2,4-DB	0.5	U	0.5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Herbicides	8151	1918-00-9	Dicamba	1.2	U	1.2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Herbicides	8151	120-36-5	Dichloroprop	6	U	6	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Herbicides	8151	88-85-7	Dinoseb	6	U	6	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	120	U	120	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Herbicides	8151	87-86-5	Pentachlorophenol	1	U	1	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	PCBs	680	2051-24-3	Decachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	0.5	U	0.5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	72-54-8	4,4'-DDD	0.1	UJ	0.1	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	72-55-9	4,4'-DDE	0.1	UJ	0.1	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	50-29-3	4,4'-DDT	0.1	UJ	0.1	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	309-00-2	Aldrin	0.05	UJ	0.05	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	319-84-6	alpha-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	5103-71-9	alpha-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	319-85-7	beta-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	319-86-8	delta-BHC	0.025	UJ	0.025	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	60-57-1	Dieldrin	0.1	UJ	0.1	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	959-98-8	Endosulfan I	0.05	UJ	0.05	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	33213-65-9	Endosulfan II	0.1	UJ	0.1	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	1031-07-8	Endosulfan sulfate	0.1	UJ	0.1	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	72-20-8	Endrin	0.1	UJ	0.1	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	7421-93-4	Endrin aldehyde	0.1	UJ	0.1	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	53494-70-5	Endrin ketone	0.1	UJ	0.1	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0.025	UJ	0.025	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	5103-74-2	gamma-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	76-44-8	Heptachlor	0.05	UJ	0.05	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	1024-57-3	Heptachlor epoxide	0.05	UJ	0.05	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	72-43-5	Methoxychlor	0.5	UJ	0.5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	Pesticides	8081A	8001-35-2	Toxaphene	5	UJ	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	25	U	25	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	91-58-7	2-Chloronaphthalene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	95-57-8	2-Chlorophenol	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	91-57-6	2-Methylnaphthalene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	88-74-4	2-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	88-75-5	2-Nitrophenol	5	U	5	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	10	U	10	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	99-09-2	3-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	25	U	25	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	106-47-8	4-Chloroaniline	10	U	10	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	100-01-6	4-Nitroaniline	25	U	25	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	100-02-7	4-Nitrophenol	25	U	25	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	83-32-9	Acenaphthene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	208-96-8	Acenaphthylene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	120-12-7	Anthracene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	56-55-3	Benzo(a)anthracene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	50-32-8	Benzo(a)pyrene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	85-68-7	Butylbenzylphthalate	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	86-74-8	Carbazole	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	218-01-9	Chrysene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	84-74-2	Di-n-butylphthalate	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	117-84-0	Di-n-octylphthalate	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	132-64-9	Dibenzofuran	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	131-11-3	Dimethylphthalate	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	206-44-0	Fluoranthene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	86-73-7	Fluorene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	118-74-1	Hexachlorobenzene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	87-68-3	Hexachlorobutadiene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	67-72-1	Hexachloroethane	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	78-59-1	Isophorone	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	91-20-3	Naphthalene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	98-95-3	Nitrobenzene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	25	U	25	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	85-01-8	Phenanthrene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	108-95-2	Phenol	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	SVOCs	8270C	129-00-0	Pyrene	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	TSS	160.2	TSS	Total Suspended Solids	28		5	mg/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	108-90-7	Chlorobenzene	0.7	J	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	100-41-4	Ethylbenzene	0.21	J	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	79-01-6	Trichloroethene	0.3	J	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-PDA-9	26-Oct-00		Site	14.5	12	VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	71-43-2	Benzene	0.14	J	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	108-90-7	Chlorobenzene	0.67	J	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-PDA-9-Niskin	26-Oct-00	Kemmerer Sample Device	Site	14.5	12	VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	197	J	18.4	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	14	UJ	14	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	10.9	UJ	10.9	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	6.2	UJ	6.2	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	8.2	UJ	8.2	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	6.6	UJ	6.6	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	4.5	UJ	4.5	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	6.2	UJ	6.2	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	3.9	UJ	3.9	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	6.1	UJ	6.1	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	5.4	UJ	5.4	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	7.5	UJ	7.5	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	4.9	UJ	4.9	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	4.5	UJ	4.5	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	5.2	UJ	5.2	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	6.6	UJ	6.6	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	4.7	UJ	4.7	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	37871-00-4	Total HpCDD	10.9	UJ	10.9	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	38998-75-3	Total HpCDF	7	UJ	7	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	34465-46-8	Total HxCDD	6.3	UJ	6.3	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	55684-94-1	Total HxCDF	4.5	UJ	4.5	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	36088-22-9	Total PeCDD	7.5	UJ	7.5	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	30402-15-4	Total PeCDF	5.1	UJ	5.1	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	41903-57-5	Total TCDD	6.6	UJ	6.6	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Dioxin	SW8290	55722-27-5	Total TCDF	4.7	UJ	4.7	pg/L
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Herbicides	8151	93-76-5	2,4,5-T	0.5	U	0.5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Herbicides	8151	94-75-7	2,4-D	0.5	U	0.5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Herbicides	8151	94-82-6	2,4-DB	0.5	U	0.5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Herbicides	8151	1918-00-9	Dicamba	1.2	U	1.2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Herbicides	8151	120-36-5	Dichloroprop	6	U	6	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Herbicides	8151	88-85-7	Dinoseb	6	R	6	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	120	U	120	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Herbicides	8151	87-86-5	Pentachlorophenol	1	U	1	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	PCBs	680	2051-24-3	Decachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	PCB	680	C-DICHLO	Dichlorobiphenyl	0.1	U	0.1	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	0.5	U	0.5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	72-54-8	4,4'-DDD	0.1	UJ	0.1	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	72-55-9	4,4'-DDE	0.1	UJ	0.1	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	50-29-3	4,4'-DDT	0.1	UJ	0.1	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	309-00-2	Aldrin	0.05	UJ	0.05	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	319-84-6	alpha-BHC	0.025	UJ	0.025	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	5103-71-9	alpha-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	319-85-7	beta-BHC	0.025	UJ	0.025	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	319-86-8	delta-BHC	0.025	UJ	0.025	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	60-57-1	Dieldrin	0.1	UJ	0.1	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	959-98-8	Endosulfan I	0.05	UJ	0.05	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	33213-65-9	Endosulfan II	0.1	UJ	0.1	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	1031-07-8	Endosulfan sulfate	0.1	UJ	0.1	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	72-20-8	Endrin	0.1	UJ	0.1	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	7421-93-4	Endrin aldehyde	0.1	UJ	0.1	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	53494-70-5	Endrin ketone	0.1	UJ	0.1	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0.025	UJ	0.025	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	5103-74-2	gamma-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	76-44-8	Heptachlor	0.05	UJ	0.05	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	1024-57-3	Heptachlor epoxide	0.05	UJ	0.05	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	72-43-5	Methoxychlor	0.5	UJ	0.5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	Pesticides	8081A	8001-35-2	Toxaphene	5	UJ	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	25	U	25	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	91-58-7	2-Chloronaphthalene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	95-57-8	2-Chlorophenol	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	91-57-6	2-Methylnaphthalene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	88-74-4	2-Nitroaniline	25	U	25	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	88-75-5	2-Nitrophenol	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	10	U	10	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	99-09-2	3-Nitroaniline	25	U	25	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	25	U	25	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	106-47-8	4-Chloroaniline	10	U	10	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	100-01-6	4-Nitroaniline	25	U	25	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	100-02-7	4-Nitrophenol	25	U	25	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	83-32-9	Acenaphthene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	208-96-8	Acenaphthylene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	120-12-7	Anthracene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	56-55-3	Benzo(a)anthracene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	50-32-8	Benzo(a)pyrene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	85-68-7	Butylbenzylphthalate	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	86-74-8	Carbazole	5	U	5	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	218-01-9	Chrysene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	84-74-2	Di-n-butylphthalate	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	117-84-0	Di-n-octylphthalate	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	132-64-9	Dibenzofuran	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	131-11-3	Dimethylphthalate	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	206-44-0	Fluoranthene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	86-73-7	Fluorene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	118-74-1	Hexachlorobenzene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	87-68-3	Hexachlorobutadiene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	67-72-1	Hexachloroethane	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	78-59-1	Isophorone	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	91-20-3	Naphthalene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	98-95-3	Nitrobenzene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	25	U	25	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	85-01-8	Phenanthrene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	108-95-2	Phenol	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	SVOCs	8270C	129-00-0	Pyrene	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	TSS	160.2	TSS	Total Suspended Solids	32		5	mg/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	78-93-3	2-Butanone (MEK)	8 8	J	10	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	71-43-2	Benzene	0 57	J	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	56-23-5	Carbon tetrachloride	0 46	J	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	108-90-7	Chlorobenzene	0 55	J	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	75-01-4	Vinyl chloride	0.35	J	2	ug/l
Water	SW-UDA-11	23-Oct-00		Reference	15	12.5	VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	27.6	UJ	27.6	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	21	UJ	21	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	17 4	UJ	17 4	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	9.3	UJ	9 3	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	12 3	UJ	12 3	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	10 4	UJ	10 4	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	6 6	UJ	6 6	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	9 8	UJ	9 8	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	5 7	UJ	5 7	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	9 6	UJ	9 6	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	7 9	UJ	7 9	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	11 2	UJ	11 2	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	7	UJ	7	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	6 6	UJ	6 6	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	7.3	UJ	7 3	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	8 1	UJ	8 1	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	4 9	UJ	4 9	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	37871-00-	Total HpCDD	17 4	UJ	17 4	pg/L
Water	SW-UD	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxi	SW8290	38998-75-	Total HpCDF	10 5	U	10 5	pg/L

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	34465-46-8	Total HxCDD	9.9	UJ	9.9	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	55684-94-1	Total HxCDF	6.6	UJ	6.6	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	36088-22-9	Total PeCDD	11.2	UJ	11.2	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	30402-15-4	Total PeCDF	7.1	UJ	7.1	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	41903-57-5	Total TCDD	8.1	UJ	8.1	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Dioxin	SW8290	55722-27-5	Total TCDF	4.9	UJ	4.9	pg/L
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	93-76-5	2,4,5-T	0.5	U	0.5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	94-75-7	2,4-D	0.5	U	0.5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	94-82-6	2,4-DB	0.5	U	0.5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	1918-00-9	Dicamba	1.2	U	1.2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	120-36-5	Dichloroprop	6	U	6	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	88-85-7	Dinoseb	6	R	6	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	120	U	120	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Herbicides	8151	87-86-5	Pentachlorophenol	1	U	1	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	2051-24-3	Decachlorobiphenyl	0.68	U	0.68	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	0.13	U	0.13	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0.4	U	0.4	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	0.27	U	0.27	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	0.13	U	0.13	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0.68	U	0.68	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0.4	U	0.4	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0.27	U	0.27	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0.27	U	0.27	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	0.68	U	0.68	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	0.13	U	0.13	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	72-54-8	4,4'-DDD	0.1	UJ	0.1	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	72-55-9	4,4'-DDE	0.1	UJ	0.1	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	50-29-3	4,4'-DDT	0.1	UJ	0.1	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	309-00-2	Aldrin	0.05	UJ	0.05	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	319-84-6	alpha-BHC	0.025	UJ	0.025	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	5103-71-9	alpha-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	319-85-7	beta-BHC	0.025	UJ	0.025	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	319-86-8	delta-BHC	0.025	UJ	0.025	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	60-57-1	Dieldrin	0.1	UJ	0.1	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	959-98-8	Endosulfan I	0.05	UJ	0.05	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	33213-65-9	Endosulfan II	0.1	UJ	0.1	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	1031-07-8	Endosulfan sulfate	0.1	UJ	0.1	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	72-20-8	Endrin	0.1	UJ	0.1	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	7421-93-4	Endrin aldehyde	0.1	UJ	0.1	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	53494-70-5	Endrin ketone	0.1	UJ	0.1	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0.025	UJ	0.025	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	5103-74-2	gamma-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	76-44-8	Heptachlor	0.05	UJ	0.05	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	1024-57-3	Heptachlor epoxide	0.05	UJ	0.05	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	72-43-5	Methoxychlor	0.5	UJ	0.5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			Pesticides	8081A	8001-35-2	Toxaphene	5	UJ	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	933-75-5	2,3,6-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	120-83-2	2,4-Dichlorophenol	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	105-67-9	2,4-Dimethylphenol	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	51-28-5	2,4-Dinitrophenol	25	U	25	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	91-58-7	2-Chloronaphthalene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	95-57-8	2-Chlorophenol	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	91-57-6	2-Methylnaphthalene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	88-74-4	2-Nitroaniline	25	U	25	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	88-75-5	2-Nitrophenol	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	10	U	10	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	99-09-2	3-Nitroaniline	25	U	25	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	25	U	25	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	106-47-8	4-Chloroaniline	10	U	10	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	100-01-6	4-Nitroaniline	25	U	25	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	100-02-7	4-Nitrophenol	25	U	25	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	83-32-9	Acenaphthene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	208-96-8	Acenaphthylene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	120-12-7	Anthracene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	56-55-3	Benzo(a)anthracene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	50-32-8	Benzo(a)pyrene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	85-68-7	Butylbenzylphthalate	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	86-74-8	Carbazole	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	218-01-9	Chrysene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	84-74-2	Di-n-butylphthalate	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	117-84-0	Di-n-octylphthalate	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	132-64-9	Dibenzofuran	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	131-11-3	Dimethylphthalate	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	206-44-0	Fluoranthene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	86-73-7	Fluorene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	118-74-1	Hexachlorobenzene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	87-68-3	Hexachlorobutadiene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	67-72-1	Hexachloroethane	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	78-59-1	Isophorone	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	91-20-3	Naphthalene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	98-95-3	Nitrobenzene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	25	U	25	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	85-01-8	Phenanthrene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	108-95-2	Phenol	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			SVOCs	8270C	129-00-0	Pyrene	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	108-90-7	Chlorobenzene	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	108-88-3	Toluene	1.1	J	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-UDA-11-EB	23-Oct-00	Surface Water Equipment Blank	QA/QC			VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SW-UD[illegible]	23-Oct-00	Field Duplicate	Reference	[illegible]	12.5	Diox[illegible]	SW8290	3268-[illegible]	1,2,3,4,6,7,8,9-OCDD	142	[illegible]	26.5	pg/L

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	20.1	UJ	20.1	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	17.1	UJ	17.1	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	9.1	UJ	9.1	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	12	UJ	12	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	9.8	UJ	9.8	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	6.7	UJ	6.7	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	9.3	UJ	9.3	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	5.8	UJ	5.8	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	9.1	UJ	9.1	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	8	UJ	8	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	10.8	UJ	10.8	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	7.6	UJ	7.6	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	6.7	UJ	6.7	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	7.9	UJ	7.9	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	7.7	UJ	7.7	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	5.1	UJ	5.1	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	37871-00-4	Total HpCDD	17.1	UJ	17.1	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	38998-75-3	Total HpCDF	10.3	UJ	10.3	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	34465-46-8	Total HxCDD	9.4	UJ	9.4	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	55684-94-1	Total HxCDF	6.7	UJ	6.7	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	36088-22-9	Total PeCDD	10.8	UJ	10.8	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	30402-15-4	Total PeCDF	7.7	UJ	7.7	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	41903-57-5	Total TCDD	7.7	UJ	7.7	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Dioxin	SW8290	55722-27-5	Total TCDF	5.1	UJ	5.1	pg/L
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Herbicides	8151	93-76-5	2,4,5-T	0.5	U	0.5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0.5	U	0.5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Herbicides	8151	94-75-7	2,4-D	0.5	U	0.5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Herbicides	8151	94-82-6	2,4-DB	0.5	U	0.5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Herbicides	8151	1918-00-9	Dicamba	1.2	U	1.2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Herbicides	8151	120-36-5	Dichloroprop	6	U	6	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Herbicides	8151	88-85-7	Dinoseb	6	R	6	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	120	U	120	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Herbicides	8151	87-86-5	Pentachlorophenol	1	U	1	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	PCBs	680	2051-24-3	Decachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0.5	U	0.5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0.3	U	0.3	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0.2	U	0.2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	0.5	U	0.5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	0.1	U	0.1	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	72-54-8	4,4'-DDD	0.1	UJ	0.1	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	72-55-9	4,4'-DDE	0.1	UJ	0.1	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	50-29-3	4,4'-DDT	0.1	UJ	0.1	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	309-00-2	Aldrin	0.05	UJ	0.05	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	319-84-6	alpha-BHC	0.025	UJ	0.025	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	5103-71-9	alpha-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	319-85-7	beta-BHC	0.025	UJ	0.025	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	319-86-8	delta-BHC	0.025	UJ	0.025	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	60-57-1	Dieldrin	0.1	UJ	0.1	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	959-98-8	Endosulfan I	0.05	UJ	0.05	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	33213-65-9	Endosulfan II	0.1	UJ	0.1	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	1031-07-8	Endosulfan sulfate	0.1	UJ	0.1	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	72-20-8	Endrin	0.1	UJ	0.1	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	7421-93-4	Endrin aldehyde	0.1	UJ	0.1	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	53494-70-5	Endrin ketone	0.1	UJ	0.1	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0.025	UJ	0.025	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	5103-74-2	gamma-Chlordane	0.05	UJ	0.05	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	76-44-8	Heptachlor	0.05	UJ	0.05	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	1024-57-3	Heptachlor epoxide	0.05	UJ	0.05	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	72-43-5	Methoxychlor	0.5	UJ	0.5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	Pesticides	8081A	8001-35-2	Toxaphene	5	UJ	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	5	U	5	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	25	U	25	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	91-58-7	2-Chloronaphthalene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	95-57-8	2-Chlorophenol	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	91-57-6	2-Methylnaphthalene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	88-74-4	2-Nitroaniline	25	U	25	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	88-75-5	2-Nitrophenol	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	10	U	10	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	99-09-2	3-Nitroaniline	25	U	25	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	25	U	25	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	106-47-8	4-Chloroaniline	10	U	10	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	100-01-6	4-Nitroaniline	25	U	25	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	100-02-7	4-Nitrophenol	25	U	25	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	83-32-9	Acenaphthene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	208-96-8	Acenaphthylene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	120-12-7	Anthracene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	56-55-3	Benzo(a)anthracene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	50-32-8	Benzo(a)pyrene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	85-68-7	Butylbenzylphthalate	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	86-74-8	Carbazole	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	218-01-9	Chrysene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	84-74-2	Di-n-butylphthalate	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	117-84-0	Di-n-octylphthalate	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	132-64-9	Dibenzofuran	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	131-11-3	Dimethylphthalate	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	206-44-0	Fluoranthene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	86-73-7	Fluorene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	118-74-1	Hexachlorobenzene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	87-68-3	Hexachlorobutadiene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	67-72-1	Hexachloroethane	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	78-59-1	Isophorone	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	91-20-3	Naphthalene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	98-95-3	Nitrobenzene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	25	U	25	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	85-01-8	Phenanthrene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	108-95-2	Phenol	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	SVOCs	8270C	129-00-0	Pyrene	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	TSS	160.2	TSS	Total Suspended Solids	33		5	mg/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	VOCs	8260B	78-93-3	2-Butanone (MEK)	9.2	J	10	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12.5	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12 5	VOCs	8260B	108-90-7	Chlorobenzene	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12 5	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12 5	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12 5	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12 5	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12 5	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12 5	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12 5	VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12 5	VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12 5	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12 5	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12 5	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12 5	VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12 5	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12 5	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12 5	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12 5	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-UDA-11-FD	23-Oct-00	Field Duplicate	Reference	15	12 5	VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	3268-87-9	1,2,3,4,6,7,8,9-OCDD	195		19 8	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	39001-02-0	1,2,3,4,6,7,8,9-OCDF	16 4	UJ	16 4	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	35822-46-9	1,2,3,4,6,7,8-HpCDD	12 2	UJ	12 2	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	67562-39-4	1,2,3,4,6,7,8-HpCDF	6 1	UJ	6 1	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	55673-89-7	1,2,3,4,7,8,9-HpCDF	7 9	UJ	7 9	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	39227-28-6	1,2,3,4,7,8-HxCDD	7 5	UJ	7 5	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	70648-26-9	1,2,3,4,7,8-HxCDF	4 7	UJ	4 7	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	57653-85-7	1,2,3,6,7,8-HxCDD	7 5	UJ	7 5	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	57117-44-9	1,2,3,6,7,8-HxCDF	4 5	UJ	4 5	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	19408-74-3	1,2,3,7,8,9-HxCDD	7 4	UJ	7 4	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	72918-21-9	1,2,3,7,8,9-HxCDF	6 1	UJ	6 1	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	40321-76-4	1,2,3,7,8-PeCDD	6 9	UJ	6 9	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	57117-41-6	1,2,3,7,8-PeCDF	5 6	UJ	5 6	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	60851-34-5	2,3,4,6,7,8-HxCDF	5	UJ	5	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	57117-31-4	2,3,4,7,8-PeCDF	5 5	UJ	5 5	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	1746-01-6	2,3,7,8-TCDD	7 5	UJ	7 5	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	51207-31-9	2,3,7,8-TCDF	4 6	UJ	4 6	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	37871-00-4	Total HpCDD	12 2	UJ	12 2	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	38998-75-3	Total HpCDF	6 9	UJ	6 9	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	34465-46-8	Total HxCDD	7 5	UJ	7 5	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	55684-94-1	Total HxCDF	5	UJ	5	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	36088-22-9	Total PeCDD	6 9	UJ	6 9	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	30402-15-4	Total PeCDF	5 5	UJ	5 5	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	41903-57-5	Total TCDD	7 5	UJ	7 5	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Dioxin	SW8290	55722-27-5	Total TCDF	4 6	UJ	4 6	pg/L
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Herbicides	8151	93-76-5	2,4,5-T	0 5	U	0 5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Herbicides	8151	93-72-1	2,4,5-TP (Silvex)	0 5	U	0 5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Herbicides	8151	94-75-7	2,4-D	0 5	U	0 5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Herbicides	8151	94-82-6	2,4-DB	0 5	U	0 5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Herbicides	8151	75-99-0	Dalapon	120	U	120	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Herbicides	8151	1918-00-9	Dicamba	1 2	U	1 2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Herbicides	8151	120-36-5	Dichloroprop	6	U	6	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Herbicides	8151	88-85-7	Dinoseb	6	U	6	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Herbicides	8151	94-74-6	MCPA[(4-chloro-2-methylphenoxy)-acetic acid]	120	U	120	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Herbicides	8151	7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	120	U	120	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Herbicides	8151	87-86-5	Pentachlorophenol	1	U	1	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	PCBs	680	2051-24-3	Decachlorobiphenyl	0 5	U	0 5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	PCBs	680	C-DICHLOROBI	Dichlorobiphenyl	0 1	U	0 1	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	PCBs	680	C-HEPTACHLOR	Heptachlorobiphenyl	0 3	U	0 3	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	PCBs	680	C-HEXACHLORO	Hexachlorobiphenyl	0 2	U	0 2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	PCBs	680	C-MONOCHLORO	Monochlorobiphenyl	0 1	U	0 1	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	PCBs	680	C-NONACHLORO	Nonachlorobiphenyl	0 5	U	0 5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	PCBs	680	C-OCTA-BIPHE	Octachlorobiphenyl	0 3	U	0 3	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	PCBs	680	C-PENTBIPHEN	Pentachlorobiphenyl	0 2	U	0 2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	PCBs	680	C-TETRACHLOR	Tetrachlorobiphenyl	0 2	U	0 2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	PCBs	680	C-TOTAL-PCB	Total Polychlorinated Biphenyls	0 5	U	0 5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	PCBs	680	C-TRICHLOROB	Trichlorobiphenyl	0 1	U	0 1	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Pesticides	8081A	72-54-8	4,4'-DDD	0 1	U	0 1	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Pesticides	8081A	72-55-9	4,4'-DDE	0 1	U	0 1	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Pesticides	8081A	50-29-3	4,4'-DDT	0 1	U	0 1	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Pesticides	8081A	309-00-2	Aldrin	0 05	U	0 05	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Pesticides	8081A	319-84-6	alpha-BHC	0 025	U	0 025	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Pesticides	8081A	5103-71-9	alpha-Chlordane	0 05	U	0 05	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Pesticides	8081A	319-85-7	beta-BHC	0 025	U	0 025	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Pesticides	8081A	319-86-8	delta-BHC	0 025	U	0 025	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Pesticides	8081A	60-57-1	Dieldrin	0 1	U	0 1	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Pesticides	8081A	959-98-8	Endosulfan I	0 05	U	0 05	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Pesticides	8081A	33213-65-9	Endosulfan II	0 1	U	0 1	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Pesticides	8081A	1031-07-8	Endosulfan sulfate	0 1	U	0 1	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9 1	6 6	Pesticides	8081A	72-20-8	Endrin	0 1	U	0 1	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	Pesticides	8081A	7421-93-4	Endrin aldehyde	0.1	U	0.1	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	Pesticides	8081A	53494-70-5	Endrin ketone	0.1	U	0.1	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	Pesticides	8081A	58-89-9	gamma-BHC (Lindane)	0.025	U	0.025	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	Pesticides	8081A	5103-74-2	gamma-Chlordane	0.05	U	0.05	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	Pesticides	8081A	76-44-8	Heptachlor	0.05	U	0.05	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	Pesticides	8081A	1024-57-3	Heptachlor epoxide	0.05	U	0.05	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	Pesticides	8081A	72-43-5	Methoxychlor	0.5	U	0.5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	Pesticides	8081A	8001-35-2	Toxaphene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	87-61-6	1,2,3-Trichlorobenzene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	120-82-1	1,2,4-Trichlorobenzene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	95-50-1	1,2-Dichlorobenzene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	108-70-3	1,3,5-Trichlorobenzene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	541-73-1	1,3-Dichlorobenzene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	106-46-7	1,4-Dichlorobenzene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	108-60-1	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	15950-66-0	2,3,4-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	933-78-8	2,3,5-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	933-7-5	2,3,6-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	95-95-4	2,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	88-06-2	2,4,6-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	120-83-2	2,4-Dichlorophenol	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	105-67-9	2,4-Dimethylphenol	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	51-28-5	2,4-Dinitrophenol	25	U	25	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	121-14-2	2,4-Dinitrotoluene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	606-20-2	2,6-Dinitrotoluene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	91-58-7	2-Chloronaphthalene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	95-57-8	2-Chlorophenol	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	91-57-6	2-Methylnaphthalene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	95-48-7	2-Methylphenol (o-Cresol)	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	88-74-4	2-Nitroaniline	25	U	25	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	88-75-5	2-Nitrophenol	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	91-94-1	3,3'-Dichlorobenzidine	10	U	10	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	609-19-8	3,4,5-Trichlorophenol	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	99-09-2	3-Nitroaniline	25	U	25	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	534-52-1	4,6-Dinitro-2-methylphenol	25	U	25	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	101-55-3	4-Bromophenylphenyl ether	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	59-50-7	4-Chloro-3-methylphenol	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	106-47-8	4-Chloroaniline	10	U	10	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	7005-72-3	4-Chlorophenylphenyl ether	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	100-01-6	4-Nitroaniline	25	U	25	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	100-02-7	4-Nitrophenol	25	U	25	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	83-32-9	Acenaphthene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	208-96-8	Acenaphthylene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	120-12-7	Anthracene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	56-55-3	Benzo(a)anthracene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	50-32-8	Benzo(a)pyrene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	205-99-2	Benzo(b)fluoranthene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	191-24-2	Benzo(g,h,i)perylene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	207-08-9	Benzo(k)fluoranthene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	111-91-1	bis(2-Chloroethoxy)methane	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	111-44-4	bis(2-Chloroethyl)ether	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	117-81-7	bis(2-Ethylhexyl)phthalate	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	85-68-7	Butylbenzylphthalate	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	86-74-8	Carbazole	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	218-01-9	Chrysene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	84-74-2	Di-n-butylphthalate	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	117-84-0	Di-n-octylphthalate	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	53-70-3	Dibenzo(a,h)anthracene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	132-64-9	Dibenzofuran	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	84-66-2	Diethylphthalate	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	131-11-3	Dimethylphthalate	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	206-44-0	Fluoranthene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	86-73-7	Fluorene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	118-74-1	Hexachlorobenzene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	87-68-3	Hexachlorobutadiene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	77-47-4	Hexachlorocyclopentadiene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	67-72-1	Hexachloroethane	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	193-39-5	Indeno(1,2,3-cd)pyrene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	78-59-1	Isophorone	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	621-64-7	N-Nitroso-di-n-propylamine	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	86-30-6	N-Nitrosodiphenylamine	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	91-20-3	Naphthalene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	98-95-3	Nitrobenzene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	87-86-5 (SVOC)	Pentachlorophenol (SVOC)	25	U	25	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	85-01-8	Phenanthrene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	108-95-2	Phenol	5	U	5	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	SVOCs	8270C	129-00-0	Pyrene	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	TSS	160.2	TSS	Total Suspended Solids	35		5	mg/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	108-90-7	Chlorobenzene	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	SW-UDA-12	26-Oct-00		Reference	9.1	6.6	VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	71-55-6	1,1,1-Trichloroethane	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	79-00-5	1,1,2-Trichloroethane	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	75-34-3	1,1-Dichloroethane	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	75-35-4	1,1-Dichloroethene	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	107-06-2	1,2-Dichloroethane	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	78-87-5	1,2-Dichloropropane	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	78-93-3	2-Butanone (MEK)	400	U	400	ug/kg dw
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	591-78-6	2-Hexanone	400	U	400	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	400	U	400	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	67-64-1	Acetone	1000	U	1000	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	71-43-2	Benzene	80	U	80	ug/kg dw
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	75-27-4	Bromodichloromethane	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	75-25-2	Bromoform	80	U	80	ug/kg dw
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	75-15-0	Carbon disulfide	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	56-23-5	Carbon tetrachloride	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	108-90-7	Chlorobenzene	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	108-90-7	Chlorobenzene	2	U	2	ug/l
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	75-00-3	Chloroethane	80	U	80	ug/kg dw
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	67-66-3	Chloroform	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	74-87-3	Chloromethane	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	80	U	80	ug/kg dw
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	124-48-1	Dibromochloromethane	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	100-41-4	Ethylbenzene	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	108-38-3	m&p-Xylene	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	59	J	200	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	100-42-5	Styrene	80	U	80	ug/kg dw
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	127-18-4	Tetrachloroethene	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	108-88-3	Toluene	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	79-01-6	Trichloroethene	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	75-01-4	Vinyl chloride	80	U	80	ug/kg dw
Water	Trip Blank	23-Oct-00		QA/QC			VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	Trip Blank	24-Oct-00		QA/QC			VOCs	8260B	1330-20-7	Xylenes, Total	80	U	80	ug/kg dw
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	Trip Blank	25-Oct-00		QA/QC			VOCs	8260B	56-23	Carbon tetrachloride	2	U	2	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	108-90-7	Chlorobenzene	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	108-90-7	Chlorobenzene	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	108-90-7	Chlorobenzene	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	108-38-3	m&p-Xylene	1.2	J	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	108-88-3	Toluene	0.47	J	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	Trip Blank Liquid	26-Oct-00		QA/QC			VOCs	8260B	1330-20-7	Xylenes, Total	1.6	J	2	ug/l
Water	Trip Blank Liquid	25-Oct-00		QA/QC			VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	Trip Blank Liquid	27-Oct-00		QA/QC			VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	71-55-6	1,1,1-Trichloroethane	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	UJ	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	71-55-6	1,1,1-Trichloroethane	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	71-55-6	1,1,1-Trichloroethane	2	U	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	80	U	80	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	UJ	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	79-34-5	1,1,2,2-Tetrachloroethane	2	U	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	79-00-5	1,1,2-Trichloroethane	80	U	80	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	UJ	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	79-00-5	1,1,2-Trichloroethane	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	79-00-5	1,1,2-Trichloroethane	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	75-34-3	1,1-Dichloroethane	2	UJ	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	75-34-3	1,1-Dichloroethane	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	75-34-3	1,1-Dichloroethane	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	75-34-3	1,1-Dichloroethane	2	U	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	75-35-4	1,1-Dichloroethene	2	UJ	2	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	75-35-4	1,1-Dichloroethene	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	75-35-4	1,1-Dichloroethene	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	75-35-4	1,1-Dichloroethene	2	U	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	107-06-2	1,2-Dichloroethane	2	UJ	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	107-06-2	1,2-Dichloroethane	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	107-06-2	1,2-Dichloroethane	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	107-06-2	1,2-Dichloroethane	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	78-87-5	1,2-Dichloropropane	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	78-87-5	1,2-Dichloropropane	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	78-87-5	1,2-Dichloropropane	2	UJ	2	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	78-87-5	1,2-Dichloropropane	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	78-93-3	2-Butanone (MEK)	10	UJ	10	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	78-93-3	2-Butanone (MEK)	400	U	400	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	78-93-3	2-Butanone (MEK)	400	U	400	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	78-93-3	2-Butanone (MEK)	10	U	10	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	78-93-3	2-Butanone (MEK)	16		10	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	591-78-6	2-Hexanone	400	U	400	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	591-78-6	2-Hexanone	400	U	400	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	591-78-6	2-Hexanone	10	UJ	10	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	591-78-6	2-Hexanone	10	U	10	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	400	U	400	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	400	U	400	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	UJ	10	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	67-64-1	Acetone	1000	U	1000	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	67-64-1	Acetone	1000	U	1000	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	67-64-1	Acetone	25	UJ	25	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	67-64-1	Acetone	25	U	25	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	71-43-2	Benzene	80	U	80	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	71-43-2	Benzene	2	UJ	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	71-43-2	Benzene	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	71-43-2	Benzene	2	U	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	75-27-4	Bromodichloromethane	80	U	80	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	75-27-4	Bromodichloromethane	2	UJ	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	75-27-4	Bromodichloromethane	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	75-27-4	Bromodichloromethane	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	75-25-2	Bromoform	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	75-25-2	Bromoform	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	75-25-2	Bromoform	2	UJ	2	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	75-25-2	Bromoform	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	UJ	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	74-83-9	Bromomethane (Methyl bromide)	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	75-15-0	Carbon disulfide	2	UJ	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	75-15-0	Carbon disulfide	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	75-15-0	Carbon disulfide	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	75-15-0	Carbon disulfide	2	U	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	56-23-5	Carbon tetrachloride	2	UJ	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	56-23-5	Carbon tetrachloride	80	U	80	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	56-23-5	Carbon tetrachloride	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	56-23-5	Carbon tetrachloride	2	U	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	108-90-7	Chlorobenzene	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	108-90-7	Chlorobenzene	80	U	80	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	108-90-7	Chlorobenzene	2	UJ	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	108-90-7	Chlorobenzene	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	108-90-7	Chlorobenzene	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	75-00-3	Chloroethane	2	UJ	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	75-00-3	Chloroethane	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	75-00-3	Chloroethane	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	75-00-3	Chloroethane	2	U	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	67-66-3	Chloroform	80	U	80	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	67-66-3	Chloroform	2	UJ	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	67-66-3	Chloroform	80	U	80	ug/l
Water	Trip Bla	27-Oct-00		QA/QC			VOCs	8260B	67-66-3	Chloroform	2	U	2	ug/l

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	74-87-3	Chloromethane	2	UJ	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	74-87-3	Chloromethane	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	74-87-3	Chloromethane	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	74-87-3	Chloromethane	2	U	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	80	U	80	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	UJ	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	156-59-2	cis-1,2-Dichloroethene	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	UJ	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	10061-01-5	cis-1,3-Dichloropropene	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	124-48-1	Dibromochloromethane	80	U	80	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	124-48-1	Dibromochloromethane	2	UJ	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	124-48-1	Dibromochloromethane	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	124-48-1	Dibromochloromethane	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	100-41-4	Ethylbenzene	80	U	80	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	100-41-4	Ethylbenzene	2	UJ	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	100-41-4	Ethylbenzene	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	100-41-4	Ethylbenzene	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	108-38-3	m&p-Xylene	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	108-38-3	m&p-Xylene	2	UJ	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	108-38-3	m&p-Xylene	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	108-38-3	m&p-Xylene	2	U	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	UJ	5	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	200	U	200	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	200	U	200	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	75-09-2	Methylene chloride (Dichloromethane)	5	U	5	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	100-42-5	Styrene	2	UJ	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	100-42-5	Styrene	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	100-42-5	Styrene	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	100-42-5	Styrene	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	127-18-4	Tetrachloroethene	2	UJ	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	127-18-4	Tetrachloroethene	80	U	80	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	127-18-4	Tetrachloroethene	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	127-18-4	Tetrachloroethene	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	108-88-3	Toluene	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	108-88-3	Toluene	2	UJ	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	108-88-3	Toluene	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	108-88-3	Toluene	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	UJ	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	156-60-5	trans-1,2-Dichloroethene	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	UJ	2	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	10061-02-6	trans-1,3-Dichloropropene	2	U	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	79-01-6	Trichloroethene	2	UJ	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	79-01-6	Trichloroethene	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	79-01-6	Trichloroethene	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	79-01-6	Trichloroethene	2	U	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	75-01-4	Vinyl chloride	2	UJ	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	75-01-4	Vinyl chloride	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	75-01-4	Vinyl chloride	80	U	80	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	75-01-4	Vinyl chloride	2	U	2	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	1330-20-7	Xylenes, Total	80	U	80	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	1330-20-7	Xylenes, Total	2	UJ	2	ug/l
Water	Trip Blank Soil	26-Oct-00		QA/QC			VOCs	8260B	1330-20-7	Xylenes, Total	80	U	80	ug/l
Water	Trip Blank Soil	25-Oct-00		QA/QC			VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	Trip Blank Soil	27-Oct-00		QA/QC			VOCs	8260B	1330-20-7	Xylenes, Total	2	U	2	ug/l
Water	WQ-DDA-1 Deep			Reference	3.5	2.7	Water Quality	YSI	Cond	Conductivity	475			uS/cm
Water	WQ-DDA-1 Deep			Reference	3.5	2.7	Water Quality	YSI	DO	Dissolved Oxygen Concentration	7.77			mg/L
Water	WQ-DDA-1 Deep			Reference	3.5	2.7	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	81.6			%

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	WQ-DDA-1 Deep			Reference	3.5	2.7	Water Quality	YSI	ORP	Oxidation Reduction Potential	170.9			millivolts
Water	WQ-DDA-1 Deep			Reference	3.5	2.7	Water Quality	YSI	pH	pH	7.55			
Water	WQ-DDA-1 Deep			Reference	3.5	2.7	Water Quality	YSI	SpCond	Specific Conductivity	563			uS/cm
Water	WQ-DDA-1 Deep			Reference	3.5	2.7	Water Quality	YSI	Temp	Temperature	17.13			C
Water	WQ-DDA-1 Deep			Reference	3.5	2.7	Water Quality	YSI	TDS	Total Dissolved Solids	0.367			
Water	WQ-DDA-1 Deep			Reference	3.5	2.7	Water Quality	YSI	Turb	Turbidity	55.6			ntu
Water	WQ-DDA-1 Shallow			Reference	3.5	0.8	Water Quality	YSI	Cond	Conductivity	463			uS/cm
Water	WQ-DDA-1 Shallow			Reference	3.5	0.8	Water Quality	YSI	DO	Dissolved Oxygen Concentration	8.11			mg/L
Water	WQ-DDA-1 Shallow			Reference	3.5	0.8	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	85.3			%
Water	WQ-DDA-1 Shallow			Reference	3.5	0.8	Water Quality	YSI	ORP	Oxidation Reduction Potential	193.6			millivolts
Water	WQ-DDA-1 Shallow			Reference	3.5	0.8	Water Quality	YSI	pH	pH	7.65			
Water	WQ-DDA-1 Shallow			Reference	3.5	0.8	Water Quality	YSI	SpCond	Specific Conductivity	541			uS/cm
Water	WQ-DDA-1 Shallow			Reference	3.5	0.8	Water Quality	YSI	Temp	Temperature	17.34			C
Water	WQ-DDA-1 Shallow			Reference	3.5	0.8	Water Quality	YSI	TDS	Total Dissolved Solids	0.352			
Water	WQ-DDA-1 Shallow			Reference	3.5	0.8	Water Quality	YSI	Turb	Turbidity	42.9			ntu
Water	WQ-DDA-13 Deep			Reference	6.2	6.8	Water Quality	YSI	Cond	Conductivity	434			uS/cm
Water	WQ-DDA-13 Deep			Reference	6.2	6.8	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.08			mg/L
Water	WQ-DDA-13 Deep			Reference	6.2	6.8	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	93.4			%
Water	WQ-DDA-13 Deep			Reference	6.2	6.8	Water Quality	YSI	ORP	Oxidation Reduction Potential	192.8			millivolts
Water	WQ-DDA-13 Deep			Reference	6.2	6.8	Water Quality	YSI	pH	pH	7.83			
Water	WQ-DDA-13 Deep			Reference	6.2	6.8	Water Quality	YSI	SpCond	Specific Conductivity	518			uS/cm
Water	WQ-DDA-13 Deep			Reference	6.2	6.8	Water Quality	YSI	Temp	Temperature	16.6			C
Water	WQ-DDA-13 Deep			Reference	6.2	6.8	Water Quality	YSI	TDS	Total Dissolved Solids	0.336			
Water	WQ-DDA-13 Deep			Reference	6.2	6.8	Water Quality	YSI	Turb	Turbidity	50.2			ntu
Water	WQ-DDA-13 Mid			Reference	6.2	2.9	Water Quality	YSI	Cond	Conductivity	437			uS/cm
Water	WQ-DDA-13 Mid			Reference	6.2	2.9	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.11			mg/L
Water	WQ-DDA-13 Mid			Reference	6.2	2.9	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	93.6			%
Water	WQ-DDA-13 Mid			Reference	6.2	2.9	Water Quality	YSI	ORP	Oxidation Reduction Potential	193.5			millivolts
Water	WQ-DDA-13 Mid			Reference	6.2	2.9	Water Quality	YSI	pH	pH	7.82			
Water	WQ-DDA-13 Mid			Reference	6.2	2.9	Water Quality	YSI	SpCond	Specific Conductivity	519			uS/cm
Water	WQ-DDA-13 Mid			Reference	6.2	2.9	Water Quality	YSI	Temp	Temperature	16.6			C
Water	WQ-DDA-13 Mid			Reference	6.2	2.9	Water Quality	YSI	TDS	Total Dissolved Solids	0.337			
Water	WQ-DDA-13 Mid			Reference	6.2	2.9	Water Quality	YSI	Turb	Turbidity	48			ntu
Water	WQ-DDA-13 Shallow			Reference	6.2	1.25	Water Quality	YSI	Cond	Conductivity	435			uS/cm
Water	WQ-DDA-13 Shallow			Reference	6.2	1.25	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.36			mg/L
Water	WQ-DDA-13 Shallow			Reference	6.2	1.25	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	93.6			%
Water	WQ-DDA-13 Shallow			Reference	6.2	1.25	Water Quality	YSI	ORP	Oxidation Reduction Potential	193.4			millivolts
Water	WQ-DDA-13 Shallow			Reference	6.2	1.25	Water Quality	YSI	pH	pH	7.81			
Water	WQ-DDA-13 Shallow			Reference	6.2	1.25	Water Quality	YSI	SpCond	Specific Conductivity	517			uS/cm
Water	WQ-DDA-13 Shallow			Reference	6.2	1.25	Water Quality	YSI	Temp	Temperature	16.6			C
Water	WQ-DDA-13 Shallow			Reference	6.2	1.25	Water Quality	YSI	TDS	Total Dissolved Solids	0.336			
Water	WQ-DDA-13 Shallow			Reference	6.2	1.25	Water Quality	YSI	Turb	Turbidity	46.9			ntu
Water	WQ-PDA-10 Deep			Site	13.5	13.3	Water Quality	YSI	Cond	Conductivity	378			uS/cm
Water	WQ-PDA-10 Deep			Site	13.5	13.3	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.11			mg/L
Water	WQ-PDA-10 Deep			Site	13.5	13.3	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	95			%
Water	WQ-PDA-10 Deep			Site	13.5	13.3	Water Quality	YSI	ORP	Oxidation Reduction Potential	203.5			millivolts
Water	WQ-PDA-10 Deep			Site	13.5	13.3	Water Quality	YSI	pH	pH	7.97			
Water	WQ-PDA-10 Deep			Site	13.5	13.3	Water Quality	YSI	SpCond	Specific Conductivity	443			uS/cm
Water	WQ-PDA-10 Deep			Site	13.5	13.3	Water Quality	YSI	Temp	Temperature	17.37			C
Water	WQ-PDA-10 Deep			Site	13.5	13.3	Water Quality	YSI	TDS	Total Dissolved Solids	0.287			
Water	WQ-PDA-10 Deep			Site	13.5	13.3	Water Quality	YSI	Turb	Turbidity	37			ntu
Water	WQ-PDA-10 Mid			Site	13.5	6.2	Water Quality	YSI	Cond	Conductivity	376			uS/cm
Water	WQ-PDA-10 Mid			Site	13.5	6.2	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.17			mg/L
Water	WQ-PDA-10 Mid			Site	13.5	6.2	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	95.3			%
Water	WQ-PDA-10 Mid			Site	13.5	6.2	Water Quality	YSI	ORP	Oxidation Reduction Potential	198.1			millivolts
Water	WQ-PDA-10 Mid			Site	13.5	6.2	Water Quality	YSI	pH	pH	8.04			
Water	WQ-PDA-10 Mid			Site	13.5	6.2	Water Quality	YSI	SpCond	Specific Conductivity	439			uS/cm
Water	WQ-PDA-10 Mid			Site	13.5	6.2	Water Quality	YSI	Temp	Temperature	17.4			C
Water	WQ-PDA-10 Mid			Site	13.5	6.2	Water Quality	YSI	TDS	Total Dissolved Solids	0.286			
Water	WQ-PDA-10 Mid			Site	13.5	6.2	Water Quality	YSI	Turb	Turbidity	37.9			ntu
Water	WQ-PDA-10 Shallow			Site	13.5	0.5	Water Quality	YSI	Cond	Conductivity	379			uS/cm
Water	WQ-PDA-10 Shallow			Site	13.5	0.5	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.14			mg/L
Water	WQ-PDA-10 Shallow			Site	13.5	0.5	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	98.3			%
Water	WQ-PDA-10 Shallow			Site	13.5	0.5	Water Quality	YSI	ORP	Oxidation Reduction Potential	198.6			millivolts
Water	WQ-PDA-10 Shallow			Site	13.5	0.5	Water Quality	YSI	pH	pH	8.06			
Water	WQ-PDA-10 Shallow			Site	13.5	0.5	Water Quality	YSI	SpCond	Specific Conductivity	441			uS/cm
Water	WQ-PDA-10 Shallow			Site	13.5	0.5	Water Quality	YSI	Temp	Temperature	17.41			C
Water	WQ-PDA-10 Shallow			Site	13.5	0.5	Water Quality	YSI	TDS	Total Dissolved Solids	0.286			
Water	WQ-PDA-10 Shallow			Site	13.5	0.5	Water Quality	YSI	Turb	Turbidity	36.8			ntu
Water	WQ-PDA-2 Deep			Site	11.5	9.2	Water Quality	YSI	Cond	Conductivity	446			uS/cm
Water	WQ-PDA-2 Deep			Site	11.5	9.2	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.27			mg/L
Water	WQ-PDA-2 Deep			Site	11.5	9.2	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	95.6			%
Water	WQ-PDA-2 Deep			Site	11.5	9.2	Water Quality	YSI	ORP	Oxidation Reduction Potential	170.5			millivolts
Water	WQ-PDA-2 Deep			Site	11.5	9.2	Water Quality	YSI	pH	pH	7.69			
Water	WQ-PDA-2 Deep			Site	11.5	9.2	Water Quality	YSI	SpCond	Specific Conductivity	521			uS/cm
Water	WQ-PDA-2 Deep			Site	11.5	9.2	Water Quality	YSI	Temp	Temperature	17.14			C
Water	WQ-PDA-2 Deep			Site	11.5	9.2	Water Quality	YSI	TDS	Total Dissolved Solids	0.339			
Water	WQ-PD[illegible]o			Site	[illegible]	9.2	Water Q[illegible]	YSI	Turb	Turbidity	35.5			ntu

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	WQ-PDA-2 Mid			Site	11.5	5.2	Water Quality	YSI	Cond	Conductivity	438			uS/cm
Water	WQ-PDA-2 Mid			Site	11.5	5.2	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9			mg/L
Water	WQ-PDA-2 Mid			Site	11.5	5.2	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	92.2			%
Water	WQ-PDA-2 Mid			Site	11.5	5.2	Water Quality	YSI	ORP	Oxidation Reduction Potential	103.9			millivolts
Water	WQ-PDA-2 Mid			Site	11.5	5.2	Water Quality	YSI	pH	pH	7.88			
Water	WQ-PDA-2 Mid			Site	11.5	5.2	Water Quality	YSI	SpCond	Specific Conductivity	515			uS/cm
Water	WQ-PDA-2 Mid			Site	11.5	5.2	Water Quality	YSI	Temp	Temperature	17.15			C
Water	WQ-PDA-2 Mid			Site	11.5	5.2	Water Quality	YSI	TDS	Total Dissolved Solids	0.335			
Water	WQ-PDA-2 Mid			Site	11.5	5.2	Water Quality	YSI	Turb	Turbidity	30.7			ntu
Water	WQ-PDA-2 Shallow			Site	11.5	0.3	Water Quality	YSI	Cond	Conductivity	440			uS/cm
Water	WQ-PDA-2 Shallow			Site	11.5	0.3	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.35			mg/L
Water	WQ-PDA-2 Shallow			Site	11.5	0.3	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	102			%
Water	WQ-PDA-2 Shallow			Site	11.5	0.3	Water Quality	YSI	ORP	Oxidation Reduction Potential	97.3			millivolts
Water	WQ-PDA-2 Shallow			Site	11.5	0.3	Water Quality	YSI	pH	pH	7.94			
Water	WQ-PDA-2 Shallow			Site	11.5	0.3	Water Quality	YSI	SpCond	Specific Conductivity	516			uS/cm
Water	WQ-PDA-2 Shallow			Site	11.5	0.3	Water Quality	YSI	Temp	Temperature	17.17			C
Water	WQ-PDA-2 Shallow			Site	11.5	0.3	Water Quality	YSI	TDS	Total Dissolved Solids	0.335			
Water	WQ-PDA-2 Shallow			Site	11.5	0.3	Water Quality	YSI	Turb	Turbidity	29.1			ntu
Water	WQ-PDA-3 Deep			Site	4	2.6	Water Quality	YSI	Cond	Conductivity	439			uS/cm
Water	WQ-PDA-3 Deep			Site	4	2.6	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.82			mg/L
Water	WQ-PDA-3 Deep			Site	4	2.6	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	103.4			%
Water	WQ-PDA-3 Deep			Site	4	2.6	Water Quality	YSI	ORP	Oxidation Reduction Potential	93.1			millivolts
Water	WQ-PDA-3 Deep			Site	4	2.6	Water Quality	YSI	pH	pH	7.79			
Water	WQ-PDA-3 Deep			Site	4	2.6	Water Quality	YSI	SpCond	Specific Conductivity	515			uS/cm
Water	WQ-PDA-3 Deep			Site	4	2.6	Water Quality	YSI	Temp	Temperature	17.25			C
Water	WQ-PDA-3 Deep			Site	4	2.6	Water Quality	YSI	TDS	Total Dissolved Solids	0.335			
Water	WQ-PDA-3 Deep			Site	4	2.6	Water Quality	YSI	Turb	Turbidity	35			ntu
Water	WQ-PDA-3 Shallow			Site	4	0.4	Water Quality	YSI	Cond	Conductivity	442			uS/cm
Water	WQ-PDA-3 Shallow			Site	4	0.4	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.55			mg/L
Water	WQ-PDA-3 Shallow			Site	4	0.4	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	102.5			%
Water	WQ-PDA-3 Shallow			Site	4	0.4	Water Quality	YSI	ORP	Oxidation Reduction Potential	82.9			millivolts
Water	WQ-PDA-3 Shallow			Site	4	0.4	Water Quality	YSI	pH	pH	7.97			
Water	WQ-PDA-3 Shallow			Site	4	0.4	Water Quality	YSI	SpCond	Specific Conductivity	515			uS/cm
Water	WQ-PDA-3 Shallow			Site	4	0.4	Water Quality	YSI	Temp	Temperature	17.34			C
Water	WQ-PDA-3 Shallow			Site	4	0.4	Water Quality	YSI	TDS	Total Dissolved Solids	0.335			
Water	WQ-PDA-3 Shallow			Site	4	0.4	Water Quality	YSI	Turb	Turbidity	47.6			ntu
Water	WQ-PDA-4 Deep			Site	6.6	4.6	Water Quality	YSI	Cond	Conductivity	443			uS/cm
Water	WQ-PDA-4 Deep			Site	6.6	4.6	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.54			mg/L
Water	WQ-PDA-4 Deep			Site	6.6	4.6	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	100.2			%
Water	WQ-PDA-4 Deep			Site	6.6	4.6	Water Quality	YSI	ORP	Oxidation Reduction Potential	240.7			millivolts
Water	WQ-PDA-4 Deep			Site	6.6	4.6	Water Quality	YSI	pH	pH	7.82			
Water	WQ-PDA-4 Deep			Site	6.6	4.6	Water Quality	YSI	SpCond	Specific Conductivity	520			uS/cm
Water	WQ-PDA-4 Deep			Site	6.6	4.6	Water Quality	YSI	Temp	Temperature	17.53			C
Water	WQ-PDA-4 Deep			Site	6.6	4.6	Water Quality	YSI	TDS	Total Dissolved Solids	0.337			
Water	WQ-PDA-4 Deep			Site	6.6	4.6	Water Quality	YSI	Turb	Turbidity	34.4			ntu
Water	WQ-PDA-4 Shallow			Site	6.6	0.5	Water Quality	YSI	Cond	Conductivity	442			uS/cm
Water	WQ-PDA-4 Shallow			Site	6.6	0.5	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.42			mg/L
Water	WQ-PDA-4 Shallow			Site	6.6	0.5	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	101.4			%
Water	WQ-PDA-4 Shallow			Site	6.6	0.5	Water Quality	YSI	ORP	Oxidation Reduction Potential	184.6			millivolts
Water	WQ-PDA-4 Shallow			Site	6.6	0.5	Water Quality	YSI	pH	pH	7.98			
Water	WQ-PDA-4 Shallow			Site	6.6	0.5	Water Quality	YSI	SpCond	Specific Conductivity	516			uS/cm
Water	WQ-PDA-4 Shallow			Site	6.6	0.5	Water Quality	YSI	Temp	Temperature	17.55			C
Water	WQ-PDA-4 Shallow			Site	6.6	0.5	Water Quality	YSI	TDS	Total Dissolved Solids	0.336			
Water	WQ-PDA-4 Shallow			Site	6.6	0.5	Water Quality	YSI	Turb	Turbidity	32.2			ntu
Water	WQ-PDA-5 Deep			Site	10	9	Water Quality	YSI	Cond	Conductivity	417			uS/cm
Water	WQ-PDA-5 Deep			Site	10	9	Water Quality	YSI	DO	Dissolved Oxygen Concentration	8.79			mg/L
Water	WQ-PDA-5 Deep			Site	10	9	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	91.5			%
Water	WQ-PDA-5 Deep			Site	10	9	Water Quality	YSI	ORP	Oxidation Reduction Potential	304.7			millivolts
Water	WQ-PDA-5 Deep			Site	10	9	Water Quality	YSI	pH	pH	7.67			
Water	WQ-PDA-5 Deep			Site	10	9	Water Quality	YSI	SpCond	Specific Conductivity	490			uS/cm
Water	WQ-PDA-5 Deep			Site	10	9	Water Quality	YSI	Temp	Temperature	17.33			C
Water	WQ-PDA-5 Deep			Site	10	9	Water Quality	YSI	TDS	Total Dissolved Solids	0.318			
Water	WQ-PDA-5 Deep			Site	10	9	Water Quality	YSI	Turb	Turbidity	36			ntu
Water	WQ-PDA-5 Mid			Site	10	4.8	Water Quality	YSI	Cond	Conductivity	421			uS/cm
Water	WQ-PDA-5 Mid			Site	10	4.8	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.21			mg/L
Water	WQ-PDA-5 Mid			Site	10	4.8	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	96.6			%
Water	WQ-PDA-5 Mid			Site	10	4.8	Water Quality	YSI	ORP	Oxidation Reduction Potential	158.9			millivolts
Water	WQ-PDA-5 Mid			Site	10	4.8	Water Quality	YSI	pH	pH	8			
Water	WQ-PDA-5 Mid			Site	10	4.8	Water Quality	YSI	SpCond	Specific Conductivity	492			uS/cm
Water	WQ-PDA-5 Mid			Site	10	4.8	Water Quality	YSI	Temp	Temperature	17.37			C
Water	WQ-PDA-5 Mid			Site	10	4.8	Water Quality	YSI	TDS	Total Dissolved Solids	0.32			
Water	WQ-PDA-5 Mid			Site	10	4.8	Water Quality	YSI	Turb	Turbidity	38.4			ntu
Water	WQ-PDA-5 Shallow			Site	10	0.4	Water Quality	YSI	Cond	Conductivity	417			uS/cm
Water	WQ-PDA-5 Shallow			Site	10	0.4	Water Quality	YSI	DO	Dissolved Oxygen Concentration	8.98			mg/L
Water	WQ-PDA-5 Shallow			Site	10	0.4	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	93.8			%
Water	WQ-PDA-5 Shallow			Site	10	0.4	Water Quality	YSI	ORP	Oxidation Reduction Potential	171.2			millivolts
Water	WQ-PDA-5 Shallow			Site	10	0.4	Water Quality	YSI	pH	pH	8.02			
Water	WQ-PDA-5 Shallow			Site	10	0.4	Water Quality	YSI	SpCond	Specific Conductivity	486			uS/cm

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	WQ-PDA-5 Shallow			Site	10	0.4	Water Quality	YSI	Temp	Temperature	17.38			C
Water	WQ-PDA-5 Shallow			Site	10	0.4	Water Quality	YSI	TDS	Total Dissolved Solids	0.316			
Water	WQ-PDA-5 Shallow			Site	10	0.4	Water Quality	YSI	Turb	Turbidity	35.5			ntu
Water	WQ-PDA-6 Deep			Site	10.5	8.8	Water Quality	YSI	Cond	Conductivity	407			uS/cm
Water	WQ-PDA-6 Deep			Site	10.5	8.8	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.78			mg/L
Water	WQ-PDA-6 Deep			Site	10.5	8.8	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	100.8			%
Water	WQ-PDA-6 Deep			Site	10.5	8.8	Water Quality	YSI	ORP	Oxidation Reduction Potential	170.3			millivolts
Water	WQ-PDA-6 Deep			Site	10.5	8.8	Water Quality	YSI	pH	pH	7.72			
Water	WQ-PDA-6 Deep			Site	10.5	8.8	Water Quality	YSI	SpCond	Specific Conductivity	483			uS/cm
Water	WQ-PDA-6 Deep			Site	10.5	8.8	Water Quality	YSI	Temp	Temperature	16.9			C
Water	WQ-PDA-6 Deep			Site	10.5	8.8	Water Quality	YSI	TDS	Total Dissolved Solids	0.314			
Water	WQ-PDA-6 Deep			Site	10.5	8.8	Water Quality	YSI	Turb	Turbidity	35.6			ntu
Water	WQ-PDA-6 Mid			Site	10.5	4.6	Water Quality	YSI	Cond	Conductivity	412			uS/cm
Water	WQ-PDA-6 Mid			Site	10.5	4.6	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.62			mg/L
Water	WQ-PDA-6 Mid			Site	10.5	4.6	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	100.4			%
Water	WQ-PDA-6 Mid			Site	10.5	4.6	Water Quality	YSI	ORP	Oxidation Reduction Potential	176.6			millivolts
Water	WQ-PDA-6 Mid			Site	10.5	4.6	Water Quality	YSI	pH	pH	7.84			
Water	WQ-PDA-6 Mid			Site	10.5	4.6	Water Quality	YSI	SpCond	Specific Conductivity	487			uS/cm
Water	WQ-PDA-6 Mid			Site	10.5	4.6	Water Quality	YSI	Temp	Temperature	16.95			C
Water	WQ-PDA-6 Mid			Site	10.5	4.6	Water Quality	YSI	TDS	Total Dissolved Solids	0.318			
Water	WQ-PDA-6 Mid			Site	10.5	4.6	Water Quality	YSI	Turb	Turbidity	35.4			ntu
Water	WQ-PDA-6 Shallow			Site	10.5	1.5	Water Quality	YSI	Cond	Conductivity	415			uS/cm
Water	WQ-PDA-6 Shallow			Site	10.5	1.5	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.55			mg/L
Water	WQ-PDA-6 Shallow			Site	10.5	1.5	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	99.7			%
Water	WQ-PDA-6 Shallow			Site	10.5	1.5	Water Quality	YSI	ORP	Oxidation Reduction Potential	178.3			millivolts
Water	WQ-PDA-6 Shallow			Site	10.5	1.5	Water Quality	YSI	pH	pH	7.86			
Water	WQ-PDA-6 Shallow			Site	10.5	1.5	Water Quality	YSI	SpCond	Specific Conductivity	488			uS/cm
Water	WQ-PDA-6 Shallow			Site	10.5	1.5	Water Quality	YSI	Temp	Temperature	16.96			C
Water	WQ-PDA-6 Shallow			Site	10.5	1.5	Water Quality	YSI	TDS	Total Dissolved Solids	0.317			
Water	WQ-PDA-6 Shallow			Site	10.5	1.5	Water Quality	YSI	Turb	Turbidity	34.1			ntu
Water	WQ-PDA-7 Deep			Site	11	11	Water Quality	YSI	Cond	Conductivity	401			uS/cm
Water	WQ-PDA-7 Deep			Site	11	11	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.32			mg/L
Water	WQ-PDA-7 Deep			Site	11	11	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	96.1			%
Water	WQ-PDA-7 Deep			Site	11	11	Water Quality	YSI	ORP	Oxidation Reduction Potential	177.2			millivolts
Water	WQ-PDA-7 Deep			Site	11	11	Water Quality	YSI	pH	pH	7.76			
Water	WQ-PDA-7 Deep			Site	11	11	Water Quality	YSI	SpCond	Specific Conductivity	478			uS/cm
Water	WQ-PDA-7 Deep			Site	11	11	Water Quality	YSI	Temp	Temperature	16.86			C
Water	WQ-PDA-7 Deep			Site	11	11	Water Quality	YSI	TDS	Total Dissolved Solids	0.31			
Water	WQ-PDA-7 Deep			Site	11	11	Water Quality	YSI	Turb	Turbidity	37.1			ntu
Water	WQ-PDA-7 Mid			Site	11	7.1	Water Quality	YSI	Cond	Conductivity	402			uS/cm
Water	WQ-PDA-7 Mid			Site	11	7.1	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.43			mg/L
Water	WQ-PDA-7 Mid			Site	11	7.1	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	97.9			%
Water	WQ-PDA-7 Mid			Site	11	7.1	Water Quality	YSI	ORP	Oxidation Reduction Potential	175.6			millivolts
Water	WQ-PDA-7 Mid			Site	11	7.1	Water Quality	YSI	pH	pH	7.78			
Water	WQ-PDA-7 Mid			Site	11	7.1	Water Quality	YSI	SpCond	Specific Conductivity	476			uS/cm
Water	WQ-PDA-7 Mid			Site	11	7.1	Water Quality	YSI	Temp	Temperature	16.86			C
Water	WQ-PDA-7 Mid			Site	11	7.1	Water Quality	YSI	TDS	Total Dissolved Solids	0.31			
Water	WQ-PDA-7 Mid			Site	11	7.1	Water Quality	YSI	Turb	Turbidity	37.3			ntu
Water	WQ-PDA-7 Shallow			Site	11	1.1	Water Quality	YSI	Cond	Conductivity	399			uS/cm
Water	WQ-PDA-7 Shallow			Site	11	1.1	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.37			mg/L
Water	WQ-PDA-7 Shallow			Site	11	1.1	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	99.7			%
Water	WQ-PDA-7 Shallow			Site	11	1.1	Water Quality	YSI	ORP	Oxidation Reduction Potential	169			millivolts
Water	WQ-PDA-7 Shallow			Site	11	1.1	Water Quality	YSI	pH	pH	7.82			
Water	WQ-PDA-7 Shallow			Site	11	1.1	Water Quality	YSI	SpCond	Specific Conductivity	472			uS/cm
Water	WQ-PDA-7 Shallow			Site	11	1.1	Water Quality	YSI	Temp	Temperature	17.3			C
Water	WQ-PDA-7 Shallow			Site	11	1.1	Water Quality	YSI	TDS	Total Dissolved Solids	0.307			
Water	WQ-PDA-7 Shallow			Site	11	1.1	Water Quality	YSI	Turb	Turbidity	38.1			ntu
Water	WQ-PDA-8 Deep			Site	10.9	10.3	Water Quality	YSI	Cond	Conductivity	454			uS/cm
Water	WQ-PDA-8 Deep			Site	10.9	10.3	Water Quality	YSI	DO	Dissolved Oxygen Concentration	8.64			mg/L
Water	WQ-PDA-8 Deep			Site	10.9	10.3	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	92.8			%
Water	WQ-PDA-8 Deep			Site	10.9	10.3	Water Quality	YSI	ORP	Oxidation Reduction Potential	145.1			millivolts
Water	WQ-PDA-8 Deep			Site	10.9	10.3	Water Quality	YSI	pH	pH	8.11			
Water	WQ-PDA-8 Deep			Site	10.9	10.3	Water Quality	YSI	SpCond	Specific Conductivity	530			uS/cm
Water	WQ-PDA-8 Deep			Site	10.9	10.3	Water Quality	YSI	Temp	Temperature	17.45			C
Water	WQ-PDA-8 Deep			Site	10.9	10.3	Water Quality	YSI	TDS	Total Dissolved Solids	0.344			
Water	WQ-PDA-8 Deep			Site	10.9	10.3	Water Quality	YSI	Turb	Turbidity	39.2			ntu
Water	WQ-PDA-8 Mid 1			Site	10.9	5.1	Water Quality	YSI	Cond	Conductivity	442			uS/cm
Water	WQ-PDA-8 Mid 1			Site	10.9	5.1	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.65			mg/L
Water	WQ-PDA-8 Mid 1			Site	10.9	5.1	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	99.4			%
Water	WQ-PDA-8 Mid 1			Site	10.9	5.1	Water Quality	YSI	ORP	Oxidation Reduction Potential	146.3			millivolts
Water	WQ-PDA-8 Mid 1			Site	10.9	5.1	Water Quality	YSI	pH	pH	8.14			
Water	WQ-PDA-8 Mid 1			Site	10.9	5.1	Water Quality	YSI	SpCond	Specific Conductivity	515			uS/cm
Water	WQ-PDA-8 Mid 1			Site	10.9	5.1	Water Quality	YSI	Temp	Temperature	17.44			C
Water	WQ-PDA-8 Mid 1			Site	10.9	5.1	Water Quality	YSI	TDS	Total Dissolved Solids	0.334			
Water	WQ-PDA-8 Mid 1			Site	10.9	5.1	Water Quality	YSI	Turb	Turbidity	36.2			ntu
Water	WQ-PDA-8 Mid 2			Site	10.9	9	Water Quality	YSI	Cond	Conductivity	446			uS/cm
Water	WQ-PDA-8 Mid 2			Site	10.9	9	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.47			mg/L
Water	WQ-PDA-8 Mid 2			Site	10.9	9	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	99.1			%

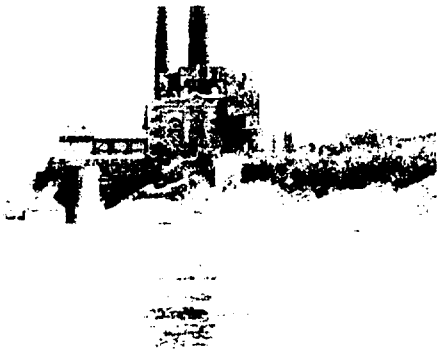
Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	WQ-PDA-8 Mid 2			Site	10 9	9	Water Quality	YSI	ORP	Oxidation Reduction Potential	146 4			millivolts
Water	WQ-PDA-8 Mid 2			Site	10 9	9	Water Quality	YSI	pH	pH	8 05			
Water	WQ-PDA-8 Mid 2			Site	10 9	9	Water Quality	YSI	SpCond	Specific Conductivity	520			uS/cm
Water	WQ-PDA-8 Mid 2			Site	10 9	9	Water Quality	YSI	Temp	Temperature	17 43			C
Water	WQ-PDA-8 Mid 2			Site	10 9	9	Water Quality	YSI	TDS	Total Dissolved Solids	0 337			
Water	WQ-PDA-8 Mid 2			Site	10 9	9	Water Quality	YSI	Turb	Turbidity	35 8			ntu
Water	WQ-PDA-8 Shallow			Site	10 9	0 2	Water Quality	YSI	Cond	Conductivity	435			uS/cm
Water	WQ-PDA-8 Shallow			Site	10 9	0 2	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9 6			mg/L
Water	WQ-PDA-8 Shallow			Site	10 9	0 2	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	101			%
Water	WQ-PDA-8 Shallow			Site	10 9	0 2	Water Quality	YSI	ORP	Oxidation Reduction Potential	150			millivolts
Water	WQ-PDA-8 Shallow			Site	10 9	0 2	Water Quality	YSI	pH	pH	8 14			
Water	WQ-PDA-8 Shallow			Site	10 9	0 2	Water Quality	YSI	SpCond	Specific Conductivity	509			uS/cm
Water	WQ-PDA-8 Shallow			Site	10 9	0 2	Water Quality	YSI	Temp	Temperature	17 43			C
Water	WQ-PDA-8 Shallow			Site	10 9	0 2	Water Quality	YSI	TDS	Total Dissolved Solids	0 331			
Water	WQ-PDA-8 Shallow			Site	10 9	0 2	Water Quality	YSI	Turb	Turbidity	34 4			ntu
Water	WQ-PDA-9 Deep			Site	14 5	13	Water Quality	YSI	Cond	Conductivity	411			uS/cm
Water	WQ-PDA-9 Deep			Site	14 5	13	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9 51			mg/L
Water	WQ-PDA-9 Deep			Site	14 5	13	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	99 4			%
Water	WQ-PDA-9 Deep			Site	14 5	13	Water Quality	YSI	ORP	Oxidation Reduction Potential	141			millivolts
Water	WQ-PDA-9 Deep			Site	14 5	13	Water Quality	YSI	pH	pH	7 99			
Water	WQ-PDA-9 Deep			Site	14 5	13	Water Quality	YSI	SpCond	Specific Conductivity	482			uS/cm
Water	WQ-PDA-9 Deep			Site	14 5	13	Water Quality	YSI	Temp	Temperature	17 48			C
Water	WQ-PDA-9 Deep			Site	14 5	13	Water Quality	YSI	TDS	Total Dissolved Solids	0 313			
Water	WQ-PDA-9 Deep			Site	14 5	13	Water Quality	YSI	Turb	Turbidity	36 3			ntu
Water	WQ-PDA-9 Mid			Site	14 5	6	Water Quality	YSI	Cond	Conductivity	408			uS/cm
Water	WQ-PDA-9 Mid			Site	14 5	6	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9 45			mg/L
Water	WQ-PDA-9 Mid			Site	14 5	6	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	98 6			%
Water	WQ-PDA-9 Mid			Site	14 5	6	Water Quality	YSI	ORP	Oxidation Reduction Potential	133 3			millivolts
Water	WQ-PDA-9 Mid			Site	14 5	6	Water Quality	YSI	pH	pH	8 11			
Water	WQ-PDA-9 Mid			Site	14 5	6	Water Quality	YSI	SpCond	Specific Conductivity	475			uS/cm
Water	WQ-PDA-9 Mid			Site	14 5	6	Water Quality	YSI	Temp	Temperature	17 49			C
Water	WQ-PDA-9 Mid			Site	14 5	6	Water Quality	YSI	TDS	Total Dissolved Solids	0 308			
Water	WQ-PDA-9 Mid			Site	14 5	6	Water Quality	YSI	Turb	Turbidity	35			ntu
Water	WQ-PDA-9 Shallow			Site	14 5	0 1	Water Quality	YSI	Cond	Conductivity	393			uS/cm
Water	WQ-PDA-9 Shallow			Site	14 5	0 1	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9 44			mg/L
Water	WQ-PDA-9 Shallow			Site	14 5	0 1	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	99 5			%
Water	WQ-PDA-9 Shallow			Site	14 5	0 1	Water Quality	YSI	ORP	Oxidation Reduction Potential	136 8			millivolts
Water	WQ-PDA-9 Shallow			Site	14 5	0 1	Water Quality	YSI	pH	pH	8 11			
Water	WQ-PDA-9 Shallow			Site	14 5	0 1	Water Quality	YSI	SpCond	Specific Conductivity	463			uS/cm
Water	WQ-PDA-9 Shallow			Site	14 5	0 1	Water Quality	YSI	Temp	Temperature	17 5			C
Water	WQ-PDA-9 Shallow			Site	14 5	0 1	Water Quality	YSI	TDS	Total Dissolved Solids	0 302			
Water	WQ-PDA-9 Shallow			Site	14 5	0 1	Water Quality	YSI	Turb	Turbidity	34 3			ntu
Water	WQ-UDA-11 Deep			Reference	15	11 3	Water Quality	YSI	Cond	Conductivity	414			uS/cm
Water	WQ-UDA-11 Deep			Reference	15	11 3	Water Quality	YSI	DO	Dissolved Oxygen Concentration	10 57			mg/L
Water	WQ-UDA-11 Deep			Reference	15	11 3	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	110 4			%
Water	WQ-UDA-11 Deep			Reference	15	11 3	Water Quality	YSI	ORP	Oxidation Reduction Potential	299 4			millivolts
Water	WQ-UDA-11 Deep			Reference	15	11 3	Water Quality	YSI	pH	pH	7 38			
Water	WQ-UDA-11 Deep			Reference	15	11 3	Water Quality	YSI	SpCond	Specific Conductivity	488			uS/cm
Water	WQ-UDA-11 Deep			Reference	15	11 3	Water Quality	YSI	Temp	Temperature	16 99			C
Water	WQ-UDA-11 Deep			Reference	15	11 3	Water Quality	YSI	TDS	Total Dissolved Solids	0 317			
Water	WQ-UDA-11 Deep			Reference	15	11 3	Water Quality	YSI	Turb	Turbidity	47 8			ntu
Water	WQ-UDA-11 Mid			Reference	15	7 5	Water Quality	YSI	Cond	Conductivity	415			uS/cm
Water	WQ-UDA-11 Mid			Reference	15	7 5	Water Quality	YSI	DO	Dissolved Oxygen Concentration	10 78			mg/L
Water	WQ-UDA-11 Mid			Reference	15	7 5	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	112 7			%
Water	WQ-UDA-11 Mid			Reference	15	7 5	Water Quality	YSI	ORP	Oxidation Reduction Potential	296 8			millivolts
Water	WQ-UDA-11 Mid			Reference	15	7 5	Water Quality	YSI	pH	pH	7 36			
Water	WQ-UDA-11 Mid			Reference	15	7 5	Water Quality	YSI	SpCond	Specific Conductivity	488			uS/cm
Water	WQ-UDA-11 Mid			Reference	15	7 5	Water Quality	YSI	Temp	Temperature	16 99			C
Water	WQ-UDA-11 Mid			Reference	15	7 5	Water Quality	YSI	TDS	Total Dissolved Solids	0 317			
Water	WQ-UDA-11 Mid			Reference	15	7 5	Water Quality	YSI	Turb	Turbidity	42 6			ntu
Water	WQ-UDA-11 Shallow			Reference	15	0 9	Water Quality	YSI	Cond	Conductivity	415			uS/cm
Water	WQ-UDA-11 Shallow			Reference	15	0 9	Water Quality	YSI	DO	Dissolved Oxygen Concentration	11 65			mg/L
Water	WQ-UDA-11 Shallow			Reference	15	0 9	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	123 9			%
Water	WQ-UDA-11 Shallow			Reference	15	0 9	Water Quality	YSI	ORP	Oxidation Reduction Potential	295			millivolts
Water	WQ-UDA-11 Shallow			Reference	15	0 9	Water Quality	YSI	pH	pH	7 42			
Water	WQ-UDA-11 Shallow			Reference	15	0 9	Water Quality	YSI	SpCond	Specific Conductivity	490			uS/cm
Water	WQ-UDA-11 Shallow			Reference	15	0 9	Water Quality	YSI	Temp	Temperature	17 03			C
Water	WQ-UDA-11 Shallow			Reference	15	0 9	Water Quality	YSI	TDS	Total Dissolved Solids	0 318			
Water	WQ-UDA-11 Shallow			Reference	15	0 9	Water Quality	YSI	Turb	Turbidity	42 4			ntu
Water	WQ-UDA-12 Deep			Reference	9 1	7 2	Water Quality	YSI	Cond	Conductivity	383			uS/cm
Water	WQ-UDA-12 Deep			Reference	9 1	7 2	Water Quality	YSI	DO	Dissolved Oxygen Concentration	7 62			mg/L
Water	WQ-UDA-12 Deep			Reference	9 1	7 2	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	78 2			%
Water	WQ-UDA-12 Deep			Reference	9 1	7 2	Water Quality	YSI	ORP	Oxidation Reduction Potential	244 2			millivolts
Water	WQ-UDA-12 Deep			Reference	9 1	7 2	Water Quality	YSI	pH	pH	7 89			
Water	WQ-UDA-12 Deep			Reference	9 1	7 2	Water Quality	YSI	SpCond	Specific Conductivity	447			uS/cm
Water	WQ-UDA-12 Deep			Reference	9 1	7 2	Water Quality	YSI	Temp	Temperature	17 77			C
Water	WQ-UDA-12 Deep			Reference	9 1	7 2	Water Quality	YSI	TDS	Total Dissolved Solids	0 29			
Water	WQ-UDA-12 Deep			Reference	9 1	7 2	Water Quality	YSI	Turb	Turbidity	37 8			ntu

Matrix	Sample ID	Sample Date	Sample Type 1	Sample Type 3	Water Depth (ft)	Sample Depth (ft)	Analysis	Analytical Method	CAS Number	Name	Concentration	Validation Q	Reporting Limit	Units
Water	WQ-UDA-12 Mid			Reference	9.1	3.9	Water Quality	YSI	Cond	Conductivity	382			uS/cm
Water	WQ-UDA-12 Mid			Reference	9.1	3.9	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.89			mg/L
Water	WQ-UDA-12 Mid			Reference	9.1	3.9	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	104.4			%
Water	WQ-UDA-12 Mid			Reference	9.1	3.9	Water Quality	YSI	ORP	Oxidation Reduction Potential	229.1			millivolts
Water	WQ-UDA-12 Mid			Reference	9.1	3.9	Water Quality	YSI	pH	pH	8.06			
Water	WQ-UDA-12 Mid			Reference	9.1	3.9	Water Quality	YSI	SpCond	Specific Conductivity	445			uS/cm
Water	WQ-UDA-12 Mid			Reference	9.1	3.9	Water Quality	YSI	Temp	Temperature	17.79			C
Water	WQ-UDA-12 Mid			Reference	9.1	3.9	Water Quality	YSI	TDS	Total Dissolved Solids	0.29			
Water	WQ-UDA-12 Mid			Reference	9.1	3.9	Water Quality	YSI	Turb	Turbidity	40.3			ntu
Water	WQ-UDA-12 Shallow			Reference	9.1	0	Water Quality	YSI	Cond	Conductivity	381			uS/cm
Water	WQ-UDA-12 Shallow			Reference	9.1	0	Water Quality	YSI	DO	Dissolved Oxygen Concentration	9.93			mg/L
Water	WQ-UDA-12 Shallow			Reference	9.1	0	Water Quality	YSI	DO%	Dissolved Oxygen Saturation	106.8			%
Water	WQ-UDA-12 Shallow			Reference	9.1	0	Water Quality	YSI	ORP	Oxidation Reduction Potential	235.1			millivolts
Water	WQ-UDA-12 Shallow			Reference	9.1	0	Water Quality	YSI	pH	pH	8.06			
Water	WQ-UDA-12 Shallow			Reference	9.1	0	Water Quality	YSI	SpCond	Specific Conductivity	443			uS/cm
Water	WQ-UDA-12 Shallow			Reference	9.1	0	Water Quality	YSI	Temp	Temperature	17.79			C
Water	WQ-UDA-12 Shallow			Reference	9.1	0	Water Quality	YSI	TDS	Total Dissolved Solids	0.289			
Water	WQ-UDA-12 Shallow			Reference	9.1	0	Water Quality	YSI	Turb	Turbidity	35			ntu

APPENDIX B

PHOTOGRAPHS

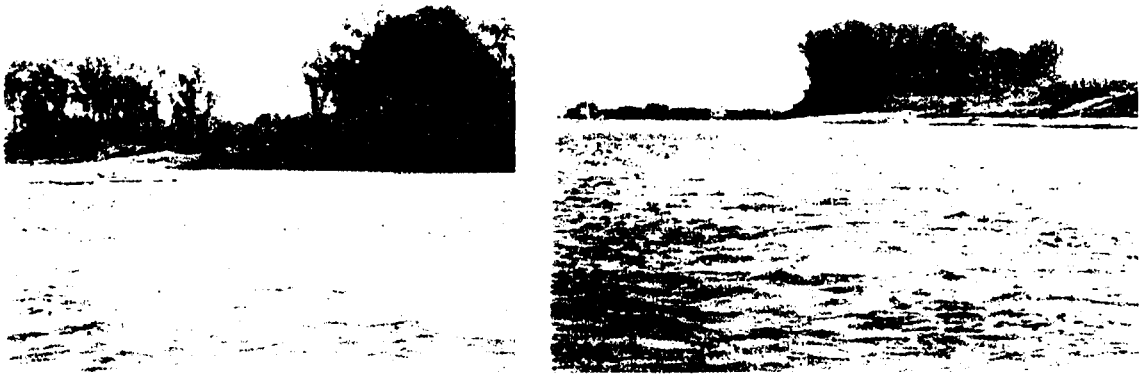
Appendix B. Photographs
WGK Plant Ecological Risk Assessment
Sauget, Illinois



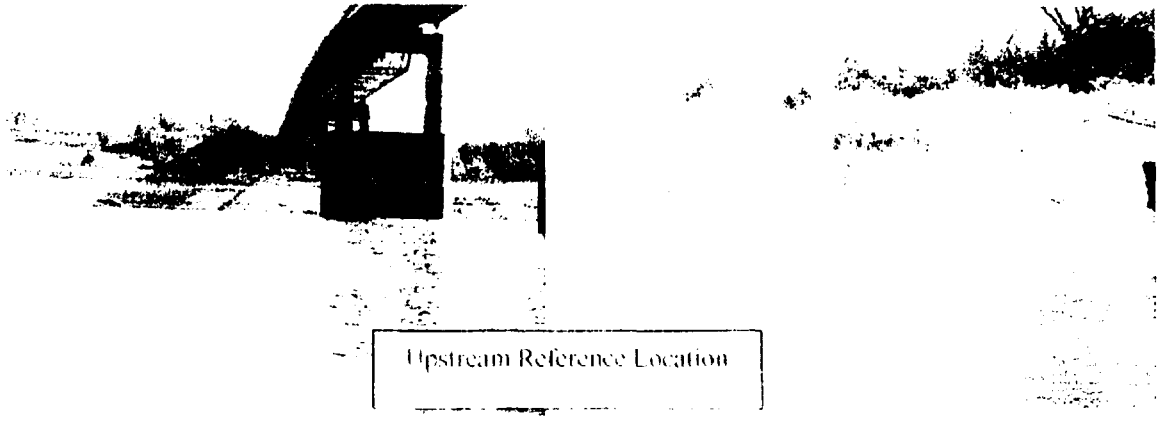
Plume
Discharge
Area

Wing
Dam

Station
Sediment
Types



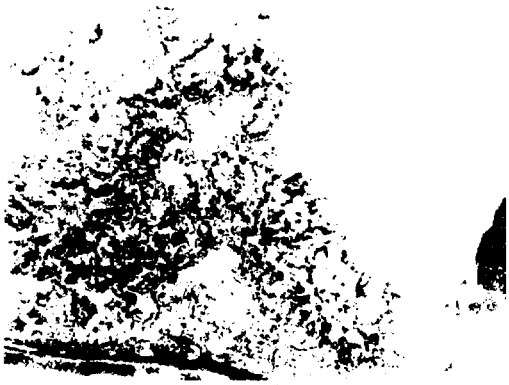
Downstream Reference Location



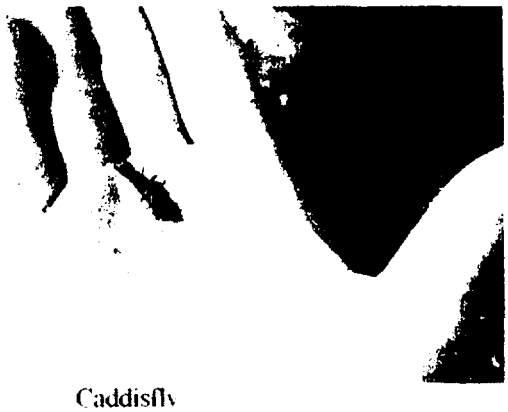
Upstream Reference Location

Non-Fish Biota
Observed at PDA

Caddisfly cases (attached to each other) and two caddisflies out of their cases



Caddisfly cases



Caddisfly

Asiatic clam

Zebra mussels

Common Fish/Turtle Species

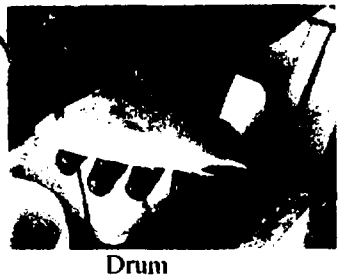
BigMouth Buffalofish in Hoop Net

ChannelCat (Young)

White Bass

Crappie

Crappie



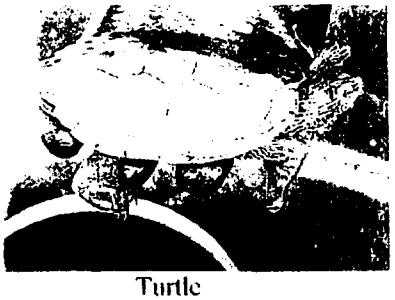
Drum

FlatheadCatfish

FlatheadCatfish

Silver Carp

SmallMouth Buffalofish



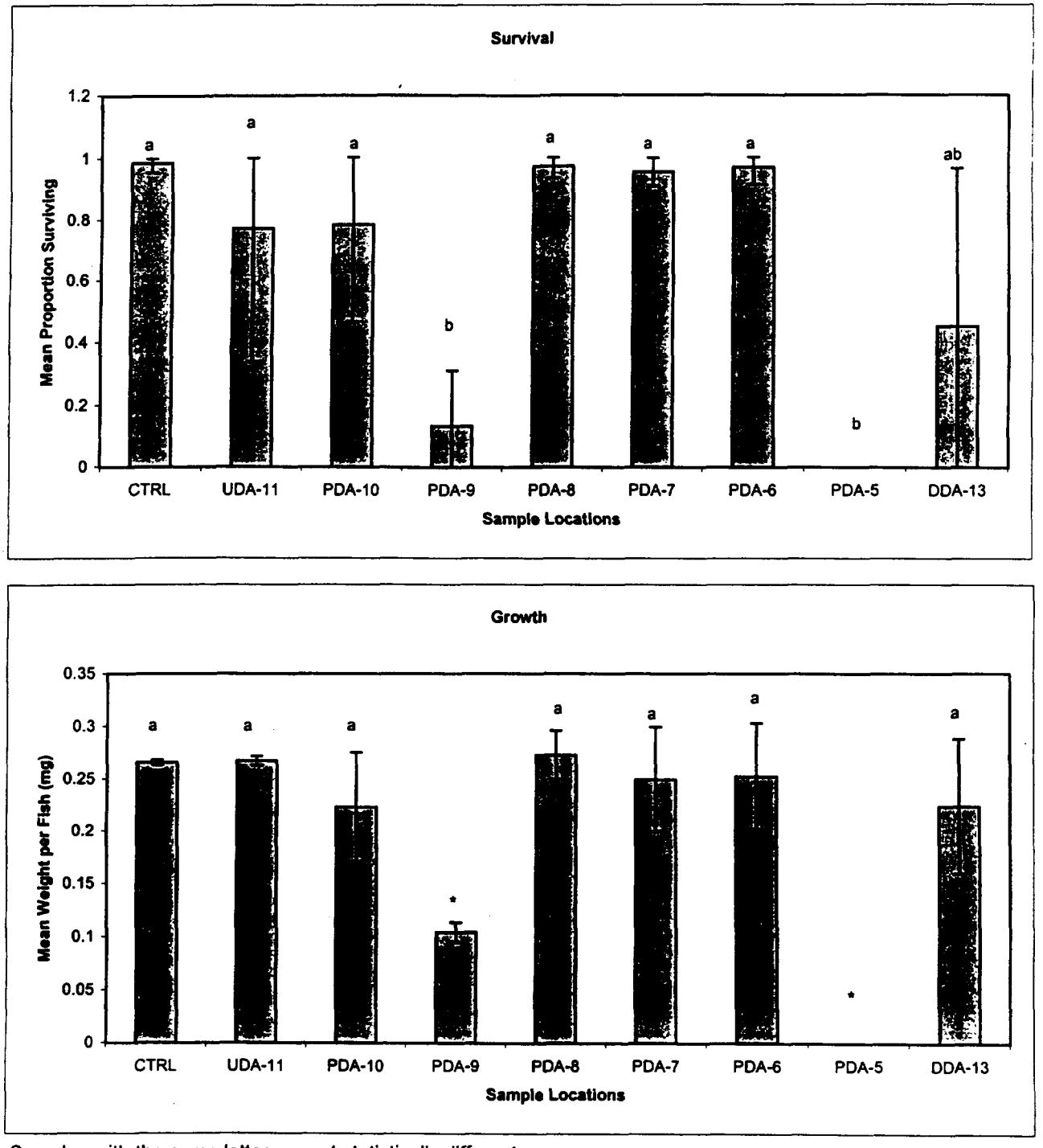
Turtle

Softshell Turtle

APPENDIX C

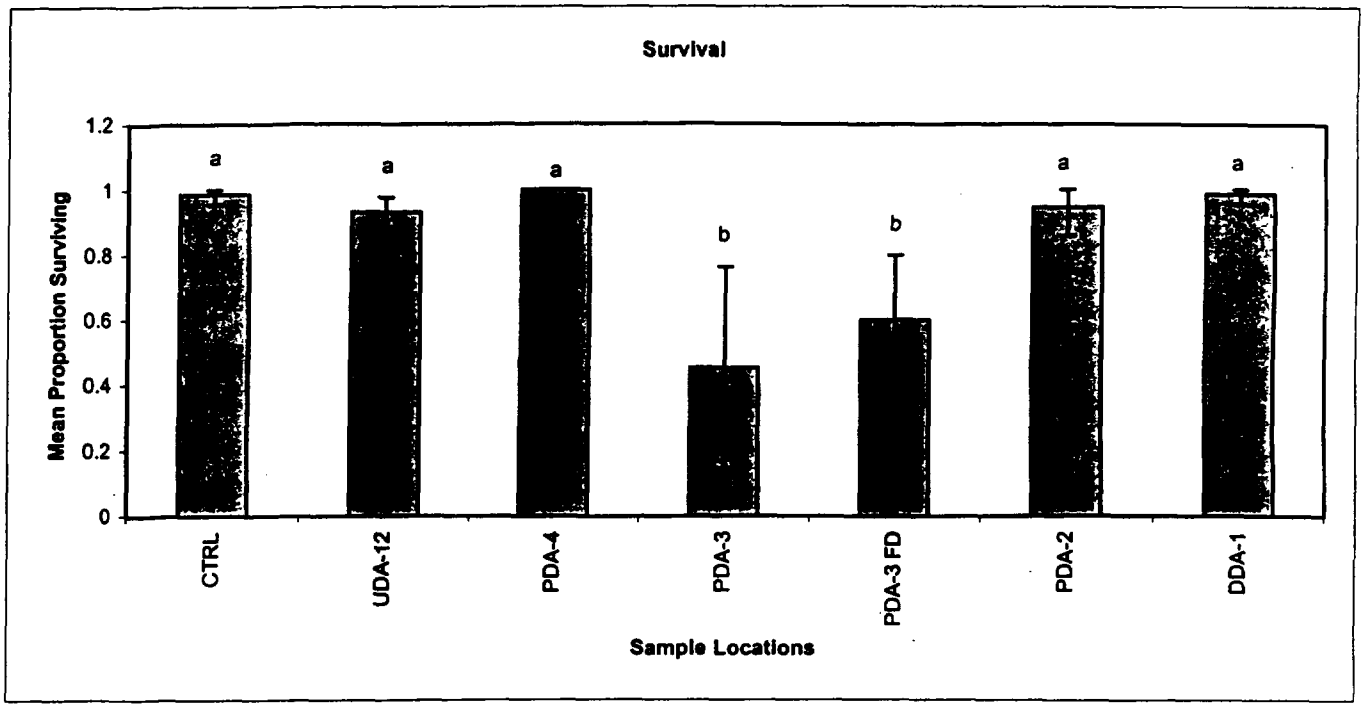
TOXICITY TESTS

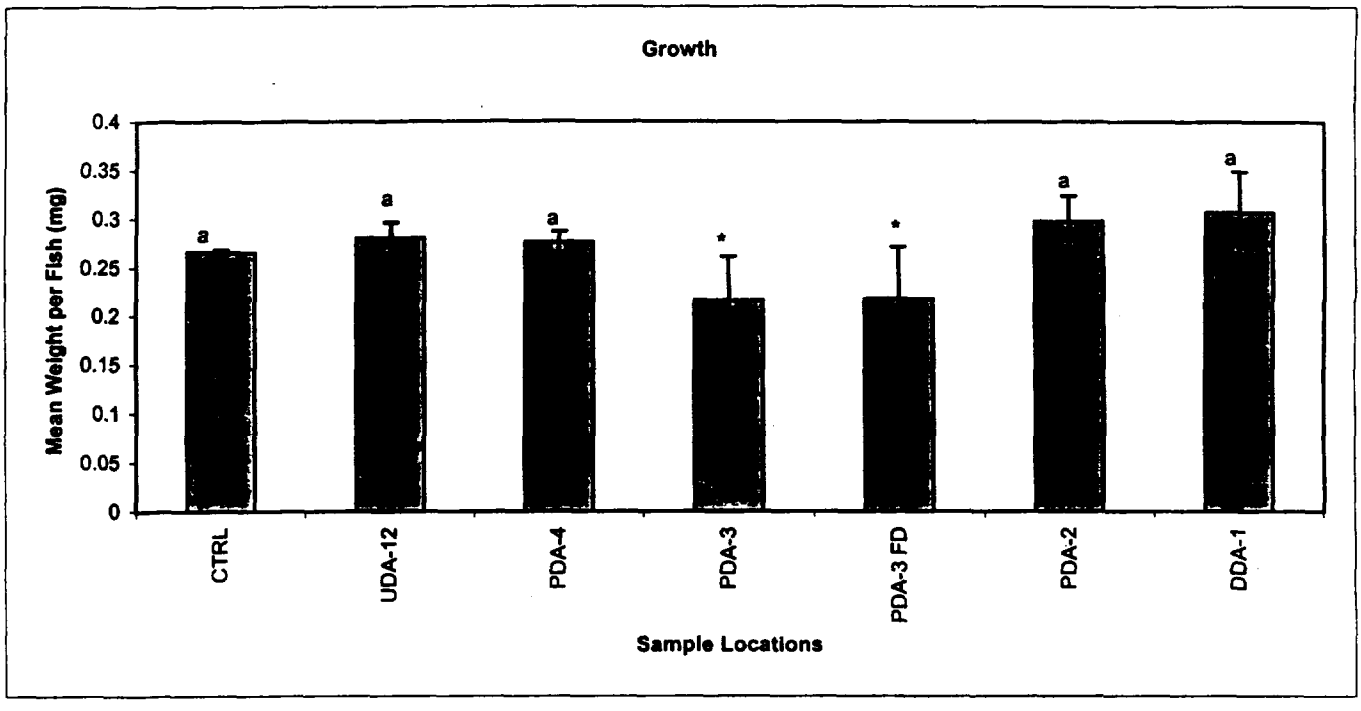
FIGURE C-1
SEDIMENT TOXICITY TESTS- *P. PROMELAS* SURVIVAL AND GROWTH, SANDY SEDIMENT STATIONS
W.G.K. PLANT ECOLOGICAL RISK ASSESSMENT
SAUGET, ILLINOIS



Samples with the same letter are not statistically different.
Error bars show one standard deviation.
* Samples that showed significant effects on survival were excluded from the statistical analysis of the growth data.

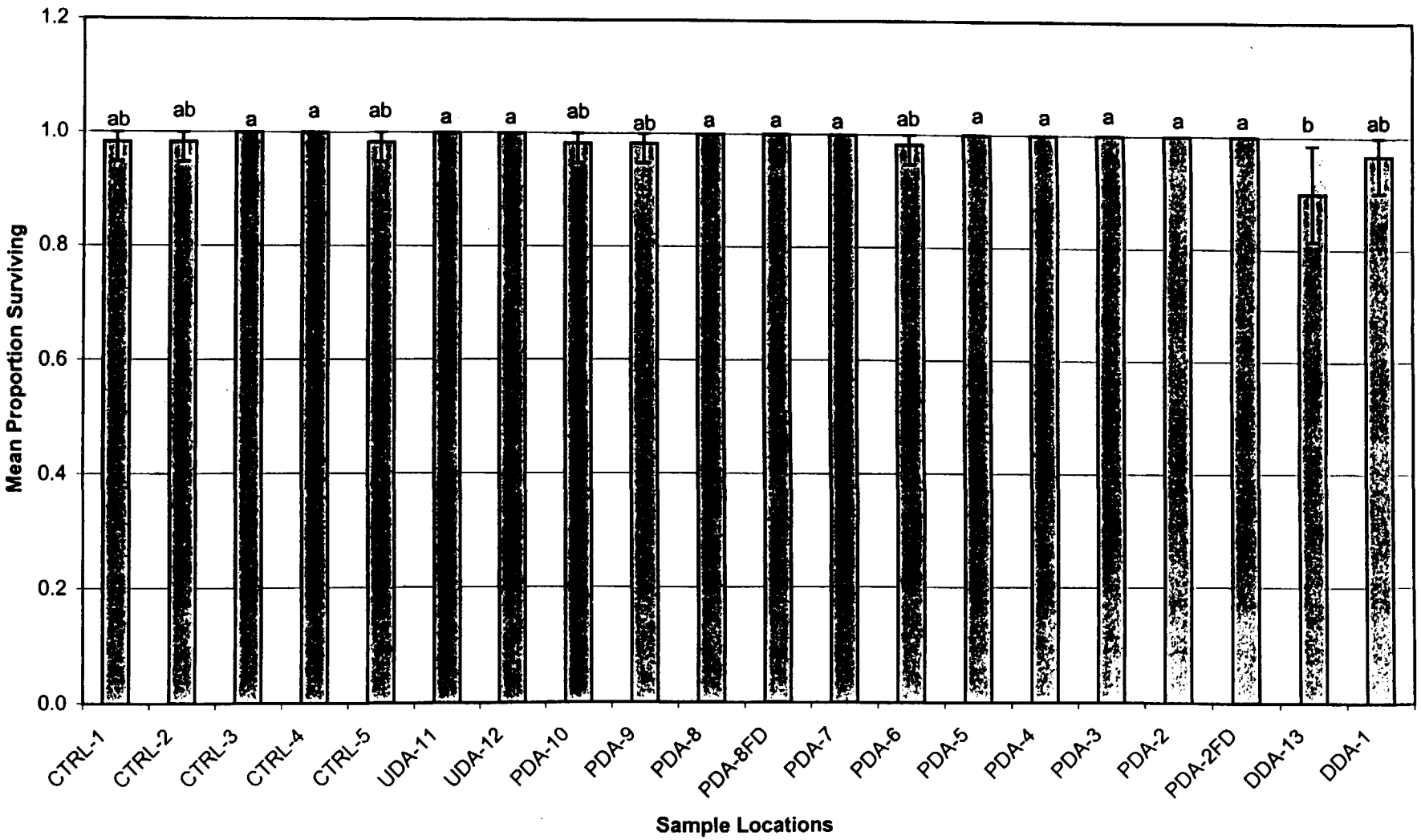
FIGURE C-2
SEDIMENT TOXICITY TESTS- *P. PROMELAS* SURVIVAL AND GROWTH, SOFT SEDIMENT STATIONS
W.G.K. PLANT ECOLOGICAL RISK ASSESSMENT
SAUGET, ILLINOIS





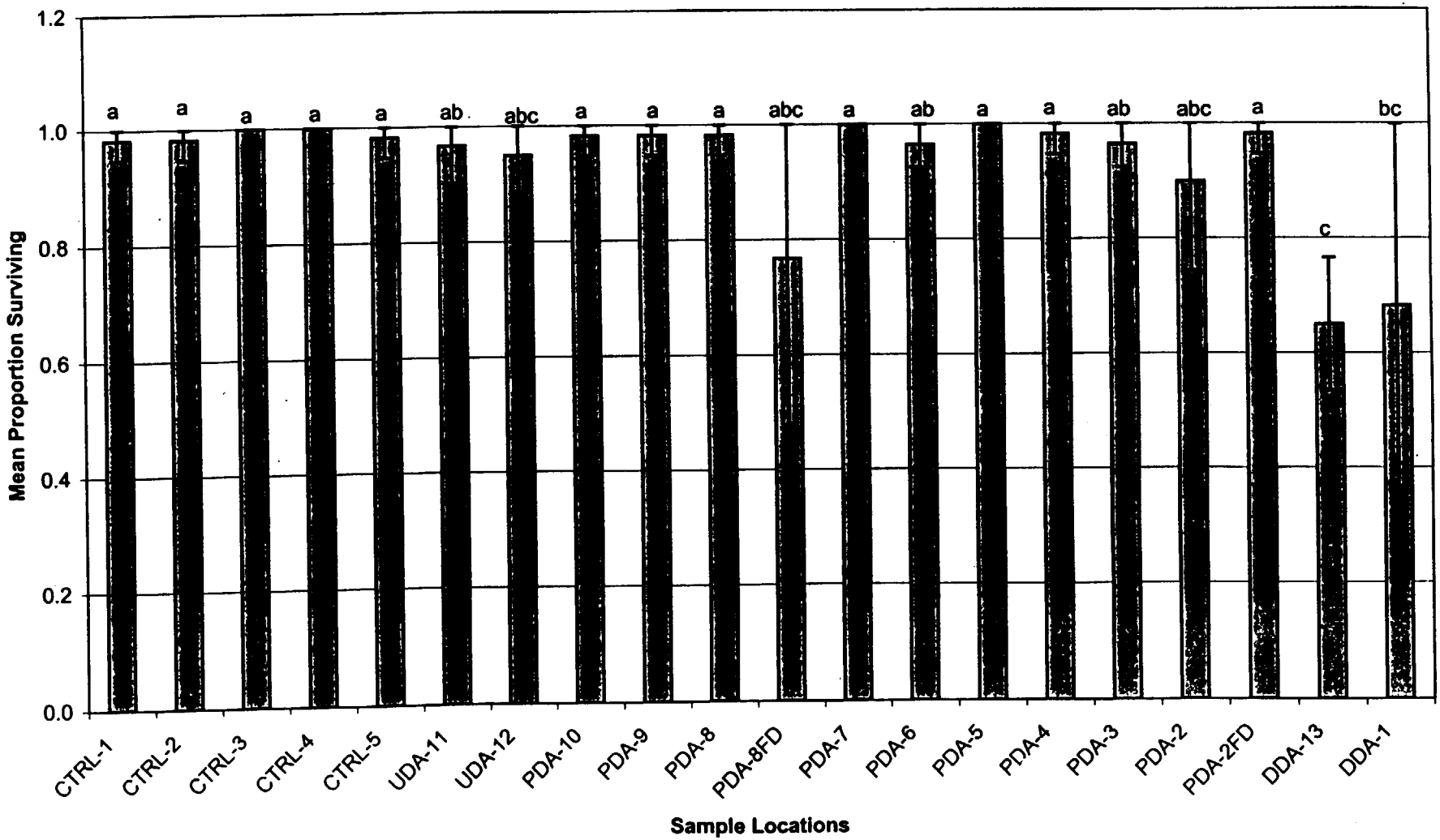
Samples with the same letter are not statistically different.
Error bars show one standard deviation.
* Samples that showed significant effects on survival were excluded from the statistical analysis of the growth data.

FIGURE C-3
SURFACE WATER TOXICITY TESTS - *P. PROMELAS* 2-DAY SURVIVAL
W.G.K. PLANT ECOLOGICAL RISK ASSESSMENT
SAUGET, ILLINOIS



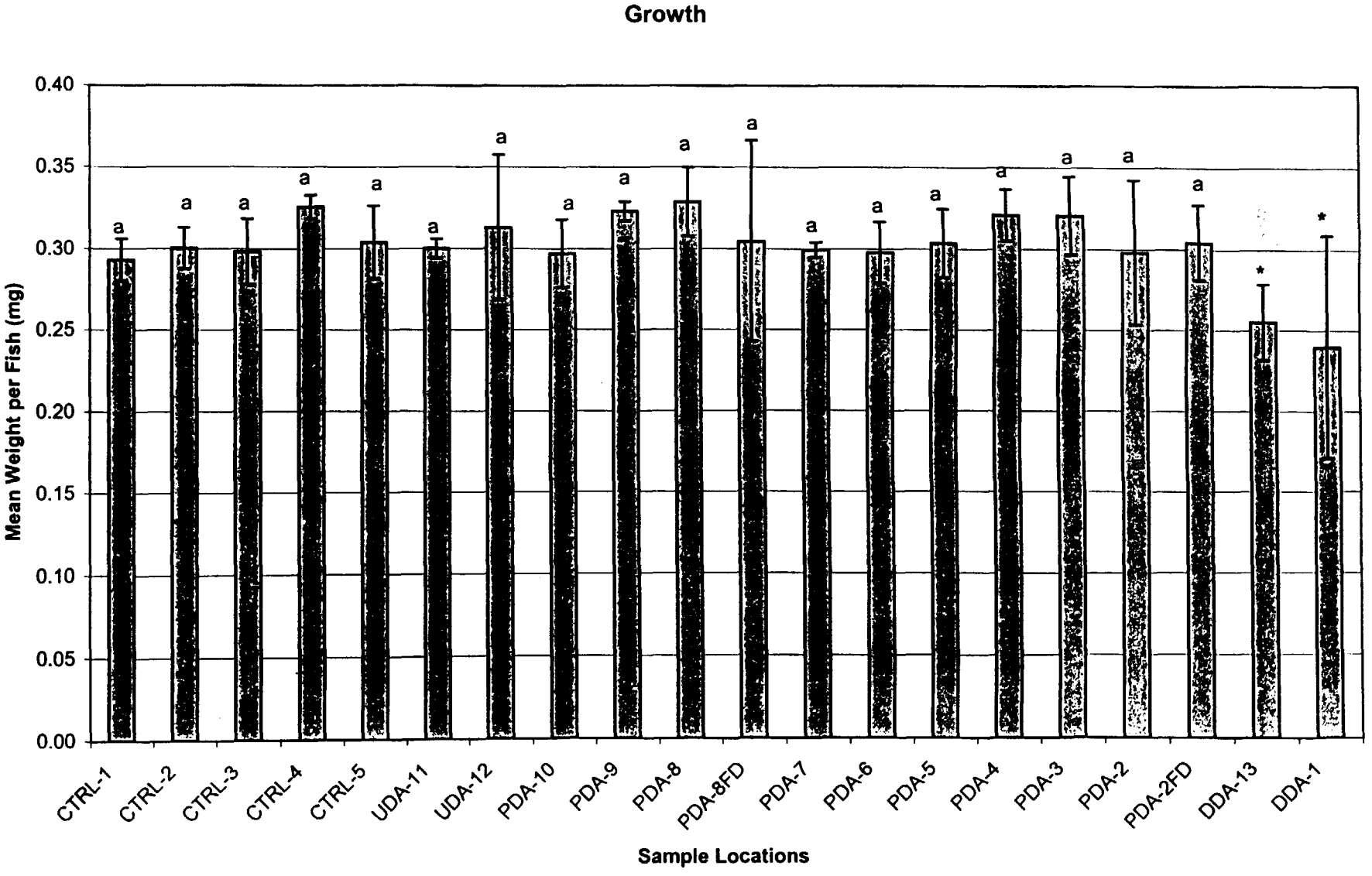
Samples with the same letter are not statistically different.
Error bars show one standard deviation.

FIGURE C-4
SURFACE WATER TOXICITY TESTS - *P. PROMELAS* 7-DAY SURVIVAL
W.G.K. PLANT ECOLOGICAL RISK ASSESSMENT
SAUGET, ILLINOIS



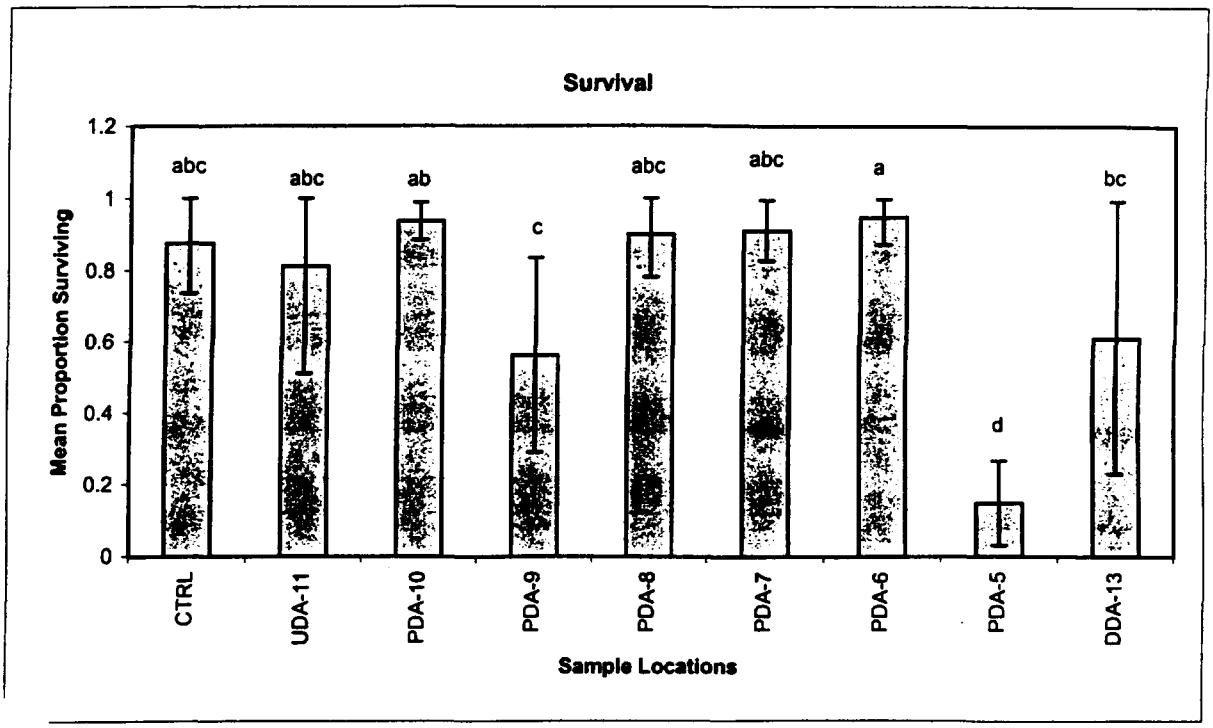
Samples with the same letter are not statistically different.
Error bars show one standard deviation.

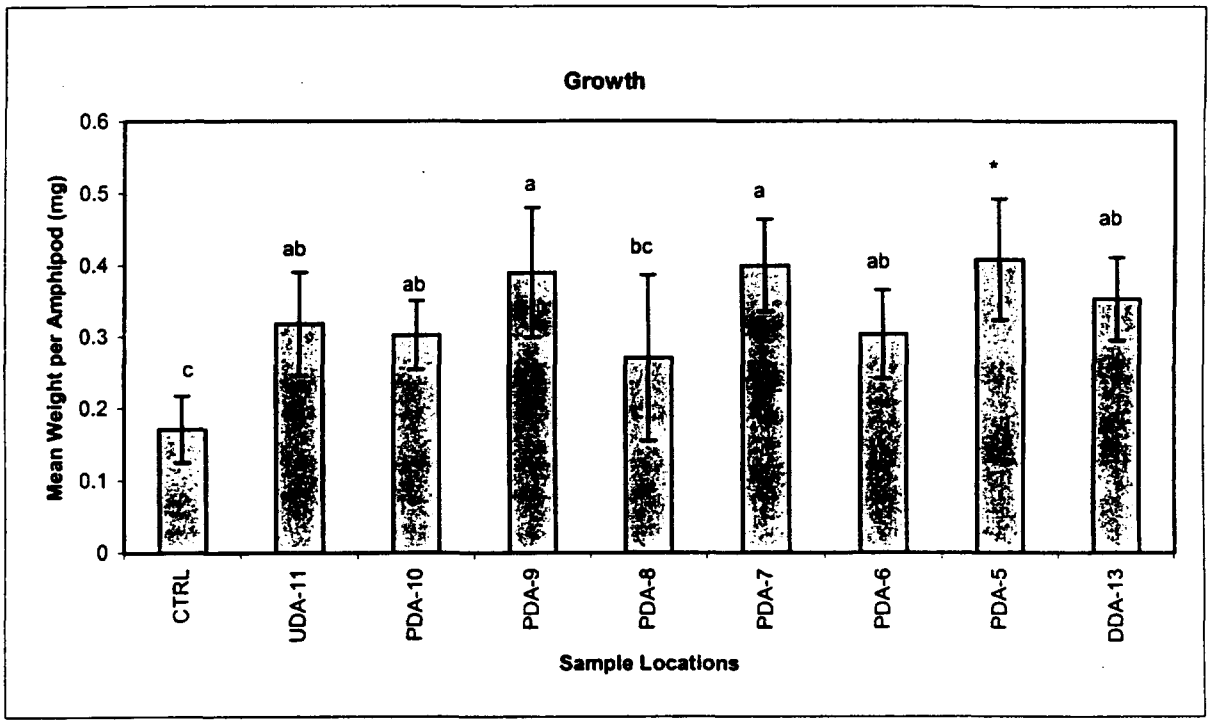
FIGURE C-5
SURFACE WATER TOXICITY TESTS - *P. PROMELAS* GROWTH (WEIGHT PER FISH)
W.G.K. PLANT ECOLOGICAL RISK ASSESSMENT
SAUGET, ILLINOIS



Samples with the same letter are not statistically different.
Error bars show one standard deviation.
* Samples that showed significant effects on survival were excluded from the statistical analysis of the growth data.

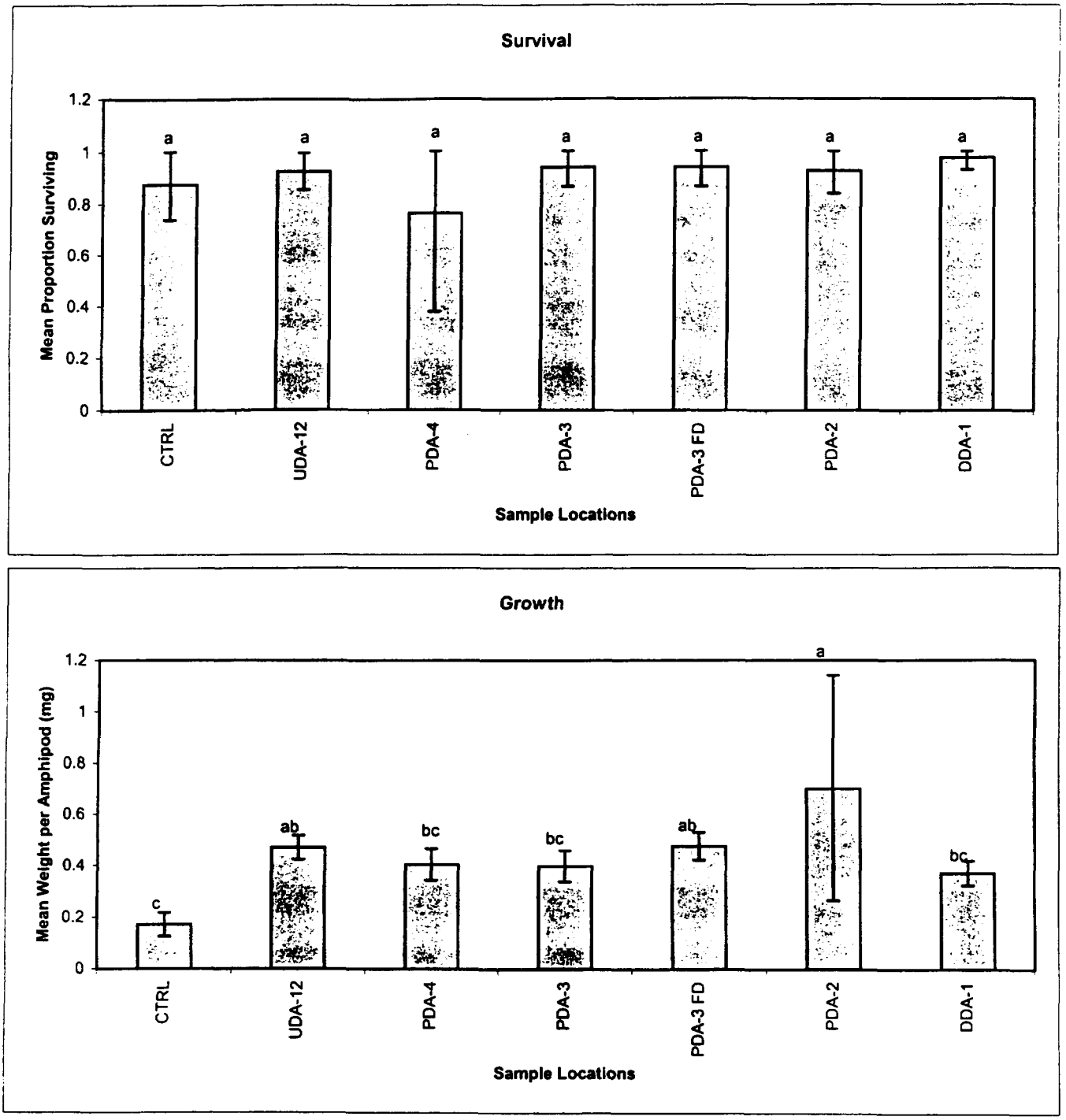
FIGURE C-6
SEDIMENT TOXICITY TESTS - *HYALELLA AZTECA* SURVIVAL AND GROWTH
SANDY SEDIMENT STATIONS
W.G.K. PLANT ECOLOGICAL RISK ASSESSMENT
SAUGET, ILLINOIS





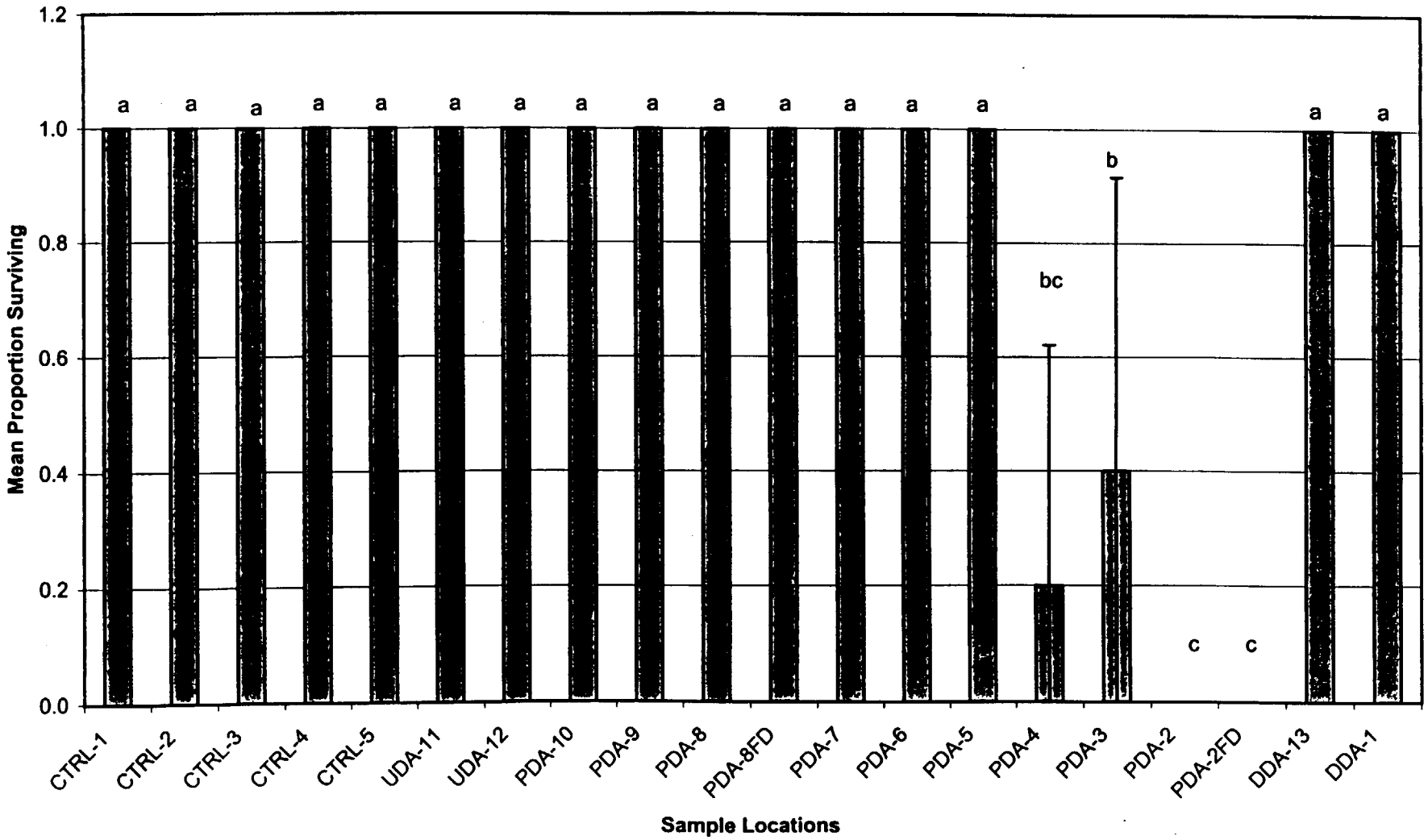
Samples with the same letter are not statistically different.
Error bars show one standard deviation.
* Samples that showed significant effects on survival were excluded from the statistical analysis of the growth data.

FIGURE C-7
SEDIMENT TOXICITY TESTS- *HYALELLA AZTECA* SURVIVAL AND GROWTH
SOFT SEDIMENT STATIONS
W.G.K. PLANT ECOLOGICAL RISK ASSESSMENT
SAUGET, ILLINOIS



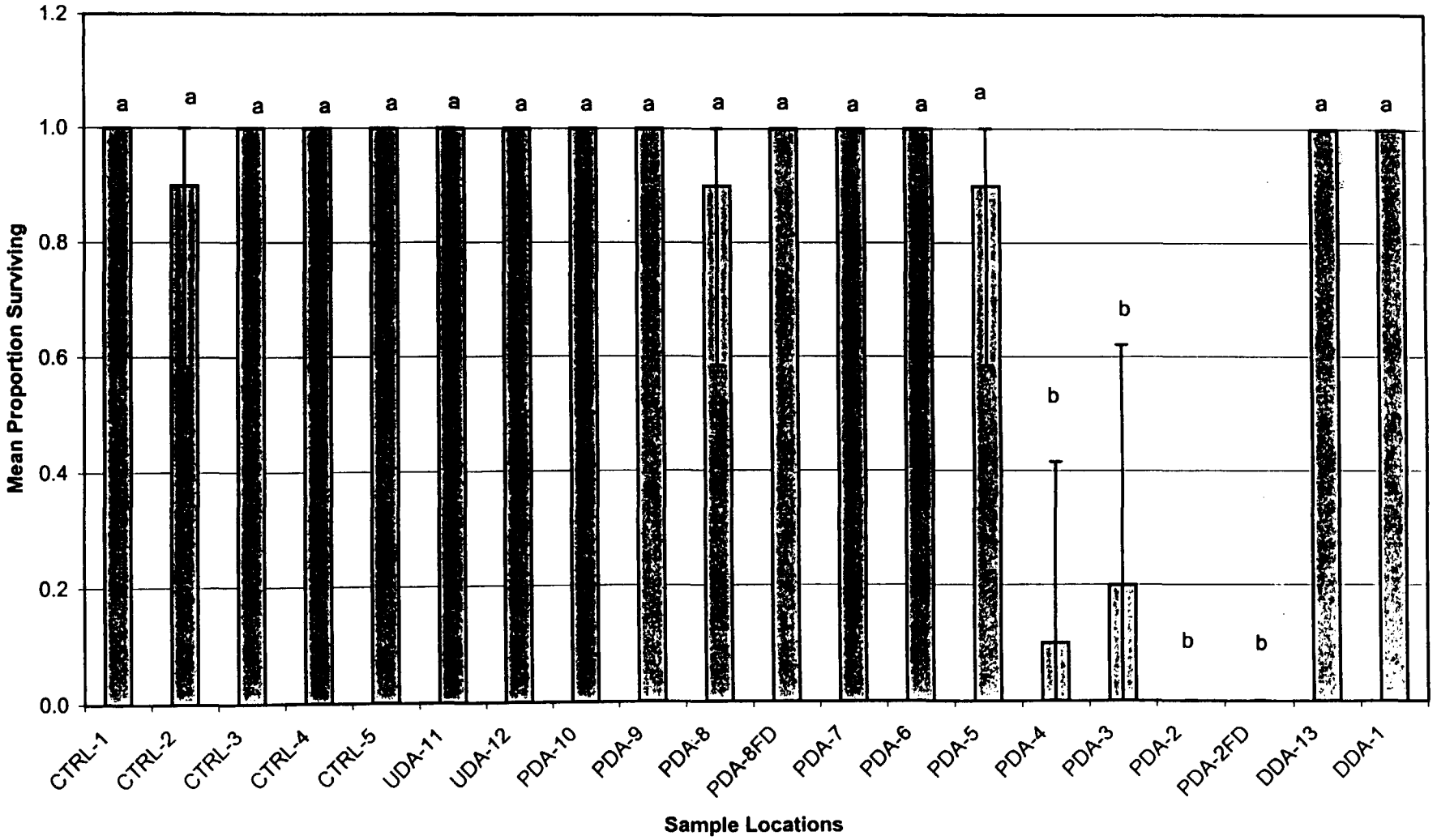
Samples with the same letter are not statistically different.
Error bars show one standard deviation.
* Samples that showed significant effects on survival were excluded from the statistical analysis of the growth data.

FIGURE C-8
SURFACE WATER TOXICITY TESTS - *C. DUBIA* 2-DAY SURVIVAL
W.G.K. PLANT ECOLOGICAL RISK ASSESSMENT
SAUGET, ILLINOIS



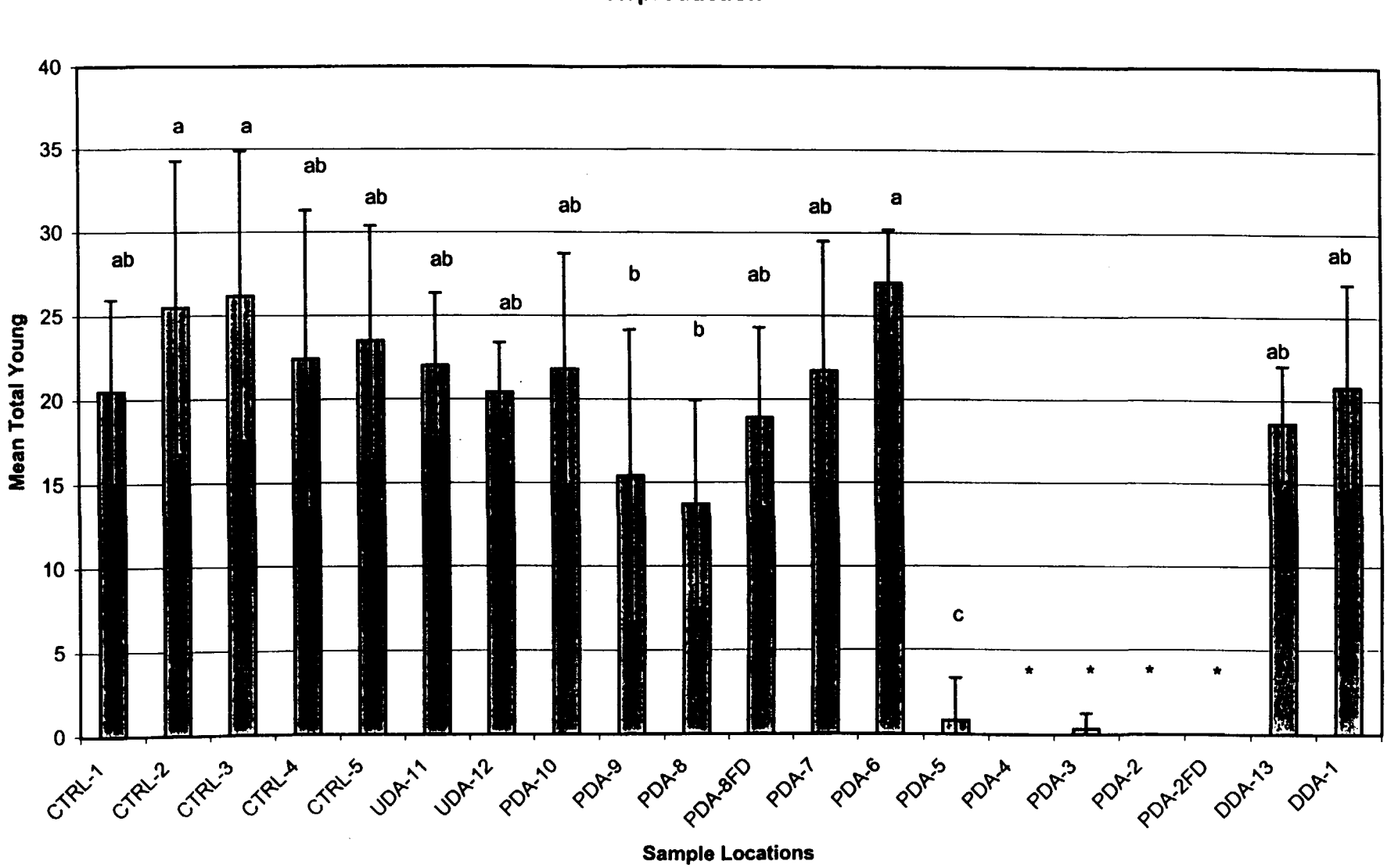
Samples with the same letter are not statistically different.
Error bars show one standard deviation.

FIGURE C-9
SURFACE WATER TOXICITY TESTS - *C. DUBIA* 7-DAY SURVIVAL
W.G.K. PLANT ECOLOGICAL RISK ASSESSMENT
SAUGET, ILLINOIS



Samples with the same letter are not statistically different.
Error bars show one standard deviation.

FIGURE C-10
SURFACE WATER TOXICITY TESTS - *C. DUBIA* REPRODUCTION (TOTAL YOUNG)
W.G.K. PLANT ECOLOGICAL RISK ASSESSMENT
SAUGET, ILLINOIS



Samples with the same letter are not statistically different.
Error bars show one standard deviation.
* Sam[illegible] that showed significant effects on survival [illegible]e excluded from th[illegible]tistical analysis of [illegible] reproduction data.

Table C-1
Toxicity Test Sediment VOCs: PDA-5
WGK Plant Ecological Risk Assessment
Sauget, Illinois

HYALLELA AZTECA SEDIMENT TOXICITY TEST									
	Field		Tox Test		Tox Test		Relative Percent Difference		
Compounds (ug/kg)	Data		Day 0		Day 28		Field & Day 0	Field & Day 28	Day 0 & Day 28
1,2-Dichloroethane	250		130		12		63	182	166
Benzene	460		140		23		107	181	144
Chlorobenzene	1800		760		86		81	182	159
Chloroform	9.7		69	JB	2		NA	132	NA
Ethylbenzene	61		88	U	5		NA	170	NA
4-Methyl-2-pentanone (MIBK)	150		56	J	6		91	185	161
m&p-Xylene	630		250		40		86	176	145
Tetrachloroethene	24		88	U	4		NA	143	NA
Toluene	840		300		37		95	183	156
Trichloroethene	42		88	U	4		NA	165	NA

PIMEPHALES PROMELAS SEDIMENT TOXICITY TEST									
	Field		Tox Test		Tox Test		Relative Percent Difference		
Compounds (ug/kg)	Data		Day 0		Day 3*		Field & Day 0	Field & Day 3	Day 0 & Day 3
1,2-Dichloroethane	250		83		90		100	94	8
Benzene	460		120		140		117	107	15
Chlorobenzene	1800		420		570		124	104	30
Chloroform	9.7		46	JB	42	J	NA	125	NA
Ethylbenzene	61		58	U	30	J	NA	68	NA
m&p-Xylene	630		160		200		119	104	22
Toluene	840		190		260		126	105	31

NA = Not applicable (Relative Percent Difference is not meaningful unless the compound is detected in both samples)
U = Compound not detected; value shown is detection limit
J = Value is estimated
B = Detected in blank; relative percent difference of samples marked with "B" qualifier is not calculated.
Note: Only compounds for which at least one relative percent difference could be calculated are shown in these tables.
* Sample was taken on Day 3 because all fish had died.

Table C-2
Toxicity Test Sediment VOCs: PDA-9
WGK Plant Ecological Risk Assessment
Sauget, Illinois

HYALLELA AZTECA SEDIMENT TOXICITY TEST									
	Field		Tox Test		Tox Test		Relative Percent Difference		
Compounds (ug/kg)	Data		Day 0		Day 28		Field & Day 0	Field & Day 28	Day 0 & Day 28
1,2-Dichloroethane	180		37	J	1		132	198	189
Chlorobenzene	2600		260		11		164	198	184
m&p-Xylene	380		37	J	2		165	198	179
Toluene	330		32	J	1		165	199	188

PIMEPHALES PROMELAS SEDIMENT TOXICITY TEST									
	Field		Tox Test		Tox Test		Relative Percent Difference		
Compounds (ug/kg)	Data		Day 0		Day 7		Field & Day 0	Field & Day 7	Day 0 & Day 7
1,2-Dichloroethane	180		46	J	56	U	119	NA	NA
Chlorobenzene	2600		380		200		149	171	62
m&p-Xylene	380		58	J	33	J	147	168	55
Toluene	330		53	J	31	J	145	166	52

NA = Not applicable (Relative Percent Difference is not meaningful unless the compound is detected in both samples)
U = Compound not detected; value shown is detection limit
J = Value is estimated
Note: Only compounds for which at least one relative percent difference could be calculated are shown in these tables.

FATHEAD MINNOW SURFACE WATER
TOXICITY TEST
STATISTICAL ANALYSIS

WGK Plant Eco Risk Assessment
Fathead Sandy Sediment Survival Statistics

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
SURVTRAN	45	100.0%	0	.0%	45	100.0%

Survival data were transformed using the arcsine square root transformation.

Descriptives

			Statistic	Std. Error
SURVTRAN	Mean		1.0236	9.733E-02
	95% Confidence Interval for Mean	Lower Bound	.8274	
		Upper Bound	1.2197	
	5% Trimmed Mean		1.0500	
	Median		1.3030	
	Variance		.426	
	Std. Deviation		.6529	
	Minimum		.00	
	Maximum		1.57	
	Range		1.57	
	Interquartile Range		1.2976	
	Skewness		-.751	.354
	Kurtosis		-1.211	.695

Tests of Normality

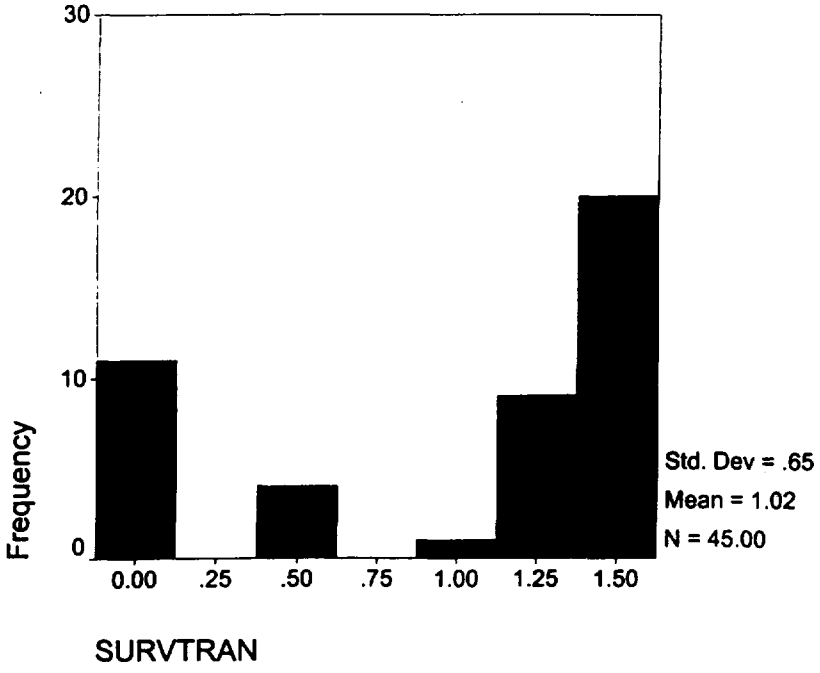
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
SURVTRAN	.266	45	.000	.725	45	.010**

**. This is an upper bound of the true significance.

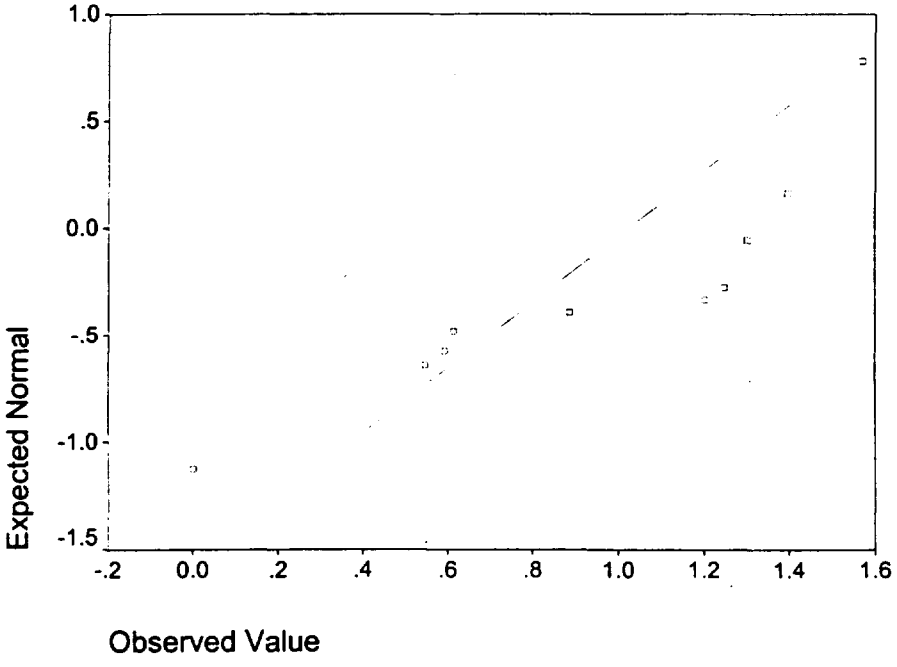
a. Lilliefors Significance Correction

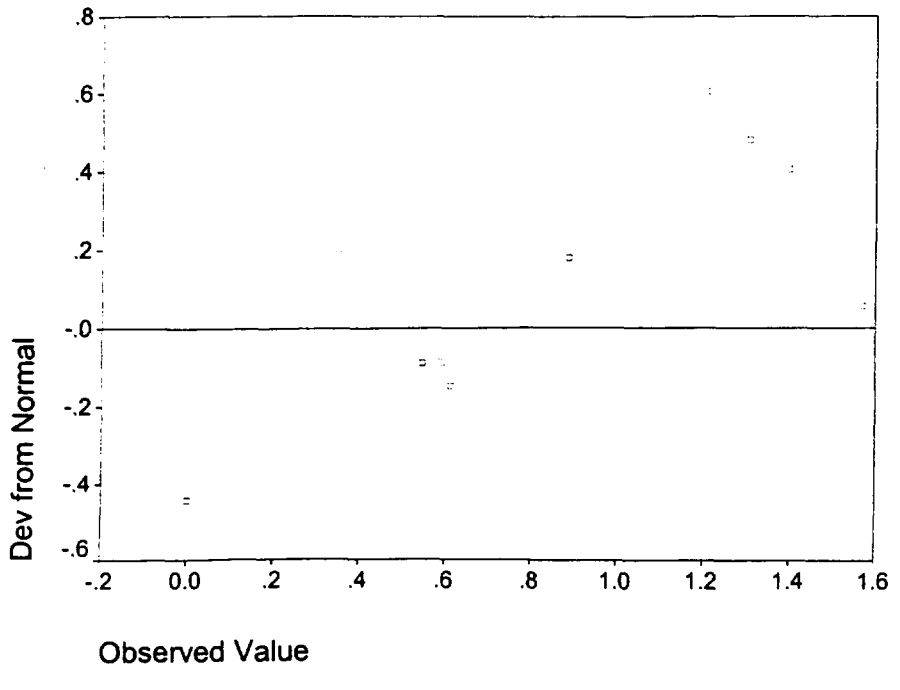
SURVTRAN

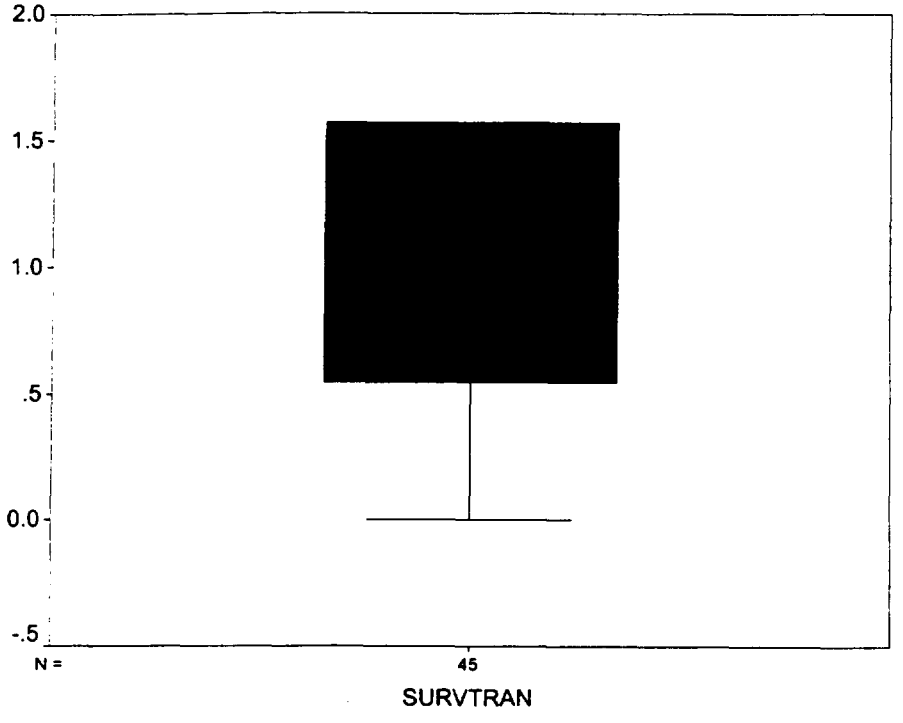
Histogram



Normal Q-Q Plot of SURVTRAN




Detrended Normal Q-Q Plot of SURVTRAN
Dev from Normal
.8
.6
.4
.2
-.0
-.2
-.4
-.6
-.2
0.0
.2
.4
.6
.8
1.0
1.2
1.4
1.6
Observed Value


2.0
1.5
1.0
.5
0.0
-.5
N =
45
SURVTRAN

Oneway

Descriptives

SURVTRAN

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
CTRL	5	1.5172	.1197	5.355E-02	1.3686	1.6659	1.30	1.57
UDA-11	5	1.1495	.6564	.2936	.3345	1.9646	.00	1.57
PDA-8	5	1.4637	.1467	6.559E-02	1.2816	1.6458	1.30	1.57
PDA-9	5	.2448	.3352	.1499	-.1714	.6609	.00	.61
PDA-10	5	1.2378	.4678	.2092	.6569	1.8186	.59	1.57
PDA-5	5	.0000	.0000	.0000	.0000	.0000	.00	.00
PDA-6	5	1.4622	.1639	7.328E-02	1.2587	1.6657	1.20	1.57
PDA-7	5	1.3993	.1581	7.069E-02	1.2031	1.5956	1.25	1.57
DDA-13	5	.7376	.7926	.3545	-.2466	1.7218	.00	1.57
Total	45	1.0236	.6529	9.733E-02	.8274	1.2197	.00	1.57

Test of Homogeneity of Variances

SURVTRAN

Levene Statistic	df1	df2	Sig.
7.590	8	36	.000

ANOVA

SURVTRAN

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12.844	8	1.605	9.776	.000
Within Groups	5.912	36	.164		
Total	18.756	44			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: SURVTRAN
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL	UDA-11	.3677	.256	.877	-.4773	1.2128
	PDA-8	5.355E-02	.256	1.000	-.7915	.8986
	PDA-9	1.2725*	.256	.001	.4274	2.1175
	PDA-10	.2795	.256	.972	-.5656	1.1245
	PDA-5	1.5172*	.256	.000	.6722	2.3623
	PDA-6	5.504E-02	.256	1.000	-.7900	.9001
	PDA-7	.1179	.256	1.000	-.7271	.9630

Multiple Comparisons

Dependent Variable: SURVTRAN

Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL	DDA-13	.7796	.256	.090	-6.5403E-02	1.6247
UDA-11	CTRL	-.3677	.256	.877	-1.2128	.4773
	PDA-8	-.3142	.256	.945	-1.1592	.5309
	PDA-9	.9048*	.256	.028	5.971E-02	1.7498
	PDA-10	-8.8261E-02	.256	1.000	-.9333	.7568
	PDA-5	1.1495*	.256	.002	.3045	1.9946
	PDA-6	-.3127	.256	.947	-1.1577	.5324
	PDA-7	-.2498	.256	.986	-1.0949	.5952
	DDA-13	.4119	.256	.795	-.4331	1.2570
PDA-8	CTRL	-5.3553E-02	.256	1.000	-.8986	.7915
	UDA-11	.3142	.256	.945	-.5309	1.1592
	PDA-9	1.2189*	.256	.001	.3739	2.0640
	PDA-10	.2259	.256	.993	-.6192	1.0709
	PDA-5	1.4637*	.256	.000	.6186	2.3087
	PDA-6	1.484E-03	.256	1.000	-.8436	.8465
	PDA-7	6.435E-02	.256	1.000	-.7807	.9094
	DDA-13	.7261	.256	.141	-.1190	1.5711
PDA-9	CTRL	-1.2725*	.256	.001	-2.1175	-.4274
	UDA-11	-.9048*	.256	.028	-1.7498	-5.9708E-02
	PDA-8	-1.2189*	.256	.001	-2.0640	-.3739
	PDA-10	-.9930*	.256	.011	-1.8381	-.1480
	PDA-5	.2448	.256	.988	-.6003	1.0898
	PDA-6	-1.2174*	.256	.001	-2.0625	-.3724
	PDA-7	-1.1546*	.256	.002	-1.9996	-.3095
	DDA-13	-.4928	.256	.603	-1.3379	.3522
PDA-10	CTRL	-.2795	.256	.972	-1.1245	.5656
	UDA-11	8.826E-02	.256	1.000	-.7568	.9333
	PDA-8	-.2259	.256	.993	-1.0709	.6192
	PDA-9	.9930*	.256	.011	.1480	1.8381
	PDA-5	1.2378*	.256	.001	.3927	2.0828
	PDA-6	-.2244	.256	.993	-1.0695	.6206
	PDA-7	-.1615	.256	.999	-1.0066	.6835
	DDA-13	.5002	.256	.585	-.3449	1.3452
PDA-5	CTRL	-1.5172*	.256	.000	-2.3623	-.6722
	UDA-11	-1.1495*	.256	.002	-1.9946	-.3045
	PDA-8	-1.4637*	.256	.000	-2.3087	-.6186
	PDA-9	-.2448	.256	.988	-1.0898	.6003
	PDA-10	-1.2378*	.256	.001	-2.0828	-.3927
	PDA-6	-1.4622*	.256	.000	-2.3073	-.6172
	PDA-7	-1.3993*	.256	.000	-2.2444	-.5543
	DDA-13	-.7376	.256	.128	-1.5826	.1074

Multiple Comparisons

Dependent Variable: SURVTRAN
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-6	CTRL	-5.5037E-02	.256	1.000	-.9001	.7900
	UDA-11	.3127	.256	.947	-.5324	1.1577
	PDA-8	-1.4839E-03	.256	1.000	-.8465	.8436
	PDA-9	1.2174*	.256	.001	.3724	2.0625
	PDA-10	.2244	.256	.993	-.6206	1.0695
	PDA-5	1.4622*	.256	.000	.6172	2.3073
	PDA-7	6.287E-02	.256	1.000	-.7822	.9079
	DDA-13	.7246	.256	.143	-.1204	1.5697
PDA-7	CTRL	-.1179	.256	1.000	-.9630	.7271
	UDA-11	.2498	.256	.986	-.5952	1.0949
	PDA-8	-6.4350E-02	.256	1.000	-.9094	.7807
	PDA-9	1.1546*	.256	.002	.3095	1.9996
	PDA-10	.1615	.256	.999	-.6835	1.0066
	PDA-5	1.3993*	.256	.000	.5543	2.2444
	PDA-6	-6.2866E-02	.256	1.000	-.9079	.7822
	DDA-13	.6617	.256	.229	-.1833	1.5068
DDA-13	CTRL	-.7796	.256	.090	-1.6247	6.540E-02
	UDA-11	-.4119	.256	.795	-1.2570	.4331
	PDA-8	-.7261	.256	.141	-1.5711	.1190
	PDA-9	.4928	.256	.603	-.3522	1.3379
	PDA-10	-.5002	.256	.585	-1.3452	.3449
	PDA-5	.7376	.256	.128	-.1074	1.5826
	PDA-6	-.7246	.256	.143	-1.5697	.1204
	PDA-7	-.6617	.256	.229	-1.5068	.1833

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

SURVTRAN

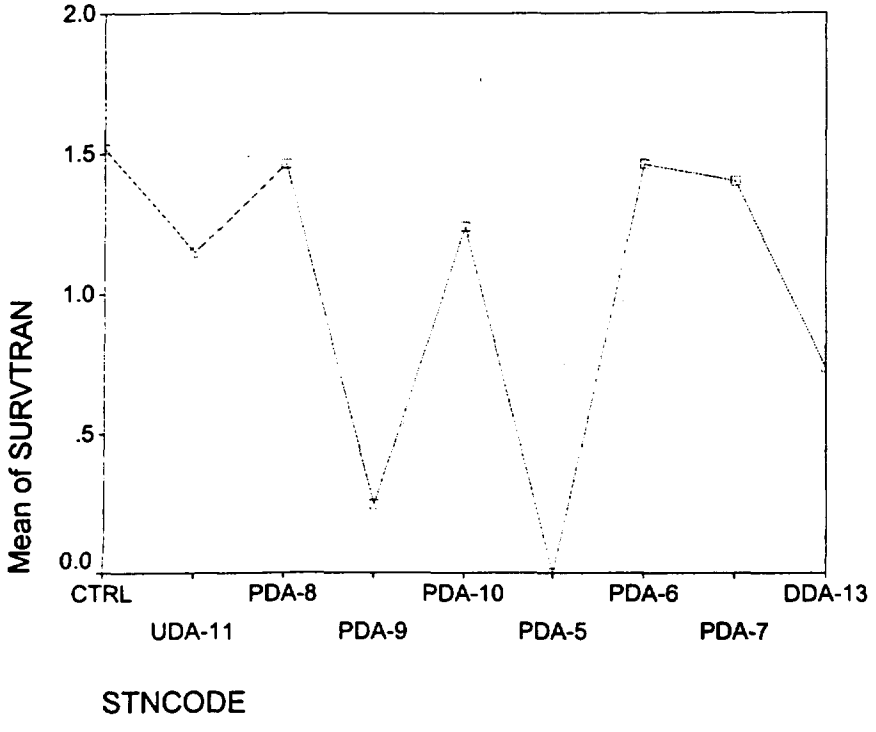
Tukey HSD[a]

STNCODE	N	Subset for alpha = .05	
		1	2
PDA-5	5	.0000	
PDA-9	5	.2448	
DDA-13	5	.7376	.7376
UDA-11	5		1.1495
PDA-10	5		1.2378
PDA-7	5		1.3993
PDA-6	5		1.4622
PDA-8	5		1.4637
CTRL	5		1.5172
Sig.		.128	.090

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.000.

Means Plots



WGK Plant Eco Risk Assessment
Fathead Soft Sediment Survival Statistics

Case Processing Summary

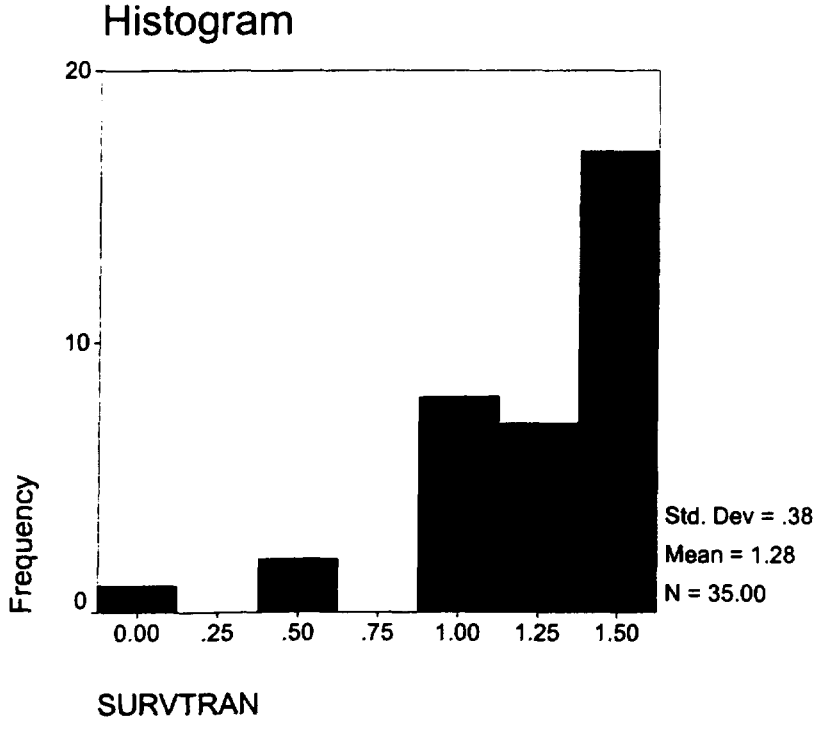
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
SURVTRAN	35	100.0%	0	.0%	35	100.0%

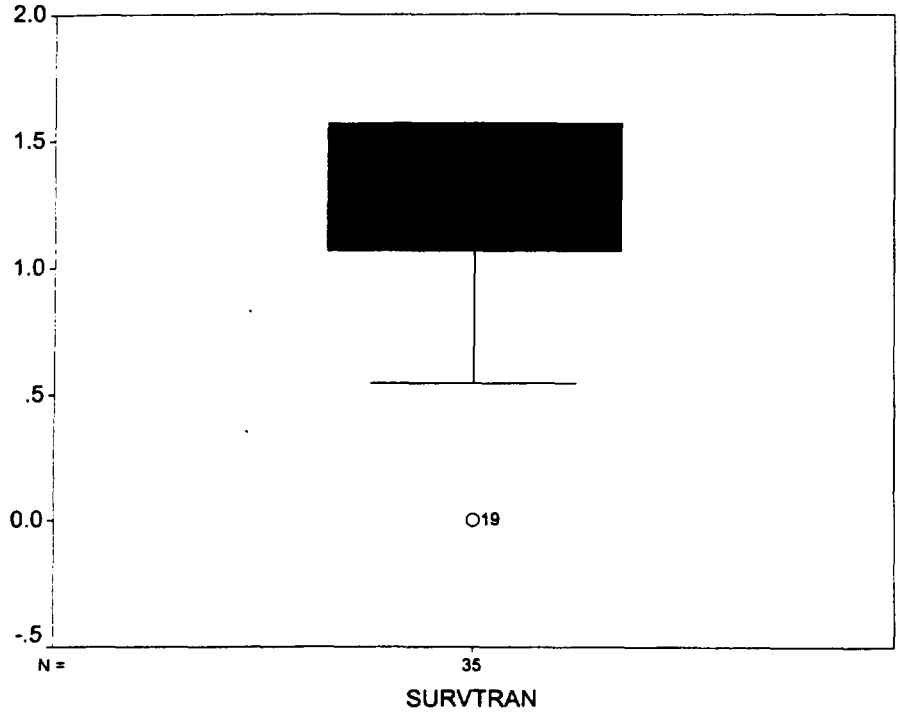
Survival data were transformed using the arcsine square root transformation.

Descriptives

			Statistic	Std. Error
SURVTRAN	Mean		1.2773	6.421E-02
	95% Confidence Interval for Mean	Lower Bound	1.1468	
		Upper Bound	1.4077	
	5% Trimmed Mean		1.3189	
	Median		1.3030	
	Variance		.144	
	Std. Deviation		.3799	
	Minimum		.00	
	Maximum		1.57	
	Range		1.57	
	Interquartile Range		.5464	
	Skewness		-1.524	.398
	Kurtosis		2.517	.778

SURVTRAN





Oneway ANOVA

Descriptives

SURVTRAN

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
CTRL	5	1.5172	.1197	5.355E-02	1.3686	1.6659	1.30	1.57
UDA-12	5	1.3364	.1382	6.179E-02	1.1648	1.5079	1.20	1.57
PDA-2	5	1.4245	.2119	9.478E-02	1.1614	1.6877	1.11	1.57
PDA-3	5	.6831	.4240	.1896	.1567	1.2096	.00	1.02
PDA-3 FD	5	.8915	.2090	9.346E-02	.6320	1.1510	.55	1.11
PDA-4	5	1.5708	.0000	.0000	1.5708	1.5708	1.57	1.57
DDA-1	5	1.5172	.1197	5.355E-02	1.3686	1.6659	1.30	1.57
Total	35	1.2773	.3799	6.421E-02	1.1468	1.4077	.00	1.57

Test of Homogeneity of Variances

SURVTRAN

Levene Statistic	df1	df2	Sig.
4.151	6	28	.004

ANOVA

SURVTRAN

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.642	6	.607	13.440	.000
Within Groups	1.264	28	4.516E-02		
Total	4.906	34			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: SURVTRAN
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL	UDA-12	.1809	.134	.825	-.2455	.6072
	PDA-2	9.273E-02	.134	.992	-.3336	.5191
	PDA-3	.8341*	.134	.000	.4078	1.2604
	PDA-3 FD	.6258*	.134	.001	.1994	1.0521
	PDA-4	-5.3553E-02	.134	1.000	-.4799	.3728
	DDA-1	.0000	.134	1.000	-.4263	.4263
UDA-12	CTRL	-.1809	.134	.825	-.6072	.2455
	PDA-2	-8.8148E-02	.134	.994	-.5145	.3382
	PDA-3	.6532*	.134	.001	.2269	1.0796
	PDA-3 FD	.4449*	.134	.037	1.855E-02	.8712
	PDA-4	-.2344	.134	.594	-.6608	.1919
	DDA-1	-.1809	.134	.825	-.6072	.2455
PDA-2	CTRL	-9.2730E-02	.134	.992	-.5191	.3336
	UDA-12	8.815E-02	.134	.994	-.3382	.5145
	PDA-3	.7414*	.134	.000	.3150	1.1677
	PDA-3 FD	.5330*	.134	.007	.1067	.9594
	PDA-4	-.1463	.134	.926	-.5726	.2801
	DDA-1	-9.2730E-02	.134	.992	-.5191	.3336
PDA-3	CTRL	-.8341*	.134	.000	-1.2604	-.4078
	UDA-12	-.6532*	.134	.001	-1.0796	-.2269
	PDA-2	-.7414*	.134	.000	-1.1677	-.3150
	PDA-3 FD	-.2083	.134	.713	-.6347	.2180
	PDA-4	-.8877*	.134	.000	-1.3140	-.4613
	DDA-1	-.8341*	.134	.000	-1.2604	-.4078
PDA-3 FD	CTRL	-.6258*	.134	.001	-1.0521	-.1994
	UDA-12	-.4449*	.134	.037	-.8712	-1.8552E-02
	PDA-2	-.5330*	.134	.007	-.9594	-.1067
	PDA-3	.2083	.134	.713	-.2180	.6347
	PDA-4	-.6793*	.134	.000	-1.1057	-.2530
	DDA-1	-.6258*	.134	.001	-1.0521	-.1994
PDA-4	CTRL	5.355E-02	.134	1.000	-.3728	.4799
	UDA-12	.2344	.134	.594	-.1919	.6608
	PDA-2	.1463	.134	.926	-.2801	.5726
	PDA-3	.8877*	.134	.000	.4613	1.3140
	PDA-3 FD	.6793*	.134	.000	.2530	1.1057
	DDA-1	5.355E-02	.134	1.000	-.3728	.4799
DDA-1	CTRL	.0000	.134	1.000	-.4263	.4263
	UDA-12	.1809	.134	.825	-.2455	.6072
	PDA-2	9.273E-02	.134	.992	-.3336	.5191
	PDA-3	.8341*	.134	.000	.4078	1.2604
	PDA-3 FD	.6258*	.134	.001	.1994	1.0521
	PDA-4	-5.3553E-02	.134	1.000	-.4799	.3728

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

SURVTRAN

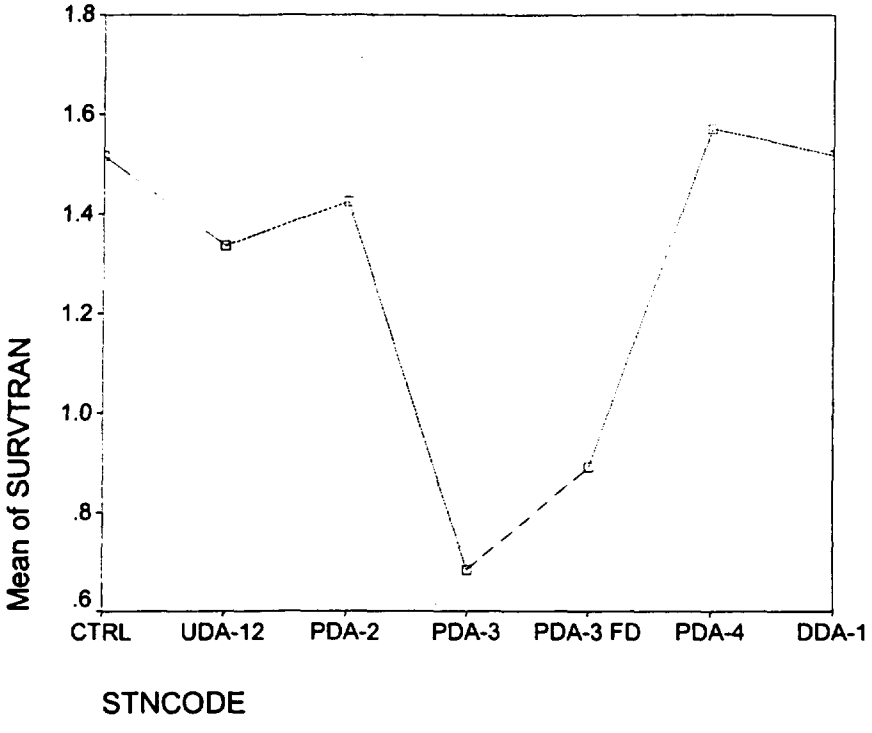
Tukey HSD[a]

STNCODE	N	Subset for alpha = .05	
		1	2
PDA-3	5	.6831	
PDA-3 FD	5	.8915	
UDA-12	5		1.3364
PDA-2	5		1.4245
CTRL	5		1.5172
DDA-1	5		1.5172
PDA-4	5		1.5708
Sig.		.713	.594

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.000.

Means Plots



WGK Plant Eco Risk Assessment
Fathead Sandy Sediment Growth Statistics

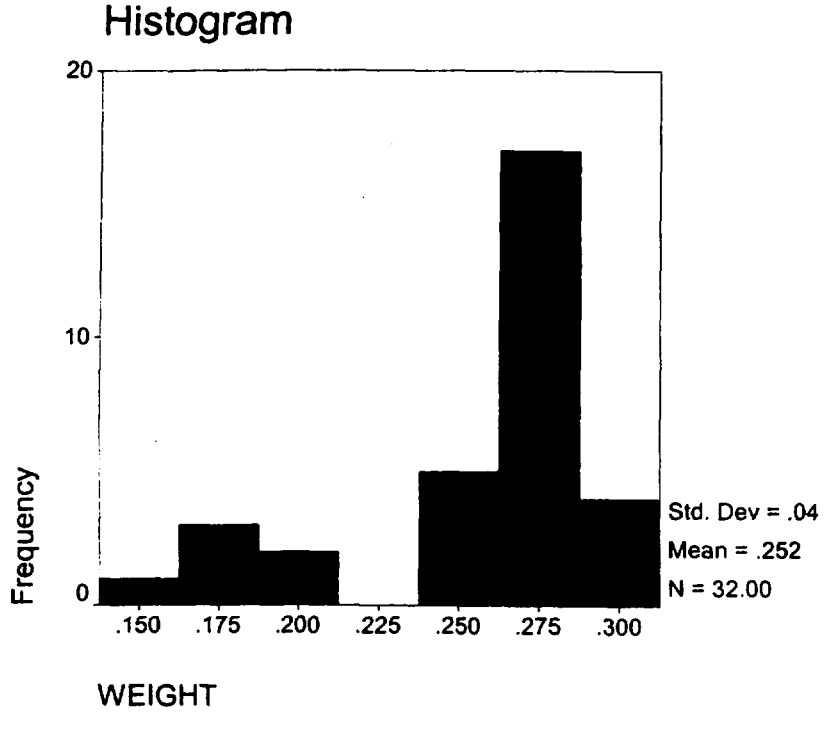
Case Processing Summary

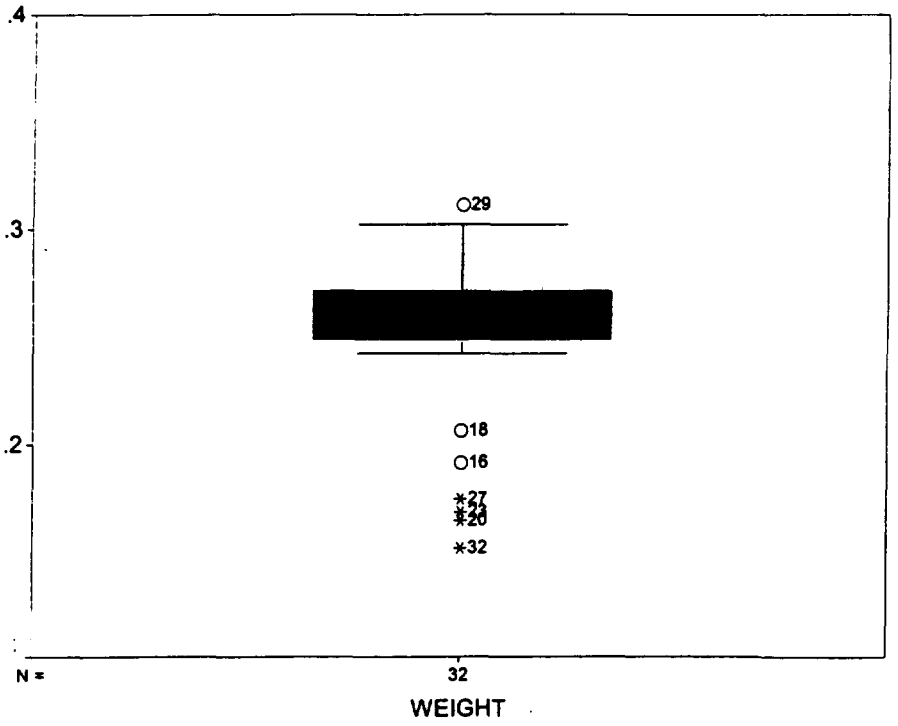
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
WEIGHT	32	91.4%	3	8.6%	35	100.0%

Descriptives

			Statistic	Std. Error
WEIGHT	Mean		.25216	7.225E-03
	95% Confidence Interval for Mean	Lower Bound	.23742	
		Upper Bound	.26689	
	5% Trimmed Mean		.25442	
	Median		.26500	
	Variance		1.671E-03	
	Std. Deviation		4.087E-02	
	Minimum		.151	
	Maximum		.311	
	Range		.160	
	Interquartile Range		2.425E-02	
	Skewness		-1.277	.414
	Kurtosis		.879	.809

WEIGHT





Oneway ANOVA

Descriptives

WEIGHT

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
CTRL	5	.26600	2.4495E-03	1.095E-03	.26296	.26904	.263	.269
UDA-11	4	.26725	4.3493E-03	2.175E-03	.26033	.27417	.263	.271
PDA-8	5	.27320	2.2906E-02	1.024E-02	.24476	.30164	.242	.300
PDA-10	5	.22320	5.2007E-02	2.326E-02	.15863	.28777	.164	.284
PDA-6	5	.25300	5.0299E-02	2.249E-02	.19055	.31545	.168	.302
PDA-7	5	.25000	4.9624E-02	2.219E-02	.18838	.31162	.174	.311
DDA-13	3	.22433	6.4010E-02	3.696E-02	6.5323E-02	.38334	.151	.269
Total	32	.25216	4.0873E-02	7.225E-03	.23742	.26689	.151	.311

Test of Homogeneity of Variances

WEIGHT

Levene Statistic	df1	df2	Sig.
3.090	6	25	.021

ANOVA

WEIGHT

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.063E-02	6	1.771E-03	1.076	.403
Within Groups	4.116E-02	25	1.647E-03		
Total	5.179E-02	31			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: WEIGHT
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL	UDA-11	-1.250E-03	.027	1.000	-8.836E-02	8.5861E-02
	PDA-8	-7.200E-03	.026	1.000	-8.933E-02	7.4929E-02
	PDA-10	4.2800E-02	.026	.642	-3.933E-02	.12493
	PDA-6	1.3000E-02	.026	.999	-6.913E-02	9.5129E-02
	PDA-7	1.6000E-02	.026	.995	-6.613E-02	9.8129E-02
	DDA-13	4.1667E-02	.030	.794	-5.317E-02	.13650
UDA-11	CTRL	1.2500E-03	.027	1.000	-8.586E-02	8.8361E-02
	PDA-8	-5.950E-03	.027	1.000	-9.306E-02	8.1161E-02
	PDA-10	4.4050E-02	.027	.672	-4.306E-02	.13116
	PDA-6	1.4250E-02	.027	.998	-7.286E-02	.10136
	PDA-7	1.7250E-02	.027	.995	-6.986E-02	.10436
	DDA-13	4.2917E-02	.031	.805	-5.626E-02	.14210
PDA-8	CTRL	7.2000E-03	.026	1.000	-7.493E-02	8.9329E-02
	UDA-11	5.9500E-03	.027	1.000	-8.116E-02	9.3061E-02
	PDA-10	5.0000E-02	.026	.470	-3.213E-02	.13213
	PDA-6	2.0200E-02	.026	.984	-6.193E-02	.10233
	PDA-7	2.3200E-02	.026	.969	-5.893E-02	.10533
	DDA-13	4.8867E-02	.030	.654	-4.597E-02	.14370
PDA-10	CTRL	-4.280E-02	.026	.642	-.12493	3.9329E-02
	UDA-11	-4.405E-02	.027	.672	-.13116	4.3061E-02
	PDA-8	-5.000E-02	.026	.470	-.13213	3.2129E-02
	PDA-6	-2.980E-02	.026	.902	-.11193	5.2329E-02
	PDA-7	-2.680E-02	.026	.938	-.10893	5.5329E-02
	DDA-13	-1.133E-03	.030	1.000	-9.597E-02	9.3701E-02
PDA-6	CTRL	-1.300E-02	.026	.999	-9.513E-02	6.9129E-02
	UDA-11	-1.425E-02	.027	.998	-.10136	7.2861E-02
	PDA-8	-2.020E-02	.026	.984	-.10233	6.1929E-02
	PDA-10	2.9800E-02	.026	.902	-5.233E-02	.11193
	PDA-7	3.0000E-03	.026	1.000	-7.913E-02	8.5129E-02
	DDA-13	2.8667E-02	.030	.957	-6.617E-02	.12350
PDA-7	CTRL	-1.600E-02	.026	.995	-9.813E-02	6.6129E-02
	UDA-11	-1.725E-02	.027	.995	-.10436	6.9861E-02
	PDA-8	-2.320E-02	.026	.969	-.10533	5.8929E-02
	PDA-10	2.6800E-02	.026	.938	-5.533E-02	.10893
	PDA-6	-3.000E-03	.026	1.000	-8.513E-02	7.9129E-02
	DDA-13	2.5667E-02	.030	.974	-6.917E-02	.12050
DDA-13	CTRL	-4.167E-02	.030	.794	-.13650	5.3167E-02
	UDA-11	-4.292E-02	.031	.805	-.14210	5.6263E-02
	PDA-8	-4.887E-02	.030	.654	-.14370	4.5967E-02
	PDA-10	1.1333E-03	.030	1.000	-9.370E-02	9.5967E-02
	PDA-6	-2.867E-02	.030	.957	-.12350	6.6167E-02
	PDA-7	-2.567E-02	.030	.974	-.12050	6.9167E-02

Homogeneous Subsets

WEIGHT

Tukey HSD[a,b]

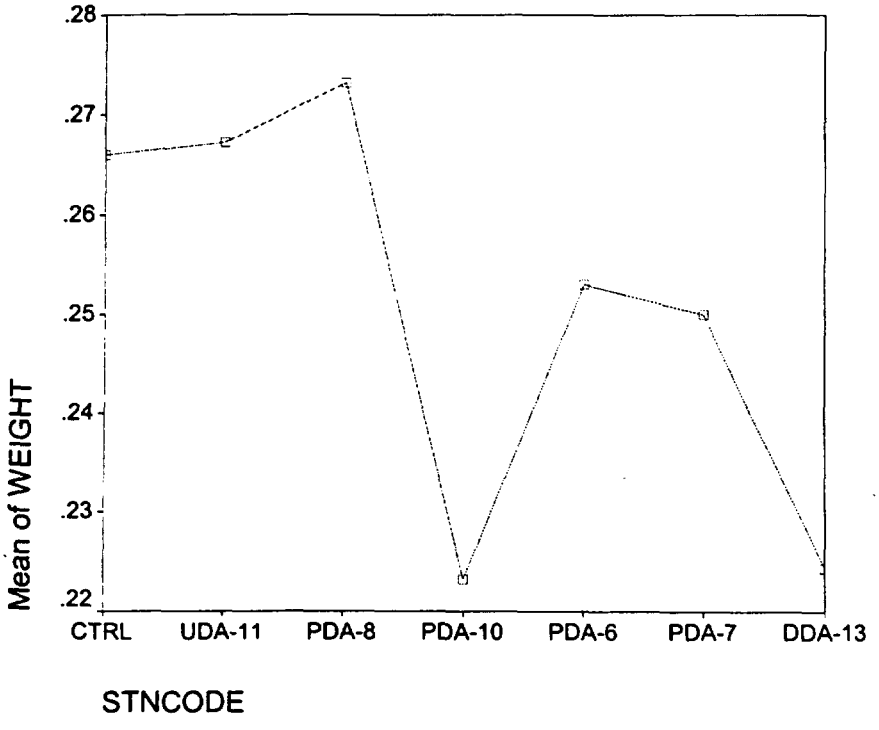
STNCODE	N	Subset for alpha = .05
		1
PDA-10	5	.22320
DDA-13	3	.22433
PDA-7	5	.25000
PDA-6	5	.25300
CTRL	5	.26600
UDA-11	4	.26725
PDA-8	5	.27320
Sig.		.540

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.421.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Means Plots



WGK Plant Eco Risk Assessment
Fathead Soft Sediment Growth Statistics

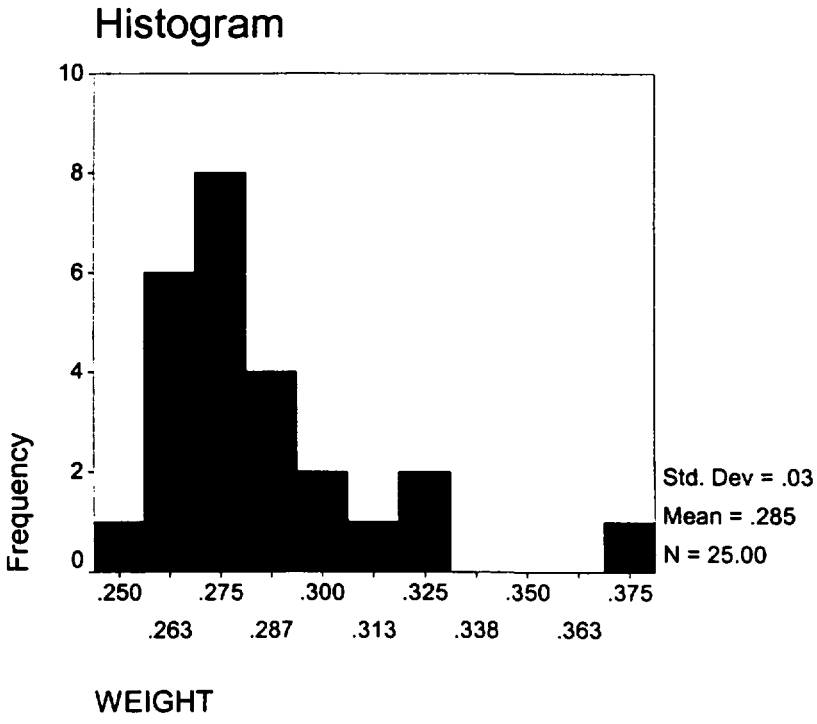
Case Processing Summary

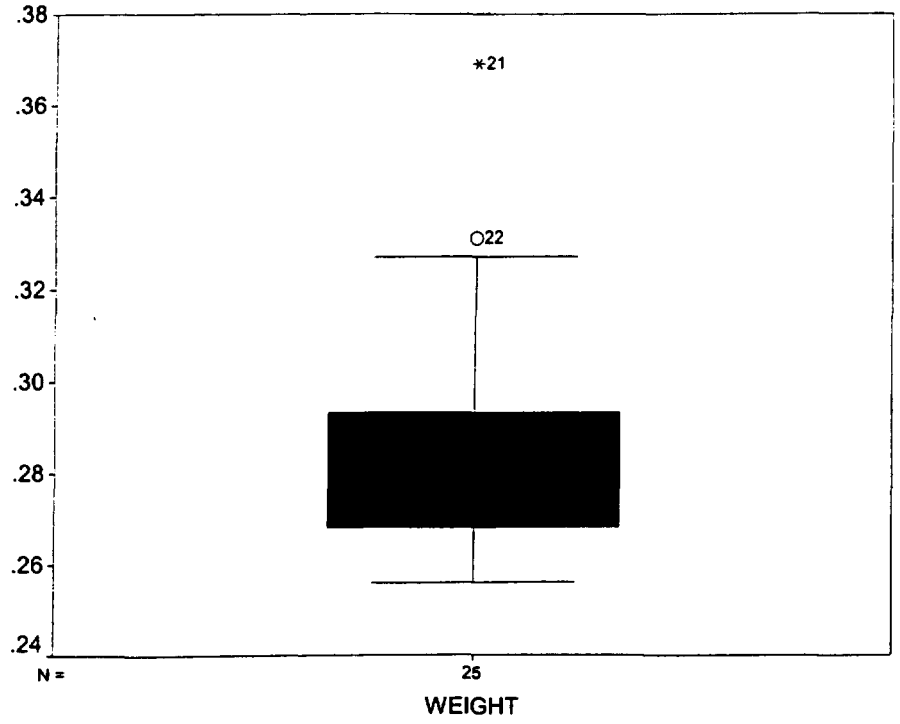
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
WEIGHT	25	100.0%	0	.0%	25	100.0%

Descriptives

			Statistic	Std. Error
WEIGHT	Mean		.28512	5.284E-03
	95% Confidence Interval for Mean	Lower Bound	.27421	
		Upper Bound	.29603	
	5% Trimmed Mean		.28249	
	Median		.27700	
	Variance		6.979E-04	
	Std. Deviation		2.642E-02	
	Minimum		.256	
	Maximum		.369	
	Range		.113	
	Interquartile Range		2.900E-02	
	Skewness		1.672	.464
	Kurtosis		3.171	.902

WEIGHT





Oneway

Descriptives

WEIGHT

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
CTRL	5	.26600	2.4495E-03	1.095E-03	.26296	.26904	.263	.269
UDA-12	5	.28000	1.5984E-02	7.148E-03	.26015	.29985	.257	.298
PDA-2	5	.29720	2.6442E-02	1.183E-02	.26437	.33003	.256	.327
PDA-4	5	.27600	1.0770E-02	4.817E-03	.26263	.28937	.263	.290
DDA-1	5	.30640	4.2057E-02	1.881E-02	.25418	.35862	.274	.369
Total	25	.28512	2.6419E-02	5.284E-03	.27421	.29603	.256	.369

Test of Homogeneity of Variances

WEIGHT

Levene Statistic	df1	df2	Sig.
6.127	4	20	.002

ANOVA

WEIGHT

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.369E-03	4	1.342E-03	2.358	.088
Within Groups	1.138E-02	20	5.691E-04		
Total	1.675E-02	24			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: WEIGHT
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL	UDA-12	-1.400E-02	.015	.883	-5.915E-02	3.1149E-02
	PDA-2	-3.120E-02	.015	.272	-7.635E-02	1.3949E-02
	PDA-4	-1.000E-02	.015	.962	-5.515E-02	3.5149E-02
	DDA-1	-4.040E-02	.015	.093	-8.555E-02	4.7486E-03
UDA-12	CTRL	1.4000E-02	.015	.883	-3.115E-02	5.9149E-02
	PDA-2	-1.720E-02	.015	.784	-6.235E-02	2.7949E-02
	PDA-4	4.0000E-03	.015	.999	-4.115E-02	4.9149E-02
	DDA-1	-2.640E-02	.015	.428	-7.155E-02	1.8749E-02
PDA-2	CTRL	3.1200E-02	.015	.272	-1.395E-02	7.6349E-02
	UDA-12	1.7200E-02	.015	.784	-2.795E-02	6.2349E-02
	PDA-4	2.1200E-02	.015	.632	-2.395E-02	6.6349E-02
	DDA-1	-9.200E-03	.015	.972	-5.435E-02	3.5949E-02
PDA-4	CTRL	1.0000E-02	.015	.962	-3.515E-02	5.5149E-02
	UDA-12	-4.000E-03	.015	.999	-4.915E-02	4.1149E-02
	PDA-2	-2.120E-02	.015	.632	-6.635E-02	2.3949E-02
	DDA-1	-3.040E-02	.015	.295	-7.555E-02	1.4749E-02
DDA-1	CTRL	4.0400E-02	.015	.093	-4.749E-03	8.5549E-02
	UDA-12	2.6400E-02	.015	.428	-1.875E-02	7.1549E-02
	PDA-2	9.2000E-03	.015	.972	-3.595E-02	5.4349E-02
	PDA-4	3.0400E-02	.015	.295	-1.475E-02	7.5549E-02

Homogeneous Subsets

WEIGHT

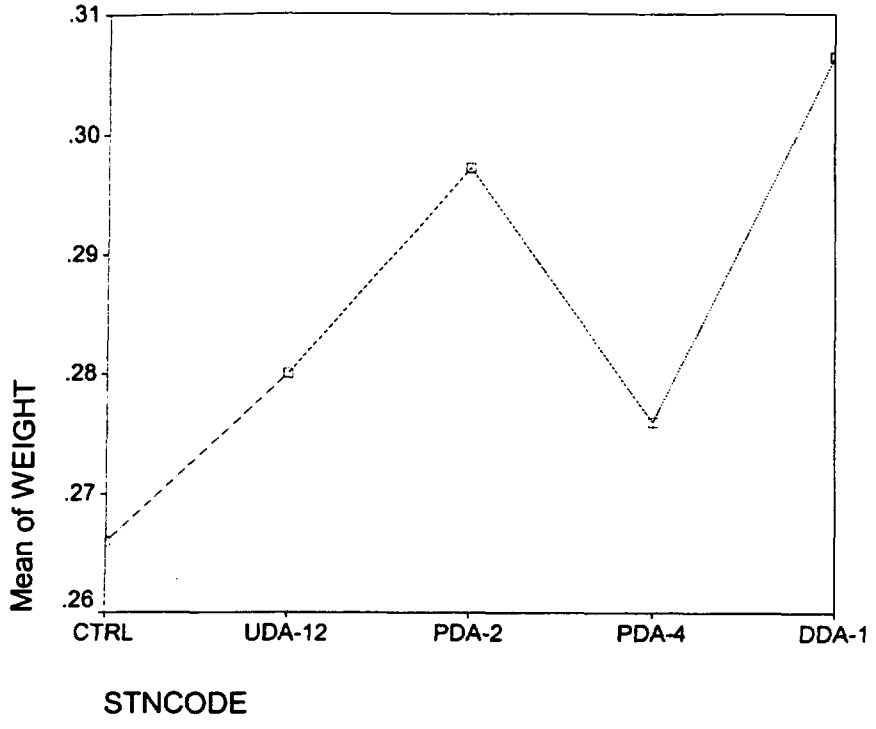
Tukey HSD[a]

STNCODE	N	Subset for alpha = .05
		1
CTRL	5	.26600
PDA-4	5	.27600
UDA-12	5	.28000
PDA-2	5	.29720
DDA-1	5	.30640
Sig.		.093

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.000.

Means Plots



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	stncode	station	survival	survtran	weight
1	1.00	CTRL	1.00	1.57	.27
2	1.00	CTRL	1.00	1.57	.27
3	1.00	CTRL	1.00	1.57	.26
4	1.00	CTRL	.93	1.30	.27
5	1.00	CTRL	1.00	1.57	.27
6	2.00	UDA-11	1.00	1.57	.27
7	2.00	UDA-11	.93	1.30	.26
8	2.00	UDA-11	1.00	1.57	.26
9	2.00	UDA-11	.93	1.30	.27
10	2.00	UDA-11	.00	.00	.
11	4.00	PDA-8	1.00	1.57	.29
12	4.00	PDA-8	.93	1.30	.27
13	4.00	PDA-8	1.00	1.57	.27
14	4.00	PDA-8	1.00	1.57	.30
15	4.00	PDA-8	.93	1.30	.24
16	5.00	PDA-9	.00	.00	.
17	5.00	PDA-9	.00	.00	.
18	5.00	PDA-9	.00	.00	.
19	5.00	PDA-9	.33	.61	.11
20	5.00	PDA-9	.33	.61	.10
21	6.00	PDA-10	.60	.89	.19
22	6.00	PDA-10	1.00	1.57	.27
23	6.00	PDA-10	1.00	1.57	.21
24	6.00	PDA-10	1.00	1.57	.28
25	6.00	PDA-10	.31	.59	.16
26	7.00	PDA-5	.00	.00	.
27	7.00	PDA-5	.00	.00	.
28	7.00	PDA-5	.00	.00	.
29	7.00	PDA-5	.00	.00	.

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	stncode	station	survival	survtran	weight
30	7.00	PDA-5	.00	.00	.
31	8.00	PDA-6	1.00	1.57	.26
32	8.00	PDA-6	1.00	1.57	.27
33	8.00	PDA-6	.97	1.40	.17
34	8.00	PDA-6	1.00	1.57	.30
35	8.00	PDA-6	.87	1.20	.26
36	9.00	PDA-7	1.00	1.57	.25
37	9.00	PDA-7	.90	1.25	.17
38	9.00	PDA-7	.93	1.30	.25
39	9.00	PDA-7	.93	1.30	.31
40	9.00	PDA-7	1.00	1.57	.27
41	14.00	DDA-13	1.00	1.57	.25
42	14.00	DDA-13	.27	.55	.15
43	14.00	DDA-13	1.00	1.57	.27
44	14.00	DDA-13	.00	.00	.
45	14.00	DDA-13	.00	.00	.

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	stncode	station	survival	survtran	weight
1	1.00	CTRL	1.00	1.57	.27
2	1.00	CTRL	1.00	1.57	.27
3	1.00	CTRL	1.00	1.57	.26
4	1.00	CTRL	.93	1.30	.27
5	1.00	CTRL	1.00	1.57	.27
6	3.00	UDA-12	.93	1.30	.26
7	3.00	UDA-12	.93	1.30	.30
8	3.00	UDA-12	1.00	1.57	.28
9	3.00	UDA-12	.93	1.30	.29
10	3.00	UDA-12	.87	1.20	.28
11	10.00	PDA-2	1.00	1.57	.31
12	10.00	PDA-2	.80	1.11	.26
13	10.00	PDA-2	1.00	1.57	.30
14	10.00	PDA-2	.93	1.30	.33
15	10.00	PDA-2	1.00	1.57	.29
16	11.00	PDA-3	.60	.89	.20
17	11.00	PDA-3	.27	.55	.16
18	11.00	PDA-3	.67	.96	.24
19	11.00	PDA-3	.00	.00	.
20	11.00	PDA-3	.73	1.02	.26
21	12.00	PDA-3 FD	.67	.96	.25
22	12.00	PDA-3 FD	.60	.89	.24
23	12.00	PDA-3 FD	.80	1.11	.25
24	12.00	PDA-3 FD	.67	.96	.22
25	12.00	PDA-3 FD	.27	.55	.13
26	13.00	PDA-4	1.00	1.57	.27
27	13.00	PDA-4	1.00	1.57	.26
28	13.00	PDA-4	1.00	1.57	.29
29	13.00	PDA-4	1.00	1.57	.28

	stncode	station	survival	survtran	weight
30	13.00	PDA-4	1.00	1.57	.28
31	15.00	DDA-1	.93	1.30	.37
32	15.00	DDA-1	1.00	1.57	.33
33	15.00	DDA-1	1.00	1.57	.27
34	15.00	DDA-1	1.00	1.57	.28
35	15.00	DDA-1	1.00	1.57	.28

FATHEAD MINNOW SEDIMENT
TOXICITY TEST
STATISTICAL ANALYSIS

WGK Plant Eco Risk Assessment
Fathead Surface Water Two-Day Survival Statistics

Case Processing Summary

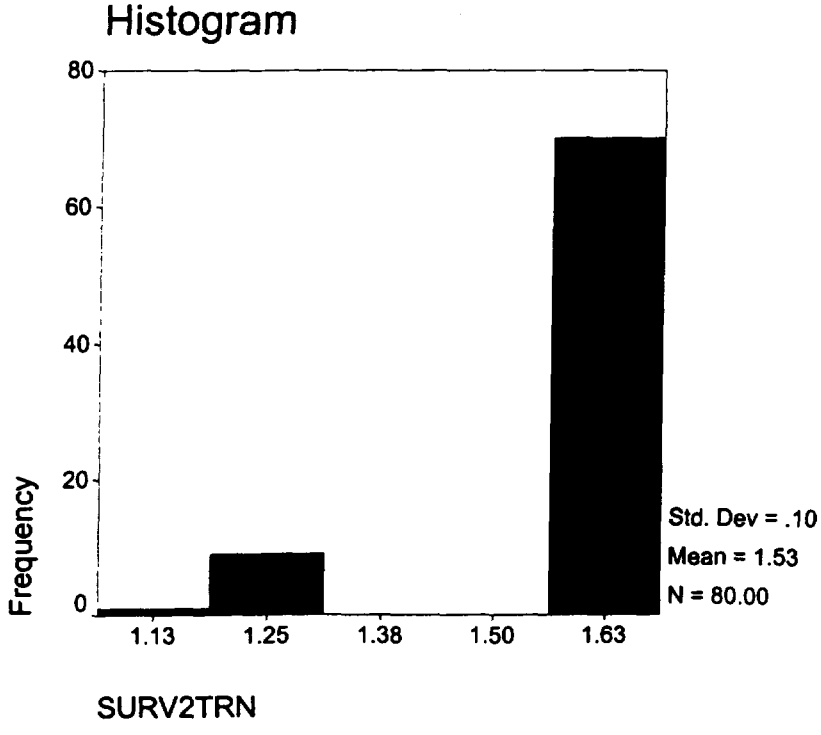
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
SURV2TRN	80	100.0%	0	.0%	80	100.0%

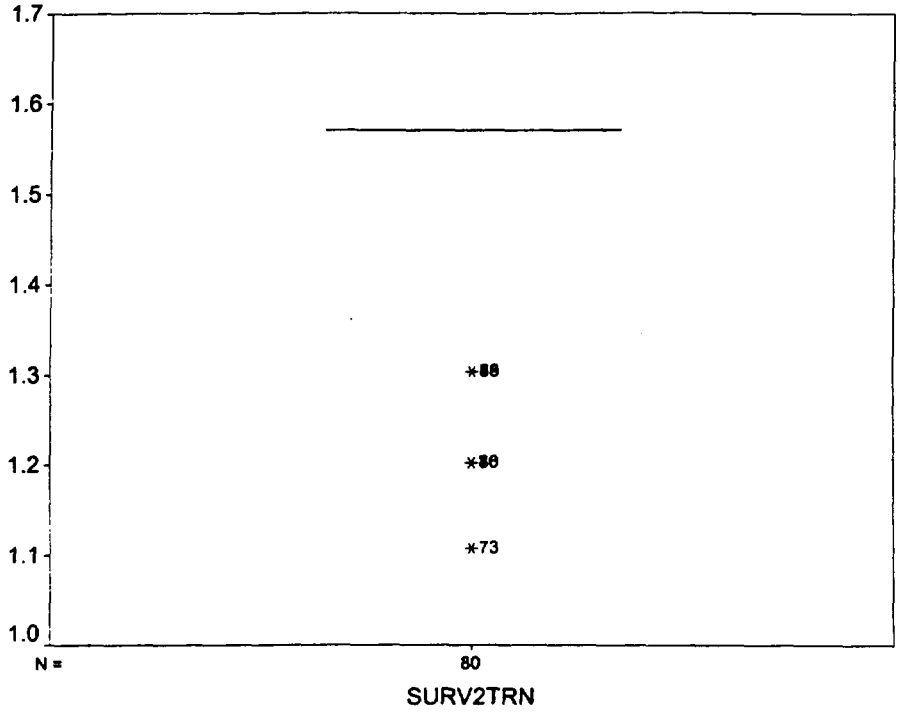
*Survival data were transformed using the arcsine square root transformation.

Descriptives

			Statistic	Std. Error
SURV2TRN	Mean		1.5323	1.174E-02
	95% Confidence Interval for Mean	Lower Bound	1.5090	
		Upper Bound	1.5557	
	5% Trimmed Mean		1.5485	
	Median		1.5708	
	Variance		1.102E-02	
	Std. Deviation		.1050	
	Minimum		1.11	
	Maximum		1.57	
	Range		.46	
	Interquartile Range		.0000	
	Skewness		-2.574	.269
	Kurtosis		5.431	.532

SURV2TRN





Oneway ANOVA

Descriptives

SURV2TRN

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
CTRL-1	4	1.5039	.1339	6.694E-02	1.2908	1.7169	1.30	1.57
CTRL-2	4	1.5039	.1339	6.694E-02	1.2908	1.7169	1.30	1.57
CTRL-3	4	1.5708	.0000	.0000	1.5708	1.5708	1.57	1.57
CTRL-4	4	1.5708	.0000	.0000	1.5708	1.5708	1.57	1.57
CTRL-5	4	1.5039	.1339	6.694E-02	1.2908	1.7169	1.30	1.57
UDA-11	4	1.5708	.0000	.0000	1.5708	1.5708	1.57	1.57
UDA-12	4	1.5708	.0000	.0000	1.5708	1.5708	1.57	1.57
PDA-8	4	1.5708	.0000	.0000	1.5708	1.5708	1.57	1.57
PDA-8FD	4	1.5708	.0000	.0000	1.5708	1.5708	1.57	1.57
PDA-9	4	1.5039	.1339	6.694E-02	1.2908	1.7169	1.30	1.57
PDA-10	4	1.5039	.1339	6.694E-02	1.2908	1.7169	1.30	1.57
PDA-5	4	1.5708	.0000	.0000	1.5708	1.5708	1.57	1.57
PDA-6	4	1.5039	.1339	6.694E-02	1.2908	1.7169	1.30	1.57
PDA-7	4	1.5708	.0000	.0000	1.5708	1.5708	1.57	1.57
PDA-2	4	1.5708	.0000	.0000	1.5708	1.5708	1.57	1.57
PDA-2FD	4	1.5708	.0000	.0000	1.5708	1.5708	1.57	1.57
PDA-3	4	1.5708	.0000	.0000	1.5708	1.5708	1.57	1.57
PDA-4	4	1.5708	.0000	.0000	1.5708	1.5708	1.57	1.57
DDA-13	4	1.2957	.2001	.1000	.9774	1.6141	1.11	1.57
DDA-1	4	1.4786	.1844	9.222E-02	1.1851	1.7721	1.20	1.57
Total	80	1.5323	.1050	1.174E-02	1.5090	1.5557	1.11	1.57

Test of Homogeneity of Variances

SURV2TRN

Levene Statistic	df1	df2	Sig.
5.230	19	60	.000

ANOVA

SURV2TRN

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.326	19	1.716E-02	1.890	.032
Within Groups	.545	60	9.079E-03		
Total	.871	79			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: SURV2TRN
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL-1	CTRL-2	.0000	.067	1.000	-.2497	.2497
	CTRL-3	-6.6941E-02	.067	1.000	-.3166	.1828
	CTRL-4	-6.6941E-02	.067	1.000	-.3166	.1828
	CTRL-5	.0000	.067	1.000	-.2497	.2497
	UDA-11	-6.6941E-02	.067	1.000	-.3166	.1828
	UDA-12	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-8	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-8FD	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-9	.0000	.067	1.000	-.2497	.2497
	PDA-10	.0000	.067	1.000	-.2497	.2497
	PDA-5	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-6	.0000	.067	1.000	-.2497	.2497
	PDA-7	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-2	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-2FD	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-3	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-4	-6.6941E-02	.067	1.000	-.3166	.1828
	DDA-13	.2081	.067	.222	-4.1578E-02	.4578
	DDA-1	2.527E-02	.067	1.000	-.2244	.2750
CTRL-2	CTRL-1	.0000	.067	1.000	-.2497	.2497
	CTRL-3	-6.6941E-02	.067	1.000	-.3166	.1828
	CTRL-4	-6.6941E-02	.067	1.000	-.3166	.1828
	CTRL-5	.0000	.067	1.000	-.2497	.2497
	UDA-11	-6.6941E-02	.067	1.000	-.3166	.1828
	UDA-12	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-8	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-8FD	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-9	.0000	.067	1.000	-.2497	.2497
	PDA-10	.0000	.067	1.000	-.2497	.2497
	PDA-5	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-6	.0000	.067	1.000	-.2497	.2497
	PDA-7	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-2	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-2FD	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-3	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-4	-6.6941E-02	.067	1.000	-.3166	.1828
	DDA-13	.2081	.067	.222	-4.1578E-02	.4578
	DDA-1	2.527E-02	.067	1.000	-.2244	.2750

Multiple Comparisons

Dependent Variable: SURV2TRN

Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL-3	CTRL-1	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-2	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-4	.0000	.067	1.000	-.2497	.2497
	CTRL-5	6.694E-02	.067	1.000	-.1828	.3166
	UDA-11	.0000	.067	1.000	-.2497	.2497
	UDA-12	.0000	.067	1.000	-.2497	.2497
	PDA-8	.0000	.067	1.000	-.2497	.2497
	PDA-8FD	.0000	.067	1.000	-.2497	.2497
	PDA-9	6.694E-02	.067	1.000	-.1828	.3166
	PDA-10	6.694E-02	.067	1.000	-.1828	.3166
	PDA-5	.0000	.067	1.000	-.2497	.2497
	PDA-6	6.694E-02	.067	1.000	-.1828	.3166
	PDA-7	.0000	.067	1.000	-.2497	.2497
	PDA-2	.0000	.067	1.000	-.2497	.2497
	PDA-2FD	.0000	.067	1.000	-.2497	.2497
	PDA-3	.0000	.067	1.000	-.2497	.2497
	PDA-4	.0000	.067	1.000	-.2497	.2497
	DDA-13	.2751*	.067	.017	2.536E-02	.5248
	DDA-1	9.222E-02	.067	.997	-.1575	.3419
CTRL-4	CTRL-1	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-2	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-3	.0000	.067	1.000	-.2497	.2497
	CTRL-5	6.694E-02	.067	1.000	-.1828	.3166
	UDA-11	.0000	.067	1.000	-.2497	.2497
	UDA-12	.0000	.067	1.000	-.2497	.2497
	PDA-8	.0000	.067	1.000	-.2497	.2497
	PDA-8FD	.0000	.067	1.000	-.2497	.2497
	PDA-9	6.694E-02	.067	1.000	-.1828	.3166
	PDA-10	6.694E-02	.067	1.000	-.1828	.3166
	PDA-5	.0000	.067	1.000	-.2497	.2497
	PDA-6	6.694E-02	.067	1.000	-.1828	.3166
	PDA-7	.0000	.067	1.000	-.2497	.2497
	PDA-2	.0000	.067	1.000	-.2497	.2497
	PDA-2FD	.0000	.067	1.000	-.2497	.2497
	PDA-3	.0000	.067	1.000	-.2497	.2497
	PDA-4	.0000	.067	1.000	-.2497	.2497
	DDA-13	.2751*	.067	.017	2.536E-02	.5248
	DDA-1	9.222E-02	.067	.997	-.1575	.3419

Multiple Comparisons

Dependent Variable: SURV2TRN
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL-5	CTRL-1	.0000	.067	1.000	-.2497	.2497
	CTRL-2	.0000	.067	1.000	-.2497	.2497
	CTRL-3	-6.6941E-02	.067	1.000	-.3166	.1828
	CTRL-4	-6.6941E-02	.067	1.000	-.3166	.1828
	UDA-11	-6.6941E-02	.067	1.000	-.3166	.1828
	UDA-12	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-8	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-8FD	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-9	.0000	.067	1.000	-.2497	.2497
	PDA-10	.0000	.067	1.000	-.2497	.2497
	PDA-5	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-6	.0000	.067	1.000	-.2497	.2497
	PDA-7	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-2	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-2FD	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-3	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-4	-6.6941E-02	.067	1.000	-.3166	.1828
	DDA-13	.2081	.067	.222	-4.1578E-02	.4578
	DDA-1	2.527E-02	.067	1.000	-.2244	.2750
UDA-11	CTRL-1	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-2	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-3	.0000	.067	1.000	-.2497	.2497
	CTRL-4	.0000	.067	1.000	-.2497	.2497
	CTRL-5	6.694E-02	.067	1.000	-.1828	.3166
	UDA-12	.0000	.067	1.000	-.2497	.2497
	PDA-8	.0000	.067	1.000	-.2497	.2497
	PDA-8FD	.0000	.067	1.000	-.2497	.2497
	PDA-9	6.694E-02	.067	1.000	-.1828	.3166
	PDA-10	6.694E-02	.067	1.000	-.1828	.3166
	PDA-5	.0000	.067	1.000	-.2497	.2497
	PDA-6	6.694E-02	.067	1.000	-.1828	.3166
	PDA-7	.0000	.067	1.000	-.2497	.2497
	PDA-2	.0000	.067	1.000	-.2497	.2497
	PDA-2FD	.0000	.067	1.000	-.2497	.2497
	PDA-3	.0000	.067	1.000	-.2497	.2497
	PDA-4	.0000	.067	1.000	-.2497	.2497
	DDA-13	.2751*	.067	.017	2.536E-02	.5248
	DDA-1	9.222E-02	.067	.997	-.1575	.3419

Multiple Comparisons

Dependent Variable: SURV2TRN
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
UDA-12	CTRL-1	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-2	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-3	.0000	.067	1.000	-.2497	.2497
	CTRL-4	.0000	.067	1.000	-.2497	.2497
	CTRL-5	6.694E-02	.067	1.000	-.1828	.3166
	UDA-11	.0000	.067	1.000	-.2497	.2497
	PDA-8	.0000	.067	1.000	-.2497	.2497
	PDA-8FD	.0000	.067	1.000	-.2497	.2497
	PDA-9	6.694E-02	.067	1.000	-.1828	.3166
	PDA-10	6.694E-02	.067	1.000	-.1828	.3166
	PDA-5	.0000	.067	1.000	-.2497	.2497
	PDA-6	6.694E-02	.067	1.000	-.1828	.3166
	PDA-7	.0000	.067	1.000	-.2497	.2497
	PDA-2	.0000	.067	1.000	-.2497	.2497
	PDA-2FD	.0000	.067	1.000	-.2497	.2497
	PDA-3	.0000	.067	1.000	-.2497	.2497
	PDA-4	.0000	.067	1.000	-.2497	.2497
	DDA-13	.2751*	.067	.017	2.536E-02	.5248
	DDA-1	9.222E-02	.067	.997	-.1575	.3419
PDA-8	CTRL-1	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-2	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-3	.0000	.067	1.000	-.2497	.2497
	CTRL-4	.0000	.067	1.000	-.2497	.2497
	CTRL-5	6.694E-02	.067	1.000	-.1828	.3166
	UDA-11	.0000	.067	1.000	-.2497	.2497
	UDA-12	.0000	.067	1.000	-.2497	.2497
	PDA-8FD	.0000	.067	1.000	-.2497	.2497
	PDA-9	6.694E-02	.067	1.000	-.1828	.3166
	PDA-10	6.694E-02	.067	1.000	-.1828	.3166
	PDA-5	.0000	.067	1.000	-.2497	.2497
	PDA-6	6.694E-02	.067	1.000	-.1828	.3166
	PDA-7	.0000	.067	1.000	-.2497	.2497
	PDA-2	.0000	.067	1.000	-.2497	.2497
	PDA-2FD	.0000	.067	1.000	-.2497	.2497
	PDA-3	.0000	.067	1.000	-.2497	.2497
	PDA-4	.0000	.067	1.000	-.2497	.2497
	DDA-13	.2751*	.067	.017	2.536E-02	.5248
	DDA-1	9.222E-02	.067	.997	-.1575	.3419

Multiple Comparisons

Dependent Variable: SURV2TRN
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-8FD	CTRL-1	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-2	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-3	.0000	.067	1.000	-.2497	.2497
	CTRL-4	.0000	.067	1.000	-.2497	.2497
	CTRL-5	6.694E-02	.067	1.000	-.1828	.3166
	UDA-11	.0000	.067	1.000	-.2497	.2497
	UDA-12	.0000	.067	1.000	-.2497	.2497
	PDA-8	.0000	.067	1.000	-.2497	.2497
	PDA-9	6.694E-02	.067	1.000	-.1828	.3166
	PDA-10	6.694E-02	.067	1.000	-.1828	.3166
	PDA-5	.0000	.067	1.000	-.2497	.2497
	PDA-6	6.694E-02	.067	1.000	-.1828	.3166
	PDA-7	.0000	.067	1.000	-.2497	.2497
	PDA-2	.0000	.067	1.000	-.2497	.2497
	PDA-2FD	.0000	.067	1.000	-.2497	.2497
	PDA-3	.0000	.067	1.000	-.2497	.2497
	PDA-4	.0000	.067	1.000	-.2497	.2497
	DDA-13	.2751*	.067	.017	2.536E-02	.5248
	DDA-1	9.222E-02	.067	.997	-.1575	.3419
PDA-9	CTRL-1	.0000	.067	1.000	-.2497	.2497
	CTRL-2	.0000	.067	1.000	-.2497	.2497
	CTRL-3	-6.6941E-02	.067	1.000	-.3166	.1828
	CTRL-4	-6.6941E-02	.067	1.000	-.3166	.1828
	CTRL-5	.0000	.067	1.000	-.2497	.2497
	UDA-11	-6.6941E-02	.067	1.000	-.3166	.1828
	UDA-12	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-8	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-8FD	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-10	.0000	.067	1.000	-.2497	.2497
	PDA-5	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-6	.0000	.067	1.000	-.2497	.2497
	PDA-7	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-2	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-2FD	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-3	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-4	-6.6941E-02	.067	1.000	-.3166	.1828
	DDA-13	.2081	.067	.222	-4.1578E-02	.4578
	DDA-1	2.527E-02	.067	1.000	-.2244	.2750

Multiple Comparisons

Dependent Variable: SURV2TRN
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-10	CTRL-1	.0000	.067	1.000	-.2497	.2497
	CTRL-2	.0000	.067	1.000	-.2497	.2497
	CTRL-3	-6.6941E-02	.067	1.000	-.3166	.1828
	CTRL-4	-6.6941E-02	.067	1.000	-.3166	.1828
	CTRL-5	.0000	.067	1.000	-.2497	.2497
	UDA-11	-6.6941E-02	.067	1.000	-.3166	.1828
	UDA-12	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-8	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-8FD	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-9	.0000	.067	1.000	-.2497	.2497
	PDA-5	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-6	.0000	.067	1.000	-.2497	.2497
	PDA-7	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-2	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-2FD	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-3	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-4	-6.6941E-02	.067	1.000	-.3166	.1828
	DDA-13	.2081	.067	.222	-4.1578E-02	.4578
	DDA-1	2.527E-02	.067	1.000	-.2244	.2750
PDA-5	CTRL-1	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-2	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-3	.0000	.067	1.000	-.2497	.2497
	CTRL-4	.0000	.067	1.000	-.2497	.2497
	CTRL-5	6.694E-02	.067	1.000	-.1828	.3166
	UDA-11	.0000	.067	1.000	-.2497	.2497
	UDA-12	.0000	.067	1.000	-.2497	.2497
	PDA-8	.0000	.067	1.000	-.2497	.2497
	PDA-8FD	.0000	.067	1.000	-.2497	.2497
	PDA-9	6.694E-02	.067	1.000	-.1828	.3166
	PDA-10	6.694E-02	.067	1.000	-.1828	.3166
	PDA-6	6.694E-02	.067	1.000	-.1828	.3166
	PDA-7	.0000	.067	1.000	-.2497	.2497
	PDA-2	.0000	.067	1.000	-.2497	.2497
	PDA-2FD	.0000	.067	1.000	-.2497	.2497
	PDA-3	.0000	.067	1.000	-.2497	.2497
	PDA-4	.0000	.067	1.000	-.2497	.2497
	DDA-13	.2751*	.067	.017	2.536E-02	.5248
	DDA-1	9.222E-02	.067	.997	-.1575	.3419

Multiple Comparisons

Dependent Variable: SURV2TRN
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-6	CTRL-1	.0000	.067	1.000	-.2497	.2497
	CTRL-2	.0000	.067	1.000	-.2497	.2497
	CTRL-3	-6.6941E-02	.067	1.000	-.3166	.1828
	CTRL-4	-6.6941E-02	.067	1.000	-.3166	.1828
	CTRL-5	.0000	.067	1.000	-.2497	.2497
	UDA-11	-6.6941E-02	.067	1.000	-.3166	.1828
	UDA-12	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-8	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-8FD	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-9	.0000	.067	1.000	-.2497	.2497
	PDA-10	.0000	.067	1.000	-.2497	.2497
	PDA-5	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-7	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-2	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-2FD	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-3	-6.6941E-02	.067	1.000	-.3166	.1828
	PDA-4	-6.6941E-02	.067	1.000	-.3166	.1828
	DDA-13	.2081	.067	.222	-4.1578E-02	.4578
	DDA-1	2.527E-02	.067	1.000	-.2244	.2750
PDA-7	CTRL-1	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-2	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-3	.0000	.067	1.000	-.2497	.2497
	CTRL-4	.0000	.067	1.000	-.2497	.2497
	CTRL-5	6.694E-02	.067	1.000	-.1828	.3166
	UDA-11	.0000	.067	1.000	-.2497	.2497
	UDA-12	.0000	.067	1.000	-.2497	.2497
	PDA-8	.0000	.067	1.000	-.2497	.2497
	PDA-8FD	.0000	.067	1.000	-.2497	.2497
	PDA-9	6.694E-02	.067	1.000	-.1828	.3166
	PDA-10	6.694E-02	.067	1.000	-.1828	.3166
	PDA-5	.0000	.067	1.000	-.2497	.2497
	PDA-6	6.694E-02	.067	1.000	-.1828	.3166
	PDA-2	.0000	.067	1.000	-.2497	.2497
	PDA-2FD	.0000	.067	1.000	-.2497	.2497
	PDA-3	.0000	.067	1.000	-.2497	.2497
	PDA-4	.0000	.067	1.000	-.2497	.2497
	DDA-13	.2751*	.067	.017	2.536E-02	.5248
	DDA-1	9.222E-02	.067	.997	-.1575	.3419

Multiple Comparisons

Dependent Variable: SURV2TRN
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-2	CTRL-1	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-2	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-3	.0000	.067	1.000	-.2497	.2497
	CTRL-4	.0000	.067	1.000	-.2497	.2497
	CTRL-5	6.694E-02	.067	1.000	-.1828	.3166
	UDA-11	.0000	.067	1.000	-.2497	.2497
	UDA-12	.0000	.067	1.000	-.2497	.2497
	PDA-8	.0000	.067	1.000	-.2497	.2497
	PDA-8FD	.0000	.067	1.000	-.2497	.2497
	PDA-9	6.694E-02	.067	1.000	-.1828	.3166
	PDA-10	6.694E-02	.067	1.000	-.1828	.3166
	PDA-5	.0000	.067	1.000	-.2497	.2497
	PDA-6	6.694E-02	.067	1.000	-.1828	.3166
	PDA-7	.0000	.067	1.000	-.2497	.2497
	PDA-2FD	.0000	.067	1.000	-.2497	.2497
	PDA-3	.0000	.067	1.000	-.2497	.2497
	PDA-4	.0000	.067	1.000	-.2497	.2497
	DDA-13	.2751*	.067	.017	2.536E-02	.5248
	DDA-1	9.222E-02	.067	.997	-.1575	.3419
PDA-2FD	CTRL-1	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-2	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-3	.0000	.067	1.000	-.2497	.2497
	CTRL-4	.0000	.067	1.000	-.2497	.2497
	CTRL-5	6.694E-02	.067	1.000	-.1828	.3166
	UDA-11	.0000	.067	1.000	-.2497	.2497
	UDA-12	.0000	.067	1.000	-.2497	.2497
	PDA-8	.0000	.067	1.000	-.2497	.2497
	PDA-8FD	.0000	.067	1.000	-.2497	.2497
	PDA-9	6.694E-02	.067	1.000	-.1828	.3166
	PDA-10	6.694E-02	.067	1.000	-.1828	.3166
	PDA-5	.0000	.067	1.000	-.2497	.2497
	PDA-6	6.694E-02	.067	1.000	-.1828	.3166
	PDA-7	.0000	.067	1.000	-.2497	.2497
	PDA-2	.0000	.067	1.000	-.2497	.2497
	PDA-3	.0000	.067	1.000	-.2497	.2497
	PDA-4	.0000	.067	1.000	-.2497	.2497
	DDA-13	.2751*	.067	.017	2.536E-02	.5248
	DDA-1	9.222E-02	.067	.997	-.1575	.3419

Multiple Comparisons

Dependent Variable: SURV2TRN
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-3	CTRL-1	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-2	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-3	.0000	.067	1.000	-.2497	.2497
	CTRL-4	.0000	.067	1.000	-.2497	.2497
	CTRL-5	6.694E-02	.067	1.000	-.1828	.3166
	UDA-11	.0000	.067	1.000	-.2497	.2497
	UDA-12	.0000	.067	1.000	-.2497	.2497
	PDA-8	.0000	.067	1.000	-.2497	.2497
	PDA-8FD	.0000	.067	1.000	-.2497	.2497
	PDA-9	6.694E-02	.067	1.000	-.1828	.3166
	PDA-10	6.694E-02	.067	1.000	-.1828	.3166
	PDA-5	.0000	.067	1.000	-.2497	.2497
	PDA-6	6.694E-02	.067	1.000	-.1828	.3166
	PDA-7	.0000	.067	1.000	-.2497	.2497
	PDA-2	.0000	.067	1.000	-.2497	.2497
	PDA-2FD	.0000	.067	1.000	-.2497	.2497
	PDA-4	.0000	.067	1.000	-.2497	.2497
	DDA-13	.2751*	.067	.017	2.536E-02	.5248
	DDA-1	9.222E-02	.067	.997	-.1575	.3419
PDA-4	CTRL-1	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-2	6.694E-02	.067	1.000	-.1828	.3166
	CTRL-3	.0000	.067	1.000	-.2497	.2497
	CTRL-4	.0000	.067	1.000	-.2497	.2497
	CTRL-5	6.694E-02	.067	1.000	-.1828	.3166
	UDA-11	.0000	.067	1.000	-.2497	.2497
	UDA-12	.0000	.067	1.000	-.2497	.2497
	PDA-8	.0000	.067	1.000	-.2497	.2497
	PDA-8FD	.0000	.067	1.000	-.2497	.2497
	PDA-9	6.694E-02	.067	1.000	-.1828	.3166
	PDA-10	6.694E-02	.067	1.000	-.1828	.3166
	PDA-5	.0000	.067	1.000	-.2497	.2497
	PDA-6	6.694E-02	.067	1.000	-.1828	.3166
	PDA-7	.0000	.067	1.000	-.2497	.2497
	PDA-2	.0000	.067	1.000	-.2497	.2497
	PDA-2FD	.0000	.067	1.000	-.2497	.2497
	PDA-3	.0000	.067	1.000	-.2497	.2497
	DDA-13	.2751*	.067	.017	2.536E-02	.5248
	DDA-1	9.222E-02	.067	.997	-.1575	.3419

Multiple Comparisons

Dependent Variable: SURV2TRN
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
DDA-13	CTRL-1	-.2081	.067	.222	-.4578	4.158E-02
	CTRL-2	-.2081	.067	.222	-.4578	4.158E-02
	CTRL-3	-.2751*	.067	.017	-.5248	-2.5363E-02
	CTRL-4	-.2751*	.067	.017	-.5248	-2.5363E-02
	CTRL-5	-.2081	.067	.222	-.4578	4.158E-02
	UDA-11	-.2751*	.067	.017	-.5248	-2.5363E-02
	UDA-12	-.2751*	.067	.017	-.5248	-2.5363E-02
	PDA-8	-.2751*	.067	.017	-.5248	-2.5363E-02
	PDA-8FD	-.2751*	.067	.017	-.5248	-2.5363E-02
	PDA-9	-.2081	.067	.222	-.4578	4.158E-02
	PDA-10	-.2081	.067	.222	-.4578	4.158E-02
	PDA-5	-.2751*	.067	.017	-.5248	-2.5363E-02
	PDA-6	-.2081	.067	.222	-.4578	4.158E-02
	PDA-7	-.2751*	.067	.017	-.5248	-2.5363E-02
	PDA-2	-.2751*	.067	.017	-.5248	-2.5363E-02
	PDA-2FD	-.2751*	.067	.017	-.5248	-2.5363E-02
	PDA-3	-.2751*	.067	.017	-.5248	-2.5363E-02
	PDA-4	-.2751*	.067	.017	-.5248	-2.5363E-02
	DDA-1	-.1829	.067	.438	-.4326	6.685E-02
DDA-1	CTRL-1	-2.5275E-02	.067	1.000	-.2750	.2244
	CTRL-2	-2.5275E-02	.067	1.000	-.2750	.2244
	CTRL-3	-9.2216E-02	.067	.997	-.3419	.1575
	CTRL-4	-9.2216E-02	.067	.997	-.3419	.1575
	CTRL-5	-2.5275E-02	.067	1.000	-.2750	.2244
	UDA-11	-9.2216E-02	.067	.997	-.3419	.1575
	UDA-12	-9.2216E-02	.067	.997	-.3419	.1575
	PDA-8	-9.2216E-02	.067	.997	-.3419	.1575
	PDA-8FD	-9.2216E-02	.067	.997	-.3419	.1575
	PDA-9	-2.5275E-02	.067	1.000	-.2750	.2244
	PDA-10	-2.5275E-02	.067	1.000	-.2750	.2244
	PDA-5	-9.2216E-02	.067	.997	-.3419	.1575
	PDA-6	-2.5275E-02	.067	1.000	-.2750	.2244
	PDA-7	-9.2216E-02	.067	.997	-.3419	.1575
	PDA-2	-9.2216E-02	.067	.997	-.3419	.1575
	PDA-2FD	-9.2216E-02	.067	.997	-.3419	.1575
	PDA-3	-9.2216E-02	.067	.997	-.3419	.1575
	PDA-4	-9.2216E-02	.067	.997	-.3419	.1575
	DDA-13	.1829	.067	.438	-6.6853E-02	.4326

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

SURV2TRN

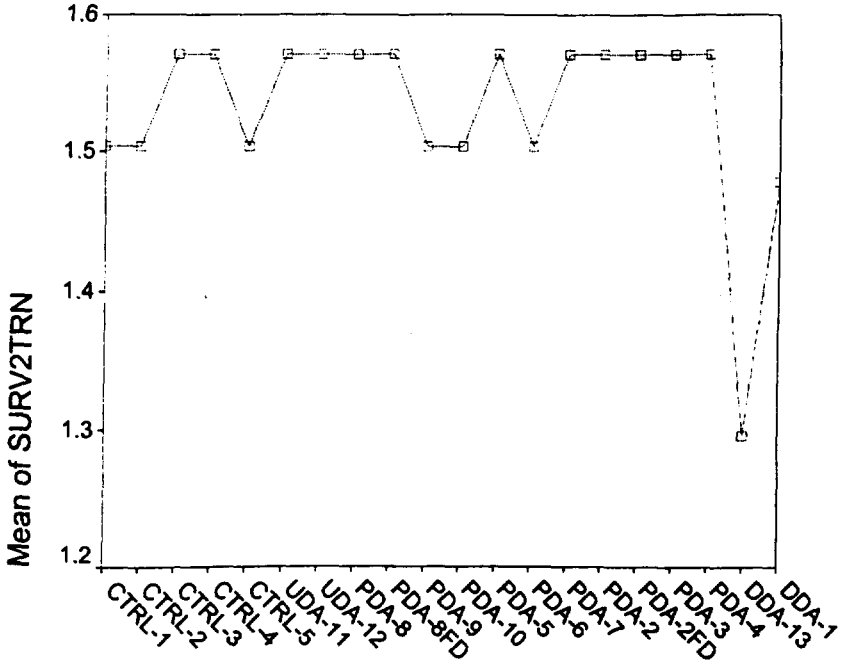
Tukey HSD[a]

STNCODE	N	Subset for alpha = .05	
		1	2
DDA-13	4	1.2957	
DDA-1	4	1.4786	1.4786
CTRL-1	4	1.5039	1.5039
CTRL-2	4	1.5039	1.5039
CTRL-5	4	1.5039	1.5039
PDA-9	4	1.5039	1.5039
PDA-10	4	1.5039	1.5039
PDA-6	4	1.5039	1.5039
CTRL-3	4		1.5708
CTRL-4	4		1.5708
UDA-11	4		1.5708
UDA-12	4		1.5708
PDA-8	4		1.5708
PDA-8FD	4		1.5708
PDA-5	4		1.5708
PDA-7	4		1.5708
PDA-2	4		1.5708
PDA-2FD	4		1.5708
PDA-3	4		1.5708
PDA-4	4		1.5708
Sig.		.222	.997

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.000.

Means Plots


1.6
1.5
1.4
1.3
1.2
Mean of SURV2TRN
CTRL-1
CTRL-2
CTRL-3
CTRL-4
CTRL-5
UDA-11
UDA-12
PDA-8
PDA-8FD
PDA-9
PDA-10
PDA-5
PDA-6
PDA-7
PDA-2
PDA-2FD
PDA-3
PDA-4
DDA-13
DDA-1
STNCODE

WGK Plant Eco Risk Assessment
Fathead Surface Water Seven-Day Survival Statistics

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
SURV7TRN	80	100.0%	0	.0%	80	100.0%

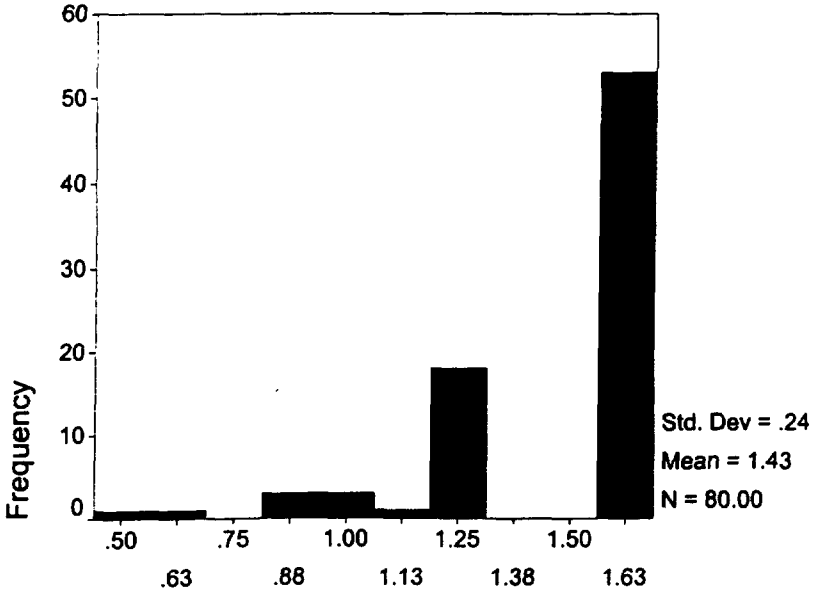
Survival data were transformed using the arcsince square root transformation.

Descriptives

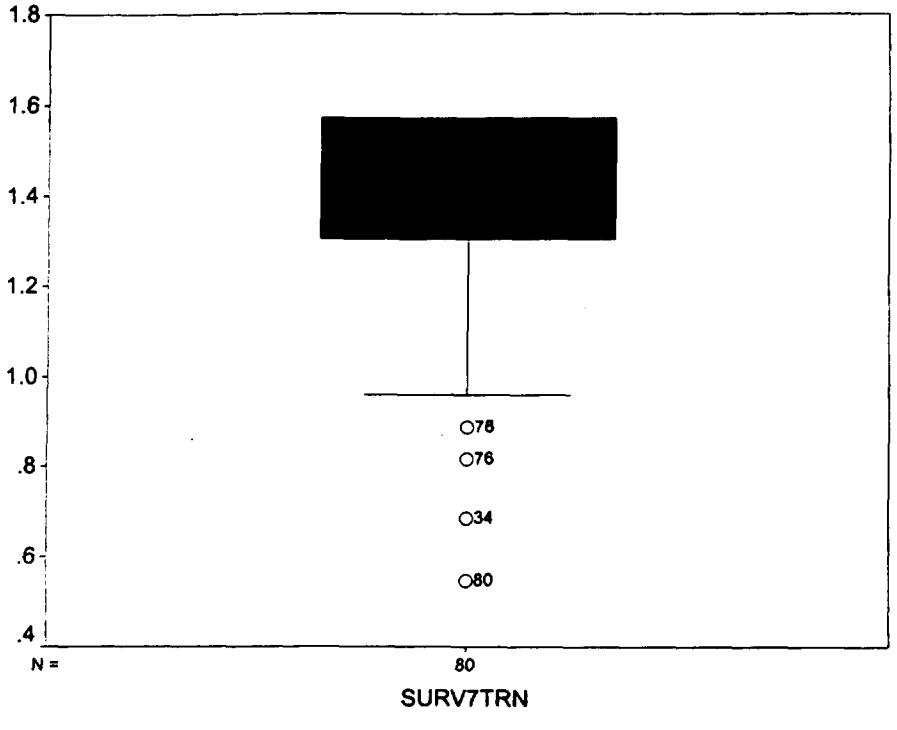
			Statistic	Std. Error
SURV7TRN	Mean		1.4288	2.665E-02
	95% Confidence Interval for Mean	Lower Bound	1.3758	
		Upper Bound	1.4819	
	5% Trimmed Mean		1.4596	
	Median		1.5708	
	Variance		5.681E-02	
	Std. Deviation		.2384	
	Minimum		.55	
	Maximum		1.57	
	Range		1.02	
	Interquartile Range		.2678	
	Skewness		-1.820	.269
	Kurtosis		2.874	.532

SURV7TRN

Histogram



SURV7TRN



Oneway ANOVA

Descriptives

SURV7TRN

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
CTRL-1	4	1.5039	.1339	6.694E-02	1.2908	1.7169	1.30	1.57
CTRL-2	4	1.5039	.1339	6.694E-02	1.2908	1.7169	1.30	1.57
CTRL-3	4	1.5708	.0000	.0000	1.5708	1.5708	1.57	1.57
CTRL-4	4	1.5708	.0000	.0000	1.5708	1.5708	1.57	1.57
CTRL-5	4	1.5039	.1339	6.694E-02	1.2908	1.7169	1.30	1.57
UDA-11	4	1.4786	.1844	9.222E-02	1.1851	1.7721	1.20	1.57
UDA-12	4	1.4116	.1884	9.418E-02	1.1119	1.7114	1.20	1.57
PDA-8	4	1.5039	.1339	6.694E-02	1.2908	1.7169	1.30	1.57
PDA-8FD	4	1.1963	.4467	.2233	.4855	1.9071	.68	1.57
PDA-9	4	1.5039	.1339	6.694E-02	1.2908	1.7169	1.30	1.57
PDA-10	4	1.5039	.1339	6.694E-02	1.2908	1.7169	1.30	1.57
PDA-5	4	1.5708	.0000	.0000	1.5708	1.5708	1.57	1.57
PDA-6	4	1.4369	.1546	7.730E-02	1.1909	1.6829	1.30	1.57
PDA-7	4	1.5708	.0000	.0000	1.5708	1.5708	1.57	1.57
PDA-2	4	1.3509	.2902	.1451	.8891	1.8127	.96	1.57
PDA-2FD	4	1.5039	.1339	6.694E-02	1.2908	1.7169	1.30	1.57
PDA-3	4	1.4369	.1546	7.730E-02	1.1909	1.6829	1.30	1.57
PDA-4	4	1.5039	.1339	6.694E-02	1.2908	1.7169	1.30	1.57
DDA-13	4	.9419	.1248	6.239E-02	.7433	1.1404	.82	1.11
DDA-1	4	1.0096	.3661	.1830	.4271	1.5921	.55	1.30
Total	80	1.4288	.2384	2.665E-02	1.3758	1.4819	.55	1.57

Test of Homogeneity of Variances

SURV7TRN

Levene Statistic	df1	df2	Sig.
6.950	19	60	.000

ANOVA

SURV7TRN

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.406	19	.127	3.650	.000
Within Groups	2.082	60	3.470E-02		
Total	4.488	79			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: SURV7TRN

Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL-1	CTRL-2	.0000	.132	1.000	-.4882	.4882
	CTRL-3	-6.6941E-02	.132	1.000	-.5551	.4212
	CTRL-4	-6.6941E-02	.132	1.000	-.5551	.4212
	CTRL-5	.0000	.132	1.000	-.4882	.4882
	UDA-11	2.527E-02	.132	1.000	-.4629	.5134
	UDA-12	9.222E-02	.132	1.000	-.3960	.5804
	PDA-8	.0000	.132	1.000	-.4882	.4882
	PDA-8FD	.3076	.132	.704	-.1806	.7957
	PDA-9	.0000	.132	1.000	-.4882	.4882
	PDA-10	.0000	.132	1.000	-.4882	.4882
	PDA-5	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-6	6.694E-02	.132	1.000	-.4212	.5551
	PDA-7	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-2	.1530	.132	1.000	-.3352	.6412
	PDA-2FD	.0000	.132	1.000	-.4882	.4882
	PDA-3	6.694E-02	.132	1.000	-.4212	.5551
	PDA-4	.0000	.132	1.000	-.4882	.4882
	DDA-13	.5620*	.132	.010	7.381E-02	1.0502
	DDA-1	.4942*	.132	.044	6.046E-03	.9824
CTRL-2	CTRL-1	.0000	.132	1.000	-.4882	.4882
	CTRL-3	-6.6941E-02	.132	1.000	-.5551	.4212
	CTRL-4	-6.6941E-02	.132	1.000	-.5551	.4212
	CTRL-5	.0000	.132	1.000	-.4882	.4882
	UDA-11	2.527E-02	.132	1.000	-.4629	.5134
	UDA-12	9.222E-02	.132	1.000	-.3960	.5804
	PDA-8	.0000	.132	1.000	-.4882	.4882
	PDA-8FD	.3076	.132	.704	-.1806	.7957
	PDA-9	.0000	.132	1.000	-.4882	.4882
	PDA-10	.0000	.132	1.000	-.4882	.4882
	PDA-5	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-6	6.694E-02	.132	1.000	-.4212	.5551
	PDA-7	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-2	.1530	.132	1.000	-.3352	.6412
	PDA-2FD	.0000	.132	1.000	-.4882	.4882
	PDA-3	6.694E-02	.132	1.000	-.4212	.5551
	PDA-4	.0000	.132	1.000	-.4882	.4882
	DDA-13	.5620*	.132	.010	7.381E-02	1.0502
	DDA-1	.4942*	.132	.044	6.046E-03	.9824

Multiple Comparisons

Dependent Variable: SURV7TRN
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL-3	CTRL-1	6.694E-02	.132	1.000	-.4212	.5551
	CTRL-2	6.694E-02	.132	1.000	-.4212	.5551
	CTRL-4	.0000	.132	1.000	-.4882	.4882
	CTRL-5	6.694E-02	.132	1.000	-.4212	.5551
	UDA-11	9.222E-02	.132	1.000	-.3960	.5804
	UDA-12	.1592	.132	.999	-.3290	.6473
	PDA-8	6.694E-02	.132	1.000	-.4212	.5551
	PDA-8FD	.3745	.132	.354	-.1137	.8627
	PDA-9	6.694E-02	.132	1.000	-.4212	.5551
	PDA-10	6.694E-02	.132	1.000	-.4212	.5551
	PDA-5	.0000	.132	1.000	-.4882	.4882
	PDA-6	.1339	.132	1.000	-.3543	.6221
	PDA-7	.0000	.132	1.000	-.4882	.4882
	PDA-2	.2199	.132	.977	-.2682	.7081
	PDA-2FD	6.694E-02	.132	1.000	-.4212	.5551
	PDA-3	.1339	.132	1.000	-.3543	.6221
	PDA-4	6.694E-02	.132	1.000	-.4212	.5551
	DDA-13	.6289*	.132	.002	.1407	1.1171
	DDA-1	.5612*	.132	.010	7.299E-02	1.0493
CTRL-4	CTRL-1	6.694E-02	.132	1.000	-.4212	.5551
	CTRL-2	6.694E-02	.132	1.000	-.4212	.5551
	CTRL-3	.0000	.132	1.000	-.4882	.4882
	CTRL-5	6.694E-02	.132	1.000	-.4212	.5551
	UDA-11	9.222E-02	.132	1.000	-.3960	.5804
	UDA-12	.1592	.132	.999	-.3290	.6473
	PDA-8	6.694E-02	.132	1.000	-.4212	.5551
	PDA-8FD	.3745	.132	.354	-.1137	.8627
	PDA-9	6.694E-02	.132	1.000	-.4212	.5551
	PDA-10	6.694E-02	.132	1.000	-.4212	.5551
	PDA-5	.0000	.132	1.000	-.4882	.4882
	PDA-6	.1339	.132	1.000	-.3543	.6221
	PDA-7	.0000	.132	1.000	-.4882	.4882
	PDA-2	.2199	.132	.977	-.2682	.7081
	PDA-2FD	6.694E-02	.132	1.000	-.4212	.5551
	PDA-3	.1339	.132	1.000	-.3543	.6221
	PDA-4	6.694E-02	.132	1.000	-.4212	.5551
	DDA-13	.6289*	.132	.002	.1407	1.1171
	DDA-1	.5612*	.132	.010	7.299E-02	1.0493

Multiple Comparisons

Dependent Variable: SURV7TRN

Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL-5	CTRL-1	.0000	.132	1.000	-.4882	.4882
	CTRL-2	.0000	.132	1.000	-.4882	.4882
	CTRL-3	-6.6941E-02	.132	1.000	-.5551	.4212
	CTRL-4	-6.6941E-02	.132	1.000	-.5551	.4212
	UDA-11	2.527E-02	.132	1.000	-.4629	.5134
	UDA-12	9.222E-02	.132	1.000	-.3960	.5804
	PDA-8	.0000	.132	1.000	-.4882	.4882
	PDA-8FD	.3076	.132	.704	-.1806	.7957
	PDA-9	.0000	.132	1.000	-.4882	.4882
	PDA-10	.0000	.132	1.000	-.4882	.4882
	PDA-5	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-6	6.694E-02	.132	1.000	-.4212	.5551
	PDA-7	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-2	.1530	.132	1.000	-.3352	.6412
	PDA-2FD	.0000	.132	1.000	-.4882	.4882
	PDA-3	6.694E-02	.132	1.000	-.4212	.5551
	PDA-4	.0000	.132	1.000	-.4882	.4882
	DDA-13	.5620*	.132	.010	7.381E-02	1.0502
	DDA-1	.4942*	.132	.044	6.046E-03	.9824
UDA-11	CTRL-1	-2.5275E-02	.132	1.000	-.5134	.4629
	CTRL-2	-2.5275E-02	.132	1.000	-.5134	.4629
	CTRL-3	-9.2216E-02	.132	1.000	-.5804	.3960
	CTRL-4	-9.2216E-02	.132	1.000	-.5804	.3960
	CTRL-5	-2.5275E-02	.132	1.000	-.5134	.4629
	UDA-12	6.694E-02	.132	1.000	-.4212	.5551
	PDA-8	-2.5275E-02	.132	1.000	-.5134	.4629
	PDA-8FD	.2823	.132	.821	-.2059	.7705
	PDA-9	-2.5275E-02	.132	1.000	-.5134	.4629
	PDA-10	-2.5275E-02	.132	1.000	-.5134	.4629
	PDA-5	-9.2216E-02	.132	1.000	-.5804	.3960
	PDA-6	4.167E-02	.132	1.000	-.4465	.5298
	PDA-7	-9.2216E-02	.132	1.000	-.5804	.3960
	PDA-2	.1277	.132	1.000	-.3605	.6159
	PDA-2FD	-2.5275E-02	.132	1.000	-.5134	.4629
	PDA-3	4.167E-02	.132	1.000	-.4465	.5298
	PDA-4	-2.5275E-02	.132	1.000	-.5134	.4629
	DDA-13	.5367*	.132	.017	4.853E-02	1.0249
	DDA-1	.4689	.132	.074	-1.9229E-02	.9571

Multiple Comparisons

Dependent Variable: SURV7TRN
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
UDA-12	CTRL-1	-9.2216E-02	.132	1.000	-.5804	.3960
	CTRL-2	-9.2216E-02	.132	1.000	-.5804	.3960
	CTRL-3	-.1592	.132	.999	-.6473	.3290
	CTRL-4	-.1592	.132	.999	-.6473	.3290
	CTRL-5	-9.2216E-02	.132	1.000	-.5804	.3960
	UDA-11	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-8	-9.2216E-02	.132	1.000	-.5804	.3960
	PDA-8FD	.2153	.132	.981	-.2728	.7035
	PDA-9	-9.2216E-02	.132	1.000	-.5804	.3960
	PDA-10	-9.2216E-02	.132	1.000	-.5804	.3960
	PDA-5	-.1592	.132	.999	-.6473	.3290
	PDA-6	-2.5275E-02	.132	1.000	-.5134	.4629
	PDA-7	-.1592	.132	.999	-.6473	.3290
	PDA-2	6.077E-02	.132	1.000	-.4274	.5489
	PDA-2FD	-9.2216E-02	.132	1.000	-.5804	.3960
	PDA-3	-2.5275E-02	.132	1.000	-.5134	.4629
	PDA-4	-9.2216E-02	.132	1.000	-.5804	.3960
	DDA-13	.4698	.132	.073	-1.8409E-02	.9579
	DDA-1	.4020	.132	.239	-8.6170E-02	.8902
PDA-8	CTRL-1	.0000	.132	1.000	-.4882	.4882
	CTRL-2	.0000	.132	1.000	-.4882	.4882
	CTRL-3	-6.6941E-02	.132	1.000	-.5551	.4212
	CTRL-4	-6.6941E-02	.132	1.000	-.5551	.4212
	CTRL-5	.0000	.132	1.000	-.4882	.4882
	UDA-11	2.527E-02	.132	1.000	-.4629	.5134
	UDA-12	9.222E-02	.132	1.000	-.3960	.5804
	PDA-8FD	.3076	.132	.704	-.1806	.7957
	PDA-9	.0000	.132	1.000	-.4882	.4882
	PDA-10	.0000	.132	1.000	-.4882	.4882
	PDA-5	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-6	6.694E-02	.132	1.000	-.4212	.5551
	PDA-7	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-2	.1530	.132	1.000	-.3352	.6412
	PDA-2FD	.0000	.132	1.000	-.4882	.4882
	PDA-3	6.694E-02	.132	1.000	-.4212	.5551
	PDA-4	.0000	.132	1.000	-.4882	.4882
	DDA-13	.5620*	.132	.010	7.381E-02	1.0502
	DDA-1	.4942*	.132	.044	6.046E-03	.9824

Multiple Comparisons

Dependent Variable: SURV7TRN

Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-8FD	CTRL-1	-.3076	.132	.704	-.7957	.1806
	CTRL-2	-.3076	.132	.704	-.7957	.1806
	CTRL-3	-.3745	.132	.354	-.8627	.1137
	CTRL-4	-.3745	.132	.354	-.8627	.1137
	CTRL-5	-.3076	.132	.704	-.7957	.1806
	UDA-11	-.2823	.132	.821	-.7705	.2059
	UDA-12	-.2153	.132	.981	-.7035	.2728
	PDA-8	-.3076	.132	.704	-.7957	.1806
	PDA-9	-.3076	.132	.704	-.7957	.1806
	PDA-10	-.3076	.132	.704	-.7957	.1806
	PDA-5	-.3745	.132	.354	-.8627	.1137
	PDA-6	-.2406	.132	.947	-.7288	.2476
	PDA-7	-.3745	.132	.354	-.8627	.1137
	PDA-2	-.1546	.132	1.000	-.6428	.3336
	PDA-2FD	-.3076	.132	.704	-.7957	.1806
	PDA-3	-.2406	.132	.947	-.7288	.2476
	PDA-4	-.3076	.132	.704	-.7957	.1806
	DDA-13	.2544	.132	.916	-.2338	.7426
	DDA-1	.1867	.132	.996	-.3015	.6748
PDA-9	CTRL-1	.0000	.132	1.000	-.4882	.4882
	CTRL-2	.0000	.132	1.000	-.4882	.4882
	CTRL-3	-6.6941E-02	.132	1.000	-.5551	.4212
	CTRL-4	-6.6941E-02	.132	1.000	-.5551	.4212
	CTRL-5	.0000	.132	1.000	-.4882	.4882
	UDA-11	2.527E-02	.132	1.000	-.4629	.5134
	UDA-12	9.222E-02	.132	1.000	-.3960	.5804
	PDA-8	.0000	.132	1.000	-.4882	.4882
	PDA-8FD	.3076	.132	.704	-.1806	.7957
	PDA-10	.0000	.132	1.000	-.4882	.4882
	PDA-5	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-6	6.694E-02	.132	1.000	-.4212	.5551
	PDA-7	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-2	.1530	.132	1.000	-.3352	.6412
	PDA-2FD	.0000	.132	1.000	-.4882	.4882
	PDA-3	6.694E-02	.132	1.000	-.4212	.5551
	PDA-4	.0000	.132	1.000	-.4882	.4882
	DDA-13	.5620*	.132	.010	7.381E-02	1.0502
	DDA-1	.4942*	.132	.044	6.046E-03	.9824

Multiple Comparisons

Dependent Variable: SURV7TRN
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-10	CTRL-1	.0000	.132	1.000	-.4882	.4882
	CTRL-2	.0000	.132	1.000	-.4882	.4882
	CTRL-3	-6.6941E-02	.132	1.000	-.5551	.4212
	CTRL-4	-6.6941E-02	.132	1.000	-.5551	.4212
	CTRL-5	.0000	.132	1.000	-.4882	.4882
	UDA-11	2.527E-02	.132	1.000	-.4629	.5134
	UDA-12	9.222E-02	.132	1.000	-.3960	.5804
	PDA-8	.0000	.132	1.000	-.4882	.4882
	PDA-8FD	.3076	.132	.704	-.1806	.7957
	PDA-9	.0000	.132	1.000	-.4882	.4882
	PDA-5	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-6	6.694E-02	.132	1.000	-.4212	.5551
	PDA-7	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-2	.1530	.132	1.000	-.3352	.6412
	PDA-2FD	.0000	.132	1.000	-.4882	.4882
	PDA-3	6.694E-02	.132	1.000	-.4212	.5551
	PDA-4	.0000	.132	1.000	-.4882	.4882
	DDA-13	.5620*	.132	.010	7.381E-02	1.0502
	DDA-1	.4942*	.132	.044	6.046E-03	.9824
PDA-5	CTRL-1	6.694E-02	.132	1.000	-.4212	.5551
	CTRL-2	6.694E-02	.132	1.000	-.4212	.5551
	CTRL-3	.0000	.132	1.000	-.4882	.4882
	CTRL-4	.0000	.132	1.000	-.4882	.4882
	CTRL-5	6.694E-02	.132	1.000	-.4212	.5551
	UDA-11	9.222E-02	.132	1.000	-.3960	.5804
	UDA-12	.1592	.132	.999	-.3290	.6473
	PDA-8	6.694E-02	.132	1.000	-.4212	.5551
	PDA-8FD	.3745	.132	.354	-.1137	.8627
	PDA-9	6.694E-02	.132	1.000	-.4212	.5551
	PDA-10	6.694E-02	.132	1.000	-.4212	.5551
	PDA-6	.1339	.132	1.000	-.3543	.6221
	PDA-7	.0000	.132	1.000	-.4882	.4882
	PDA-2	.2199	.132	.977	-.2682	.7081
	PDA-2FD	6.694E-02	.132	1.000	-.4212	.5551
	PDA-3	.1339	.132	1.000	-.3543	.6221
	PDA-4	6.694E-02	.132	1.000	-.4212	.5551
	DDA-13	.6289*	.132	.002	.1407	1.1171
	DDA-1	.5612*	.132	.010	7.299E-02	1.0493

Multiple Comparisons

Dependent Variable: SURV7TRN

Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-6	CTRL-1	-6.6941E-02	.132	1.000	-.5551	.4212
	CTRL-2	-6.6941E-02	.132	1.000	-.5551	.4212
	CTRL-3	-.1339	.132	1.000	-.6221	.3543
	CTRL-4	-.1339	.132	1.000	-.6221	.3543
	CTRL-5	-6.6941E-02	.132	1.000	-.5551	.4212
	UDA-11	-4.1666E-02	.132	1.000	-.5298	.4465
	UDA-12	2.527E-02	.132	1.000	-.4629	.5134
	PDA-8	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-8FD	.2406	.132	.947	-.2476	.7288
	PDA-9	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-10	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-5	-.1339	.132	1.000	-.6221	.3543
	PDA-7	-.1339	.132	1.000	-.6221	.3543
	PDA-2	8.604E-02	.132	1.000	-.4021	.5742
	PDA-2FD	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-3	-2.2204E-16	.132	1.000	-.4882	.4882
	PDA-4	-6.6941E-02	.132	1.000	-.5551	.4212
	DDA-13	.4950*	.132	.043	6.866E-03	.9832
	DDA-1	.4273	.132	.159	-6.0895E-02	.9155
PDA-7	CTRL-1	6.694E-02	.132	1.000	-.4212	.5551
	CTRL-2	6.694E-02	.132	1.000	-.4212	.5551
	CTRL-3	.0000	.132	1.000	-.4882	.4882
	CTRL-4	.0000	.132	1.000	-.4882	.4882
	CTRL-5	6.694E-02	.132	1.000	-.4212	.5551
	UDA-11	9.222E-02	.132	1.000	-.3960	.5804
	UDA-12	.1592	.132	.999	-.3290	.6473
	PDA-8	6.694E-02	.132	1.000	-.4212	.5551
	PDA-8FD	.3745	.132	.354	-.1137	.8627
	PDA-9	6.694E-02	.132	1.000	-.4212	.5551
	PDA-10	6.694E-02	.132	1.000	-.4212	.5551
	PDA-5	.0000	.132	1.000	-.4882	.4882
	PDA-6	.1339	.132	1.000	-.3543	.6221
	PDA-2	.2199	.132	.977	-.2682	.7081
	PDA-2FD	6.694E-02	.132	1.000	-.4212	.5551
	PDA-3	.1339	.132	1.000	-.3543	.6221
	PDA-4	6.694E-02	.132	1.000	-.4212	.5551
	DDA-13	.6289*	.132	.002	.1407	1.1171
	DDA-1	.5612*	.132	.010	7.299E-02	1.0493

Multiple Comparisons

Dependent Variable: SURV7TRN
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-2	CTRL-1	-.1530	.132	1.000	-.6412	.3352
	CTRL-2	-.1530	.132	1.000	-.6412	.3352
	CTRL-3	-.2199	.132	.977	-.7081	.2682
	CTRL-4	-.2199	.132	.977	-.7081	.2682
	CTRL-5	-.1530	.132	1.000	-.6412	.3352
	UDA-11	-.1277	.132	1.000	-.6159	.3605
	UDA-12	-6.0769E-02	.132	1.000	-.5489	.4274
	PDA-8	-.1530	.132	1.000	-.6412	.3352
	PDA-8FD	.1546	.132	1.000	-.3336	.6428
	PDA-9	-.1530	.132	1.000	-.6412	.3352
	PDA-10	-.1530	.132	1.000	-.6412	.3352
	PDA-5	-.2199	.132	.977	-.7081	.2682
	PDA-6	-8.6044E-02	.132	1.000	-.5742	.4021
	PDA-7	-.2199	.132	.977	-.7081	.2682
	PDA-2FD	-.1530	.132	1.000	-.6412	.3352
	PDA-3	-8.6044E-02	.132	1.000	-.5742	.4021
	PDA-4	-.1530	.132	1.000	-.6412	.3352
	DDA-13	.4090	.132	.215	-7.9178E-02	.8972
	DDA-1	.3412	.132	.524	-.1469	.8294
PDA-2FD	CTRL-1	.0000	.132	1.000	-.4882	.4882
	CTRL-2	.0000	.132	1.000	-.4882	.4882
	CTRL-3	-6.6941E-02	.132	1.000	-.5551	.4212
	CTRL-4	-6.6941E-02	.132	1.000	-.5551	.4212
	CTRL-5	.0000	.132	1.000	-.4882	.4882
	UDA-11	2.527E-02	.132	1.000	-.4629	.5134
	UDA-12	9.222E-02	.132	1.000	-.3960	.5804
	PDA-8	.0000	.132	1.000	-.4882	.4882
	PDA-8FD	.3076	.132	.704	-.1806	.7957
	PDA-9	.0000	.132	1.000	-.4882	.4882
	PDA-10	.0000	.132	1.000	-.4882	.4882
	PDA-5	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-6	6.694E-02	.132	1.000	-.4212	.5551
	PDA-7	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-2	.1530	.132	1.000	-.3352	.6412
	PDA-3	6.694E-02	.132	1.000	-.4212	.5551
	PDA-4	.0000	.132	1.000	-.4882	.4882
	DDA-13	.5620*	.132	.010	7.381E-02	1.0502
	DDA-1	.4942*	.132	.044	6.046E-03	.9824

Multiple Comparisons

Dependent Variable: SURV7TRN

Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-3	CTRL-1	-6.6941E-02	.132	1.000	-.5551	.4212
	CTRL-2	-6.6941E-02	.132	1.000	-.5551	.4212
	CTRL-3	-.1339	.132	1.000	-.6221	.3543
	CTRL-4	-.1339	.132	1.000	-.6221	.3543
	CTRL-5	-6.6941E-02	.132	1.000	-.5551	.4212
	UDA-11	-4.1666E-02	.132	1.000	-.5298	.4465
	UDA-12	2.527E-02	.132	1.000	-.4629	.5134
	PDA-8	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-8FD	.2406	.132	.947	-.2476	.7288
	PDA-9	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-10	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-5	-.1339	.132	1.000	-.6221	.3543
	PDA-6	2.220E-16	.132	1.000	-.4882	.4882
	PDA-7	-.1339	.132	1.000	-.6221	.3543
	PDA-2	8.604E-02	.132	1.000	-.4021	.5742
	PDA-2FD	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-4	-6.6941E-02	.132	1.000	-.5551	.4212
	DDA-13	.4950*	.132	.043	6.866E-03	.9832
	DDA-1	.4273	.132	.159	-6.0895E-02	.9155
PDA-4	CTRL-1	.0000	.132	1.000	-.4882	.4882
	CTRL-2	.0000	.132	1.000	-.4882	.4882
	CTRL-3	-6.6941E-02	.132	1.000	-.5551	.4212
	CTRL-4	-6.6941E-02	.132	1.000	-.5551	.4212
	CTRL-5	.0000	.132	1.000	-.4882	.4882
	UDA-11	2.527E-02	.132	1.000	-.4629	.5134
	UDA-12	9.222E-02	.132	1.000	-.3960	.5804
	PDA-8	.0000	.132	1.000	-.4882	.4882
	PDA-8FD	.3076	.132	.704	-.1806	.7957
	PDA-9	.0000	.132	1.000	-.4882	.4882
	PDA-10	.0000	.132	1.000	-.4882	.4882
	PDA-5	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-6	6.694E-02	.132	1.000	-.4212	.5551
	PDA-7	-6.6941E-02	.132	1.000	-.5551	.4212
	PDA-2	.1530	.132	1.000	-.3352	.6412
	PDA-2FD	.0000	.132	1.000	-.4882	.4882
	PDA-3	6.694E-02	.132	1.000	-.4212	.5551
	DDA-13	.5620*	.132	.010	7.381E-02	1.0502
	DDA-1	.4942*	.132	.044	6.046E-03	.9824

Multiple Comparisons

Dependent Variable: SURV7TRN
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
DDA-13	CTRL-1	-.5620*	.132	.010	-1.0502	-7.3807E-02
	CTRL-2	-.5620*	.132	.010	-1.0502	-7.3807E-02
	CTRL-3	-.6289*	.132	.002	-1.1171	-.1407
	CTRL-4	-.6289*	.132	.002	-1.1171	-.1407
	CTRL-5	-.5620*	.132	.010	-1.0502	-7.3807E-02
	UDA-11	-.5367*	.132	.017	-1.0249	-4.8532E-02
	UDA-12	-.4698	.132	.073	-.9579	1.841E-02
	PDA-8	-.5620*	.132	.010	-1.0502	-7.3807E-02
	PDA-8FD	-.2544	.132	.916	-.7426	.2338
	PDA-9	-.5620*	.132	.010	-1.0502	-7.3807E-02
	PDA-10	-.5620*	.132	.010	-1.0502	-7.3807E-02
	PDA-5	-.6289*	.132	.002	-1.1171	-.1407
	PDA-6	-.4950*	.132	.043	-.9832	-6.8661E-03
	PDA-7	-.6289*	.132	.002	-1.1171	-.1407
	PDA-2	-.4090	.132	.215	-.8972	7.918E-02
	PDA-2FD	-.5620*	.132	.010	-1.0502	-7.3807E-02
	PDA-3	-.4950*	.132	.043	-.9832	-6.8661E-03
	PDA-4	-.5620*	.132	.010	-1.0502	-7.3807E-02
	DDA-1	-6.7761E-02	.132	1.000	-.5559	.4204
DDA-1	CTRL-1	-.4942*	.132	.044	-.9824	-6.0457E-03
	CTRL-2	-.4942*	.132	.044	-.9824	-6.0457E-03
	CTRL-3	-.5612*	.132	.010	-1.0493	-7.2987E-02
	CTRL-4	-.5612*	.132	.010	-1.0493	-7.2987E-02
	CTRL-5	-.4942*	.132	.044	-.9824	-6.0457E-03
	UDA-11	-.4689	.132	.074	-.9571	1.923E-02
	UDA-12	-.4020	.132	.239	-.8902	8.617E-02
	PDA-8	-.4942*	.132	.044	-.9824	-6.0457E-03
	PDA-8FD	-.1867	.132	.996	-.6748	.3015
	PDA-9	-.4942*	.132	.044	-.9824	-6.0457E-03
	PDA-10	-.4942*	.132	.044	-.9824	-6.0457E-03
	PDA-5	-.5612*	.132	.010	-1.0493	-7.2987E-02
	PDA-6	-.4273	.132	.159	-.9155	6.090E-02
	PDA-7	-.5612*	.132	.010	-1.0493	-7.2987E-02
	PDA-2	-.3412	.132	.524	-.8294	.1469
	PDA-2FD	-.4942*	.132	.044	-.9824	-6.0457E-03
	PDA-3	-.4273	.132	.159	-.9155	6.090E-02
	PDA-4	-.4942*	.132	.044	-.9824	-6.0457E-03
	DDA-13	6.776E-02	.132	1.000	-.4204	.5559

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

SURV7TRN

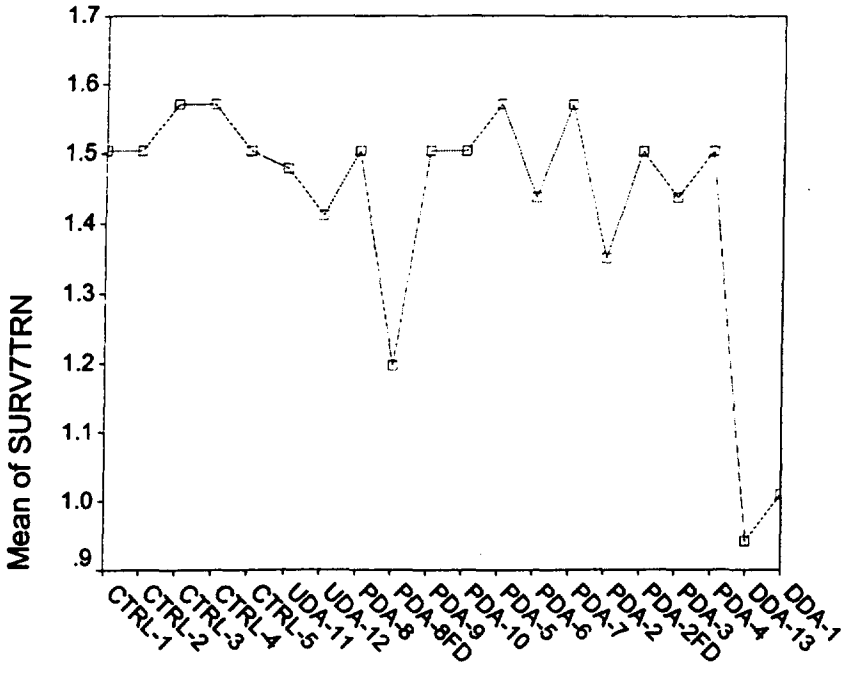
Tukey HSD[a]

STNCODE	N	Subset for alpha = .05		
		1	2	3
DDA-13	4	.9419		
DDA-1	4	1.0096	1.0096	
PDA-8FD	4	1.1963	1.1963	1.1963
PDA-2	4	1.3509	1.3509	1.3509
UDA-12	4	1.4116	1.4116	1.4116
PDA-6	4		1.4369	1.4369
PDA-3	4		1.4369	1.4369
UDA-11	4		1.4786	1.4786
CTRL-1	4			1.5039
CTRL-2	4			1.5039
CTRL-5	4			1.5039
PDA-8	4			1.5039
PDA-9	4			1.5039
PDA-10	4			1.5039
PDA-2FD	4			1.5039
PDA-4	4			1.5039
CTRL-3	4			1.5708
CTRL-4	4			1.5708
PDA-5	4			1.5708
PDA-7	4			1.5708
Sig.		.073	.074	.354

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.000.

Means Plots


Mean of SURV7TRN
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1.0
.9
CTRL-1
CTRL-2
CTRL-3
CTRL-4
CTRL-5
UDA-11
UDA-12
PDA-8
PDA-8FD
PDA-9
PDA-10
PDA-5
PDA-6
PDA-7
PDA-2
PDA-2FD
PDA-3
PDA-4
DDA-13
DDA-1
STNCODE

WGK Plant Eco Risk Assessment
Fathead Surface Water Growth Statistics

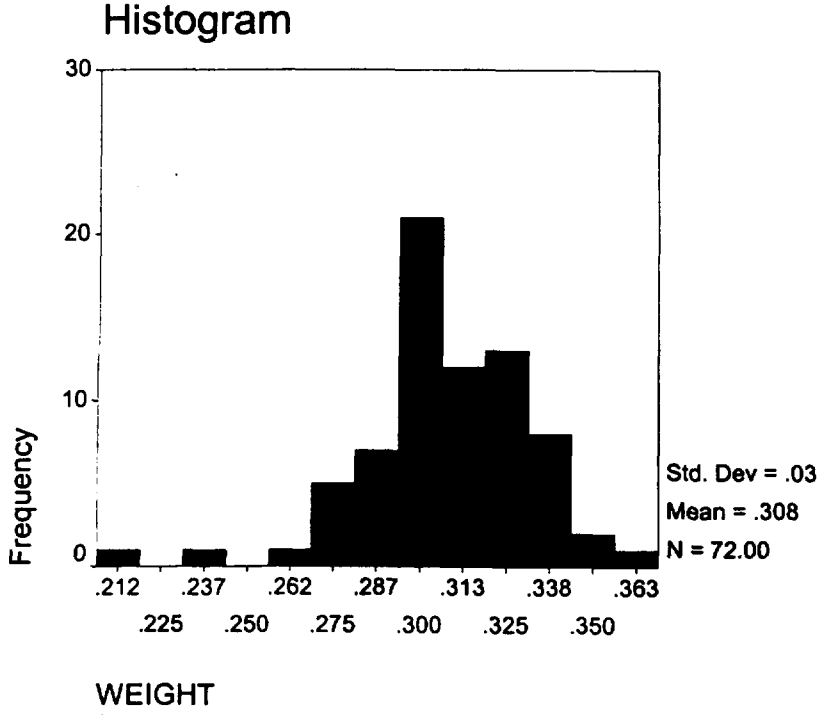
Case Processing Summary

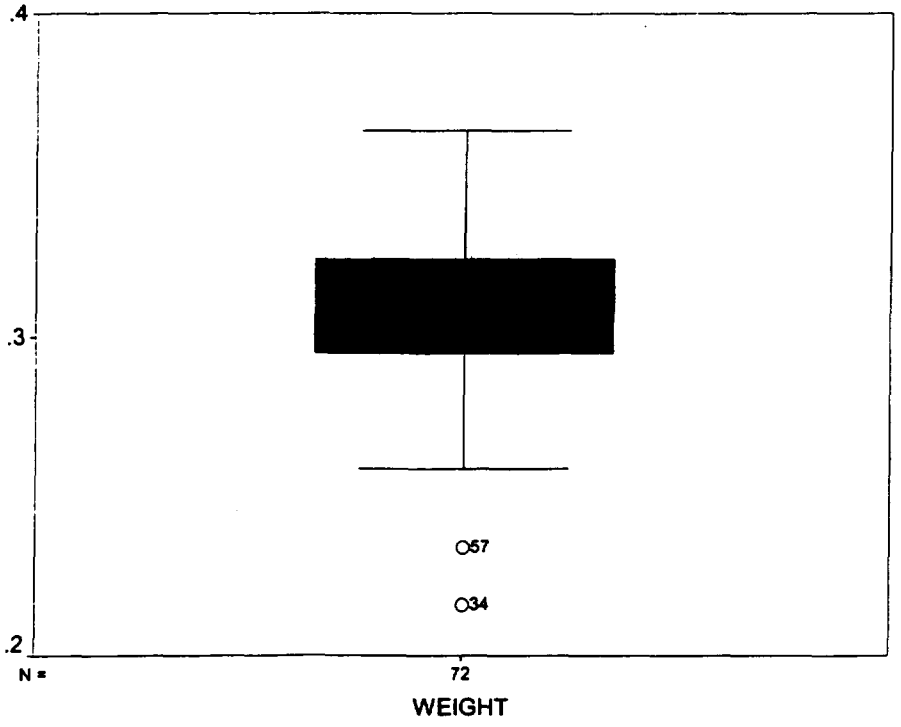
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
WEIGHT	72	100.0%	0	.0%	72	100.0%

Descriptives

			Statistic	Std. Error
WEIGHT	Mean		.3075	2.981E-03
	95% Confidence Interval for Mean	Lower Bound	.3016	
		Upper Bound	.3134	
	5% Trimmed Mean		.3085	
	Median		.3063	
	Variance		6.397E-04	
	Std. Deviation		2.529E-02	
	Minimum		.22	
	Maximum		.36	
	Range		.15	
	Interquartile Range		2.984E-02	
	Skewness		-.774	.283
	Kurtosis		2.144	.559

WEIGHT





Oneway ANOVA

Descriptives

WEIGHT

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
CTRL-1	4	.2933	1.294E-02	6.471E-03	.2727	.3139	.28	.30
CTRL-2	4	.3005	1.271E-02	6.357E-03	.2803	.3207	.29	.32
CTRL-3	4	.2983	2.015E-02	1.008E-02	.2663	.3304	.27	.32
CTRL-4	4	.3257	7.110E-03	3.555E-03	.3144	.3370	.32	.33
CTRL-5	4	.3040	2.241E-02	1.121E-02	.2683	.3397	.28	.33
UDA-11	4	.3003	5.875E-03	2.937E-03	.2910	.3097	.29	.31
UDA-12	4	.3132	4.444E-02	2.222E-02	.2424	.3839	.26	.36
PDA-8	4	.3290	2.102E-02	1.051E-02	.2956	.3624	.31	.35
PDA-8FD	4	.3047	6.178E-02	3.089E-02	.2064	.4030	.22	.36
PDA-9	4	.3232	5.768E-03	2.884E-03	.3140	.3323	.31	.33
PDA-10	4	.2972	2.085E-02	1.043E-02	.2640	.3303	.27	.32
PDA-5	4	.3037	2.110E-02	1.055E-02	.2701	.3372	.28	.32
PDA-6	4	.2980	1.900E-02	9.499E-03	.2678	.3282	.28	.32
PDA-7	4	.2995	4.661E-03	2.331E-03	.2921	.3069	.29	.31
PDA-2	4	.2981	4.459E-02	2.229E-02	.2272	.3691	.23	.33
PDA-2FD	4	.3045	2.313E-02	1.157E-02	.2677	.3413	.28	.34
PDA-3	4	.3207	2.392E-02	1.196E-02	.2826	.3588	.30	.34
PDA-4	4	.3212	1.573E-02	7.866E-03	.2961	.3462	.30	.34
Total	72	.3075	2.529E-02	2.981E-03	.3016	.3134	.22	.36

Test of Homogeneity of Variances

WEIGHT

Levene Statistic	df1	df2	Sig.
2.772	17	54	.002

ANOVA

WEIGHT

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.835E-03	17	5.197E-04	.767	.721
Within Groups	3.659E-02	54	6.775E-04		
Total	4.542E-02	71			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: WEIGHT
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL-1	CTRL-2	-7.1675E-03	.018	1.000	-7.4571E-02	6.024E-02
	CTRL-3	-5.0000E-03	.018	1.000	-7.2403E-02	6.240E-02
	CTRL-4	-3.2335E-02	.018	.945	-9.9738E-02	3.507E-02
	CTRL-5	-1.0665E-02	.018	1.000	-7.8068E-02	5.674E-02
	UDA-11	-7.0000E-03	.018	1.000	-7.4403E-02	6.040E-02
	UDA-12	-1.9835E-02	.018	1.000	-8.7238E-02	4.757E-02
	PDA-8	-3.5667E-02	.018	.884	-.1031	3.174E-02
	PDA-8FD	-1.1335E-02	.018	1.000	-7.8738E-02	5.607E-02
	PDA-9	-2.9835E-02	.018	.973	-9.7238E-02	3.757E-02
	PDA-10	-3.8325E-03	.018	1.000	-7.1236E-02	6.357E-02
	PDA-5	-1.0335E-02	.018	1.000	-7.7738E-02	5.707E-02
	PDA-6	-4.6650E-03	.018	1.000	-7.2068E-02	6.274E-02
	PDA-7	-6.1675E-03	.018	1.000	-7.3571E-02	6.124E-02
	PDA-2	-4.8125E-03	.018	1.000	-7.2216E-02	6.259E-02
	PDA-2FD	-1.1165E-02	.018	1.000	-7.8568E-02	5.624E-02
	PDA-3	-2.7370E-02	.018	.988	-9.4773E-02	4.003E-02
	PDA-4	-2.7835E-02	.018	.986	-9.5238E-02	3.957E-02

Multiple Comparisons

Dependent Variable: WEIGHT
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL-2	CTRL-1	7.167E-03	.018	1.000	-6.0236E-02	7.457E-02
	CTRL-3	2.167E-03	.018	1.000	-6.5236E-02	6.957E-02
	CTRL-4	-2.5168E-02	.018	.995	-9.2571E-02	4.224E-02
	CTRL-5	-3.4975E-03	.018	1.000	-7.0901E-02	6.391E-02
	UDA-11	1.675E-04	.018	1.000	-6.7236E-02	6.757E-02
	UDA-12	-1.2667E-02	.018	1.000	-8.0071E-02	5.474E-02
	PDA-8	-2.8500E-02	.018	.982	-9.5903E-02	3.890E-02
	PDA-8FD	-4.1675E-03	.018	1.000	-7.1571E-02	6.324E-02
	PDA-9	-2.2668E-02	.018	.999	-9.0071E-02	4.474E-02
	PDA-10	3.335E-03	.018	1.000	-6.4068E-02	7.074E-02
	PDA-5	-3.1675E-03	.018	1.000	-7.0571E-02	6.424E-02
	PDA-6	2.503E-03	.018	1.000	-6.4901E-02	6.991E-02
	PDA-7	1.000E-03	.018	1.000	-6.6403E-02	6.840E-02
	PDA-2	2.355E-03	.018	1.000	-6.5048E-02	6.976E-02
	PDA-2FD	-3.9975E-03	.018	1.000	-7.1401E-02	6.341E-02
	PDA-3	-2.0203E-02	.018	1.000	-8.7606E-02	4.720E-02
	PDA-4	-2.0668E-02	.018	1.000	-8.8071E-02	4.674E-02
CTRL-3	CTRL-1	5.000E-03	.018	1.000	-6.2403E-02	7.240E-02
	CTRL-2	-2.1675E-03	.018	1.000	-6.9571E-02	6.524E-02
	CTRL-4	-2.7335E-02	.018	.988	-9.4738E-02	4.007E-02
	CTRL-5	-5.6650E-03	.018	1.000	-7.3068E-02	6.174E-02
	UDA-11	-2.0000E-03	.018	1.000	-6.9403E-02	6.540E-02
	UDA-12	-1.4835E-02	.018	1.000	-8.2238E-02	5.257E-02
	PDA-8	-3.0667E-02	.018	.965	-9.8071E-02	3.674E-02
	PDA-8FD	-6.3350E-03	.018	1.000	-7.3738E-02	6.107E-02
	PDA-9	-2.4835E-02	.018	.996	-9.2238E-02	4.257E-02
	PDA-10	1.167E-03	.018	1.000	-6.6236E-02	6.857E-02
	PDA-5	-5.3350E-03	.018	1.000	-7.2738E-02	6.207E-02
	PDA-6	3.350E-04	.018	1.000	-6.7068E-02	6.774E-02
	PDA-7	-1.1675E-03	.018	1.000	-6.8571E-02	6.624E-02
	PDA-2	1.875E-04	.018	1.000	-6.7216E-02	6.759E-02
	PDA-2FD	-6.1650E-03	.018	1.000	-7.3568E-02	6.124E-02
	PDA-3	-2.2370E-02	.018	.999	-8.9773E-02	4.503E-02
	PDA-4	-2.2835E-02	.018	.998	-9.0238E-02	4.457E-02

Multiple Comparisons

Dependent Variable: WEIGHT

Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL-4	CTRL-1	3.234E-02	.018	.945	-3.5068E-02	9.974E-02
	CTRL-2	2.517E-02	.018	.995	-4.2236E-02	9.257E-02
	CTRL-3	2.734E-02	.018	.988	-4.0068E-02	9.474E-02
	CTRL-5	2.167E-02	.018	.999	-4.5733E-02	8.907E-02
	UDA-11	2.533E-02	.018	.995	-4.2068E-02	9.274E-02
	UDA-12	1.250E-02	.018	1.000	-5.4903E-02	7.990E-02
	PDA-8	-3.3325E-03	.018	1.000	-7.0736E-02	6.407E-02
	PDA-8FD	2.100E-02	.018	.999	-4.6403E-02	8.840E-02
	PDA-9	2.500E-03	.018	1.000	-6.4903E-02	6.990E-02
	PDA-10	2.850E-02	.018	.982	-3.8901E-02	9.591E-02
	PDA-5	2.200E-02	.018	.999	-4.5403E-02	8.940E-02
	PDA-6	2.767E-02	.018	.987	-3.9733E-02	9.507E-02
	PDA-7	2.617E-02	.018	.993	-4.1236E-02	9.357E-02
	PDA-2	2.752E-02	.018	.987	-3.9881E-02	9.493E-02
	PDA-2FD	2.117E-02	.018	.999	-4.6233E-02	8.857E-02
	PDA-3	4.965E-03	.018	1.000	-6.2438E-02	7.237E-02
	PDA-4	4.500E-03	.018	1.000	-6.2903E-02	7.190E-02
CTRL-5	CTRL-1	1.067E-02	.018	1.000	-5.6738E-02	7.807E-02
	CTRL-2	3.498E-03	.018	1.000	-6.3906E-02	7.090E-02
	CTRL-3	5.665E-03	.018	1.000	-6.1738E-02	7.307E-02
	CTRL-4	-2.1670E-02	.018	.999	-8.9073E-02	4.573E-02
	UDA-11	3.665E-03	.018	1.000	-6.3738E-02	7.107E-02
	UDA-12	-9.1700E-03	.018	1.000	-7.6573E-02	5.823E-02
	PDA-8	-2.5002E-02	.018	.995	-9.2406E-02	4.240E-02
	PDA-8FD	-6.7000E-04	.018	1.000	-6.8073E-02	6.673E-02
	PDA-9	-1.9170E-02	.018	1.000	-8.6573E-02	4.823E-02
	PDA-10	6.833E-03	.018	1.000	-6.0571E-02	7.424E-02
	PDA-5	3.300E-04	.018	1.000	-6.7073E-02	6.773E-02
	PDA-6	6.000E-03	.018	1.000	-6.1403E-02	7.340E-02
	PDA-7	4.498E-03	.018	1.000	-6.2906E-02	7.190E-02
	PDA-2	5.853E-03	.018	1.000	-6.1551E-02	7.326E-02
	PDA-2FD	-5.0000E-04	.018	1.000	-6.7903E-02	6.690E-02
	PDA-3	-1.6705E-02	.018	1.000	-8.4108E-02	5.070E-02
	PDA-4	-1.7170E-02	.018	1.000	-8.4573E-02	5.023E-02

Multiple Comparisons

Dependent Variable: WEIGHT
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
UDA-11	CTRL-1	7.000E-03	.018	1.000	-6.0403E-02	7.440E-02
	CTRL-2	-1.6750E-04	.018	1.000	-6.7571E-02	6.724E-02
	CTRL-3	2.000E-03	.018	1.000	-6.5403E-02	6.940E-02
	CTRL-4	-2.5335E-02	.018	.995	-9.2738E-02	4.207E-02
	CTRL-5	-3.6650E-03	.018	1.000	-7.1068E-02	6.374E-02
	UDA-12	-1.2835E-02	.018	1.000	-8.0238E-02	5.457E-02
	PDA-8	-2.8667E-02	.018	.981	-9.6071E-02	3.874E-02
	PDA-8FD	-4.3350E-03	.018	1.000	-7.1738E-02	6.307E-02
	PDA-9	-2.2835E-02	.018	.998	-9.0238E-02	4.457E-02
	PDA-10	3.167E-03	.018	1.000	-6.4236E-02	7.057E-02
	PDA-5	-3.3350E-03	.018	1.000	-7.0738E-02	6.407E-02
	PDA-6	2.335E-03	.018	1.000	-6.5068E-02	6.974E-02
	PDA-7	8.325E-04	.018	1.000	-6.6571E-02	6.824E-02
	PDA-2	2.188E-03	.018	1.000	-6.5216E-02	6.959E-02
	PDA-2FD	-4.1650E-03	.018	1.000	-7.1568E-02	6.324E-02
	PDA-3	-2.0370E-02	.018	1.000	-8.7773E-02	4.703E-02
	PDA-4	-2.0835E-02	.018	.999	-8.8238E-02	4.657E-02
UDA-12	CTRL-1	1.983E-02	.018	1.000	-4.7568E-02	8.724E-02
	CTRL-2	1.267E-02	.018	1.000	-5.4736E-02	8.007E-02
	CTRL-3	1.483E-02	.018	1.000	-5.2568E-02	8.224E-02
	CTRL-4	-1.2500E-02	.018	1.000	-7.9903E-02	5.490E-02
	CTRL-5	9.170E-03	.018	1.000	-5.8233E-02	7.657E-02
	UDA-11	1.283E-02	.018	1.000	-5.4568E-02	8.024E-02
	PDA-8	-1.5832E-02	.018	1.000	-8.3236E-02	5.157E-02
	PDA-8FD	8.500E-03	.018	1.000	-5.8903E-02	7.590E-02
	PDA-9	-1.0000E-02	.018	1.000	-7.7403E-02	5.740E-02
	PDA-10	1.600E-02	.018	1.000	-5.1401E-02	8.341E-02
	PDA-5	9.500E-03	.018	1.000	-5.7903E-02	7.690E-02
	PDA-6	1.517E-02	.018	1.000	-5.2233E-02	8.257E-02
	PDA-7	1.367E-02	.018	1.000	-5.3736E-02	8.107E-02
	PDA-2	1.502E-02	.018	1.000	-5.2381E-02	8.243E-02
	PDA-2FD	8.670E-03	.018	1.000	-5.8733E-02	7.607E-02
	PDA-3	-7.5350E-03	.018	1.000	-7.4938E-02	5.987E-02
	PDA-4	-8.0000E-03	.018	1.000	-7.5403E-02	5.940E-02

Multiple Comparisons

Dependent Variable: WEIGHT
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-8	CTRL-1	3.567E-02	.018	.884	-3.1736E-02	.1031
	CTRL-2	2.850E-02	.018	.982	-3.8903E-02	9.590E-02
	CTRL-3	3.067E-02	.018	.965	-3.6736E-02	9.807E-02
	CTRL-4	3.332E-03	.018	1.000	-6.4071E-02	7.074E-02
	CTRL-5	2.500E-02	.018	.995	-4.2401E-02	9.241E-02
	UDA-11	2.867E-02	.018	.981	-3.8736E-02	9.607E-02
	UDA-12	1.583E-02	.018	1.000	-5.1571E-02	8.324E-02
	PDA-8FD	2.433E-02	.018	.997	-4.3071E-02	9.174E-02
	PDA-9	5.832E-03	.018	1.000	-6.1571E-02	7.324E-02
	PDA-10	3.183E-02	.018	.952	-3.5568E-02	9.924E-02
	PDA-5	2.533E-02	.018	.995	-4.2071E-02	9.274E-02
	PDA-6	3.100E-02	.018	.962	-3.6401E-02	9.841E-02
	PDA-7	2.950E-02	.018	.975	-3.7903E-02	9.690E-02
	PDA-2	3.085E-02	.018	.963	-3.6548E-02	9.826E-02
	PDA-2FD	2.450E-02	.018	.996	-4.2901E-02	9.191E-02
	PDA-3	8.297E-03	.018	1.000	-5.9106E-02	7.570E-02
	PDA-4	7.832E-03	.018	1.000	-5.9571E-02	7.524E-02
PDA-8FD	CTRL-1	1.133E-02	.018	1.000	-5.6068E-02	7.874E-02
	CTRL-2	4.167E-03	.018	1.000	-6.3236E-02	7.157E-02
	CTRL-3	6.335E-03	.018	1.000	-6.1068E-02	7.374E-02
	CTRL-4	-2.1000E-02	.018	.999	-8.8403E-02	4.640E-02
	CTRL-5	6.700E-04	.018	1.000	-6.6733E-02	6.807E-02
	UDA-11	4.335E-03	.018	1.000	-6.3068E-02	7.174E-02
	UDA-12	-8.5000E-03	.018	1.000	-7.5903E-02	5.890E-02
	PDA-8	-2.4332E-02	.018	.997	-9.1736E-02	4.307E-02
	PDA-9	-1.8500E-02	.018	1.000	-8.5903E-02	4.890E-02
	PDA-10	7.502E-03	.018	1.000	-5.9901E-02	7.491E-02
	PDA-5	1.000E-03	.018	1.000	-6.6403E-02	6.840E-02
	PDA-6	6.670E-03	.018	1.000	-6.0733E-02	7.407E-02
	PDA-7	5.167E-03	.018	1.000	-6.2236E-02	7.257E-02
	PDA-2	6.522E-03	.018	1.000	-6.0881E-02	7.393E-02
	PDA-2FD	1.700E-04	.018	1.000	-6.7233E-02	6.757E-02
	PDA-3	-1.6035E-02	.018	1.000	-8.3438E-02	5.137E-02
	PDA-4	-1.6500E-02	.018	1.000	-8.3903E-02	5.090E-02

Multiple Comparisons

Dependent Variable: WEIGHT
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-9	CTRL-1	2.984E-02	.018	.973	-3.7568E-02	9.724E-02
	CTRL-2	2.267E-02	.018	.999	-4.4736E-02	9.007E-02
	CTRL-3	2.483E-02	.018	.996	-4.2568E-02	9.224E-02
	CTRL-4	-2.5000E-03	.018	1.000	-6.9903E-02	6.490E-02
	CTRL-5	1.917E-02	.018	1.000	-4.8233E-02	8.657E-02
	UDA-11	2.283E-02	.018	.998	-4.4568E-02	9.024E-02
	UDA-12	1.000E-02	.018	1.000	-5.7403E-02	7.740E-02
	PDA-8	-5.8325E-03	.018	1.000	-7.3236E-02	6.157E-02
	PDA-8FD	1.850E-02	.018	1.000	-4.8903E-02	8.590E-02
	PDA-10	2.600E-02	.018	.993	-4.1401E-02	9.341E-02
	PDA-5	1.950E-02	.018	1.000	-4.7903E-02	8.690E-02
	PDA-6	2.517E-02	.018	.995	-4.2233E-02	9.257E-02
	PDA-7	2.367E-02	.018	.998	-4.3736E-02	9.107E-02
	PDA-2	2.502E-02	.018	.995	-4.2381E-02	9.243E-02
	PDA-2FD	1.867E-02	.018	1.000	-4.8733E-02	8.607E-02
	PDA-3	2.465E-03	.018	1.000	-6.4938E-02	6.987E-02
	PDA-4	2.000E-03	.018	1.000	-6.5403E-02	6.940E-02
PDA-10	CTRL-1	3.833E-03	.018	1.000	-6.3571E-02	7.124E-02
	CTRL-2	-3.3350E-03	.018	1.000	-7.0738E-02	6.407E-02
	CTRL-3	-1.1675E-03	.018	1.000	-6.8571E-02	6.624E-02
	CTRL-4	-2.8502E-02	.018	.982	-9.5906E-02	3.890E-02
	CTRL-5	-6.8325E-03	.018	1.000	-7.4236E-02	6.057E-02
	UDA-11	-3.1675E-03	.018	1.000	-7.0571E-02	6.424E-02
	UDA-12	-1.6002E-02	.018	1.000	-8.3406E-02	5.140E-02
	PDA-8	-3.1835E-02	.018	.952	-9.9238E-02	3.557E-02
	PDA-8FD	-7.5025E-03	.018	1.000	-7.4906E-02	5.990E-02
	PDA-9	-2.6002E-02	.018	.993	-9.3406E-02	4.140E-02
	PDA-5	-6.5025E-03	.018	1.000	-7.3906E-02	6.090E-02
	PDA-6	-8.3250E-04	.018	1.000	-6.8236E-02	6.657E-02
	PDA-7	-2.3350E-03	.018	1.000	-6.9738E-02	6.507E-02
	PDA-2	-9.8000E-04	.018	1.000	-6.8383E-02	6.642E-02
	PDA-2FD	-7.3325E-03	.018	1.000	-7.4736E-02	6.007E-02
	PDA-3	-2.3537E-02	.018	.998	-9.0941E-02	4.387E-02
	PDA-4	-2.4002E-02	.018	.997	-9.1406E-02	4.340E-02

Multiple Comparisons

Dependent Variable: WEIGHT

Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-5	CTRL-1	1.034E-02	.018	1.000	-5.7068E-02	7.774E-02
	CTRL-2	3.168E-03	.018	1.000	-6.4236E-02	7.057E-02
	CTRL-3	5.335E-03	.018	1.000	-6.2068E-02	7.274E-02
	CTRL-4	-2.2000E-02	.018	.999	-8.9403E-02	4.540E-02
	CTRL-5	-3.3000E-04	.018	1.000	-6.7733E-02	6.707E-02
	UDA-11	3.335E-03	.018	1.000	-6.4068E-02	7.074E-02
	UDA-12	-9.5000E-03	.018	1.000	-7.6903E-02	5.790E-02
	PDA-8	-2.5332E-02	.018	.995	-9.2736E-02	4.207E-02
	PDA-8FD	-1.0000E-03	.018	1.000	-6.8403E-02	6.640E-02
	PDA-9	-1.9500E-02	.018	1.000	-8.6903E-02	4.790E-02
	PDA-10	6.503E-03	.018	1.000	-6.0901E-02	7.391E-02
	PDA-6	5.670E-03	.018	1.000	-6.1733E-02	7.307E-02
	PDA-7	4.168E-03	.018	1.000	-6.3236E-02	7.157E-02
	PDA-2	5.523E-03	.018	1.000	-6.1881E-02	7.293E-02
	PDA-2FD	-8.3000E-04	.018	1.000	-6.8233E-02	6.657E-02
	PDA-3	-1.7035E-02	.018	1.000	-8.4438E-02	5.037E-02
	PDA-4	-1.7500E-02	.018	1.000	-8.4903E-02	4.990E-02
PDA-6	CTRL-1	4.665E-03	.018	1.000	-6.2738E-02	7.207E-02
	CTRL-2	-2.5025E-03	.018	1.000	-6.9906E-02	6.490E-02
	CTRL-3	-3.3500E-04	.018	1.000	-6.7738E-02	6.707E-02
	CTRL-4	-2.7670E-02	.018	.987	-9.5073E-02	3.973E-02
	CTRL-5	-6.0000E-03	.018	1.000	-7.3403E-02	6.140E-02
	UDA-11	-2.3350E-03	.018	1.000	-6.9738E-02	6.507E-02
	UDA-12	-1.5170E-02	.018	1.000	-8.2573E-02	5.223E-02
	PDA-8	-3.1002E-02	.018	.962	-9.8406E-02	3.640E-02
	PDA-8FD	-6.6700E-03	.018	1.000	-7.4073E-02	6.073E-02
	PDA-9	-2.5170E-02	.018	.995	-9.2573E-02	4.223E-02
	PDA-10	8.325E-04	.018	1.000	-6.6571E-02	6.824E-02
	PDA-5	-5.6700E-03	.018	1.000	-7.3073E-02	6.173E-02
	PDA-7	-1.5025E-03	.018	1.000	-6.8906E-02	6.590E-02
	PDA-2	-1.4750E-04	.018	1.000	-6.7551E-02	6.726E-02
	PDA-2FD	-6.5000E-03	.018	1.000	-7.3903E-02	6.090E-02
	PDA-3	-2.2705E-02	.018	.998	-9.0108E-02	4.470E-02
	PDA-4	-2.3170E-02	.018	.998	-9.0573E-02	4.423E-02

Multiple Comparisons

Dependent Variable: WEIGHT
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-7	CTRL-1	6.167E-03	.018	1.000	-6.1236E-02	7.357E-02
	CTRL-2	-1.0000E-03	.018	1.000	-6.8403E-02	6.640E-02
	CTRL-3	1.167E-03	.018	1.000	-6.6236E-02	6.857E-02
	CTRL-4	-2.6168E-02	.018	.993	-9.3571E-02	4.124E-02
	CTRL-5	-4.4975E-03	.018	1.000	-7.1901E-02	6.291E-02
	UDA-11	-8.3250E-04	.018	1.000	-6.8236E-02	6.657E-02
	UDA-12	-1.3668E-02	.018	1.000	-8.1071E-02	5.374E-02
	PDA-8	-2.9500E-02	.018	.975	-9.6903E-02	3.790E-02
	PDA-8FD	-5.1675E-03	.018	1.000	-7.2571E-02	6.224E-02
	PDA-9	-2.3668E-02	.018	.998	-9.1071E-02	4.374E-02
	PDA-10	2.335E-03	.018	1.000	-6.5068E-02	6.974E-02
	PDA-5	-4.1675E-03	.018	1.000	-7.1571E-02	6.324E-02
	PDA-6	1.503E-03	.018	1.000	-6.5901E-02	6.891E-02
	PDA-2	1.355E-03	.018	1.000	-6.6048E-02	6.876E-02
	PDA-2FD	-4.9975E-03	.018	1.000	-7.2401E-02	6.241E-02
	PDA-3	-2.1203E-02	.018	.999	-8.8606E-02	4.620E-02
	PDA-4	-2.1668E-02	.018	.999	-8.9071E-02	4.574E-02
PDA-2	CTRL-1	4.812E-03	.018	1.000	-6.2591E-02	7.222E-02
	CTRL-2	-2.3550E-03	.018	1.000	-6.9758E-02	6.505E-02
	CTRL-3	-1.8750E-04	.018	1.000	-6.7591E-02	6.722E-02
	CTRL-4	-2.7523E-02	.018	.987	-9.4926E-02	3.988E-02
	CTRL-5	-5.8525E-03	.018	1.000	-7.3256E-02	6.155E-02
	UDA-11	-2.1875E-03	.018	1.000	-6.9591E-02	6.522E-02
	UDA-12	-1.5022E-02	.018	1.000	-8.2426E-02	5.238E-02
	PDA-8	-3.0855E-02	.018	.963	-9.8258E-02	3.655E-02
	PDA-8FD	-6.5225E-03	.018	1.000	-7.3926E-02	6.088E-02
	PDA-9	-2.5023E-02	.018	.995	-9.2426E-02	4.238E-02
	PDA-10	9.800E-04	.018	1.000	-6.6423E-02	6.838E-02
	PDA-5	-5.5225E-03	.018	1.000	-7.2926E-02	6.188E-02
	PDA-6	1.475E-04	.018	1.000	-6.7256E-02	6.755E-02
	PDA-7	-1.3550E-03	.018	1.000	-6.8758E-02	6.605E-02
	PDA-2FD	-6.3525E-03	.018	1.000	-7.3756E-02	6.105E-02
	PDA-3	-2.2558E-02	.018	.999	-8.9961E-02	4.485E-02
	PDA-4	-2.3023E-02	.018	.998	-9.0426E-02	4.438E-02

Multiple Comparisons

Dependent Variable: WEIGHT
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-2FD	CTRL-1	1.117E-02	.018	1.000	-5.6238E-02	7.857E-02
	CTRL-2	3.998E-03	.018	1.000	-6.3406E-02	7.140E-02
	CTRL-3	6.165E-03	.018	1.000	-6.1238E-02	7.357E-02
	CTRL-4	-2.1170E-02	.018	.999	-8.8573E-02	4.623E-02
	CTRL-5	5.000E-04	.018	1.000	-6.6903E-02	6.790E-02
	UDA-11	4.165E-03	.018	1.000	-6.3238E-02	7.157E-02
	UDA-12	-8.6700E-03	.018	1.000	-7.6073E-02	5.873E-02
	PDA-8	-2.4502E-02	.018	.996	-9.1906E-02	4.290E-02
	PDA-8FD	-1.7000E-04	.018	1.000	-6.7573E-02	6.723E-02
	PDA-9	-1.8670E-02	.018	1.000	-8.6073E-02	4.873E-02
	PDA-10	7.333E-03	.018	1.000	-6.0071E-02	7.474E-02
	PDA-5	8.300E-04	.018	1.000	-6.6573E-02	6.823E-02
	PDA-6	6.500E-03	.018	1.000	-6.0903E-02	7.390E-02
	PDA-7	4.998E-03	.018	1.000	-6.2406E-02	7.240E-02
	PDA-2	6.353E-03	.018	1.000	-6.1051E-02	7.376E-02
	PDA-3	-1.6205E-02	.018	1.000	-8.3608E-02	5.120E-02
	PDA-4	-1.6670E-02	.018	1.000	-8.4073E-02	5.073E-02
PDA-3	CTRL-1	2.737E-02	.018	.988	-4.0033E-02	9.477E-02
	CTRL-2	2.020E-02	.018	1.000	-4.7201E-02	8.761E-02
	CTRL-3	2.237E-02	.018	.999	-4.5033E-02	8.977E-02
	CTRL-4	-4.9650E-03	.018	1.000	-7.2368E-02	6.244E-02
	CTRL-5	1.670E-02	.018	1.000	-5.0698E-02	8.411E-02
	UDA-11	2.037E-02	.018	1.000	-4.7033E-02	8.777E-02
	UDA-12	7.535E-03	.018	1.000	-5.9868E-02	7.494E-02
	PDA-8	-8.2975E-03	.018	1.000	-7.5701E-02	5.911E-02
	PDA-8FD	1.604E-02	.018	1.000	-5.1368E-02	8.344E-02
	PDA-9	-2.4650E-03	.018	1.000	-6.9868E-02	6.494E-02
	PDA-10	2.354E-02	.018	.998	-4.3866E-02	9.094E-02
	PDA-5	1.703E-02	.018	1.000	-5.0368E-02	8.444E-02
	PDA-6	2.271E-02	.018	.998	-4.4698E-02	9.011E-02
	PDA-7	2.120E-02	.018	.999	-4.6201E-02	8.861E-02
	PDA-2	2.256E-02	.018	.999	-4.4846E-02	8.996E-02
	PDA-2FD	1.620E-02	.018	1.000	-5.1198E-02	8.361E-02
	PDA-4	-4.6500E-04	.018	1.000	-6.7868E-02	6.694E-02

Multiple Comparisons

Dependent Variable: WEIGHT
Tukey HSD

(I) STNCODE	(J) STNCODE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-4	CTRL-1	2.784E-02	.018	.986	-3.9568E-02	9.524E-02
	CTRL-2	2.067E-02	.018	1.000	-4.6736E-02	8.807E-02
	CTRL-3	2.283E-02	.018	.998	-4.4568E-02	9.024E-02
	CTRL-4	-4.5000E-03	.018	1.000	-7.1903E-02	6.290E-02
	CTRL-5	1.717E-02	.018	1.000	-5.0233E-02	8.457E-02
	UDA-11	2.083E-02	.018	.999	-4.6568E-02	8.824E-02
	UDA-12	8.000E-03	.018	1.000	-5.9403E-02	7.540E-02
	PDA-8	-7.8325E-03	.018	1.000	-7.5236E-02	5.957E-02
	PDA-8FD	1.650E-02	.018	1.000	-5.0903E-02	8.390E-02
	PDA-9	-2.0000E-03	.018	1.000	-6.9403E-02	6.540E-02
	PDA-10	2.400E-02	.018	.997	-4.3401E-02	9.141E-02
	PDA-5	1.750E-02	.018	1.000	-4.9903E-02	8.490E-02
	PDA-6	2.317E-02	.018	.998	-4.4233E-02	9.057E-02
	PDA-7	2.167E-02	.018	.999	-4.5736E-02	8.907E-02
	PDA-2	2.302E-02	.018	.998	-4.4381E-02	9.043E-02
	PDA-2FD	1.667E-02	.018	1.000	-5.0733E-02	8.407E-02
	PDA-3	4.650E-04	.018	1.000	-6.6938E-02	6.787E-02

Homogeneous Subsets

WEIGHT

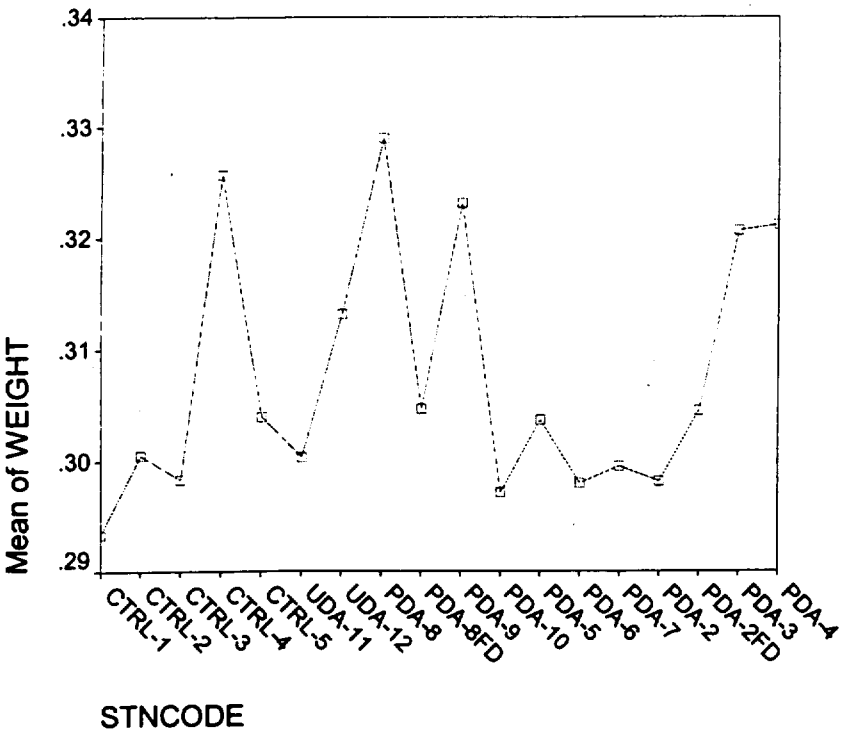
Tukey HSD[a]

STNCODE	N	Subset for alpha = .05
		1
CTRL-1	4	.2933
PDA-10	4	.2972
PDA-6	4	.2980
PDA-2	4	.2981
CTRL-3	4	.2983
PDA-7	4	.2995
UDA-11	4	.3003
CTRL-2	4	.3005
PDA-5	4	.3037
CTRL-5	4	.3040
PDA-2FD	4	.3045
PDA-8FD	4	.3047
UDA-12	4	.3132
PDA-3	4	.3207
PDA-4	4	.3212
PDA-9	4	.3232
CTRL-4	4	.3257
PDA-8	4	.3290
Sig.		.884

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.000.

Means Plots


Mean of WEIGHT
.34
.33
.32
.31
.30
.29
CTRL-1
CTRL-2
CTRL-3
CTRL-4
CTRL-5
UDA-11
UDA-12
PDA-8
PDA-8FD
PDA-9
PDA-10
PDA-5
PDA-6
PDA-7
PDA-2
PDA-2FD
PDA-3
PDA-4
STNCODE

	stncode	station	surv2d	surv2trn	surv7d
1	1.00	CTRL-1	.93	1.30	.93
2	1.00	CTRL-1	1.00	1.57	1.00
3	1.00	CTRL-1	1.00	1.57	1.00
4	1.00	CTRL-1	1.00	1.57	1.00
5	2.00	CTRL-2	.93	1.30	.93
6	2.00	CTRL-2	1.00	1.57	1.00
7	2.00	CTRL-2	1.00	1.57	1.00
8	2.00	CTRL-2	1.00	1.57	1.00
9	3.00	CTRL-3	1.00	1.57	1.00
10	3.00	CTRL-3	1.00	1.57	1.00
11	3.00	CTRL-3	1.00	1.57	1.00
12	3.00	CTRL-3	1.00	1.57	1.00
13	4.00	CTRL-4	1.00	1.57	1.00
14	4.00	CTRL-4	1.00	1.57	1.00
15	4.00	CTRL-4	1.00	1.57	1.00
16	4.00	CTRL-4	1.00	1.57	1.00
17	5.00	CTRL-5	1.00	1.57	1.00
18	5.00	CTRL-5	.93	1.30	.93
19	5.00	CTRL-5	1.00	1.57	1.00
20	5.00	CTRL-5	1.00	1.57	1.00
21	6.00	UDA-11	1.00	1.57	1.00
22	6.00	UDA-11	1.00	1.57	.87
23	6.00	UDA-11	1.00	1.57	1.00
24	6.00	UDA-11	1.00	1.57	1.00
25	7.00	UDA-12	1.00	1.57	1.00
26	7.00	UDA-12	1.00	1.57	.93
27	7.00	UDA-12	1.00	1.57	.87
28	7.00	UDA-12	1.00	1.57	1.00
29	8.00	PDA-8	1.00	1.57	1.00

	surv7trn	weight
1	1.30	.28
2	1.57	.30
3	1.57	.29
4	1.57	.30
5	1.30	.30
6	1.57	.30
7	1.57	.32
8	1.57	.29
9	1.57	.32
10	1.57	.30
11	1.57	.30
12	1.57	.27
13	1.57	.32
14	1.57	.32
15	1.57	.33
16	1.57	.33
17	1.57	.28
18	1.30	.30
19	1.57	.31
20	1.57	.33
21	1.57	.31
22	1.20	.30
23	1.57	.30
24	1.57	.29
25	1.57	.36
26	1.30	.33
27	1.20	.30
28	1.57	.26
29	1.57	.31

	stncode	station	surv2d	surv2trn	surv7d
30	8.00	PDA-8	1.00	1.57	.93
31	8.00	PDA-8	1.00	1.57	1.00
32	8.00	PDA-8	1.00	1.57	1.00
33	9.00	PDA-8FD	1.00	1.57	1.00
34	9.00	PDA-8FD	1.00	1.57	.40
35	9.00	PDA-8FD	1.00	1.57	.67
36	9.00	PDA-8FD	1.00	1.57	1.00
37	10.00	PDA-9	1.00	1.57	1.00
38	10.00	PDA-9	.93	1.30	.93
39	10.00	PDA-9	1.00	1.57	1.00
40	10.00	PDA-9	1.00	1.57	1.00
41	11.00	PDA-10	1.00	1.57	1.00
42	11.00	PDA-10	1.00	1.57	1.00
43	11.00	PDA-10	.93	1.30	.93
44	11.00	PDA-10	1.00	1.57	1.00
45	12.00	PDA-5	1.00	1.57	1.00
46	12.00	PDA-5	1.00	1.57	1.00
47	12.00	PDA-5	1.00	1.57	1.00
48	12.00	PDA-5	1.00	1.57	1.00
49	13.00	PDA-6	.93	1.30	.93
50	13.00	PDA-6	1.00	1.57	1.00
51	13.00	PDA-6	1.00	1.57	1.00
52	13.00	PDA-6	1.00	1.57	.93
53	14.00	PDA-7	1.00	1.57	1.00
54	14.00	PDA-7	1.00	1.57	1.00
55	14.00	PDA-7	1.00	1.57	1.00
56	14.00	PDA-7	1.00	1.57	1.00
57	15.00	PDA-2	1.00	1.57	.67
58	15.00	PDA-2	1.00	1.57	1.00

	surv7trn	weight
30	1.30	.31
31	1.57	.35
32	1.57	.34
33	1.57	.33
34	.68	.22
35	.96	.36
36	1.57	.31
37	1.57	.32
38	1.30	.31
39	1.57	.33
40	1.57	.33
41	1.57	.31
42	1.57	.27
43	1.30	.29
44	1.57	.32
45	1.57	.32
46	1.57	.29
47	1.57	.28
48	1.57	.32
49	1.30	.30
50	1.57	.29
51	1.57	.32
52	1.30	.28
53	1.57	.30
54	1.57	.30
55	1.57	.29
56	1.57	.31
57	.96	.23
58	1.57	.33

	stncode	station	surv2d	surv2trn	surv7d
59	15.00	PDA-2	1.00	1.57	.93
60	15.00	PDA-2	1.00	1.57	1.00
61	16.00	PDA-2FD	1.00	1.57	1.00
62	16.00	PDA-2FD	1.00	1.57	1.00
63	16.00	PDA-2FD	1.00	1.57	1.00
64	16.00	PDA-2FD	1.00	1.57	.93
65	17.00	PDA-3	1.00	1.57	.93
66	17.00	PDA-3	1.00	1.57	.93
67	17.00	PDA-3	1.00	1.57	1.00
68	17.00	PDA-3	1.00	1.57	1.00
69	18.00	PDA-4	1.00	1.57	1.00
70	18.00	PDA-4	1.00	1.57	1.00
71	18.00	PDA-4	1.00	1.57	.93
72	18.00	PDA-4	1.00	1.57	1.00
73	19.00	DDA-13	.80	1.11	.67
74	19.00	DDA-13	1.00	1.57	.80
75	19.00	DDA-13	.93	1.30	.60
76	19.00	DDA-13	.87	1.20	.53
77	20.00	DDA-1	1.00	1.57	.93
78	20.00	DDA-1	1.00	1.57	.60
79	20.00	DDA-1	1.00	1.57	.93
80	20.00	DDA-1	.87	1.20	.27

	surv7trn	weight
59	1.30	.30
60	1.57	.33
61	1.57	.31
62	1.57	.34
63	1.57	.29
64	1.30	.28
65	1.30	.30
66	1.30	.34
67	1.57	.30
68	1.57	.34
69	1.57	.30
70	1.57	.32
71	1.30	.32
72	1.57	.34
73	.96	.25
74	1.11	.29
75	.89	.24
76	.82	.24
77	1.30	.26
78	.89	.24
79	1.30	.31
80	.55	.15

AMPHIPOD SEDIMENT
TOXICITY TEST
STATISTICAL ANALYSIS

WGK Plant Eco Risk Assessment
Amphipod Sandy Sediment Survival Statistics

Case Processing Summary

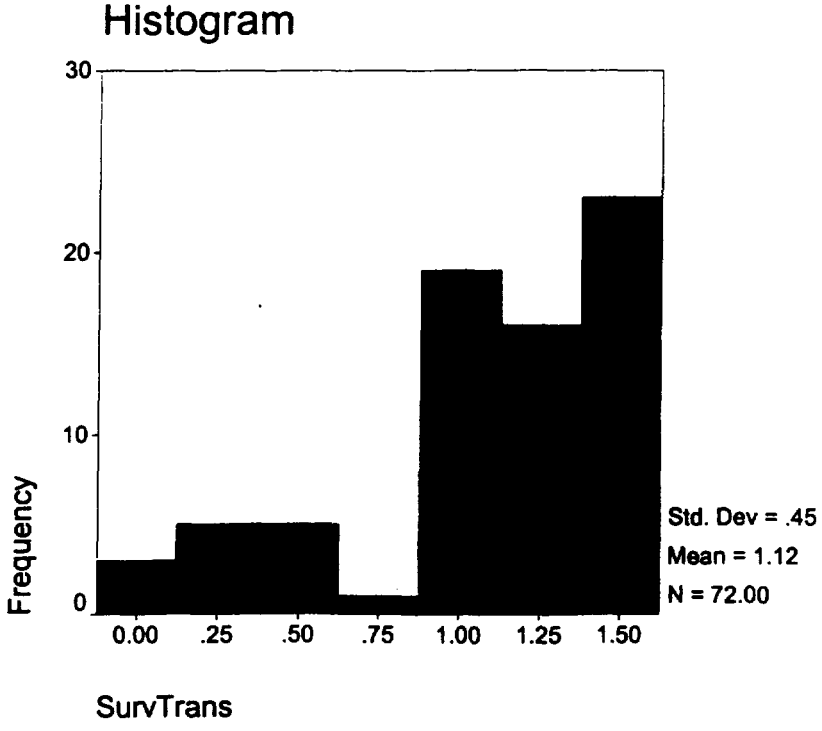
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
SurvTrans	72	100.0%	0	.0%	72	100.0%

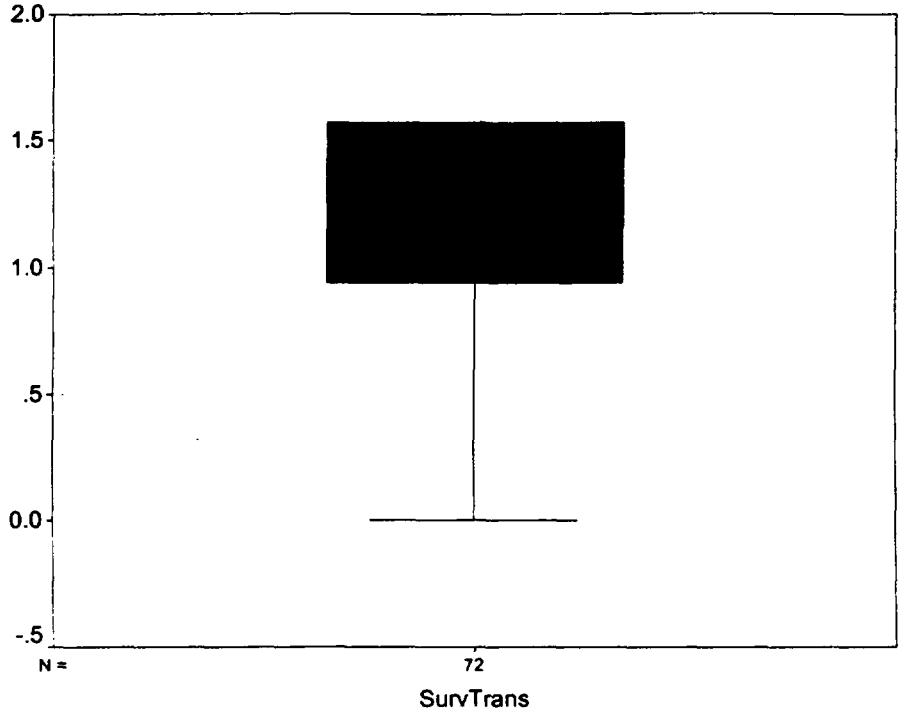
Survival data were transformed using arcsine square root tranformation.

Descriptives

			Statistic	Std. Error
SurvTrans	Mean		1.1233	5.249E-02
	95% Confidence Interval for Mean	Lower Bound	1.0186	
		Upper Bound	1.2280	
	5% Trimmed Mean		1.1578	
	Median		1.2490	
	Variance		.198	
	Std. Deviation		.4454	
	Minimum		.00	
	Maximum		1.57	
	Range		1.57	
	Interquartile Range		.6584	
	Skewness		-.973	.283
	Kurtosis		.162	.559

SurvTrans





Oneway ANOVA

Descriptives

SurvTrans

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
CTRL	8	1.2889	.2591	9.160E-02	1.0722	1.5055	.89	1.57
UDA-11	8	1.2183	.4146	.1466	.8717	1.5649	.32	1.57
PDA-8	8	1.3422	.2539	8.978E-02	1.1299	1.5545	.99	1.57
PDA-9	8	.8513	.3038	.1074	.5974	1.1053	.32	1.25
PDA-10	8	1.3697	.1665	5.887E-02	1.2305	1.5089	1.25	1.57
PDA-5	8	.3413	.2322	8.208E-02	.1472	.5353	.00	.58
PDA-6	8	1.4324	.1960	6.928E-02	1.2686	1.5962	1.11	1.57
PDA-7	8	1.3342	.2045	7.231E-02	1.1632	1.5052	1.11	1.57
DDA-13	8	.9312	.5507	.1947	.4708	1.3916	.00	1.57
Total	72	1.1233	.4454	5.249E-02	1.0186	1.2280	.00	1.57

Test of Homogeneity of Variances

SurvTrans

Levene Statistic	df1	df2	Sig.
1.640	8	63	.131

ANOVA

SurvTrans

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.060	8	1.008	10.533	.000
Within Groups	6.026	63	9.565E-02		
Total	14.087	71			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: SurvTrans

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL	UDA-11	7.054E-02	.155	1.000	-.4262	.5672
	PDA-8	-5.3354E-02	.155	1.000	-.5501	.4434
	PDA-9	.4375	.155	.127	-5.9186E-02	.9342
	PDA-10	-8.0845E-02	.155	1.000	-.5776	.4159
	PDA-5	.9476*	.155	.000	.4509	1.4443
	PDA-6	-.1435	.155	.990	-.6403	.3532
	PDA-7	-4.5371E-02	.155	1.000	-.5421	.4513

Multiple Comparisons

Dependent Variable: SurvTrans

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL	DDA-13	.3576	.155	.350	-.1391	.8543
UDA-11	CTRL	-7.0541E-02	.155	1.000	-.5672	.4262
	PDA-8	-.1239	.155	.996	-.6206	.3728
	PDA-9	.3670	.155	.317	-.1297	.8637
	PDA-10	-.1514	.155	.987	-.6481	.3453
	PDA-5	.8771*	.155	.000	.3804	1.3738
	PDA-6	-.2141	.155	.900	-.7108	.2826
	PDA-7	-.1159	.155	.998	-.6126	.3808
	DDA-13	.2871	.155	.645	-.2096	.7838
PDA-8	CTRL	5.335E-02	.155	1.000	-.4434	.5501
	UDA-11	.1239	.155	.996	-.3728	.6206
	PDA-9	.4909	.155	.055	-5.8322E-03	.9876
	PDA-10	-2.7492E-02	.155	1.000	-.5242	.4692
	PDA-5	1.0010*	.155	.000	.5042	1.4977
	PDA-6	-9.0192E-02	.155	1.000	-.5869	.4065
	PDA-7	7.983E-03	.155	1.000	-.4887	.5047
	DDA-13	.4110	.155	.184	-8.5720E-02	.9077
PDA-9	CTRL	-.4375	.155	.127	-.9342	5.919E-02
	UDA-11	-.3670	.155	.317	-.8637	.1297
	PDA-8	-.4909	.155	.055	-.9876	5.832E-03
	PDA-10	-.5184*	.155	.034	-1.0151	-2.1659E-02
	PDA-5	.5101*	.155	.040	1.337E-02	1.0068
	PDA-6	-.5811*	.155	.011	-1.0778	-8.4360E-02
	PDA-7	-.4829	.155	.063	-.9796	1.381E-02
	DDA-13	-7.9888E-02	.155	1.000	-.5766	.4168
PDA-10	CTRL	8.085E-02	.155	1.000	-.4159	.5776
	UDA-11	.1514	.155	.987	-.3453	.6481
	PDA-8	2.749E-02	.155	1.000	-.4692	.5242
	PDA-9	.5184*	.155	.034	2.166E-02	1.0151
	PDA-5	1.0284*	.155	.000	.5317	1.5251
	PDA-6	-6.2701E-02	.155	1.000	-.5594	.4340
	PDA-7	3.547E-02	.155	1.000	-.4612	.5322
	DDA-13	.4385	.155	.126	-5.8228E-02	.9352
PDA-5	CTRL	-.9476*	.155	.000	-1.4443	-.4509
	UDA-11	-.8771*	.155	.000	-1.3738	-.3804
	PDA-8	-1.0010*	.155	.000	-1.4977	-.5042
	PDA-9	-.5101*	.155	.040	-1.0068	-1.3371E-02
	PDA-10	-1.0284*	.155	.000	-1.5251	-.5317
	PDA-6	-1.0911*	.155	.000	-1.5878	-.5944
	PDA-7	-.9930*	.155	.000	-1.4897	-.4963
	DDA-13	-.5900*	.155	.009	-1.0867	-9.3259E-02

Multiple Comparisons

Dependent Variable: SurvTrans
Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-6	CTRL	.1435	.155	.990	-.3532	.6403
	UDA-11	.2141	.155	.900	-.2826	.7108
	PDA-8	9.019E-02	.155	1.000	-.4065	.5869
	PDA-9	.5811*	.155	.011	8.436E-02	1.0778
	PDA-10	6.270E-02	.155	1.000	-.4340	.5594
	PDA-5	1.0911*	.155	.000	.5944	1.5878
	PDA-7	9.817E-02	.155	.999	-.3985	.5949
	DDA-13	.5012*	.155	.046	4.472E-03	.9979
PDA-7	CTRL	4.537E-02	.155	1.000	-.4513	.5421
	UDA-11	.1159	.155	.998	-.3808	.6126
	PDA-8	-7.9827E-03	.155	1.000	-.5047	.4887
	PDA-9	.4829	.155	.063	-1.3815E-02	.9796
	PDA-10	-3.5474E-02	.155	1.000	-.5322	.4612
	PDA-5	.9930*	.155	.000	.4963	1.4897
	PDA-6	-9.8175E-02	.155	.999	-.5949	.3985
	DDA-13	.4030	.155	.205	-9.3702E-02	.8997
DDA-13	CTRL	-.3576	.155	.350	-.8543	.1391
	UDA-11	-.2871	.155	.645	-.7838	.2096
	PDA-8	-.4110	.155	.184	-.9077	8.572E-02
	PDA-9	7.989E-02	.155	1.000	-.4168	.5766
	PDA-10	-.4385	.155	.126	-.9352	5.823E-02
	PDA-5	.5900*	.155	.009	9.326E-02	1.0867
	PDA-6	-.5012*	.155	.046	-.9979	-4.4723E-03
	PDA-7	-.4030	.155	.205	-.8997	9.370E-02

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

SurvTrans

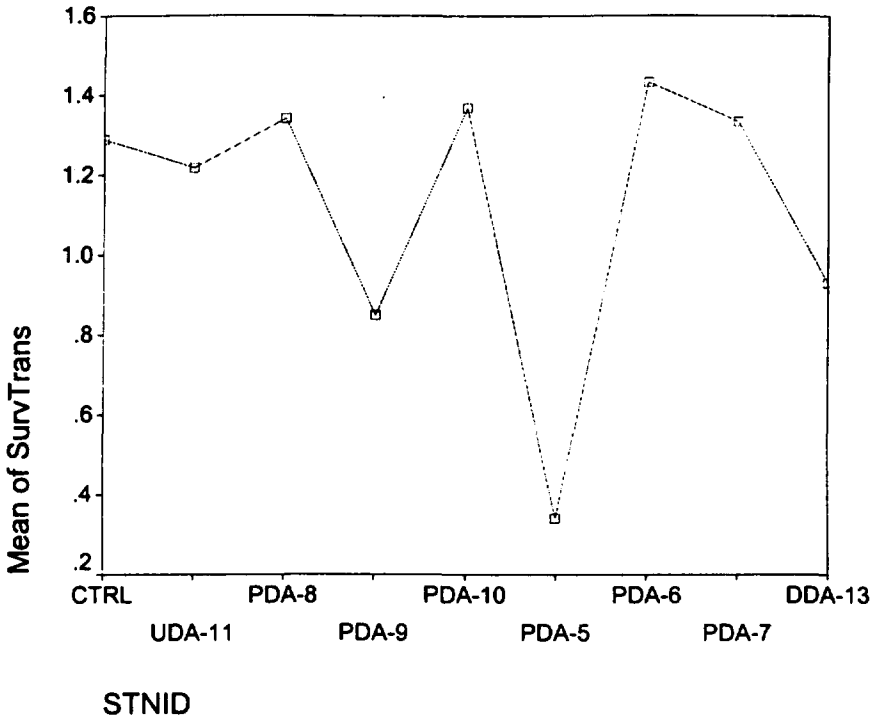
Tukey HSD[a]

STNID	N	Subset for alpha = .05			
		1	2	3	4
PDA-5	8	.3413			
PDA-9	8		.8513		
DDA-13	8		.9312	.9312	
UDA-11	8		1.2183	1.2183	1.2183
CTRL	8		1.2889	1.2889	1.2889
PDA-7	8		1.3342	1.3342	1.3342
PDA-8	8		1.3422	1.3422	1.3422
PDA-10	8			1.3697	1.3697
PDA-6	8				1.4324
Sig.		1.000	.055	.126	.900

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 8.000.

Means Plots



WGK Plant Eco Risk Assessment
Amphipod Soft Sediment Survival Statistics

Case Processing Summary

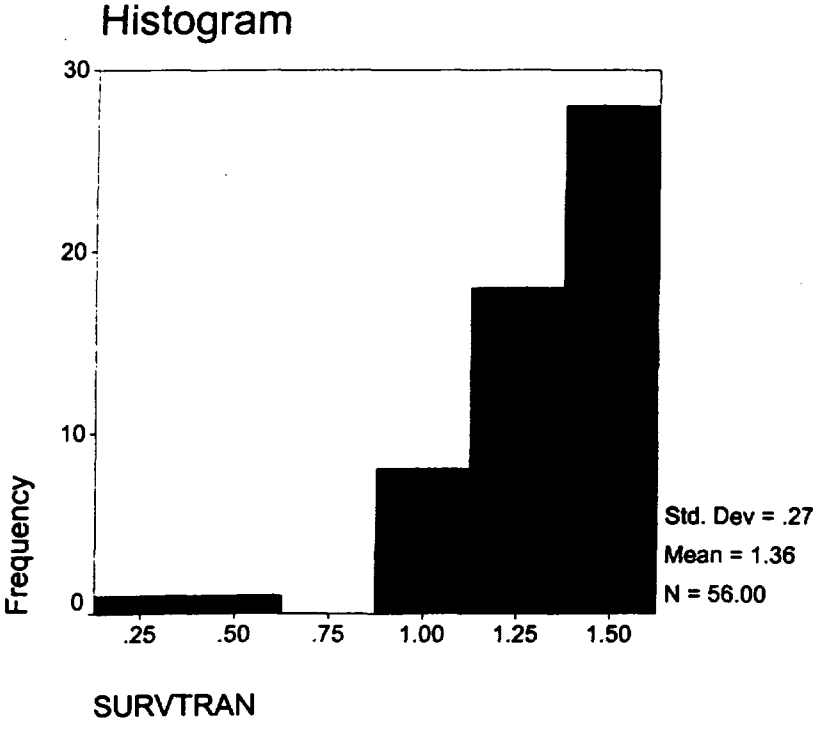
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
SURVTRAN	56	100.0%	0	.0%	56	100.0%

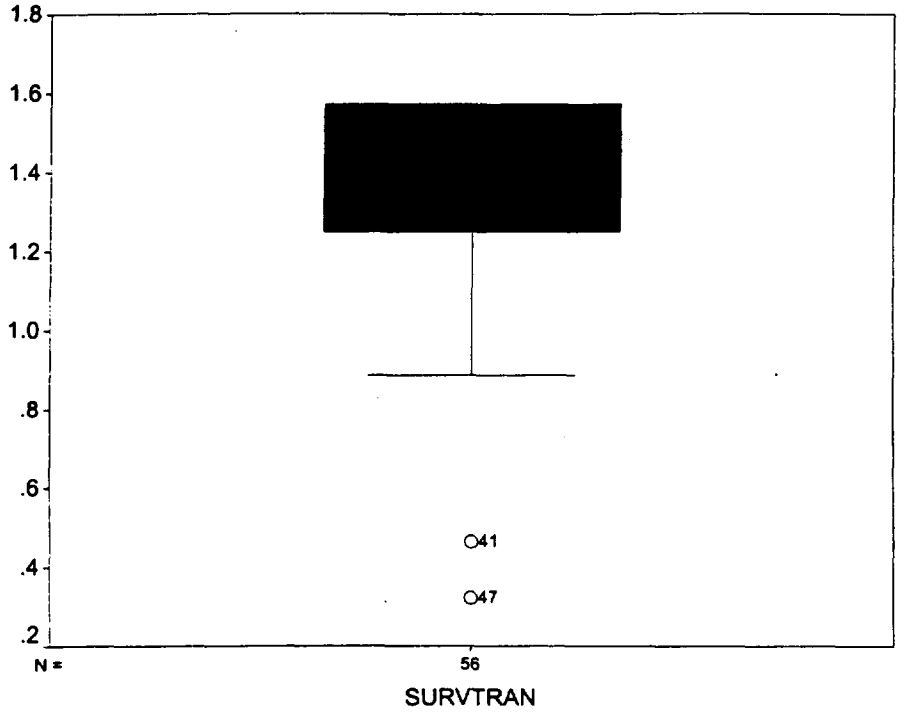
Survival data were transformed using the arcsine square root transformation.

Descriptives

			Statistic	Std. Error
SURVTRAN	Mean		1.3551	3.612E-02
	95% Confidence Interval for Mean	Lower Bound	1.2827	
		Upper Bound	1.4275	
	5% Trimmed Mean		1.3888	
	Median		1.4099	
	Variance		7.305E-02	
	Std. Deviation		.2703	
	Minimum		.32	
	Maximum		1.57	
	Range		1.25	
	Interquartile Range		.3218	
	Skewness		-1.683	.319
	Kurtosis		4.085	.628

SURVTRAN





Oneway ANOVA

Descriptives

SURVTRAN

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
CTRL	8	1.2889	.2591	9.160E-02	1.0722	1.5055	.89	1.57
UDA-12	8	1.3520	.1875	6.627E-02	1.1953	1.5087	1.11	1.57
PDA-2	8	1.3744	.2166	7.660E-02	1.1933	1.5556	1.11	1.57
PDA-3	8	1.3922	.1965	6.948E-02	1.2279	1.5565	1.11	1.57
PDA-3 FD	8	1.3922	.1965	6.948E-02	1.2279	1.5565	1.11	1.57
PDA-4	8	1.1958	.5166	.1826	.7639	1.6277	.32	1.57
DDA-1	8	1.4904	.1489	5.266E-02	1.3658	1.6149	1.25	1.57
Total	56	1.3551	.2703	3.612E-02	1.2827	1.4275	.32	1.57

Test of Homogeneity of Variances

SURVTRAN

Levene Statistic	df1	df2	Sig.
3.944	6	49	.003

ANOVA

SURVTRAN

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.409	6	6.824E-02	.927	.484
Within Groups	3.609	49	7.364E-02		
Total	4.018	55			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: SURVTRAN
Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL	UDA-12	-6.3108E-02	.136	.999	-.4802	.3540
	PDA-2	-8.5590E-02	.136	.995	-.5027	.3315
	PDA-3	-.1033	.136	.988	-.5204	.3138
	PDA-3 FD	-.1033	.136	.988	-.5204	.3138
	PDA-4	9.302E-02	.136	.993	-.3241	.5101
	DDA-1	-.2015	.136	.752	-.6186	.2156
UDA-12	CTRL	6.311E-02	.136	.999	-.3540	.4802
	PDA-2	-2.2482E-02	.136	1.000	-.4396	.3946
	PDA-3	-4.0219E-02	.136	1.000	-.4573	.3769
	PDA-3 FD	-4.0219E-02	.136	1.000	-.4573	.3769
	PDA-4	.1561	.136	.909	-.2610	.5732
	DDA-1	-.1384	.136	.947	-.5555	.2787
PDA-2	CTRL	8.559E-02	.136	.995	-.3315	.5027
	UDA-12	2.248E-02	.136	1.000	-.3946	.4396
	PDA-3	-1.7737E-02	.136	1.000	-.4348	.3994
	PDA-3 FD	-1.7737E-02	.136	1.000	-.4348	.3994
	PDA-4	.1786	.136	.841	-.2385	.5957
	DDA-1	-.1159	.136	.978	-.5330	.3012
PDA-3	CTRL	.1033	.136	.988	-.3138	.5204
	UDA-12	4.022E-02	.136	1.000	-.3769	.4573
	PDA-2	1.774E-02	.136	1.000	-.3994	.4348
	PDA-3 FD	.0000	.136	1.000	-.4171	.4171
	PDA-4	.1963	.136	.774	-.2208	.6135
	DDA-1	-9.8175E-02	.136	.990	-.5153	.3189
PDA-3 FD	CTRL	.1033	.136	.988	-.3138	.5204
	UDA-12	4.022E-02	.136	1.000	-.3769	.4573
	PDA-2	1.774E-02	.136	1.000	-.3994	.4348
	PDA-3	.0000	.136	1.000	-.4171	.4171
	PDA-4	.1963	.136	.774	-.2208	.6135
	DDA-1	-9.8175E-02	.136	.990	-.5153	.3189
PDA-4	CTRL	-9.3023E-02	.136	.993	-.5101	.3241
	UDA-12	-.1561	.136	.909	-.5732	.2610
	PDA-2	-.1786	.136	.841	-.5957	.2385
	PDA-3	-.1963	.136	.774	-.6135	.2208
	PDA-3 FD	-.1963	.136	.774	-.6135	.2208
	DDA-1	-.2945	.136	.330	-.7116	.1226
DDA-1	CTRL	.2015	.136	.752	-.2156	.6186
	UDA-12	.1384	.136	.947	-.2787	.5555
	PDA-2	.1159	.136	.978	-.3012	.5330
	PDA-3	9.817E-02	.136	.990	-.3189	.5153
	PDA-3 FD	9.817E-02	.136	.990	-.3189	.5153
	PDA-4	.2945	.136	.330	-.1226	.7116

Homogeneous Subsets

SURVTRAN

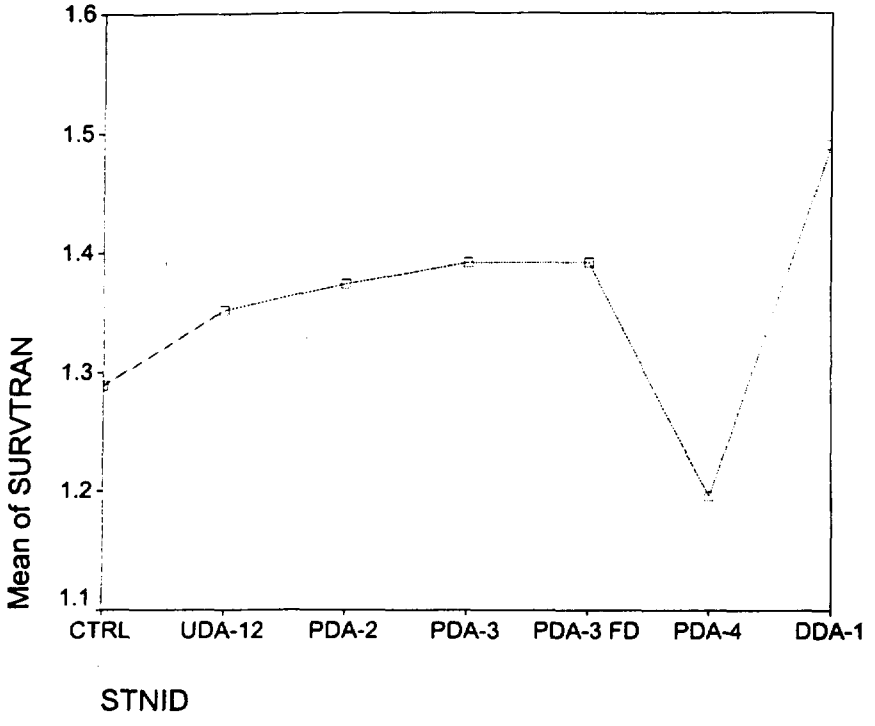
Tukey HSD[a]

STNID	N	Subset for alpha = .05
		1
PDA-4	8	1.1958
CTRL	8	1.2889
UDA-12	8	1.3520
PDA-2	8	1.3744
PDA-3	8	1.3922
PDA-3 FD	8	1.3922
DDA-1	8	1.4904
Sig.		.330

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 8.000.

Means Plots



WGK Plant Eco Risk Assessment
Amphipod Sandy Sediment Growth Statistics

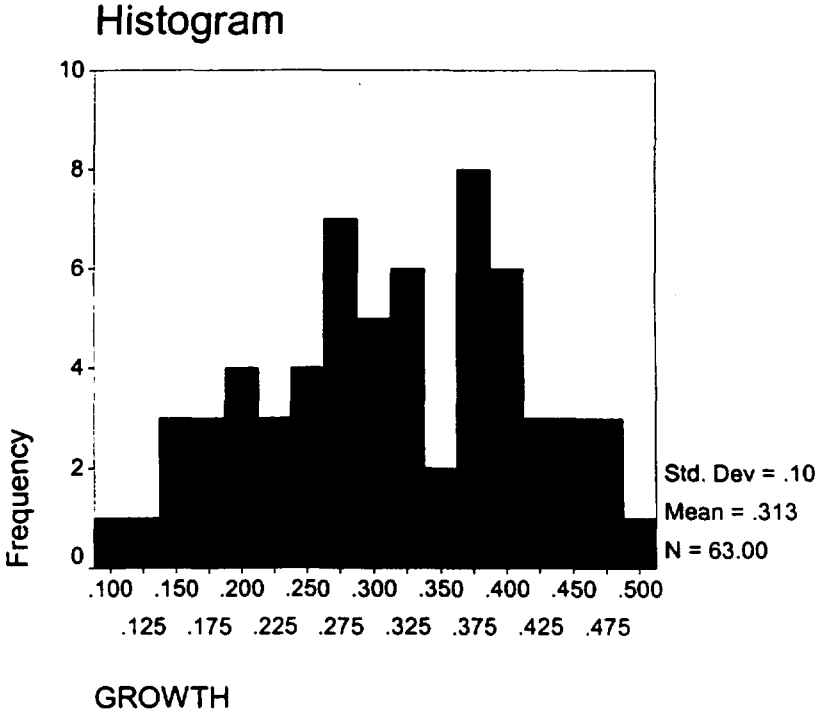
Case Processing Summary

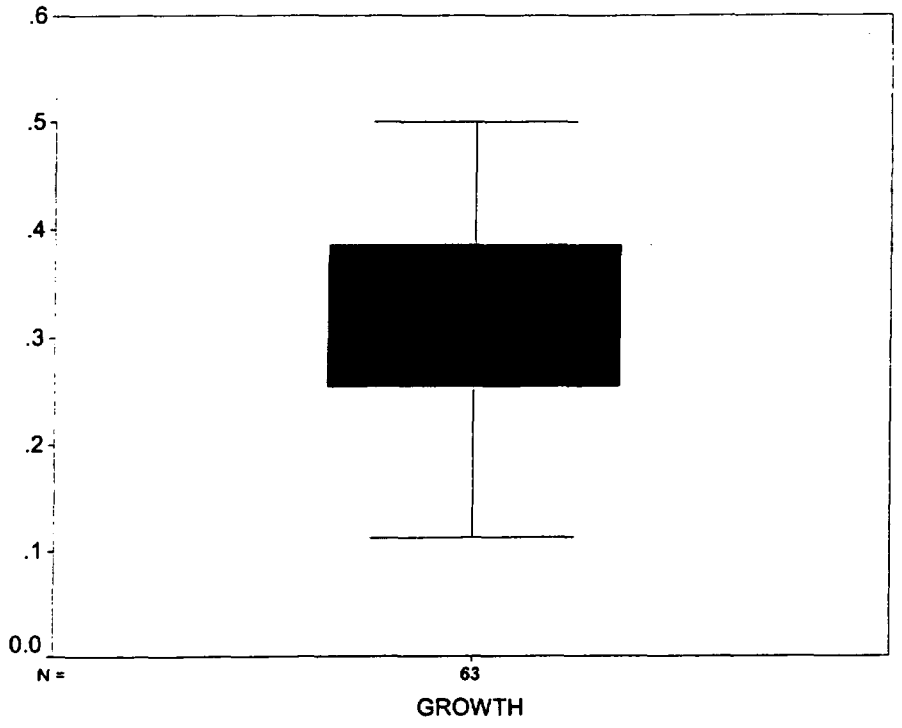
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
GROWTH	63	98.4%	1	1.6%	64	100.0%

Descriptives

			Statistic	Std. Error
GROWTH	Mean		.3127	1.229E-02
	95% Confidence Interval for Mean	Lower Bound	.2881	
		Upper Bound	.3373	
	5% Trimmed Mean		.3133	
	Median		.3130	
	Variance		9.518E-03	
	Std. Deviation		9.756E-02	
	Minimum		.11	
	Maximum		.50	
	Range		.39	
	Interquartile Range		.1370	
	Skewness		-.144	.302
	Kurtosis		-.796	.595

GROWTH





Oneway ANOVA

Descriptives

GROWTH

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
CTRL	8	.1710	4.643E-02	1.641E-02	.1322	.2098	.11	.25
UDA-11	8	.3184	7.221E-02	2.553E-02	.2580	.3787	.19	.41
PDA-8	8	.2703	.1158	4.094E-02	.1734	.3671	.16	.48
PDA-9	8	.3898	9.058E-02	3.203E-02	.3140	.4655	.19	.50
PDA-10	8	.3023	4.769E-02	1.686E-02	.2624	.3421	.23	.38
PDA-6	8	.3033	6.212E-02	2.196E-02	.2513	.3552	.26	.44
PDA-7	8	.3991	6.460E-02	2.284E-02	.3451	.4531	.31	.48
DDA-13	7	.3526	5.749E-02	2.173E-02	.2994	.4057	.25	.41
Total	63	.3127	9.756E-02	1.229E-02	.2881	.3373	.11	.50

Test of Homogeneity of Variances

GROWTH

Levene Statistic	df1	df2	Sig.
1.864	7	55	.093

ANOVA

GROWTH

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.295	7	4.218E-02	7.868	.000
Within Groups	.295	55	5.361E-03		
Total	.590	62			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: GROWTH
Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL	UDA-11	-.1474*	.037	.004	-.2627	-3.2037E-02
	PDA-8	-9.9250E-02	.037	.141	-.2146	1.609E-02
	PDA-9	-.2187*	.037	.000	-.3341	-.1034
	PDA-10	-.1313*	.037	.015	-.2466	-1.5912E-02
	PDA-6	-.1323*	.037	.014	-.2476	-1.6912E-02
	PDA-7	-.2281*	.037	.000	-.3435	-.1128
	DDA-13	-.1816*	.038	.000	-.3010	-6.2185E-02
UDA-11	CTRL	.1474*	.037	.004	3.204E-02	.2627
	PDA-8	4.812E-02	.037	.889	-6.7213E-02	.1635
	PDA-9	-7.1375E-02	.037	.524	-.1867	4.396E-02
	PDA-10	1.613E-02	.037	1.000	-9.9213E-02	.1315
	PDA-6	1.513E-02	.037	1.000	-.1002	.1305
	PDA-7	-8.0750E-02	.037	.364	-.1961	3.459E-02
	DDA-13	-3.4196E-02	.038	.985	-.1536	8.519E-02
PDA-8	CTRL	9.925E-02	.037	.141	-1.6088E-02	.2146
	UDA-11	-4.8125E-02	.037	.889	-.1635	6.721E-02
	PDA-9	-.1195*	.037	.037	-.2348	-4.1619E-03
	PDA-10	-3.2000E-02	.037	.987	-.1473	8.334E-02
	PDA-6	-3.3000E-02	.037	.985	-.1483	8.234E-02
	PDA-7	-.1289*	.037	.018	-.2442	-1.3537E-02
	DDA-13	-8.2321E-02	.038	.384	-.2017	3.706E-02
PDA-9	CTRL	.2187*	.037	.000	.1034	.3341
	UDA-11	7.137E-02	.037	.524	-4.3963E-02	.1867
	PDA-8	.1195*	.037	.037	4.162E-03	.2348
	PDA-10	8.750E-02	.037	.267	-2.7838E-02	.2028
	PDA-6	8.650E-02	.037	.280	-2.8838E-02	.2018
	PDA-7	-9.3750E-03	.037	1.000	-.1247	.1060
	DDA-13	3.718E-02	.038	.975	-8.2208E-02	.1566

Multiple Comparisons

Dependent Variable: GROWTH
Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-10	CTRL	.1313*	.037	.015	1.591E-02	.2466
	UDA-11	-1.6125E-02	.037	1.000	-.1315	9.921E-02
	PDA-8	3.200E-02	.037	.987	-8.3338E-02	.1473
	PDA-9	-8.7500E-02	.037	.267	-.2028	2.784E-02
	PDA-6	-1.0000E-03	.037	1.000	-.1163	.1143
	PDA-7	-9.6875E-02	.037	.162	-.2122	1.846E-02
	DDA-13	-5.0321E-02	.038	.884	-.1697	6.906E-02
PDA-6	CTRL	.1323*	.037	.014	1.691E-02	.2476
	UDA-11	-1.5125E-02	.037	1.000	-.1305	.1002
	PDA-8	3.300E-02	.037	.985	-8.2338E-02	.1483
	PDA-9	-8.6500E-02	.037	.280	-.2018	2.884E-02
	PDA-10	1.000E-03	.037	1.000	-.1143	.1163
	PDA-7	-9.5875E-02	.037	.171	-.2112	1.946E-02
	DDA-13	-4.9321E-02	.038	.894	-.1687	7.006E-02
PDA-7	CTRL	.2281*	.037	.000	.1128	.3435
	UDA-11	8.075E-02	.037	.364	-3.4588E-02	.1961
	PDA-8	.1289*	.037	.018	1.354E-02	.2442
	PDA-9	9.375E-03	.037	1.000	-.1060	.1247
	PDA-10	9.687E-02	.037	.162	-1.8463E-02	.2122
	PDA-6	9.587E-02	.037	.171	-1.9463E-02	.2112
	DDA-13	4.655E-02	.038	.920	-7.2833E-02	.1659
DDA-13	CTRL	.1816*	.038	.000	6.219E-02	.3010
	UDA-11	3.420E-02	.038	.985	-8.5190E-02	.1536
	PDA-8	8.232E-02	.038	.384	-3.7065E-02	.2017
	PDA-9	-3.7179E-02	.038	.975	-.1566	8.221E-02
	PDA-10	5.032E-02	.038	.884	-6.9065E-02	.1697
	PDA-6	4.932E-02	.038	.894	-7.0065E-02	.1687
	PDA-7	-4.6554E-02	.038	.920	-.1659	7.283E-02

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

GROWTH

Tukey HSD[a,b]

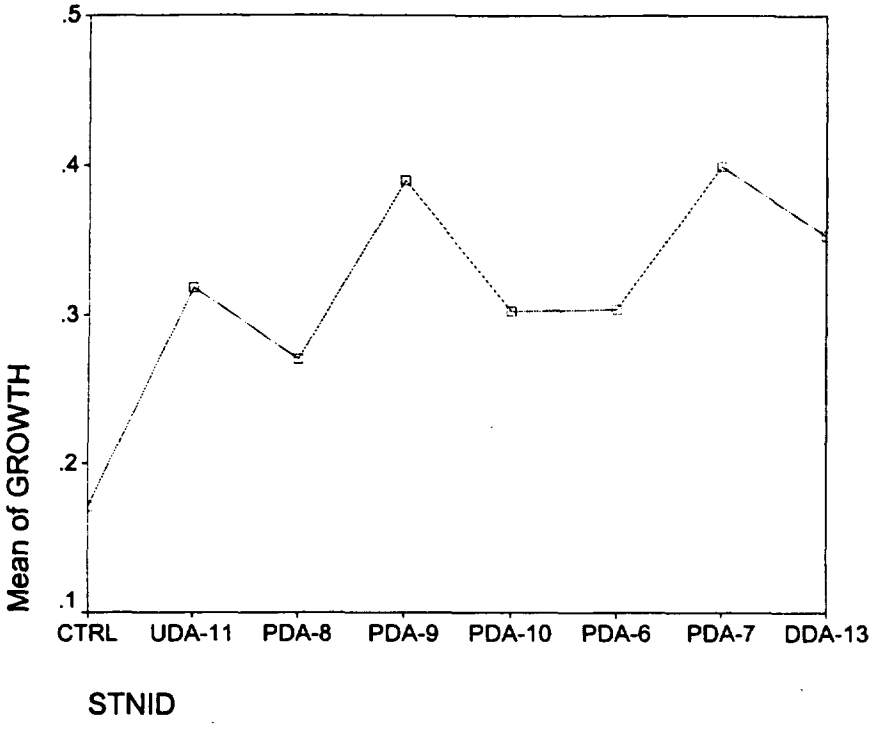
STNID	N	Subset for alpha = .05		
		1	2	3
CTRL	8	.1710		
PDA-8	8	.2703	.2703	
PDA-10	8		.3023	.3023
PDA-6	8		.3033	.3033
UDA-11	8		.3184	.3184
DDA-13	7		.3526	.3526
PDA-9	8			.3898
PDA-7	8			.3991
Sig.		.149	.351	.170

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 7.860.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Means Plots



WGK Plant Eco Risk Assessment
Amphipod Soft Sediment Growth Statistics

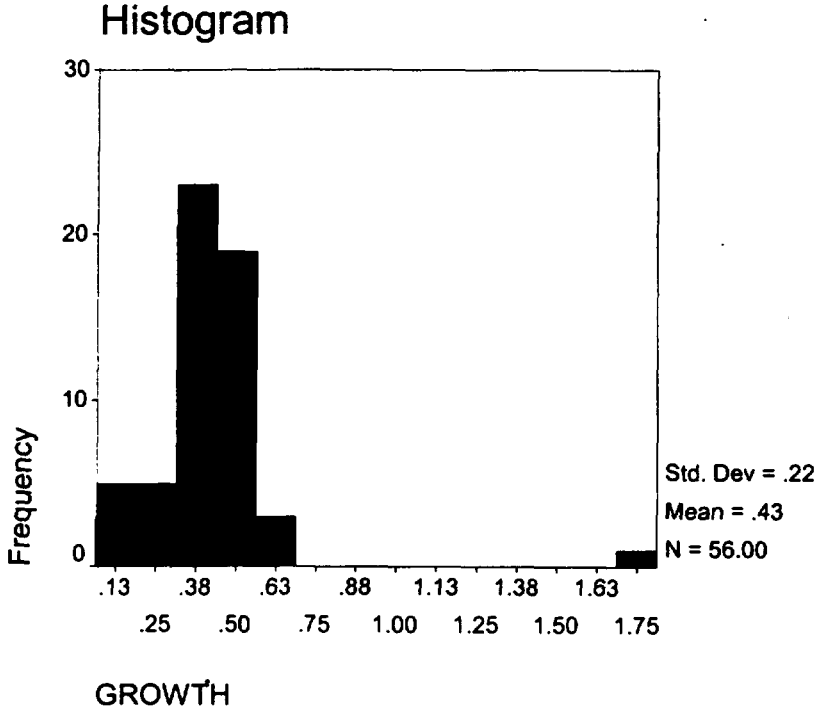
Case Processing Summary

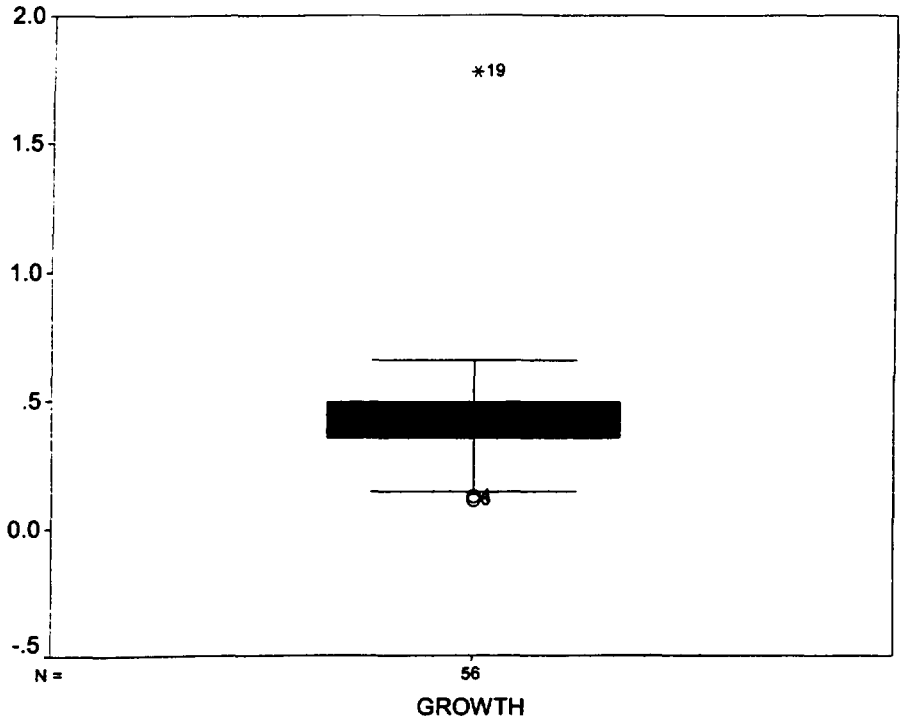
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
GROWTH	56	100.0%	0	.0%	56	100.0%

Descriptives

			Statistic	Std. Error
GROWTH	Mean		.4292	2.943E-02
	95% Confidence Interval for Mean	Lower Bound	.3702	
		Upper Bound	.4882	
	5% Trimmed Mean		.4121	
	Median		.4225	
	Variance		4.850E-02	
	Std. Deviation		.2202	
	Minimum		.11	
	Maximum		1.78	
	Range		1.67	
	Interquartile Range		.1445	
	Skewness		4.104	.319
	Kurtosis		25.770	.628

GROWTH





Oneway ANOVA

Descriptives

GROWTH

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
CTRL	8	.1710	4.643E-02	1.641E-02	.1322	.2098	.11	.25
UDA-12	8	.4704	4.681E-02	1.655E-02	.4312	.5095	.40	.53
PDA-2	8	.7043	.4377	.1548	.3383	1.0702	.46	1.78
PDA-3	8	.4003	6.032E-02	2.133E-02	.3498	.4507	.32	.52
PDA-3 FD	8	.4789	5.380E-02	1.902E-02	.4339	.5239	.38	.55
PDA-4	8	.4054	6.144E-02	2.172E-02	.3540	.4567	.30	.49
DDA-1	8	.3741	4.805E-02	1.699E-02	.3340	.4143	.31	.43
Total	56	.4292	.2202	2.943E-02	.3702	.4882	.11	1.78

Test of Homogeneity of Variances

GROWTH

Levene Statistic	df1	df2	Sig.
3.623	6	49	.005

ANOVA

GROWTH

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.207	6	.201	6.753	.000
Within Groups	1.460	49	2.980E-02		
Total	2.667	55			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: GROWTH
Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL	UDA-12	-.2994*	.086	.018	-.5647	-3.4050E-02
	PDA-2	-.5333*	.086	.000	-.7986	-.2679
	PDA-3	-.2293	.086	.132	-.4946	3.608E-02
	PDA-3 FD	-.3079*	.086	.013	-.5732	-4.2550E-02
	PDA-4	-.2344	.086	.116	-.4997	3.095E-02
	DDA-1	-.2031	.086	.240	-.4685	6.220E-02
UDA-12	CTRL	.2994*	.086	.018	3.405E-02	.5647
	PDA-2	-.2339	.086	.117	-.4992	3.145E-02
	PDA-3	7.012E-02	.086	.983	-.1952	.3355
	PDA-3 FD	-8.5000E-03	.086	1.000	-.2738	.2568
	PDA-4	6.500E-02	.086	.988	-.2003	.3303
	DDA-1	9.625E-02	.086	.920	-.1691	.3616
PDA-2	CTRL	.5333*	.086	.000	.2679	.7986
	UDA-12	.2339	.086	.117	-3.1450E-02	.4992
	PDA-3	.3040*	.086	.015	3.867E-02	.5693
	PDA-3 FD	.2254	.086	.145	-3.9950E-02	.4907
	PDA-4	.2989*	.086	.018	3.355E-02	.5642
	DDA-1	.3301*	.086	.006	6.480E-02	.5955
PDA-3	CTRL	.2293	.086	.132	-3.6075E-02	.4946
	UDA-12	-7.0125E-02	.086	.983	-.3355	.1952
	PDA-2	-.3040*	.086	.015	-.5693	-3.8675E-02
	PDA-3 FD	-7.8625E-02	.086	.969	-.3440	.1867
	PDA-4	-5.1250E-03	.086	1.000	-.2705	.2602
	DDA-1	2.613E-02	.086	1.000	-.2392	.2915
PDA-3 FD	CTRL	.3079*	.086	.013	4.255E-02	.5732
	UDA-12	8.500E-03	.086	1.000	-.2568	.2738
	PDA-2	-.2254	.086	.145	-.4907	3.995E-02
	PDA-3	7.863E-02	.086	.969	-.1867	.3440
	PDA-4	7.350E-02	.086	.978	-.1918	.3388
	DDA-1	.1048	.086	.886	-.1606	.3701
PDA-4	CTRL	.2344	.086	.116	-3.0950E-02	.4997
	UDA-12	-6.5000E-02	.086	.988	-.3303	.2003
	PDA-2	-.2989*	.086	.018	-.5642	-3.3550E-02
	PDA-3	5.125E-03	.086	1.000	-.2602	.2705
	PDA-3 FD	-7.3500E-02	.086	.978	-.3388	.1918
	DDA-1	3.125E-02	.086	1.000	-.2341	.2966
DDA-1	CTRL	.2031	.086	.240	-6.2200E-02	.4685
	UDA-12	-9.6250E-02	.086	.920	-.3616	.1691
	PDA-2	-.3301*	.086	.006	-.5955	-6.4800E-02
	PDA-3	-2.6125E-02	.086	1.000	-.2915	.2392
	PDA-3 FD	-.1048	.086	.886	-.3701	.1606
	PDA-4	-3.1250E-02	.086	1.000	-.2966	.2341

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

GROWTH

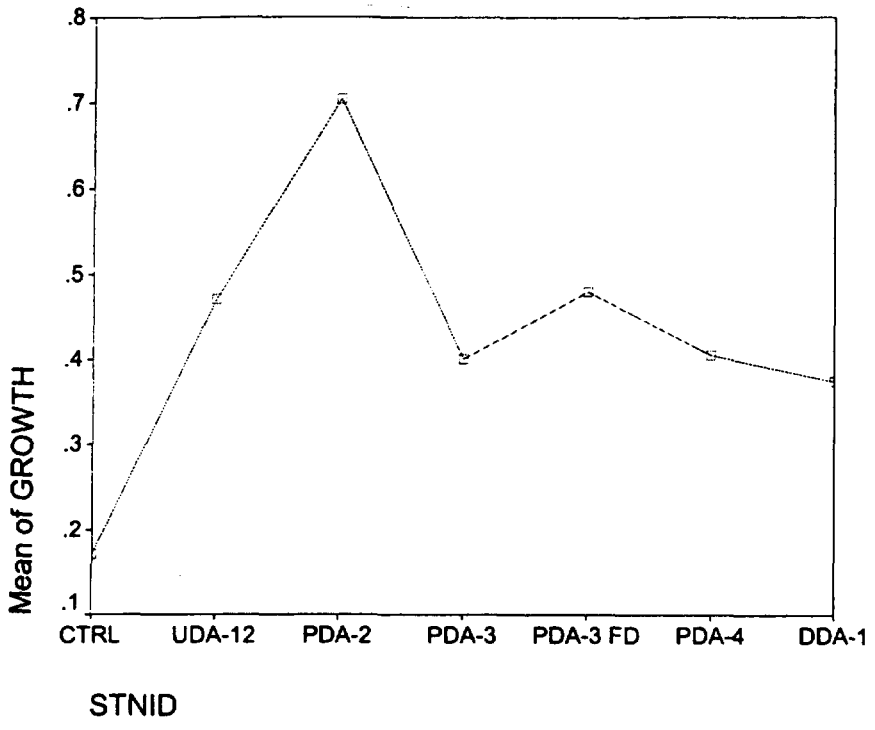
Tukey HSD[a]

STNID	N	Subset for alpha = .05		
		1	2	3
CTRL	8	.1710		
DDA-1	8	.3741	.3741	
PDA-3	8	.4003	.4003	
PDA-4	8	.4054	.4054	
UDA-12	8		.4704	.4704
PDA-3 FD	8		.4789	.4789
PDA-2	8			.7043
Sig.		.116	.886	.117

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 8.000.

Means Plots



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	stnid	station	survival	survtran	growth
1	1.00	CTRL	1.00	1.57	.18
2	1.00	CTRL	1.00	1.57	.25
3	1.00	CTRL	.90	1.25	.15
4	1.00	CTRL	.60	.89	.13
5	1.00	CTRL	.90	1.25	.19
6	1.00	CTRL	1.00	1.57	.11
7	1.00	CTRL	.80	1.11	.20
8	1.00	CTRL	.80	1.11	.14
9	2.00	UDA-11	.90	1.25	.27
10	2.00	UDA-11	1.00	1.57	.41
11	2.00	UDA-11	.80	1.11	.33
12	2.00	UDA-11	.80	1.11	.31
13	2.00	UDA-11	1.00	1.57	.37
14	2.00	UDA-11	.90	1.25	.39
15	2.00	UDA-11	1.00	1.57	.28
16	2.00	UDA-11	.10	.32	.19
17	4.00	PDA-8	1.00	1.57	.36
18	4.00	PDA-8	1.00	1.57	.17
19	4.00	PDA-8	.90	1.25	.22
20	4.00	PDA-8	.80	1.11	.16
21	4.00	PDA-8	1.00	1.57	.23
22	4.00	PDA-8	.80	1.11	.37
23	4.00	PDA-8	1.00	1.57	.48
24	4.00	PDA-8	.70	.99	.18
25	5.00	PDA-9	.90	1.25	.19
26	5.00	PDA-9	.40	.68	.39
27	5.00	PDA-9	.80	1.11	.50
28	5.00	PDA-9	.70	.99	.46
29	5.00	PDA-9	.30	.58	.37

	stnid	station	survival	survtran	growth
30	5.00	PDA-9	.10	.32	.42
31	5.00	PDA-9	.60	.89	.37
32	5.00	PDA-9	.70	.99	.42
33	6.00	PDA-10	.90	1.25	.29
34	6.00	PDA-10	1.00	1.57	.38
35	6.00	PDA-10	.90	1.25	.27
36	6.00	PDA-10	1.00	1.57	.31
37	6.00	PDA-10	.90	1.25	.30
38	6.00	PDA-10	.90	1.25	.28
39	6.00	PDA-10	1.00	1.57	.36
40	6.00	PDA-10	.90	1.25	.23
41	7.00	PDA-5	.20	.46	.26
42	7.00	PDA-5	.10	.32	.42
43	7.00	PDA-5	.30	.58	.49
44	7.00	PDA-5	.20	.46	.48
45	7.00	PDA-5	.00	.00	.
46	7.00	PDA-5	.00	.00	.
47	7.00	PDA-5	.10	.32	.43
48	7.00	PDA-5	.30	.58	.37
49	8.00	PDA-6	1.00	1.57	.27
50	8.00	PDA-6	.80	1.11	.44
51	8.00	PDA-6	.90	1.25	.26
52	8.00	PDA-6	1.00	1.57	.26
53	8.00	PDA-6	1.00	1.57	.28
54	8.00	PDA-6	.90	1.25	.27
55	8.00	PDA-6	1.00	1.57	.32
56	8.00	PDA-6	1.00	1.57	.34
57	9.00	PDA-7	.90	1.25	.38
58	9.00	PDA-7	1.00	1.57	.32

	stnid	station	survival	survtran	growth
59	9.00	PDA-7	1.00	1.57	.31
60	9.00	PDA-7	.90	1.25	.41
61	9.00	PDA-7	.90	1.25	.44
62	9.00	PDA-7	.80	1.11	.48
63	9.00	PDA-7	.80	1.11	.47
64	9.00	PDA-7	1.00	1.57	.38
65	14.00	DDA-13	.80	1.11	.39
66	14.00	DDA-13	.00	.00	.
67	14.00	DDA-13	.60	.89	.37
68	14.00	DDA-13	1.00	1.57	.31
69	14.00	DDA-13	.80	1.11	.41
70	14.00	DDA-13	.60	.89	.25
71	14.00	DDA-13	1.00	1.57	.34
72	14.00	DDA-13	.10	.32	.41

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	stnid	station	survival	survtran	growth
1	1.00	CTRL	1.00	1.57	.18
2	1.00	CTRL	1.00	1.57	.25
3	1.00	CTRL	.90	1.25	.15
4	1.00	CTRL	.60	.89	.13
5	1.00	CTRL	.90	1.25	.19
6	1.00	CTRL	1.00	1.57	.11
7	1.00	CTRL	.80	1.11	.20
8	1.00	CTRL	.80	1.11	.14
9	3.00	UDA-12	.90	1.25	.53
10	3.00	UDA-12	.90	1.25	.50
11	3.00	UDA-12	1.00	1.57	.46
12	3.00	UDA-12	1.00	1.57	.46
13	3.00	UDA-12	1.00	1.57	.40
14	3.00	UDA-12	.90	1.25	.44
15	3.00	UDA-12	.80	1.11	.53
16	3.00	UDA-12	.90	1.25	.45
17	10.00	PDA-2	.90	1.25	.46
18	10.00	PDA-2	1.00	1.57	.57
19	10.00	PDA-2	.80	1.11	1.78
20	10.00	PDA-2	.90	1.25	.59
21	10.00	PDA-2	.80	1.11	.66
22	10.00	PDA-2	1.00	1.57	.51
23	10.00	PDA-2	1.00	1.57	.55
24	10.00	PDA-2	1.00	1.57	.51
25	11.00	PDA-3	1.00	1.57	.35
26	11.00	PDA-3	1.00	1.57	.32
27	11.00	PDA-3	.90	1.25	.52
28	11.00	PDA-3	.80	1.11	.41
29	11.00	PDA-3	.90	1.25	.43

	stnid	station	survival	survtran	growth
30	11.00	PDA-3	1.00	1.57	.38
31	11.00	PDA-3	.90	1.25	.41
32	11.00	PDA-3	1.00	1.57	.37
33	12.00	PDA-3 FD	.90	1.25	.38
34	12.00	PDA-3 FD	1.00	1.57	.52
35	12.00	PDA-3 FD	.90	1.25	.43
36	12.00	PDA-3 FD	1.00	1.57	.48
37	12.00	PDA-3 FD	.90	1.25	.55
38	12.00	PDA-3 FD	.80	1.11	.48
39	12.00	PDA-3 FD	1.00	1.57	.48
40	12.00	PDA-3 FD	1.00	1.57	.52
41	13.00	PDA-4	.20	.46	.30
42	13.00	PDA-4	.90	1.25	.49
43	13.00	PDA-4	1.00	1.57	.42
44	13.00	PDA-4	1.00	1.57	.40
45	13.00	PDA-4	1.00	1.57	.37
46	13.00	PDA-4	1.00	1.57	.48
47	13.00	PDA-4	.10	.32	.41
48	13.00	PDA-4	.90	1.25	.38
49	15.00	DDA-1	.90	1.25	.31
50	15.00	DDA-1	1.00	1.57	.41
51	15.00	DDA-1	1.00	1.57	.36
52	15.00	DDA-1	.90	1.25	.42
53	15.00	DDA-1	1.00	1.57	.31
54	15.00	DDA-1	1.00	1.57	.39
55	15.00	DDA-1	1.00	1.57	.43
56	15.00	DDA-1	1.00	1.57	.35

DAPHNID SURFACE WATER

TOXICITY TEST

STATISTICAL ANALYSIS

WGK Plant Eco Risk Assessment
Daphnid Surface Water Survival Statistics

Two-Day Survival Test

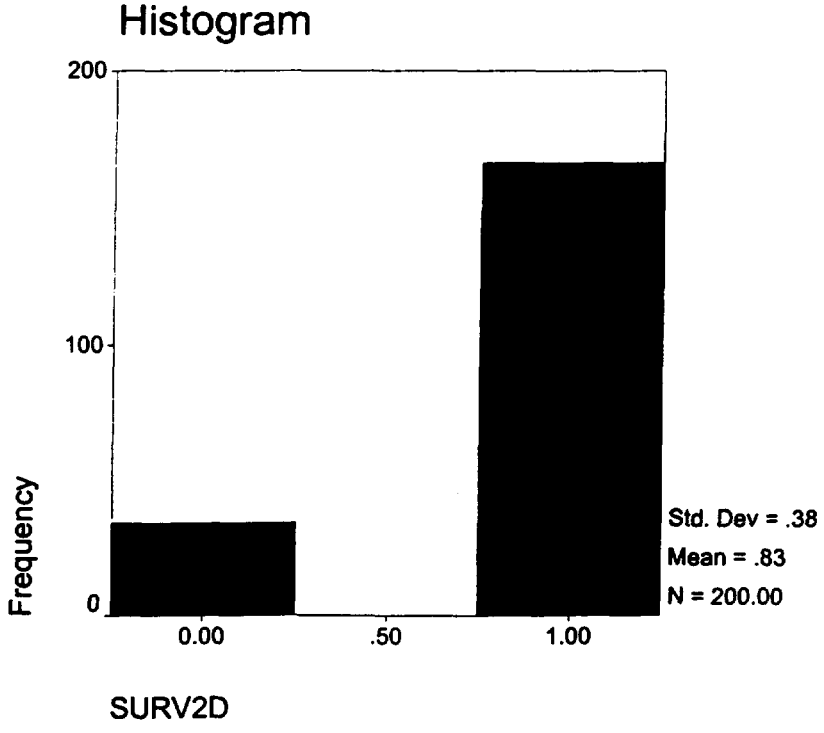
Case Processing Summary

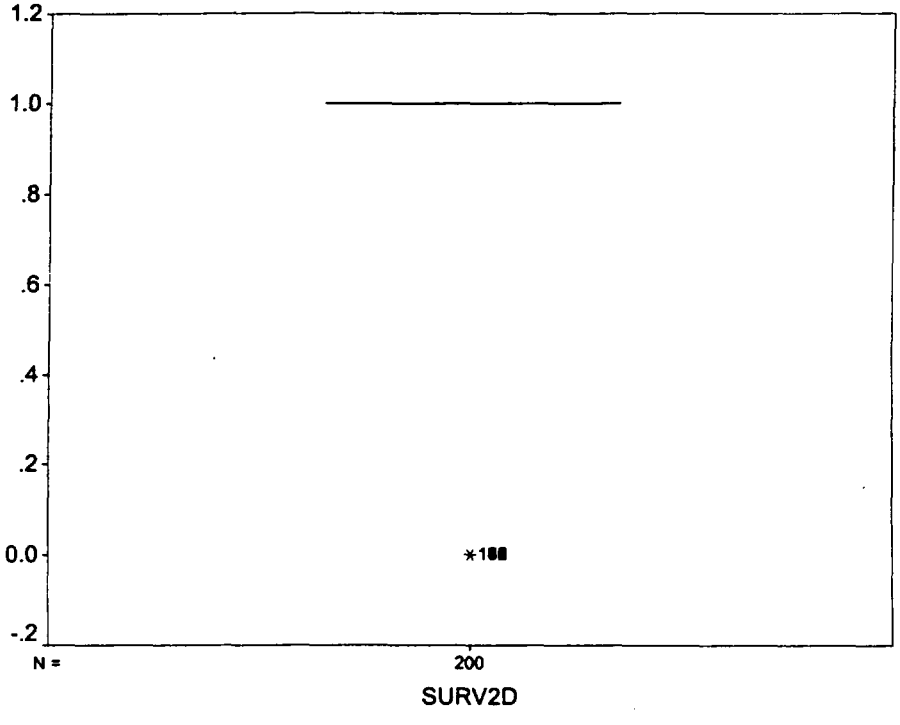
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
SURV2D	200	100.0%	0	.0%	200	100.0%

Descriptives

			Statistic	Std. Error
SURV2D	Mean		.8300	2.663E-02
	95% Confidence Interval for Mean	Lower Bound	.7775	
		Upper Bound	.8825	
	5% Trimmed Mean		.8667	
	Median		1.0000	
	Variance		.142	
	Std. Deviation		.3766	
	Minimum		.00	
	Maximum		1.00	
	Range		1.00	
	Interquartile Range		.0000	
	Skewness		-1.770	.172
	Kurtosis		1.145	.342

SURV2D





Seven-Day Survival Test

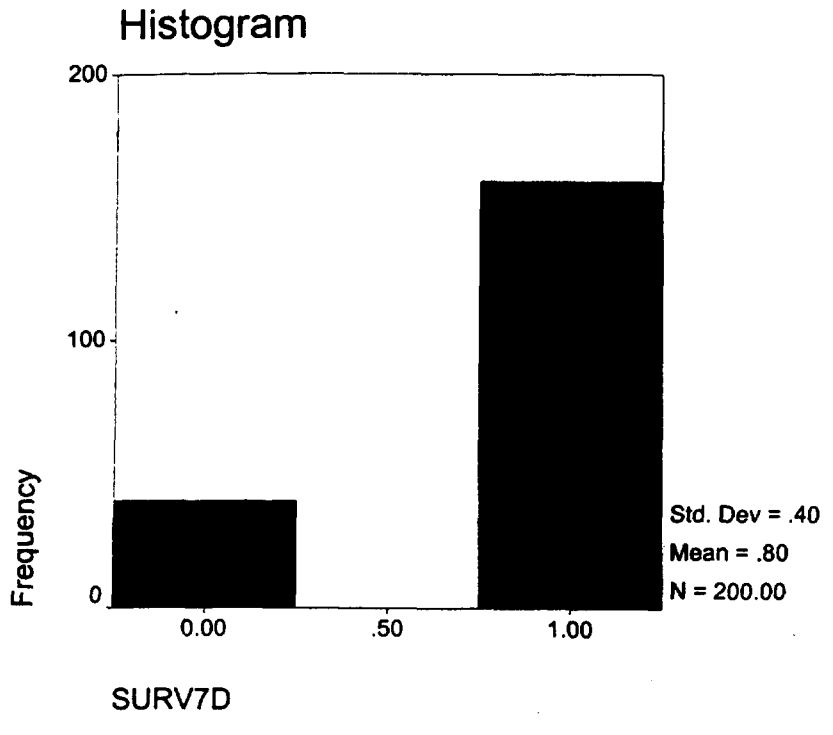
Case Processing Summary

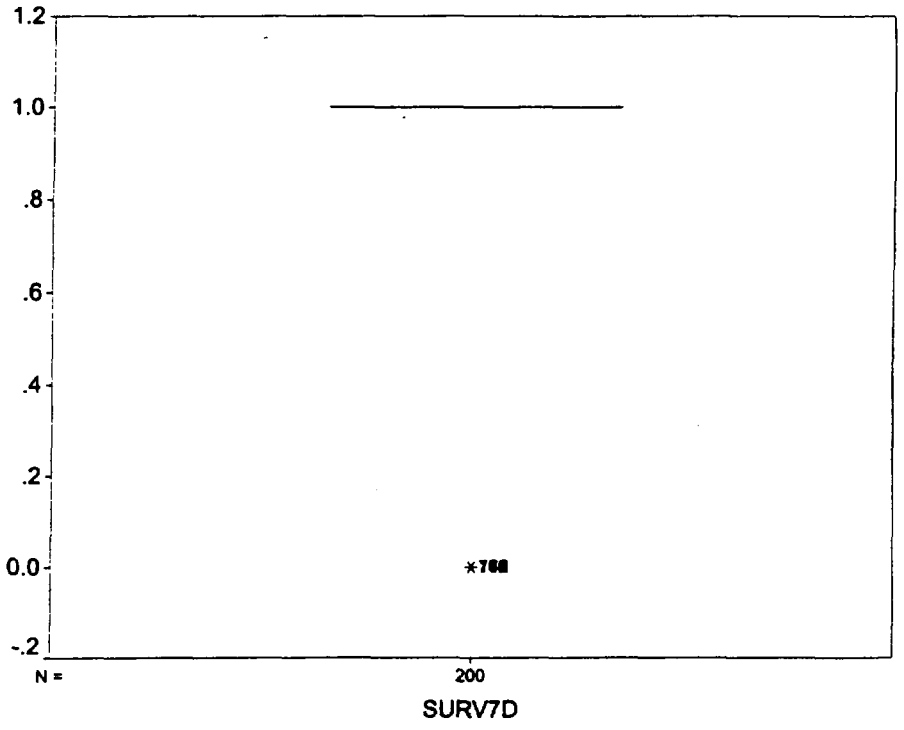
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
SURV7D	200	100.0%	0	.0%	200	100.0%

Descriptives

			Statistic	Std. Error
SURV7D	Mean		.8000	2.836E-02
	95% Confidence Interval for Mean	Lower Bound	.7441	
		Upper Bound	.8559	
	5% Trimmed Mean		.8333	
	Median		1.0000	
	Variance		.161	
	Std. Deviation		.4010	
	Minimum		.00	
	Maximum		1.00	
	Range		1.00	
	Interquartile Range		.0000	
	Skewness		-1.511	.172
	Kurtosis		.287	.342

SURV7D





Oneway ANOVA - Two-Day Survival Tests

Descriptives

SURV2D

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
CTRL-1	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
CTRL-2	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
CTRL-3	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
CTRL-4	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
CTRL-5	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
UDA-11	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
UDA-12	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
PDA-8	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
PDA-8FD	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
PDA-9	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
PDA-10	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
PDA-5	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
PDA-6	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
PDA-7	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
PDA-2	10	.0000	.0000	.0000	.0000	.0000	.00	.00
PDA-2FD	10	.0000	.0000	.0000	.0000	.0000	.00	.00
PDA-3	10	.4000	.5164	.1633	3.059E-02	.7694	.00	1.00
PDA-4	10	.2000	.4216	.1333	-.1016	.5016	.00	1.00
DDA-13	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
DDA-1	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
Total	200	.8300	.3766	2.663E-02	.7775	.8825	.00	1.00

Test of Homogeneity of Variances

SURV2D

Levene Statistic	df1	df2	Sig.
42.406	19	180	.000

ANOVA

SURV2D

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	24.220	19	1.275	57.363	.000
Within Groups	4.000	180	2.222E-02		
Total	28.220	199			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: SURV2D

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL-1	CTRL-2	.0000	.067	1.000	-.2363	.2363
	CTRL-3	.0000	.067	1.000	-.2363	.2363
	CTRL-4	.0000	.067	1.000	-.2363	.2363
	CTRL-5	.0000	.067	1.000	-.2363	.2363
	UDA-11	.0000	.067	1.000	-.2363	.2363
	UDA-12	.0000	.067	1.000	-.2363	.2363
	PDA-8	.0000	.067	1.000	-.2363	.2363
	PDA-8FD	.0000	.067	1.000	-.2363	.2363
	PDA-9	.0000	.067	1.000	-.2363	.2363
	PDA-10	.0000	.067	1.000	-.2363	.2363
	PDA-5	.0000	.067	1.000	-.2363	.2363
	PDA-6	.0000	.067	1.000	-.2363	.2363
	PDA-7	.0000	.067	1.000	-.2363	.2363
	PDA-2	1.0000*	.067	.000	.7637	1.2363
	PDA-2FD	1.0000*	.067	.000	.7637	1.2363
	PDA-3	.6000*	.067	.000	.3637	.8363
	PDA-4	.8000*	.067	.000	.5637	1.0363
	DDA-13	.0000	.067	1.000	-.2363	.2363
	DDA-1	.0000	.067	1.000	-.2363	.2363

Multiple Comparisons

Dependent Variable: SURV2D
Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL-2	CTRL-1	.0000	.067	1.000	-.2363	.2363
	CTRL-3	.0000	.067	1.000	-.2363	.2363
	CTRL-4	.0000	.067	1.000	-.2363	.2363
	CTRL-5	.0000	.067	1.000	-.2363	.2363
	UDA-11	.0000	.067	1.000	-.2363	.2363
	UDA-12	.0000	.067	1.000	-.2363	.2363
	PDA-8	.0000	.067	1.000	-.2363	.2363
	PDA-8FD	.0000	.067	1.000	-.2363	.2363
	PDA-9	.0000	.067	1.000	-.2363	.2363
	PDA-10	.0000	.067	1.000	-.2363	.2363
	PDA-5	.0000	.067	1.000	-.2363	.2363
	PDA-6	.0000	.067	1.000	-.2363	.2363
	PDA-7	.0000	.067	1.000	-.2363	.2363
	PDA-2	1.0000*	.067	.000	.7637	1.2363
	PDA-2FD	1.0000*	.067	.000	.7637	1.2363
	PDA-3	.6000*	.067	.000	.3637	.8363
	PDA-4	.8000*	.067	.000	.5637	1.0363
	DDA-13	.0000	.067	1.000	-.2363	.2363
	DDA-1	.0000	.067	1.000	-.2363	.2363
CTRL-3	CTRL-1	.0000	.067	1.000	-.2363	.2363
	CTRL-2	.0000	.067	1.000	-.2363	.2363
	CTRL-4	.0000	.067	1.000	-.2363	.2363
	CTRL-5	.0000	.067	1.000	-.2363	.2363
	UDA-11	.0000	.067	1.000	-.2363	.2363
	UDA-12	.0000	.067	1.000	-.2363	.2363
	PDA-8	.0000	.067	1.000	-.2363	.2363
	PDA-8FD	.0000	.067	1.000	-.2363	.2363
	PDA-9	.0000	.067	1.000	-.2363	.2363
	PDA-10	.0000	.067	1.000	-.2363	.2363
	PDA-5	.0000	.067	1.000	-.2363	.2363
	PDA-6	.0000	.067	1.000	-.2363	.2363
	PDA-7	.0000	.067	1.000	-.2363	.2363
	PDA-2	1.0000*	.067	.000	.7637	1.2363
	PDA-2FD	1.0000*	.067	.000	.7637	1.2363
	PDA-3	.6000*	.067	.000	.3637	.8363
	PDA-4	.8000*	.067	.000	.5637	1.0363
	DDA-13	.0000	.067	1.000	-.2363	.2363
	DDA-1	.0000	.067	1.000	-.2363	.2363

Multiple Comparisons

Dependent Variable: SURV2D

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL-4	CTRL-1	.0000	.067	1.000	-.2363	.2363
	CTRL-2	.0000	.067	1.000	-.2363	.2363
	CTRL-3	.0000	.067	1.000	-.2363	.2363
	CTRL-5	.0000	.067	1.000	-.2363	.2363
	UDA-11	.0000	.067	1.000	-.2363	.2363
	UDA-12	.0000	.067	1.000	-.2363	.2363
	PDA-8	.0000	.067	1.000	-.2363	.2363
	PDA-8FD	.0000	.067	1.000	-.2363	.2363
	PDA-9	.0000	.067	1.000	-.2363	.2363
	PDA-10	.0000	.067	1.000	-.2363	.2363
	PDA-5	.0000	.067	1.000	-.2363	.2363
	PDA-6	.0000	.067	1.000	-.2363	.2363
	PDA-7	.0000	.067	1.000	-.2363	.2363
	PDA-2	1.0000*	.067	.000	.7637	1.2363
	PDA-2FD	1.0000*	.067	.000	.7637	1.2363
	PDA-3	.6000*	.067	.000	.3637	.8363
	PDA-4	.8000*	.067	.000	.5637	1.0363
	DDA-13	.0000	.067	1.000	-.2363	.2363
	DDA-1	.0000	.067	1.000	-.2363	.2363
CTRL-5	CTRL-1	.0000	.067	1.000	-.2363	.2363
	CTRL-2	.0000	.067	1.000	-.2363	.2363
	CTRL-3	.0000	.067	1.000	-.2363	.2363
	CTRL-4	.0000	.067	1.000	-.2363	.2363
	UDA-11	.0000	.067	1.000	-.2363	.2363
	UDA-12	.0000	.067	1.000	-.2363	.2363
	PDA-8	.0000	.067	1.000	-.2363	.2363
	PDA-8FD	.0000	.067	1.000	-.2363	.2363
	PDA-9	.0000	.067	1.000	-.2363	.2363
	PDA-10	.0000	.067	1.000	-.2363	.2363
	PDA-5	.0000	.067	1.000	-.2363	.2363
	PDA-6	.0000	.067	1.000	-.2363	.2363
	PDA-7	.0000	.067	1.000	-.2363	.2363
	PDA-2	1.0000*	.067	.000	.7637	1.2363
	PDA-2FD	1.0000*	.067	.000	.7637	1.2363
	PDA-3	.6000*	.067	.000	.3637	.8363
	PDA-4	.8000*	.067	.000	.5637	1.0363
	DDA-13	.0000	.067	1.000	-.2363	.2363
	DDA-1	.0000	.067	1.000	-.2363	.2363

Multiple Comparisons

Dependent Variable: SURV2D

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
UDA-11	CTRL-1	.0000	.067	1.000	-.2363	.2363
	CTRL-2	.0000	.067	1.000	-.2363	.2363
	CTRL-3	.0000	.067	1.000	-.2363	.2363
	CTRL-4	.0000	.067	1.000	-.2363	.2363
	CTRL-5	.0000	.067	1.000	-.2363	.2363
	UDA-12	.0000	.067	1.000	-.2363	.2363
	PDA-8	.0000	.067	1.000	-.2363	.2363
	PDA-8FD	.0000	.067	1.000	-.2363	.2363
	PDA-9	.0000	.067	1.000	-.2363	.2363
	PDA-10	.0000	.067	1.000	-.2363	.2363
	PDA-5	.0000	.067	1.000	-.2363	.2363
	PDA-6	.0000	.067	1.000	-.2363	.2363
	PDA-7	.0000	.067	1.000	-.2363	.2363
	PDA-2	1.0000*	.067	.000	.7637	1.2363
	PDA-2FD	1.0000*	.067	.000	.7637	1.2363
	PDA-3	.6000*	.067	.000	.3637	.8363
	PDA-4	.8000*	.067	.000	.5637	1.0363
	DDA-13	.0000	.067	1.000	-.2363	.2363
	DDA-1	.0000	.067	1.000	-.2363	.2363
UDA-12	CTRL-1	.0000	.067	1.000	-.2363	.2363
	CTRL-2	.0000	.067	1.000	-.2363	.2363
	CTRL-3	.0000	.067	1.000	-.2363	.2363
	CTRL-4	.0000	.067	1.000	-.2363	.2363
	CTRL-5	.0000	.067	1.000	-.2363	.2363
	UDA-11	.0000	.067	1.000	-.2363	.2363
	PDA-8	.0000	.067	1.000	-.2363	.2363
	PDA-8FD	.0000	.067	1.000	-.2363	.2363
	PDA-9	.0000	.067	1.000	-.2363	.2363
	PDA-10	.0000	.067	1.000	-.2363	.2363
	PDA-5	.0000	.067	1.000	-.2363	.2363
	PDA-6	.0000	.067	1.000	-.2363	.2363
	PDA-7	.0000	.067	1.000	-.2363	.2363
	PDA-2	1.0000*	.067	.000	.7637	1.2363
	PDA-2FD	1.0000*	.067	.000	.7637	1.2363
	PDA-3	.6000*	.067	.000	.3637	.8363
	PDA-4	.8000*	.067	.000	.5637	1.0363
	DDA-13	.0000	.067	1.000	-.2363	.2363
	DDA-1	.0000	.067	1.000	-.2363	.2363

Multiple Comparisons

Dependent Variable: SURV2D

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-8	CTRL-1	.0000	.067	1.000	-.2363	.2363
	CTRL-2	.0000	.067	1.000	-.2363	.2363
	CTRL-3	.0000	.067	1.000	-.2363	.2363
	CTRL-4	.0000	.067	1.000	-.2363	.2363
	CTRL-5	.0000	.067	1.000	-.2363	.2363
	UDA-11	.0000	.067	1.000	-.2363	.2363
	UDA-12	.0000	.067	1.000	-.2363	.2363
	PDA-8FD	.0000	.067	1.000	-.2363	.2363
	PDA-9	.0000	.067	1.000	-.2363	.2363
	PDA-10	.0000	.067	1.000	-.2363	.2363
	PDA-5	.0000	.067	1.000	-.2363	.2363
	PDA-6	.0000	.067	1.000	-.2363	.2363
	PDA-7	.0000	.067	1.000	-.2363	.2363
	PDA-2	1.0000*	.067	.000	.7637	1.2363
	PDA-2FD	1.0000*	.067	.000	.7637	1.2363
	PDA-3	.6000*	.067	.000	.3637	.8363
	PDA-4	.8000*	.067	.000	.5637	1.0363
	DDA-13	.0000	.067	1.000	-.2363	.2363
	DDA-1	.0000	.067	1.000	-.2363	.2363
PDA-8FD	CTRL-1	.0000	.067	1.000	-.2363	.2363
	CTRL-2	.0000	.067	1.000	-.2363	.2363
	CTRL-3	.0000	.067	1.000	-.2363	.2363
	CTRL-4	.0000	.067	1.000	-.2363	.2363
	CTRL-5	.0000	.067	1.000	-.2363	.2363
	UDA-11	.0000	.067	1.000	-.2363	.2363
	UDA-12	.0000	.067	1.000	-.2363	.2363
	PDA-8	.0000	.067	1.000	-.2363	.2363
	PDA-9	.0000	.067	1.000	-.2363	.2363
	PDA-10	.0000	.067	1.000	-.2363	.2363
	PDA-5	.0000	.067	1.000	-.2363	.2363
	PDA-6	.0000	.067	1.000	-.2363	.2363
	PDA-7	.0000	.067	1.000	-.2363	.2363
	PDA-2	1.0000*	.067	.000	.7637	1.2363
	PDA-2FD	1.0000*	.067	.000	.7637	1.2363
	PDA-3	.6000*	.067	.000	.3637	.8363
	PDA-4	.8000*	.067	.000	.5637	1.0363
	DDA-13	.0000	.067	1.000	-.2363	.2363
	DDA-1	.0000	.067	1.000	-.2363	.2363

Multiple Comparisons

Dependent Variable: SURV2D
Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-9	CTRL-1	.0000	.067	1.000	-.2363	.2363
	CTRL-2	.0000	.067	1.000	-.2363	.2363
	CTRL-3	.0000	.067	1.000	-.2363	.2363
	CTRL-4	.0000	.067	1.000	-.2363	.2363
	CTRL-5	.0000	.067	1.000	-.2363	.2363
	UDA-11	.0000	.067	1.000	-.2363	.2363
	UDA-12	.0000	.067	1.000	-.2363	.2363
	PDA-8	.0000	.067	1.000	-.2363	.2363
	PDA-8FD	.0000	.067	1.000	-.2363	.2363
	PDA-10	.0000	.067	1.000	-.2363	.2363
	PDA-5	.0000	.067	1.000	-.2363	.2363
	PDA-6	.0000	.067	1.000	-.2363	.2363
	PDA-7	.0000	.067	1.000	-.2363	.2363
	PDA-2	1.0000*	.067	.000	.7637	1.2363
	PDA-2FD	1.0000*	.067	.000	.7637	1.2363
	PDA-3	.6000*	.067	.000	.3637	.8363
	PDA-4	.8000*	.067	.000	.5637	1.0363
	DDA-13	.0000	.067	1.000	-.2363	.2363
	DDA-1	.0000	.067	1.000	-.2363	.2363
PDA-10	CTRL-1	.0000	.067	1.000	-.2363	.2363
	CTRL-2	.0000	.067	1.000	-.2363	.2363
	CTRL-3	.0000	.067	1.000	-.2363	.2363
	CTRL-4	.0000	.067	1.000	-.2363	.2363
	CTRL-5	.0000	.067	1.000	-.2363	.2363
	UDA-11	.0000	.067	1.000	-.2363	.2363
	UDA-12	.0000	.067	1.000	-.2363	.2363
	PDA-8	.0000	.067	1.000	-.2363	.2363
	PDA-8FD	.0000	.067	1.000	-.2363	.2363
	PDA-9	.0000	.067	1.000	-.2363	.2363
	PDA-5	.0000	.067	1.000	-.2363	.2363
	PDA-6	.0000	.067	1.000	-.2363	.2363
	PDA-7	.0000	.067	1.000	-.2363	.2363
	PDA-2	1.0000*	.067	.000	.7637	1.2363
	PDA-2FD	1.0000*	.067	.000	.7637	1.2363
	PDA-3	.6000*	.067	.000	.3637	.8363
	PDA-4	.8000*	.067	.000	.5637	1.0363
	DDA-13	.0000	.067	1.000	-.2363	.2363
	DDA-1	.0000	.067	1.000	-.2363	.2363

Multiple Comparisons

Dependent Variable: SURV2D
Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-5	CTRL-1	.0000	.067	1.000	-.2363	.2363
	CTRL-2	.0000	.067	1.000	-.2363	.2363
	CTRL-3	.0000	.067	1.000	-.2363	.2363
	CTRL-4	.0000	.067	1.000	-.2363	.2363
	CTRL-5	.0000	.067	1.000	-.2363	.2363
	UDA-11	.0000	.067	1.000	-.2363	.2363
	UDA-12	.0000	.067	1.000	-.2363	.2363
	PDA-8	.0000	.067	1.000	-.2363	.2363
	PDA-8FD	.0000	.067	1.000	-.2363	.2363
	PDA-9	.0000	.067	1.000	-.2363	.2363
	PDA-10	.0000	.067	1.000	-.2363	.2363
	PDA-6	.0000	.067	1.000	-.2363	.2363
	PDA-7	.0000	.067	1.000	-.2363	.2363
	PDA-2	1.0000*	.067	.000	.7637	1.2363
	PDA-2FD	1.0000*	.067	.000	.7637	1.2363
	PDA-3	.6000*	.067	.000	.3637	.8363
	PDA-4	.8000*	.067	.000	.5637	1.0363
	DDA-13	.0000	.067	1.000	-.2363	.2363
	DDA-1	.0000	.067	1.000	-.2363	.2363
PDA-6	CTRL-1	.0000	.067	1.000	-.2363	.2363
	CTRL-2	.0000	.067	1.000	-.2363	.2363
	CTRL-3	.0000	.067	1.000	-.2363	.2363
	CTRL-4	.0000	.067	1.000	-.2363	.2363
	CTRL-5	.0000	.067	1.000	-.2363	.2363
	UDA-11	.0000	.067	1.000	-.2363	.2363
	UDA-12	.0000	.067	1.000	-.2363	.2363
	PDA-8	.0000	.067	1.000	-.2363	.2363
	PDA-8FD	.0000	.067	1.000	-.2363	.2363
	PDA-9	.0000	.067	1.000	-.2363	.2363
	PDA-10	.0000	.067	1.000	-.2363	.2363
	PDA-5	.0000	.067	1.000	-.2363	.2363
	PDA-7	.0000	.067	1.000	-.2363	.2363
	PDA-2	1.0000*	.067	.000	.7637	1.2363
	PDA-2FD	1.0000*	.067	.000	.7637	1.2363
	PDA-3	.6000*	.067	.000	.3637	.8363
	PDA-4	.8000*	.067	.000	.5637	1.0363
	DDA-13	.0000	.067	1.000	-.2363	.2363
	DDA-1	.0000	.067	1.000	-.2363	.2363

Multiple Comparisons

Dependent Variable: SURV2D
Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-7	CTRL-1	.0000	.067	1.000	-.2363	.2363
	CTRL-2	.0000	.067	1.000	-.2363	.2363
	CTRL-3	.0000	.067	1.000	-.2363	.2363
	CTRL-4	.0000	.067	1.000	-.2363	.2363
	CTRL-5	.0000	.067	1.000	-.2363	.2363
	UDA-11	.0000	.067	1.000	-.2363	.2363
	UDA-12	.0000	.067	1.000	-.2363	.2363
	PDA-8	.0000	.067	1.000	-.2363	.2363
	PDA-8FD	.0000	.067	1.000	-.2363	.2363
	PDA-9	.0000	.067	1.000	-.2363	.2363
	PDA-10	.0000	.067	1.000	-.2363	.2363
	PDA-5	.0000	.067	1.000	-.2363	.2363
	PDA-6	.0000	.067	1.000	-.2363	.2363
	PDA-2	1.0000*	.067	.000	.7637	1.2363
	PDA-2FD	1.0000*	.067	.000	.7637	1.2363
	PDA-3	.6000*	.067	.000	.3637	.8363
	PDA-4	.8000*	.067	.000	.5637	1.0363
	DDA-13	.0000	.067	1.000	-.2363	.2363
	DDA-1	.0000	.067	1.000	-.2363	.2363
PDA-2	CTRL-1	-1.0000*	.067	.000	-1.2363	-.7637
	CTRL-2	-1.0000*	.067	.000	-1.2363	-.7637
	CTRL-3	-1.0000*	.067	.000	-1.2363	-.7637
	CTRL-4	-1.0000*	.067	.000	-1.2363	-.7637
	CTRL-5	-1.0000*	.067	.000	-1.2363	-.7637
	UDA-11	-1.0000*	.067	.000	-1.2363	-.7637
	UDA-12	-1.0000*	.067	.000	-1.2363	-.7637
	PDA-8	-1.0000*	.067	.000	-1.2363	-.7637
	PDA-8FD	-1.0000*	.067	.000	-1.2363	-.7637
	PDA-9	-1.0000*	.067	.000	-1.2363	-.7637
	PDA-10	-1.0000*	.067	.000	-1.2363	-.7637
	PDA-5	-1.0000*	.067	.000	-1.2363	-.7637
	PDA-6	-1.0000*	.067	.000	-1.2363	-.7637
	PDA-7	-1.0000*	.067	.000	-1.2363	-.7637
	PDA-2FD	.0000	.067	1.000	-.2363	.2363
	PDA-3	-.4000*	.067	.000	-.6363	-.1637
	PDA-4	-.2000	.067	.231	-.4363	3.625E-02
	DDA-13	-1.0000*	.067	.000	-1.2363	-.7637
	DDA-1	-1.0000*	.067	.000	-1.2363	-.7637

Multiple Comparisons

Dependent Variable: SURV2D

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-2FD	CTRL-1	-1.0000*	.067	.000	-1.2363	-.7637
	CTRL-2	-1.0000*	.067	.000	-1.2363	-.7637
	CTRL-3	-1.0000*	.067	.000	-1.2363	-.7637
	CTRL-4	-1.0000*	.067	.000	-1.2363	-.7637
	CTRL-5	-1.0000*	.067	.000	-1.2363	-.7637
	UDA-11	-1.0000*	.067	.000	-1.2363	-.7637
	UDA-12	-1.0000*	.067	.000	-1.2363	-.7637
	PDA-8	-1.0000*	.067	.000	-1.2363	-.7637
	PDA-8FD	-1.0000*	.067	.000	-1.2363	-.7637
	PDA-9	-1.0000*	.067	.000	-1.2363	-.7637
	PDA-10	-1.0000*	.067	.000	-1.2363	-.7637
	PDA-5	-1.0000*	.067	.000	-1.2363	-.7637
	PDA-6	-1.0000*	.067	.000	-1.2363	-.7637
	PDA-7	-1.0000*	.067	.000	-1.2363	-.7637
	PDA-2	.0000	.067	1.000	-.2363	.2363
	PDA-3	-.4000*	.067	.000	-.6363	-.1637
	PDA-4	-.2000	.067	.231	-.4363	3.625E-02
	DDA-13	-1.0000*	.067	.000	-1.2363	-.7637
	DDA-1	-1.0000*	.067	.000	-1.2363	-.7637
PDA-3	CTRL-1	-.6000*	.067	.000	-.8363	-.3637
	CTRL-2	-.6000*	.067	.000	-.8363	-.3637
	CTRL-3	-.6000*	.067	.000	-.8363	-.3637
	CTRL-4	-.6000*	.067	.000	-.8363	-.3637
	CTRL-5	-.6000*	.067	.000	-.8363	-.3637
	UDA-11	-.6000*	.067	.000	-.8363	-.3637
	UDA-12	-.6000*	.067	.000	-.8363	-.3637
	PDA-8	-.6000*	.067	.000	-.8363	-.3637
	PDA-8FD	-.6000*	.067	.000	-.8363	-.3637
	PDA-9	-.6000*	.067	.000	-.8363	-.3637
	PDA-10	-.6000*	.067	.000	-.8363	-.3637
	PDA-5	-.6000*	.067	.000	-.8363	-.3637
	PDA-6	-.6000*	.067	.000	-.8363	-.3637
	PDA-7	-.6000*	.067	.000	-.8363	-.3637
	PDA-2	.4000*	.067	.000	.1637	.6363
	PDA-2FD	.4000*	.067	.000	.1637	.6363
	PDA-4	.2000	.067	.231	-3.6253E-02	.4363
	DDA-13	-.6000*	.067	.000	-.8363	-.3637
	DDA-1	-.6000*	.067	.000	-.8363	-.3637

Multiple Comparisons

Dependent Variable: SURV2D
Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-4	CTRL-1	-.8000*	.067	.000	-1.0363	-.5637
	CTRL-2	-.8000*	.067	.000	-1.0363	-.5637
	CTRL-3	-.8000*	.067	.000	-1.0363	-.5637
	CTRL-4	-.8000*	.067	.000	-1.0363	-.5637
	CTRL-5	-.8000*	.067	.000	-1.0363	-.5637
	UDA-11	-.8000*	.067	.000	-1.0363	-.5637
	UDA-12	-.8000*	.067	.000	-1.0363	-.5637
	PDA-8	-.8000*	.067	.000	-1.0363	-.5637
	PDA-8FD	-.8000*	.067	.000	-1.0363	-.5637
	PDA-9	-.8000*	.067	.000	-1.0363	-.5637
	PDA-10	-.8000*	.067	.000	-1.0363	-.5637
	PDA-5	-.8000*	.067	.000	-1.0363	-.5637
	PDA-6	-.8000*	.067	.000	-1.0363	-.5637
	PDA-7	-.8000*	.067	.000	-1.0363	-.5637
	PDA-2	.2000	.067	.231	-3.6253E-02	.4363
	PDA-2FD	.2000	.067	.231	-3.6253E-02	.4363
	PDA-3	-.2000	.067	.231	-.4363	3.625E-02
	DDA-13	-.8000*	.067	.000	-1.0363	-.5637
	DDA-1	-.8000*	.067	.000	-1.0363	-.5637
DDA-13	CTRL-1	.0000	.067	1.000	-.2363	.2363
	CTRL-2	.0000	.067	1.000	-.2363	.2363
	CTRL-3	.0000	.067	1.000	-.2363	.2363
	CTRL-4	.0000	.067	1.000	-.2363	.2363
	CTRL-5	.0000	.067	1.000	-.2363	.2363
	UDA-11	.0000	.067	1.000	-.2363	.2363
	UDA-12	.0000	.067	1.000	-.2363	.2363
	PDA-8	.0000	.067	1.000	-.2363	.2363
	PDA-8FD	.0000	.067	1.000	-.2363	.2363
	PDA-9	.0000	.067	1.000	-.2363	.2363
	PDA-10	.0000	.067	1.000	-.2363	.2363
	PDA-5	.0000	.067	1.000	-.2363	.2363
	PDA-6	.0000	.067	1.000	-.2363	.2363
	PDA-7	.0000	.067	1.000	-.2363	.2363
	PDA-2	1.0000*	.067	.000	.7637	1.2363
	PDA-2FD	1.0000*	.067	.000	.7637	1.2363
	PDA-3	.6000*	.067	.000	.3637	.8363
	PDA-4	.8000*	.067	.000	.5637	1.0363
	DDA-1	.0000	.067	1.000	-.2363	.2363

Multiple Comparisons

Dependent Variable: SURV2D
Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
DDA-1	CTRL-1	.0000	.067	1.000	-.2363	.2363
	CTRL-2	.0000	.067	1.000	-.2363	.2363
	CTRL-3	.0000	.067	1.000	-.2363	.2363
	CTRL-4	.0000	.067	1.000	-.2363	.2363
	CTRL-5	.0000	.067	1.000	-.2363	.2363
	UDA-11	.0000	.067	1.000	-.2363	.2363
	UDA-12	.0000	.067	1.000	-.2363	.2363
	PDA-8	.0000	.067	1.000	-.2363	.2363
	PDA-8FD	.0000	.067	1.000	-.2363	.2363
	PDA-9	.0000	.067	1.000	-.2363	.2363
	PDA-10	.0000	.067	1.000	-.2363	.2363
	PDA-5	.0000	.067	1.000	-.2363	.2363
	PDA-6	.0000	.067	1.000	-.2363	.2363
	PDA-7	.0000	.067	1.000	-.2363	.2363
	PDA-2	1.0000*	.067	.000	.7637	1.2363
	PDA-2FD	1.0000*	.067	.000	.7637	1.2363
	PDA-3	.6000*	.067	.000	.3637	.8363
	PDA-4	.8000*	.067	.000	.5637	1.0363
	DDA-13	.0000	.067	1.000	-.2363	.2363

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

SURV2D

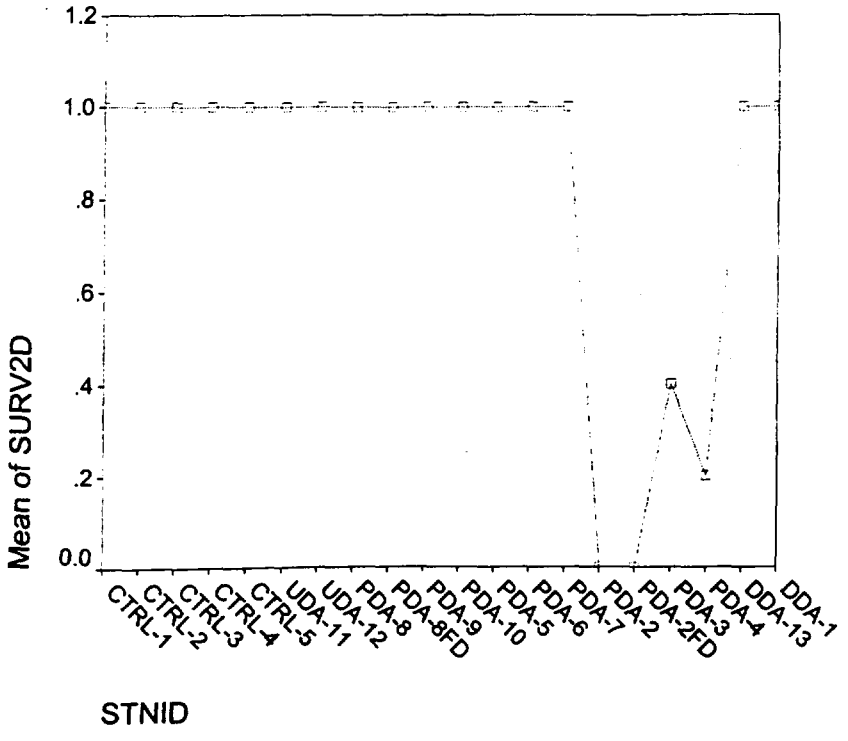
Tukey HSD[a]

STNID	N	Subset for alpha = .05		
		1	2	3
PDA-2	10	.0000		
PDA-2FD	10	.0000		
PDA-4	10	.2000	.2000	
PDA-3	10		.4000	
CTRL-1	10			1.0000
CTRL-2	10			1.0000
CTRL-3	10			1.0000
CTRL-4	10			1.0000
CTRL-5	10			1.0000
UDA-11	10			1.0000
UDA-12	10			1.0000
PDA-8	10			1.0000
PDA-8FD	10			1.0000
PDA-9	10			1.0000
PDA-10	10			1.0000
PDA-5	10			1.0000
PDA-6	10			1.0000
PDA-7	10			1.0000
DDA-13	10			1.0000
DDA-1	10			1.0000
Sig.		.231	.231	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Means Plots



Oneway ANOVA - Seven-Day Survival Test

Descriptives

SURV7D

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
CTRL-1	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
CTRL-2	10	.9000	.3162	1.000E-01	.6738	1.1262	.00	1.00
CTRL-3	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
CTRL-4	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
CTRL-5	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
UDA-11	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
UDA-12	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
PDA-8	10	.9000	.3162	1.000E-01	.6738	1.1262	.00	1.00
PDA-8FD	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
PDA-9	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
PDA-10	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
PDA-5	10	.9000	.3162	1.000E-01	.6738	1.1262	.00	1.00
PDA-6	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
PDA-7	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
PDA-2	10	.0000	.0000	.0000	.0000	.0000	.00	.00
PDA-2FD	10	.0000	.0000	.0000	.0000	.0000	.00	.00
PDA-3	10	.2000	.4216	.1333	-.1016	.5016	.00	1.00
PDA-4	10	.1000	.3162	1.000E-01	-.1262	.3262	.00	1.00
DDA-13	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
DDA-1	10	1.0000	.0000	.0000	1.0000	1.0000	1.00	1.00
Total	200	.8000	.4010	2.836E-02	.7441	.8559	.00	1.00

Test of Homogeneity of Variances

SURV7D

Levene Statistic	df1	df2	Sig.
5.853	19	180	.000

ANOVA

SURV7D

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	26.800	19	1.411	48.826	.000
Within Groups	5.200	180	2.889E-02		
Total	32.000	199			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: SURV7D
Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
CTRL-1	CTRL-2	1.000E-01	.076	.999	-.1694	.3694
	CTRL-3	.0000	.076	1.000	-.2694	.2694
	CTRL-4	.0000	.076	1.000	-.2694	.2694
	CTRL-5	.0000	.076	1.000	-.2694	.2694
	UDA-11	.0000	.076	1.000	-.2694	.2694
	UDA-12	.0000	.076	1.000	-.2694	.2694
	PDA-8	1.000E-01	.076	.999	-.1694	.3694
	PDA-8FD	.0000	.076	1.000	-.2694	.2694
	PDA-9	.0000	.076	1.000	-.2694	.2694
	PDA-10	.0000	.076	1.000	-.2694	.2694
	PDA-5	1.000E-01	.076	.999	-.1694	.3694
	PDA-6	.0000	.076	1.000	-.2694	.2694
	PDA-7	.0000	.076	1.000	-.2694	.2694
	PDA-2	1.0000*	.076	.000	.7306	1.2694
	PDA-2FD	1.0000*	.076	.000	.7306	1.2694
	PDA-3	.8000*	.076	.000	.5306	1.0694
	PDA-4	.9000*	.076	.000	.6306	1.1694
	DDA-13	.0000	.076	1.000	-.2694	.2694
	DDA-1	.0000	.076	1.000	-.2694	.2694

Multiple Comparisons

Dependent Variable: SURV7D

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL-2	CTRL-1	-1.0000E-01	.076	.999	-.3694	.1694
	CTRL-3	-1.0000E-01	.076	.999	-.3694	.1694
	CTRL-4	-1.0000E-01	.076	.999	-.3694	.1694
	CTRL-5	-1.0000E-01	.076	.999	-.3694	.1694
	UDA-11	-1.0000E-01	.076	.999	-.3694	.1694
	UDA-12	-1.0000E-01	.076	.999	-.3694	.1694
	PDA-8	.0000	.076	1.000	-.2694	.2694
	PDA-8FD	-1.0000E-01	.076	.999	-.3694	.1694
	PDA-9	-1.0000E-01	.076	.999	-.3694	.1694
	PDA-10	-1.0000E-01	.076	.999	-.3694	.1694
	PDA-5	.0000	.076	1.000	-.2694	.2694
	PDA-6	-1.0000E-01	.076	.999	-.3694	.1694
	PDA-7	-1.0000E-01	.076	.999	-.3694	.1694
	PDA-2	.9000*	.076	.000	.6306	1.1694
	PDA-2FD	.9000*	.076	.000	.6306	1.1694
	PDA-3	.7000*	.076	.000	.4306	.9694
	PDA-4	.8000*	.076	.000	.5306	1.0694
	DDA-13	-1.0000E-01	.076	.999	-.3694	.1694
	DDA-1	-1.0000E-01	.076	.999	-.3694	.1694
CTRL-3	CTRL-1	.0000	.076	1.000	-.2694	.2694
	CTRL-2	1.000E-01	.076	.999	-.1694	.3694
	CTRL-4	.0000	.076	1.000	-.2694	.2694
	CTRL-5	.0000	.076	1.000	-.2694	.2694
	UDA-11	.0000	.076	1.000	-.2694	.2694
	UDA-12	.0000	.076	1.000	-.2694	.2694
	PDA-8	1.000E-01	.076	.999	-.1694	.3694
	PDA-8FD	.0000	.076	1.000	-.2694	.2694
	PDA-9	.0000	.076	1.000	-.2694	.2694
	PDA-10	.0000	.076	1.000	-.2694	.2694
	PDA-5	1.000E-01	.076	.999	-.1694	.3694
	PDA-6	.0000	.076	1.000	-.2694	.2694
	PDA-7	.0000	.076	1.000	-.2694	.2694
	PDA-2	1.0000*	.076	.000	.7306	1.2694
	PDA-2FD	1.0000*	.076	.000	.7306	1.2694
	PDA-3	.8000*	.076	.000	.5306	1.0694
	PDA-4	.9000*	.076	.000	.6306	1.1694
	DDA-13	.0000	.076	1.000	-.2694	.2694
	DDA-1	.0000	.076	1.000	-.2694	.2694

Multiple Comparisons

Dependent Variable: SURV7D

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL-4	CTRL-1	.0000	.076	1.000	-.2694	.2694
	CTRL-2	1.000E-01	.076	.999	-.1694	.3694
	CTRL-3	.0000	.076	1.000	-.2694	.2694
	CTRL-5	.0000	.076	1.000	-.2694	.2694
	UDA-11	.0000	.076	1.000	-.2694	.2694
	UDA-12	.0000	.076	1.000	-.2694	.2694
	PDA-8	1.000E-01	.076	.999	-.1694	.3694
	PDA-8FD	.0000	.076	1.000	-.2694	.2694
	PDA-9	.0000	.076	1.000	-.2694	.2694
	PDA-10	.0000	.076	1.000	-.2694	.2694
	PDA-5	1.000E-01	.076	.999	-.1694	.3694
	PDA-6	.0000	.076	1.000	-.2694	.2694
	PDA-7	.0000	.076	1.000	-.2694	.2694
	PDA-2	1.0000*	.076	.000	.7306	1.2694
	PDA-2FD	1.0000*	.076	.000	.7306	1.2694
	PDA-3	.8000*	.076	.000	.5306	1.0694
	PDA-4	.9000*	.076	.000	.6306	1.1694
	DDA-13	.0000	.076	1.000	-.2694	.2694
	DDA-1	.0000	.076	1.000	-.2694	.2694
CTRL-5	CTRL-1	.0000	.076	1.000	-.2694	.2694
	CTRL-2	1.000E-01	.076	.999	-.1694	.3694
	CTRL-3	.0000	.076	1.000	-.2694	.2694
	CTRL-4	.0000	.076	1.000	-.2694	.2694
	UDA-11	.0000	.076	1.000	-.2694	.2694
	UDA-12	.0000	.076	1.000	-.2694	.2694
	PDA-8	1.000E-01	.076	.999	-.1694	.3694
	PDA-8FD	.0000	.076	1.000	-.2694	.2694
	PDA-9	.0000	.076	1.000	-.2694	.2694
	PDA-10	.0000	.076	1.000	-.2694	.2694
	PDA-5	1.000E-01	.076	.999	-.1694	.3694
	PDA-6	.0000	.076	1.000	-.2694	.2694
	PDA-7	.0000	.076	1.000	-.2694	.2694
	PDA-2	1.0000*	.076	.000	.7306	1.2694
	PDA-2FD	1.0000*	.076	.000	.7306	1.2694
	PDA-3	.8000*	.076	.000	.5306	1.0694
	PDA-4	.9000*	.076	.000	.6306	1.1694
	DDA-13	.0000	.076	1.000	-.2694	.2694
	DDA-1	.0000	.076	1.000	-.2694	.2694

Multiple Comparisons

Dependent Variable: SURV7D

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
UDA-11	CTRL-1	.0000	.076	1.000	-.2694	.2694
	CTRL-2	1.000E-01	.076	.999	-.1694	.3694
	CTRL-3	.0000	.076	1.000	-.2694	.2694
	CTRL-4	.0000	.076	1.000	-.2694	.2694
	CTRL-5	.0000	.076	1.000	-.2694	.2694
	UDA-12	.0000	.076	1.000	-.2694	.2694
	PDA-8	1.000E-01	.076	.999	-.1694	.3694
	PDA-8FD	.0000	.076	1.000	-.2694	.2694
	PDA-9	.0000	.076	1.000	-.2694	.2694
	PDA-10	.0000	.076	1.000	-.2694	.2694
	PDA-5	1.000E-01	.076	.999	-.1694	.3694
	PDA-6	.0000	.076	1.000	-.2694	.2694
	PDA-7	.0000	.076	1.000	-.2694	.2694
	PDA-2	1.0000*	.076	.000	.7306	1.2694
	PDA-2FD	1.0000*	.076	.000	.7306	1.2694
	PDA-3	.8000*	.076	.000	.5306	1.0694
	PDA-4	.9000*	.076	.000	.6306	1.1694
	DDA-13	.0000	.076	1.000	-.2694	.2694
	DDA-1	.0000	.076	1.000	-.2694	.2694
UDA-12	CTRL-1	.0000	.076	1.000	-.2694	.2694
	CTRL-2	1.000E-01	.076	.999	-.1694	.3694
	CTRL-3	.0000	.076	1.000	-.2694	.2694
	CTRL-4	.0000	.076	1.000	-.2694	.2694
	CTRL-5	.0000	.076	1.000	-.2694	.2694
	UDA-11	.0000	.076	1.000	-.2694	.2694
	PDA-8	1.000E-01	.076	.999	-.1694	.3694
	PDA-8FD	.0000	.076	1.000	-.2694	.2694
	PDA-9	.0000	.076	1.000	-.2694	.2694
	PDA-10	.0000	.076	1.000	-.2694	.2694
	PDA-5	1.000E-01	.076	.999	-.1694	.3694
	PDA-6	.0000	.076	1.000	-.2694	.2694
	PDA-7	.0000	.076	1.000	-.2694	.2694
	PDA-2	1.0000*	.076	.000	.7306	1.2694
	PDA-2FD	1.0000*	.076	.000	.7306	1.2694
	PDA-3	.8000*	.076	.000	.5306	1.0694
	PDA-4	.9000*	.076	.000	.6306	1.1694
	DDA-13	.0000	.076	1.000	-.2694	.2694
	DDA-1	.0000	.076	1.000	-.2694	.2694

Multiple Comparisons

Dependent Variable: SURV7D
Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-8	CTRL-1	-1.0000E-01	.076	.999	-.3694	.1694
	CTRL-2	.0000	.076	1.000	-.2694	.2694
	CTRL-3	-1.0000E-01	.076	.999	-.3694	.1694
	CTRL-4	-1.0000E-01	.076	.999	-.3694	.1694
	CTRL-5	-1.0000E-01	.076	.999	-.3694	.1694
	UDA-11	-1.0000E-01	.076	.999	-.3694	.1694
	UDA-12	-1.0000E-01	.076	.999	-.3694	.1694
	PDA-8FD	-1.0000E-01	.076	.999	-.3694	.1694
	PDA-9	-1.0000E-01	.076	.999	-.3694	.1694
	PDA-10	-1.0000E-01	.076	.999	-.3694	.1694
	PDA-5	.0000	.076	1.000	-.2694	.2694
	PDA-6	-1.0000E-01	.076	.999	-.3694	.1694
	PDA-7	-1.0000E-01	.076	.999	-.3694	.1694
	PDA-2	.9000*	.076	.000	.6306	1.1694
	PDA-2FD	.9000*	.076	.000	.6306	1.1694
	PDA-3	.7000*	.076	.000	.4306	.9694
	PDA-4	.8000*	.076	.000	.5306	1.0694
	DDA-13	-1.0000E-01	.076	.999	-.3694	.1694
	DDA-1	-1.0000E-01	.076	.999	-.3694	.1694
PDA-8FD	CTRL-1	.0000	.076	1.000	-.2694	.2694
	CTRL-2	1.000E-01	.076	.999	-.1694	.3694
	CTRL-3	.0000	.076	1.000	-.2694	.2694
	CTRL-4	.0000	.076	1.000	-.2694	.2694
	CTRL-5	.0000	.076	1.000	-.2694	.2694
	UDA-11	.0000	.076	1.000	-.2694	.2694
	UDA-12	.0000	.076	1.000	-.2694	.2694
	PDA-8	1.000E-01	.076	.999	-.1694	.3694
	PDA-9	.0000	.076	1.000	-.2694	.2694
	PDA-10	.0000	.076	1.000	-.2694	.2694
	PDA-5	1.000E-01	.076	.999	-.1694	.3694
	PDA-6	.0000	.076	1.000	-.2694	.2694
	PDA-7	.0000	.076	1.000	-.2694	.2694
	PDA-2	1.0000*	.076	.000	.7306	1.2694
	PDA-2FD	1.0000*	.076	.000	.7306	1.2694
	PDA-3	.8000*	.076	.000	.5306	1.0694
	PDA-4	.9000*	.076	.000	.6306	1.1694
	DDA-13	.0000	.076	1.000	-.2694	.2694
	DDA-1	.0000	.076	1.000	-.2694	.2694

Multiple Comparisons

Dependent Variable: SURV7D
Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-9	CTRL-1	.0000	.076	1.000	-.2694	.2694
	CTRL-2	1.000E-01	.076	.999	-.1694	.3694
	CTRL-3	.0000	.076	1.000	-.2694	.2694
	CTRL-4	.0000	.076	1.000	-.2694	.2694
	CTRL-5	.0000	.076	1.000	-.2694	.2694
	UDA-11	.0000	.076	1.000	-.2694	.2694
	UDA-12	.0000	.076	1.000	-.2694	.2694
	PDA-8	1.000E-01	.076	.999	-.1694	.3694
	PDA-8FD	.0000	.076	1.000	-.2694	.2694
	PDA-10	.0000	.076	1.000	-.2694	.2694
	PDA-5	1.000E-01	.076	.999	-.1694	.3694
	PDA-6	.0000	.076	1.000	-.2694	.2694
	PDA-7	.0000	.076	1.000	-.2694	.2694
	PDA-2	1.0000*	.076	.000	.7306	1.2694
	PDA-2FD	1.0000*	.076	.000	.7306	1.2694
	PDA-3	.8000*	.076	.000	.5306	1.0694
	PDA-4	.9000*	.076	.000	.6306	1.1694
	DDA-13	.0000	.076	1.000	-.2694	.2694
	DDA-1	.0000	.076	1.000	-.2694	.2694
PDA-10	CTRL-1	.0000	.076	1.000	-.2694	.2694
	CTRL-2	1.000E-01	.076	.999	-.1694	.3694
	CTRL-3	.0000	.076	1.000	-.2694	.2694
	CTRL-4	.0000	.076	1.000	-.2694	.2694
	CTRL-5	.0000	.076	1.000	-.2694	.2694
	UDA-11	.0000	.076	1.000	-.2694	.2694
	UDA-12	.0000	.076	1.000	-.2694	.2694
	PDA-8	1.000E-01	.076	.999	-.1694	.3694
	PDA-8FD	.0000	.076	1.000	-.2694	.2694
	PDA-9	.0000	.076	1.000	-.2694	.2694
	PDA-5	1.000E-01	.076	.999	-.1694	.3694
	PDA-6	.0000	.076	1.000	-.2694	.2694
	PDA-7	.0000	.076	1.000	-.2694	.2694
	PDA-2	1.0000*	.076	.000	.7306	1.2694
	PDA-2FD	1.0000*	.076	.000	.7306	1.2694
	PDA-3	.8000*	.076	.000	.5306	1.0694
	PDA-4	.9000*	.076	.000	.6306	1.1694
	DDA-13	.0000	.076	1.000	-.2694	.2694
	DDA-1	.0000	.076	1.000	-.2694	.2694

Multiple Comparisons

Dependent Variable: SURV7D
Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-5	CTRL-1	-1.0000E-01	.076	.999	-.3694	.1694
	CTRL-2	.0000	.076	1.000	-.2694	.2694
	CTRL-3	-1.0000E-01	.076	.999	-.3694	.1694
	CTRL-4	-1.0000E-01	.076	.999	-.3694	.1694
	CTRL-5	-1.0000E-01	.076	.999	-.3694	.1694
	UDA-11	-1.0000E-01	.076	.999	-.3694	.1694
	UDA-12	-1.0000E-01	.076	.999	-.3694	.1694
	PDA-8	.0000	.076	1.000	-.2694	.2694
	PDA-8FD	-1.0000E-01	.076	.999	-.3694	.1694
	PDA-9	-1.0000E-01	.076	.999	-.3694	.1694
	PDA-10	-1.0000E-01	.076	.999	-.3694	.1694
	PDA-6	-1.0000E-01	.076	.999	-.3694	.1694
	PDA-7	-1.0000E-01	.076	.999	-.3694	.1694
	PDA-2	.9000*	.076	.000	.6306	1.1694
	PDA-2FD	.9000*	.076	.000	.6306	1.1694
	PDA-3	.7000*	.076	.000	.4306	.9694
	PDA-4	.8000*	.076	.000	.5306	1.0694
	DDA-13	-1.0000E-01	.076	.999	-.3694	.1694
	DDA-1	-1.0000E-01	.076	.999	-.3694	.1694
PDA-6	CTRL-1	.0000	.076	1.000	-.2694	.2694
	CTRL-2	1.000E-01	.076	.999	-.1694	.3694
	CTRL-3	.0000	.076	1.000	-.2694	.2694
	CTRL-4	.0000	.076	1.000	-.2694	.2694
	CTRL-5	.0000	.076	1.000	-.2694	.2694
	UDA-11	.0000	.076	1.000	-.2694	.2694
	UDA-12	.0000	.076	1.000	-.2694	.2694
	PDA-8	1.000E-01	.076	.999	-.1694	.3694
	PDA-8FD	.0000	.076	1.000	-.2694	.2694
	PDA-9	.0000	.076	1.000	-.2694	.2694
	PDA-10	.0000	.076	1.000	-.2694	.2694
	PDA-5	1.000E-01	.076	.999	-.1694	.3694
	PDA-7	.0000	.076	1.000	-.2694	.2694
	PDA-2	1.0000*	.076	.000	.7306	1.2694
	PDA-2FD	1.0000*	.076	.000	.7306	1.2694
	PDA-3	.8000*	.076	.000	.5306	1.0694
	PDA-4	.9000*	.076	.000	.6306	1.1694
	DDA-13	.0000	.076	1.000	-.2694	.2694
	DDA-1	.0000	.076	1.000	-.2694	.2694

Multiple Comparisons

Dependent Variable: SURV7D

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-7	CTRL-1	.0000	.076	1.000	-.2694	.2694
	CTRL-2	1.000E-01	.076	.999	-.1694	.3694
	CTRL-3	.0000	.076	1.000	-.2694	.2694
	CTRL-4	.0000	.076	1.000	-.2694	.2694
	CTRL-5	.0000	.076	1.000	-.2694	.2694
	UDA-11	.0000	.076	1.000	-.2694	.2694
	UDA-12	.0000	.076	1.000	-.2694	.2694
	PDA-8	1.000E-01	.076	.999	-.1694	.3694
	PDA-8FD	.0000	.076	1.000	-.2694	.2694
	PDA-9	.0000	.076	1.000	-.2694	.2694
	PDA-10	.0000	.076	1.000	-.2694	.2694
	PDA-5	1.000E-01	.076	.999	-.1694	.3694
	PDA-6	.0000	.076	1.000	-.2694	.2694
	PDA-2	1.0000*	.076	.000	.7306	1.2694
	PDA-2FD	1.0000*	.076	.000	.7306	1.2694
	PDA-3	.8000*	.076	.000	.5306	1.0694
	PDA-4	.9000*	.076	.000	.6306	1.1694
	DDA-13	.0000	.076	1.000	-.2694	.2694
	DDA-1	.0000	.076	1.000	-.2694	.2694
PDA-2	CTRL-1	-1.0000*	.076	.000	-1.2694	-.7306
	CTRL-2	-.9000*	.076	.000	-1.1694	-.6306
	CTRL-3	-1.0000*	.076	.000	-1.2694	-.7306
	CTRL-4	-1.0000*	.076	.000	-1.2694	-.7306
	CTRL-5	-1.0000*	.076	.000	-1.2694	-.7306
	UDA-11	-1.0000*	.076	.000	-1.2694	-.7306
	UDA-12	-1.0000*	.076	.000	-1.2694	-.7306
	PDA-8	-.9000*	.076	.000	-1.1694	-.6306
	PDA-8FD	-1.0000*	.076	.000	-1.2694	-.7306
	PDA-9	-1.0000*	.076	.000	-1.2694	-.7306
	PDA-10	-1.0000*	.076	.000	-1.2694	-.7306
	PDA-5	-.9000*	.076	.000	-1.1694	-.6306
	PDA-6	-1.0000*	.076	.000	-1.2694	-.7306
	PDA-7	-1.0000*	.076	.000	-1.2694	-.7306
	PDA-2FD	.0000	.076	1.000	-.2694	.2694
	PDA-3	-.2000	.076	.481	-.4694	6.937E-02
	PDA-4	-.1000	.076	.999	-.3694	.1694
	DDA-13	-1.0000*	.076	.000	-1.2694	-.7306
	DDA-1	-1.0000*	.076	.000	-1.2694	-.7306

Multiple Comparisons

Dependent Variable: SURV7D

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-2FD	CTRL-1	-1.0000*	.076	.000	-1.2694	-.7306
	CTRL-2	-.9000*	.076	.000	-1.1694	-.6306
	CTRL-3	-1.0000*	.076	.000	-1.2694	-.7306
	CTRL-4	-1.0000*	.076	.000	-1.2694	-.7306
	CTRL-5	-1.0000*	.076	.000	-1.2694	-.7306
	UDA-11	-1.0000*	.076	.000	-1.2694	-.7306
	UDA-12	-1.0000*	.076	.000	-1.2694	-.7306
	PDA-8	-.9000*	.076	.000	-1.1694	-.6306
	PDA-8FD	-1.0000*	.076	.000	-1.2694	-.7306
	PDA-9	-1.0000*	.076	.000	-1.2694	-.7306
	PDA-10	-1.0000*	.076	.000	-1.2694	-.7306
	PDA-5	-.9000*	.076	.000	-1.1694	-.6306
	PDA-6	-1.0000*	.076	.000	-1.2694	-.7306
	PDA-7	-1.0000*	.076	.000	-1.2694	-.7306
	PDA-2	.0000	.076	1.000	-.2694	.2694
	PDA-3	-.2000	.076	.481	-.4694	6.937E-02
	PDA-4	-.1000	.076	.999	-.3694	.1694
	DDA-13	-1.0000*	.076	.000	-1.2694	-.7306
	DDA-1	-1.0000*	.076	.000	-1.2694	-.7306
PDA-3	CTRL-1	-.8000*	.076	.000	-1.0694	-.5306
	CTRL-2	-.7000*	.076	.000	-.9694	-.4306
	CTRL-3	-.8000*	.076	.000	-1.0694	-.5306
	CTRL-4	-.8000*	.076	.000	-1.0694	-.5306
	CTRL-5	-.8000*	.076	.000	-1.0694	-.5306
	UDA-11	-.8000*	.076	.000	-1.0694	-.5306
	UDA-12	-.8000*	.076	.000	-1.0694	-.5306
	PDA-8	-.7000*	.076	.000	-.9694	-.4306
	PDA-8FD	-.8000*	.076	.000	-1.0694	-.5306
	PDA-9	-.8000*	.076	.000	-1.0694	-.5306
	PDA-10	-.8000*	.076	.000	-1.0694	-.5306
	PDA-5	-.7000*	.076	.000	-.9694	-.4306
	PDA-6	-.8000*	.076	.000	-1.0694	-.5306
	PDA-7	-.8000*	.076	.000	-1.0694	-.5306
	PDA-2	.2000	.076	.481	-6.9370E-02	.4694
	PDA-2FD	.2000	.076	.481	-6.9370E-02	.4694
	PDA-4	.1000	.076	.999	-.1694	.3694
	DDA-13	-.8000*	.076	.000	-1.0694	-.5306
	DDA-1	-.8000*	.076	.000	-1.0694	-.5306

Multiple Comparisons

Dependent Variable: SURV7D

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-4	CTRL-1	-.9000*	.076	.000	-1.1694	-.6306
	CTRL-2	-.8000*	.076	.000	-1.0694	-.5306
	CTRL-3	-.9000*	.076	.000	-1.1694	-.6306
	CTRL-4	-.9000*	.076	.000	-1.1694	-.6306
	CTRL-5	-.9000*	.076	.000	-1.1694	-.6306
	UDA-11	-.9000*	.076	.000	-1.1694	-.6306
	UDA-12	-.9000*	.076	.000	-1.1694	-.6306
	PDA-8	-.8000*	.076	.000	-1.0694	-.5306
	PDA-8FD	-.9000*	.076	.000	-1.1694	-.6306
	PDA-9	-.9000*	.076	.000	-1.1694	-.6306
	PDA-10	-.9000*	.076	.000	-1.1694	-.6306
	PDA-5	-.8000*	.076	.000	-1.0694	-.5306
	PDA-6	-.9000*	.076	.000	-1.1694	-.6306
	PDA-7	-.9000*	.076	.000	-1.1694	-.6306
	PDA-2	.1000	.076	.999	-.1694	.3694
	PDA-2FD	.1000	.076	.999	-.1694	.3694
	PDA-3	-.1000	.076	.999	-.3694	.1694
	DDA-13	-.9000*	.076	.000	-1.1694	-.6306
	DDA-1	-.9000*	.076	.000	-1.1694	-.6306
DDA-13	CTRL-1	.0000	.076	1.000	-.2694	.2694
	CTRL-2	1.000E-01	.076	.999	-.1694	.3694
	CTRL-3	.0000	.076	1.000	-.2694	.2694
	CTRL-4	.0000	.076	1.000	-.2694	.2694
	CTRL-5	.0000	.076	1.000	-.2694	.2694
	UDA-11	.0000	.076	1.000	-.2694	.2694
	UDA-12	.0000	.076	1.000	-.2694	.2694
	PDA-8	1.000E-01	.076	.999	-.1694	.3694
	PDA-8FD	.0000	.076	1.000	-.2694	.2694
	PDA-9	.0000	.076	1.000	-.2694	.2694
	PDA-10	.0000	.076	1.000	-.2694	.2694
	PDA-5	1.000E-01	.076	.999	-.1694	.3694
	PDA-6	.0000	.076	1.000	-.2694	.2694
	PDA-7	.0000	.076	1.000	-.2694	.2694
	PDA-2	1.0000*	.076	.000	.7306	1.2694
	PDA-2FD	1.0000*	.076	.000	.7306	1.2694
	PDA-3	.8000*	.076	.000	.5306	1.0694
	PDA-4	.9000*	.076	.000	.6306	1.1694
	DDA-1	.0000	.076	1.000	-.2694	.2694

Multiple Comparisons

Dependent Variable: SURV7D
Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
DDA-1	CTRL-1	.0000	.076	1.000	-.2694	.2694
	CTRL-2	1.000E-01	.076	.999	-.1694	.3694
	CTRL-3	.0000	.076	1.000	-.2694	.2694
	CTRL-4	.0000	.076	1.000	-.2694	.2694
	CTRL-5	.0000	.076	1.000	-.2694	.2694
	UDA-11	.0000	.076	1.000	-.2694	.2694
	UDA-12	.0000	.076	1.000	-.2694	.2694
	PDA-8	1.000E-01	.076	.999	-.1694	.3694
	PDA-8FD	.0000	.076	1.000	-.2694	.2694
	PDA-9	.0000	.076	1.000	-.2694	.2694
	PDA-10	.0000	.076	1.000	-.2694	.2694
	PDA-5	1.000E-01	.076	.999	-.1694	.3694
	PDA-6	.0000	.076	1.000	-.2694	.2694
	PDA-7	.0000	.076	1.000	-.2694	.2694
	PDA-2	1.0000*	.076	.000	.7306	1.2694
	PDA-2FD	1.0000*	.076	.000	.7306	1.2694
	PDA-3	.8000*	.076	.000	.5306	1.0694
	PDA-4	.9000*	.076	.000	.6306	1.1694
	DDA-13	.0000	.076	1.000	-.2694	.2694

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

SURV7D

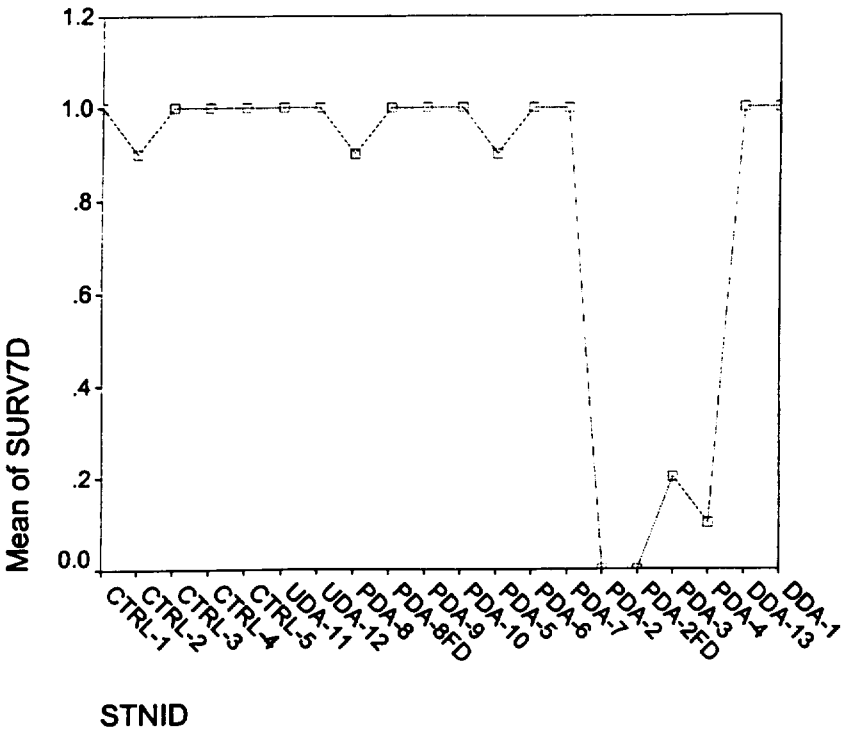
Tukey HSD[a]

STNID	N	Subset for alpha = .05	
		1	2
PDA-2	10	.0000	
PDA-2FD	10	.0000	
PDA-4	10	.1000	
PDA-3	10	.2000	
CTRL-2	10		.9000
PDA-8	10		.9000
PDA-5	10		.9000
CTRL-1	10		1.0000
CTRL-3	10		1.0000
CTRL-4	10		1.0000
CTRL-5	10		1.0000
UDA-11	10		1.0000
UDA-12	10		1.0000
PDA-8FD	10		1.0000
PDA-9	10		1.0000
PDA-10	10		1.0000
PDA-6	10		1.0000
PDA-7	10		1.0000
DDA-13	10		1.0000
DDA-1	10		1.0000
Sig.		.481	.999

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Means Plots


Mean of SURV7D
1.2
1.0
.8
.6
.4
.2
0.0
CTRL-1
CTRL-2
CTRL-3
CTRL-4
CTRL-5
UDA-11
UDA-12
PDA-8
PDA-8FD
PDA-9
PDA-10
PDA-5
PDA-6
PDA-7
PDA-2
PDA-2FD
PDA-3
PDA-4
DDA-13
DDA-1
STNID

WGK Plant Eco Risk Assessment
Daphnid Surface Water Reproduction Statistics

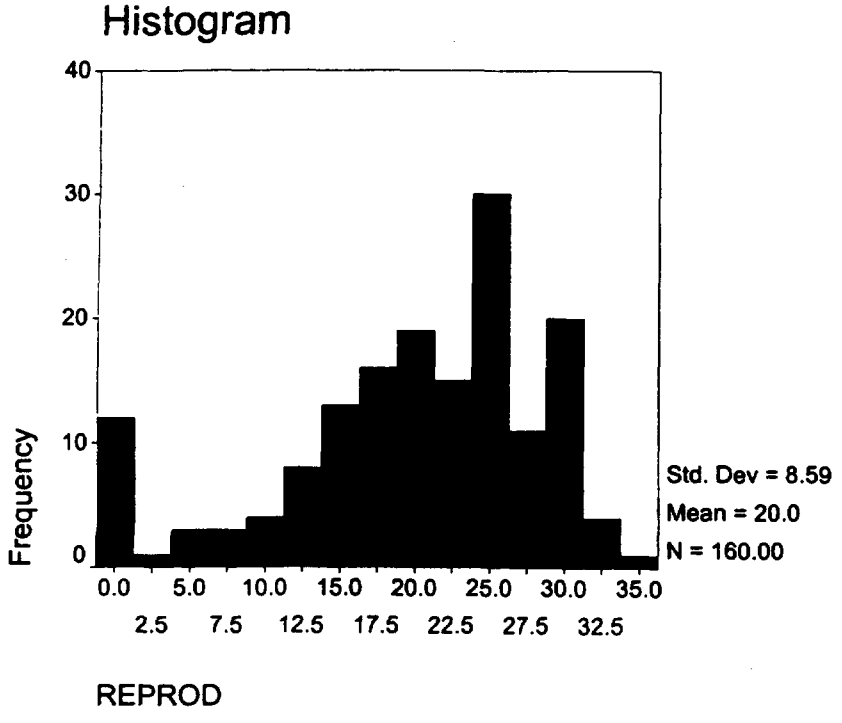
Case Processing Summary

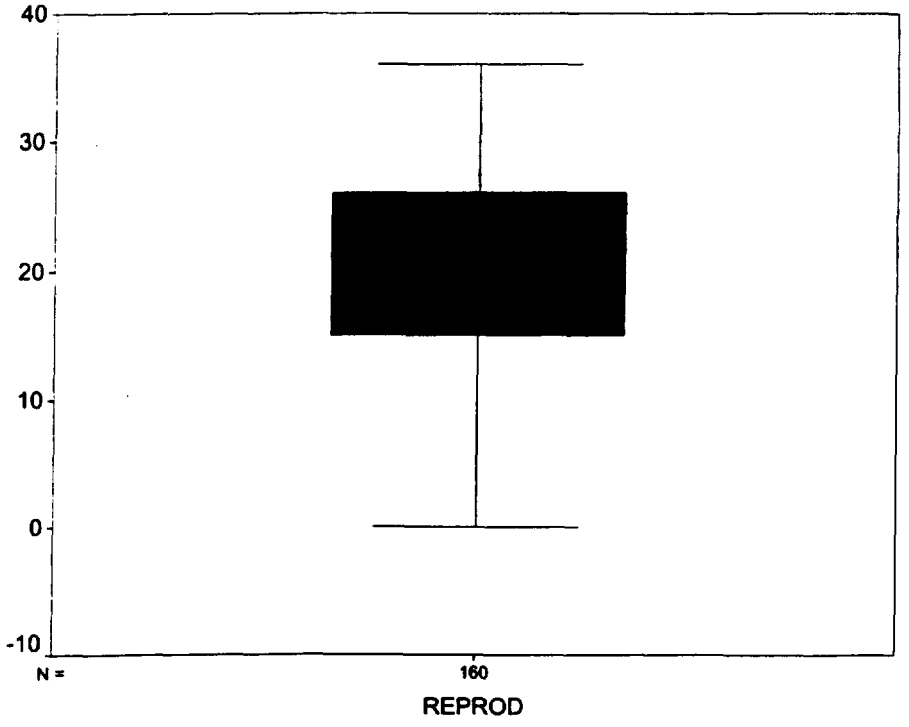
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
REPROD	160	100.0%	0	.0%	160	100.0%

Descriptives

			Statistic	Std. Error
REPROD	Mean		19.9500	.6788
	95% Confidence Interval for Mean	Lower Bound	18.6093	
		Upper Bound	21.2907	
	5% Trimmed Mean		20.3611	
	Median		22.0000	
	Variance		73.733	
	Std. Deviation		8.5868	
	Minimum		.00	
	Maximum		36.00	
	Range		36.00	
	Interquartile Range		11.0000	
	Skewness		-.843	.192
	Kurtosis		.165	.381

REPROD





Oneway ANOVA

Descriptives

REPROD

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
CTRL-1	10	20.5000	5.4823	1.7337	16.5782	24.4218	13.00	29.00
CTRL-2	10	25.5000	8.7718	2.7739	19.2250	31.7750	5.00	36.00
CTRL-3	10	26.2000	8.7025	2.7520	19.9746	32.4254	10.00	33.00
CTRL-4	10	22.4000	8.9219	2.8213	16.0177	28.7823	1.00	29.00
CTRL-5	10	23.5000	6.9001	2.1820	18.5640	28.4360	14.00	31.00
UDA-11	10	22.0000	4.3461	1.3744	18.8910	25.1090	14.00	28.00
UDA-12	10	20.4000	2.9889	.9452	18.2619	22.5381	13.00	24.00
PDA-8	10	13.7000	6.2370	1.9723	9.2383	18.1617	.00	20.00
PDA-8FD	10	18.9000	5.4047	1.7091	15.0337	22.7663	10.00	26.00
PDA-9	10	15.4000	8.7585	2.7697	9.1346	21.6654	.00	26.00
PDA-10	10	21.8000	6.9410	2.1949	16.8347	26.7653	7.00	29.00
PDA-5	10	.8000	2.5298	.8000	-1.0097	2.6097	.00	8.00
PDA-6	10	27.0000	3.1972	1.0111	24.7128	29.2872	23.00	33.00
PDA-7	10	21.7000	7.8038	2.4678	16.1175	27.2825	4.00	29.00
DDA-13	10	18.6000	3.4705	1.0975	16.1173	21.0827	11.00	23.00
DDA-1	10	20.8000	6.1968	1.9596	16.3671	25.2329	8.00	26.00
Total	160	19.9500	8.5868	.6788	18.6093	21.2907	.00	36.00

Test of Homogeneity of Variances

REPROD

Levene Statistic	df1	df2	Sig.
2.073	15	144	.014

ANOVA

REPROD

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5795.000	15	386.333	9.384	.000
Within Groups	5928.600	144	41.171		
Total	11723.600	159			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: REPROD

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL-1	CTRL-2	-5.0000	2.870	.936	-14.8311	4.8311
	CTRL-3	-5.7000	2.870	.833	-15.5311	4.1311
	CTRL-4	-1.9000	2.870	1.000	-11.7311	7.9311
	CTRL-5	-3.0000	2.870	1.000	-12.8311	6.8311
	UDA-11	-1.5000	2.870	1.000	-11.3311	8.3311
	UDA-12	.1000	2.870	1.000	-9.7311	9.9311
	PDA-8	6.8000	2.870	.571	-3.0311	16.6311
	PDA-8FD	1.6000	2.870	1.000	-8.2311	11.4311
	PDA-9	5.1000	2.870	.925	-4.7311	14.9311
	PDA-10	-1.3000	2.870	1.000	-11.1311	8.5311
	PDA-5	19.7000*	2.870	.000	9.8689	29.5311
	PDA-6	-6.5000	2.870	.650	-16.3311	3.3311
	PDA-7	-1.2000	2.870	1.000	-11.0311	8.6311
	DDA-13	1.9000	2.870	1.000	-7.9311	11.7311
	DDA-1	-.3000	2.870	1.000	-10.1311	9.5311

Multiple Comparisons

Dependent Variable: REPROD

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL-2	CTRL-1	5.0000	2.870	.936	-4.8311	14.8311
	CTRL-3	-.7000	2.870	1.000	-10.5311	9.1311
	CTRL-4	3.1000	2.870	1.000	-6.7311	12.9311
	CTRL-5	2.0000	2.870	1.000	-7.8311	11.8311
	UDA-11	3.5000	2.870	.998	-6.3311	13.3311
	UDA-12	5.1000	2.870	.925	-4.7311	14.9311
	PDA-8	11.8000*	2.870	.004	1.9689	21.6311
	PDA-8FD	6.6000	2.870	.624	-3.2311	16.4311
	PDA-9	10.1000*	2.870	.037	.2689	19.9311
	PDA-10	3.7000	2.870	.996	-6.1311	13.5311
	PDA-5	24.7000*	2.870	.000	14.8689	34.5311
	PDA-6	-1.5000	2.870	1.000	-11.3311	8.3311
	PDA-7	3.8000	2.870	.995	-6.0311	13.6311
	DDA-13	6.9000	2.870	.544	-2.9311	16.7311
	DDA-1	4.7000	2.870	.962	-5.1311	14.5311
CTRL-3	CTRL-1	5.7000	2.870	.833	-4.1311	15.5311
	CTRL-2	.7000	2.870	1.000	-9.1311	10.5311
	CTRL-4	3.8000	2.870	.995	-6.0311	13.6311
	CTRL-5	2.7000	2.870	1.000	-7.1311	12.5311
	UDA-11	4.2000	2.870	.986	-5.6311	14.0311
	UDA-12	5.8000	2.870	.814	-4.0311	15.6311
	PDA-8	12.5000*	2.870	.001	2.6689	22.3311
	PDA-8FD	7.3000	2.870	.439	-2.5311	17.1311
	PDA-9	10.8000*	2.870	.016	.9689	20.6311
	PDA-10	4.4000	2.870	.979	-5.4311	14.2311
	PDA-5	25.4000*	2.870	.000	15.5689	35.2311
	PDA-6	-.8000	2.870	1.000	-10.6311	9.0311
	PDA-7	4.5000	2.870	.974	-5.3311	14.3311
	DDA-13	7.6000	2.870	.365	-2.2311	17.4311
	DDA-1	5.4000	2.870	.885	-4.4311	15.2311

Multiple Comparisons

Dependent Variable: REPROD

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CTRL-4	CTRL-1	1.9000	2.870	1.000	-7.9311	11.7311
	CTRL-2	-3.1000	2.870	1.000	-12.9311	6.7311
	CTRL-3	-3.8000	2.870	.995	-13.6311	6.0311
	CTRL-5	-1.1000	2.870	1.000	-10.9311	8.7311
	UDA-11	.4000	2.870	1.000	-9.4311	10.2311
	UDA-12	2.0000	2.870	1.000	-7.8311	11.8311
	PDA-8	8.7000	2.870	.156	-1.1311	18.5311
	PDA-8FD	3.5000	2.870	.998	-6.3311	13.3311
	PDA-9	7.0000	2.870	.517	-2.8311	16.8311
	PDA-10	.6000	2.870	1.000	-9.2311	10.4311
	PDA-5	21.6000*	2.870	.000	11.7689	31.4311
	PDA-6	-4.6000	2.870	.968	-14.4311	5.2311
	PDA-7	.7000	2.870	1.000	-9.1311	10.5311
	DDA-13	3.8000	2.870	.995	-6.0311	13.6311
	DDA-1	1.6000	2.870	1.000	-8.2311	11.4311
CTRL-5	CTRL-1	3.0000	2.870	1.000	-6.8311	12.8311
	CTRL-2	-2.0000	2.870	1.000	-11.8311	7.8311
	CTRL-3	-2.7000	2.870	1.000	-12.5311	7.1311
	CTRL-4	1.1000	2.870	1.000	-8.7311	10.9311
	UDA-11	1.5000	2.870	1.000	-8.3311	11.3311
	UDA-12	3.1000	2.870	1.000	-6.7311	12.9311
	PDA-8	9.8000	2.870	.052	-3.1109E-02	19.6311
	PDA-8FD	4.6000	2.870	.968	-5.2311	14.4311
	PDA-9	8.1000	2.870	.256	-1.7311	17.9311
	PDA-10	1.7000	2.870	1.000	-8.1311	11.5311
	PDA-5	22.7000*	2.870	.000	12.8689	32.5311
	PDA-6	-3.5000	2.870	.998	-13.3311	6.3311
	PDA-7	1.8000	2.870	1.000	-8.0311	11.6311
	DDA-13	4.9000	2.870	.945	-4.9311	14.7311
	DDA-1	2.7000	2.870	1.000	-7.1311	12.5311

Multiple Comparisons

Dependent Variable: REPROD

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
UDA-11	CTRL-1	1.5000	2.870	1.000	-8.3311	11.3311
	CTRL-2	-3.5000	2.870	.998	-13.3311	6.3311
	CTRL-3	-4.2000	2.870	.986	-14.0311	5.6311
	CTRL-4	-.4000	2.870	1.000	-10.2311	9.4311
	CTRL-5	-1.5000	2.870	1.000	-11.3311	8.3311
	UDA-12	1.6000	2.870	1.000	-8.2311	11.4311
	PDA-8	8.3000	2.870	.219	-1.5311	18.1311
	PDA-8FD	3.1000	2.870	1.000	-6.7311	12.9311
	PDA-9	6.6000	2.870	.624	-3.2311	16.4311
	PDA-10	.2000	2.870	1.000	-9.6311	10.0311
	PDA-5	21.2000*	2.870	.000	11.3689	31.0311
	PDA-6	-5.0000	2.870	.936	-14.8311	4.8311
	PDA-7	.3000	2.870	1.000	-9.5311	10.1311
	DDA-13	3.4000	2.870	.999	-6.4311	13.2311
	DDA-1	1.2000	2.870	1.000	-8.6311	11.0311
UDA-12	CTRL-1	-.1000	2.870	1.000	-9.9311	9.7311
	CTRL-2	-5.1000	2.870	.925	-14.9311	4.7311
	CTRL-3	-5.8000	2.870	.814	-15.6311	4.0311
	CTRL-4	-2.0000	2.870	1.000	-11.8311	7.8311
	CTRL-5	-3.1000	2.870	1.000	-12.9311	6.7311
	UDA-11	-1.6000	2.870	1.000	-11.4311	8.2311
	PDA-8	6.7000	2.870	.597	-3.1311	16.5311
	PDA-8FD	1.5000	2.870	1.000	-8.3311	11.3311
	PDA-9	5.0000	2.870	.936	-4.8311	14.8311
	PDA-10	-1.4000	2.870	1.000	-11.2311	8.4311
	PDA-5	19.6000*	2.870	.000	9.7689	29.4311
	PDA-6	-6.6000	2.870	.624	-16.4311	3.2311
	PDA-7	-1.3000	2.870	1.000	-11.1311	8.5311
	DDA-13	1.8000	2.870	1.000	-8.0311	11.6311
	DDA-1	-.4000	2.870	1.000	-10.2311	9.4311

Multiple Comparisons

Dependent Variable: REPROD

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-8	CTRL-1	-6.8000	2.870	.571	-16.6311	3.0311
	CTRL-2	-11.8000*	2.870	.004	-21.6311	-1.9689
	CTRL-3	-12.5000*	2.870	.001	-22.3311	-2.6689
	CTRL-4	-8.7000	2.870	.156	-18.5311	1.1311
	CTRL-5	-9.8000	2.870	.052	-19.6311	3.111E-02
	UDA-11	-8.3000	2.870	.219	-18.1311	1.5311
	UDA-12	-6.7000	2.870	.597	-16.5311	3.1311
	PDA-8FD	-5.2000	2.870	.913	-15.0311	4.6311
	PDA-9	-1.7000	2.870	1.000	-11.5311	8.1311
	PDA-10	-8.1000	2.870	.256	-17.9311	1.7311
	PDA-5	12.9000*	2.870	.001	3.0689	22.7311
	PDA-6	-13.3000*	2.870	.000	-23.1311	-3.4689
	PDA-7	-8.0000	2.870	.276	-17.8311	1.8311
	DDA-13	-4.9000	2.870	.945	-14.7311	4.9311
	DDA-1	-7.1000	2.870	.491	-16.9311	2.7311
PDA-8FD	CTRL-1	-1.6000	2.870	1.000	-11.4311	8.2311
	CTRL-2	-6.6000	2.870	.624	-16.4311	3.2311
	CTRL-3	-7.3000	2.870	.439	-17.1311	2.5311
	CTRL-4	-3.5000	2.870	.998	-13.3311	6.3311
	CTRL-5	-4.6000	2.870	.968	-14.4311	5.2311
	UDA-11	-3.1000	2.870	1.000	-12.9311	6.7311
	UDA-12	-1.5000	2.870	1.000	-11.3311	8.3311
	PDA-8	5.2000	2.870	.913	-4.6311	15.0311
	PDA-9	3.5000	2.870	.998	-6.3311	13.3311
	PDA-10	-2.9000	2.870	1.000	-12.7311	6.9311
	PDA-5	18.1000*	2.870	.000	8.2689	27.9311
	PDA-6	-8.1000	2.870	.256	-17.9311	1.7311
	PDA-7	-2.8000	2.870	1.000	-12.6311	7.0311
	DDA-13	.3000	2.870	1.000	-9.5311	10.1311
	DDA-1	-1.9000	2.870	1.000	-11.7311	7.9311

Multiple Comparisons

Dependent Variable: REPROD

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-9	CTRL-1	-5.1000	2.870	.925	-14.9311	4.7311
	CTRL-2	-10.1000*	2.870	.037	-19.9311	-.2689
	CTRL-3	-10.8000*	2.870	.016	-20.6311	-.9689
	CTRL-4	-7.0000	2.870	.517	-16.8311	2.8311
	CTRL-5	-8.1000	2.870	.256	-17.9311	1.7311
	UDA-11	-6.6000	2.870	.624	-16.4311	3.2311
	UDA-12	-5.0000	2.870	.936	-14.8311	4.8311
	PDA-8	1.7000	2.870	1.000	-8.1311	11.5311
	PDA-8FD	-3.5000	2.870	.998	-13.3311	6.3311
	PDA-10	-6.4000	2.870	.676	-16.2311	3.4311
	PDA-5	14.6000*	2.870	.000	4.7689	24.4311
	PDA-6	-11.6000*	2.870	.005	-21.4311	-1.7689
	PDA-7	-6.3000	2.870	.701	-16.1311	3.5311
	DDA-13	-3.2000	2.870	.999	-13.0311	6.6311
	DDA-1	-5.4000	2.870	.885	-15.2311	4.4311
PDA-10	CTRL-1	1.3000	2.870	1.000	-8.5311	11.1311
	CTRL-2	-3.7000	2.870	.996	-13.5311	6.1311
	CTRL-3	-4.4000	2.870	.979	-14.2311	5.4311
	CTRL-4	-.6000	2.870	1.000	-10.4311	9.2311
	CTRL-5	-1.7000	2.870	1.000	-11.5311	8.1311
	UDA-11	-.2000	2.870	1.000	-10.0311	9.6311
	UDA-12	1.4000	2.870	1.000	-8.4311	11.2311
	PDA-8	8.1000	2.870	.256	-1.7311	17.9311
	PDA-8FD	2.9000	2.870	1.000	-6.9311	12.7311
	PDA-9	6.4000	2.870	.676	-3.4311	16.2311
	PDA-5	21.0000*	2.870	.000	11.1689	30.8311
	PDA-6	-5.2000	2.870	.913	-15.0311	4.6311
	PDA-7	.1000	2.870	1.000	-9.7311	9.9311
	DDA-13	3.2000	2.870	.999	-6.6311	13.0311
	DDA-1	1.0000	2.870	1.000	-8.8311	10.8311

Multiple Comparisons

Dependent Variable: REPROD

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-5	CTRL-1	-19.7000*	2.870	.000	-29.5311	-9.8689
	CTRL-2	-24.7000*	2.870	.000	-34.5311	-14.8689
	CTRL-3	-25.4000*	2.870	.000	-35.2311	-15.5689
	CTRL-4	-21.6000*	2.870	.000	-31.4311	-11.7689
	CTRL-5	-22.7000*	2.870	.000	-32.5311	-12.8689
	UDA-11	-21.2000*	2.870	.000	-31.0311	-11.3689
	UDA-12	-19.6000*	2.870	.000	-29.4311	-9.7689
	PDA-8	-12.9000*	2.870	.001	-22.7311	-3.0689
	PDA-8FD	-18.1000*	2.870	.000	-27.9311	-8.2689
	PDA-9	-14.6000*	2.870	.000	-24.4311	-4.7689
	PDA-10	-21.0000*	2.870	.000	-30.8311	-11.1689
	PDA-6	-26.2000*	2.870	.000	-36.0311	-16.3689
	PDA-7	-20.9000*	2.870	.000	-30.7311	-11.0689
	DDA-13	-17.8000*	2.870	.000	-27.6311	-7.9689
	DDA-1	-20.0000*	2.870	.000	-29.8311	-10.1689
PDA-6	CTRL-1	6.5000	2.870	.650	-3.3311	16.3311
	CTRL-2	1.5000	2.870	1.000	-8.3311	11.3311
	CTRL-3	.8000	2.870	1.000	-9.0311	10.6311
	CTRL-4	4.6000	2.870	.968	-5.2311	14.4311
	CTRL-5	3.5000	2.870	.998	-6.3311	13.3311
	UDA-11	5.0000	2.870	.936	-4.8311	14.8311
	UDA-12	6.6000	2.870	.624	-3.2311	16.4311
	PDA-8	13.3000*	2.870	.000	3.4689	23.1311
	PDA-8FD	8.1000	2.870	.256	-1.7311	17.9311
	PDA-9	11.6000*	2.870	.005	1.7689	21.4311
	PDA-10	5.2000	2.870	.913	-4.6311	15.0311
	PDA-5	26.2000*	2.870	.000	16.3689	36.0311
	PDA-7	5.3000	2.870	.899	-4.5311	15.1311
	DDA-13	8.4000	2.870	.201	-1.4311	18.2311
	DDA-1	6.2000	2.870	.725	-3.6311	16.0311

Multiple Comparisons

Dependent Variable: REPROD

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
PDA-7	CTRL-1	1.2000	2.870	1.000	-8.6311	11.0311
	CTRL-2	-3.8000	2.870	.995	-13.6311	6.0311
	CTRL-3	-4.5000	2.870	.974	-14.3311	5.3311
	CTRL-4	-.7000	2.870	1.000	-10.5311	9.1311
	CTRL-5	-1.8000	2.870	1.000	-11.6311	8.0311
	UDA-11	-.3000	2.870	1.000	-10.1311	9.5311
	UDA-12	1.3000	2.870	1.000	-8.5311	11.1311
	PDA-8	8.0000	2.870	.276	-1.8311	17.8311
	PDA-8FD	2.8000	2.870	1.000	-7.0311	12.6311
	PDA-9	6.3000	2.870	.701	-3.5311	16.1311
	PDA-10	-.1000	2.870	1.000	-9.9311	9.7311
	PDA-5	20.9000*	2.870	.000	11.0689	30.7311
	PDA-6	-5.3000	2.870	.899	-15.1311	4.5311
	DDA-13	3.1000	2.870	1.000	-6.7311	12.9311
	DDA-1	.9000	2.870	1.000	-8.9311	10.7311
DDA-13	CTRL-1	-1.9000	2.870	1.000	-11.7311	7.9311
	CTRL-2	-6.9000	2.870	.544	-16.7311	2.9311
	CTRL-3	-7.6000	2.870	.365	-17.4311	2.2311
	CTRL-4	-3.8000	2.870	.995	-13.6311	6.0311
	CTRL-5	-4.9000	2.870	.945	-14.7311	4.9311
	UDA-11	-3.4000	2.870	.999	-13.2311	6.4311
	UDA-12	-1.8000	2.870	1.000	-11.6311	8.0311
	PDA-8	4.9000	2.870	.945	-4.9311	14.7311
	PDA-8FD	-.3000	2.870	1.000	-10.1311	9.5311
	PDA-9	3.2000	2.870	.999	-6.6311	13.0311
	PDA-10	-3.2000	2.870	.999	-13.0311	6.6311
	PDA-5	17.8000*	2.870	.000	7.9689	27.6311
	PDA-6	-8.4000	2.870	.201	-18.2311	1.4311
	PDA-7	-3.1000	2.870	1.000	-12.9311	6.7311
	DDA-1	-2.2000	2.870	1.000	-12.0311	7.6311

Multiple Comparisons

Dependent Variable: REPROD

Tukey HSD

(I) STNID	(J) STNID	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
DDA-1	CTRL-1	.3000	2.870	1.000	-9.5311	10.1311
	CTRL-2	-4.7000	2.870	.962	-14.5311	5.1311
	CTRL-3	-5.4000	2.870	.885	-15.2311	4.4311
	CTRL-4	-1.6000	2.870	1.000	-11.4311	8.2311
	CTRL-5	-2.7000	2.870	1.000	-12.5311	7.1311
	UDA-11	-1.2000	2.870	1.000	-11.0311	8.6311
	UDA-12	.4000	2.870	1.000	-9.4311	10.2311
	PDA-8	7.1000	2.870	.491	-2.7311	16.9311
	PDA-8FD	1.9000	2.870	1.000	-7.9311	11.7311
	PDA-9	5.4000	2.870	.885	-4.4311	15.2311
	PDA-10	-1.0000	2.870	1.000	-10.8311	8.8311
	PDA-5	20.0000*	2.870	.000	10.1689	29.8311
	PDA-6	-6.2000	2.870	.725	-16.0311	3.6311
	PDA-7	-.9000	2.870	1.000	-10.7311	8.9311
	DDA-13	2.2000	2.870	1.000	-7.6311	12.0311

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

REPROD

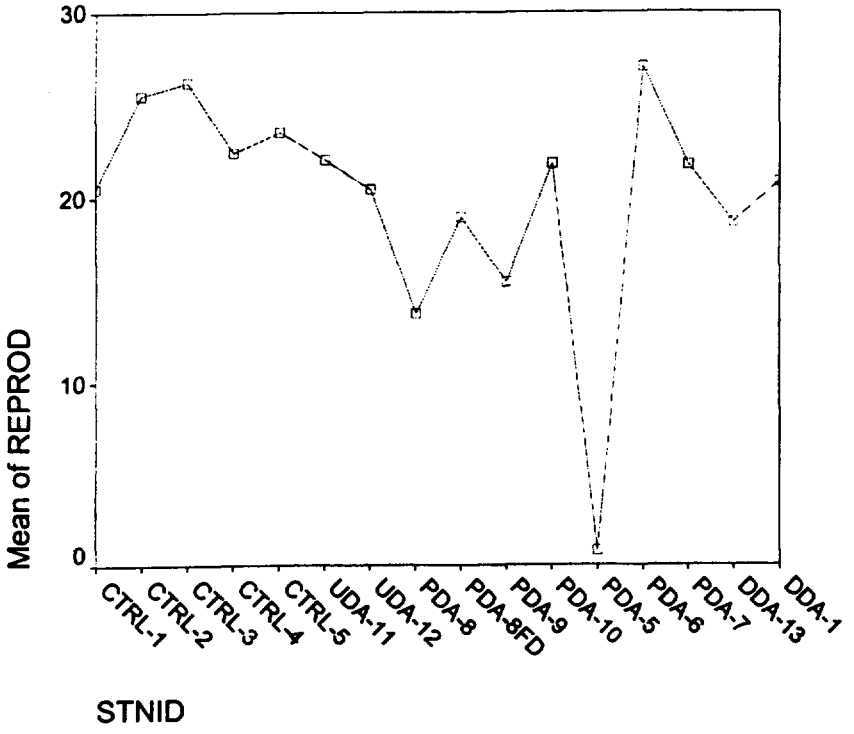
Tukey HSD[a]

STNID	N	Subset for alpha = .05		
		1	2	3
PDA-5	10	.8000		
PDA-8	10		13.7000	
PDA-9	10		15.4000	
DDA-13	10		18.6000	18.6000
PDA-8FD	10		18.9000	18.9000
UDA-12	10		20.4000	20.4000
CTRL-1	10		20.5000	20.5000
DDA-1	10		20.8000	20.8000
PDA-7	10		21.7000	21.7000
PDA-10	10		21.8000	21.8000
UDA-11	10		22.0000	22.0000
CTRL-4	10		22.4000	22.4000
CTRL-5	10		23.5000	23.5000
CTRL-2	10			25.5000
CTRL-3	10			26.2000
PDA-6	10			27.0000
Sig.		1.000	.052	.201

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Means Plots


30
20
10
0
Mean of REPROD
CTRL-1
CTRL-2
CTRL-3
CTRL-4
CTRL-5
UDA-11
UDA-12
PDA-8
PDA-8FD
PDA-9
PDA-10
PDA-5
PDA-6
PDA-7
DDA-13
DDA-1
STNID

	stnid	station	surv2d	surv7d	reprod
1	1.00	CTRL-1	1.00	1.00	29.00
2	1.00	CTRL-1	1.00	1.00	24.00
3	1.00	CTRL-1	1.00	1.00	26.00
4	1.00	CTRL-1	1.00	1.00	16.00
5	1.00	CTRL-1	1.00	1.00	15.00
6	1.00	CTRL-1	1.00	1.00	15.00
7	1.00	CTRL-1	1.00	1.00	24.00
8	1.00	CTRL-1	1.00	1.00	20.00
9	1.00	CTRL-1	1.00	1.00	13.00
10	1.00	CTRL-1	1.00	1.00	23.00
11	2.00	CTRL-2	1.00	1.00	27.00
12	2.00	CTRL-2	1.00	1.00	36.00
13	2.00	CTRL-2	1.00	1.00	31.00
14	2.00	CTRL-2	1.00	1.00	31.00
15	2.00	CTRL-2	1.00	1.00	29.00
16	2.00	CTRL-2	1.00	1.00	17.00
17	2.00	CTRL-2	1.00	.00	5.00
18	2.00	CTRL-2	1.00	1.00	24.00
19	2.00	CTRL-2	1.00	1.00	26.00
20	2.00	CTRL-2	1.00	1.00	29.00
21	3.00	CTRL-3	1.00	1.00	32.00
22	3.00	CTRL-3	1.00	1.00	31.00
23	3.00	CTRL-3	1.00	1.00	33.00
24	3.00	CTRL-3	1.00	1.00	30.00
25	3.00	CTRL-3	1.00	1.00	33.00
26	3.00	CTRL-3	1.00	1.00	11.00
27	3.00	CTRL-3	1.00	1.00	10.00
28	3.00	CTRL-3	1.00	1.00	25.00
29	3.00	CTRL-3	1.00	1.00	31.00

	stnid	station	surv2d	surv7d	reprod
30	3.00	CTRL-3	1.00	1.00	26.00
31	4.00	CTRL-4	1.00	1.00	15.00
32	4.00	CTRL-4	1.00	1.00	26.00
33	4.00	CTRL-4	1.00	1.00	28.00
34	4.00	CTRL-4	1.00	1.00	26.00
35	4.00	CTRL-4	1.00	1.00	27.00
36	4.00	CTRL-4	1.00	1.00	17.00
37	4.00	CTRL-4	1.00	1.00	27.00
38	4.00	CTRL-4	1.00	1.00	28.00
39	4.00	CTRL-4	1.00	1.00	29.00
40	4.00	CTRL-4	1.00	1.00	1.00
41	5.00	CTRL-5	1.00	1.00	28.00
42	5.00	CTRL-5	1.00	1.00	25.00
43	5.00	CTRL-5	1.00	1.00	30.00
44	5.00	CTRL-5	1.00	1.00	15.00
45	5.00	CTRL-5	1.00	1.00	14.00
46	5.00	CTRL-5	1.00	1.00	29.00
47	5.00	CTRL-5	1.00	1.00	31.00
48	5.00	CTRL-5	1.00	1.00	17.00
49	5.00	CTRL-5	1.00	1.00	17.00
50	5.00	CTRL-5	1.00	1.00	29.00
51	6.00	UDA-11	1.00	1.00	27.00
52	6.00	UDA-11	1.00	1.00	24.00
53	6.00	UDA-11	1.00	1.00	24.00
54	6.00	UDA-11	1.00	1.00	18.00
55	6.00	UDA-11	1.00	1.00	22.00
56	6.00	UDA-11	1.00	1.00	24.00
57	6.00	UDA-11	1.00	1.00	21.00
58	6.00	UDA-11	1.00	1.00	14.00

	stnid	station	surv2d	surv7d	reprod
59	6.00	UDA-11	1.00	1.00	28.00
60	6.00	UDA-11	1.00	1.00	18.00
61	7.00	UDA-12	1.00	1.00	24.00
62	7.00	UDA-12	1.00	1.00	21.00
63	7.00	UDA-12	1.00	1.00	21.00
64	7.00	UDA-12	1.00	1.00	20.00
65	7.00	UDA-12	1.00	1.00	13.00
66	7.00	UDA-12	1.00	1.00	20.00
67	7.00	UDA-12	1.00	1.00	22.00
68	7.00	UDA-12	1.00	1.00	19.00
69	7.00	UDA-12	1.00	1.00	21.00
70	7.00	UDA-12	1.00	1.00	23.00
71	8.00	PDA-8	1.00	.00	.00
72	8.00	PDA-8	1.00	1.00	17.00
73	8.00	PDA-8	1.00	1.00	6.00
74	8.00	PDA-8	1.00	1.00	15.00
75	8.00	PDA-8	1.00	1.00	13.00
76	8.00	PDA-8	1.00	1.00	13.00
77	8.00	PDA-8	1.00	1.00	19.00
78	8.00	PDA-8	1.00	1.00	17.00
79	8.00	PDA-8	1.00	1.00	20.00
80	8.00	PDA-8	1.00	1.00	17.00
81	9.00	PDA-8FD	1.00	1.00	18.00
82	9.00	PDA-8FD	1.00	1.00	10.00
83	9.00	PDA-8FD	1.00	1.00	26.00
84	9.00	PDA-8FD	1.00	1.00	12.00
85	9.00	PDA-8FD	1.00	1.00	20.00
86	9.00	PDA-8FD	1.00	1.00	21.00
87	9.00	PDA-8FD	1.00	1.00	18.00

	stnid	station	surv2d	surv7d	reprod
88	9.00	PDA-8FD	1.00	1.00	24.00
89	9.00	PDA-8FD	1.00	1.00	25.00
90	9.00	PDA-8FD	1.00	1.00	15.00
91	10.00	PDA-9	1.00	1.00	2.00
92	10.00	PDA-9	1.00	1.00	16.00
93	10.00	PDA-9	1.00	1.00	21.00
94	10.00	PDA-9	1.00	1.00	.00
95	10.00	PDA-9	1.00	1.00	26.00
96	10.00	PDA-9	1.00	1.00	15.00
97	10.00	PDA-9	1.00	1.00	22.00
98	10.00	PDA-9	1.00	1.00	16.00
99	10.00	PDA-9	1.00	1.00	24.00
100	10.00	PDA-9	1.00	1.00	12.00
101	11.00	PDA-10	1.00	1.00	23.00
102	11.00	PDA-10	1.00	1.00	26.00
103	11.00	PDA-10	1.00	1.00	29.00
104	11.00	PDA-10	1.00	1.00	7.00
105	11.00	PDA-10	1.00	1.00	26.00
106	11.00	PDA-10	1.00	1.00	22.00
107	11.00	PDA-10	1.00	1.00	23.00
108	11.00	PDA-10	1.00	1.00	12.00
109	11.00	PDA-10	1.00	1.00	23.00
110	11.00	PDA-10	1.00	1.00	27.00
111	12.00	PDA-5	1.00	1.00	.00
112	12.00	PDA-5	1.00	.00	.00
113	12.00	PDA-5	1.00	1.00	.00
114	12.00	PDA-5	1.00	1.00	.00
115	12.00	PDA-5	1.00	1.00	.00
116	12.00	PDA-5	1.00	1.00	.00

	stnid	station	surv2d	surv7d	reprod
117	12.00	PDA-5	1.00	1.00	8.00
118	12.00	PDA-5	1.00	1.00	.00
119	12.00	PDA-5	1.00	1.00	.00
120	12.00	PDA-5	1.00	1.00	.00
121	13.00	PDA-6	1.00	1.00	29.00
122	13.00	PDA-6	1.00	1.00	30.00
123	13.00	PDA-6	1.00	1.00	24.00
124	13.00	PDA-6	1.00	1.00	23.00
125	13.00	PDA-6	1.00	1.00	24.00
126	13.00	PDA-6	1.00	1.00	27.00
127	13.00	PDA-6	1.00	1.00	25.00
128	13.00	PDA-6	1.00	1.00	33.00
129	13.00	PDA-6	1.00	1.00	26.00
130	13.00	PDA-6	1.00	1.00	29.00
131	14.00	PDA-7	1.00	1.00	29.00
132	14.00	PDA-7	1.00	1.00	18.00
133	14.00	PDA-7	1.00	1.00	22.00
134	14.00	PDA-7	1.00	1.00	19.00
135	14.00	PDA-7	1.00	1.00	28.00
136	14.00	PDA-7	1.00	1.00	4.00
137	14.00	PDA-7	1.00	1.00	29.00
138	14.00	PDA-7	1.00	1.00	21.00
139	14.00	PDA-7	1.00	1.00	29.00
140	14.00	PDA-7	1.00	1.00	18.00
141	15.00	PDA-2	.00	.00	.00
142	15.00	PDA-2	.00	.00	.00
143	15.00	PDA-2	.00	.00	.00
144	15.00	PDA-2	.00	.00	.00
145	15.00	PDA-2	.00	.00	.00

	stnid	station	surv2d	surv7d	reprod
146	15.00	PDA-2	.00	.00	.00
147	15.00	PDA-2	.00	.00	.00
148	15.00	PDA-2	.00	.00	.00
149	15.00	PDA-2	.00	.00	.00
150	15.00	PDA-2	.00	.00	.00
151	16.00	PDA-2FD	.00	.00	.00
152	16.00	PDA-2FD	.00	.00	.00
153	16.00	PDA-2FD	.00	.00	.00
154	16.00	PDA-2FD	.00	.00	.00
155	16.00	PDA-2FD	.00	.00	.00
156	16.00	PDA-2FD	.00	.00	.00
157	16.00	PDA-2FD	.00	.00	.00
158	16.00	PDA-2FD	.00	.00	.00
159	16.00	PDA-2FD	.00	.00	.00
160	16.00	PDA-2FD	.00	.00	.00
161	17.00	PDA-3	.00	.00	.00
162	17.00	PDA-3	.00	.00	.00
163	17.00	PDA-3	.00	.00	.00
164	17.00	PDA-3	1.00	.00	.00
165	17.00	PDA-3	.00	.00	.00
166	17.00	PDA-3	1.00	1.00	.00
167	17.00	PDA-3	1.00	.00	.00
168	17.00	PDA-3	1.00	1.00	3.00
169	17.00	PDA-3	.00	.00	.00
170	17.00	PDA-3	.00	.00	.00
171	18.00	PDA-4	.00	.00	.00
172	18.00	PDA-4	.00	.00	.00
173	18.00	PDA-4	.00	.00	.00
174	18.00	PDA-4	.00	.00	.00

	stnid	station	surv2d	surv7d	reprod
175	18.00	PDA-4	.00	.00	.00
176	18.00	PDA-4	1.00	1.00	.00
177	18.00	PDA-4	.00	.00	.00
178	18.00	PDA-4	1.00	.00	.00
179	18.00	PDA-4	.00	.00	.00
180	18.00	PDA-4	.00	.00	.00
181	19.00	DDA-13	1.00	1.00	15.00
182	19.00	DDA-13	1.00	1.00	22.00
183	19.00	DDA-13	1.00	1.00	19.00
184	19.00	DDA-13	1.00	1.00	20.00
185	19.00	DDA-13	1.00	1.00	18.00
186	19.00	DDA-13	1.00	1.00	11.00
187	19.00	DDA-13	1.00	1.00	23.00
188	19.00	DDA-13	1.00	1.00	18.00
189	19.00	DDA-13	1.00	1.00	20.00
190	19.00	DDA-13	1.00	1.00	20.00
191	20.00	DDA-1	1.00	1.00	22.00
192	20.00	DDA-1	1.00	1.00	23.00
193	20.00	DDA-1	1.00	1.00	25.00
194	20.00	DDA-1	1.00	1.00	12.00
195	20.00	DDA-1	1.00	1.00	26.00
196	20.00	DDA-1	1.00	1.00	18.00
197	20.00	DDA-1	1.00	1.00	25.00
198	20.00	DDA-1	1.00	1.00	8.00
199	20.00	DDA-1	1.00	1.00	25.00
200	20.00	DDA-1	1.00	1.00	24.00

FATHEAD MINNOW
SEDIMENT TOXICITY TEST
LABORATORY REPORT

Aquatec Biological Sciences

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January 10, 2001

Ted Wickwire, Ph.D.
Menzie-Cura & Associates
1 Courthouse Lane
Chelmsford, Massachusetts 01824

Dear Dr. Wickwire:

Enclosed please find the report (one bound and one unbound copy) and electronic data deliverable (EDD) for fathead minnow, *Pimephales promelas*, Sauget sediment toxicity assessment.

Sincerely,

John Williams
Manager, Environmental Toxicology

273 Commerce Street, Williston, VT 05495 Tel: 802.860.1638 Fax: 802.658.3189

Aquatec Biological Sciences

Ecology | Environmental Toxicology | Natural Resource Assessments | Microbiology

Toxicity Summary Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/11/01
Project: 00049
SDG: 4806
Site: Sauget

Method: 1000.0 Sediment Species: *Pimephales promelas*

Sample ID	Sample Name	Control Group	Mean Proportion Surviving		Mean Weight Over All Replicates (mg)
018228	SD-DDA-13	A	0.45	*	0.22
018229	SD-UDA-11	A	0.77		0.27
018231	Control	A	0.99		0.27
018271	SD-PDA-7	A	0.95		0.25
018272	SD-PDA-6	A	0.97		0.25
018273	SD-PDA-5	A	0.00	*	
018274	SD-PDA-10	A	0.78		0.22
018275	SD-PDA-2	A	0.95		0.30
018276	SD-PDA-3	A	0.45	*	0.22
018277	SD-PDA-3 FD	A	0.60	*	0.22
018278	SD-PDA-4	A	1.00		0.28
018296	SD-PDA-8	A	0.97		0.27
018297	SD-PDA-9	A	0.13	*	0.10

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Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/11/01
Project: 20049
SDG: 4806
Site: Sauget

Method: 1000.0 Sediment Species: *Pimephales promelas*

Sample ID	Sample Name	Control Group	Mean Proportion Surviving		Mean Weight Over All Replicates (mg)
018298	SD-PDA-12	A	0.93	*	0.28
018305	SD-DDA-1	A	0.99		0.31

* Indicates a statisically significant reduction in the organism response when compared to the control group sediment.

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Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/11/01
Project: 00049
SDG: 4806
Site: Sauget

Samples Received

Number	Sample Name	Date / Time Collected		Type
018228	SD-DDA-13	10/23/00	10:25	Sediment
018229	SD-UDA-11	10/23/00	15:40	Sediment
018230	Control	10/23/00	11:00	Sediment
018231	Control	10/23/00	11:00	Sediment
018271	SD-PDA-7	10/24/00	9:35	Sediment
018272	SD-PDA-6	10/24/00	11:20	Sediment
018273	SD-PDA-5	10/24/00	14:20	Sediment
018274	SD-PDA-10	10/24/00	15:40	Sediment
018275	SD-PDA-2	10/25/00	9:50	Sediment
018276	SD-PDA-3	10/25/00	12:10	Sediment
018277	SD-PDA-3 FD	10/25/00	12:20	Sediment
018278	SD-PDA-4	10/25/00	15:20	Sediment
018296	SD-PDA-8	10/26/00	10:35	Sediment
018297	SD-PDA-9	10/26/00	12:25	Sediment
018298	SD-PDA-12	10/26/00	15:05	Sediment
018305	SD-DDA-1	10/27/00	10:30	Sediment

Submitted By:

273 Commerce Street, Williston, VT 05495 Tel: 802.860.1638 Fax: 802.658.3189

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1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/11/01
Project: 00049
SDG: 4806
Site: Sauget

Special Conditions and Qualifiers

Test protocols: The Pimephales promelas sediment toxicity test procedure was based upon a combination of USEPA effluent and sediment test guidelines (EPA/600/4-91/002 and EPA/600/R-99/064, respectively). The test duration was 7 days, with survival and growth (average dry weight) as the end points. Growth was determined by dividing the replicate minnow total dry weight by the original number of minnows distributed to the replicate on Day 0. Project-specific modifications of the test protocol included: loading of test replicates with approximately 150 mL of sediment rather than 100 mL; and, reduction of overlying water renewal to once per 24-h period rather than every 12 hours.

Extra test replicates: Additional test replicates were included for two samples to monitor sediment volatile organic compounds (VOCs) during the test. Sediment VOC samples were collected using the method provided by Woods Hole Group Environmental Laboratories (WHG). Samples were collected on Day 0 from an extra replicate of Samples 18273 (SD-PDA-5) and 18297 (SD-PDA-9). On Day 3 a VOC sample was collected from an extra replicate of Sample 18273 because all minnows had died. At the end of the test (Day 7), a VOC sample was collected from an extra replicate of Sample 18297. All samples were shipped to WHG on the day of collection for subsequent VOC analysis.

Temperature below target range: An interruption in the power to a water bath heater occurred on Day 3 of the tests (November 3, 2000). Heating to test temperature was restored. The lowest recorded temperature in any test replicate was 19.0 degrees centigrade.

Excess number of organisms in test replicates: Three test replicates, including Sample 18271 (SD-PDA-7) Replicate B; Sample 18272 (SD-PDA-6) Replicate C; and, Sample 18274 (SD-PDA-10) Replicate C apparently received distribution of 30 rather than 15 larval minnows when the tests were started. The following three replicates apparently received 16 rather than 15 larval minnows when the tests were started: Sample 18229 (SD-UDA-11) Replicate C; Sample 18231 (Control) Replicate C; and, Sample 18305 (SD-DDA-1) Replicate E.

Interference may have affected hardness readings: Samples of overlying water for hardness analysis (EDTA titrimetric) samples were collected on Day 0 and Day 7. Six of the samples

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Chelmsford, MA 01824

Date: 1/11/01
Project: 00049
SDG: 4806
Site: Sauget

collected on Day 0 exhibited the color change endpoint immediately (before adding titrant), resulting in hardness readings of "0". The overlying water for all test replicates was from the same source, with an initial hardness of approximately 80 mg/L.

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Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/10/01
Project: 00049
SDG: 4806
Site: Sauget

Method: 1000.0 Sediment Species: *Pimephales promelas*

Sample ID: 018228 Sample Name: SD-DDA-13 Method: 1000.0 Sediment

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Boat Weight (mg)	Total Dry Weight (mg)	Organisms Weighed	Mean Replicate Weight
A	15	15	1.00	28.67	32.46	15	0.253
B	15	4	0.27	28.97	31.24	4	0.151
C	15	15	1.00	26.78	30.81	15	0.269
D	15	0	0.00				
E	15	0	0.00				

Mean Proportion Surviving 0.45 Mean Weight Over All Replicates (mg): 0.224

Sample ID: 018229 Sample Name: SD-UDA-11 Method: 1000.0 Sediment

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Boat Weight (mg)	Total Dry Weight (mg)	Organisms Weighed	Mean Replicate Weight
A	15	15	1.00	29.62	33.68	15	0.271
B	15	14	0.93	29.28	33.22	14	0.263
C	16	16	1.00	25.53	29.75	16	0.264
D	15	14	0.93	26.63	30.89	14	0.271
E	15	0	0.00				

Mean Proportion Surviving 0.77 Mean Weight Over All Replicates (mg): 0.267

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/10/01
Project: 00049
SDG: 4806
Site: Sauget

Sample ID: 018231 Sample Name: Control Method: 1000.0 Sediment

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Boat Weight (mg)	Total Dry Weight (mg)	Organisms Weighed	Mean Replicate Weight
A	15	15	1.00	30.68	34.65	15	0.265
B	15	15	1.00	28.36	32.38	15	0.268
C	16	16	1.00	28.41	32.61	16	0.263
D	15	14	0.93	26.95	30.92	14	0.265
E	15	15	1.00	28.36	32.40	15	0.269

Mean Proportion Surviving 0.99 Mean Weight Over All Replicates (mg): 0.266

Sample ID: 018271 Sample Name: SD-PDA-7 Method: 1000.0 Sediment

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Boat Weight (mg)	Total Dry Weight (mg)	Organisms Weighed	Mean Replicate Weight
A	15	15	1.00	27.89	31.67	15	0.252
B	30	27	0.90	26.68	31.90	27	0.174
C	15	14	0.93	30.06	33.73	14	0.245
D	15	14	0.93	30.97	35.63	14	0.311
E	15	15	1.00	29.79	33.81	15	0.268

Mean Proportion Surviving 0.95 Mean Weight Over All Replicates (mg): 0.250

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/10/01
Project: 00049
SDG: 4806
Site: Sauget

Sample ID: 018272 Sample Name: SD-PDA-6 Method: 1000.0 Sediment

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Boat Weight (mg)	Total Dry Weight (mg)	Organisms Weighed	Mean Replicate Weight
A	15	15	1.00	28.19	32.09	15	0.260
B	15	15	1.00	27.70	31.77	15	0.271
C	30	29	0.97	23.98	29.01	29	0.168
D	15	15	1.00	29.10	33.63	15	0.302
E	15	13	0.87	31.10	35.06	13	0.264

Mean Proportion Surviving 0.97 Mean Weight Over All Replicates (mg): 0.253

Sample ID: 018273 Sample Name: SD-PDA-5 Method: 1000.0 Sediment

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Boat Weight (mg)	Total Dry Weight (mg)	Organisms Weighed	Mean Replicate Weight
A	15	0	0.00				
B	15	0	0.00				
C	15	0	0.00				
D	15	0	0.00				
E	15	0	0.00				

Mean Proportion Surviving 0.00 Mean Weight Over All Replicates (mg):

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/10/01
Project: 00049
SDG: 4806
Site: Sauget

Sample ID: 018274 Sample Name: SD-PDA-10 Method: 1000.0 Sediment

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Boat Weight (mg)	Total Dry Weight (mg)	Organisms Weighed	Mean Replicate Weight
A	15	9	0.60	27.34	30.20	9	0.191
B	15	15	1.00	31.30	35.36	15	0.271
C	30	30	1.00	28.39	34.58	30	0.206
D	15	15	1.00	28.99	33.25	15	0.284
E	13	4	0.31	28.10	30.23	4	0.164

Mean Proportion Surviving 0.78 Mean Weight Over All Replicates (mg): 0.223

Sample ID: 018275 Sample Name: SD-PDA-2 Method: 1000.0 Sediment

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Boat Weight (mg)	Total Dry Weight (mg)	Organisms Weighed	Mean Replicate Weight
A	15	15	1.00	32.19	36.86	15	0.311
B	15	12	0.80	28.27	32.11	12	0.256
C	15	15	1.00	33.16	37.64	15	0.299
D	15	14	0.93	28.89	33.79	14	0.327
E	15	15	1.00	31.56	35.96	15	0.293

Mean Proportion Surviving 0.95 Mean Weight Over All Replicates (mg): 0.297

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/10/01
Project: 00049
SDG: 4806
Site: Sauget

Sample ID: 018276 Sample Name: SD-PDA-3 Method: 1000.0 Sediment

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Boat Weight (mg)	Total Dry Weight (mg)	Organisms Weighed	Mean Replicate Weight
A	15	9	0.60	33.25	36.27	9	0.201
B	15	4	0.27	31.50	33.87	4	0.158
C	15	10	0.67	33.67	37.24	10	0.238
D	15	0	0.00				
E	15	11	0.73	33.03	36.99	11	0.264

Mean Proportion Surviving 0.45 Mean Weight Over All Replicates (mg): 0.215

Sample ID: 018277 Sample Name: SD-PDA-3 FD Method: 1000.0 Sediment

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Boat Weight (mg)	Total Dry Weight (mg)	Organisms Weighed	Mean Replicate Weight
A	15	10	0.67	32.01	35.82	10	0.254
B	15	9	0.60	30.01	33.59	9	0.239
C	15	12	0.80	33.09	36.88	12	0.253
D	15	10	0.67	30.83	34.05	10	0.215
E	15	4	0.27	31.91	33.79	4	0.125

Mean Proportion Surviving 0.60 Mean Weight Over All Replicates (mg): 0.217

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/10/01
Project: 00049
SDG: 4806
Site: Sauget

Sample ID: 018278 Sample Name: SD-PDA-4 Method: 1000.0 Sediment

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Boat Weight (mg)	Total Dry Weight (mg)	Organisms Weighed	Mean Replicate Weight
A	15	15	1.00	32.64	36.67	15	0.269
B	15	15	1.00	28.47	32.42	15	0.263
C	15	15	1.00	31.73	36.08	15	0.290
D	15	15	1.00	30.04	34.17	15	0.275
E	15	15	1.00	29.73	33.98	15	0.283

Mean Proportion Surviving 1.00 Mean Weight Over All Replicates (mg): 0.276

Sample ID: 018296 Sample Name: SD-PDA-8 Method: 1000.0 Sediment

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Boat Weight (mg)	Total Dry Weight (mg)	Organisms Weighed	Mean Replicate Weight
A	15	15	1.00	32.36	36.72	15	0.291
B	15	14	0.93	32.07	36.06	14	0.266
C	15	15	1.00	32.52	36.52	15	0.267
D	15	15	1.00	29.38	33.88	15	0.300
E	15	14	0.93	34.20	37.83	14	0.242

Mean Proportion Surviving 0.97 Mean Weight Over All Replicates (mg): 0.273

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/10/01
Project: 20049
SDG: 4806
Site: Sauget

Sample ID: 018297 Sample Name: SD-PDA-9 Method: 1000.0 Sediment

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Boat Weight (mg)	Total Dry Weight (mg)	Organisms Weighed	Mean Replicate Weight
A	15	0	0.00				
B	15	0	0.00				
C	15	0	0.00				
D	15	5	0.33	35.11	36.78	5	0.111
E	15	5	0.33	31.96	33.43	5	0.098
Mean Proportion Surviving			0.13	Mean Weight Over All Replicates (mg):			0.105

Sample ID: 018298 Sample Name: SD-PDA-12 Method: 1000.0 Sediment

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Boat Weight (mg)	Total Dry Weight (mg)	Organisms Weighed	Mean Replicate Weight
A	15	14	0.93	27.97	31.83	14	0.257
B	15	14	0.93	29.90	34.37	14	0.298
C	15	15	1.00	29.20	33.36	15	0.277
D	15	14	0.93	29.63	34.01	14	0.292
E	15	13	0.87	27.37	31.51	13	0.276
Mean Proportion Surviving			0.93	Mean Weight Over All Replicates (mg):			0.280

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/10/01
Project: 00049
SDG: 4806
Site: Sauget

Sample ID: 018305 Sample Name: SD-DDA-1 Method: 1000.0 Sediment

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Boat Weight (mg)	Total Dry Weight (mg)	Organisms Weighed	Mean Replicate Weight
A	15	14	0.93	29.87	35.41	14	0.369
B	15	15	1.00	28.82	33.79	15	0.331
C	15	15	1.00	27.43	31.54	15	0.274
D	15	15	1.00	27.63	31.82	15	0.279
E	16	16	1.00	28.02	32.48	16	0.279
Mean Proportion Surviving			0.99	Mean Weight Over All Replicates (mg):			0.307

Supportive Documentation

Toxicity Test Methods

Chain-Of-Custody

Fathead Minnow, Pimephales promelas Larval Survival and Growth in Sediment

Standard Reference Toxicant Control Charts

Toxicity Test Methods

Client: Menzie-Cura **Project: 00049, Sauget Sediment Assessment** **SDG: 4806**

Test Description: Fathead minnow *(Pimephales promelas)* 7-day survival and growth for sediments

ASSOCIATED PROTOCOLS: EPA 1994. *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms* (EPA/600/4-91/002) and EPA 2000. *Methods for Measuring the Toxicity and Bioaccumulation of Sediment-Associated Contaminants with Freshwater Invertebrates* (EPA/600/R-99/064)

1. Test type:	Whole sediment toxicity (static renewal)
2. Test temperature:	25 ± 1°C
3. Light quality:	Ambient laboratory illumination
4. Photoperiod:	16 hr. light, 8 hr. dark
5. Test chamber:	300 ml glass beaker with screened overflow
6. Sediment / overlying water volumes:	150 / 125 mL
7. Renewal of overlying water:	1 volume exchange per day
8. Age of test organisms:	1 day old at the start of the test
9. No. larvae / test chamber:	15
10. No. of replicate chambers / sample	5 (additional replicates for monitoring sediment VOC)
11. Feeding regime:	0.15 mL *Artemia* nauplii twice daily to each replicate
12. Cleaning:	Overflow screens, replace water delivery tips as needed
13. Aeration:	None, unless dissoved oxygen drops below 2.5 mg/L
14. Overlying water:	Reconstituted moderately hard water (EPA/600/4-91/002)
15. Control sediment:	Formulated sediment (EPA/600/R-24/024)
16. Test duration:	7 days
17. Monitoring:	Overlying water chemistry: Daily: temperature Days 0, 2, 7: pH, dissolved oxygen, conductivity. Days 0, 7: hardness, alkalinity, ammonia Biological monitoring: Day 2: survival estimates and removal of dead Day 7: survival and growth
18. End points:	Day 7: survival and growth (dry weight based on original number of organisms)
19. Reference toxicant test:	Sodium chloride 96-h LC50, water only
20. Test acceptability (control performance):	80% or greater survival
21. Data interpretation:	Hypothesis test statistics (e.g., t-test) to identify samples with significant reductions in organism response compared to the control organism response ($p<0.05$). If the organism average response value for the test sample was numerically equal to or greater than the control average response value, the result was assumed to be not significant (statistical analysis not performed). If a significant reduction in survival was observed, statistical analysis of growth data was not performed.

Review: _____ Date: 10/30/00

Ppsedpkg

Laboratory: Aquatec Biological Sciences, Inc. Willlson, Vermont

Chain-Of-Custody

SDG 4806

Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
TEL: (802) 860-1638
FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Sauget Sed / Water Tox & Macro	Carrier:
Address: 1 Courthouse Lane Chelmsford, Massachusetts 01824	Project Number: 00049	Airbill Number:
Telephone: (978) 322-2824	Sampler Name(s):	Date Shipped:
Facsimile: (978) 453-7260		
Contact Name: Ted Wickwire	Quote #: 10/18/00 Client Code: MENCUR	Hand Delivered: ___Yes ___No

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)	NUMBER OF CONTAINERS
SD-DDA-13	10/23/00	10:25A	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	4°C plastic 1 gal	1
SD-UDA-11	10/23/00	3:40P	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		1
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		

	DATE	TIME		
Relinquished by: *(signature)* Ted W	10/23/00	1720	Received by: *(signature)*	
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*	
Relinquished by: *(signature)*	10/24/00	09:30	Received by: *(signature)* Jammy Martin	

NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)

Notes to Lab: Ambient temperature of cooler on delivery: 1.9 °C JM

SDG 4806

Page ___ of ___

Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
TEL: (802) 860-1638
FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Sauget Sed / Water Tox & Macro	Carrier:
Address: 1 Courthouse Lane, Chelmsford, Massachusetts 01824	Project Number: 00049	Airbill Number:
Telephone: (978) 322-2824	Sampler Name(s):	Date Shipped:
Facsimile: (978) 453-7260		Hand Delivered: ___Yes ___No
Contact Name: Ted Wickwire	Quote #: 10/18/00 Client Code: MENCUR	

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	NUMBER OF CONTAINERS
SD-PDA-7	10/24/00	9:35A	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
SD-PDA-6	↓	11:20A	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
SD-PDA-5		14:20	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
SW-PDA-10 SD DUP	↓	15:40	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
NOTE: SD-PDA-5					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
Measure VOC both bioassays					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
START AND END					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	

VOLUME/CONTAINER TYPE; PRESERVATIVE (NOTE 4)
4°C
plastic
1 gal

Relinquished by: (signature)	DATE	TIME	Received by: (signature)
Ted CW	10/24/00	17:10	
Relinquished by: (signature)	DATE	TIME	Received by: (signature)
	10/25/00	10:15	Philip C Stone
Relinquished by (signature)	DATE	TIME	Received by: (signature)

NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)

Notes to Lab: Ambient temperature of cooler on delivery: °C

Temp = 0.6°C

→ 3 coolers Total (see + sw)

Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
TEL: (802) 860-1638
FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Sauget Sed / Water Tox & Macro	Carrier:	4°C
Address: 1 Courthouse Lane Chelmsford, Massachusetts 01824	Project Number: 00049	Airbill Number:	plastic
Telephone: (978) 322-2824	Sampler Name(s):	Date Shipped:	
Facsimile: (978) 453-7260			1 gal
Contact Name: Ted Wickwire	Quote #: 10/18/00 Client Code: MENCUR	Hand Delivered: ___Yes ___No	

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	NUMBER OF CONTAINERS
SD-PDA-2	10/25/00	9:50	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
SD-PDA-3		12:10	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
SD-PDA 3 FD		12:20	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
SD-PDA 4		15:20	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	

	DATE	TIME	
Relinquished by: *(signature)* Ted W	10/25/00	17:30	Received by: *(signature)*
Relinquished by: *(signature)*	10/26/00	9:30	Received by: *(signature)* Karen Downey
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*

NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)

Notes to Lab: Ambient temperature of cooler on delivery: 0.3°C #1 cooler
0.4°C #2 " "
0.3°C #3 " "

Page ___ of ___

Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
TEL: (802) 860-1638
FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Sauget Sed / Water Tox & Macro	Carrier:
Address: 1 Courthouse Lane	Project Number: 00049	Airbill Number:
Chelmsford, Massachusetts 01824	Sampler Name(s):	Date Shipped:
Telephone: (978) 322-2824		
Facsimile: (978) 453-7260		Hand Delivered: ___Yes ___No
Contact Name: Ted Wickwire	Quote #: 10/18/00 Client Code: MENCUR	

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)	NUMBER OF CONTAINERS
SD-PDA-8	10/24/00	10:35	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	4°C, plastic, 1 gal	1
SD-PDA-9	↓	12:15	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		1
SD-UDA 12	↓	15:05	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		1
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		

	DATE	TIME		
Relinquished by: *(signature)* Ted W	10/26/00	17:00	Received by: *(signature)*	
Relinquished by: *(signature)*	10/27/00	10:00	Received by: *(signature)* Philip C Downey	
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*	

NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)

Notes to Lab: Ambient temperature of cooler on delivery: °C

Temp -0.3°C

Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
TEL: (802) 860-1638
FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Saugel Sed / Water Tox & Macro	Carrier:
Address: 1 Courthouse Lane, Chelmsford, Massachusetts 01824	Project Number: 00049	Airbill Number:
Telephone: (978) 322-2824	Sampler Name(s):	Date Shipped:
Facsimile: (978) 453-7260		Hand Delivered: ___Yes ___No
Contact Name: Ted Wickwire	Quote #: 10/18/00 Client Code: MENCUR	

VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)						
4°C	—	—	—	—	—	—
plastic	—	—	—	—	—	—
1 gal						

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	NUMBER OF CONTAINERS
SD - DDA - 1	10/27/00	10:30	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	

	DATE	TIME	
Relinquished by: *(signature)* Ted W	10/27/00	15:00	Received by: *(signature)*
Relinquished by: *(signature)*	10/28	10:00	Received by: *(signature)* J Goodbrat
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*

NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)

Notes to Lab: Ambient temperature of cooler on delivery: °C

Cooler Temp = 4.3°C

Woods Hole Group
Environmental Laboratories

375 Paramount Drive • Suite B
Raynham, MA 02767-5154 • USA
Phone: 508-822-9300
Fax: 508-822-3288

Sampling Protocol for Method 5035: VOC's in Soil

CLIENT: Menzie Cura Associates Client Project: _____

CONTACT: Ted Wickwire WHG Project Mgr: Edie Hutchenson

TEL.: _____ Date: 10/23/00

FOR EACH SAMPLE LOCATION, PLEASE COLLECT:

- 2 Low-level samples (preserved with ~~Sodium Bisulfate~~ H_2O), 5g Soil/Sediment. (hold time is 7 days)
- 1 High-level sample (preserved with Methanol), 5g Soil/Sediment.
- 1 unpreserved sample for percent solids determination.

IF YOU WISH TO ANALYZE A MS/MSD PAIR, PLEASE COLLECT AN ADDITIONAL FOUR (4) LOW-LEVEL SAMPLES *(We must supply the additional sample vials, so advance notice is critical)*

NOTE: You have been sent 20 Low-Level sample vials. ***Please RETURN all UNUSED Low-Level sample vials or you will be charged an additional $10.00 for EACH one that is not returned.***

Any questions, please call your Project Manager: 508-822-9300

Field Sampling:

1.) If possible, try to evaluate the soil type to determine if:
   a. The acid solution will reduce the pH to <2, (if pH>2, note on Chain of Custody)
   b. There is a possibility for effervescence due to carbonates in the soil*

2.) Collect a 5 gram sample using a cut off plastic syringe ~~or other coring device (i.e. EnCore Sampler~~**)
   a. Withdraw the plunger and insert the barrel into the soil
   b. Adjust the plunger so the syringe barrel holds approximately 4 to 4.5 cc of soil***
   c. Place the syringe inside the VOA vial and gently push the soil into the solution (~~Sodium Bisulfate~~, Methanol, or directly into the empty VOA vial for percent solids) H_2O
   d. **Be sure not to spill or splash ANY of the solution**
   e. **Re-cap the vial ensuring NO debris is in the vial threads**

3.) Collect all four (4) aliquots for this sample, at this time, using the same syringe.

4.) Move to the next sample location. Using a new syringe (or coring device), collect the next sample (and all aliquots) in this same way.

---

* *If effervescing occurs when soil is added to the Sodium Bisulfate preserved vial, collect a sample with no preservative. Effervescence could result in a loss of volatiles and may cause vials to break during shipping*

** *If necessary, samples can be shipped in the sealed EnCore Sampler, but they MUST be received by the laboratory within 24 hours of collection for sample preservation by the lab, or there is a potential for the loss of volatiles. The Laboratory will NOT be responsible for hold-time violations when samples are received after 24 hours from collection.*

*** *It has been determined that 4 - 4.5 cc (or mL) marked on the collection syringe, is approximately equivalent to 5 grams of soil. The 5 gram EnCore Sampler also should hold a 5 gram sample. Since different soil types have different densities, the laboratory strongly recommends the use of an analytical balance in the field that can weigh to 0.01g, to ensure that the proper sample weight is collected.*

Chain-of-Custody Record

Woods Hole Group
Environmental Laboratories

375 Paramount Drive
Raynham, MA 02767

TEL: (508) 822-9300
FAX: (508) 822-3288

PAGE 1 OF 1

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)
Name:	Regulatory Protocol:	Carrier:	
Address: [illegible]	For the State of:	Airbill Number: [illegible]	
Telephone: [illegible]	Project Name:	Date Shipped: [illegible]	
Facsimile: [illegible]	Project Number:	Quote #:	
Contact Name: [illegible]	P.O. #		
	Sampler Name(s): John Williams [illegible]		

TAT ___ 10 Day ___ 5 Day ___ 3 Day ___ 48 Hr ___ 24 Hr ___ Other

WHG LAB #	SAMPLE ID (NOTE 1)	COLLECTION DATE	COLLECTION TIME	COMPOSITE GRAB	MATRIX	ANALYSIS/REMARKS (NOTE 2, 3)	NUMBER OF CONTAINERS
	18273 [illegible] SD [illegible] 5	[illegible]	[illegible]	X	[illegible]	VOCs per [illegible]	
						Cura	
	18273 [illegible] SD [illegible] 5	[illegible]	[illegible]	X			
	18277 [illegible] SD [illegible] 1	[illegible]	[illegible]	X			
	18277 [illegible] SD [illegible] 9	[illegible]	[illegible]	X			

Relinquished by: (signature)	DATE	TIME	Received by: (signature)
[illegible]	[illegible]	[illegible]	[illegible] X
Relinquished by: (signature)	DATE	TIME	Received by: (signature)
Relinquished by: (signature)	DATE	TIME	Received for Laboratory by: (signature)

NOTES TO SAMPLER (S): (1) Limit Sample Identification to 6 characters, if possible; (2) Indicate designated Lab Q.C. sample and type (e.g.; MS/MSD/REP) and provide sufficient sample; (3) Field duplicates are separate sample; (4) e.g.; 40ml/glass/H_2SO_4

Notes to Lab: Overlying water [illegible] prior [illegible] [illegible] [illegible] [illegible] [illegible]. After VOC [illegible] [illegible] water replaced. [illegible] [illegible] [illegible] [illegible].

Woods Hole Group
Environmental Laboratories

Chain-of-Custody Record

375 Paramount Drive
Raynham, MA 02767
TEL: (508) 822-[illegible]00
FAX: (508) 822-3288

PAGE ___ OF ___

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)
Name: [illegible]	Regulatory Protocol:	Carrier: [illegible]	
Address: [illegible]	For the State of:	Airbill Number: [illegible]	
[illegible]	Project Name:	Date Shipped: [illegible]	
[illegible] VT [illegible]	Project Number:	Quote #:	
Telephone: (802) [illegible]	P.O. #		
Facsimile: (802) [illegible]	Sampler Name(s): [illegible]		
Contact Name: [illegible]			

TAT ___ 10 Day ___ 5 Day ___ 3 Day ___ 48 Hr ___ 24 Hr ___ Other

WHG LAB #	SAMPLE ID (NOTE 1)	COLLECTION DATE	COLLECTION TIME	COMPOSITE GRAB	MATRIX	ANALYSIS/REMARKS (NOTE 2, 3)	NUMBER OF CONTAINERS
	18273 DAJ3(Pr) SD POA 5	11/7/00	12:45		[illegible]	VOC per Mercury Cure	

Relinquished by: (signature)	DATE	TIME	Received by: (signature)
[illegible]	11/7/00	1900	[illegible] FX.
Relinquished by: (signature)	DATE	TIME	Received by: (signature)
Relinquished by: (signature)	DATE	TIME	Received for Laboratory by: (signature)

NOTES TO SAMPLER (S): (1) Limit Sample Identification to 6 characters, if possible; (2) Indicate designated Lab Q.C. sample and type (e.g.; MS/MSD/REP) and provide sufficient sample; (3) Field duplicates are separate sample; (4) e.g.; 40ml/glass/H_2SO_4

Notes to Lab: (1) ~~[illegible]~~ (2) [illegible], samples shipped 11/3/00. [illegible]

We cannot accept verbal changes - Please Fax written changes to (508) 822-3288

Woods Hole Group
Environmental Laboratories

Chain-of-Custody Record

375 Paramount Drive
Raynham, MA 02767
TEL: (508) 822-9300
FAX: (508) 822-3288

PAGE ___ OF ___

COMPANY INFORMATION	COMPANY S PROJECT INFORMATION	SHIPPING INFORMATION
Name:	Regulatory Protocol:	Carrier:
Address:	For the State of:	Airbill Number:
Telephone:	Project Name:	Date Shipped:
Facsimile:	Project Number:	Quote #:
Contact Name:	P.O. #	
	Sampler Name(s):	

TAT ___ 10 Day ___ 5 Day ___ 3 Day ___ 48 Hr ___ 24 Hr ___ Other

WHG LAB #	SAMPLE ID (NOTE 1)	COLLECTION DATE	COLLECTION TIME	COMPOSITE GRAB	MATRIX	ANALYSIS/REMARKS (NOTE 2, 3)	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4) / NUMBER OF CONTAINERS

Relinquished by: (signature)	DATE	TIME	Received by: (signature)
Relinquished by: (signature)	DATE	TIME	Received by: (signature)
Relinquished by: (signature)	DATE	TIME	Received for Laboratory by: (signature)

NOTES TO SAMPLER (S): (1) Limit Sample Identification to 6 characters, if possible; (2) Indicate designated Lab Q.C. sample and type (e.g.; MS/MSD/REP) and provide sufficient sample; (3) Field duplicates are separate sample; (4) e.g.; 40ml/glass/H_2SO_4

Notes to Lab:

We cannot accept verbal changes - Please fax written changes to (508) 822-3288

Fathead Minnow, Pimephales promelas Larval Survival and Growth in Sediment

Title: 4806 18228 1000.0 Sediment PP S
File: 18228pps Transform: ARC SINE(SQUARE ROOT(Y))

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18231	0.0035	
2	18228	0.4420	127.4268

(p-value = 0.0004)

Critical F = 23.1545 (P=0.01, 4, 4)
9.6045 (P=0.05, 4, 4)

Since F > Critical F, REJECT Ho: Equal Variances (alpha = 0.01).

Title: 4806 18228 1000.0 Sediment PP S
File: 18228pps Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 1 OF 2 Ho: Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS t STAT	SIG 0.05
1	18231	1.4150	0.9867		
2	18228	0.7368	0.4533	2.2719	*

Equal Var: t critical value = 1.8595 (1 Tailed, alpha = 0.05, df = 8)
(p-value = 0.0264)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS T STAT	SIG 0.05
1	18231	1.4150	0.9867		
2	18228	0.7368	0.4533	2.2719	*

Unequal Var: t critical value = 2.1318 (1 Tailed, alpha = 0.05, df = 4)
(p-value = 0.0428)

Title: 4806 18228 1000.0 Sediment PP S
File: 18228pps Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 2 OF 2 Ho: Control<Treatment

Equal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18228	5	0.4017	41.2	0.5333

Unequal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18228	5	0.4827	49.5	0.5333

Title: 4806 18229 1000.0 Sediment PP S
File: 18229pps Transform: ARC SINE(SQUARE ROOT(Y))

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18231	0.0035	
2	18229	0.3149	90.7622

(p-value = 0.0007)

Critical F = 23.1545 (P=0.01, 4, 4)
9.6045 (P=0.05, 4, 4)

Since F > Critical F, REJECT Ho: Equal Variances (alpha = 0.01).

Title: 4806 18229 1000.0 Sediment PP S
File: 18229pps Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 1 OF 2 Ho: Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS t STAT	SIG 0.05
1	18231	1.4150	0.9867		
2	18229	1.1263	0.7733	1.1443	

Equal Var: t critical value = 1.8595 (1 Tailed, alpha = 0.05, df = 8)
(p-value = 0.1428)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS T STAT	SIG 0.05
1	18231	1.4150	0.9867		
2	18229	1.1263	0.7733	1.1443	

Unequal Var: t critical value = 2.1318 (1 Tailed, alpha = 0.05, df = 4)
(p-value = 0.1582)

Title: 4806 18229 1000.0 Sediment PP S
File: 18229pps Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 2 OF 2 Ho: Control<Treatment

Equal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18229	5	0.3183	32.6	0.2133

Unequal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18229	5	0.3847	39.4	0.2133

Title: 4806 18271 1000.0 Sediment PP S
File: 18271pps Transform: ARC SINE(SQUARE ROOT(Y))

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18231	0.0035	
2	18271	0.0075	2.1718

(p-value = 0.4711)

Critical F = 23.1545 (P=0.01, 4, 4)
9.6045 (P=0.05, 4, 4)

Since F <= Critical F, FAIL TO REJECT Ho: Equal Variances (alpha = 0.01).

Title: 4806 18271 1000.0 Sediment PP S
File: 18271pps Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 1 OF 2 Ho: Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS t STAT	SIG 0.05
1	18231	1.4150	0.9867		
2	18271	1.3502	0.9533	1.3813	

Equal Var: t critical value = 1.8595 (1 Tailed, alpha = 0.05, df = 8)
(p-value = 0.1023)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS T STAT	SIG 0.05
1	18231	1.4150	0.9867		
2	18271	1.3502	0.9533	1.3813	

Unequal Var: t critical value = 1.8946 (1 Tailed, alpha = 0.05, df = 7)
(p-value = 0.1046)

Title: 4806 18271 1000.0 Sediment PP S
File: 18271pps Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 2 OF 2 Ho: Control<Treatment

Equal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18271	5	0.0338	3.5	0.0333

Unequal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18271	5	0.0346	3.5	0.0333

Title: 4806 18272 1000.0 Sediment PP S
File: 18272pps Transform: NO TRANSFORMATION

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18231	0.0009	
2	18272	0.0033	3.7500

(p-value = 0.2286)

Critical F = 23.1545 (P=0.01, 4, 4)
9.6045 (P=0.05, 4, 4)

Since F <= Critical F, FAIL TO REJECT Ho: Equal Variances (alpha = 0.01).

Title: 4806 18272 1000.0 Sediment PP S
File: 18272pps Transform: NO TRANSFORMATION

2 Sample t-Test - TABLE 1 OF 2 Ho: Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	t STAT	SIG 0.05
1	18231	0.9867	0.9867		
2	18272	0.9667	0.9667	0.6882	

Equal Var: t critical value = 1.8595 (1 Tailed, alpha = 0.05, df = 8)
(p-value = 0.2554)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T STAT	SIG 0.05
1	18231	0.9867	0.9867		
2	18272	0.9667	0.9667	0.6882	

Unequal Var: t critical value = 1.9432 (1 Tailed, alpha = 0.05, df = 6)
(p-value = 0.2585)

Title: 4806 18272 1000.0 Sediment PP S
File: 18272pps Transform: NO TRANSFORMATION

2 Sample t-Test - TABLE 2 OF 2 Ho: Control<Treatment

Equal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18272	5	0.0540	5.5	0.0200

Unequal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18272	5	0.0565	5.7	0.0200

Title: 4806 18274 1000.0 Sediment PP S
File: 18274pps Transform: ARC SINE(SQUARE ROOT(Y))

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18231	0.0035	
2	18274	0.1599	46.0990

(p-value = 0.0027)

Critical F = 23.1545 (P=0.01, 4, 4)
9.6045 (P=0.05, 4, 4)

Since F > Critical F, REJECT Ho: Equal Variances (alpha = 0.01).

Title: 4806 18274 1000.0 Sediment PP S
File: 18274pps Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 1 OF 2 Ho: Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS t STAT	SIG 0.05
1	18231	1.4150	0.9867		
2	18274	1.1596	0.7815	1.4127	

Equal Var: t critical value = 1.8595 (1 Tailed, alpha = 0.05, df = 8)
(p-value = 0.0977)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS T STAT	SIG 0.05
1	18231	1.4150	0.9867		
2	18274	1.1596	0.7815	1.4127	

Unequal Var: t critical value = 2.1318 (1 Tailed, alpha = 0.05, df = 4)
(p-value = 0.1153)

Title: 4806 18274 1000.0 Sediment PP S
File: 18274pps Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 2 OF 2 Ho: Control<Treatment

Equal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18274	5	0.1990	20.4	0.2051

Unequal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18274	5	0.2413	24.7	0.2051

Title: 4806 18275 1000.0 Sediment PP S
File: 18275pps
Transform: ARC SINE(SQUARE ROOT(Y))

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18231	0.0035	
2	18275	0.0214	6.1702

(p-value = 0.1059)

Critical F = 23.1545 (P=0.01, 4, 4)
9.6045 (P=0.05, 4, 4)

Since F <= Critical F, FAIL TO REJECT Ho: Equal Variances (alpha = 0.01).

Title: 4806 18275 1000.0 Sediment PP S
File: 18275pps Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 1 OF 2 Ho: Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS t STAT	SIG 0.05
1	18231	1.4150	0.9867		
2	18275	1.3482	0.9467	0.9476	

Equal Var: t critical value = 1.8595 (1 Tailed, alpha = 0.05, df = 8)
(p-value = 0.1855)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS T STAT	SIG 0.05
1	18231	1.4150	0.9867		
2	18275	1.3482	0.9467	0.9476	

Unequal Var: t critical value = 2.0150 (1 Tailed, alpha = 0.05, df = 5)
(p-value = 0.1934)

Title: 4806 18275 1000.0 Sediment PP S
File: 18275pps Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 2 OF 2 Ho: Control<Treatment

Equal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18275	5	0.0560	5.7	0.0400

Unequal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18275	5	0.0621	6.4	0.0400

Title: 4806 18276 1000.0 Sediment PP S Transform: ARC SINE(SQUARE ROOT(Y))
File: 18276pps

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18231	0.0035	40.1722
2	18276	0.1394	

(p-value = 0.0035)

Critical F = 23.1545 (P=0.01, 4, 4)
9.6045 (P=0.05, 4, 4)

Since F > Critical F, REJECT Ho: Equal Variances (alpha = 0.01).

Title: 4806 18277 1000.0 Sediment PP S
File: 18277pps Transform: ARC SINE(SQUARE ROOT(Y))

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18231	0.0035	
2	18277	0.0441	12.7096

(p-value = 0.0304)

Critical F = 23.1545 (P=0.01, 4, 4)
9.6045 (P=0.05, 4, 4)

Since F <= Critical F, FAIL TO REJECT Ho: Equal Variances (alpha = 0.01).

Title: 4806 18277 1000.0 Sediment PP S
File: 18277pps Transform: ARC SINE(SQUARE ROOT(Y))
Number of Groups: 2

GRP	IDENTIFICATION	REP	VALUE	TRANS VALUE
1	18231	1	1.0000	1.4413
1	18231	2	1.0000	1.4413
1	18231	3	1.0000	1.4413
1	18231	4	0.9333	1.3096
1	18231	5	1.0000	1.4413
2	18277	1	0.6667	0.9553
2	18277	2	0.6000	0.8861
2	18277	3	0.8000	1.1071
2	18277	4	0.6667	0.9553
2	18277	5	0.2667	0.5426

Title: 4806 18276 1000.0 Sediment PP S
File: 18276pps Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 1 OF 2 Ho: Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS t STAT	SIG 0.05
1	18231	1.4150	0.9867		
2	18276	0.7083	0.4533	4.1812	*

Equal Var: t critical value = 1.8595 (1 Tailed, alpha = 0.05, df = 8)
(p-value = 0.0015)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS T STAT	SIG 0.05
1	18231	1.4150	0.9867		
2	18276	0.7083	0.4533	4.1812	*

Unequal Var: t critical value = 2.1318 (1 Tailed, alpha = 0.05, df = 4)
(p-value = 0.0070)

Title: 4806 18276 1000.0 Sediment PP S
File: 18276pps Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 2 OF 2 Ho: Control<Treatment

Equal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18276	5	0.1811	18.6	0.5333

Unequal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTR
1	18231	5			
2	18276	5	0.2195	22.5	0.5333

itle: 4806 18277 1000.0 Sediment PP S
le: 18277pps Transform: ARC SINE(SQUARE ROOT(Y))

Shapiro - Wilk's Test for Normality

D = 0.1902
W = 0.8210

Critical W = 0.7810 (alpha = 0.01 , N = 10)
W = 0.8420 (alpha = 0.05 , N = 10)

Data PASS normality test (alpha = 0.01). Continue analysis.

Title: 4806 18298 1000.0 Sediment PP S
File: 18298pps Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 1 OF 2 Ho: Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS t STAT	SIG 0.05
1	18231	1.4150	0.9867		
2	18298	1.3135	0.9333	2.1691	*

Equal Var: t critical value = 1.8595 (1 Tailed, alpha = 0.05, df = 8)
(p-value = 0.0310)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS T STAT	SIG 0.05
1	18231	1.4150	0.9867		
2	18298	1.3135	0.9333	2.1691	*

Unequal Var: t critical value = 1.8946 (1 Tailed, alpha = 0.05, df = 7)
(p-value = 0.0334)

Title: 4806 18298 1000.0 Sediment PP S
File: 18298pps Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 2 OF 2 Ho: Control<Treatment

Equal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18298	5	0.0338	3.5	0.0533

Unequal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18298	5	0.0345	3.5	0.0533

Title: 4806 18271 1000.0 Sediment PP G
File: 18271ppg Transform: NO TRANSFORMATION

Shapiro - Wilk's Test for Normality

D = 0.0098
W = 0.7888

Critical W = 0.7810 (alpha = 0.01 , N = 10)
W = 0.8420 (alpha = 0.05 , N = 10)

Data PASS normality test (alpha = 0.01). Continue analysis.

Title: 4806 18298 1000.0 Sediment PP S
File: 18298pps Transform: ARC SINE(SQUARE ROOT(Y))

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18231	0.0035	
2	18298	0.0075	2.1590

(p-value = 0.4743)

Critical F = 23.1545 (P=0.01, 4, 4)
9.6045 (P=0.05, 4, 4)

Since F <= Critical F, FAIL TO REJECT Ho: Equal Variances (alpha = 0.01).

Title: 4806 18298 1000.0 Sediment PP S
File: 18298pps Transform: ARC SINE(SQUARE ROOT(Y))
Number of Groups: 2

GRP	IDENTIFICATION	REP	VALUE	TRANS VALUE
1	18231	1	1.0000	1.4413
1	18231	2	1.0000	1.4413
1	18231	3	1.0000	1.4413
1	18231	4	0.9333	1.3096
1	18231	5	1.0000	1.4413
2	18298	1	0.9333	1.3096
2	18298	2	0.9333	1.3096
2	18298	3	1.0000	1.4413
2	18298	4	0.9333	1.3096
2	18298	5	0.8667	1.1970

Title: 4806 18271 1000.0 Sediment PP G
File: 18271ppg Transform: NO TRANSFORMATION

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18231	0.0000	
2	18271	0.0025	318.8260

(p-value = 0.0001)

Critical F = 23.1545 (P=0.01, 4, 4)
9.6045 (P=0.05, 4, 4)

Since F > Critical F, REJECT Ho: Equal Variances (alpha = 0.01).

Title: 4806 18271 1000.0 Sediment PP G
File: 18271ppg Transform: NO TRANSFORMATION
Number of Groups: 2

GRP	IDENTIFICATION	REP	VALUE	TRANS VALUE
1	18231	1	0.2647	0.2647
1	18231	2	0.2680	0.2680
1	18231	3	0.2625	0.2625
1	18231	4	0.2647	0.2647
1	18231	5	0.2693	0.2693
2	18271	1	0.2520	0.2520
2	18271	2	0.1740	0.1740
2	18271	3	0.2447	0.2447
2	18271	4	0.3107	0.3107
2	18271	5	0.2680	0.2680

Title: 4806 18271 1000.0 Sediment PP G
File: 18271ppg Transform: NO TRANSFORMATION

2 Sample t-Test - TABLE 1 OF 2 Ho: Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	t STAT	SIG 0.05
1	18231	0.2658	0.2658		
2	18271	0.2499	0.2499	0.7197	

Equal Var: t critical value = 1.8595 (1 Tailed, alpha = 0.05, df = 8)
(p-value = 0.2461)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T STAT	SIG 0.05
1	18231	0.2658	0.2658		
2	18271	0.2499	0.2499	0.7197	

Unequal Var: t critical value = 2.1318 (1 Tailed, alpha = 0.05, df = 4)
(p-value = 0.2558)

Title: 4806 18271 1000.0 Sediment PP G
File: 18271ppg Transform: NO TRANSFORMATION

2 Sample t-Test - TABLE 2 OF 2 Ho: Control<Treatment

Equal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18271	5	0.0413	15.5	0.0160

Unequal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18271	5	0.0473	17.8	0.0160

Title: 4806 18272 1000.0 Sediment PP G
File: 18272ppg Transform: NO TRANSFORMATIO

Shapiro - Wilk's Test for Normality

D = 0.0102
W = 0.7557

Critical W = 0.7810 (alpha = 0.01 , N = 10)
W = 0.8420 (alpha = 0.05 , N = 10)

Data FAIL normality test (alpha = 0.01). Try another transformation.

Warning - The F-test of homogeneity is sensitive to non-normality and should not be performed with this data as is.

Title: 4806 18297 1000.0 Sediment PP S
File: 18297pps Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 1 OF 2 Ho: Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS t STAT	SIG 0.05
1	18231	1.4150	0.9867		
2	18297	0.3239	0.1333	8.9489	*

Equal Var: t critical value = 1.8595 (1 Tailed, alpha = 0.05, df = 8)
(p-value = 0.0000)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS T STAT	SIG 0.05
1	18231	1.4150	0.9867		
2	18297	0.3239	0.1333	8.9489	*

Unequal Var: t critical value = 2.1318 (1 Tailed, alpha = 0.05, df = 4)
(p-value = 0.0004)

Title: 4806 18297 1000.0 Sediment PP S
File: 18297pps Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 2 OF 2 Ho: Control<Treatment

Equal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18297	5	0.1153	11.8	0.8533

Unequal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18297	5	0.1390	14.2	0.8533

Title: 4806 18298 1000.0 Sediment PP S
File: 18298pps Transform: ARC SINE(SQUARE ROOT(Y))

Shapiro - Wilk's Test for Normality

D = 0.0438
W = 0.8667

Critical W = 0.7810 (alpha = 0.01 , N = 10)
W = 0.8420 (alpha = 0.05 , N = 10)

Data PASS normality test (alpha = 0.01). Continue analysis.

Title: 4806 18297 1000.0 Sediment PP S
File: 18297pps Transform: ARC SINE(SQUARE ROOT(Y))

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18231	0.0035	
2	18297	0.0709	20.4279

(p-value = 0.0127)

Critical F = 23.1545 (P=0.01, 4, 4)
9.6045 (P=0.05, 4, 4)

Since F <= Critical F, FAIL TO REJECT Ho: Equal Variances (alpha = 0.01).

Title: 4806 18297 1000.0 Sediment PP S
File: 18297pps Transform: ARC SINE(SQUARE ROOT(Y))
Number of Groups: 2

GRP	IDENTIFICATION	REP	VALUE	TRANS VALUE
1	18231	1	1.0000	1.4413
1	18231	2	1.0000	1.4413
1	18231	3	1.0000	1.4413
1	18231	4	0.9333	1.3096
1	18231	5	1.0000	1.4413
2	18297	1	0.0000	0.1295
2	18297	2	0.0000	0.1295
2	18297	3	0.0000	0.1295
2	18297	4	0.3333	0.6155
2	18297	5	0.3333	0.6155

Title: 4806 18296 1000.0 Sediment PP S
File: 18296pps Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 1 OF 2 Ho: Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS t STAT	SIG 0.05
1	18231	1.4150	0.9867		
2	18296	1.3887	0.9733	0.6325	

Equal Var: t critical value = 1.8595 (1 Tailed, alpha = 0.05, df = 8)
(p-value = 0.2724)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS T STAT	SIG 0.05
1	18231	1.4150	0.9867		
2	18296	1.3887	0.9733	0.6325	

Unequal Var: t critical value = 1.8595 (1 Tailed, alpha = 0.05, df = 8)
(p-value = 0.2724)

Title: 4806 18296 1000.0 Sediment PP S
File: 18296pps Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 2 OF 2 Ho: Control<Treatment

Equal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18296	5	0.0293	3.0	0.0133

Unequal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18296	5	0.0293	3.0	0.0133

Title: 4806 18297 1000.0 Sediment PP S
File: 18297pps Transform: ARC SINE(SQUARE ROOT(Y

Shapiro - Wilk's Test for Normality

D = 0.2973
W = 0.8484

Critical W = 0.7810 (alpha = 0.01 , N = 10)
W = 0.8420 (alpha = 0.05 , N = 10)

Data PASS normality test (alpha = 0.01). Continue analysis.

Title: 4806 18296 1000.0 Sediment PP S
File: 18296pps Transform: ARC SINE(SQUARE ROOT(Y))

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18231	0.0035	
2	18296	0.0052	1.5000

(p-value = 0.7040)

Critical F = 23.1545 (P=0.01, 4, 4)
9.6045 (P=0.05, 4, 4)

Since F <= Critical F, FAIL TO REJECT Ho: Equal Variances (alpha = 0.01).

Title: 4806 18296 1000.0 Sediment PP S
File: 18296pps Transform: ARC SINE(SQUARE ROOT(Y))
Number of Groups: 2

GRP	IDENTIFICATION	REP	VALUE	TRANS VALUE
1	18231	1	1.0000	1.4413
1	18231	2	1.0000	1.4413
1	18231	3	1.0000	1.4413
1	18231	4	0.9333	1.3096
1	18231	5	1.0000	1.4413
2	18296	1	1.0000	1.4413
2	18296	2	0.9333	1.3096
2	18296	3	1.0000	1.4413
2	18296	4	1.0000	1.4413
2	18296	5	0.9333	1.3096

Title: 4806 18277 1000.0 Sediment PP S
File: 18277pps Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 1 OF 2 Ho: Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS t STAT	SIG 0.05
1	18231	1.4150	0.9867		
2	18277	0.8893	0.6000	5.3902	*

Equal Var: t critical value = 1.8595 (1 Tailed, alpha = 0.05, df = 8)
(p-value = 0.0003)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS T STAT	SIG 0.05
1	18231	1.4150	0.9867		
2	18277	0.8893	0.6000	5.3902	*

Unequal Var: t critical value = 2.0150 (1 Tailed, alpha = 0.05, df = 5)
(p-value = 0.0015)

Title: 4806 18277 1000.0 Sediment PP S
File: 18277pps Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 2 OF 2 Ho: Control<Treatment

Equal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18277	5	0.0854	8.7	0.3867

Unequal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18277	5	0.0950	9.7	0.3867

Title: 4806 18296 1000.0 Sediment PP S
File: 18296pps Transform: ARC SINE(SQUARE ROOT(Y))

Shapiro - Wilk's Test for Normality

D = 0.0347
W = 0.7588

Critical W = 0.7810 (alpha = 0.01 , N = 10)
W = 0.8420 (alpha = 0.05 , N = 10)

Data FAIL normality test (alpha = 0.01). Try another transformation.

Warning - The F-test of homogeneity is sensitive to non-normality and should not be performed with this data as is.

Title: 4806 18272 1000.0 Sediment PP G
File: 18272ppg Transform: NO TRANSFORMATION

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18231	0.0000	
2	18272	0.0025	331.0449

(p-value = 0.0001)

Critical F = 23.1545 (P=0.01, 4, 4)
9.6045 (P=0.05, 4, 4)

Since F > Critical F, REJECT Ho: Equal Variances (alpha = 0.01).

Title: 4806 18272 1000.0 Sediment PP G
File: 18272ppg Transform: NO TRANSFORMATION
Number of Groups: 2

GRP	IDENTIFICATION	REP	VALUE	TRANS VALUE
1	18231	1	0.2647	0.2647
1	18231	2	0.2680	0.2680
1	18231	3	0.2625	0.2625
1	18231	4	0.2647	0.2647
1	18231	5	0.2693	0.2693
2	18272	1	0.2600	0.2600
2	18272	2	0.2713	0.2713
2	18272	3	0.1677	0.1677
2	18272	4	0.3020	0.3020
2	18272	5	0.2640	0.2640

Title: 4806 18272 1000.0 Sediment PP G
File: 18272ppg Transform: NO TRANSFORMATION

2 Sample t-Test - TABLE 1 OF 2 Ho: Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	t STAT	SIG 0.05
1	18231	0.2658	0.2658		
2	18272	0.2530	0.2530	0.5677	

Equal Var: t critical value = 1.8595 (1 Tailed, alpha = 0.05, df = 8)
(p-value = 0.2929)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T STAT	SIG 0.05
1	18231	0.2658	0.2658		
2	18272	0.2530	0.2530	0.5677	

Unequal Var: t critical value = 2.1318 (1 Tailed, alpha = 0.05, df = 4)
(p-value = 0.3003)

Title: 4806 18272 1000.0 Sediment PP G
File: 18272ppg Transform: NO TRANSFORMATION

2 Sample t-Test - TABLE 2 OF 2 Ho: Control<Treatment

Equal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18272	5	0.0420	15.8	0.0128

Unequal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18272	5	0.0482	18.1	0.0128

Title: 4806 18274 1000.0 Sediment PP G
File: 18274ppg Transform: NO TRANSFORMATION

Shapiro - Wilk's Test for Normality

D = 0.0108
W = 0.9275

Critical W = 0.7810 (alpha = 0.01 , N = 10)
W = 0.8420 (alpha = 0.05 , N = 10)

Data PASS normality test (alpha = 0.01). Continue analysis.

Title: 4806 18274 1000.0 Sediment PP G
File: 18274ppg Transform: NO TRANSFORMATION

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18231	0.0000	
2	18274	0.0027	351.4030

(p-value = 0.0000)

Critical F = 23.1545 (P=0.01, 4, 4)
9.6045 (P=0.05, 4, 4)

Since F > Critical F, REJECT Ho: Equal Variances (alpha = 0.01).

Title: 4806 18274 1000.0 Sediment PP G
File: 18274ppg Transform: NO TRANSFORMATION
Number of Groups: 2

GRP	IDENTIFICATION	REP	VALUE	TRANS VALUE
1	18231	1	0.2647	0.2647
1	18231	2	0.2680	0.2680
1	18231	3	0.2625	0.2625
1	18231	4	0.2647	0.2647
1	18231	5	0.2693	0.2693
2	18274	1	0.1907	0.1907
2	18274	2	0.2707	0.2707
2	18274	3	0.2063	0.2063
2	18274	4	0.2840	0.2840
2	18274	5	0.1638	0.1638

Title: 4806 18274 1000.0 Sediment PP G
File: 18274ppg Transform: NO TRANSFORMATION

2 Sample t-Test - TABLE 1 OF 2 Ho: Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	t STAT	SIG 0.05
1	18231	0.2658	0.2658		
2	18274	0.2231	0.2231	1.8349	

Equal Var: t critical value = 1.8595 (1 Tailed, alpha = 0.05, df = 8)
(p-value = 0.0519)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T STAT	SIG 0.05
1	18231	0.2658	0.2658		
2	18274	0.2231	0.2231	1.8349	

Unequal Var: t critical value = 2.1318 (1 Tailed, alpha = 0.05, df = 4)
(p-value = 0.0702)

Title: 4806 18274 1000.0 Sediment PP G
File: 18274ppg Transform: NO TRANSFORMATION

2 Sample t-Test - TABLE 2 OF 2 Ho: Control<Treatment

Equal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18274	5	0.0433	16.3	0.0427

Unequal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18231	5			
2	18274	5	0.0496	18.7	0.0427

Fathead minnow (*Pimephales promelas*) Sediment Test Survival and Dry Weight Data

Client: MENZIE CURA	Project: 00049	SDG: 4806
Sauget Sediment Assessment	Test Start: October 31, 2000	Test End: November 7, 2000

Sample	Repl.	Initial # Larvae	Day 2 # Alive *	Init.	Day 7 # Alive	Init.	# Weighed	Init Pan Wt.	Total Dry Wt.
18228	A	15	15	J	15	J	15	28.67	32.46
	B	15	13		4	JG	4	28.97	31.24
	C	15	15	11/2/00	① 15	J	15	26.78	30.81
	D	15	15		0	JG	0	29.16	—
	E	15	14		0	JG	0	29.23	—
18229	A	15	15		15	JG	15	29.62	33.68
	B	15	14		14	JG	14	29.28	33.22
	C	J ~~15~~ 16	15		① ~~15~~ 16 ②	J	16	25.53 JG	~~30.29~~ 29.75
	D	15	15		~~15~~ 4 JG	JG	14	26.83	30.89
	E	15	15		③ 0	J	0	28.08	—
~~18230~~ 18231 JWW	A	15	15		15	J	15	30.68	34.65
	B	15	15		15	J	15	28.36	32.38
	C	J ~~15~~ 16	15		16	J	16	28.41	32.61
	D	15	15		14	JG	14	26.95	30.92
	E	15	15		15	JG	15	28.36	32.40
18271	A	15	15		15	J	15	27.89	31.67
	B	J ~~15~~ 30	15		27	JG	27	26.68	31.90
	C	15	15		14	JG	14	30.06	33.73
	D	15	15		14	J	14	30.97	35.63
	E	15	15		15	JG	15	29.79	33.81
18272	A	15	15		15	J	15	28.19	32.09
	B	15	15		15	JG	15	27.70	31.77
	C	J ~~15~~ 30	15		29	JG	29	23.98	29.01 2 dead
	D	15	15		15	J	15	29.10	33.63
	E	15	15		13	JG	13	31.10	35.06
18273	A	15	0		0		0	—	—
	B	15	0		0		0	—	—
	C	15	0		0		0	—	—
	D	15	0		0		0	—	—
	E	15	0		0		0	—	—
18274	A	15	15		9	J	9	27.34	30.20
	B	15	15		15	JG	15	31.30	35.36
	C	J ~~15~~ 30	15		30	JG	30	28.39	34.58
	D	15	15		15	J	15	28.99	33.25
	E	15	13		4	JG	4	28.10	30.23

*Day 2 survival counts are estimates due to difficulty in counting live. mobile fish. (# surviving = 15 - dead removed)

Balance QC: Initial (20 mg = 1996)	Final (20 mg = 1997)	Balance Asset #:
Date/time In 11/7/00 Temp(°C) 104°C Init. JG	Date/time out 11/8 Temp(°C) 104	Init. JG
Comments: 17:00	① Cup spilled, lost 1 fish J. FOUND IT	

Init. 19.95 (20mg) Ending (20mg) = 19.9

② 16 minnows JWW

③ Remains of dead fish present JW

Review: J Date: 1/8/01 11/8/00 17:00 JG

Laboratory: Aquatec Biological Sciences, Inc. Willison, Vermont

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Fathead minnow (*Pimephales promelas*) Sediment Test Survival and Dry Weight Data

Client: MENZIE CURA	Project: 00049	SDG: 4806
Sauget Sediment Assessment	Test Start: October 31, 2000	Test End: November 7, 2000

Sample	Repl.	Initial # Larvae	Day 2 # Alive *	Init.	Day 7 # Alive	11/7/00 Init.	# Weighed	Init Pan Wt.	Total Dry Wt.
18275	A	15	15		15	JG	15	32.19	36.86
	B	15	14	11/4/00	12	JG	12	28.27	32.11
	C	15	6 ~~15~~		15	J	15	33.16	37.64
	D	15	15		14	JG	14	28.89	33.79
	E	15	15		15	JG	15	31.56	35.96
18276	A	15	11		9	J	9	33.25	36.27
	B	15	15		4	JG	4	31.50	33.87
	C	15	15		10	J	10	33.67	37.24
	D	15	0		0	—	0	—	—
	E	15	15		11	J	11	33.03	36.99
18277	A	15	15		10	J	10	32.01	35.82
	B	15	13		4	JG	4	30.01	33.59
	C	15	15		12	JG	12	33.09	36.88
	D	15	13		10	J	10	30.83	34.05
	E	15	8		4	JG	4	31.91	33.79
18278	A	15	15		15	JG	15	32.64	36.67
	B	15	15		15	J	15	28.47	32.42
	C	15	15		15	J	15	31.73	36.08
	D	15	15		15	JG	15	30.04	34.17
	E	15	15		15	JG	15	29.73	33.98
18296	A	15	15		15	J	15	32.36	36.72
	B	15	15		14	JG	14	32.07	36.06
	C	15	15		15	JG	15	32.52	36.52
	D	15	15		15	JG	15	29.38	33.88
	E	15	15		14	JG	14	34.20	37.83
18297	A	15	15		① 0	J	0	34.90	—
	B	15	~~0~~ 15		① 0	|	0	32.23	—
	C	15	14		① 0	|	0	29.34	—
	D	15	~~15~~		5	|	5	35.11	~~36.78~~
	E	15	15		5	|	5	31.96	33.43
18298	A	15	15		14	JG	14	27.97	31.83
	B	15	15		14	J	14	24.90	34.37
	C	15	15		15	JG	15	29.20	33.36
	D	15	15	j	14	J	14	29.63	34.01
	E	15	15		13	JG	13	27.37	31.51

*Day 2 survival counts are estimates due to difficulty in counting live, mobile fish. (#Surviving = 15 - dead removed) J

Balance QC: Initial (20 mg = 19.96)	Final (20 mg = 19.97)	Balance Asset #:			
Date/time In	Temp(°C)	Init.	Date/time out	Temp(°C)	Init.
Comments: ① Remains of dead larvae present J					

Review: _____ Date: 1/8/01

Laboratory: Aquatec Biological Sciences, Inc. Willison, Vermont

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Fathead minnow (*Pimephales promelas*) Sediment Test Survival and Dry Weight Data

Client: MENZIE CURA	Project: 00049	SDG: 4806
Sauget Sediment Assessment	Test Start: October 31, 2000	Test End: November 7, 2000

Sample	Repl.	Initial # Larvae	Day 2 # Alive *	Init.	Day 7 # Alive	11/7/00 Init.	# Weighed	Init Pan Wt.	Total Dry Wt.
18305	A	15	15	[illegible]	14	[illegible]	14	29.87	34.41
	B	15	15	11/2/00	15	JG	15	28.82	33.79
	C	15	15		15	JG	15	27.43	31.54
	D	15	15		15	JG	15	27.63	31.82
	E	15	15		16	[illegible]	16	28.02	32.48
	A								
	B								
	C								
	D								
	E								
	A								
	B								
	C								
	D								
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	B								
	C								
	D								
	E								

*Day 2 survival counts are estimates due to difficulty in counting live, mobile fish (# surviving – dead removed)

Balance QC: Initial (20 mg = 1946)	Final (20 mg = 1997)	Balance Asset #:			
Date/time In	Temp(°C)	Init.	Date/time out	Temp(°C)	Init.
Comments:					

Review: [signature] Date: 1/8/01

Laboratory: Aquatec Biological Sciences, Inc. Willison, Vermont

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Pimephales promelas Initial Dry Wt.

Project: MENZIE CURA 00049 Sauget Sed. Assessment

Culture ID: Age: 1 day

Replicate	Number of Organisms weighed	Initial Pan Weight (mg)	Final Pan Weight (mg)	Total Fish WT. (mg)	Avg. Fish (mg)
1	15	29.92	31.45	1.53	0.10
2	15	28.78	30.44	1.66	0.11
3	15	31.07	32.65	1.58	0.10
4	15	31.65	33.25	1.60	0.10
5	15	32.63	34.09	1.46	0.09
Initials:					
Date:					

Balance QC: Initial (20 mg = 19.99) Final (20 mg = 19.98) Balance Asset #:

Date/time In 10/31 7:30 Temp(°C) 10.0 Init. JG Date/time out 11/1 Temp(°C) 8.7°C Init.

Comments:

Review: T Date: 1/8/01

Laboratory: Aquatec Biological Sciences, Inc. Willison, Vermont

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1300 Blue Spruce Drive, Suite C
Fort Collins, Colorado 80524

AQUATIC BIO SYSTEMS ABS INC.

Toll Free: 800/331-5916
Tel: 970/484-5091 Fax:970/484-25

ORGANISM HISTORY

DATE: 10/30/00

SPECIES: Pimephales promelas

AGE: N/A

LIFE STAGE: Embryo

HATCH DATE: 10/30/00

BEGAN FEEDING: N/A

FOOD: N/A

Water Chemistry Record:	Mean	Range
TEMPERATURE:	24 °C	--
SALINITY/CONDUCTIVITY:	--	--
TOTAL HARDNESS (as $CaCO_3$):	116 mg/l	--
TOTAL ALKALINITY (as $CaCO_3$):	65 mg/l	--
pH:	7.91	--

Comments:

Received 10/31/00
Temp = 20.3°C
pH = 7.5
DO = 12.1
Cond = 300

Facility Supervisor

Fathead minnow (*Pimephales promelas*) Overlying Water Environmental Monitoring

Client: MENZIE CURA	Project: 00049 Sauget Sed. Assessment	SDG: 4806

Sample	Parameter	0	1	2	3	4	5	6	7
18228	T (°C)	23.9	22.8	23.6	25.8	25.6	24.6	23.7*	24.4
	pH	7.9	X	7.8	X	X	X	X	7.7
	DO (mg/L)	8.4	7.6	7.7	7.9			7.6	7.3
	Conductivity	270	X	280	X	X	X	X	340
18229	T (°C)	23.7	22.9	23.9	24.1	24.9	24.7	23.2	24.0
	pH	7.9	X	7.8	X	X	X	X	7.7
	DO (mg/L)	8.4	7.4	7.5	8.0			7.6	7.3
	Conductivity	290	X	300	X	X	X	X	350
~~18230~~ 18231 SW	T (°C)	24.6	23.2	23.5	24.7	24.0	24.2	23.2	23.9
	pH	7.4	X	7.6	X	X	X	X	7.6
	DO (mg/L)	8.6	7.1	7.2	8.0			7.3	7.1
	Conductivity	440	X	450	X	X	X	X	480
18271	T (°C)	24.3	24.1	24.2	24.5	24.1	23.9	23.4	24.1
	pH	7.8	X	7.8	X	X	X	X	7.8
	DO (mg/L)	8.4	7.5	7.4	7.5			7.1	7.1
	Conductivity	270	X	300	X	X	X	X	350
	Init./Date:	10/31 JG	11/1 JG	11/2 JG	11/3 RB	11/4 JG	11/5 jm	11/6 jm	11/7 JG

Comments:

* Increased cart temp 11/6 jm

Review Date 1/8/01

Ppsedpkg

Laboratory: Aquatec Biological Sciences, Inc. Willison, Vermont

Fathead minnow (*Pimephales promelas*) Overlying Water Environmental Monitoring

Client: MENZIE CURA	Project: 00049 Sauget Sed. Assessment	SDG: 4806

Sample	Parameter	0	1	2	3	4	5	6	7
18272	T (°C)	①	24.5	24.0	24.0	24.0	24.2	24.0	24.0
	pH	7.7	X	7.8	X	X	X	X	7.7
	DO (mg/L)	8.2	7.2	7.5	7.9			7.3	7.2
	Conductivity	300	X	310	X	X	X	X	350
18273	T (°C)	23.2	24.1	24.0	23.8	24.0	—	—	—
	pH	7.7	X	7.6	X	X	X	X	—
	DO (mg/L)	6.3	5.6	6.6	7.5			—	—
	Conductivity	600	X	380	X	X	X	X	—
18274	T (°C)	24.5	24.7	23.9	24.1	24.1	24.6	23.4	24.0
	pH	7.8	X	7.7	X	X	X	X	7.7
	DO (mg/L)	8.3	7.2	7.2	7.6			7.4	7.1
	Conductivity	310	X	320	X	X	X	X	360
18275	T (°C)	23.9	24.7	23.6	24.3	24.0	23.5	23.3	23.8
	pH	7.7	X	7.7	X	X	X	X	7.6
	DO (mg/L)	7.1	5.7	6.7	7.1			6.3	6.1
	Conductivity	500	X	440	X	X	X	X	420
	Init./Date:	~~10/31~~ JG	~~11/1~~ JG	~~11/2~~ JG	11/3	~~11/4~~ JG	11/5 jm	11/6 jm	~~11/7~~ JG

Comments ① Not recorded JW

Review J Date 1/8/01

Laboratory: Aquatic Biological Sciences, Inc. Willison, Vermont

Ppsedpkg

Fathead minnow (*Pimephales promelas*) Overlying Water Environmental Monitoring

Client: MENZIE CURA	Project: 00049 Sauget Sed. Assessment	SDG: 4806

Sample	Parameter	0	1	2	3	4	5	6	7
18276	T (°C)	24.3	24.4	23.9	23.8	24.2	24.4	24.0	23.8
	pH	7.6	X	7.8	X	X	X	X	7.7
	DO (mg/L)	4.9	5.6	6.7	7.7			6.4	6.4
	Conductivity	550	X	400	X	X	X	X	400
18277	T (°C)	24.0	23.2	23.8	(1) 19.0	24.0	24.4	23.6	24.1
	pH	7.6	X	7.8	X	X	X	X	7.7
	DO (mg/L)	5.0	6.0	6.4	7.4			6.5	6.5
	Conductivity	500	X	400	X	X	X	X	400
18278	T (°C)	23.6	(1) 22.8	23.6	19.1	24.9	24.2	24.1	24.0
	pH	7.8	X	7.8	X	X	X	X	7.8
	DO (mg/L)	7.3	6.7	6.8	7.6			6.8	6.5
	Conductivity	430	X	390	X	X	X	X	400
18296	T (°C)	24.3	23.7	23.5	24.4	24.1	24.9	24.0	24.2
	pH	7.8	X	7.8	X	X	X	X	7.7
	DO (mg/L)	6.7	6.7	6.8	7.0			7.1	6.8
	Conductivity	380	X	390	X	X	X	X	390
	Init./Date:	10/31 JG	11/1 JG	11/2 JG	11/3 [illegible]	11/4 JG	11/5 JM	11/6 JM	11/7 JG

Comments: (1) Increase water bath temperature setting. JW 11/1/00
(1) Heater found unplugged, plugged in again [illegible]

Review [illegible] Date 1/8/01
Laboratory: Aquatec Biological Sciences, Inc. Willison, Vermont

Ppsedpkg

Fathead minnow (*Pimephales promelas*) Overlying Water Environmental Monitoring

Client: MENZIE CURA	Project: 00049 Sauget Sed. Assessment	SDG: 4806

Sample	Parameter	0	1	2	3	4	5	6	7	
18297	T (°C)	24.5	24.0	23.9	24.1	24.0	24.2	23.9	24.3	
	pH	7.9	X	7.7	X	X	X	X	7.7	
	DO (mg/L)	8.1	6.8	7.0	7.3			7.0	6.8	
	Conductivity	390	X	360	X	X	X	X	390	
18298	T (°C)	24.3	23.4	23.5	24.5	24.1	23.7	23.1	23.9	
	pH	7.7	X	7.7	X	X	X	X	7.6	
	DO (mg/L)	7.0	5.9	6.0	7.5			6.6	6.0	
	Conductivity	410	X	385	X	X	X	X	~~350~~	JG 430
18305	T (°C)	24.5	23.0	23.5	24.0	23.9	23.9	23.2	24.1	
	pH	7.8	X	7.7	X	X	X	X	7.9	
	DO (mg/L)	7.0	6.3	6.0	7.7			6.0	5.9	
	Conductivity	440	X	390	X	X	X	X	~~480~~	JG 430
	T (°C)									
	pH		X		X	X	X	X		
	DO (mg/L)									
	Conductivity		X		X	X	X	X		
	Init./Date:	10/31 JG	11/1 JG	11/2 JG	11/3 RB	11/4 JG	11/5 JM	11/6 JM	11/7 JG	

Comments:

Review. Date 1/8/01

Laboratory: Aquatec Biological Sciences, Inc. Willison, Vermont

Ppsedpkg

Menzie Lura Sawyer - Day 0 P.P.

Alkalinity and Hardness

Sample Number	Type	Collection Date	Alkalinity Volume (ml)	Initial Titrant	Final Titrant	Alkalinity (mg/l)	Hardness Volume (ml)	Initial Titrant	Final Titrant	Hardness (mg/l)
18288	PP	10/31/00	50	23.8	25	24.0	50	5	10.8	116.0
18299	PP	10/31/00	50	25	26	20.0	50	10.8	16.6	116.0
~~18230~~ 18231	PP	10/31/00	50	26	29	60.0	50	16.6	27.1	210.0
18271	PP	10/31/00	50	29	29.9	18.0	50	27.1	32.1	100.0
18272	PP	10/31/00	50	29.9	31.1	24.0	50	32.1	38	118.0
18273	PP	10/31/00	50	31.1	33.7	52.0	50	38	47.4	188.0
18274	PP	10/31/00	50	33.7	34.9	24.0	50	1.2	6.8	112.0
18275	PP	10/31/00	50	34.9	38.7	76.0	50	6.8	6.8	0.0
18276	PP	10/31/00	50	38.7	41.5	56.0	50	6.8	6.8	0.0
18277	PP	10/31/00	50	41.5	44.3	56.0	50	6.8	6.8	0.0
18278	PP	10/31/00	50	44.5	46.7	44.0	50	19.1	19.1	0.0
18296	PP	10/31/00	50	0	1.9	38.0	50	19.5	27.5	160.0
18297	PP	10/31/00	50	1.9	3.5	32.0	50	27.5	35.2	154.0
18298	PP	10/31/00	50	3.5	6.5	60.0	50	35.2	35.2	0.0
18305	PP	10/31/00	50	6.6	10.1	70.0	50	35.2	35.2	0.0

M.C Sauget
P.P. Day 7

Alkalinity and Hardness

Sample Number	Type	Collection Date	Alkalinity Volume (ml)	Initial Titrant	Final Titrant	Alkalinity (mg/l)	Hardness Volume (ml)	Initial Titrant	Final Titrant	Hardness (mg/l)
18228	PP	11/7/00	50	24.5	26	30.0	50	0.6	6.3	114.0
18229	PP	11/7/00	50	26	27.6	32.0	50	6.3	12.1	116.0
~~18230~~ 18231	PP	11/7/00	50	27.6	30.7	62.0	50	12.1	22.4	206.0
18271	PP	11/7/00	50	30.7	32.3	32.0	50	22.4	28	112.0
18272	PP	11/7/00	50	32.3	33.8	30.0	50	28	33.6	112.0
18274	PP	11/7/00	50	33.8	35.3	30.0	50	33.6	39.5	118.0
18275	PP	11/7/00	50	35.3	37.9	52.0	50	39.5	47.2	154.0
18276	PP	11/7/00	50	37.9	40	42.0	50	0.2	7.1	138.0
18277	PP	11/7/00	50	40	41.9	38.0	50	7.1	13.7	132.0
18278	PP	11/7/00	50	41.9	44	42.0	50	13.7	21	146.0
18296	PP	11/7/00	50	0.3	2.3	40.0	50	21	27.5	130.0
18297	PP	11/7/00	50	2.3	4	34.0	50	27.5	33.7	124.0
18298	PP	11/7/00	50	4	6.9	58.0	50	33.7	42.6	178.0

N.C. Sauget
P.P. Day 7

Alkalinity and Hardness

Sample Number	Type	Collection Date	Alkalinity Volume (ml)	Initial Titrant	Final Titrant	**Alkalinity (mg/l)**	Hardness Volume (ml)	Initial Titrant	Final Titrant	**Hardness (mg/l)**
18305	PP	11/7/00	50	6.9	9.6	**54.0**	50	2.2	10.9	**174.0**

Peak	Cup	Name	Type	Dil	Wt	Height	Calc. (mg/L)	Flags
55	32	16622HA27	U	1	1	50817	0.236212	
56	33	16623HA27	U	1	1	50304	0.233728	
[redacted]	34	16624HA27	U	1	1	43272	0.199644	
[redacted]	35	16685HA27	U	1	1	44441	0.205312	
59	36	16691HA27	U	1	1	50914	0.236685	
60	37	16727HA27	U	1	1	43247	0.199523	
61	38	17742HA27	U	1	1	55125	0.257094	
62	5	CCV (4) Correction - should be	U	1	1	1037877	5.020234	
63	1	CCB L.P. on	U	1	1	2913	0.004034	
B	0	Baseline	RB	1	1	0	-0.010084	BL
65	61	18228PP0	U	1	1	-9079	-0.054086	LO
66	62	18229PP0	U	1	1	4662	0.012514	
67	63	18230PP0	U	1	1	176497	0.845351	
68	64	18271PP0	U	1	1	-7852	-0.048142	LO
69	65	18272PP0	U	1	1	44260	0.204431	
70	66	18273PP0	U	1	1	203838	0.977864	
71	67	18274PP0	U	1	1	91117	0.431537	
72	68	18275PP0	U	1	1	1938868	9.387097	
73	69	18276PP0	U	1	1	445973	2.151428	
74	70	18277PP0	U	1	1	424342	2.046588	
75	5	CCV	U	1	1	1047728	5.067979	
76	1	CCB	U	1	1	2417	0.001630	
B	0	Baseline	RB	1	1	0	-0.010084	BL
78	71	18278PP0	U	1	1	81605	0.385433	
79	72	18296PP0	U	1	1	94775	0.449266	
80	73	18297PP0	U	1	1	70811	0.333116	
81	74	18298PP0	U	1	1	689744	3.332922	
82	75	18305PP0	U	1	1	665373	3.214804	
[redacted]	76	18228HA0	U	1	1	541	-0.007463	LO
84	77	18229HA0	U	1	1	-730	-0.013620	LO
85	78	18230HA0	U	1	1	150823	0.720914	
86	79	18271HA0	U	1	1	104	-0.009582	LO
87	80	18272HA0	U	1	1	55341	0.258138	
88	5	CCV	U	1	1	1054297	5.099815	
89	1	CCB	U	1	1	2817	0.003568	
B	0	Baseline	RB	1	1	0	-0.010084	BL
91	81	18273HA0	U	1	1	233251	1.120423	
92	82	18274HA0	U	1	1	88486	0.418782	
93	83	18275HA0	U	1	1	1933199	9.359619	
94	84	18276HA0	U	1	1	383934	1.850741	
95	85	18277HA0	U	1	1	370180	1.784079	
96	86	18278HA0	U	1	1	56500	0.263757	
97	87	18296HA0	U	1	1	153548	0.734121	
98	88	18297HA0	U	1	1	66521	0.312324	
99	89	18298HA0	U	1	1	576358	2.783373	
100	90	18305HA0	U	1	1	603239	2.913656	
101	5	CCV	U	1	1	1058191	5.118690	
102	1	CCB	U	1	1	3508	0.006920	
B	0	Baseline	RB	1	1	0	-0.010084	BL
104	91	18228PP7	U	1	1	8441	0.030828	
105	92	18229PP7	U	1	1	-7459	-0.046234	LO
106	93	18230PP7	U	1	1	111178	0.528768	
107	94	18271PP7	U	1	1	-1501	-0.017360	LO
108	95	18272PP7	U	1	1	-5366	-0.036093	LO
[redacted]	96	18274PP7	U	1	1	14247	0.058969	
110	97	18275PP7	U	1	1	531894	2.567868	
111	98	18276PP7	U	1	1	-1107	-0.015450	LO
112	99	18277PP7	U	1	1	-2983	-0.024543	LO
113	100	18278PP7	U	1	1	-539	-0.012697	LO

Peroxide - Day 0 — T. ammonia (mg/L)

Peroxide - Day 7 — T. ammonia Day 7

Peak	Cup	Name	Type	Dil	Wt	Height	Calc. (mg/L)	Flags
114	5	CCV	U	1	1	1048020	5.069395	
115	1	CCB	U	1	1	1351	-0.003534	LO
	0	Baseline	RB	1	1	0	-0.010084	BL
117	101	18296PP7	U	1	1	44554	0.205858	
118	102	18297PP7	U	1	1	178183	0.853524	
119	103	18298PP7	U	1	1	2119	0.000188	
120	104	18305PP7	U	1	1	3132	0.005098	
121	105	18420HA0	U	1	1	16904	0.071846	
122	106	18421HA0	U	1	1	28779	0.129399	
123	107	18422HA0	U	1	1	28030	0.125768	
124	108	18423HA0	U	1	1	47579	0.220517	
125	109	18424HA0	U	1	1	85981	0.406642	
126	110	18077	U	1	1	-2494	-0.022171	LO
127	5	CCV	U	1	1	1043760	5.048745	
128	1	CCB	U	1	1	3413	0.006460	
E	0	Baseline	RB	1	1	0	-0.010084	BL

Sediment Characterization

Project Description: 00049 SDG: 4806
Menzie-Cura Sauget Sediment Assessment

Sample Number	Sediment Visual Characterization
18228	Sand
18229	Sand
18230	EPA artificial control sediment (77% med. and fine sand; 17% kaolinite clay; 5% 0.5 mm-sieved peat; 1% CaCO3). Stored dry, then hydrated prior to addition to test chambers.
18271	Sand
18272	Coarse sand
18273	Sand, VOC odor, extra replicate for VOC analysis
18274	Coarse sand
18275	Soft mud, sulfide odor
18276	Sand, gravel, mud. Some pebbles
18277	Sand, gravel, some mud
18278	Sand, gravel, some pebbles
18296	Sand
18297	Sand, extra replicate for VOC analysis
18298	Mud
18305	Mud, organic debris

Sediments were loaded into test beakers on 10/30/00. Nominal 150 mL sediment per beaker covered with approximately 125 mL overlying water. All replicates for *Hyalella azteca* and *Pimephales promelas* chronic tests were loaded and allowed to sit overnight without overlying water renewal or aeration.

Entered by: jww Date: 10/30/00

Reviewer: _____ Date 1/9/01

Ha28dpkg

Laboratory: Aquatec Biological Sciences, Inc. Williston, Vermont

DAILY CHECKLIST FOR AUTOMATED DELIVERY
SEDIMENT TOXICITY TESTS

Week of October 29, 2000

ACTIVITY / DAY	Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Prior to noon fill reservoirs			✓	✓		✓	✓
Noon delivery cycle			MANUAL RENEWAL	MANUAL Renewal	MANUAL Renewal		
• splitter boxes filling?			1500	1600	1430	11:00	12:00 ✓
• syringes filling?			✓	✓	✓	✓	✓
• needles flowing?			✓	✓	✓	✓	✓
• beaker screens clear, flowing?			✓	✓	✓	✓	✓
• drainage to waste ok?			✓	✓	✓	✓	✓
• empty waste buckets?					✓	✓	✓
Test monitoring							
• test temperature ok?				✓		✓	✓
• D.O. ok?			✓	✓		✓	—
• check for floating organisms			✓	✓	PM	✓	✓
• feeding completed?			✓ H2/PP	AM PP PM H2 PP	Amp ✓ HP ff	✓ H2	AM H2 ✓ PM PP ✓
Additional activities							
Prior to midnight fill reservoirs *	--	--	--	--	--	--	--
Check sediment water supply			✓	✓	✓	✓	✓
Corrective Action / Comments				Incr. Temp to 1 PP w/ 20 bath		Hi ammo recirculated in one water bath ✓	
Initials/Date			JG 10/31/00	JG 11/1/00	JG 11/2/00	JG 11/3 RD 11/3	JG 11/4

Procedure: All operating systems listed above must be checked on a daily basis when sediment toxicity tests are in progress. Corrective action must be taken whenever appropriate. Document corrective action on this form. If project-specific documentation is required, write a brief description (on Project Documentation form) and include with the test data package.

Comments: * One daily renewal
Hydrolab distributed 10/31/00 1615
Ipromelz distributed 10/31/00 1630

Reviewer: _____ Date 12/20/00

Laboratory: Aquatec Biological Sciences, Inc. Williston, Vermont

DAILY CHECKLIST FOR AUTOMATED DELIVERY
SEDIMENT TOXICITY TESTS

Week of November 5, 2000

ACTIVITY / DAY	Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Prior to noon fill reservoirs	✓	✓	✓	✓	✓	✓	✓
Noon delivery cycle	Manual @ 11:30	Manual @ 11:30				Manual @ 11:20	
• splitter boxes filling?	✓	✓	✓	✓	✓	✓	✓
• syringes filling?	✓	✓	✓	✓	✓	✓	✓
• needles flowing?	✓	✓	✓	✓	✓	✓	✓
• beaker screens clear, flowing?	✓	✓	✓	✓	✓	✓	✓
• drainage to waste ok?	✓	✓	✓	✓	✓	✓	✓
• empty waste buckets?	✓	✓	✓	✓	✓	✓	✓
Test monitoring							
• test temperature ok?	✓	✓ ①	✓	✓	✓	✓	✓
• D.O. ok?	—	✓	—	✓	—	✓	—
• check for floating organisms	✓	✓	✓	✓	✓	✓	✓
• feeding completed?	Pumps programmed for 11:30		✓	✓	✓	✓	✓
Additional activities							
Prior to midnight fill reservoirs *	--	--	--	--	--	--	--
Check sediment water supply	✓	✓	✓	✓	✓	✓	✓
Corrective Action / Comments							
Initials/Date	11/5 jm	11/6 jm	JG 11/7	jm 11/8	JG 11/9	JG 11/10	JG 11/11

Procedure: All operating systems listed above must be checked on a daily basis when sediment toxicity tests are in progress. Corrective action must be taken whenever appropriate. Document corrective action on this form. If project-specific documentation is required, write a brief description (on Project Documentation form) and include with the test data package.

Comments: * One daily renewal

① Increased curt temp on P.p. sed. tests 11/6 jm

Reviewer: _____ Date 12/20/00

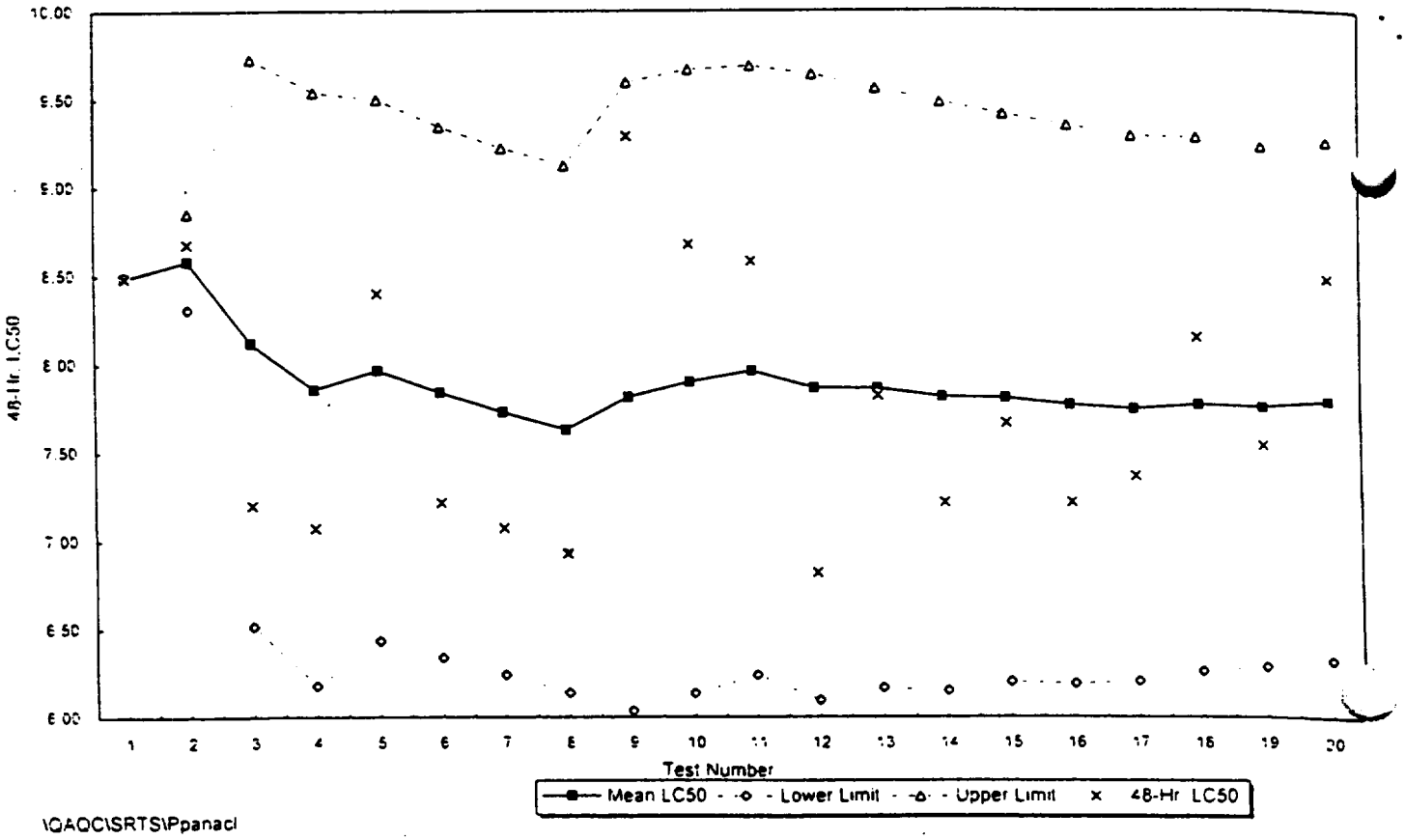
Laboratory: Aquatec Biological Sciences, Inc. Williston, Vermont

Ha28dpkg

Standard Reference Toxicant Control Charts

Reference Toxicant Control Chart
Pimephales promelas
in Sodium chloride (g/L)

Test Number	Test Date	Organism Age (Days)	48-Hr. LC50	Mean LC50	Lower Limit	Upper Limit	Organism Source
1	10/05/99	1	8.485	8.49			Aquatic Bio Systems
2	11/02/99	1	8.677	8.58	8.31	8.85	Aquatic Bio Systems
3	12/10/99	2	7.2	8.12	6.51	9.73	Aquatic Bio Systems
4	01/12/00	2	7.07	7.86	6.18	9.54	Aquatic Bio Systems
5	02/22/00	1	8.398	7.97	6.43	9.50	Aquatic Bio Systems
6	03/15/00	2	7.215	7.84	6.34	9.34	Aquatic Bio Systems
7	04/04/00	1	7.07	7.73	6.24	9.22	Aquatic Bio Systems
8	05/04/00	13	6.928	7.63	6.14	9.12	Aquatic Bio Systems
9	05/29/00	1	9.29	7.81	6.03	9.60	Aquatec Biological Sciences
10	06/02/00	3	8.677	7.90	6.14	9.67	Aquatec Biological Sciences
11	06/03/00	2	8.581	7.96	6.24	9.69	Aquatec Biological Sciences
12	06/04/00	2	6.818	7.87	6.10	9.64	Aquatec Biological Sciences
13	06/07/00	2	7.824	7.86	6.17	9.56	Aquatec Biological Sciences
14	06/11/00	2	7.215	7.82	6.15	9.48	Aquatec Biological Sciences
15	07/13/00	3	7.667	7.81	6.20	9.42	Aquatec Biological Sciences
16	08/24/00	2	7.215	7.77	6.19	9.35	Aquatec Biological Sciences
17	09/13/00	2	7.363	7.75	6.20	9.29	Aquatic Bio Systems
18	10/18/00	2	8.148	7.77	6.26	9.28	Aquatic Bio Systems
19	11/01/00	2	7.539	7.76	6.29	9.23	Aquatic Bio Systems
20	12/13/00	7	8.485	7.79	6.33	9.26	Aquatic Bio Systems



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DAPHNID AND FATHEAD MINNOW
SURFACE WATER TOXICITY TESTS
LABORATORY REPORTS

Aquatec Biological Sciences

Ecology | Environmental Toxicology | Natural Resource Assessments | Microbiology

January 17, 2001

Ted Wickwire, Ph.D.
Menzie-Cura & Associates
1 Courthouse Lane
Chelmsford, Massachusetts 01824

Dear Dr. Wickwire:

Enclosed please find the report (two unbound copies) and electronic data deliverable (EDD) for daphnid, *Ceriodaphnia dubia*, and fathead minnow, *Pimephales promelas*, Sauget surface water screening toxicity assessment.

Sincerely,

John Williams
Manager, Environmental Toxicology

273 Commerce Street, Williston, VT 05495 Tel: 802.860.1638 Fax: 802.658.3189

Aquatec Biological Sciences

Ecology | Environmental Toxicology | Natural Resource Assessments | Microbiology

Toxicity Summary Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/17/01
Project: 00049
SDG: 4805
Site: Sauget

Method: 1000.0 Screen *Pimephales promelas*

Number	Sample Name	A-NOEC (%)	C-NOEC (%)
18220	SW UDA 11	100	100
18221	SW DDA 13	100	<100
18267	SW-PDA-7	100	100
18268	SW-PDA-6	100	100
18269	SW-PDA-5	100	100
18270	SW-PDA-10	100	100
18279	SW-PDA-2	100	100
18280	SW-PDA-2 FD	100	100
18281	SW-PDA-3	100	100
18282	SW-PDA-4	100	100
18299	SW-PDA-8	100	100
18300	SW-PDA-8 FD	100	100
18301	SW-PDA-9	100	100
18302	SW-UDA-12	100	100
18304	SW-DDA-1	100	<100

A statistically significant reduction in the response (relative to the corresponding control) was reported as <100.

273 Commerce Street, Williston, VT 05495 Tel: 802.860.1638 Fax: 802.658.3189

Aquatec Biological Sciences

Ecology | Environmental Toxicology | Natural Resource Assessments | Microbiology

Toxicity Summary Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/17/01
Project: 00049
SDG: 4805
Site: Sauget

Method: 1002.0 Screen *Ceriodaphnia dubia*

Number	Sample Name	A-NOEC (%)	C-NOEC (%)
18220	SW UDA 11	100	100
18221	SW DDA 13	100	100
18267	SW-PDA-7	100	100
18268	SW-PDA-6	100	100
18269	SW-PDA-5	100	<100
18270	SW-PDA-10	100	100
18279	SW-PDA-2	<100	<100
18280	SW-PDA-2 FD	<100	<100
18281	SW-PDA-3	<100	<100
18282	SW-PDA-4	<100	<100
18299	SW-PDA-8	100	<100
18300	SW-PDA-8 FD	100	<100
18301	SW-PDA-9	100	<100
18302	SW-UDA-12	100	100
18304	SW-DDA-1	100	100

A statistically significant reduction in the response (relative to the corresponding control) was reported as <100.

273 Commerce Street, Williston, VT 05495 Tel: 802.860.1638 Fax: 802.658.3189

Aquatec Biological Sciences

Ecology | Environmental Toxicology | Natural Resource Assessments | Microbiology

Toxicity Summary Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/17/01
Project: 00049
SDG: 4805
Site: Sauget

Samples Received

Number	Sample Name	Date / Time Collected		Type
018220	SW UDA 11	10/23/00	14:25	Surface Water
018221	SW DDA 13	10/23/00	9:50	Surface Water
018267	SW-PDA-7	10/24/00	8:50	Surface Water
018268	SW-PDA-6	10/24/00	10:30	Surface Water
018269	SW-PDA-5	10/24/00	14:05	Surface Water
018270	SW-PDA-10	10/24/00	15:10	Surface Water
018279	SW-PDA-2	10/25/00	9:05	Surface Water
018280	SW-PDA-2 FD	10/25/00	9:05	Surface Water
018281	SW-PDA-3	10/25/00	11:35	Surface Water
018282	SW-PDA-4	10/25/00	14:50	Surface Water
018299	SW-PDA-8	10/26/00	9:25	Surface Water
018300	SW-PDA-8 FD	10/26/00	9:50	Surface Water
018301	SW-PDA-9	10/26/00	11:38	Surface Water
018302	SW-UDA-12	10/26/00	14:50	Surface Water
018304	SW-DDA-1	10/27/00	9:55	Surface Water

Submitted By:

273 Commerce Street, Williston, VT 05495 Tel: 802.860.1638 Fax: 802.658.3189

Aquatec Biological Sciences

Ecology | Environmental Toxicology | Natural Resource Assessments | Microbiology

Menzie-Cura & Associates		Date:	1/17/01
1 Courthouse Lane		Project:	00049
		SDG:	4805
Chelmsford, MA	01824	Site:	Sauget

Special Conditions and Qualifiers

Test replicates for Samples 18300 (SW-PDA-FD) and 18304 (SW-DDA-1) of the Pimephales promelas screening tests had variable survival (two replicates with low survival and two replicates with high survival). When testing ambient waters, we have observed that some replicates may develop a bacterial or fungal growth that apparently can affect survival in a particular replicate while other replicates of the same sample are unaffected. The survival response for Sample 18300 was not significantly less than the control, while the survival response for Sample 18304 was statistically less than the control. It is unclear whether the chemical characteristics or biological factors associated with Sample 18304 resulted in the reduced survival.

273 Commerce Street, Williston, VT 05495 Tel: 802.860.1638 Fax: 802.658.3189

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/17/2001
Project: 00049
SDG: 4805
Site: Sauget

Sample ID: 18220 SW UDA 11

Method: 1000.0 Screen *Pimephales promelas*

Response: Survival (%)

Day	Control	100 %
2	98.33	100
7	98.33	96.67

Response: Growth (mean dry weight in milligrams)

Day	Control	100 %
End	0.293	0.300

Method: 1002.0 Screen *Ceriodaphnia dubia*

Response: Survival (%)

Day	Control	100 %
2	100	100
7	100	100

Response: Reproduction (mean neonates per female)

Day	Control	100 %
End	20.5	22

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/17/2001
Project: 00049
SDG: 4805
Site: Sauget

Sample ID: 18221 SW DDA 13

Method: 1000.0 Screen *Pimephales promelas*

Response: Survival (%)

Day	Control	100 %
2	98.33	90
7	98.33	65

Response: Growth (mean dry weight in milligrams)

Day	Control	100 %
End	0.293	0.255

Method: 1002.0 Screen *Ceriodaphnia dubia*

Response: Survival (%)

Day	Control	100 %
2	100	100
7	100	100

Response: Reproduction (mean neonates per female)

Day	Control	100 %
End	20.5	18.6

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/17/2001
Project: 00049
SDG: 4805
Site: Sauget

Sample ID: 18267 SW-PDA-7

Method: 1000.0 Screen *Pimephales promelas*

Response: Survival (%)

Day	Control	100 %
2	98.33	100
7	98.33	100

Response: Growth (mean dry weight in milligrams)

Day	Control	100 %
End	0.301	0.3

Method: 1002.0 Screen *Ceriodaphnia dubia*

Response: Survival (%)

Day	Control	100 %
2	100	100
7	90	100

Response: Reproduction (mean neonates per female)

Day	Control	100 %
End	25.5	21.7

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/17/2001
Project: 00049
SDG: 4805
Site: Sauget

Sample ID: 18268 SW-PDA-6

Method: 1000.0 Screen *Pimephales promelas*

Response: Survival (%)

Day	Control	100 %
2	98.33	98.33
7	98.33	96.67

Response: Growth (mean dry weight in milligrams)

Day	Control	100 %
End	0.301	0.298

Method: 1002.0 Screen *Ceriodaphnia dubia*

Response: Survival (%)

Day	Control	100 %
2	100	100
7	90	100

Response: Reproduction (mean neonates per female)

Day	Control	100 %
End	25.5	27

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/17/2001
Project: 00049
SDG: 4805
Site: Sauget

Sample ID: 18269 SW-PDA-5

Method: 1000.0 Screen *Pimephales promelas*

Response: Survival (%)

Day	Control	100 %
2	98.33	100
7	98.33	100

Response: Growth (mean dry weight in milligrams)

Day	Control	100 %
End	0.301	0.304

Method: 1002.0 Screen *Ceriodaphnia dubia*

Response: Survival (%)

Day	Control	100 %
2	100	100
7	90	90

Response: Reproduction (mean neonates per female)

Day	Control	100 %
End	25.5	0.8

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/17/2001
Project: 00049
SDG: 4805
Site: Sauget

Sample ID: 18270 SW-PDA-10

Method: 1000.0 Screen *Pimephales promelas*

Response: Survival (%)

Day	Control	100 %
2	98.33	98.33
7	98.33	98.33

Response: Growth (mean dry weight in milligrams)

Day	Control	100 %
End	0.301	0.297

Method: 1002.0 Screen *Ceriodaphnia dubia*

Response: Survival (%)

Day	Control	100 %
2	100	100
7	90	100

Response: Reproduction (mean neonates per female)

Day	Control	100 %
End	25.5	21.8

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/17/2001
Project: 00049
SDG: 4805
Site: Sauget

Sample ID: 18279 SW-PDA-2

Method: 1000.0 Screen *Pimephales promelas*

Response: Survival (%)

Day	Control	100 %
2	100	100
7	100	90

Response: Growth (mean dry weight in milligrams)

Day	Control	100 %
End	0.298	0.298

Method: 1002.0 Screen *Ceriodaphnia dubia*

Response: Survival (%)

Day	Control	100 %
2	100	0
7	100	0

Response: Reproduction (mean neonates per female)

Day	Control	100 %
End	26.2	0

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/17/2001
Project: 00049
SDG: 4805
Site: Sauget

Sample ID: 18280 SW-PDA-2 FD

Method: 1000.0 Screen *Pimephales promelas*

Response: Survival (%)

Day	Control	100 %
2	100	100
7	100	98.33

Response: Growth (mean dry weight in milligrams)

Day	Control	100 %
End	0.298	0.305

Method: 1002.0 Screen *Ceriodaphnia dubia*

Response: Survival (%)

Day	Control	100 %
2	100	0
7	100	0

Response: Reproduction (mean neonates per female)

Day	Control	100 %
End	26.2	0

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/17/2001
Project: 00049
SDG: 4805
Site: Sauget

Sample ID: 18281 SW-PDA-3

Method: 1000.0 Screen *Pimephales promelas*

Response: Survival (%)

Day	Control	100 %
2	100	100
7	100	96.55

Response: Growth (mean dry weight in milligrams)

Day	Control	100 %
End	0.298	0.321

Method: 1002.0 Screen *Ceriodaphnia dubia*

Response: Survival (%)

Day	Control	100 %
2	100	40
7	100	20

Response: Reproduction (mean neonates per female)

Day	Control	100 %
End	26.2	0.3

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/17/2001
Project: 00049
SDG: 4805
Site: Sauget

Sample ID: 18282 SW-PDA-4

Method: 1000.0 Screen *Pimephales promelas*

Response: Survival (%)

Day	Control	100 %
2	100	100
7	100	98.33

Response: Growth (mean dry weight in milligrams)

Day	Control	100 %
End	0.298	0.321

Method: 1002.0 Screen *Ceriodaphnia dubia*

Response: Survival (%)

Day	Control	100 %
2	100	20
7	100	10

Response: Reproduction (mean neonates per female)

Day	Control	100 %
End	26.2	0

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/17/2001
Project: 20049
SDG: 4805
Site: Sauget

Sample ID: 18299 SW-PDA-8

Method: 1000.0 Screen *Pimephales promelas*

Response: Survival (%)

Day	Control	100 %
2	100	100
7	100	98.33

Response: Growth (mean dry weight in milligrams)

Day	Control	100 %
End	0.326	0.329

Method: 1002.0 Screen *Ceriodaphnia dubia*

Response: Survival (%)

Day	Control	100 %
2	100	100
7	100	90

Response: Reproduction (mean neonates per female)

Day	Control	100 %
End	22.4	13.7

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/17/2001
Project: 20049
SDG: 4805
Site: Sauget

Sample ID: 18300 SW-PDA-8 FD

Method: 1000.0 Screen *Pimephales promelas*

Response: Survival (%)

Day	Control	100 %
2	100	100
7	100	76.67

Response: Growth (mean dry weight in milligrams)

Day	Control	100 %
End	0.326	0.305

Method: 1002.0 Screen *Ceriodaphnia dubia*

Response: Survival (%)

Day	Control	100 %
2	100	100
7	100	100

Response: Reproduction (mean neonates per female)

Day	Control	100 %
End	22.4	18.9

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/17/2001
Project: 20049
SDG: 4805
Site: Sauget

Sample ID: 18301 SW-PDA-9

Method: 1000.0 Screen *Pimephales promelas*

Response: Survival (%)

Day	Control	100 %
2	100	98.33
7	100	98.33

Response: Growth (mean dry weight in milligrams)

Day	Control	100 %
End	0.326	0.323

Method: 1002.0 Screen *Ceriodaphnia dubia*

Response: Survival (%)

Day	Control	100 %
2	100	100
7	100	100

Response: Reproduction (mean neonates per female)

Day	Control	100 %
End	22.4	15.4

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/17/2001
Project: 20049
SDG: 4805
Site: Sauget

Sample ID: 18302 SW-UDA-12

Method: 1000.0 Screen *Pimephales promelas*

Response: Survival (%)

Day	Control	100 %
2	100	100
7	100	95

Response: Growth (mean dry weight in milligrams)

Day	Control	100 %
End	0.326	0.313

Method: 1002.0 Screen *Ceriodaphnia dubia*

Response: Survival (%)

Day	Control	100 %
2	100	100
7	100	100

Response: Reproduction (mean neonates per female)

Day	Control	100 %
End	22.4	20.4

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/17/2001
Project: 00049
SDG: 4805
Site: Sauget

Sample ID: 18304 SW-DDA-1

Method: 1000.0 Screen *Pimephales promelas*

Response: Survival (%)

Day	Control	100 %
2	98.33	96.67
7	98.33	68.33

Response: Growth (mean dry weight in milligrams)

Day	Control	100 %
End	0.304	0.24

Method: 1002.0 Screen *Ceriodaphnia dubia*

Response: Survival (%)

Day	Control	100 %
2	100	100
7	100	100

Response: Reproduction (mean neonates per female)

Day	Control	100 %
End	23.5	20.8

Supportive Documentation

Toxicity Test Methods

Chain-Of-Custody

Daphnid, Ceriodaphnia dubia Survival and Reproduction Screen

Fathead Minnow, Pimephales promelas Larval Survival and Growth Screen

Standard Reference Toxicant Control Charts

Toxicity Test Methods

Client: MENZIE-CURA SAUGET **SDG: 4805**

Test Description: Daphnid, *Ceriodaphnia dubia* acute / chronic survival and reproduction

ASSOCIATED PROTOCOL: EPA 1994. *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/600/4-91/003) Method 1002.0 Screen

1. Test type:	Static, daily renewal
2. Test temperature:	25 ± 1°C
3. Light quality:	Ambient laboratory illumination
4. Photoperiod:	16 h light, 8 h dark
5. Test chamber size:	30 ml
6. Test solution volume:	15-20 ml/replicate
7. Renewal of test concentrations:	Daily
8. Age of test organisms:	Less than 24 h; released within an 8 h period
9. No. organisms/test chamber:	1
10. No. of replicate chamber / concentration:	10
11. No. of organisms / concentration:	10
12. Feeding regime:	0.1 ml each YTC and algal suspension per exposure chamber daily
13. Cleaning:	Transfer to new test solution and test chamber daily
14. Aeration:	None
15. Dilution water:	None
16. Test concentrations:	100% (undiluted ambient water)
17. Laboratory control:	1:1 mis of reconstituted moderately hard water and Lamoille River (VT) water
18. Test duration:	Until 60% of control females have three broods
19. Monitoring:	Daily temperature, dissolved oxygen, pH, and conductivity. Hardness, alkalinity on each new sample. Biological monitoring daily
19. End points:	Survival (Days 2 and end of test), reproduction
20. Reference toxicant test:	Sodium chloride 48-h LC50
21. Test acceptability (control performance):	80% or greater survival and an average of 15 or more young/female. At least 60% of surviving females must have produced third brood
22. Data interpretation:	Hypothesis test statistics compared to the control (Acute: A-NOEC and Chronic: C-NOEC), P<0.05.

Client: MENZIE-CURA SAUGET **SDG: 4805**

Test Description: Fathead minnow, *Pimephales promelas*, acute / chronic survival and growth

ASSOCIATED PROTOCOL: EPA 1994. *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/600/4-91/003) Method 1000.0 Screen

1. Test type:	Static, daily renewal
2. Test temperature:	25 ± 1°C
3. Light quality:	Ambient laboratory illumination
4. Photoperiod:	16 hr. light, 8 hr. dark
5. Test chamber size:	600 ml
6. Test solution volume:	250 ml/replicate
7. Renewal of test concentrations:	Daily
8. Age of test organisms:	Newly hatched larvae, 24 hours old
9. No. larvae/test chamber:	15
10. No. of replicate chambers / concentration:	4
11. No. of larvae / concentration:	60
12. Feeding regime:	0.15 ml *Artemia* nauplii twice daily, 6 hrs. between feedings. Not fed on Day 7
13. Cleaning:	Siphon daily, during test solution renewal
14. Aeration:	None, unless dissoved oxygen drops below 40% of saturation
15. Dilution water:	None
16. Test concentrations:	100% (undiluted ambient water)
17. Laboratory control:	Reconstituted moderately hard water
18. Test duration:	7 days
19. Monitoring:	Daily temperature, dissolved oxygen, pH, and conductivity. Hardness, alkalinity on each new sample. Biological monitoring daily
19. End points:	Survival (Days 2 and 7) and growth (dry weight)
20. Reference toxicant test:	Sodium chloride 48-h LC50
21. Test acceptability (control performance):	80% or greater survival: minimum average dry weight of 0.25 mg
22. Data interpretation:	Hypothesis test statistics compared to the control (Acute: A-NOEC and Chronic: C-NOEC), P<0.05.

Chain-Of-Custody

SDG 48057 Page ___ of ___

Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
TEL: (802) 860-1638
FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Sauget Sed / Water Tox & Macro	Carrier:
Address: 1 Courthouse Lane		
Chelmsford, Massachusetts 01824	Project Number: 00049	Airbill Number:
Telephone: (978) 322-2824	Sampler Name(s):	
Facsimile: (978) 453-7260		Date Shipped:
Contact Name: Ted Wickwire		
	Quote #: 10/18/00 Client Code: MENCUR7	Hand Delivered: ___Yes ___No

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)	NUMBER OF CONTAINERS
SW UDA 11	10/23	1425	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	4°C plastic 2.5 gal	1
SW DDA 13	10/23	1550	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth		1
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth		
		9:50			Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth		
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth		
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth		
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth		
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth		

Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*
	10/25/00	1720	
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*
	10/24/00	09:30	Jammy Martin

NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)

Notes to Lab: Ambient temperature of cooler on delivery: 0.3 °C

T000000

SDG: 4805

Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
TEL: (802) 860-1638
FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Sauget Sed / Water Tox & Macro	Carrier:	4°C
Address: 1 Courthouse Lane, Chelmsford, Massachusetts 01824	Project Number: 00049	Airbill Number:	plastic
Telephone: (978) 322-2824	Sampler Name(s):	Date Shipped:	2.5 gal
Facsimile: (978) 453-7260			
Contact Name: Ted Wickwire	Quote #: 10/18/00 Client Code: MENCUR	Hand Delivered: ___Yes ___No	

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	NUMBER OF CONTAINERS	
SW-PDA-7	10/24/00	8:50A	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	1	Temp=0.6°C
SW-PDA-6		10:30A	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	1	Temp=0.6
SW-PDA-5		14:05	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	1	Temp=2.6
SW-PDA-10	↓	15:10	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	1	Temp=2.6
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth		
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth		
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth		
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth		

Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*
Ted Wickwire	10/24/00	17:10	Philip Downey 10/25/00
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)* 10:15
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*

NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)

Notes to Lab: Ambient temperature of cooler on delivery: °C

Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
TEL: (802) 860-1638
FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Sauget Sed / Water Tox & Macro	Carrier:	4°C
Address: 1 Courthouse Lane	Project Number: 00049	Airbill Number:	plastic
Chelmsford, Massachusetts 01824	Sampler Name(s):	Date Shipped:	2.5 gal
Telephone: (978) 322-2824			
Facsimile: (978) 453-7260	Quote #: 10/18/00 Client Code: MENCUR	Hand Delivered: ___Yes ___No	
Contact Name: Ted Wickwire			

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	NUMBER OF CONTAINERS
SW-PDA-2	10/25/00	9:05	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	1
SW-PDA-2FD	↓	9:05	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	1
SW-PDA-3		11:35	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	1
SW-PDA-4		14:50	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	1
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	

Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*
Ted W	10/25/00	17:30	
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*
	10/26/00	9:30	Karen Downey
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*

NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)

Notes to Lab: Ambient temperature of cooler on delivery: 0.3°C #1 Cooler
0.4°C #2 Cooler
0.3°C #3 Cooler

Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
TEL: (802) 860-1638
FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Sauget Sed / Water Tox & Macro	Carrier:
Address: 1 Courthouse Lane Chelmsford, Massachusetts 01824	Project Number: 00049	Airbill Number:
Telephone: (978) 322-2824	Sampler Name(s):	Date Shipped:
Facsimile: (978) 453-7260		Hand Delivered: ___Yes ___No
Contact Name: Ted Wickwire	Quote #: 10/18/00 Client Code: MENCUR	

VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)						
4°C						
plastic						
2.5 gal						

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	NUMBER OF CONTAINERS					
SW-PDA-8	10/26/00	9:25	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	1		Temp = 0.5°C			
SW-PDA-8 FD		9:50	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	1		Temp = 0.5°C			
SW-PDA-9		11:38	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	1		Temp = 0.2°C			
SW-UDA-12	↓	14:50	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	1		Temp = 0.3°C			
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth						
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth						
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth						
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth						

Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*
Ted W	10/26/00	17:00	
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*
	10/27/00	10:00	Philip C Dorney
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*

NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)

Notes to Lab: Ambient temperature of cooler on delivery: °C

Page _____ of _____

Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
TEL: (802) 860-1638
FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Sauget Sed / Water Tox & Macro	Carrier:
Address: 1 Courthouse Lane Chelmsford, Massachusetts 01824	Project Number: 00049	Airbill Number:
Telephone: (978) 322-2824	Sampler Name(s):	Date Shipped:
Facsimile: (978) 453-7260		
Contact Name: Ted Wickwire	Quote #: 10/18/00 Client Code: MENCUR	Hand Delivered: ___Yes ___No

VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)						
4°C						
plastic						
2.5 gal						

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	NUMBER OF CONTAINERS
SW-DDA-1	10/27/00	9:55	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	1
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	

00000

Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*
Ted W	10/27/00	15:00	
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*
	10/28	10:00	J. Gallant
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*

NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)

Notes to Lab: Ambient temperature of cooler on delivery: °C

Cooler Temp = 4.3°C

Fathead Minnow, Pimephales promelas Larval Survival and Growth Screen

Site SW UDA II

Aquatec Biological Sciences

Test Date: 10/24/00
Sample Date: 10/23/00
Species: Pimephales promelas
Test Type: Chronic

Test Number: 25817
Test Material: Ambient water %
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.41	.066	
			X	100.000	D	4	1.44	0.000	
Proportion Alive	2	No transformation							
				0.000	D	4	.98	.033	
				100.000	D	4	1.00	0.000	
Proportion Alive	7	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.41	.066	
			X	100.000	D	4	1.38	.122	
Proportion Alive	7	No transformation							
				0.000	D	4	.98	.033	
				100.000	D	4	.97	.067	
Weight		No transformation							
			X	0.000	D	4	.29	.013	
			X	100.000	D	4	.30	.006	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	Arc sine sqrt w/ adj.					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.002	.024
Proportion Alive	7	Arc sine sqrt w/ adj.					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.010	.060
Weight		No transformation					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.000	.014

Site SW UDA-11

Aquatec Biological Sciences

FISH TEST DATA

Test Number: 25817 (x) Chronic ( ) Acute hours
Test Date: 24-Oct-00
Source: SAUGET Test Material: AMB2 (%)

Conc		Rep	Cont. No.	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Weight /Fish
0.00	D	1		15	14						14	.93	.27933
0.00	D	2		15	15						15	1.00	.30467
0.00	D	3		15	15						15	1.00	.26533
0.00	D	4		15	15						15	1.00	.30400
100.00	D	1		15	15						15	1.00	.30733
100.00	D	2		15	15						13	.87	.30267
100.00	D	3		15	15						15	1.00	.29733
100.00	D	4		15	15						15	1.00	.29400

jm 11/29/00

Sample is aac
Site SW UDA 11

Aquatec Biological Sciences

FISH LARVAE TOXICITY TEST

TEST START DATE
October 24, 1900

TEST NUMBER
25817

Conc	Rep	Cont. No.	Number Alive Start	1	2	3	4	5	6	7	# Fish	Tare Wgt.	Total Wgt.
0.00	D	1	15		14					14	15	30.93	35.12
0.00	D	2	15		15					15	15	30.60	35.17
0.00	D	3	15		15					15	15	31.40	35.68
0.00	D	4	15		15					15	15	33.16	37.72
100.00	D	1	15		15					15	15	34.92	39.53
100.00	D	2	15		15					13	15	30.53	35.07
100.00	D	3	15		15					15	15	29.52	33.98
100.00	D	4	15		15					15	15	32.69	37.10

jm
11/29/00

Sample 18221
Site SW DDA 13

Aquatec Biological Sciences

Test Date: 10/24/00
Sample Date: 10/23/00
Species: Pimephales promelas
Test Type: Chronic

Test Number: 25620
Test Material: Ambient water
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.41	.066	
			X	100.000	D	4	1.26	.144	
Proportion Alive	2	No transformation							
				0.000	D	4	.98	.033	
				100.000	D	4	.90	.086	
Proportion Alive	7	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.41	.066	
			X	100.000	D	4	.94	.124	
Proportion Alive	7	No transformation							
				0.000	D	4	.98	.033	
				100.000	D	4	.65	.114	
Weight		No transformation							
			X	0.000	D	4	.29	.013	
				100.000	D	4	.26	.024	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	Arc sine sqrt w/ adj.					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.013	.071
Proportion Alive	7	Arc sine sqrt w/ adj.					
		Wilcoxon test with Bonfe	<100.000	100.000	> 1.00	.010	.060
Weight		No transformation					
		EPA Flowchart (Chronic a					

- GROWTH POINT ESTIMATE -

End Point	P	IC	95% CI
Weight			
	IC 10	76.656	37.27 - 100.00
	IC 25		-
	IC 50		-

Sample Id
Site SW DDA 13

Aquatec Biological Sciences

FISH TEST DATA

Test Number: 25620 (x) Chronic ( ) Acute hours
Test Date: 24-Oct-00
Source: SAUGET Test Material: AME2 (%)

Conc		Rep	Cont. No.	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Weight /Fish
0.00	D	1		15	14						14	.93	.27933
0.00	D	2		15	15						15	1.00	.30467
0.00	D	3		15	15						15	1.00	.28533
0.00	D	4		15	15						15	1.00	.30400
100.00	D	1		15	12						10	.67	.25200
100.00	D	2		15	15						12	.80	.26933
100.00	D	3		15	14						9	.60	.23733
100.00	D	4		15	13						8	.53	.24200

jm 11/29/00

Sample 10dd1
Site SW DDA 13

Aquatec Biological Sciences

FISH LARVAE TOXICITY TEST

TEST START DATE
October 24, 1900

TEST NUMBER
25820

Conc	Rep	Cont. No.	Number Alive Start	1	2	3	4	5	6	7	# Fish	Tare Wgt.	Total Wgt.
0.00	D	1	15		14					14	15	30.93	35.12
0.00	D	2	15		15					15	15	30.60	35.17
0.00	D	3	15		15					15	15	31.40	35.68
0.00	D	4	15		15					15	15	33.16	37.72
100.00	D	1	15		12					10	15	33.20	36.98
100.00	D	2	15		15					12	15	30.62	34.96
100.00	D	3	15		14					9	15	32.04	35.60
100.00	D	4	15		13					8	15	31.50	35.13

JM 11/29

Pimephales promelas Survival and Growth Data

Client: MENZIE-CURA SAUGET **SDG:** 4805

Test Description: *Pimephales promelas* acute / chronic toxicity tests

		Survival Data								Growth Data		
Repl		Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	No. weighed [1]	Initial Boat Wt (mg)	Total Dry Wt (mg)
Lab	A	15	15	15 14	14	14	14	14	14	14	30.93	35.12
Contr	B	15	15	15	15	15	15	15	15	15	30.60	35.17
18225	C	15	15	15	15	15	15	15	15	15	31.40	35.68
	D	15	15	15	15	15	15	15	15	15	33.16	37.72
18220	A	15	15	15	15	15	15	15	15	15	34.92	39.53
C	B	15	15	15	14	14	13	13	13	13	30.53	35.07
	C	15	15	15	15	15	15	15	15	15	29.52	33.98
	D	15	15	15	15	15	15	15	15	15	32.69	37.10
18221	A	15	15	12	10	10	10	10	10	10	33.20	36.98
	B	15	15	15	13	13	13	12	12	12	30.62	34.96
	C	15	15	14	11	10	9	9	9	9	32.04	35.60
	D	15	14	13	11	8	8	8	8	8	31.50	35.13
	A	15										
	B	15										
	C	15										
	D	15										
	A	15										
	B	15										
	C	15										
	D	15										
	A	15										
	B	15										
	C	15										
	D	15										
	A	15										
	B	15										
	C	15										
	D	15										
										Bal QC	Bal QC	
I/D/T		TM 10/24 14:45	TM 10/25 14:00	JM 10/26 13:15	JG 10/27 13:00	JG 10/28 15:30	TM 10/29 13:15	JM 10/30 14:10	TM 10/31	20 mg=20.00	19.98 20 mg=	
Fed AM		—	09:00 TM	08:00 JM	0830 J	09:[illegible] JG	10:30 JM	09:15 JM	Not	20 mg=20.00	19.98 20 mg=	
Fed PM		1730 J	1640 JG	17[illegible] JT	16:30 JG	17:[illegible] JG	17:30 JM	16:30 JM	fed	I/D/T TM 10/30	I/D/T JM 11/1	

[1] The number weighed = the number actually weighed. For statistical purposes, the number weighed = the original number of organisms on Day 0.

Init DWN 10/31 10:5 Temp = 10Z

Aquatec Biological Sciences, Inc. Williston Vermont

Reviewed by: J Date: 1/16/01

CdPpChronic4805

Final (After renewal) Water Chemistry Data

Client: MENZIE-CURA SAUGET **SDG:** 4805

Test Description: *Pimephales promelas* acute / chronic toxicity tests

	Day:	1	2	3	4	5	6	7
Lab Control 17225	pH	7.6	7.5	7.5	7.7	7.5	7.4	7.5
	DO	7.6	7.2	7.3	7.4	7.3	7.3	7.5
	Temp	24.9	25.2	24.9	24.4	23.9	24.5	24.5
	Cond.	280	280	270	280	280	260	280
18220	pH	8.1	8.1	8.0	8.1	8.1	8.1	8.1
	DO	7.2	7.2	7.3	7.4	7.4	7.3	7.5
	Temp	25.0	25.1	24.9	24.3	24.0	24.6	24.4
	Cond.	450	460	460	460	445	450	460
18221	pH	8.2	8.1	8.0	8.1	8.2	8.2	8.2
	DO	7.6	7.2	7.3	7.4	7.4	7.3	7.7
	Temp	24.5	25.2	25.0	24.4	24.0	24.5	24.5
	Cond.	480	500	500	500	480	480	480
	pH							
	DO							
	Temp							
	Cond.							
	pH							
	DO							
	Temp							
	Cond.							
	pH							
	DO							
	Temp							
	Cond.							
	pH							
	DO							
	Temp							
	Cond.							
	Init./Date	jm 10/25	jm 10/26	SG 10/27	SG 10/28	jm 10/29	jm 10/30	jm 10/31

Aquatec Biological Sciences, Inc. Williston Vermont

Reviewed by: _____ Date: 1/16/01

CdPpChronic4805

1300 Blue Spruce Drive, Suite C
Fort Collins, Colorado 80524

Toll Free: 800/331-5916
Tel: 970/484-5091 Fax:970/484-2514

ORGANISM HISTORY

DATE: 10/23/00

SPECIES: Pimephales promelas

AGE: N/A

LIFE STAGE: Embryo

HATCH DATE: 10/23/00

BEGAN FEEDING: N/A

FOOD: N/A

Fish used to start ~~ICP~~ tests

18220
18221

Water Chemistry Record:	Mean	Range
TEMPERATURE:	24 °C	--
SALINITY/CONDUCTIVITY:	--	--
TOTAL HARDNESS (as $CaCO_3$):	132 mg/l	--
TOTAL ALKALINITY (as $CaCO_3$):	80 mg/l	--
pH:	7.96	--

Comments:

Date Rec'd
10/24/00 jm

Temp = 19.8
pH 7.9
DO 12.4
Cond 310

fed ✓

Facility Supervisor

Sample 1020
Site SW-PDA -7

Aquatec Biological Sciences

Test Date: 10/25/00
Sample Date: 10/24/00
Species: Pimephales promelas
Test Type: Chronic

Test Number: 25876
Test Material: Ambient water
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.41	.066	
			X	100.000	D	4	1.44	0.000	
Proportion Alive	2	No transformation							
				0.000	D	4	.98	.033	
				100.000	D	4	1.00	0.000	
Proportion Alive	7	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.41	.066	
			X	100.000	D	4	1.44	0.000	
Proportion Alive	7	No transformation							
				0.000	D	4	.98	.033	
				100.000	D	4	1.00	0.000	
Weight		No transformation							
			X	0.000	D	4	.30	.013	
			X	100.000	D	4	.30	.005	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	Arc sine sqrt w/ adj.					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.002	.024
Proportion Alive	7	Arc sine sqrt w/ adj.					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.002	.024
Weight		No transformation					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.000	.013

Site SW-PDA-

Aquatec Biological Sciences

FISH TEST DATA

Test Number: 25876 (x) Chronic ( ) Acute hours
Test Date: 25-Oct-00
Source: SAUGET Test Material: AMB2 (%)

Conc		Rep	Cont. No.	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Weight /Fish
0.00	D	1		15	14						14	.93	.29533
0.00	D	2		15	15						15	1.00	.29867
0.00	D	3		15	15						15	1.00	.31667
0.00	D	4		15	15						15	1.00	.28533
100.00	D	1		15	15						15	1.00	.30000
100.00	D	2		15	15						15	1.00	.29867
100.00	D	3		15	15						15	1.00	.29400
100.00	D	4		15	15						15	1.00	.30533

jm 12/20/00

Site SW-PDA-7

Aquatec Biological Sciences

FISH LARVAE TOXICITY TEST

TEST START DATE
October 25, 1900

TEST NUMBER
25876

Conc	Rep	Cont. No.	Number Alive: Start	1	2	3	4	5	6	7	# Fish	Tare Wgt.	Total Wgt.
0.00	D	1	15		14					14	15	29.65	34.08
0.00	D	2	15		15					15	15	30.42	34.90
0.00	D	3	15		15					15	15	26.69	31.47
0.00	D	4	15		15					15	15	29.24	33.58
100.00	D	1	15		15					15	15	30.19	34.69
100.00	D	2	15		15					15	15	29.50	33.[illegible]
100.00	D	3	15		15					15	15	31.90	36.31
100.00	D	4	15		15					15	15	31.30	35.88

jm 12/[illegible]

Site SW-PDA-6

Aquatec Biological Sciences

Test Date: 10/25/00
Sample Date: 10/24/00
Species: Pimephales promelas
Test Type: Chronic

Test Number: 25877
Test Material: Ambient water
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.41	.066	
			X	100.000	D	4	1.41	.066	
Proportion Alive	2	No transformation							
				0.000	D	4	.98	.033	
				100.000	D	4	.98	.033	
Proportion Alive	7	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.41	.066	
			X	100.000	D	4	1.38	.076	
Proportion Alive	7	No transformation							
				0.000	D	4	.96	.033	
				100.000	D	4	.97	.038	
Weight		No transformation							
			X	0.000	D	4	.30	.013	
			X	100.000	D	4	.30	.019	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	Arc sine sqrt w/ adj.					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.004	.036
Proportion Alive	7	Arc sine sqrt w/ adj.					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.005	.040
Weight		No transformation					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.000	.022

Sample 10200
Site SW-PDA-6

Aquatec Biological Sciences

FISH TEST DATA

Test Number: 25877 (x) Chronic ( ) Acute hours
Test Date: 25-Oct-00
Source: SAUGET Test Material: AMB2 (%)

Conc		Rep	Cont. No.	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Weight /Fish
0.00	D	1		15	14						14	.93	.29533
0.00	D	2		15	15						15	1.00	.29867
0.00	D	3		15	15						15	1.00	.31867
0.00	D	4		15	15						15	1.00	.26933
100.00	D	1		15	14						14	.93	.30400
100.00	D	2		15	15						15	1.00	.26933
100.00	D	3		15	15						15	1.00	.32133
100.00	D	4		15	15						14	.93	.27733

fm 12/20/00

Sample 1020
Site SW-PDA-6

Aquatec Biological Sciences

FISH LARVAE TOXICITY TEST

TEST START DATE
October 25, 1900

TEST NUMBER
25877

Conc	Rep	Cont. No.	Number Alive Start	1	2	3	4	5	6	7	# Fish	Tare Wgt.	Total Wgt.
0.00	D	1	15		14					14	15	29.65	34.08
0.00	D	2	15		15					15	15	30.42	34.90
0.00	D	3	15		15					15	15	26.69	31.47
0.00	D	4	15		15					15	15	29.24	33.58
100.00	D	1	15		14					14	15	32.24	36.80
100.00	D	2	15		15					15	15	28.57	32.91
100.00	D	3	15		15					15	15	26.34	31.16
100.00	D	4	15		15					14	15	31.66	35.82

jm 12/20/c

Sample 10a04
Site SW-PDA-5

Aquatec Biological Sciences

Test Date: 10/25/00
Sample Date: 10/24/00
Species: Pimephales promelas
Test Type: Chronic

Test Number: 25878
Test Material: Ambient water
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.41	.066	
			X	100.000	D	4	1.44	0.000	
Proportion Alive	2	No transformation							
				0.000	D	4	.98	.033	
				100.000	D	4	1.00	0.000	
Proportion Alive	7	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.41	.066	
			X	100.000	D	4	1.44	0.000	
Proportion Alive	7	No transformation							
				0.000	D	4	.98	.033	
				100.000	D	4	1.00	0.000	
Weight		No transformation							
			X	0.000	D	4	.30	.013	
			X	100.000	D	4	.30	.021	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC		TU	MSE	MSD
Proportion Alive	2	Arc sine sqrt w/ adj.						
		Wilcoxon test with Bonfe	>100.000	>100.000	<	1.00	.002	.024
Proportion Alive	7	Arc sine sqrt w/ adj.						
		Wilcoxon test with Bonfe	>100.000	>100.000	<	1.00	.002	.024
Weight		No transformation						
		Wilcoxon test with Bonfe	>100.000	>100.000	<	1.00	.000	.024

Site SW-PDA-5

Aquatec Biological Sciences

FISH TEST DATA

Test Number: 25878 (x) Chronic ( ) Acute hours
Test Date: 25-Oct-00
Source: SAUGET Test Material: AME2 (%)

Conc		Rep	Cont. No.	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Weight /Fish
0.00	D	1		15	14						14	.93	.29533
0.00	D	2		15	15						15	1.00	.29867
0.00	D	3		15	15						15	1.00	.31867
0.00	D	4		15	15						15	1.00	.26933
100.00	D	1		15	15						15	1.00	.32267
100.00	D	2		15	15						15	1.00	.29000
100.00	D	3		15	15						15	1.00	.28133
100.00	D	4		15	15						15	1.00	.32067

jm 12/20/00

Site SW-PDA-5

Aquatec Biological Sciences

FISH LARVAE TOXICITY TEST

TEST START DATE
October 25, 1900

TEST NUMBER
25878

Conc	Rep	Cont. No.	Number Alive Start	1	2	3	4	5	6	7	# Fish	Tare Wgt.	Total Wgt.
0.00	D	1	15		14					14	15	29.65	34.08
0.00	D	2	15		15					15	15	30.42	34.90
0.00	D	3	15		15					15	15	26.69	31.47
0.00	D	4	15		15					15	15	29.24	33.58
100.00	D	1	15		15					15	15	28.08	32.9
100.00	D	2	15		15					15	15	29.28	33.63
100.00	D	3	15		15					15	15	28.67	32.89
100.00	D	4	15		15					15	15	30.38	35.19

jm 12/20

Sample 10 of 10
Site SW-PDA-10

Aquatec Biological Sciences

Test Date: 10/25/00
Sample Date: 10/24/00
Species: Pimephales promelas
Test Type: Chronic

Test Number: 25679
Test Material: Ambient water
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.41	.066	
			X	100.000	D	4	1.41	.066	
Proportion Alive	2	No transformation							
				0.000	D	4	.98	.033	
				100.000	D	4	.98	.033	
Proportion Alive	7	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.41	.066	
			X	100.000	D	4	1.41	.066	
Proportion Alive	7	No transformation							
				0.000	D	4	.98	.033	
				100.000	D	4	.98	.033	
Weight		No transformation							
			X	0.000	D	4	.30	.013	
			X	100.000	D	4	.30	.021	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	Arc sine sqrt w/ adj.					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.004	.036
Proportion Alive	7	Arc sine sqrt w/ adj.					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.004	.036
Weight		No transformation					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.000	.024

Site SW-PDA-10

Aquatec Biological Sciences

FISH TEST DATA

Test Number: 25879 (x) Chronic ( ) Acute hours
Test Date: 25-Oct-00
Source: SAUGET Test Material: AME2 (%)

Conc		Rep	Cont. No.	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Weight /Fish
0.00	D	1		15	14						14	.93	.29533
0.00	D	2		15	15						15	1.00	.29867
0.00	D	3		15	15						15	1.00	.31867
0.00	D	4		15	15						15	1.00	.28933
100.00	D	1		15	15						15	1.00	.30733
100.00	D	2		15	15						15	1.00	.27133
100.00	D	3		15	14						14	.93	.29067
100.00	D	4		15	15						15	1.00	.31533

jm 12/20/00

Site SW-PDA 70

Aquatec Biological Sciences

FISH LARVAE TOXICITY TEST

TEST START DATE
October 25, 1900

TEST NUMBER
25879

Conc	Rep	Cont. No.	Number Alive Start	1	2	3	4	5	6	7	# Fish	Tare Wgt.	Total Wgt.
0.00	D	1	15		14					14	15	29.65	34.08
0.00	D	2	15		15					15	15	30.42	34.90
0.00	D	3	15		15					15	15	26.69	31.47
0.00	D	4	15		15					15	15	29.24	33.58
100.00	D	1	15		15					15	15	28.86	33.47
100.00	D	2	15		15					15	15	27.69	31.76
100.00	D	3	15		14					14	15	28.13	32.49
100.00	D	4	15		15					15	15	28.26	33.05

jm 12/20(

Pimephales promelas Survival and Growth Data

Client: MENZIE-CURA SAUGET **SDG:** 4805

Test Description: *Pimephales promelas* acute / chronic toxicity tests

Repl	Survival Data: Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Growth Data: No. weighed [1]	Initial Boat Wt (mg)	Total Dry Wt (mg)
Lab A	15	14	14	14	14	14	14	14	14	29.65	34.08
Contr B	15	15	15	15	15	15	15	15	15	30.42	34.90
18225 C	15	15	15	15	15	15	15	15	15	26.69	31.47
D	15	15	15	15	15	15	15	15	15	29.24	33.58
18267 A	15	15	15	16	15	15	15	15	15	30.19	34.69
B	15	15	15	|	15	15	15	15	15	29.50	33.98
C	15	15	15	|	15	15	15	15	15	31.90	36.31
D	15	15	15	<	15	15	15	15	15	31.30	35.88
18268 A	15	15	14	14	14	14	14	14	14	32.24	36.80
B	15	15	15	15	15	15	15	15	15	28.57	32.91
C	15	15	15	15	15	15	15	15	15	26.34	31.16
D	15	15	15	14	14	14	14	14	14	31.66	35.82
18269 A	15	15	15	15	15	15	15	15	15	28.08	32.92
B	15	15	15	|	15	15	15	15	15	29.28	33.63
C	15	15	15	|	15	15	15	15	15	28.67	32.89
D	15	15	15	<	15	15	15	15	15	30.38	35.19
18270 A	15	15	15	15	15	15	15	15	15	28.86	33.47
B	15	15	15	15	15	15	15	15	15	27.69	31.76
C	15	14	14	14	14	14	14	14	14	28.13	32.49
D	15	15	15	15	15	15	15	15	15	28.26	33.05
A	15										
B	15										
C	15										
D	15										
A	15										
B	15										
C	15										
D	15										
								-	Bal QC	Bal QC	
I/D/T	TM 10/25 15:30	JM 10/26 19:00	JG 10/27 13:30	JG 10/28 15:00	TM 10/29 12:30	TM 10/30 19:45	TM 10/31 15:17	JM 11/1 10:00	20 mg=19.99	19.92	20 mg=
Fed AM	—	08:00 JM	08:30 JG	09:00 JG	x 30 JM	09:15 JM	09:20 JM	Not	20 mg=19.99	19.92	20 mg=
Fed PM	1640 JG	17:15 JG	16:30 JG	19:00 JG	17:30 JM	16:30 JM	17:00 JM	fed	I/D/T		I/D/T

[1] The number weighed = the number actually weighed. For statistical purposes, the number weighed = the original number of organisms on Day 0.

Into oven 11/1 10:30
Out of oven 11/2 10:30

Aquatec Biological Sciences, Inc. Williston Vermont

Reviewed by: _____ Date: 1/16/01

CdPpChronic4812

Final (After renewal) Water Chemistry Data

Client: MENZIE-CURA SAUGET **BTR:** 4812 **SDG:** 4805

Test Description: *Pimephales promelas* acute / chronic toxicity tests

	Day:	1	2	3	4	5	6	7
Lab Control 18225	pH	7.6	7.8	7.7	7.6	7.5	7.5	7.6
	DO	7.4	7.2	7.8	7.6	7.7	7.6	7.7
	Temp	25.2	24.8	24.2	23.2	24.5	24.1	23.6
	Cond.	280	280	280	260	260	270	270
18267	pH	8.1	8.1	8.1	8.1	8.1	8.1	8.1
	DO	7.1	7.2	7.7	7.4	7.4	7.4	7.4
	Temp	25.1	24.7	24.1	23.4	24.1	23.9	23.7
	Cond.	440	450	450	430	430	435	430
18268	pH	8.1	8.1	8.1	8.2	8.1	8.1	8.1
	DO	7.2	7.2	7.7	7.5	7.4	7.4	7.5
	Temp	25.0	24.8	24.1	23.6	24.2	24.0	23.8
	Cond.	460	470	470	450	450	460	460
18269	pH	8.1	8.1	8.1	8.2	8.2	8.2	8.1
	DO	7.2	7.2	7.6	7.5	7.4	7.4	7.6
	Temp	24.9	24.7	24.2	23.7	24.4	24.0	23.9
	Cond.	490	500	500	480	490	490	480
18270	pH	8.1	8.1	8.2	8.2	8.2	8.2	8.2
	DO	7.2	7.2	7.6	7.5	7.5	7.4	7.6
	Temp	25.0	24.8	24.1	23.6	24.2	24.0	23.4
	Cond.	450	460	465	440	450	450	440
	pH							
	DO							
	Temp							
	Cond.							
	pH							
	DO							
	Temp							
	Cond.							
	Init./Date	JM 10/26	JG 10/27	JG 10/28	JM 10/29	JM 10/30	JM 10/31	JM 11/1

Aquatec Biological Sciences, Inc. Williston Vermont

Reviewed by: _____ Date: 1/16/01

CdPpChronic4812

1300 Blue Spruce Drive, Suite C
Fort Collins, Colorado 80524

Toll Free: 800/331-5916
Tel: 970/484-5091 Fax:970/484-2

ORGANISM HISTORY

DATE: 10/24/00

SPECIES: Pimephales promelas

AGE: N/A

LIFE STAGE: Embryo

HATCH DATE: 10/24/00

BEGAN FEEDING: N/A

FOOD: N/A

Water Chemistry Record:	Mean	Range
TEMPERATURE:	24 °C	--
SALINITY/CONDUCTIVITY:	--	--
TOTAL HARDNESS (as $CaCO_3$):	132 mg/l	--
TOTAL ALKALINITY (as $CaCO_3$):	80 mg/l	--
pH:	7.96	--

Comments:

Date Rec'd 10/25
pH 7.7
DO 12.9
Cond 310
Temp = 19.0°C
fed

Facility Supervisor

Site SW-PDA -2

Aquatec Biological Sciences

Test Date: 10/26/00
Sample Date: 10/25/00
Species: Pimephales promelas
Test Type: Chronic

Test Number: 25906
Test Material: Ambient water %
Source: SAUGET
Sauget
Mentle Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.44	0.000	
			X	100.000	D	4	1.44	0.000	
Proportion Alive	2	No transformation							
				0.000	D	4	1.00	0.000	
				100.000	D	4	1.00	0.000	
Proportion Alive	7	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.44	0.000	
			X	100.000	D	4	1.29	.230	
Proportion Alive	7	No transformation							
				0.000	D	4	1.00	0.000	
				100.000	D	4	.90	.159	
Weight		No transformation							
			X	0.000	D	4	.30	.020	
			X	100.000	D	4	.30	.045	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	Arc sine sqrt w/ adj.					
Proportion Alive	7	Arc sine sqrt w/ adj. Wilcoxon test with Bonfe	>100.000	>100.000 <	1.00	.026	.119
Weight		No transformation Wilcoxon test with Bonfe	>100.000	>100.000 <	1.00	.001	.047

Site SW-PDA-2

Aquatec Biological Sciences

FISH TEST DATA

Test Number: 25506 (X) Chronic ( ) Acute Hours
Test Date: 26-Oct-00
Source: SAUGET Test Material: AMB2 (%)

Conc		Rep	Cont. No.	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Weight /Fish
0.00	D	1		15		15					15	1.00	.31600
0.00	D	2		15		15					15	1.00	.30333
0.00	D	3		15		15					15	1.00	.30467
0.00	D	4		15		15					15	1.00	.26933
100.00	D	1		15		15					10	.67	.23400
100.00	D	2		15		15					15	1.00	.32533
100.00	D	3		15		15					14	.93	.30200
100.00	D	4		16		16					16	1.00	.33125

jm 12/27/00

000031

Sample 10a-7
Site SW-PDA-2

Aquatec Biological Sciences

FISH LARVAE TOXICITY TEST

TEST START DATE
October 26, 1900

TEST NUMBER
25908

Conc	Rep	Cont. No.	Number Alive: Start	1	2	3	4	5	6	7	# Fish	Tare Wgt.	Total Wgt.
0.00	D	1	15		15					15	15	30.79	35.53
0.00	D	2	15		15					15	15	32.18	36.73
0.00	D	3	15		15					15	15	29.86	34.43
0.00	D	4	15		15					15	15	34.55	38.59
00.00	D	1	15		15					10	15	26.10	29.61
100.00	D	2	15		15					15	15	27.51	32.39
100.00	D	3	15		15					14	15	24.71	29.24
100.00	D	4	16		16					16	16	33.39	38.69

jm 12/27/00

Site SW-PDA-2 FD

Aquatec Biological Sciences

Test Date: 10/26/00
Sample Date: 10/25/00
Species: Pimephales promelas
Test Type: Chronic

Test Number: 25911
Test Material: Ambient water
Source: SAUGET
Sauget
Mentzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.44	0.000	
			X	100.000	D	4	1.44	0.000	
Proportion Alive	2	No transformation							
				0.000	D	4	1.00	0.000	
				100.000	D	4	1.00	0.000	
Proportion Alive	7	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.44	0.000	
			X	100.000	D	4	1.41	.066	
Proportion Alive	7	No transformation							
				0.000	D	4	1.00	0.000	
				100.000	D	4	.98	.033	
Weight		No transformation							
			X	0.000	D	4	.30	.020	
			X	100.000	D	4	.30	.023	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	Arc sine sqrt w/ adj.					
Proportion Alive	7	Arc sine sqrt w/ adj.					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.002	.037
Weight		No transformation					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.050	.030

Sample 10 of C
Site SW-PDA-2 FD

Aquatec Biological Sciences

FISH TEST DATA

Test Number: 25911 (x) Chronic ( ) Acute hours
Test Date: 26-Oct-00
Source: SAUGET Test Material: AMB2 (%)

Conc		Rep	Cont. No.	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Weight /Fish
0.00	D	1		15		15					15	1.00	.31600
0.00	D	2		15		15					15	1.00	.30333
0.00	D	3		15		15					15	1.00	.30467
0.00	D	4		15		15					15	1.00	.26933
100.00	D	1		15		15					15	1.00	.30733
100.00	D	2		15		15					15	1.00	.33533
100.00	D	3		15		15					15	1.00	.29400
100.00	D	4		15		15					14	.93	.28133

ym 12/27/00

Site SW-PDA-2 FD

Aquatec Biological Sciences

FISH LARVAE TOXICITY TEST

TEST START DATE
October 26, 1900

TEST NUMBER
25911

Conc	Rep	Cont. No.	Number Alive Start	1	2	3	4	5	6	7	# Fish	Tare Wgt.	Total Wgt.
0.00	D	1	15		15					15	15	30.79	35.53
0.00	D	2	15		15					15	15	32.18	36.73
0.00	D	3	15		15					15	15	29.86	34.43
0.00	D	4	15		15					15	15	34.55	38.59
100.00	D	1	15		15					15	15	33.08	37.69
100.00	D	2	15		15					15	15	33.33	38.36
100.00	D	3	15		15					15	15	33.10	37.51
100.00	D	4	15		15					14	15	32.50	36.72

jm 12/

Site SW-PDA-3

Aquatec Biological Sciences

Test Date: 10/26/00
Sample Date: 10/25/00
Species: Pimephales promelas
Test Type: Chronic

Test Number: 25914
Test Material: Ambient water
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.44	0.000	
			X	100.000	D	4	1.44	0.000	
Proportion Alive	2	No transformation							
				0.000	D	4	1.00	0.000	
				100.000	D	4	1.00	0.000	
Proportion Alive	7	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.44	0.000	
			X	100.000	D	4	1.37	.079	
Proportion Alive	7	No transformation							
				0.000	D	4	1.00	0.000	
				100.000	D	4	.97	.040	
Weight		No transformation							
			X	0.000	D	4	.30	.020	
			X	100.000	D	4	.32	.024	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	Arc sine sqrt w/ adj.					
Proportion Alive	7	Arc sine sqrt w/ adj.					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.003	.042
Weight		No transformation					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.000	.030

Site SW-PDA-3

Aquatec Biological Sciences

FISH TEST DATA

Test Number: 25514 (x) Chronic ( ) Acute hours
Test Date: 26-Oct-00
Source: SAUGET Test Material: AMB2 (%)

Conc		Rep	Cont. No.	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Weight /Fish
0.00	D	1		15	15						15	1.00	.31600
0.00	D	2		15	15						15	1.00	.30333
0.00	D	3		15	15						15	1.00	.30467
0.00	D	4		15	15						15	1.00	.26933
100.00	D	1		15	15						14	.93	.29933
100.00	D	2		14	14						13	.93	.34214
100.00	D	3		15	15						15	1.00	.30067
100.00	D	4		15	15						15	1.00	.34067

jm 12/27/00

Site SW-PDA-3

Aquatec Biological Sciences

FISH LARVAE TOXICITY TEST

TEST START DATE
October 26, 1900

TEST NUMBER
25914

Conc	Rep	Cont. No.	Number Alive Start	1	2	3	4	5	6	7	# Fish	Tare Wgt.	Total Wgt.
0.00	D	1	15		15					15	15	30.79	35.53
0.00	D	2	15		15					15	15	32.18	36.73
0.00	D	3	15		15					15	15	29.86	34.43
0.00	D	4	15		15					15	15	34.55	38.59
100.00	D	1	15		15					14	15	40.26	44.75
100.00	D	2	14		14					13	14	31.69	36.48
100.00	D	3	15		15					15	15	37.52	42.03
100.00	D	4	15		15					15	15	32.55	37.66

jm 12/27/

Site SW-PDA-4

Aquatec Biological Sciences

Test Date: 10/26/00
Sample Date: 10/25/00
Species: Pimephales promelas
Test Type: Chronic

Test Number: 25917
Test Material: Ambient water
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.44	0.000	
			X	100.000	D	4	1.44	0.000	
Proportion Alive	2	No transformation							
				0.000	D	4	1.00	0.000	
				100.000	D	4	1.00	0.000	
Proportion Alive	7	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.44	0.000	
			X	100.000	D	4	1.41	.066	
Proportion Alive	7	No transformation							
				0.000	D	4	1.00	0.000	
				100.000	D	4	.98	.033	
Weight		No transformation							
			X	0.000	D	4	.30	.020	
			X	100.000	D	4	.32	.016	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	Arc sine sqrt w/ adj.					
Proportion Alive	7	Arc sine sqrt w/ adj. Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.002	.037
Weight		No transformation Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.000	

Site SW-PDA-4

Aquatec Biological Sciences

FISH TEST DATA

Test Number: 25917 (x) Chronic ( ) Acute hours
Test Date: 26-Oct-00
Source: SAUGET Test Material: AM32 (%)

Conc		Rep	Cont. No.	Start	Daily Survival 1	2	3	4	5	6 End	Prop Alive	Weight /Fish
0.00	D	1		15	15					15	1.00	.31600
0.00	D	2		15	15					15	1.00	.30333
0.00	D	3		15	15					15	1.00	.30467
0.00	D	4		15	15					15	1.00	.26533
100.00	D	1		15	15					15	1.00	.30467
100.00	D	2		15	15					15	1.00	.31533
100.00	D	3		15	15					14	.93	.32267
100.00	D	4		15	15					15	1.00	.34200

jm 12/27/00

Site SW-PDA-4

Aquatec Biological Sciences

FISH LARVAE TOXICITY TEST

TEST START DATE
October 26, 1900

TEST NUMBER
25917

Conc	Rep	Cont. No.	Number Alive Start	1	2	3	4	5	6	7	# Fish	Tare Wgt.	Total Wgt.
0.00	D	1	15		15					15	15	30.79	35.53
0.00	D	2	15		15					15	15	32.18	36.73
0.00	D	3	15		15					15	15	29.86	34.43
0.00	D	4	15		15					15	15	34.55	38.59
100.00	D	1	15		15					15	15	33.28	37.85
100.00	D	2	15		15					15	15	38.62	43.35
100.00	D	3	15		15					14	15	31.44	36.28
100.00	D	4	15		15					15	15	39.72	44.85

jm 12/2

Pimephales promelas Survival and Growth Data

Client: MENZIE-CURA SAUGET **SDG:** 4805

Test Description: *Pimephales promelas* acute / chronic toxicity tests

Repl	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	No. weighed [1]	Initial Boat Wt (mg)	Total Dry Wt (mg)
Survival Data									**Growth Data**		
Lab A	15	15	15	15	15	15	15	15	15	30.79	35.53
Contr B	15	15	"	15	15	15	15	15	15	32.18	36.73
18225 C	15	15	"	15	15	15	15	15	15	29.86	34.43
D	15	15	"	15	15	15	15	15	15	34.55	38.59
18279 A	15	15	15	14	11@	10	10	10	10	26.10	29.61
B	15	"	"	15	15	15	15	15	15	27.51	32.39
C	15	"	"	14	14	14	14	14	14	24.91	29.24
D	~~15~~ 16	" 16	" 16	16	16	16	16	16	16	33.39	38.69
18280 A	15	15	15	15	15	15	15	15	15	33.08	37.69
B	15	"	"	15	15	15	15	15	15	33.33	38.36
C	15	"	"	15	15	15	15	15	15	33.10	37.51
D	15	"	"	15	15	15	15	14	14	32.50	36.72
18281 A	15	15	15	14	14	14	14	14	14	40.26	44.75
B	15	"	"	13*	13	13	13	13	13	31.69	36.48
C	15	"	"	15	15	15	15	15	15	39.52	42.03
D	15	"	"	15	15	15	15	15	15	32.55	37.66
18282 A	15	15	15	15	15	15	15	15	15	33.28	37.85
B	15	"	"	15	15	15	15	15	15	38.62	43.35
C	15	"	"	14	14	14	14	14	14	31.44	36.28
D	15	"	"	15	15	15	15	15	15	39.72	44.85
A	15										
B	15										
C	15										
D	15										
A	15										
B	15										
C	15										
D	15										
								-	Bal QC	Bal QC	
I/D/T	10/26 TM 15:15	JG 10/27 13:00	10/28 JG 14:30	10/29 JM 14:30	10/30 JM 14:45	10/31 TM 14:45	11/1 JM 13:30		20 mg=19.99	20 mg=	
Fed AM	—	0830 J	07:00 JG	10:30 JM	09:15 JM	09:20 JM	09:15 JM	Not	20 mg=19.98	20 mg=	
Fed PM	1715 J	JG 16:30	17:00 JG	17:15 JM	16:30 JM	17:00 JM	17:15 J	fed	I/D/T	I/D/T	

[1] The number weighed = the number actually weighed. For statistical purposes, the number weighed = the original number of organisms on Day 0.

Into oven @ 10:30

* One fish killed by pipet JM 10/29/00

@ Fungal growth on dead fish JM 10/30/00 JM

Aquatec Biological Sciences, Inc. Williston Vermont

Reviewed by: _____ Date: 1/16/01

CdPpChronic4815

11/1/00 Init. wt. 19.98 Ending WT. 19.99 KRD

Final (After renewal) Water Chemistry Data

Client: MENZIE-CURA SAUGET **BTR:** 4815 **SDG:** 4805

Test Description: *Pimephales promelas* acute / chronic toxicity tests

	Day:	1	2	3	4	5	6	7
Lab Control 18225	pH	7.6	7.6	7.6	7.5	7.5	7.5	7.5
	DO	7.6	7.7	7.4	7.5	7.4	7.3	7.6
	Temp	24.8	24.3	24.0	24.4	24.2	24.1	24.7
	Cond.	280	280	265	260	265	270	260
18279	pH	8.0	8.0	8.0	8.0	8.0	8.0	8.0
	DO	7.4	7.0	7.2	6.8	6.7	7.0	7.2
	Temp	24.7	24.2	24.0	24.2	24.2	24.1	24.7
	Cond.	490	500	470	470	480	480	470
18280	pH	8.1	8.0	8.1	8.1	8.1	8.1	8.1
	DO	7.4	7.0	7.3	7.0	7.2	7.2	7.3
	Temp	24.8	24.2	24.0	24.1	24.2	24.2	24.8
	Cond.	500	500	475	480	480	490	480
18281	pH	8.1	8.1	8.2	8.1	8.1	8.1	8.1
	DO	7.4	7.2	8.4	6.9	7.2	7.2	7.3
	Temp	24.8	24.2	23.7	24.3	24.2	24.2	24.8
	Cond.	490	490	470	480	480	480	470
18282	pH	8.1	8.1	8.2	8.1	8.1	8.1	8.1
	DO	7.4	7.4	7.4	7.1	7.3	7.2	7.3
	Temp	24.6	24.3	23.7	24.2	24.2	24.3	24.8
	Cond.	500	500	480	485	490	490	480
	pH							
	DO							
	Temp							
	Cond.							
	pH							
	DO							
	Temp							
	Cond.							
	Init./Date	JG10/27	JG10/28	jm10/29	jm10/30	jm10/31	JG11/1	jm11/2

Aquatec Biological Sciences, Inc. Williston Vermont

Reviewed by: _____ Date: 11/6/01

CdPpChronic4815

1300 Blue Spruce Drive, Suite C
Fort Collins, Colorado 80524

Toll Free: 800/331-5916
Tel: 970/484-5091 Fax:970/484-2514

ORGANISM HISTORY

DATE: 10/25/00

SPECIES: Pimephales promelas

AGE: N/A

LIFE STAGE: Embryo

HATCH DATE: 10/25/00

BEGAN FEEDING: N/A

FOOD: N/A

Rec'd 10/26 jr.
Temp = 20.2
pH = 7.9
DO = 12.6
Cond = 320

Water Chemistry Record:	Mean	Range
TEMPERATURE:	24 °C	--
SALINITY/CONDUCTIVITY:	--	--
TOTAL HARDNESS (as $CaCO_3$):	132 mg/l	--
TOTAL ALKALINITY (as $CaCO_3$):	80 mg/l	--
pH:	7.96	--

fed ✓

Comments:

Fish used to start 10/26 test

Facility Supervisor

Site SW-PDA-8

Aquatec Biological Sciences

Test Date: 10/27/00
Sample Date: 10/26/00
Species: Pimephales promelas
Test Type: Chronic

Test Number: 25939
Test Material: Ambient water %
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.44	0.000	
			X	100.000	D	4	1.44	0.000	
Proportion Alive	2	No transformation							
				0.000	D	4	1.00	0.000	
				100.000	D	4	1.00	0.000	
Proportion Alive	7	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.44	0.000	
			X	100.000	D	4	1.41	.066	
Proportion Alive	7	No transformation							
				0.000	D	4	1.00	0.000	
				100.000	D	4	.98	.033	
Weight		No transformation							
			X	0.000	D	4	.33	.007	
			X	100.000	D	4	.33	.021	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	Arc sine sqrt w/ adj.					
Proportion Alive	7	Arc sine sqrt w/ adj.					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.002	.037
Weight		No transformation					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.000	.022

Site SW-PDA-8

Aquatec Biological Sciences

FISH TEST DATA

Test Number: 25939 (x) Chronic ( ) Acute hours
Test Date: 27-Oct-00
Source: SAUGET Test Material: AMB2 (%)

Conc		Rep	Cont. No.	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Weight /Fish
0.00	D	1		15	15						15	1.00	.32133
0.00	D	2		15	15						15	1.00	.31800
0.00	D	3		15	15						15	1.00	.33067
0.00	D	4		15	15						15	1.00	.33267
100.00	D	1		15	15						15	1.00	.31200
100.00	D	2		15	15						14	.93	.31000
100.00	D	3		15	15						15	1.00	.35067
100.00	D	4		15	15						15	1.00	.34333

fm 12/28/00

Site SW-PDA-8

Aquatec Biological Sciences

FISH LARVAE TOXICITY TEST

TEST START DATE
October 27, 1900

TEST NUMBER
25939

Conc	Rep	Cont. No.	Number Alive: Start	1	2	3	4	5	6	7	# Fish	Tare Wgt.	Total Wgt.
0.00	D	1	15		15					15	15	32.27	37.09
0.00	D	2	15		15					15	15	32.74	37.51
0.00	D	3	15		15					15	15	32.53	37.49
0.00	D	4	15		15					15	15	34.96	39.95
100.00	D	1	15		15					15	15	36.08	40.76
100.00	D	2	15		15					14	15	25.81	30.4
100.00	D	3	15		15					15	15	31.19	36.45
100.00	D	4	15		15					15	15	32.14	37.29

ym 12/28/00

Site SW-PDA-8 FD

Aquatec Biological Sciences

Test Date: 10/27/00
Sample Date: 10/26/00
Species: Pimephales promelas
Test Type: Chronic

Test Number: 25941
Test Material: Ambient water
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.44	0.000	
			X	100.000	D	4	1.44	0.000	
Proportion Alive	2	No transformation							
				0.000	D	4	1.00	0.000	
				100.000	D	4	1.00	0.000	
Proportion Alive	7	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.44	0.000	
			X	100.000	D	4	1.13	.375	
Proportion Alive	7	No transformation							
				0.000	D	4	1.00	0.000	
				100.000	D	4	.77	.291	
Weight		No transformation							
			X	0.000	D	4	.33	.007	
			X	100.000	D	4	.30	.062	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	Arc sine sqrt w/ adj.					
Proportion Alive	7	Arc sine sqrt w/ adj. Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.070	.224
Weight		No transformation Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.002	.060

Site SW-PDA-8 FD

Aquatec Biological Sciences

FISH TEST DATA

Test Number: 25941 (x) Chronic ( ) Acute hours
Test Date: 27-Oct-00
Source: SAUGET Test Material: AME2 (%)

Conc		Rep	Cont. No.	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Weight /Fish
0.00	D	1		15	15						15	1.00	.32133
0.00	D	2		15	15						15	1.00	.31800
0.00	D	3		15	15						15	1.00	.33067
0.00	D	4		15	15						15	1.00	.33267
100.00	D	1		15	15						15	1.00	.33467
100.00	D	2		15	15						6	.40	.21600
100.00	D	3		15	15						10	.67	.35600
100.00	D	4		15	15						15	1.00	.31200

jm 12/28/00

Site SW-PDA-8 FU

Aquatec Biological Sciences

FISH LARVAE TOXICITY TEST

TEST START DATE
October 27, 1900

TEST NUMBER
25941

Conc	Rep	Cont. No.	Number Alive Start	1	2	3	4	5	6	7	# Fish	Tare Wgt.	Total Wgt.
0.00	D	1	15		15					15	15	32.27	37.09
0.00	D	2	15		15					15	15	32.74	37.51
0.00	D	3	15		15					15	15	32.53	37.49
0.00	D	4	15		15					15	15	34.96	39.95
100.00	D	1	15		15					15	15	31.61	36.63
100.00	D	2	15		15					6	15	30.08	33.32
100.00	D	3	15		15					10	15	30.23	35.57
100.00	D	4	15		15					15	15	34.96	39.64

jm 12/28/00

Site SW-PDA-9

Aquatec Biological Sciences

Test Date: 10/27/00
Sample Date: 10/26/00
Species: Pimephales promelas
Test Type: Chronic

Test Number: 25942
Test Material: Ambient water
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc	D	#Reps	Mean	StDev	% Surv
Proportion Alive	2	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.44	0.000	
			X	100.000	D	4	1.41	.066	
Proportion Alive	2	No transformation							
				0.000	D	4	1.00	0.000	
				100.000	D	4	.98	.033	
Proportion Alive	7	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.44	0.000	
			X	100.000	D	4	1.41	.066	
Proportion Alive	7	No transformation							
				0.000	D	4	1.00	0.000	
				100.000	D	4	.98	.033	
Weight		No transformation							
			X	0.000	D	4	.33	.017	
			X	100.000	D	4	.32	.006	

X = Indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	Arc sine sqrt w/ adj.					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.002	.037
Proportion Alive	7	Arc sine sqrt w/ adj.					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.002	.037
Weight		No transformation					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.000	.009

Site SW-PDA-9

Aquatec Biological Sciences

FISH TEST DATA

Test Number: 25942 (x) Chronic ( ) Acute hours
Test Date: 27-Oct-00
Source: SAUGET Test Material: AME2 (%)

Conc		Rep	Cont. No.	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Weight /Fish
0.00	D	1		15	15						15	1.00	.32133
0.00	D	2		15	15						15	1.00	.31800
0.00	D	3		15	15						15	1.00	.33067
0.00	D	4		15	15						15	1.00	.33267
100.00	D	1		15	15						15	1.00	.32467
100.00	D	2		15	14						14	.93	.31467
100.00	D	3		15	15						15	1.00	.32733
100.00	D	4		15	15						15	1.00	.32600

jm 12/28/00

Sample 18501
Site SW-PDA-9

Aquatec Biological Sciences

FISH LARVAE TOXICITY TEST

TEST START DATE
October 27, 1900

TEST NUMBER
25942

Conc	Rep	Cont. No.	Number Alive Start	1	2	3	4	5	6	7	# Fish	Tare Wgt.	Total Wgt.
0.00	D	1	15		15					15	15	32.27	37.09
0.00	D	2	15		15					15	15	32.74	37.51
0.00	D	3	15		15					15	15	32.53	37.49
0.00	D	4	15		15					15	15	34.96	39.95
100.00	D	1	15		15					15	15	35.65	40.52
100.00	D	2	15		14					14	15	35.57	40.29
100.00	D	3	15		15					15	15	30.11	35.02
100.00	D	4	15		15					15	15	36.45	41.34

jm 12/28/00

Site SW-UDA-12

Aquatec Biological Sciences

Test Date: 10/27/00
Sample Date: 10/26/00
Species: Pimephales promelas
Test Type: Chronic

Test Number: 25945
Test Material: Ambient water %
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.44	0.000	
			X	100.000	D	4	1.44	0.000	
Proportion Alive	2	No transformation							
				0.000	D	4	1.00	0.000	
				100.000	D	4	1.00	0.000	
Proportion Alive	7	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.44	0.000	
			X	100.000	D	4	1.35	.118	
Proportion Alive	7	No transformation							
				0.000	D	4	1.00	0.000	
				100.000	D	4	.95	.064	
Weight		No transformation							
			X	0.000	D	4	.33	.007	
			X	100.000	D	4	.31	.044	

X = Indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	Arc sine sqrt w/ adj.					
Proportion Alive	7	Arc sine sqrt w/ adj.					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.007	.058
Weight		No transformation					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.001	.044

Site SW-UDA-12

Aquatec Biological Sciences

FISH TEST DATA

Test Number: 25945 (x) Chronic ( ) Acute hours
Test Date: 27-Oct-00
Source: SAUGET Test Material: AMS2 (%)

Conc		Rep	Cont. No.	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Weight /Fish
0.00	D	1		15	15						15	1.00	.32133
0.00	D	2		15	15						15	1.00	.31800
0.00	D	3		15	15						15	1.00	.33067
0.00	D	4		15	15						15	1.00	.33267
100.00	D	1		15	15						15	1.00	.36333
100.00	D	2		15	15						14	.93	.33110
100.00	D	3		15	15						13	.87	.30167
100.00	D	4		15	15						15	1.00	.25867

jm 12/28/00

Site SW-DDA-1

Aquatec Biological Sciences

Test Date: 10/28/00
Sample Date: 10/27/00
Species: Pimephales promelas
Test Type: Chronic

Test Number: 25947
Test Material: Ambient water
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.41	.066	
			X	100.000	D	4	1.38	.122	
Proportion Alive	2	No transformation							
				0.000	D	4	.98	.033	
				100.000	D	4	.97	.067	
Proportion Alive	7	Arc sine sqrt w/ adj.							
			X	0.000	D	4	1.41	.066	
			X	100.000	D	4	1.01	.371	
Proportion Alive	7	No transformation							
				0.000	D	4	.98	.033	
				100.000	D	4	.66	.319	
Weight		No transformation							
			X	0.000	D	4	.80	.022	
				100.000	D	4	.24	.069	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	Arc sine sqrt w/ adj.					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	.010	.060
Proportion Alive	7	Arc sine sqrt w/ adj.					
		Wilcoxon test with Bonfe	<100.000	100.000	> 1.00	.071	.228
Weight		No transformation					
		EPA Flowchart (Chronic a					

- GROWTH POINT ESTIMATE -

End Point	P	IC	95% CI
Weight			
	IC 10	47.377	8.71 - 116.65
	IC 25		-
	IC 50		-

000060

Site SW-DDA-1

Aquatec Biological Sciences

FISH LARVAE TOXICITY TEST

TEST START DATE
October 28, 1900

TEST NUMBER
25947

Conc	Rep	Cont. No.	Number Alive Start	1	2	3	4	5	6	7	# Fish	Tare Wgt.	Total Wgt.
0.00	D	1	15		15					15	15	39.37	43.50
0.00	D	2	15		14					14	15	37.65	42.17
0.00	D	3	15		15					15	15	39.94	44.59
0.00	D	4	15		15					15	15	37.68	42.62
100.00	D	1	15		15					14	15	37.22	41.18
100.00	D	2	15		15					9	15	31.68	35.24
100.00	D	3	15		15					14	15	28.13	32.80
100.00	D	4	15		13					4	15	27.56	29.76

jm1 12/28/00

Site SW-DDA-1

Aquatec Biological Sciences

FISH TEST DATA

Test Number: 25947 (x) Chronic ( ) Acute hours
Test Date: 26-Oct-00
Source: SAUGET Test Material: AME2 (%)

Conc		Rep	Cont. No.	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Weight /Fish
0.00	D	1		15	15						15	1.00	.27533
0.00	D	2		15	14						14	.93	.30133
0.00	D	3		15	15						15	1.00	.31000
0.00	D	4		15	15						15	1.00	.32933
100.00	D	1		15	15						14	.93	.26400
100.00	D	2		15	15						9	.60	.23733
100.00	D	3		15	15						14	.93	.30133
100.00	D	4		15	13						4	.27	.14667

jm 12/28/00

1300 Blue Spruce Drive, Suite C
Fort Collins, Colorado 80524

Toll Free: 800/331-5916
Tel: 970/484-5091 Fax:970/484-25

ORGANISM HISTORY

DATE: 10/27/00

SPECIES: Pimephales promelas

AGE: N/A

LIFE STAGE: Embryo

HATCH DATE: 10/27/00

BEGAN FEEDING: N/A

FOOD: N/A

Water Chemistry Record:	Mean	Range
TEMPERATURE:	24 °C	--
SALINITY/CONDUCTIVITY:	--	--
TOTAL HARDNESS (as $CaCO_3$):	132 mg/l	--
TOTAL ALKALINITY (as $CaCO_3$):	80 mg/l	--
pH:	7.96	--

Comments:

Rec'd 10/28/00 10:c
Temp. = 20.2°C
pH = 7.8
DO = 12.8
Cond. = 310

Facility Supervisor

fed. ✓

000063

Pimephales promelas Survival and Growth Data

Client: MENZIE-CURA SAUGET SDG: 4805

Test Description: *Pimephales promelas* acute / chronic toxicity tests

		Survival Data								Growth Data		
Repl	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	No. weighed [1]	Initial Boat Wt (mg)	Total Dry Wt (mg)
Lab A	15	15	15	15	15	15	15	15	15	39.37	43.50
Contr B	15	14	14	14	14	14	14	~~15~~ 14	~~15~~ 14	39.65	42.17
18225 C	15	15	15	15	15	15	15	15	15	39.94	44.59
D	15	15	15	15	15	15	15	15	15	37.68	42.62
18304 A	15	15	15	15	15	14	14	14	14	37.22	41.18
♀ B	15	15	15	12*	10	10	10	9	9	31.68	35.24
♂ C	15	15	15	15	14	14	14	14	14	28.13	32.80
D	15	14	13	8*	4	4	4	4	4	27.56	29.76
A	15										
B	15										
C	15										
D	15										
A	15										
B	15										
C	15										
D	15										
A	15										
B	15										
C	15										
D	15										
A	15										
B	15										
C	15										
D	15										
A	15										
B	15										
C	15										
D	15										
								-	Bal QC	Bal QC	
I/D/T	JG 10/28 15:30	jm 10/29 15:45	jm 10/30 15:30	jm 10/31 14:20	TM 11/1 16:20	TM 11/2 13:00	JG 11/3 12:30	BE 11/4 11:30	20 mg=	19.920 mg=	
Fed AM	—	10:30 jm	09:15 jm	[illegible]	09:00 JG	09:15 jm	09:00 JG	Not	20 mg=	19.920 mg=	jm 11/5
Fed PM	17:00 JG	17:30 jm	17:00 jm	17:15 TM	15:30 JG	17:00		fed	I/D/T JG 11/4	11:45 I/D/T	~~JG 11/9~~

[1] The number weighed = the number actually weighed. For statistical purposes, the number weighed = the original number of organisms on Day 0.

* Fungal growth on dead fish jm 10/31

Aquatec Biological Sciences, Inc. Williston Vermont

Reviewed by: _____ Date: 1/16/01 000064 CdPpChronic4805

11/1/00 Init wt. 19.99 Ending wt. 19.99 KRD

Final (After renewal) Water Chemistry Data

Client: MENZIE-CURA SAUGET **SDG:** 4805

Test Description: *Pimephales promelas* acute / chronic toxicity tests

	Day:	1	2	3	4	5	6	7
Lab Control ~~18225~~ 18226	pH	7.8	7.9	7.6	7.5	7.7	7.5	7.4
	DO	7.8	7.9	7.6	7.4	7.4	7.1	7.4
	Temp	23.6	23.8	23.9	24.1	24.1	24.4	25.0
	Cond.	270	270	270	270	270	270	270
~~18220~~ 18304 JG	pH	8.3	8.2	8.2	8.2	8.2	8.1	8.1
	DO	7.7	7.4	7.5	7.1	7.3	7.0	7.1
	Temp	23.5	23.9	23.9	24.2	24.3	24.5	25.0
	Cond.	500	500	550	600	550	550	550
~~18224~~	pH							
	DO							
	Temp							
	Cond.							
	pH							
	DO							
	Temp							
	Cond.							
	pH							
	DO							
	Temp							
	Cond.							
	pH							
	DO							
	Temp							
	Cond.							
	pH							
	DO							
	Temp							
	Cond.							
	Init./Date	jm 10/29	jm 10/30	jm 10/31	jm 11/1	jm 11/2	JG 11/3	JG 11/4

Daphnid, Ceriodaphnia dubia Survival and Reproduction Screen

Site SW UDA 1.

Aquatec Biological Sciences

Test Date: 10/24/00
Sample Date: 10/23/00
Species: Ceriodaphnia dubia
Test Type: Chronic

Test Number: 25818
Test Material: Ambient water
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	1.00	0.000	
Proportion Alive	7	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	1.00	0.000	
Reproduction		No transformation							
			X	0.000	D	10	20.50	5.482	
			X	100.000	D	10	22.00	4.346	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	No transformation Fisher Exact	>100.000	>100.000 <	1.00		
Proportion Alive	7	No transformation Fisher Exact	>100.000	>100.000 <	1.00		
Reproduction		No transformation Wilcoxon test with Bonfe	>100.000	>100.000 <	1.00	24.472	3.827

Sample 13220
Site SW UDA 11

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 25818 (x) Chronic ( ) Acute hours
Test Date: 24-Oct-00
Source: SAUGET Test Material: AMB2 (%)

Conc	Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Total Young	Max Young
0.00 D	1		F	1		1					1	1.00	29	12
0.00 D	2		F	1		1					1	1.00	24	11
0.00 D	3		F	1		1					1	1.00	26	10
0.00 D	4		F	1		1					1	1.00	16	10
0.00 D	5		F	1		1					1	1.00	15	10
0.00 D	6		F	1		1					1	1.00	15	9
0.00 D	7		F	1		1					1	1.00	24	10
0.00 D	8		F	1		1					1	1.00	20	10
0.00 D	9		F	1		1					1	1.00	13	8
0.00 D	10		F	1		1					1	1.00	23	10
100.00 D	1		F	1		1					1	1.00	27	12
100.00 D	2		F	1		1					1	1.00	24	11
100.00 D	3		F	1		1					1	1.00	24	10
100.00 D	4		F	1		1					1	1.00	18	9
100.00 D	5		F	1		1					1	1.00	22	11
100.00 D	6		F	1		1					1	1.00	24	10
100.00 D	7		F	1		1					1	1.00	21	10
100.00 D	8		F	1		1					1	1.00	14	7
100.00 D	9		F	1		1					1	1.00	28	13
100.00 D	10		F	1		1					1	1.00	18	9

JM 11/29/00

Site SW UDA

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 25818 (x) Chronic ( ) Acute hours
TEST DATE: 24-Oct-00
SOURCE: SAUGET TEST MATERIAL: AMB2 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
0.00	D	1					6	12	11				
0.00	D	2					5	8	11				
0.00	D	3					6	10	10				
0.00	D	4					6	10	0				
0.00	D	5					5	10	0				
0.00	D	6					6	9	0				
0.00	D	7					5	9	10				
0.00	D	8					5	10	5				
0.00	D	9					5	8	0				
0.00	D	10					4	10	9				
100.00	D	1					6	9	12				
100.00	D	2					4	11	9				
100.00	D	3					5	9	10				
100.00	D	4					5	9	4				
100.00	D	5					7	11	4				
100.00	D	6					5	10	9				
100.00	D	7					5	10	6				
100.00	D	8					5	2	7				
100.00	D	9					4	13	11				
100.00	D	10					0	9	9				

jm 11/29/00

Site SW DDA 13

Aquatec Biological Sciences

Test Date: 10/24/00
Sample Date: 10/23/00
Species: Ceriodaphnia dubia
Test Type: Chronic

Test Number: 28821
Test Material: Ambient water %
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	1.00	0.000	
Proportion Alive	7	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	1.00	0.000	
Reproduction		No transformation							
			X	0.000	D	10	20.50	5.482	
			X	100.000	D	10	18.60	3.471	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	No transformation					
		Fisher Exact	>100.000	>100.000	1.00		
Proportion Alive	7	No transformation					
		Fisher Exact	>100.000	>100.000	1.00		
Reproduction		No transformation					
		Wilcoxon test with Bonfe	>100.000	>100.000	1.00	21.050	3.650

Site SW DDA 13

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 25821 (x) Chronic ( ) Acute hours
Test Date: 24-Oct-00
Source: SAUGET Test Material: AMB1 (%)

Conc	Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Total Young	Max Young
0.00 D	1		F	1	1						1	1.00	29	12
0.00 D	2		F	1	1						1	1.00	24	11
0.00 D	3		F	1	1						1	1.00	26	10
0.00 D	4		F	1	1						1	1.00	16	10
0.00 D	5		F	1	1						1	1.00	15	10
0.00 D	6		F	1	1						1	1.00	15	9
0.00 D	7		F	1	1						1	1.00	24	10
0.00 D	8		F	1	1						1	1.00	20	10
0.00 D	9		F	1	1						1	1.00	13	8
0.00 D	10		F	1	1						1	1.00	23	10
100.00 D	1		F	1	1						1	1.00	15	10
100.00 D	2		F	1	1						1	1.00	22	10
100.00 D	3		F	1	1						1	1.00	19	8
100.00 D	4		F	1	1						1	1.00	20	10
100.00 D	5		F	1	1						1	1.00	18	10
100.00 D	6		F	1	1						1	1.00	11	10
100.00 D	7		F	1	1						1	1.00	23	10
100.00 D	8		F	1	1						1	1.00	18	9
100.00 D	9		F	1	1						1	1.00	20	10
100.00 D	10		F	1	1						1	1.00	20	8

jm 11/29/00

Site SW DDA L

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 25821 (x) Chronic ( ) Acute hours
TEST DATE: 24-Oct-00
SOURCE: SAUGET TEST MATERIAL: AMB1 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
0.00	D	1					6	12	11				
0.00	D	2					5	8	11				
0.00	D	3					6	10	10				
0.00	D	4					6	10	0				
0.00	D	5					5	10	0				
0.00	D	6					6	9	0				
0.00	D	7					5	9	10				
0.00	D	8					5	10	5				
0.00	D	9					5	8	0				
0.00	D	10					4	10	9				
100.00	D	1					5	10	0				
100.00	D	2					3	9	10				
100.00	D	3					4	8	7				
100.00	D	4					2	8	10				
100.00	D	5					2	10	6				
100.00	D	6					1	10	0				
100.00	D	7					4	9	10				
100.00	D	8					4	9	5				
100.00	D	9					2	10	8				
100.00	D	10					4	8	8				

jm 11/29/00

Ceriodaphnia dubia Survival and Reproduction Data (Page 1 of 2)

Client: MENZIE-CURA SAUGET **SDG:** 4805

Test Description: *Ceriodaphnia dubia* acute / chronic toxicity tests

Effluent (%)	Repl 1	Repl 2	Repl 3	Repl 4	Repl 5	Repl 6	Repl 7	Repl 8	Repl 9	Repl 10	Remarks
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 0
18220	0	0	0	0	0	0	0	0	0	0	
18221	0	0	0	0	0	0	0	0	0	0	Fed ✓
											Date/time/Init.
											10/24/00 jm
											11:50
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 1
18220	0	0	0	0	0	0	0	0	0	0	
18221	0	0	0	0	0	0	0	0	0	0	Fed ✓
											Date/time/Init.
											10/25/00 jm
											12:00
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 2
18220	0	0	0	0	0	0	0	0	0	0	Sample:
18221	0	0	0	0	0	0	0	0	0	0	Fed ✓
											Date/time/Init.
											10/26/00 jm
											09:45
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 3
18220	0	0	0	0	0	0	0	0	0	0	
18221	0	0	0	0	0	0	0	0	0	0	Fed ✓
											Date/time/Init.
											10/27/00
											11:00 JG

0=original organism surviving, no young; D=original organism dead; #=# young released; *=lab-induced mortality

Aquatec Biological Sciences, Inc. Williston Vermont

Reviewed by: _____ Date: 1/16/01

CdPpChronic4805

Ceriodaphnia dubia Survival and Reproduction Data (Page 2 of 2)

Client: MENZIE-CURA SAUGET **SDG:** 4805

Test Description: *Ceriodaphnia dubia* acute / chronic toxicity tests

Effluent (%)	Repl 1	Repl 2	Repl 3	Repl 4	Repl 5	Repl 6	Repl 7	Repl 8	Repl 9	Repl 10	Remarks
Lab Contr	6	5	6	6	5	6	5	5	5	4	Day 4
18220	6	4	5	5	7	5	5	5	4	0	
18221	5	3	4	2	2	1	4	4	2	4	Fed ✓
											Date/time/Init.
											10/28/00 JG
											12:30
Lab Contr	12	8	10	10	10	9	9	10	8	10	Day 5
18220	9	11	9	9	11	10	10	2	13	9	
18221	10	9	8	8	10	10	9	9	10	8	Fed ✓
											Date/time/Init.
											10/29/00 jm
											13:00
Lab Contr	11	11	10	0	0	0	10	5	0	9	Day 6
18220	12	9	10	4	4	9	6	7	11	9	
18221	0	10	7	10	6	0	10	5	8	8	Fed
											Date/time/Init.
											10/30/00
											16:00 jm
Lab Contr											Day 7
18220											
18221											Fed
											Date/time/Init.

0=original organism surviving, no young; D=original organism dead; #=# young released; *=lab-induced mortality

Aquatec Biological Sciences, Inc. Williston Vermont

Reviewed by: _____ Date: 1/16/01

CdPpChronic4805

Water Chemistry Data

Client: MENZIE-CURA SAUGET		Test Description: *C. dubia* acute / chronic toxicity *	SDG: 4805

INITIAL WATER CHEMISTRY DATA * (*C. dubia and Pimephales promelas* tests)

	Day:	0	1	2	3	4	5	6
Lab Control 18225 (Pp)	pH	7.9	8.0	7.9	7.9	7.9	7.9	7.9
	DO	8.2	8.2	8.1	8.2	8.3	8.3	8.3
	Temp.	24.2	24.1	24.0	24.3	24.6	24.5	24.1
	Conduct.	280	280	280	280	270	270	270
Lab Control 18226 (Cd)	pH	7.9	8.0	7.8	7.8	7.9	7.9	7.9
	DO	8.3	8.3	8.3	8.3	8.4	8.4	8.2
	Temp.	24.5	24.2	24.1	24.4	24.5	24.5	24.0
	Conduct.	200	220	210	200	200	210	220
18220	pH	8.0	8.0	8.0	8.0	8.0	8.0	8.0
	DO	9.4	9.5	9.7	9.6	9.8	9.9	9.6
	Temp.	24.4	25.0	24.2	24.5	25.2	25.6	25.5
	Conduct.	440	450	465	460	460	450	460
18221	pH	7.9	8.0	8.0	7.9	7.9	8.0	8.0
	DO	9.3	9.3	9.4	9.7	9.9	9.9	9.8
	Temp.	24.8	25.1	24.5	24.4	25.5	25.4	25.6
	Conduct.	470	500	490	500	500	500	500
	pH							
	DO							
	Temp.							
	Conduct.							
	pH							
	DO							
	Temp.							
	Conduct.							
	pH							
	DO							
	Temp.							
	Conduct.							
	Init./Date	jm 10/24	jm 10/25	jm 10/26	JG 10/27	JG 10/28	jm 10/29	jm 10/30

FINAL WATER CHEMISTRY DATA (*C. dubia* test only)

	1	2	3	4	5	6	7
Lab Control 18225 (Pp)							
Lab Control 18226 (Cd)	7.8	7.7	7.7	7.8	7.8	7.6	
	8.1	8.1	8.3	8.3	8.2	8.3	
	24.3	24.3	24.1	24.0	23.2*	23.2	
	220	220	220	210	210	215	
18220	8.4	8.4	8.4	8.4	8.4	8.4	
	8.2	8.2	8.4	8.4	8.4	8.3	
	24.5	24.3	24.1	24.1	23.4	23.8	
	460	460	460	465	445	450	
18221	8.4	8.4	8.4	8.4	8.4	8.4	
	8.3	8.2	8.4	8.4	8.4	8.3	
	24.6	24.3	24.0	24.1	23.4	24.2	
	490	490	500	500	480	485	
	jm 10/25	jm 10/26	JG 10/27	JG 10/28	jm 10/29	jm 10/30	

* Increased Room temp 10/29 jm

Aquatec Biological Sciences, Inc. Williston Vermont

Reviewed by [signature] Date 1/16/01

Chronic4805

000074

Sample Preparation

Client: MENZIE-CURA SAUGET **SDG: 4805**

Test Description: *Ceriodaphnia dubia* and *Pimephales promelas* acute / chronic toxicity tests

Sample Identification:

Sample Description	SW UDA 11	SW DDA 13	Pp Lab Control	Cd Lab Control			
Sample #	18220	18221	18225	18226			

Sample Preparation:

Filtration	60 micron	60 micron	60 micron	60 micron			
Warm (25°C)	✓	✓	✓	✓			
Prepared by (Init./date)	ym 10/24	—		—			

Remove a subsample for warming, store the remainder of the sample refrigerated.

Daily Dilution Plan for: *Ceriodaphnia dubia* and *Pimephales promelas* chronic toxicity tests

Concentration (%)	Volume Sample (mL)	Volume Diluent (mL)	Total Volume (mL)
Laboratory Control	0	1200	1200
100% Sample	1200	0	1200

Comments:

Collect alkalinity and hardness samples on each sample.

000075

Documentation of Collection of *Ceriodaphnia dubia* for Toxicity Testing

Brood Board	Date / Time Init. when cleared of Neonates	Date / Time Init. when neonates collected	No. Cups with 8 or more neonates	Fed YCT / *Selenastrum*
10/15 A	10/23/00 13:00 jm	—	—	—
10/15 B	10/23/00 12:00 jm	—	—	—
10/17 A	10/23/00 12:20 jm	—	—	—
10/17 B	10/23/00 12:40 jm	—	—	—
10/15 A	10/23/00 17:30 jm	—	—	—
10/15 B	→	10/23 17:30 jm	4	✓
10/17 A	→	10/23 17:30 jm	11 *	✓
10/17 B	→	10/23 17:30 jm	11	✓

* neonates used to start test

Project Description / Test Use: Menzie Cura screen - SW

cccoll.doc

Site SW - PDA -7

Aquatec Biological Sciences

Test Date: 10/25/00
Sample Date: 10/24/00
Species: Ceriodaphnia dubia
Test Type: Chronic

Test Number: 25880
Test Material: Ambient water %
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	1.00	0.000	
Proportion Alive	7	No transformation							
			X	0.000	D	10	.90	.316	
			X	100.000	D	10	1.00	0.000	
Reproduction		No transformation							
			X	0.000	D	10	25.50	8.772	
			X	100.000	D	10	21.70	7.804	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	No transformation					
		Fisher Exact	>100.000	>100.000	< 1.00		
Proportion Alive	7	No transformation					
		Fisher Exact	>100.000	>100.000	< 1.00		
Reproduction		No transformation					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	68.922	6.423

- GROWTH POINT ESTIMATE -

End Point	P	IC	95% CI	
Reproduction				
	IC 10	67.105	25.63 -	90.40
	IC 25		-	
	IC 50		-	

Site SW-PDA-7

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 25880 (x) Chronic ( ) Acute hours
Test Date: 25-Oct-00
Source: SAUGET Test Material: AMB1 (%)

Conc	Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Total Young	Max Young
0.00 D	1		F	1	1						1	1.00	27	13
0.00 D	2		F	1	1						1	1.00	36	20
0.00 D	3		F	1	1						1	1.00	31	15
0.00 D	4		F	1	1						1	1.00	31	14
0.00 D	5		F	1	1						1	1.00	29	14
0.00 D	6		F	1	1						1	1.00	17	11
0.00 D	7		F	1	1						0	0.00	5	5
0.00 D	8		F	1	1						1	1.00	24	13
0.00 D	9		F	1	1						1	1.00	26	11
0.00 D	10		F	1	1						1	1.00	29	15
100.00 D	1		F	1	1						1	1.00	29	14
100.00 D	2		F	1	1						1	1.00	18	7
100.00 D	3		F	1	1						1	1.00	22	11
100.00 D	4		F	1	1						1	1.00	19	8
100.00 D	5		F	1	1						1	1.00	28	14
100.00 D	6		F	1	1						1	1.00	4	4
100.00 D	7		F	1	1						1	1.00	29	14
100.00 D	8		F	1	1						1	1.00	21	10
100.00 D	9		F	1	1						1	1.00	29	14
100.00 D	10		F	1	1						1	1.00	18	8

jm 11/29/00

Site SW-PDA-7

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 25880 (x) Chronic ( ) Acute hours
TEST DATE: 25-Oct-00
SOURCE: SAUGET TEST MATERIAL: AMB1 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
0.00	D	1				4	0	10	13				
0.00	D	2				5	0	11	20				
0.00	D	3				5	0	11	15				
0.00	D	4				0	6	11	14				
0.00	D	5				4	0	11	14				
0.00	D	6				6	0	11	0				
0.00	D	7				5	0	0	0				
0.00	D	8				3	0	8	13				
0.00	D	9				4	0	11	11				
0.00	D	10				4	0	10	15				
100.00	D	1				6	0	9	14				
100.00	D	2				6	0	7	5				
100.00	D	3				4	0	7	11				
100.00	D	4				5	0	6	8				
100.00	D	5				6	0	8	14				
100.00	D	6				4	0	0	0				
100.00	D	7				5	0	10	14				
100.00	D	8				4	0	7	10				
100.00	D	9				5	0	10	14				
100.00	D	10				5	0	8	5				

jm 11/29/00

Site SW-PDA-6

Aquatec Biological Sciences

Test Date: 10/25/00
Sample Date: 10/24/00
Species: Ceriodaphnia dubia
Test Type: Chronic

Test Number: 25882
Test Material: Ambient water
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	1.00	0.000	
Proportion Alive	7	No transformation							
			X	0.000	D	10	.90	.316	
			X	100.000	D	10	1.00	0.000	
Reproduction		No transformation							
			X	0.000	D	10	25.50	8.772	
			X	100.000	D	10	27.00	3.197	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	No transformation					
		Fisher Exact	>100.000	>100.000	1.00		
Proportion Alive	7	No transformation					
		Fisher Exact	>100.000	>100.000	1.00		
Reproduction		No transformation					
		Wilcoxon test with Bonfe	>100.000	>100.000	1.00	43.583	5.108

Site SW-PDA-6

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 25862 (x) Chronic ( ) Acute hours
Test Date: 25-Oct-00
Source: SAUGET Test Material: AMEI (%)

Conc	Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6 End	Prop Alive	Total Young	Max Young
0.00 D	1		F	1	1					1	1.00	27	13
0.00 D	2		F	1	1					1	1.00	36	20
0.00 D	3		F	1	1					1	1.00	31	15
0.00 D	4		F	1	1					1	1.00	31	14
0.00 D	5		F	1	1					1	1.00	29	14
0.00 D	6		F	1	1					1	1.00	17	11
0.00 D	7		F	1	1					0	0.00	5	5
0.00 D	8		F	1	1					1	1.00	24	13
0.00 D	9		F	1	1					1	1.00	26	11
0.00 D	10		F	1	1					1	1.00	29	15
100.00 D	1		F	1	1					1	1.00	29	16
100.00 D	2		F	1	1					1	1.00	30	16
100.00 D	3		F	1	1					1	1.00	24	12
100.00 D	4		F	1	1					1	1.00	23	12
100.00 D	5		F	1	1					1	1.00	24	12
100.00 D	6		F	1	1					1	1.00	27	13
100.00 D	7		F	1	1					1	1.00	25	12
100.00 D	8		F	1	1					1	1.00	33	15
100.00 D	9		F	1	1					1	1.00	26	13
100.00 D	10		F	1	1					1	1.00	29	15

jm 11/29/00

Sample 10&60
Site SW-PDA-6

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 25882 (x) Chronic ( ) Acute hours
TEST DATE: 25-Oct-00
SOURCE: SAUGET TEST MATERIAL: AMB1 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
0.00	D	1				4	0	10	13				
0.00	D	2				5	0	11	20				
0.00	D	3				5	0	11	15				
0.00	D	4				0	6	11	14				
0.00	D	5				4	0	11	14				
0.00	D	6				6	0	11	0				
0.00	D	7				5	0	0	0				
0.00	D	8				3	0	8	13				
0.00	D	9				4	0	11	11				
0.00	D	10				4	0	10	15				
100.00	D	1				4	0	9	16				
100.00	D	2				3	0	11	16				
100.00	D	3				5	0	7	12				
100.00	D	4				4	2	5	12				
100.00	D	5				5	0	7	12				
100.00	D	6				6	0	8	13				
100.00	D	7				5	0	8	12				
100.00	D	8				6	0	12	15				
100.00	D	9				4	0	9	13				
100.00	D	10				5	0	9	15				

jm 11/29/00

Site SW-PDA-5

Aquatec Biological Sciences

Test Date: 10/25/00
Sample Date: 10/24/00
Species: Ceriodaphnia dubia
Test Type: Chronic

Test Number: 25983
Test Material: Ambient water
Source: Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	1.00	0.000	
Proportion Alive	7	No transformation							
			X	0.000	D	10	.90	.316	
			X	100.000	D	10	.90	.316	
Reproduction		No transformation							
			X	0.000	D	10	25.50	8.772	
			X	100.000	D	10	.80	2.530	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	No transformation					
		Fisher Exact	>100.000	>100.000	1.00		
Proportion Alive	7	No transformation					
		Fisher Exact	>100.000	>100.000	1.00		
Reproduction		No transformation					
		Wilcoxon test with Bonfe	<100.000	100.000	1.00	41.672	4.994

- GROWTH POINT ESTIMATE -

End Point	P	IC	95% CI
Reproduction			
	IC 10	10.324	10.00 - 11.10
	IC 25	25.810	25.00 - 27.63
	IC 50	51.619	50.00 - 56.00

Sample 18264
Site SW-PDA-5

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 25883 (x) Chronic ( ) Acute hours
Test Date: 25-Oct-00
Source: SAUGET Test Material: AMBI (%)

Conc	Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Total Young	Max Young
0.00 D	1		F	1	1						1	1.00	27	13
0.00 D	2		F	1	1						1	1.00	36	20
0.00 D	3		F	1	1						1	1.00	31	15
0.00 D	4		F	1	1						1	1.00	31	14
0.00 D	5		F	1	1						1	1.00	29	14
0.00 D	6		F	1	1						1	1.00	17	11
0.00 D	7		F	1	1						0	0.00	5	5
0.00 D	8		F	1	1						1	1.00	24	13
0.00 D	9		F	1	1						1	1.00	26	11
0.00 D	10		F	1	1						1	1.00	29	15
100.00 D	1		F	1	1						1	1.00	0	0
100.00 D	2		F	1	1						0	0.00	0	0
100.00 D	3		F	1	1						1	1.00	0	0
100.00 D	4		F	1	1						1	1.00	0	0
100.00 D	5		F	1	1						1	1.00	0	0
100.00 D	6		F	1	1						1	1.00	0	0
100.00 D	7		F	1	1						1	1.00	8	8
100.00 D	8		F	1	1						1	1.00	0	0
100.00 D	9		F	1	1						1	1.00	0	0
100.00 D	10		F	1	1						1	1.00	0	0

jm 11/29/00

Sample 18260
Site SW-PDA-5

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 25883 (x) Chronic ( ) Acute hours
TEST DATE: 25-Oct-00
SOURCE: SAUGET TEST MATERIAL: AMB1 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
0.00	D	1				4	0	10	13				
0.00	D	2				5	0	11	20				
0.00	D	3				5	0	11	15				
0.00	D	4				0	6	11	14				
0.00	D	5				4	0	11	14				
0.00	D	6				6	0	11	0				
0.00	D	7				5	0	0	0				
0.00	D	8				3	0	8	13				
0.00	D	9				4	0	11	11				
0.00	D	10				4	0	10	15				
100.00	D	1				0	0	0	0				
100.00	D	2				0	0	0	0				
100.00	D	3				0	0	0	0				
100.00	D	4				0	0	0	0				
100.00	D	5				0	0	0	0				
100.00	D	6				0	0	0	0				
100.00	D	7				0	0	0	8				
100.00	D	8				0	0	0	0				
100.00	D	9				0	0	0	0				
100.00	D	10				0	0	0	0				

jm 11/29/00

Sample 18 & 20
Site SW-PDA-10

Aquatec Biological Sciences

Test Date: 10/25/00
Sample Date: 10/24/00
Species: Ceriodaphnia dubia
Test Type: Chronic

Test Number: 25884
Test Material: Ambient water %
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	1.00	0.000	
Proportion Alive	7	No transformation							
			X	0.000	D	10	.90	.316	
			X	100.000	D	10	1.00	0.000	
Reproduction		No transformation							
			X	0.000	D	10	25.50	8.772	
			X	100.000	D	10	21.80	6.941	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	No transformation					
		Fisher Exact	>100.000	>100.000	< 1.00		
Proportion Alive	7	No transformation					
		Fisher Exact	>100.000	>100.000	< 1.00		
Reproduction		No transformation					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	62.561	6.119

- GROWTH POINT ESTIMATE -

End Point	P		95% CI	
Reproduction				
	IC 10	88.919	23.77 -	99.62
	IC 25		-	
	IC 50		-	

Site SW-PDA-10

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 25884 (x) Chronic ( ) Acute hours
Test Date: 25-Oct-00
Source: SAUGET Test Material: AMB1 (%)

Conc	Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Total Young	Max Young
0.00 D	1		F	1	1						1	1.00	27	13
0.00 D	2		F	1	1						1	1.00	36	20
0.00 D	3		F	1	1						1	1.00	31	15
0.00 D	4		F	1	1						1	1.00	31	14
0.00 D	5		F	1	1						1	1.00	29	14
0.00 D	6		F	1	1						1	1.00	17	11
0.00 D	7		F	1	1						0	0.00	8	8
0.00 D	8		F	1	1						1	1.00	24	13
0.00 D	9		F	1	1						1	1.00	26	11
0.00 D	10		F	1	1						1	1.00	29	15
100.00 D	1		F	1	1						1	1.00	23	12
100.00 D	2		F	1	1						1	1.00	26	11
100.00 D	3		F	1	1						1	1.00	29	15
100.00 D	4		F	1	1						1	1.00	7	4
100.00 D	5		F	1	1						1	1.00	26	12
100.00 D	6		F	1	1						1	1.00	22	10
100.00 D	7		F	1	1						1	1.00	23	10
100.00 D	8		F	1	1						1	1.00	12	8
100.00 D	9		F	1	1						1	1.00	23	11
100.00 D	10		F	1	1						1	1.00	27	15

JM 12/20/00

000087

Site SW-PDA-1

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 25884 (x) Chronic ( ) Acute hours
TEST DATE: 25-Oct-00
SOURCE: SAUGET TEST MATERIAL: AMB1 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
0.00	D	1				4	0	10	13				
0.00	D	2				5	0	11	20				
0.00	D	3				5	0	11	15				
0.00	D	4				0	6	11	14				
0.00	D	5				4	0	11	14				
0.00	D	6				6	0	11	0				
0.00	D	7				5	0	0	0				
0.00	D	8				3	0	8	13				
0.00	D	9				4	0	11	11				
0.00	D	10				4	0	10	15				
100.00	D	1				4	0	7	12				
100.00	D	2				5	0	10	11				
100.00	D	3				5	0	9	15				
100.00	D	4				4	0	0	3				
100.00	D	5				5	0	9	12				
100.00	D	6				4	0	8	10				
100.00	D	7				4	0	9	10				
100.00	D	8				4	0	8	0				
100.00	D	9				5	0	7	11				
100.00	D	10				2	0	10	15				

jm 12/20/00

Ceriodaphnia dubia Survival and Reproduction Data (Page 1 of 2)

Client: MENZIE-CURA SAUGET **BTR:** 4812 **SDG:** 4805

Test Description: *Ceriodaphnia dubia* acute / chronic toxicity tests

Effluent (%)	Repl 1	Repl 2	Repl 3	Repl 4	Repl 5	Repl 6	Repl 7	Repl 8	Repl 9	Repl 10	Remarks
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 0
18267	0	0	0	0	0	0	0	0	0	0	
18268	0	0	0	0	0	0	0	0	0	0	Fed ✓
18269	0	0	0	0	0	0	0	0	0	0	
18270	0	0	0	0	0	0	0	0	0	0	Date/time/Init.
											10/25/00 jm
											12:20
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 1
18267	0	0	0	0	0	0	0	0	0	0	
18268	0	0	0	0	0	0	0	0	0	0	Fed ✓
18269	0	0	0	0	0	0	0	0	0	0	
18270	0	0	0	0	0	0	0	0	0	0	Date/time/Init.
											10/26/00 jm
											10:20
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 2
18267	0	0	0	0	0	0	0	0	0	0	Sample:
18268	0	0	0	0	0	0	0	0	0	0	Fed ✓
18269	0	0	0	0	0	0	0	0	0	0	
18270	0	0	0	0	0	0	0	0	0	0	Date/time/Init.
											10/27/00 JG
											11:30
Lab Contr	4	5	5	0	4	6	5	3	4	4	Day 3
18267	6	6	4	5	6	4	5	4	5	5	✓
18268	4	3	5	4	5	6	5	6	4	5	Fed
18269	0	D	0	0	0	0	0	0	0	0	
18270	4	5	5	4	5	4	4	4	5	2	Date/time/Init.
											10/28/00
											13:00 JG

0=original organism surviving, no young; D=original organism dead; #=# young released; *=lab-induced mortality

Aquatec Biological Sciences, Inc. Williston Vermont

Reviewed by: _____ Date: 1/16/01

CdPpChronic4812

Ceriodaphnia dubia Survival and Reproduction Data (Page 2 of 2)

Client: MENZIE-CURA SAUGET **SDG:** 4805

Test Description: *Ceriodaphnia dubia* acute / chronic toxicity tests

Effluent (%)	Repl 1	Repl 2	Repl 3	Repl 4	Repl 5	Repl 6	Repl 7	Repl 8	Repl 9	Repl 10	Remarks
Lab Contr	0	0	0	6	0	0	0	0	0	0	Day 4
18267	0	0	0	0	0	0	0	0	0	0	
18268	0	0	0	2	0	0	0	0	0	0	Fed ✓
18269	0	D	0	0	0	0	0	0	0	0	
18270	0	0	0	0	0	0	0	0	0	0	Date/time/Init.
											10/29/00
											14:00 jm
Lab Contr	10	11	11	11	11	11	D	8	11	10	Day 5
18267	9	7	7	6	8	0	10	7	10	8	
18268	9	11	7	5	7	8	8	12	9	9	Fed
18269	0	D	0	0	0	0	0	0	0	0	
18270	7	10	9	0	9	8	9	8	7	10	Date/time/Init.
											10/30/00 jm
											12:30
Lab Contr	13	20	15	14	14	0	D	13	11	15	Day 6
18267	14	5	11	8	14	0	14	10	14	5	
18268	16	16	12	12	12	13	12	15	13	15	Fed
18269	0	D	0	0	0	0	8	0	0	0	
18270	12	11	15	3	12	10	10	0	11	15	Date/time/Init.
											10/31/00 jm
											16:00
Lab Contr											Day 7
18267											
18268											Fed
18269											
18270											Date/time/Init.

0=original organism surviving, no young; D=original organism dead; #=# young released; *=lab-induced mortality

Aquatec Biological Sciences, Inc. Williston Vermont

Reviewed by: _____ Date: 1/16/01

CdPpChronic4812

Water Chemistry Data

Client: MENZIE-CURA SAUGET		Test Description: *C. dubia* acute / chronic toxicity *	SDG: 4805

INITIAL WATER CHEMISTRY DATA * (*C. dubia* and *Pimephales promelas* tests) | **FINAL WATER CHEMISTRY DATA** (*C. dubia* test only)

	Day:	0	1	2	3	4	5	6	1	2	3	4	5	6	7
Lab Control 18225 (Pp)	pH	8.0	7.9	7.9	8.0	7.9	7.9	8.0							
	DO	8.2	8.1	8.2	10.8, 8.3	8.3	8.3	8.2							
	Temp.	24.1	24.0	24.3	24.6	24.5	24.1	24.2							
	Conduct.	280	280	280	270	270	270	270							
Lab Control 18226 (Cd)	pH	8.0	7.8	7.8	8.0	7.9	7.9	8.0	7.7	7.9	7.8	7.7	7.7	7.7	
	DO	8.3	8.3	8.3	8.4	8.4	8.2	8.4	8.0	8.3	8.3	8.2	8.4	8.3	
	Temp.	24.2	24.1	24.4	24.5	24.5	24.0	24.0	24.6	24.2	24.2	23.2*	24.2	24.1	
	Conduct.	220	210	200	200	210	220	220	220	210	210	210	210	210	
18267	pH	7.9	8.0	8.0	8.0	8.1	8.1	8.1	8.4	8.4	8.4	8.4	8.4	8.4	
	DO	9.3	9.8	9.9	10.1	9.9	10.0	9.4	8.2	8.3	8.3	8.3	8.4	8.2	
	Temp.	25.2	24.2	24.3	25.0	25.2	25.4	24.7	24.5	24.0	24.1	23.4	24.1	24.2	
	Conduct.	450	440	460	460	440	440	440	430	450	450	430	425	450	
18268	pH	8.0	8.0	8.1	8.0	8.0	8.0	8.0	8.4	8.4	8.4	8.5	8.4	8.4	
	DO	9.5	9.6	10.0	10.0	10.0	9.8	9.5	8.2	8.3	8.3	8.3	8.4	8.2	
	Temp.	25.4	24.2	24.2	25.3	25.2	25.2	24.8	24.2	24.2	23.9	23.6	24.0	24.2	
	Conduct.	460	460	470	480	470	465	470	470	480	480	470	445	460	
18269	pH	8.0	8.0	8.1	8.0	8.1	8.1	8.0	8.4	8.5	8.4	8.5	8.5	8.4	
	DO	9.3	9.5	10.0	10.0	9.9	10.0	9.4	8.2	8.4	8.3	8.2	8.6	8.2	
	Temp.	25.8	24.2	24.3	25.5	25.6	25.0	24.7	24.1	24.0	24.0	23.7	23.9	24.1	
	Conduct.	550	490	500	500	600	500	500	490	500	500	490	475	480	
18270	pH	8.0	8.0	8.1	8.0	8.1	8.1	8.1	8.4	8.5	8.5	8.5	8.5	8.4	
	DO	9.1	9.4	10.0	10.0	9.7	10.0	9.5	8.3	8.4	8.4	8.4	8.5	8.3	
	Temp.	25.4	24.5	24.4	25.1	25.6	25.0	24.6	24.2	23.9	24.1	23.6	23.9	24.2	
	Conduct.	470	450	465	470	500	500	460	450	465	460	440	440	450	
	pH														
	DO														
	Temp.														
	Conduct.														
	Init./Date	jm 10/25	jm 10/26	JG 10/27	JG 10/28	jm 10/29	jm 10/30	jm 10/31	jm 10/26	JG 10/27	JG 10/28	jm 10/29	jm 10/30	jm 10/31	

* Room temp increased 10/26 jm

Sample Preparation

Client: MENZIE-CURA SAUGET	BTR: 4812	SDG: 4805
Test Description: *Ceriodaphnia dubia* and *Pimephales promelas* acute / chronic toxicity tests		

Sample Identification:

Sample Description	SW-PDA 7	SW-PDA 6	SW-PDA 5	SW-PDA 10	*Pimephales* Control	*Ceriodaphnia* Control	
Sample #	18267	18268	18269	18270	18225	18226	

Sample Preparation:

Filtration	60 micron	60 micron	60 micron	60 micron			
Warm (25°C)	✓	✓	✓	✓			
Prepared by (Init./date)	10/25/00 jm	10/25/00 jm	10/25/00 jm	10/25/00 jm			

Remove a subsample for warming, store the remainder of the sample refrigerated.

Daily Dilution Plan for: *Ceriodaphnia dubia* and *Pimephales promelas* chronic toxicity tests

Concentration (%)	Volume Sample (mL)	Volume Diluent (mL)	Total Volume (mL)
Laboratory Control	0	1200	1200
100% Sample	1200	0	1200

Comments:

Collect alkalinity and hardness samples on each sample.

Documentation of Collection of *Ceriodaphnia dubia* for Toxicity Testing

4 2000

Brood Board	Date / Time Init. when cleared of Neonates	Date / Time Init. when neonates collected	No. Cups with 8 or more neonates	Fed YCT / *Selenastrum*
10/15A	10/24 13:00 jm	—	—	—
10/17A	10/24 12:45 JG	—	—	—
10/17B	10/24 13:20 JG	—	—	—
10/17B	10/24 17:00	10/24 17:00	4	✓
10/15A	10/24 17:00	10/24 17:00	5	✓
10/17A	10/24 17:00	10/24 17:00	7	✓

Project Description / Test Use: Menzie Cura - SW

cocoll.doc

Site SW-PDA-2

Aquatec Biological Sciences

Test Date: 10/26/00
Sample Date: 10/25/00
Species: Ceriodaphnia dubia
Test Type: Chronic

Test Number: 25907
Test Material: Ambient water
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	No transformation							
			X	0.000	D	10	1.00	0.000	
				100.000	D	10	0.00	0.000	
Proportion Alive	7	No transformation							
			X	0.000	D	10	1.00	0.000	
				100.000	D	10	0.00	0.000	
Reproduction		No transformation							
			X	0.000	D	10	16.20	8.702	
				100.000	D	10	0.00	0.000	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	No transformation Fisher Exact	<100.000	100.000 >	1.00		
Proportion Alive	7	No transformation Fisher Exact	<100.000	100.000 >	1.00		
Reproduction		No transformation EPA Flowchart (Chronic a					

- GROWTH POINT ESTIMATE -

End Point	P	IC	95% CI
Reproduction			
	IC 10	10.000	10.00 - 10.00
	IC 25	25.000	25.00 - 25.00
	IC 50	50.000	50.00 - 50.00

Site SW-PDA-2

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 25907 (x) Chronic ( ) Acute hours
Test Date: 26-Oct-00
Source: SAUGET Test Material: AMB1 (%)

Conc	Rep	Cont. Nc.	Sex	Start	Daily Survival 1	2	3	4	5	6 End	Prop Alive	Total Young	Max Young
0.00 D	1		F	1	1					1	1.00	32	13
0.00 D	2		F	1	1					1	1.00	31	15
0.00 D	3		F	1	1					1	1.00	33	16
0.00 D	4		F	1	1					1	1.00	30	14
0.00 D	5		F	1	1					1	1.00	33	16
0.00 D	6		F	1	1					1	1.00	11	11
0.00 D	7		F	1	1					1	1.00	10	8
0.00 D	8		F	1	1					1	1.00	25	14
0.00 D	9		F	1	1					1	1.00	31	16
0.00 D	10		F	1	1					1	1.00	26	13
100.00 D	1		F	1	0					0	0.00	0	0
100.00 D	2		F	1	0					0	0.00	0	0
100.00 D	3		F	1	0					0	0.00	0	0
100.00 D	4		F	1	0					0	0.00	0	0
100.00 D	5		F	1	0					0	0.00	0	0
100.00 D	6		F	1	0					0	0.00	0	0
100.00 D	7		F	1	0					0	0.00	0	0
100.00 D	8		F	1	0					0	0.00	0	0
100.00 D	9		F	1	0					0	0.00	0	0
100.00 D	10		F	1	0					0	0.00	0	0

jm 12/20/00

Site SW-PDA-2

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 25907 (x) Chronic ( ) Acute hours
TEST DATE: 26-Oct-00
SOURCE: SAUGET TEST MATERIAL: AMB1 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
0.00	D	1				6	0	13	13				
0.00	D	2				6	0	10	15				
0.00	D	3				6	0	11	16				
0.00	D	4				5	0	11	14				
0.00	D	5				7	0	10	16				
0.00	D	6				0	0	11	0				
0.00	D	7				2	0	8	0				
0.00	D	8				5	0	6	14				
0.00	D	9				6	0	9	16				
0.00	D	10				6	0	7	13				
100.00	D	1				0	0	0	0				
100.00	D	2				0	0	0	0				
100.00	D	3				0	0	0	0				
100.00	D	4				0	0	0	0				
100.00	D	5				0	0	0	0				
100.00	D	6				0	0	0	0				
100.00	D	7				0	0	0	0				
100.00	D	8				0	0	0	0				
100.00	D	9				0	0	0	0				
100.00	D	10				0	0	0	0				

jm 12/20/00

Site SW-PDA-2 FD

Aquatec Biological Sciences

Test Date: 10/26/00
Sample Date: 10/25/00
Species: Ceriodaphnia dubia
Test Type: Chronic

Test Number: 25910
Test Material: Ambient water %
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	No transformation							
			X	0.000	D	10	1.00	0.000	
				100.000	D	10	0.00	0.000	
Proportion Alive	7	No transformation							
			X	0.000	D	10	1.00	0.000	
				100.000	D	10	0.00	0.000	
Reproduction		No transformation							
			X	0.000	D	10	26.20	8.702	
				100.000	D	10	0.00	0.000	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	No transformation Fisher Exact	<100.000	100.000 >	1.00		
Proportion Alive	7	No transformation Fisher Exact	<100.000	100.000 >	1.00		
Reproduction		No transformation EPA Flowchart (Chronic a					

- GROWTH POINT ESTIMATE -

End Point	P	IC	95% CI
Reproduction			
	IC 10	10.000	10.00 - 10.00
	IC 25	25.000	25.00 - 25.00
	IC 50	50.000	50.00 - 50.00

Site SW-PDA-2 FD

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 25910 (x) Chronic ( ) Acute hours
Test Date: 26-Oct-00
Source: SAUGET Test Material: AMBI (%)

Conc		Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Total Young	Max Young
0.00	D	1		F	1	1						1	1.00	32	13
0.00	D	2		F	1	1						1	1.00	31	15
0.00	D	3		F	1	1						1	1.00	33	16
0.00	D	4		F	1	1						1	1.00	30	14
0.00	D	5		F	1	1						1	1.00	33	16
0.00	D	6		F	1	1						1	1.00	11	11
0.00	D	7		F	1	1						1	1.00	10	8
0.00	D	8		F	1	1						1	1.00	35	14
0.00	D	9		F	1	1						1	1.00	31	16
0.00	D	10		F	1	1						1	1.00	26	13
100.00	D	1		F	1	0						1	0.00	0	0
100.00	D	2		F	1	0						1	0.00	0	0
100.00	D	3		F	1	0						1	0.00	0	0
100.00	D	4		F	1	0						1	0.00	0	0
100.00	D	5		F	1	0						1	0.00	0	0
100.00	D	6		F	1	0						1	0.00	0	0
100.00	D	7		F	1	0						1	0.00	0	0
100.00	D	8		F	1	0						1	0.00	0	0
100.00	D	9		F	1	0						1	0.00	0	0
100.00	D	10		F	1	0						1	0.00	0	0

jm 12/22/00

Site SW-PDA -3

Aquatec Biological Sciences

Test Date: 10/26/00
Sample Date: 10/26/00
Species: Ceriodaphnia dubia
Test Type: Chronic

Test Number: 25913
Test Material: Ambient water %
Source: SAUGET
Sauget
Mentle Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	.40	.516	
Proportion Alive	7	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	.20	.422	
Reproduction		No transformation							
			X	0.000	D	10	26.20	8.702	
				100.000	D	10	.30	.949	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	No transformation Fisher Exact	<100.000	100.000 >	1.00		
Proportion Alive	7	No transformation Fisher Exact	<100.000	100.000 >	1.00		
Reproduction		No transformation EPA Flowchart (Chronic a					

- GROWTH POINT ESTIMATE -

End Point	P	IC	95% CI
Reproduction			
	IC 10	10.116	10.00 - 10.49
	IC 25	25.290	25.00 - 26.06
	IC 50	50.579	50.00 - 52.48

Sample 15281
Site SW-PDA-3

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 25913 (x) Chronic ( ) Acute hours
Test Date: 26-Oct-00
Source: SAUGET Test Material: AMSI (%)

Conc		Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6 End	Prop Alive	Total Young	Max Young
0.00	D	1		F	1	1					1	1.00	32	13
0.00	D	2		F	1	1					1	1.00	31	15
0.00	D	3		F	1	1					1	1.00	33	16
0.00	D	4		F	1	1					1	1.00	30	14
0.00	D	5		F	1	1					1	1.00	33	16
0.00	D	6		F	1	1					1	1.00	11	11
0.00	D	7		F	1	1					1	1.00	10	8
0.00	D	8		F	1	1					1	1.00	25	14
0.00	D	9		F	1	1					1	1.00	31	16
0.00	D	10		F	1	1					1	1.00	26	13
100.00	D	1		F	1	0					0	0.00	0	0
100.00	D	2		F	1	0					0	0.00	0	0
100.00	D	3		F	1	0					0	0.00	0	0
100.00	D	4		F	1	1					0	0.00	0	0
100.00	D	5		F	1	0					0	0.00	0	0
100.00	D	6		F	1	1					1	1.00	0	0
100.00	D	7		F	1	1					0	0.00	0	0
100.00	D	8		F	1	1					1	1.00	3	3
100.00	D	9		F	1	0					0	0.00	0	0
100.00	D	10		F	1	0					0	0.00	0	0

jm 12/22/00

Site SW-PDA-3

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 25913 (x) Chronic ( ) Acute hours
TEST DATE: 26-Oct-00
SOURCE: SAUGET TEST MATERIAL: AMB1 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
0.00	D	1				6	0	13	13				
0.00	D	2				6	0	10	15				
0.00	D	3				6	0	11	16				
0.00	D	4				5	0	11	14				
0.00	D	5				7	0	10	16				
0.00	D	6				0	0	11	0				
0.00	D	7				2	0	8	0				
0.00	D	8				5	0	6	14				
0.00	D	9				6	0	9	16				
0.00	D	10				6	0	7	13				
100.00	D	1				0	0	0	0				
100.00	D	2				0	0	0	0				
100.00	D	3				0	0	0	0				
100.00	D	4				0	0	0	0				
100.00	D	5				0	0	0	0				
100.00	D	6				0	0	0	0				
100.00	D	7				0	0	0	0				
100.00	D	8				0	0	0	3				
100.00	D	9				0	0	0	0				
100.00	D	10				0	0	0	0				

jm 12/22/00

Site SW-PDA -4

Aquatec Biological Sciences

Test Date: 10/26/00
Sample Date: 10/25/00
Species: Ceriodaphnia dubia
Test Type: Chronic

Test Number: 25916
Test Material: Ambient water
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	.20	.422	
Proportion Alive	7	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	.10	.316	
Reproduction		No transformation							
			X	0.000	D	10	36.20	8.702	
				100.000	D	10	0.00	0.000	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	No transformation					
		Fisher Exact	<100.000	100.000 >	1.00		
Proportion Alive	7	No transformation					
		Fisher Exact	<100.000	100.000 >	1.00		
Reproduction		No transformation					
		EPA Flowchart (Chronic a					

- GROWTH POINT ESTIMATE -

End Point	P	IC	95% CI
Reproduction			
	IC 10	10.000	10.00 - 10.00
	IC 25	25.000	25.00 - 25.00
	IC 50	50.000	50.00 - 50.00

Site SW-PDA-4

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 25916 (x) Chronic ( ) Acute hours
Test Date: 26-Oct-00
Source: SAUGET Test Material: AMBI (%)

Conc	Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6 End	Prop Alive	Total Young	Max Young
0.00 D	1		F	1	1					1	1.00	32	13
0.00 D	2		F	1	1					1	1.00	31	15
0.00 D	3		F	1	1					1	1.00	33	16
0.00 D	4		F	1	1					1	1.00	30	14
0.00 D	5		F	1	1					1	1.00	33	16
0.00 D	6		F	1	1					1	1.00	11	11
0.00 D	7		F	1	1					1	1.00	10	8
0.00 D	8		F	1	1					1	1.00	25	14
0.00 D	9		F	1	1					1	1.00	31	16
0.00 D	10		F	1	1					1	1.00	26	13
100.00 D	1		F	1	0					0	0.00	0	0
100.00 D	2		F	1	0					0	0.00	0	0
100.00 D	3		F	1	0					0	0.00	0	0
100.00 D	4		F	1	0					0	0.00	0	0
100.00 D	5		F	1	0					0	0.00	0	0
100.00 D	6		F	1	1					1	1.00	0	0
100.00 D	7		F	1	0					0	0.00	0	0
100.00 D	8		F	1	1					0	0.00	0	0
100.00 D	9		F	1	0					0	0.00	0	0
100.00 D	10		F	1	0					0	0.00	0	0

JM 12/22/00

000194

Site SW-PDA-4

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 25916 (x) Chronic ( ) Acute hours
TEST DATE: 26-Oct-00
SOURCE: SAUGET TEST MATERIAL: AMB1 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
0.00	D	1				6	0	13	13				
0.00	D	2				6	0	10	15				
0.00	D	3				6	0	11	16				
0.00	D	4				5	0	11	14				
0.00	D	5				7	0	10	16				
0.00	D	6				0	0	11	0				
0.00	D	7				2	0	8	0				
0.00	D	8				5	0	6	14				
0.00	D	9				6	0	9	16				
0.00	D	10				6	0	7	13				
100.00	D	1				0	0	0	0				
100.00	D	2				0	0	0	0				
100.00	D	3				0	0	0	0				
100.00	D	4				0	0	0	0				
100.00	D	5				0	0	0	0				
100.00	D	6				0	0	0	0				
100.00	D	7				0	0	0	0				
100.00	D	8				0	0	0	0				
100.00	D	9				0	0	0	0				
100.00	D	10				0	0	0	0				

jm 12/22/00

Ceriodaphnia dubia Survival and Reproduction Data (Page 1 of 2)

Client: MENZIE-CURA SAUGET BTR: 4815 SDG: 4805

Test Description: *Ceriodaphnia dubia* acute / chronic toxicity tests

Effluent (%)	Repl 1	Repl 2	Repl 3	Repl 4	Repl 5	Repl 6	Repl 7	Repl 8	Repl 9	Repl 10	Remarks
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 0
18279	0	0	0	0	0	0	0	0	0	0	
18280	0	0	0	0	0	0	0	0	0	0	Fed ✓
18281	0	0	0	0	0	0	0	0	0	0	
18282	0	0	0	0	0	0	0	0	0	0	Date/time/Init.
											10/26/00 jm
											12:00
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 1
18279	D	D	D	D	D	D	D	D	D	D	
18280	D	0	D	D	D	D	D	D	0	D	Fed ✓
18281	0	0	0	0	0	0	0	0	0	D	
18282	D	D	D	D	D	0	D	0	D	D	Date/time/Init.
											10/27/00
											11:30 JG
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 2
18279	D	—	—	—	—	—	—	—	—	—	Sample:
18280	D	D	D	D	D	D	D	D	D	D	Fed ✓
18281	D	D	D	0	D	0	0	0	D	D	
18282	D	D	D	D	D	0	D	0	D	D	Date/time/Init.
											10/28/00
											13:30 JG
Lab Contr	6	6	6	5	7	0	2	5	6	6	Day 3
18279	D	—	—	—	—	—	—	—	—	1	
18280	D	—	—	—	—	—	—	—	—	1	Fed ✓
18281	D	D	D	D	D* jm	D* jm	D	0	D	D	
18282	D	D	D	D	D	0	D	0	D	D	Date/time/Init.
											10/29/00
											jm 14:20

0=original organism surviving, no young; D=original organism dead; #=# young released; *=lab-induced mortality

Ceriodaphnia dubia Survival and Reproduction Data (Page 2 of 2)

Client: MENZIE-CURA SAUGET **SDG:** 4805

Test Description: *Ceriodaphnia dubia* acute / chronic toxicity tests

Effluent (%)	Repl 1	Repl 2	Repl 3	Repl 4	Repl 5	Repl 6	Repl 7	Repl 8	Repl 9	Repl 10	Remarks
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 4
18279	D									1	
18280	D									1	Fed ✓
18281	D	D	D	D	D	0	D	0	D	D	
18282	D	D	D	D	D	0	D	D	D	D	Date/time/Init.
											10/30/00 ym
											11:30
Lab Contr	13	10	11	11	10	11	8	6	9	7	Day 5
18279	D									1	
18280	D									1	Fed ✓
18281	D	D	D	D	D	0	D	0	D	D	
18282	D	D	D	D	D	0	D	D	D	D	Date/time/Init.
											10/31/00 ym
											13:45
Lab Contr	13	15	16	14	16	0	0	14	16	13	Day 6
18279	D									1	
18280	D									1	Fed –
18281	D	D	D	D	D	0	D	3	D	D	
18282	D	D	D	D	D	0	D	D	D	D	Date/time/Init.
											11/1/00
											13:30 ym
Lab Contr											Day 7
18279											
18280											Fed
18281											
18282											Date/time/Init.

0=original organism surviving, no young; D=original organism dead; #=# young released; *=lab-induced mortality

Aquatec Biological Sciences, Inc. Williston Vermont

Reviewed by: _____ Date: 1/16/01

CdPpChronic4815

Water Chemistry Data

Client: MENZIE-CURA SAUGET		Test Description: *C. dubia* acute / chronic toxicity *	SDG: 4805

INITIAL WATER CHEMISTRY DATA * (*C. dubia* and *Pimephales promelas* tests)

	Day:	0	1	2	3	4	5	6
Lab Control 18225 (Pp)	pH	7.9	7.9	7.9	7.9	7.9	8.0	8.0
	DO	8.1	8.2	8.3	8.3	8.3	8.2	8.2
	Temp.	24.0	24.4	24.6	24.5	24.1	24.2	25.0
	Conduct.	280	280	280	270	270	270	270
Lab Control 18226 (Cd)	pH	7.8	7.8	7.9	7.9	7.9	8.0	7.9
	DO	8.3	8.3	8.4	8.4	8.2	8.4	8.2
	Temp.	24.1	24.3	24.5	24.5	24.0	24.0	24.5
	Conduct.	210	200	200	210	220	220	200
18279	pH	7.8	8.0	8.1	7.9	7.9	8.0	8.0
	DO	9.3	9.8	9.7	9.4	9.9	9.8	8.4
	Temp.	24.0	24.4	25.1	25.1	25.2	24.7	24.0
	Conduct.	470	500	600	490	480	490	470
18280	pH	7.9	7.9	8.1	8.0	8.0	8.0	8.1
	DO	9.2	9.8	9.5	9.4	9.5	9.8	8.5
	Temp.	24.1	24.3	25.4	25.2	25.5	21.8	24.0
	Conduct.	475	500	600	600	550	500	500
18281	pH	8.0	8.0	8.1	8.0	8.0	8.1	8.1
	DO	9.5	9.9	9.6	9.5	9.7	9.8	8.6
	Temp.	24.0	24.5	25.4	25.5	25.8	24.9	24.1
	Conduct.	475	500	500	500	550	500	490
18282	pH	8.0	8.0	8.1	8.0	8.0	8.1	8.1
	DO	9.2	10.0	9.8	9.9	9.8	9.9	8.6
	Temp.	24.2	24.4	25.5	24.5	25.4	21.5	24.2
	Conduct.	480	500	500	500	500	500	500
	pH							
	DO							
	Temp.							
	Conduct.							
	Init./Date	JM 10/26	JG 10/27	JG 10/28	JM 10/29	JM 10/30	JM 10/31	JG 11/1

FINAL WATER CHEMISTRY DATA (*C. dubia* test only)

1	2	3	4	5	6	7
7.6	7.7	7.8	7.8	7.8	7.8	
8.2	8.2	8.2	8.3	8.3	8.2	
24.3	23.9	23.2*	24.0	23.6	23.7	~~23.4~~
215	210	210	210	210	220	
8.1						
8.3						
24.3						
490						
8.2	8.4					
8.3	—					
24.2	24.1					
500	—					
8.3	8.4	8.4	8.5	8.4	8.5	
8.3	~~8.3~~	—	—	—	—	
~~24.2~~	24.0	23.0	23.6	23.6	23.7	~~23.5~~
500	500	—	—	—	—	
8.3	8.5	8.5	8.5	8.5	8.5	
8.3	—	—	—	—	—	
24.3	24.0	23.2	23.5	23.7	23.7	~~23.4~~
500	~~500~~	—	—	—	—	
JG 10/27	JG 10/28	JM 10/29	JM 10/30	JM 10/31	JM 11/1	JG 11/1

Room temp increased JM 10/29

Aquatec Biological Sciences, Inc. Williston Vermont

Reviewed by: _____ Date 1/16/01

CdPpChronic4815

Sample Preparation

Client: MENZIE-CURA SAUGET	BTR: 4815	SDG: 4805
Test Description: *Ceriodaphnia dubia* and *Pimephales promelas* acute / chronic toxicity tests		

Sample Identification:

Sample Description	SW-PDA 2	SW-PDA 2 FD	SW-PDA 3	SW-PDA 4	*Pimephales* Control	*Ceriodaphnia* Control	
Sample #	18279	18280	18281	18282	18225	18226	

Sample Preparation:

Filtration	60 micron	60 micron	60 micron	60 micron			
Warm (25°C)	✓	✓	✓	✓	✓	✓	
Prepared by (Init./date)	10/26/00 jm	10/26/00 jm	10/26/00 jm	10/26/00 jm	jm	jm	

Remove a subsample for warming, store the remainder of the sample refrigerated.

Daily Dilution Plan for: *Ceriodaphnia dubia* and *Pimephales promelas* chronic toxicity tests

Concentration (%)	Volume Sample (mL)	Volume Diluent (mL)	Total Volume (mL)
Laboratory Control	0	1200	1200
100% Sample	1200	0	1200

Comments:

Collect alkalinity and hardness samples on each sample.

Documentation of Collection of *Ceriodaphnia dubia* for Toxicity Testing

Brood Board	Date / Time Init. when cleared of Neonates	Date / Time Init. when neonates collected	No. Cups with 8 or more neonates	Fed YCT / *Selenastrum*
10/17A	10/25/00 12:45 jm	—	—	—
10/17B	10/25/00 13:15 jm	—	—	—
10/15A	10/25/00 13:15 jm	—	—	—
10/15B	10/25/00 13:30 JG	—	—	—
10/15A		10/25 1650	4	✓
10/15B		10/25 1653	4 *	✓
10/17A		10/25 1655	3 *	✓
10/17B		10/25 1658	4 *	✓

*neonates used to start test 10/26 jm

Project Description / Test Use: Menzie Cura

cdcoll.doc

Site SW-PDA-8

Aquatec Biological Sciences

Test Date: 10/27/00
Sample Date: 10/26/00
Species: Ceriodaphnia dubia
Test Type: Chronic

Test Number: 15938
Test Material: Ambient water %
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	1.00	0.000	
Proportion Alive	7	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	.90	.316	
Reproduction		No transformation							
			X	0.000	D	10	22.40	8.922	
			X	100.000	D	10	13.70	6.237	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSI
Proportion Alive	2	No transformation Fisher Exact	>100.000	>100.000	< 1.00		
Proportion Alive	7	No transformation Fisher Exact	>100.000	>100.000	< 1.00		
Reproduction		No transformation Wilcoxon test with Bonfe	<100.000	100.000	> 1.00	59.250	5.985

- GROWTH POINT ESTIMATE -

End Point	P	IC	95% CI
Reproduction			
	IC 10	28.747	17.38 - 99.61
	IC 25	64.368	42.30 - 90.32
	IC 50		-

Site SW-PDA-8

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 28936 (x) Chronic ( ) Acute Hours
Test Date: 27-Oct-10
Source: SAUGET Test Material: AMEL (%)

Conc	Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Total Young	Max Young
0.00 D	1		F	1	1						1	1.00	15	9
0.00 D	2		F	1	1						1	1.00	26	11
0.00 D	3		F	1	1						1	1.00	28	12
0.00 D	4		F	1	1						1	1.00	26	10
0.00 D	5		F	1	1						1	1.00	27	12
0.00 D	6		F	1	1						1	1.00	27	12
0.00 D	7		F	1	1						1	1.00	27	12
0.00 D	8		F	1	1						1	1.00	26	11
0.00 D	9		F	1	1						1	1.00	29	12
0.00 D	10		F	1	1						1	1.00	1	1
100.00 D	1		F	1	1						0	0.00	0	0
100.00 D	2		F	1	1						1	1.00	17	8
100.00 D	3		F	1	1						1	1.00	6	6
100.00 D	4		F	1	1						1	1.00	15	6
100.00 D	5		F	1	1						1	1.00	13	6
100.00 D	6		F	1	1						1	1.00	13	5
100.00 D	7		F	1	1						1	1.00	19	8
100.00 D	8		F	1	1						1	1.00	17	8
100.00 D	9		F	1	1						1	1.00	20	-
100.00 D	10		F	1	1						1	1.00	17	9

jm 12/27/10

Sample 18299
Site SW-FDA-8

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 25938 (x) Chronic ( ) Acute hours
TEST DATE: 27-Oct-00
SOURCE: SAUGET TEST MATERIAL: AMB1 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
0.00	D	1					6	0	9	0			
0.00	D	2					6	9	0	11			
0.00	D	3					5	11	0	12			
0.00	D	4					6	10	0	10			
0.00	D	5					6	9	0	12			
0.00	D	6					5	0	0	12			
0.00	D	7					5	9	0	13			
0.00	D	8					6	11	0	11			
0.00	D	9					6	12	0	11			
0.00	D	10					1	0	0	0			
100.00	D	1					0	0	0	0			
100.00	D	2					4	8	5	0			
100.00	D	3					0	6	0	0			
100.00	D	4					6	5	0	4			
100.00	D	5					2	6	0	5			
100.00	D	6					5	5	0	3			
100.00	D	7					6	5	0	8			
100.00	D	8					4	5	0	8			
100.00	D	9					6	7	0	7			
100.00	D	10					4	4	9	0			

jm 12/27/00

Site SW-PDA-8 FD

Aquatec Biological Sciences

Test Date: 10/27/00
Sample Date: 10/26/00
Species: Ceriodaphnia dubia
Test Type: Chronic

Test Number: 25940
Test Material: Ambient water %
Source: SAUGET
Sauget
Mentle Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	1.00	0.000	
Proportion Alive	7	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	1.00	0.000	
Reproduction		No transformation							
			X	0.000	D	10	22.40	8.932	
			X	100.000	D	10	18.90	5.405	

X = Indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	No transformation Fisher Exact	>100.000	>100.000	< 1.00		
Proportion Alive	7	No transformation Fisher Exact	>100.000	>100.000	< 1.00		
Reproduction		No transformation Wilcoxon test with Bonfe	<100.000	100.000	> 1.00	54.406	5.707

- GROWTH POINT ESTIMATE -

End Point	P	IC	95% CI
Reproduction	IC 10	64.000	30.33 - 96.82
	IC 25		-
	IC 50		-

Site SW-PDA-8 FD

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 25940 (x) Chronic ( ) Acute hours
Test Date: 27-Oct-00
Source: SAUGET Test Material: AMBI (%)

Conc	Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Total Young	Max Young
0.00 D	1		F	1	1						1	1.00	15	9
0.00 D	2		F	1	1						1	1.00	26	11
0.00 D	3		F	1	1						1	1.00	28	12
0.00 D	4		F	1	1						1	1.00	26	10
0.00 D	5		F	1	1						1	1.00	27	12
0.00 D	6		F	1	1						1	1.00	17	12
0.00 D	7		F	1	1						1	1.00	27	13
0.00 D	8		F	1	1						1	1.00	26	11
0.00 D	9		F	1	1						1	1.00	29	12
0.00 D	10		F	1	1						1	1.00	1	1
100.00 D	1		F	1	1						1	1.00	18	10
100.00 D	2		F	1	1						1	1.00	10	6
100.00 D	3		F	1	1						1	1.00	26	11
100.00 D	4		F	1	1						1	1.00	12	8
100.00 D	5		F	1	1						1	1.00	20	9
100.00 D	6		F	1	1						1	1.00	21	8
100.00 D	7		F	1	1						1	1.00	16	7
100.00 D	8		F	1	1						1	1.00	24	10
100.00 D	9		F	1	1						1	1.00	25	10
100.00 D	10		F	1	1						1	1.00	15	7

jm 12/27/00

000115

Site SW-PDA-8 FD

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 25940 (x) Chronic ( ) Acute hours
TEST DATE: 27-Oct-00
SOURCE: SAUGET TEST MATERIAL: AMB1 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
0.00	D	1					6	0	9	0			
0.00	D	2					6	9	0	11			
0.00	D	3					5	11	0	12			
0.00	D	4					6	10	0	10			
0.00	D	5					6	9	0	12			
0.00	D	6					5	0	0	12			
0.00	D	7					5	9	0	13			
0.00	D	8					6	11	0	11			
0.00	D	9					6	12	0	11			
0.00	D	10					1	0	0	0			
100.00	D	1					0	8	10	0			
100.00	D	2					6	0	4	0			
100.00	D	3					6	9	11	0			
100.00	D	4					4	8	0	0			
100.00	D	5					6	5	0	9			
100.00	D	6					5	8	0	8			
100.00	D	7					6	7	0	5			
100.00	D	8					5	10	9	0			
100.00	D	9					5	10	0	10			
100.00	D	10					2	7	6	0			

jm 12/27/00

Sample 10501
Site SW-PDA-9

Aquatec Biological Sciences

Test Date: 10/27/00
Sample Date: 10/26/00
Species: Ceriodaphnia dubia
Test Type: Chronic

Test Number: 28943
Test Material: Ambient water
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	1.00	0.000	
Proportion Alive	7	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	1.00	0.000	
Reproduction		No transformation							
			X	0.000	D	10	22.40	8.922	
			X	100.000	D	10	18.40	6.756	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	No transformation					
		Fisher Exact	>100.000	>100.000	< 1.00		
Proportion Alive	7	No transformation					
		Fisher Exact	>100.000	>100.000	< 1.00		
Reproduction		No transformation					
		Wilcoxon test with Bonfe	<100.000	100.000	> 1.00	78.156	6.840

- GROWTH POINT ESTIMATE -

End Point	P	IC	95% CI
Reproduction			
	IC 10	32.000	17.69 - 75.93
	IC 25	61.000	35.50 - 99.02
	IC 50		

Site SW-PDA-9

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 25943 (x) Chronic ( ) Acute hours
Test Date: 27-Oct-00
Source: SAUGET Test Material: AMB1 (%)

Conc	Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Total Young	Max Young
0.00 D	1		F	1	1						1	1.00	15	9
0.00 D	2		F	1	1						1	1.00	26	11
0.00 D	3		F	1	1						1	1.00	28	12
0.00 D	4		F	1	1						1	1.00	26	10
0.00 D	5		F	1	1						1	1.00	27	12
0.00 D	6		F	1	1						1	1.00	17	12
0.00 D	7		F	1	1						1	1.00	27	13
0.00 D	8		F	1	1						1	1.00	28	11
0.00 D	9		F	1	1						1	1.00	29	13
0.00 D	10		F	1	1						1	1.00	1	1
100.00 D	1		F	1	1						1	1.00	2	2
100.00 D	2		F	1	1						1	1.00	16	7
100.00 D	3		F	1	1						1	1.00	21	10
100.00 D	4		F	1	1						1	1.00	0	0
100.00 D	5		F	1	1						1	1.00	26	13
100.00 D	6		F	1	1						1	1.00	15	8
100.00 D	7		F	1	1						1	1.00	22	9
100.00 D	8		F	1	1						1	1.00	16	6
100.00 D	9		F	1	1						1	1.00	24	11
100.00 D	10		F	1	1						1	1.00	12	7

jm 12/27/00

000118

Site SW-PDA-9

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 25943 (x) Chronic ( ) Acute hours
TEST DATE: 27-Oct-00
SOURCE: SAUGET TEST MATERIAL: AMB1 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
0.00	D	1					6	0	9	0			
0.00	D	2					6	9	0	11			
0.00	D	3					5	11	0	12			
0.00	D	4					6	10	0	10			
0.00	D	5					6	9	0	12			
0.00	D	6					5	0	0	12			
0.00	D	7					5	9	0	13			
0.00	D	8					6	11	0	11			
0.00	D	9					6	12	0	11			
0.00	D	10					1	0	0	0			
100.00	D	1					2	0	0	0			
100.00	D	2					5	7	0	4			
100.00	D	3					5	6	0	10			
100.00	D	4					0	0	0	0			
100.00	D	5					5	8	13	0			
100.00	D	6					5	8	0	2			
100.00	D	7					6	7	0	9			
100.00	D	8					5	5	0	6			
100.00	D	9					5	8	11	0			
100.00	D	10					5	7	0	0			

JM 12/27/00

Site SW-UDA-12

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 25944 x Chronic . Acute hours
Test Date: 27-Oct-00
Source: SAUGET Test Material: AMB1 (%)

Conc		Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6 End	Prop Alive	Total Young	Max Young
0.00	D	1		F	1	1					1	1.00	15	9
0.00	D	2		F	1	1					1	1.00	26	11
0.00	D	3		F	1	1					1	1.00	28	13
0.00	D	4		F	1	1					1	1.00	26	10
0.00	D	5		F	1	1					1	1.00	27	12
0.00	D	6		F	1	1					1	1.00	17	12
0.00	D	7		F	1	1					1	1.00	27	13
0.00	D	8		F	1	1					1	1.00	28	11
0.00	D	9		F	1	1					1	1.00	29	12
0.00	D	10		F	1	1					1	1.00	1	1
100.00	D	1		F	1	1					1	1.00	24	10
100.00	D	2		F	1	1					1	1.00	21	10
100.00	D	3		F	1	1					1	1.00	21	8
100.00	D	4		F	1	1					1	1.00	20	10
100.00	D	5		F	1	1					1	1.00	13	8
100.00	D	6		F	1	1					1	1.00	20	11
100.00	D	7		F	1	1					1	1.00	22	10
100.00	D	8		F	1	1					1	1.00	19	9
100.00	D	9		F	1	1					1	1.00	21	9
100.00	D	10		F	1	1					1	1.00	23	9

jm 12/27/00

Site SW-UDA-16

Aquatec Biological Sciences

Test Date: 10/27/00
Sample Date: 10/26/00
Species: Ceriodaphnia dubia
Test Type: Chronic

Test Number: 25944
Test Material: Ambient water
Source: SAUGET
Sauget
Mentle Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	1.00	0.000	
Proportion Alive	7	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	1.00	0.000	
Reproduction		No transformation							
			X	0.000	D	10	22.40	8.922	
			X	100.000	D	10	20.40	2.989	

X = Indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	No transformation					
		Fisher Exact	>100.000	>100.000	< 1.00		
Proportion Alive	7	No transformation					
		Fisher Exact	>100.000	>100.000	< 1.00		
Reproduction		No transformation					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	44.267	5.148

Ceriodaphnia dubia Survival and Reproduction Data (Page 1 of 2)

Client: MENZIE-CURA SAUGET **BTR:** 4818 **SDG:** 4805

Test Description: *Ceriodaphnia dubia* acute / chronic toxicity tests

Effluent (%)	Repl 1	Repl 2	Repl 3	Repl 4	Repl 5	Repl 6	Repl 7	Repl 8	Repl 9	Repl 10	Remarks
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 0
18299	0	0	0	0	0	0	0	0	0	0	
18300	0	0	0	0	0	0	0	0	0	0	Fed ✓
18301	0	0	0	0	0	0	0	0	0	0	
18302	0	0	0	0	0	0	0	0	0	0	Date/time/Init.
											10/27/00
											1230

Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 1
18299	0	—	—	—	—	—	—	—	—	1	
18300	0	—	—	—	—	—	—	—	—	1	Fed ✓
18301	0	—	—	—	—	—	—	—	—	1	
18302	0	—	—	—	—	—	—	—	—	1	Date/time/Init.
											JG 10/28/00
											14:00

Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 2
18299	0	0	0	0	0	0	0	0	0	0	Sample:
18300	0	0	0	0	0	0	0	0	0	0	Fed ✓
18301	0	0	0	0	0	0	0	0	0	0	
18302	0	0	0	0	0	0	0	0	0	0	Date/time/Init.
											jm 10/29/00
											15:00

Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 3
18299	0	0	0	0	0	0	0	0	0	0	
18300	0	0	0	0	0	0	0	0	0	0	Fed ✓
18301	0	0	0	0	0	0	0	0	0	0	
18302	0	0	0	0	0	0	0	0	0	0	Date/time/Init.
											10/30/00 jm
											11:00

0=original organism surviving, no young; D=original organism dead; #=# young released; *=lab-induced mortality

SITE SW-UDA-13

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 25944 (x) Chronic ( ) Acute hours
TEST DATE: 27-Oct-00
SOURCE: SAUGET TEST MATERIAL: AMB1 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
0.00	D	1					6	0	9	0			
0.00	D	2					6	9	0	11			
0.00	D	3					5	11	0	12			
0.00	D	4					6	10	0	10			
0.00	D	5					6	9	0	12			
0.00	D	6					5	0	0	12			
0.00	D	7					5	9	0	13			
0.00	D	8					6	11	0	11			
0.00	D	9					6	12	0	11			
0.00	D	10					1	0	0	0			
100.00	D	1					6	8	10	0			
100.00	D	2					5	6	10	0			
100.00	D	3					6	7	0	8			
100.00	D	4					3	7	0	10			
100.00	D	5					5	8	0	0			
100.00	D	6					4	5	0	11			
100.00	D	7					6	6	0	10			
100.00	D	8					5	5	0	9			
100.00	D	9					6	6	9	0			
100.00	D	10					6	8	9	0			

jm 12/27/00

Water Chemistry Data

Client: MENZIE-CURA SAUGET		Test Description: *C. dubia* acute / chronic toxicity *	SDG: 4805

INITIAL WATER CHEMISTRY DATA * *(C. dubia and Pimephales promelas tests)*

	Day:	0	1	2	3	4	5	6
Lab Control 18225 (Pp)	pH	7.9	7.9	7.9	7.9	8.0	8.0	8.0
	DO	8.2	8.3	8.3	8.3	8.2	8.2	~~9.5~~ 8.1
	Temp.	24.3	24.6	24.6	24.1	24.2	25.0	24.6
	Conduct.	280	290	270	270	270	270	270
Lab Control 18226 (Cd)	pH	7.8	7.9	7.9	7.9	8.0	7.9	8.1
	DO	8.3	8.4	8.4	8.2	8.4	8.2	8.1
	Temp.	24.4	24.5	24.5	24.0	24.0	24.5	24.0
	Conduct.	200	200	210	220	220	200	200
18299	pH	8.0	7.9	8.1	8.1	8.1	8.1	8.1
	DO	9.4	9.6	9.6	9.6	9.9	9.1	9.5
	Temp.	25.2	24.5	24.1	24.5	24.5	24.6	25.2
	Conduct.	600	490	550	550	550	600	600
18300	pH	8.0	8.0	8.1	8.1	8.1	8.2	8.1
	DO	9.5	10.0	10.0	9.3	9.6	9.4	9.5
	Temp.	25.0	24.3	24.1	24.6	24.7	24.5	25.3
	Conduct.	600	600	600	600	550	600	600
18301	pH	8.0	8.0	8.1	8.1	8.1	8.2	8.1
	DO	9.6	10.1	9.6	9.9	9.7	9.5	9.4
	Temp.	24.7	24.5	24.1	24.5	24.2	24.4	25.5
	Conduct.	500	500	500	500	500	500	500
18302	pH	8.0	8.0	8.1	8.1	8.1	8.2	8.1
	DO	9.6	10.0	9.5	9.9	9.7	9.4	9.3
	Temp.	24.3	24.4	24.1	24.5	24.3	24.3	25.2
	Conduct.	500	500	500	500	500	500	500
	pH							
	DO							
	Temp.							
	Conduct.							
	Init./Date		JG 10/28	jm 10/29	jm 10/30	jm 10/31	JG 11/1	jm 11/2

FINAL WATER CHEMISTRY DATA (*C. dubia* test only)

1	2	3	4	5	6	7
~~7.8~~						
~~8.3~~						
~~23.8~~ JG						
~~280~~						
~~8.3~~	7.8 7.8	7.8	7.8	7.9	7.8	7.7
8.3	JG 8.2	8.4	8.2	8.3	8.1	8.1
24.0	23.5	23.9	23.7	23.0	23.5	23.4
200	220	215	220	225	215	210
8.4	8.5	8.4	8.4	8.4	8.4	8.4
8.3	8.2	8.3	8.2	8.3	8.1	8.1
24.0	23.5	23.7	23.8	23.1	24.0	23.5
500	600	600	600	600	600	600
8.3	8.5	8.5	8.5	8.5	8.5	8.4
8.3	8.3	8.2	8.2	8.4	8.1	8.2
23.8	23.6	23.7	24.0	23.1	23.9	23.5
600	600	600	600	600	600	600
8.4	8.5	8.5	8.5	8.5	8.5	8.4
8.3	8.3	8.3	8.3	8.4	8.1	8.2
23.9	23.6	23.8	23.6	23.1	23.8	23.5
500	500	500	500	500	500	500
8.5	8.5	8.5	8.5	8.5	8.5	9.4
8.2	8.3	8.3	8.3	8.3	8.0	8.2
23.9	23.6	23.8	23.8	23.0	23.4	23.4
500	500	500	500	500	500	500
JG 10/28	jm 10/29	jm 10/30	jm 10/31	JG 11/1	jm 11/2	JG 11/3

Aquatec Biological Sciences, Inc. Williston Vermont

Reviewed by _____ Date: 1/16/01

Ceriodaphnia dubia Survival and Reproduction Data (Page 2 of 2)

Client: MENZIE-CURA SAUGET **SDG:** 4805

Test Description: *Ceriodaphnia dubia* acute / chronic toxicity tests

Effluent (%)	Repl 1	Repl 2	Repl 3	Repl 4	Repl 5	Repl 6	Repl 7	Repl 8	Repl 9	Repl 10	Remarks
Lab Contr	6	6	5	6	6	5	5	6	6	1	Day 4
18299	D	4	0	6	2	5	6	4	6	4	
18300	0	6	6	4	6	5	6	5	5	2	Fed ✓
18301	2	5	5	0	5	5	6	5	5	5	
18302	6	5	6	3	5	4	6	5	6	6	Date/time/Init.
											10/31/00 jm
											12:30

Lab Contr	0	9	11	10	9	0	9	11	12	0	Day 5
18299	D	8	6	5	6	5	5	5	7	4	
18300	8	0	9	8	5	8	7	10	10	7	Fed ✓
18301	0	7	6	0	8	8	7	5	8	7	
18302	8	6	7	7	8	5	6	5	6	8	Date/time/Init.
											11/1/00
											16:00 JG

Lab Contr	9	0	0	0	0	0	0	0	0	0	Day 6
18299	D	5	0	0	0	0	0	0	0	9	
18300	10	4	11	0	0	0	0	9	0	6	Fed ✓
18301	0	0	0	0	13	0	0	0	11	0	
18302	10	10	0	0	0	0	0	0	9	9	Date/time/Init.
											11/2/00 jm
											16:30

Lab Contr	0	11	12	10	12	12	13	11	11	0	Day 7
18299	D	0	0	4	5	3	8	8	7	0	Test ended
18300	0	0	0	0	9	8	5	0	10	0	Fed ——
18301	0	4	10	0	0	2	9	6	0	0	
18302	0	0	8	10	0	11	10	9	0	0	Date/time/Init.
											JG 11/3/00
											11:30

0=original organism surviving, no young; D=original organism dead; #=# young released; *=lab-induced mortality

Documentation of Collection of *Ceriodaphnia dubia* for Toxicity Testing

Brood Board	Date / Time Init. when cleared of Neonates	Date / Time Init. when neonates collected	No. Cups with 8 or more neonates	Fed YCT / *Selenastrum*
10/15 B	10/26 12:30 jm	—	—	—
10/15 A	10/26 12:45 jm	—	—	—
10/17 A	10/26 13:00 jm	—	—	—
10/17 B	10/26 13:15 jm			
10/15 A	→	10/26 17:00 jm	1	✓
10/15 B	→	10/26 17:00 jm	5	✓
10/17 A *	→	10/26 17:00 jm	12	✓
10/17 B	→	10/26 17:00 jm	15	✓

* Neonates used for testing 10/27/00 σ

Project Description / Test Use: Menzie Cura -SW

cccoll.doc

Sample Preparation

Client: MENZIE-CURA SAUGET	BTR: 4818	SDG: 4805
Test Description: *Ceriodaphnia dubia* and *Pimephales promelas* acute / chronic toxicity tests		

Sample Identification:

Sample Description	SW-PDA 8	SW-PDA 8 FD	SW-PDA 9	SW-UDA 12	*Pimephales* Control	*Ceriodaphnia* Control	
Sample #	18299	18300	18301	18302	18225	18226	

Sample Preparation:

Filtration	60 micron	60 micron	60 micron	60 micron			
Warm (25°C)							
Prepared by (Init./date)	10/27/00	10/27/00	10/27/00	10/27/00			

Remove a subsample for warming, store the remainder of the sample refrigerated.

Daily Dilution Plan for: *Ceriodaphnia dubia* and *Pimephales promelas* chronic toxicity tests

Concentration (%)	Volume Sample (mL)	Volume Diluent (mL)	Total Volume (mL)
Laboratory Control	0	1200	1200
100% Sample	1200	0	1200

Comments:

Collect alkalinity and hardness samples on each sample.

Site SW-DDA-1

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 25548 (x) Chronic ( ) Acute hours
Test Date: 26-Oct-00
Source: SAUGET Test Material: AMEL %

Conc		Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Total Young	Max Young
0.00	D	1		F	1	1						1	1.00	28	14
0.00	D	2		F	1	1						1	1.00	25	11
0.00	D	3		F	1	1						1	1.00	30	14
0.00	D	4		F	1	1						1	1.00	15	10
0.00	D	5		F	1	1						1	1.00	14	9
0.00	D	6		F	1	1						1	1.00	29	13
0.00	D	7		F	1	1						1	1.00	31	14
0.00	D	8		F	1	1						1	1.00	17	13
0.00	D	9		F	1	1						1	1.00	17	11
0.00	D	10		F	1	1						1	1.00	29	13
100.00	D	1		F	1	1						1	1.00	22	11
100.00	D	2		F	1	1						1	1.00	23	9
100.00	D	3		F	1	1						1	1.00	25	12
100.00	D	4		F	1	1						1	1.00	12	6
100.00	D	5		F	1	1						1	1.00	26	12
100.00	D	6		F	1	1						1	1.00	18	8
100.00	D	7		F	1	1						1	1.00	25	11
100.00	D	8		F	1	1						1	1.00	8	8
100.00	D	9		F	1	1						1	1.00	25	11
100.00	D	10		F	1	1						1	1.00	24	11

jm 12/28/00

Site SW-DDA-1

Aquatec Biological Sciences

Test Date: 10/26/00
Sample Date: 10/27/00
Species: Ceriodaphnia dubia
Test Type: Chronic

Test Number: 18948
Test Material: Ambient water
Source: SAUGET
Sauget
Mantle Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	1.00	0.000	
Proportion Alive	7	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	100.000	D	10	1.00	0.000	
Reproduction		No transformation							
			X	0.000	D	10	33.50	6.900	
			X	100.000	D	10	20.60	6.197	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	No transformation					
		Fisher Exact	>100.000	>100.000	< 1.00		
Proportion Alive	7	No transformation					
		Fisher Exact	>100.000	>100.000	< 1.00		
Reproduction		No transformation					
		Wilcoxon test with Bonfe	>100.000	>100.000	< 1.00	43.006	6.074

- GROWTH POINT ESTIMATE -

End Point	P	IC	95% CI
Reproduction			
	IC 10	87.037	26.24 - 99.20
	IC 25		-
	IC 50		-

Page 2 of 2

Ceriodaphnia dubia Survival and Reproduction Data (Page 1 of 2)

Client: MENZIE-CURA SAUGET **SDG:** 4805

Test Description: *Ceriodaphnia dubia* acute / chronic toxicity tests

Effluent (%)	Repl 1	Repl 2	Repl 3	Repl 4	Repl 5	Repl 6	Repl 7	Repl 8	Repl 9	Repl 10	Remarks
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 0
18304	0	0	0	0	0	0	0	0	0	0	
											Fed ✓
											Date/time/Init.
											JG 10/28/00
											12:30
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 1
18304	0	0	0	0	0	0	0	0	0	0	
											Fed ✓
											Date/time/Init.
											10/29/00
											jm 15:20
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 2
18304	0	0	0	0	0	0	0	0	0	0	Sample:
											Fed ✓
											Date/time/Init.
											10/30/00 jm
											11:00
Lab Contr	4	4	6	0	0	5	5	0	0	0	Day 3
18304	6	0	5	0	5	4	6	0	0	0	
											Fed ✓
											Date/time/Init.
											10/31/00 jm
											12:15

0=original organism surviving, no young; D=original organism dead; #=# young released; *=lab-induced mortality

Aquatec Biological Sciences, Inc. Williston Vermont

Reviewed by: _____ Date: 1/16/01

CdPpChronic4805

Site SW-DDA-1

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 25948 (x) Chronic ( ) Acute hours
TEST DATE: 28-Oct-00
SOURCE: SAUGET TEST MATERIAL: AMB1 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
0.00	D	1				4	0	10	14				
0.00	D	2				4	0	11	10				
0.00	D	3				6	0	10	14				
0.00	D	4				0	5	10	0				
0.00	D	5				0	6	8	0				
0.00	D	6				5	0	11	13				
0.00	D	7				5	0	12	14				
0.00	D	8				0	4	13	0				
0.00	D	9				0	6	11	0				
0.00	D	10				0	5	11	13				
100.00	D	1				6	0	5	11				
100.00	D	2				0	6	8	9				
100.00	D	3				5	0	8	12				
100.00	D	4				0	6	6	0				
100.00	D	5				5	0	9	12				
100.00	D	6				4	0	6	8				
100.00	D	7				6	0	8	11				
100.00	D	8				0	0	8	0				
100.00	D	9				0	6	9	10				
100.00	D	10				0	5	8	11				

jm 12/28/00

Water Chemistry Data

Client: MENZIE-CURA SAUGET		Test Description: *C. dubia* acute / chronic toxicity *	SDG: 4805

INITIAL WATER CHEMISTRY DATA * *(C. dubia and Pimephales promelas tests)*

	Day:	0	1	2	3	4	5	6
Lab Control 18225 (Pp)	pH	7.9	7.9	7.9	8.0	8.0	8.0	7.9
	DO	8.3	8.3	8.3	8.2	8.2	8.1	7.9
	Temp.	24.4	24.5	24.1	24.2	25.0	24.6	24.5
	Conduct.	280	270	270	270	270	270	270
Lab Control 18225 (Cd)	pH	7.9	7.9	7.9	8.0	7.9	8.1	7.9
	DO	8.4	8.4	8.2	8.4	8.2	8.1	8.0
	Temp.	24.5	24.5	24.0	24.0	24.5	24.0	24.4
	Conduct.	200	210	220	220	200	200	210
18304	pH	7.9	7.9	8.0	7.9	8.1	8.0	8.0
	DO	9.5	9.5	9.8	9.2	9.1	9.5	8.8
	Temp.	24.5	24.0	24.5	24.2	24.4	25.2	24.2
	Conduct.	550	500	550	550	550	600	600
	pH							
	DO							
	Temp.							
	Conduct.							
	pH							
	DO							
	Temp.							
	Conduct.							
	pH							
	DO							
	Temp.							
	Conduct.							
	Init./Date	JG 10/28	jm 10/29	jm 10/30	jm 10/31	JG 11/1	jm 11/2	JG 11/3

FINAL WATER CHEMISTRY DATA (*C. dubia* test only)

1	2	3	4	5	6	7
7.8	7.8	7.8	8.1	7.8	7.9	
8.0	8.2	8.2	8.1	7.9	7.7	
23.4*	24.2	24.4	23.9	24.0	23.6	
210	210	220	225	200	210	
8.5	8.5	8.5	8.5	8.4	8.4	
7.9	8.0	8.1	8.1	7.9	7.9	
23.5	24.0	24.8	23.7	24.0	23.5	
500	550	550	650	550	550	
jm 10/29	jm 10/30	jm 10/31	JG 11/1	jm 11/2	JG 11/3	

* Room temp. increased 10/29 jm

3310133

Ceriodaphnia dubia Survival and Reproduction Data (Page 2 of 2)

Client: MENZIE-CURA SAUGET **SDG:** 4805

Test Description: *Ceriodaphnia dubia* acute / chronic toxicity tests

Effluent (%)	Repl 1	Repl 2	Repl 3	Repl 4	Repl 5	Repl 6	Repl 7	Repl 8	Repl 9	Repl 10	Remarks
Lab Contr	0	0	0	5	6	0	0	4	6	5	Day 4
18304	0	6	0	6	0	0	0	0	6	5	
											Fed ✓
											Date/time/Init.
											11/1/00 JG
											16:30
Lab Contr	10	11	10	10	8	11	12	13	11	11	Day 5
18304	5	8	8	6	9	6	8	8	9	8	
											Fed ✓
											Date/time/Init.
											11/2/00 JM
											13:00
Lab Contr	14	10	14	0	0	13	14	0	0	13	Day 6
18304	11	9	12	0	12	8	11	0	10	11	
											Fed —
											Test ended
											Date/time/Init.
											11/3/00
											12:45 JG
Lab Contr											Day 7
18304											
											Fed
											Date/time/Init.

0=original organism surviving, no young; D=original organism dead; #=# young released; *=lab-induced mortality

Aquatec Biological Sciences, Inc. Williston Vermont

Reviewed by: _____ Date: 1/16/01

CdPpChronic4805

Documentation of Collection of *Ceriodaphnia dubia* for Toxicity Testing

Brood Board	Date / Time Init. when cleared of Neonates	Date / Time Init. when neonates collected	No. Cups with 8 or more neonates	Fed YCT / *Selenastrum*
10/15 A	10/27/00 1300	10/27 1612	6	✓ ✓
10/15 B	1318	1614	5	✓ ✓
10/17 A	1325	1616	5	✓ ✓
10/17 B	1330	1620	4	✓ ✓

Project Description / Test Use: MC - Surface Water

cdcell.doc

Sample Preparation

Client: MENZIE-CURA SAUGET **SDG: 4805**

Test Description: *Ceriodaphnia dubia* and *Pimephales promelas* acute / chronic toxicity tests

Sample Identification:

Sample Description	SW UDA 15		Pp Lab Control	Cd Lab Control			
Sample #	18304		18225	18226			

Sample Preparation:

Filtration	60 micron ✓	60 micron	60 micron	60 micron			
Warm (25°C)	✓						
Prepared by (Init./date)	JG 10/28						

Remove a subsample for warming, store the remainder of the sample refrigerated.

Daily Dilution Plan for: *Ceriodaphnia dubia* and *Pimephales promelas* chronic toxicity tests

Concentration (%)	Volume Sample (mL)	Volume Diluent (mL)	Total Volume (mL)
Laboratory Control	0	1200	1200
100% Sample	1200	0	1200

Comments:

Collect alkalinity and hardness samples on each sample.

Alkalinity and Hardness

Sample Number	Type	Collection Date	Alkalinity Volume (ml)	Initial Titrant	Final Titrant	Alkalinity (mg/l)	Hardness Volume (ml)	Initial Titrant	Final Titrant	Hardness (mg/l)
18267	SW	10/25/00	50	20	23	**60.0**	50	27	36.5	**190.0**
18268	SW	10/25/00	50	23	26	**60.0**	50	36.5	45.8	**186.0**
18269	SW	10/25/00	50	26	29	**60.0**	50	0.5	10.1	**192.0**
18270	SW	10/25/00	50	29	32	**60.0**	50	10.1	19.5	**188.0**

Alkalinity and Hardness

Sample Number	Type	Collection Date	Alkalinity Volume (ml)	Initial Titrant	Final Titrant	Alkalinity (mg/l)	Hardness Volume (ml)	Initial Titrant	Final Titrant	Hardness (mg/l)
18220	SW	10/24/00	50	12.1	14.9	**56.0**	50	0.7	10.1	**188.0**
18221	SW	10/24/00	50	14.9	17.9	**60.0**	50	10.1	19.5	**188.0**
18225	SW	10/24/00	50	17.9	19	**22.0**	50	19.5	23.6	**82.0**
18226	SW	10/24/00	50	19	20	**20.0**	50	23.6	27	**68.0**

990136

Alkalinity and Hardness

Sample Number	Type	Collection Date	Alkalinity Volume (ml)	Initial Titrant	Final Titrant	Alkalinity (mg/l)	Hardness Volume (ml)	Initial Titrant	Final Titrant	Hardness (mg/l)
18299	SW	10/27/00	50	0.1	3.2	**62.0**	50	0.3	10	**194.0**
18300	SW	10/27/00	50	3.2	6.1	**58.0**	50	10	20	**200.0**
18301	SW	10/27/00	50	6.1	9.2	**62.0**	50	20	29.6	**192.0**
18302	SW	10/27/00	50	9.2	12.1	**58.0**	50	29.6	39	**188.0**

Alkalinity and Hardness

Sample Number	Type	Collection Date	Alkalinity Volume (ml)	Initial Titrant	Final Titrant	Alkalinity (mg/l)	Hardness Volume (ml)	Initial Titrant	Final Titrant	Hardness (mg/l)
18279	SW	10/26/00	50	32	35	60.0	50	19.5	29.2	194.0
18280	SW	10/26/00	50	35	38	60.0	50	29.2	39	196.0
18281	SW	10/26/00	50	38	41	60.0	50	0	9.5	190.0
18282	SW	10/26/00	50	41	44	60.0	50	9.5	19.1	192.0

00-0139

Alkalinity and Hardness

Sample Number	Type	Collection Date	Alkalinity Volume (ml)	Initial Titrant	Final Titrant	**Alkalinity (mg/l)**	Hardness Volume (ml)	Initial Titrant	Final Titrant	**Hardness (mg/l)**
18269	SW	11/1/00	50	44	47	**60.0**	50	19.1	28.7	**192.0**
18279	SW	11/1/00	50	0.2	3.3	**62.0**	50	28.7	38.5	**196.0**
18280	SW	11/1/00	50	3.3	6.2	**58.0**	50	38.5	48.3	**196.0**
18281	SW	11/1/00	50	6.2	9.2	**60.0**	50	0	9.8	**196.0**
18282	SW	11/1/00	50	9.2	12.1	**58.0**	50	9.8	19.8	**200.0**
18226	SW	11/1/00	50	12.1	13.1	**20.0**	50	19.8	23.2	**68.0**

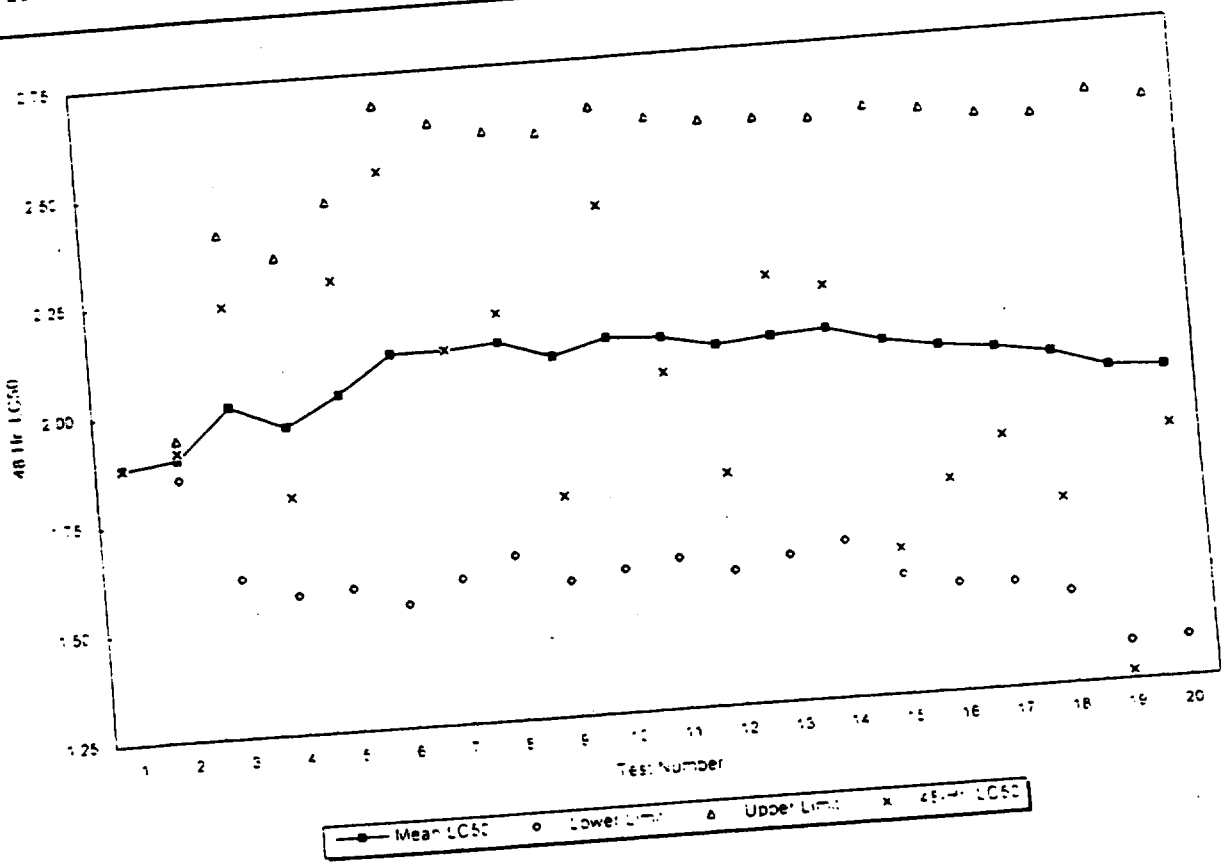
Alkalinity and Hardness

Sample Number	Type	Collection Date	Alkalinity Volume (ml)	Initial Titrant	Final Titrant	Alkalinity (mg/l)	Hardness Volume (ml)	Initial Titrant	Final Titrant	Hardness (mg/l)
18304	SW	10/28/00	50	13.1	16.6	**70.0**	50	23.2	34.6	**228.0**

000140

Reference Toxicant Control Chart
Ceriodaphnia dubia
in Sodium chloride (g/L)

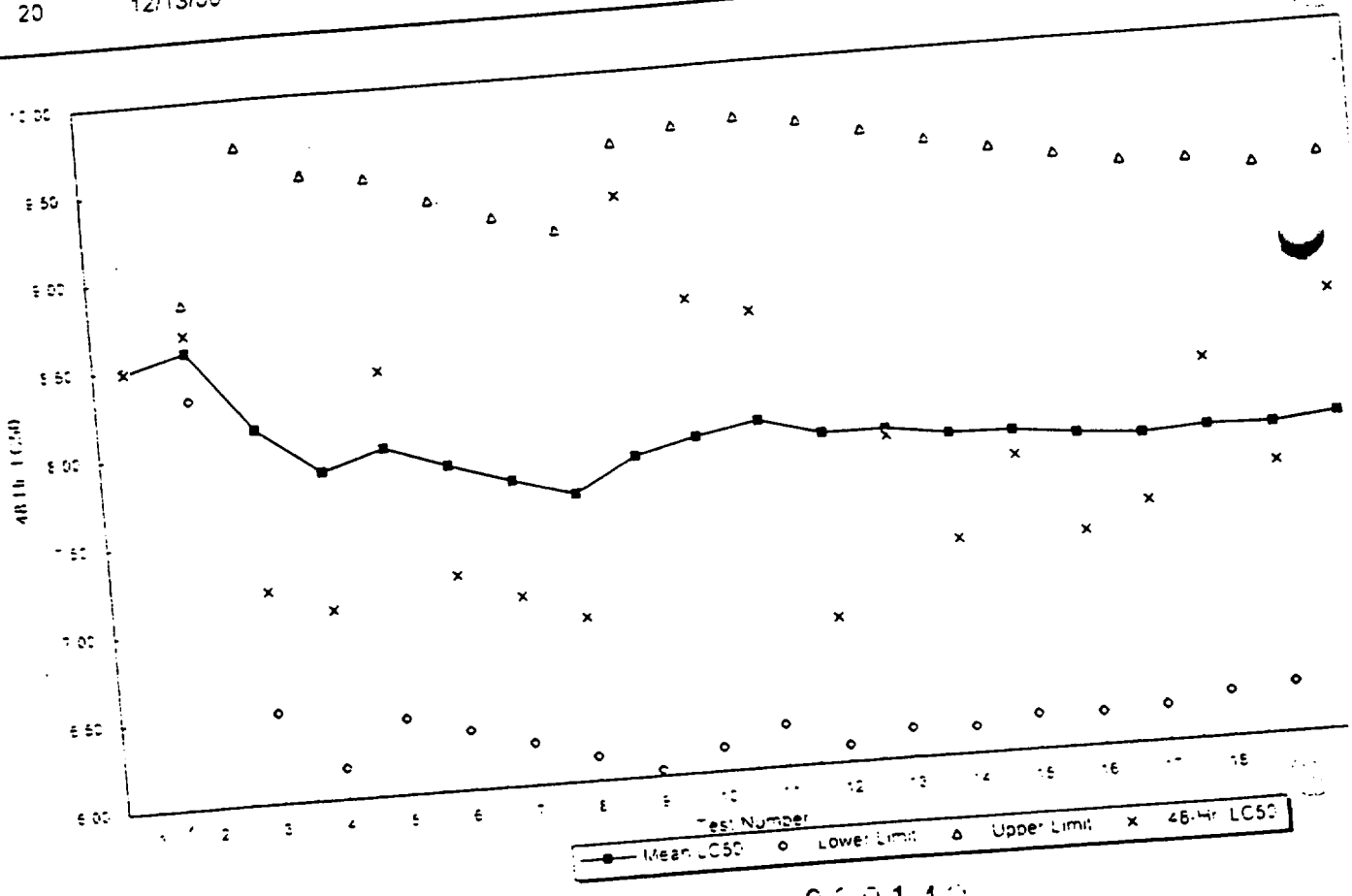
Test Number	Test Date	Organism Age (Days)	48-Hr. LC50	Mean LC50	Lower Limit	Upper Limit	Organism Source
1	06/06/99	1	1.879	1.88	1.82	1.94	Aquatec Biological Sciences
2	07/12/99	1	1.911	1.90	1.61	2.40	Aquatec Biological Sciences
3	08/24/99	1	2.236	2.01	1.67	2.34	Aquatec Biological Sciences
4	09/28/99	1	1.794	1.96	1.58	2.46	Aquatec Biological Sciences
5	10/05/99	1	2.280	2.02	1.53	2.58	Aquatec Biological Sciences
6	11/02/99	1	2.525	2.10	1.58	2.63	Aquatec Biological Sciences
7	12/07/99	1	2.105	2.10	1.63	2.60	Aquatec Biological Sciences
8	01/11/00	1	2.180	2.11	1.66	2.59	Aquatec Biological Sciences
9	02/03/00	1	1.754	2.07	1.58	2.54	Aquatec Biological Sciences
10	03/02/00	1	2.412	2.11	1.59	2.61	Aquatec Biological Sciences
11	04/04/00	1	2.019	2.10	1.56	2.59	Aquatec Biological Sciences
12	05/03/00	1	1.760	2.07	1.58	2.59	Aquatec Biological Sciences
13	05/06/00	1	2.222	2.08	1.61	2.59	Aquatec Biological Sciences
14	07/13/00	1	2.190	2.09	1.62	2.59	Aquatec Biological Sciences
15	08/08/00	1	1.561	2.06	1.49	2.58	Aquatec Biological Sciences
16	09/12/00	1	1.732	2.04	1.49	2.58	Aquatec Biological Sciences
17	10/17/00	1	1.823	2.02	1.46	2.58	Aquatec Biological Sciences
18	11/01/00	1	1.672	2.01	1.44	2.60	Aquatec Biological Sciences
19	12/05/00	1	1.268	1.97	1.34	2.58	Aquatec Biological Sciences
20	12/27/00	1	1.825	1.96	1.34		Aquatec Biological Sciences



Standard Reference Toxicant Control Charts

Reference Toxicant Control Chart
Pimephales promelas
in Sodium chloride (g/L)

Test Number	Test Date	Organism Age (Days)	48-Hr. LC50	Mean LC50	Lower Limit	Upper Limit	Organism Source
1	10/05/99	1	8.485	8.49	8.31	8.85	Aquatic Bio Systems
2	11/02/99	1	8.677	8.58	8.51	9.73	Aquatic Bio Systems
3	12/10/99	2	7.2	8.12	8.18	9.54	Aquatic Bio Systems
4	01/12/00	2	7.07	7.66	8.43	9.50	Aquatic Bio Systems
5	02/22/00	1	8.398	7.97	8.34	9.34	Aquatic Bio Systems
6	03/15/00	2	7.215	7.64	8.24	9.22	Aquatic Bio Systems
7	04/04/00	1	7.07	7.73	8.14	9.12	Aquatic Bio Systems
8	05/04/00	13	6.928	7.63	8.03	9.60	Aquatec Biological Sciences
9	05/29/00	1	9.29	7.81	8.14	9.67	Aquatec Biological Sciences
10	06/02/00	3	8.677	7.90	8.24	9.69	Aquatec Biological Sciences
11	06/03/00	2	8.561	7.96	8.10	9.84	Aquatec Biological Sciences
12	06/04/00	2	6.815	7.87	8.17	9.56	Aquatec Biological Sciences
13	06/07/00	2	7.824	7.88	8.15	9.45	Aquatec Biological Sciences
14	06/11/00	2	7.215	7.82	8.20	9.42	Aquatec Biological Sciences
15	07/13/00	3	7.667	7.81	8.19	9.35	Aquatec Biological Sciences
16	08/24/00	2	7.215	7.77	8.20	9.29	Aquatic Bio Systems
17	09/13/00	2	7.363	7.75	8.26	9.25	Aquatic Bio Systems
18	10/18/00	2	8.148	7.77	8.29	9.23	Aquatic Bio Systems
19	11/01/00	2	7.539	7.76	8.33	9.26	Aquatic Bio Systems
20	12/13/00	7	8.485	7.79			



DAPHNID SURFACE WATER
DILUTION SERIES TOXICITY TEST
LABORATORY REPORT

Aquatec Biological Sciences

Ecology | Environmental Toxicology | Natural Resource Assessments | Microbiology

January 17, 2001

Ted Wickwire, Ph.D.
Menzie-Cura & Associates
1 Courthouse Lane
Chelmsford, Massachusetts 01824

Dear Dr. Wickwire:

Enclosed please find the report (one bound and one unbound copy) and electronic data deliverable (EDD) for daphnid, *Ceriodaphnia dubia*, Sauget surface water dilution toxicity assessment.

Sincerely,

John Williams
Manager, Environmental Toxicology

273 Commerce Street, Williston, VT 05495 Tel: 802.860.1638 Fax: 802.658.3189

Aquatec Biological Sciences

Ecology | Environmental Toxicology | Natural Resource Assessments | Microbiology

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/18/01
Project: 00049
SDG: 4805
Site: Sauget

Special Conditions and Qualifiers

Dilution chronic toxicity tests were performed on several surface water samples that exhibited toxicity to Ceriodaphnia dubia in screening-level chronic toxicity tests performed on the same samples. Screening-level tests were initiated on the same day as sample delivery. The dilution toxicity tests were initiated on November 1, 2000. after the screening-level tests were completed, approximately one week after sample collection. The samples were refrigerated during storage.

Alkalinity and hardness measurements were completed on sub-samples of the surface water samples taken when the screening-level toxicity tests were initiated. Alkalinity and hardness measurements of surface water samples were not repeated for the dilution tests.

273 Commerce Street, Williston, VT 05495 Tel: 802.860.1638 Fax: 802.658.3189

Aquatec Biological Sciences

Ecology | Environmental Toxicology | Natural Resource Assessments | Microbiology

Toxicity Summary Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: 1/18/01
Project: 00049
SDG: 4805
Site Sauget

Method: 1002.0 Ceriodaphnia dubia

Sample	Sample Name	A-NOEC (%)	A-LC50 (%)	C-NOEC (%)	C-LOEC (%)	MATC (%)
18269	SW-PDA-5	100	>100	6.35	12.7	9
18279	SW-PDA-2	100	>100	<6.35	6.35	
18280	SW-PDA-2 FD	100	>100	<6.35	6.35	
18281	SW-PDA-3	100	>100	6.35	12.7	9
18282	SW-PDA-4	100	>100	6.35	12.7	9

Samples Received

Number	Sample Name	Date / Time Collected		Type
018269	SW-PDA-5	10/24/00	14:05	Surface Water
018279	SW-PDA-2	10/25/00	9:05	Surface Water
018280	SW-PDA-2 FD	10/25/00	9:05	Surface Water
018281	SW-PDA-3	10/25/00	11:35	Surface Water
018282	SW-PDA-4	10/25/00	14:50	Surface Water

Submitted By:

273 Commerce Street, Williston, VT 05495 Tel: 802.860.1638 Fax: 802.658.3189

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: /17/2001
Project: 00049
SDG: 4805
Site: Sauget

Sample ID: 18279 SW-PDA-2

Method: 1002.0 *Ceriodaphnia dubia*

Response: Survival (%)

	%					
Day	0	6.35	12.7	25	50	100
2	100	100	100	100	100	100
7	100	90	90	100	80	0

Response: Reproduction (mean neonates per female)

	%					
	0	6.35	12.7	25	50	100
	25	11.2	2.9	3.2	0.3	0

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: /17/2001
Project: 00049
SDG: 4805
Site: Sauget

Sample ID: 18269 SW-PDA-5

Method: 1002.0 *Ceriodaphnia dubia*

Response: Survival (%)

	%					
Day	0	6.35	12.7	25	50	100
2	100	100	100	100	100	100
7	100	100	100	100	70	90

Response: Reproduction (mean neonates per female)

	%					
	0	6.35	12.7	25	50	100
	21.9	21	15.7	14.8	7.3	3.3

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: /17/2001
Project: 00049
SDG: 4805
Site: Sauget

Sample ID: 18281 SW-PDA-3

Method: 1002.0 *Ceriodaphnia dubia*

Response: Survival (%)

	%					
Day	0	6.35	12.7	25	50	100
2	100	100	90	100	100	100
7	100	100	90	90	100	100

Response: Reproduction (mean neonates per female)

	%					
	0	6.35	12.7	25	50	100
	23.9	23	14.7	8	4	2.4

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: /17/2001
Project: 00049
SDG: 4805
Site: Sauget

Sample ID: 18280 SW-PDA-2 FD

Method: 1002.0 *Ceriodaphnia dubia*

Response: Survival (%)

	%					
Day	0	6.35	12.7	25	50	100
2	100	100	100	100	100	100
7	100	100	100	100	100	90

Response: Reproduction (mean neonates per female)

	%					
	0	6.35	12.7	25	50	100
	26.9	17	6.4	3.3	0	0

Supportive Documentation

Toxicity Test Methods

Chain-Of-Custody

Daphnid, Ceriodaphnia dubia, Survival and Reproduction

Standard Reference Toxicant Control Charts

Toxicity Detail Report

Menzie-Cura & Associates
1 Courthouse Lane

Chelmsford, MA 01824

Date: /17/2001
Project: 00049
SDG: 4805
Site: Sauget

Sample ID: 18282 SW-PDA-4

Method: 1002.0 *Ceriodaphnia dubia*

Response: Survival (%)

	%					
Day	0	6.35	12.7	25	50	100
2	100	100	100	100	90	100
7	100	100	100	100	90	100

Response: Reproduction (mean neonates per female)

	%					
	0	6.35	12.7	25	50	100
	26.8	23	14.9	12.8	2.8	0.1

Client: MENZIE-CURA 00049 SAUGET **SDG: 4805**

Test Description: Daphnid, *Ceriodaphnia dubia* acute and chronic survival and reproduction

ASSOCIATED PROTOCOL: EPA 1994. *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms.* (EPA/600/4-91/002) Method 1002.0

1. Test type:	Static, daily renewal
2. Test temperature:	25 ± 1°C
3. Light quality:	Ambient laboratory illumination
4. Photoperiod:	16 h light, 8 h dark
5. Test chamber size:	30 ml
6. Test solution volume:	15-20 ml / replicate
7. Renewal of test concentrations:	Daily
8. Age of test organisms:	Less than 24 h; released within an 8 h period
9. No. organisms / test chamber:	1
10. No. of replicate chambers / concentration:	10
11. No. of organisms / concentration:	10
12. Feeding regime:	0.1 ml each of YTC and algal suspension daily
13. Cleaning:	Transfer to new solutions daily
14. Aeration:	None
15. Dilution water:	1:1 mix of laboratory moderately hard water and Lamoille River (VT) water
16. Test concentrations:	6.3, 12.7, 25, 50, 100% surface water
17. Laboratory control:	1:1 mix of laboratory moderately hard water and Lamoille River (VT) water
18. Test duration:	Until 60% of control females have three broods
19. Monitoring:	Daily temperature, dissolved oxygen, pH, and conductivity. Hardness, alkalinity each sample. Biological monitoring daily
19. End points:	Survival (48-h and end of test) and reproduction
20. Reference toxicant test:	Sodium chloride 48-h LC50
21. Test acceptability (Control performance):	80% or greater survival and an average of 15 or more young/female. At least 60% of surviving females must have produced third brood
22. Data interpretation:	Acute: 48-h LC50, A-NOEC Chronic: C-NOEC by hypothesis test statistics compared to the control responses (P<0.05)

Toxicity Test Methods

SUG.: 4805

Page ___ of ___

Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
TEL: (802) 860-1638
FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Sauget Sed / Water Tox & Macro	Carrier:
Address: 1 Courthouse Lane, Chelmsford, Massachusetts 01824	Project Number: 00049	Airbill Number:
Telephone: (978) 322-2824	Sampler Name(s):	Date Shipped:
Facsimile: (978) 453-7260		Hand Delivered: ___Yes ___No
Contact Name: Ted Wickwire	Quote #: 10/18/00 Client Code: MENCUR	

VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4): 4°C; plastic; 2.5 gal

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	NUMBER OF CONTAINERS	
SW-PDA-7	10/24/00	8:50A	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	1	Temp=0.6
SW-PDA-6		10:30A	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	1	Temp=0.6
SW-PDA-5		14:05	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	1	Temp=2.6
SW-PDA-10		15:10	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	1	Temp=4.6
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth		
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth		
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth		
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth		

Relinquished by: (signature)	DATE	TIME	Received by: (signature)
Ted Wickwire	10/24/00	17:10	Philip Conroy 10/25/00
Relinquished by: (signature)	DATE	TIME	Received by: (signature) 10:15
Relinquished by: (signature)	DATE	TIME	Received by: (signature)

NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)

Notes to Lab: Ambient temperature of cooler on delivery: °C

Chain-Of-Custody

Daphnid, Ceriodaphnia dubia, Survival and Reproduction

Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
TEL: (802) 860-1638
FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Sauget Sed / Water Tox & Macro	Carrier:
Address: 1 Courthouse Lane Chelmsford, Massachusetts 01824	Project Number: 00049	Airbill Number:
Telephone: (978) 322-2824	Sampler Name(s):	Date Shipped:
Facsimile: (978) 453-7260		
Contact Name: Ted Wickwire	Quote #: 10/18/00 Client Code: MENCUR	Hand Delivered: ___Yes ___No

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4) NUMBER OF CONTAINERS
SW-PDA-2	10/25/00	9:05	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	4°C: 1 plastic: 1 2.5 gal: 1
SW-PDA-2FD	"	9:05	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	4°C: 1 plastic: 1 2.5 gal: 1
SW-PDA-3	"	11:35	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	4°C: 1 plastic: 1 2.5 gal: 1
SW-PDA-4	"	14:50	✓		Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	4°C: 1 plastic: 1 2.5 gal: 1
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	
					Surface water	*Ceriodaphnia dubia* survival / reproduction *Pimephales promelas* 7-d survival / growth	

	DATE	TIME		
Relinquished by (signature)	10/26/00	17:30	Received by: (signature)	
Relinquished by (signature)	10/26/00	9:20	Received by: (signature)	
Relinquished by (signature)	DATE	TIME	Received by: (signature)	

NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)

Notes to Lab: Ambient temperature of cooler on delivery 0.3°C #1 Cooler
0.1°C #2 Cooler
0.3°C #3 Cooler

Site SW-PDA-5

12/28/00- 1:12 pm TOXIS ANALYSIS SUMMARY

Water Flea

Lab	Species	Test Date	Test Material	Permit	Protocol	Test Number
VTABS	CD	11/01/0	AMB2 (%)	SAUGET	EPAF 94	26028

Statistics Parameters

PROPORTION

End Point:	PA Proportion Alive		
Analysis:	Fisher Exact	Auto growth select	1 control
Transform:	No transformation		
Tail:	One-tailed, decreasing		
Constant:	-.01	Variance:	.01
Root:	0.00	Alpha Normality:	.01
		NOEC:	.05

EC/LC Method: F (P,S,G,L,N) Superdunnet: 4000

GROWTH

End Point:	GR Reproduction		
Analysis:	EPA Flowchart	Auto growth select	1 control
Transform:	No transformation		
Tail:	One-tailed, decreasing		
Constant:	-.01	Variance:	.01
Root:	0.00	Alpha Normality:	.01
		NOEC:	.05

Calculate IC? Y (Y,N) IC resamples: 120

Errors/Warnings

Type	Number	
EC/LC	71	No linear interpolation estimate can be calculated - none of the group response means < 100-p % of the control response me
IC	0	Analysis completed with no errors
PROP	0	Analysis completed with no errors
GROW	0	Analysis completed with no errors

Site SW- PDA - 5

Aquatec Biological Sciences

Test Date: 11/01/00
Sample Date: 10/24/00
Species: Ceriodaphnia dubia
Test Type: Chronic

Test Number: 26028
Test Material: Ambient water
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc	#Reps	Mean	StDev	% Surv
Proportion Alive	2	No transformation						
			X	0.000 D	10	1.00	0.000	
			X	6.350 D	10	1.00	0.000	
			X	12.700 D	10	1.00	0.000	
			X	25.000 D	10	1.00	0.000	
			X	50.000 D	10	1.00	0.000	
			X	100.000 D	10	1.00	0.000	
Proportion Alive	7	No transformation						
			X	0.000 D	10	1.00	0.000	
			X	6.350 D	10	1.00	0.000	
			X	12.700 D	10	1.00	0.000	
			X	25.000 D	10	1.00	0.000	
			X	50.000 D	10	.70	.483	
			X	100.000 D	10	.90	.316	
Reproduction		No transformation						
			X	0.000 D	10	21.90	3.315	
			X	6.350 D	10	21.00	5.831	
			X	12.700 D	10	15.70	5.165	
			X	25.000 D	10	14.80	5.[illegible]	
			X	50.000 D	10	7.30	4.762	
			X	100.000 D	10	3.30	2.359	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	No transformation					
		Fisher Exact	>100.000	>100.000	< 1.00		
Proportion Alive	7	No transformation					
		Fisher Exact	>100.000	>100.000	< 1.00		
Reproduction		No transformation					
		Dunnett	6.350	12.700	15.75	20.941	4.[illegible]

- GROWTH POINT ESTIMATE -

End Point	P	IC	95% CI
Reproduction			
	IC 10	7.896	3.08 - 11.00
	IC 25	11.831	6.24 - 27.93
	IC 50	37.833	24.29 - 44.27

Site SW-PDA-5

12/28/00 TOXIS ANALYSIS SUMMARY

Ceriodaphnia Proportion Alive Day 7

Lab	Species	Date	Test Material	Permit	Protocol	Test Number
VTABS	CD	11/01/0	AMB2 (%)	SAUGET	EPAF 94	26028

Fisher Exact Auto growth select 1 control

Transformation		Prop. Conc	Alive	P
No transformation				
	X	0.00D	1.00	
	X	6.35D	1.00	1.000
	X	12.70D	1.00	1.000
	X	25.00D	1.00	1.000
	X	50.00D	.70	.105
	X	100.00D	.90	.500

NOEC	LOEC	TU	Alpha	Tail	Based on
>100	>100	<1	.05	One-sided	Fisher Exact

000037

Site SW-PDA-5

Inhibition Concentration (ICp) Using Linear Interpolation Analysis

Aquatec Biological Sciences

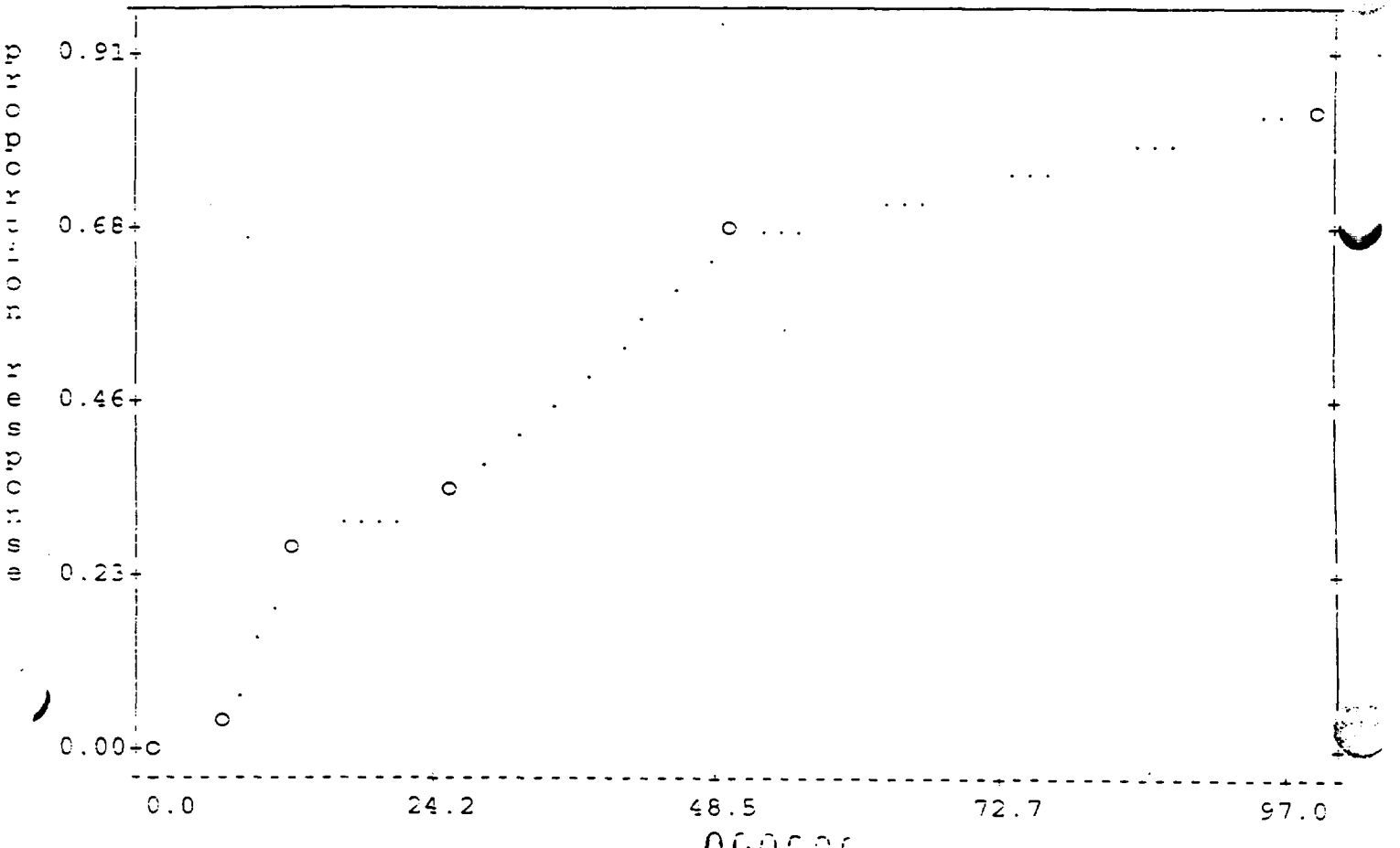
Species: Ceriodaphnia dubia
Test Material: Ambient water (%)
Endpoint: Total young

Test Number: 26028
Test Date: 11/01/0

Concentration	Mean	Pooled Mean	Proportion Response
0.0000	21.9000	21.9000	0.0000
6.3500	21.0000	21.0000	0.0411
12.7000	15.7000	15.7000	0.2831
25.0000	14.8000	14.8000	0.3242
50.0000	7.3000	7.3000	0.6667
100.0000	3.3000	3.3000	0.8493

P Value	Estimated Concentration	95% Confidence Limits Lower	Upper
10	7.8956	3.076	10.996
25	11.8314	6.241	27.934
50	37.8333	24.290	44.271

Note: # bootstrap resamplings = 120



Site SW-PDA-5

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 26026 (x) Chronic ( ) Acute Hours
Test Date: 1-Nov-00
Source: SAUGET Test Material: AME2 (%)

Conc	Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Total Young	Max Young
0.00 D	1		F	1	1						1	1.00	17	13
0.00 D	2		F	1	1						1	1.00	20	12
0.00 D	3		F	1	1						1	1.00	21	12
0.00 D	4		F	1	1						1	1.00	25	13
0.00 D	5		F	1	1						1	1.00	25	13
0.00 D	6		F	1	1						1	1.00	21	13
0.00 D	7		F	1	1						1	1.00	20	12
0.00 D	8		F	1	1						1	1.00	23	12
0.00 D	9		F	1	1						1	1.00	19	12
0.00 D	10		F	1	1						1	1.00	26	13
6.35 D	1		F	1	1						1	1.00	27	12
6.35 D	2		F	1	1						1	1.00	25	13
6.35 D	3		F	1	1						1	1.00	15	9
6.35 D	4		F	1	1						1	1.00	24	13
6.35 D	5		F	1	1						1	1.00	25	13
6.35 D	6		F	1	1						1	1.00	18	10
6.35 D	7		F	1	1						1	1.00	25	12
6.35 D	8		F	1	1						1	1.00	25	12
6.35 D	9		F	1	1						1	1.00	10	5
6.35 D	10		F	1	1						1	1.00	19	13
12.70 D	1		F	1	1						1	1.00	10	8
12.70 D	2		F	1	1						1	1.00	17	12
12.70 D	3		F	1	1						1	1.00	19	13
12.70 D	4		F	1	1						1	1.00	24	13
12.70 D	5		F	1	1						1	1.00	19	13
12.70 D	6		F	1	1						1	1.00	16	11
12.70 D	7		F	1	1						1	1.00	18	11
12.70 D	8		F	1	1						1	1.00	17	11
12.70 D	9		F	1	1						1	1.00	11	10
12.70 D	10		F	1	1						1	1.00	7	7
25.00 D	1		F	1	1						1	1.00	17	10
25.00 D	2		F	1	1						1	1.00	19	15
25.00 D	3		F	1	1						1	1.00	15	11
25.00 D	4		F	1	1						1	1.00	16	9
25.00 D	5		F	1	1						1	1.00	19	11
25.00 D	6		F	1	1						1	1.00	14	9
25.00 D	7		F	1	1						1	1.00	22	11
25.00 D	8		F	1	1						1	1.00	9	7
25.00 D	9		F	1	1						1	1.00	8	6
25.00 D	10		F	1	1						1	1.00	12	9
50.00 D	1		F	1	1						1	1.00	13	12
50.00 D	2		F	1	1						1	1.00	1	1
50.00 D	3		F	1	1						1	1.00	10	7
50.00 D	4		F	1	1						1	1.00	11	7
50.00 D	5		F	1	1						1	1.00	8	7
50.00 D	6		F	1	1						0	0.00	1	0
50.00 D	7		F	1	1						0	0.00	3	3

000009

Site SW-PDA-5

12/28/00 TOXIS ANALYSIS SUMMARY

Ceriodaphnia Reproduction

Lab	Species	Date	Test Material	Permit	Protocol	Test Number
VTABS	CD	11/01/0	AMB2 (%)	SAUGET	EPAF 94	26028

EPA Flowchart Auto growth select 1 control

	Conc	Mean	SD	N	T
Data transformation:		No	transformation		
X	0.00D	21.90	3.315	10	
X	6.35D	21.00	5.831	10	.440
X	12.70D	15.70	5.165	10	3.030
X	25.00D	14.80	5.073	10	3.469
X	50.00D	7.30	4.762	10	7.134
X	100.00D	3.30	2.359	10	9.089

NOEC	LOEC	TU	Alpha	Tail	Based on	Critical T
6.35	12.7	15.74	.05	One-sided	Dunnett	2.289

Dunnett Test:

MSE	MSD % Reduction from Control	Critical T
20.940	21.3900	2.289

Kolmogorov Test for Normality:

Alpha	D	Cutoff D	Normal?
.01	.111648	.132	Yes

Bartlett Test for Equal Variance:

Alpha	B	P(B)	Equal Var?
.01	8.2574	.14260	Yes

000008

Site SW-PDA-5

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 26028 (x) Chronic ( ) Acute hours
TEST DATE: 1-Nov-00
SOURCE: SAUGET TEST MATERIAL: AMB2 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
0.00	D	1					0	4	13	0			
0.00	D	2					2	6	0	12			
0.00	D	3					5	4	0	12			
0.00	D	4					4	8	13	0			
0.00	D	5					4	8	0	13			
0.00	D	6					0	8	13	0			
0.00	D	7					2	5	12	1			
0.00	D	8					4	7	12	0			
0.00	D	9					0	7	12	0			
0.00	D	10					6	9	13	0			
6.35	D	1					5	10	12	0			
6.35	D	2					4	8	0	13			
6.35	D	3					0	9	0	6			
6.35	D	4					3	8	0	13			
6.35	D	5					4	8	0	13			
6.35	D	6					0	5	0	10			
6.35	D	7					6	7	0	12			
6.35	D	8					4	8	1	12			
6.35	D	9					0	5	0	5			
6.35	D	10					5	1	13	0			
12.70	D	1					0	2	0	8			
12.70	D	2					0	5	0	12			
12.70	D	3					0	6	0	13			
12.70	D	4					4	7	0	13			
12.70	D	5					0	6	0	13			
12.70	D	6					0	5	0	11			
12.70	D	7					1	6	0	11			
12.70	D	8					1	5	0	11			
12.70	D	9					0	0	0	10			
12.70	D	10					0	0	0	7			
25.00	D	1					1	4	0	12			
25.00	D	2					0	4	0	15			
25.00	D	3					1	0	3	11			
25.00	D	4					3	4	0	9			
25.00	D	5					2	6	0	11			
25.00	D	6					1	0	4	9			
25.00	D	7					6	0	5	11			
25.00	D	8					1	1	0	7			
25.00	D	9					0	0	0	5			
25.00	D	10					0	3	0	9			
50.00	D	1					0	1	0	12			
50.00	D	2					0	0	0	0			
50.00	D	3					2	0	1	7			
50.00	D	4					0	0	4	7			
50.00	D	5					0	0	1	7			
50.00	D	6					0	0	0	0			
50.00	D	7					3	0	0	0			

Site SW-PDA-5

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 26126 x Chronic Acute hours
Test Date: 1-Nov-10
Source: SAUGET Test Material: AMEC (%)

Conc	Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6 End	Prop Alive	Total Young	Max Young
50.00 D	8		F	1	1					1	1.00	7	6
50.00 D	9		F	1	1					1	1.00	9	7
50.00 D	10		F	1	1					1	1.00	12	9
100.00 D	1		F	1	1					1	1.00	7	7
100.00 D	2		F	1	1					1	1.00	1	1
100.00 D	3		F	1	1					1	1.00	5	5
100.00 D	4		F	1	1					0	0.00	2	2
100.00 D	5		F	1	1					1	1.00	0	0
100.00 D	6		F	1	1					1	1.00	1	1
100.00 D	7		F	1	1					1	1.00	5	4
100.00 D	8		F	1	1					1	1.00	5	4
100.00 D	9		F	1	1					1	1.00	2	2
100.00 D	10		F	1	1					1	1.00	5	5

jm 12/28/10

000010

Ceriodaphnia dubia Survival and Reproduction Data (Page 1 of 2)

Client: MENZIE-CURA 00049 SAUGET **Test #:** 26028 **SDG:** 4805

Test Description: *Ceriodaphnia dubia* acute / chronic toxicity test

Effluent (%)	Repl 1	Repl 2	Repl 3	Repl 4	Repl 5	Repl 6	Repl 7	Repl 8	Repl 9	Repl 10	Remarks
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 0
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18269
6.3	0	0	0	0	0	0	0	0	0	0	Fed ✓
12.7	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	Date/time/Init.
50	0	0	0	0	0	0	0	0	0	0	11/1/00 JM
100	0	0	0	0	0	0	0	0	0	0	12:15
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 1
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18269
6.3	0	0	0	0	0	0	0	0	0	0	Fed ✓
12.7	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	Date/time/Init.
50	0	0	0	0	0	0	0	0	0	0	11/2/00 JM
100	0	0	0	0	0	0	0	0	0	0	13:30
Lab Contr	0	—	—	—	—	—	—	—	—	—	Day 2
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18269
6.3	0	—	—	—	—	—	—	—	—	—	Fed ✓
12.7	0	—	—	—	—	—	—	—	—	—	
25	0	—	—	—	—	—	—	—	—	—	Date/time/Init.
50	0	—	—	—	—	—	—	—	—	—	~~JG~~ 11/3/00
100	0	—	—	—	—	—	—	—	—	—	14:30 JG
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 3
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18269
6.3	0	0	0	0	0	0	0	0	0	0	Fed ✓
12.7	0	—	—	—	—	—	—	—	—	—	
25	0	—	—	—	—	—	—	—	—	—	Date/time/Init.
50	0	—	—	—	—	—	—	—	—	—	11/4/00
100	0	—	—	—	—	—	—	—	—	—	13:00 JG

0=original organism surviving, no young; D=original organism dead; #=# young released; *=lab-induced mortality

Site SW-PDA-5

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 26028 (x) Chronic ( ) Acute hours
TEST DATE: 1-Nov-00
SOURCE: SAUGET TEST MATERIAL: AMB2 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
50.00	D	8					0	0	1	6			
50.00	D	9					0	0	2	7			
50.00	D	10					0	3	0	9			
100.00	D	1					0	0	7	0			
100.00	D	2					0	0	0	1			
100.00	D	3					0	0	0	5			
100.00	D	4					2	0	0	0			
100.00	D	5					0	0	0	0			
100.00	D	6					0	0	0	1			
100.00	D	7					0	0	1	4			
100.00	D	8					1	0	0	4			
100.00	D	9					0	0	0	2			
100.00	D	10					0	0	5	0			

jm 12/28/00

Water Chemistry Data: *C. dubia* acute / chronic toxicity

Client: MENZIE-CURA 00049 SAUGET	Test #: 26024	SDG: 4805

	Day:	0	1	2	3	4	5	6	7	8
Lab Control 50:50	pH	7.9	7.8	7.8	7.8	7.8	7.6	7.7	7.7	
	DO	8.2	8.1	8.0	8.0	8.0	8.1	8.2	8.1	
	Temp.	24.5	24.1	23.6	24.1	24.4	25.0	24.6	23.2	
	Conduct.	200	200	210	210	210	220	230	220	
6.3%	pH	8.0	7.9	7.9	7.9	7.9	7.9	7.9	7.8	
	DO	8.3	8.1	8.0	8.1	8.1	8.2	8.3	8.2	
	Temp.	24.0	24.2	23.5	24.2	24.5	25.1	24.8	23.5	
	Conduct.	210	220	230	230	240	250	250	250	
12.7%	pH	8.1	8.0	8.0	7.9	8.0	8.0	8.0	7.9	
	DO	8.3	8.2	7.9	8.1	8.1	8.2	8.2	8.2	
	Temp.	24.0	24.1	23.7	24.2	24.7	25.2	24.9	23.6	
	Conduct.	240	240	250	250	260	260	260	260	
25%	pH	8.1	8.1	8.0	8.0	8.1	8.1	8.1	8.0	
	DO	8.2	8.2	7.9	8.1	8.1	8.2	8.2	8.2	
	Temp.	24.0	24.1	23.6	24.2	24.8	25.3	24.8	23.6	
	Conduct.	275	275	290	290	290	290	300	290	
50%	pH	8.2	8.2	8.2	8.2	8.3	8.2	8.2	8.2	
	DO	8.3	8.1	7.9	8.1	8.2	8.2	8.3	8.2	
	Temp.	24.5	24.2	23.7	24.1	24.8	25.4	24.9	23.6	
	Conduct.	350	350	360	360	355	360	370	360	
100%	pH	8.2	8.1	8.3	8.4	8.5	8.5	/	/	/
	DO	8.4	8.3	8.0	8.2	8.1	8.2	/	/	/
	Temp.	25.0	24.2	23.8	24.2	24.8	24.6	/	/	/
	Conduct.	480	480	500	500	490	480	/	/	/
	Sample #	18279	18279	18279	18279	18279	18279	18279	18279	18279
	Init./Date	jm 11/1	jm 11/2	NE 11/3	NE 11/4	jm 11/5	jm 11/6	jm 11/7	jm 11/8	

Ceriodaphnia dubia Survival and Reproduction Data (Page 2 of 2)

Client: MENZIE-CURA 00049 SAUGET **Test #:** 26024 **SDG:** 4805

Test Description: *Ceriodaphnia dubia* acute / chronic toxicity test

Effluent (%)	Repl 1	Repl 2	Repl 3	Repl 4	Repl 5	Repl 6	Repl 7	Repl 8	Repl 9	Repl 10	Remarks
Lab Contr	2	1	3	5	4	2	4	4	4	5	Day 4
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18279
6.3	4	0	3	0	4	4	2	1	2	4	Fed ✓
12.7	2	0	1	1	2	0	0	0	0	2	
25	2	4	2	4	0	0	0	0	0	0	Date/time/Init
50	0	0	0	0	3	0	0	0	0	0	11/5/00 jm
100	D	D	D	0	0	D	0	0	0	D	13:30
Lab Contr	10	9	10	10	9	9	11	11	10	11	Day 5
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18279
6.3	1	0	0	0	3	0	0	1	0	2	Fed ✓
12.7	D	0	1	0	0	1	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	Date/time/Init
50	0	0	0	0	0	0	0	D	0	0	11/6/00 jm
100	D	D	D	D	D	D	D	D	D	D	14:18
Lab Contr	12	10	0	0	0	0	0	0	0	14	Day 6
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18279
6.3	8	0	0	0	0	0	0	0	0	6	Fed ✓
12.7	D	0	5	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	Date/time/Init
50	0	0	0	0	0	0	0	D	0	0	11/7/00 jm
100	D	D	D	D	D	D	D	D	D	D	15:30
Lab Contr	0	0	14	4	4	16	16	13	13	0	Day 7
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18279
6.3	0	0	D/8	2	10	11	13	13	10	0	Fed —
12.7	D	0	0	0	0	0	0	9	5	0	
25	0	0	0	11	9	0	0	0	0	0	Date/time/Init
50	0	0	0	0	0	D	0	D	0	0	11/8/00 jm
100	D	D	D	D	D	D	D	D	D	D	11:15

0=original organism surviving, no young; D=original organism dead; #=# young released; *=lab-induced mortality

Aquatec Biological Sciences, Inc. Williston, Vermont

Reviewed by: _____ Date: 1/17/01

000026

CddilToxForm

Ceriodaphnia dubia Survival and Reproduction Data (Page 1 of 2)

Client: MENZIE-CURA 00049 SAUGET **Test #:** 26024 **SDG:** 4805

Test Description: *Ceriodaphnia dubia* acute / chronic toxicity test

Effluent (%)	Repl 1	Repl 2	Repl 3	Repl 4	Repl 5	Repl 6	Repl 7	Repl 8	Repl 9	Repl 10	Remarks
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 0
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18279
6.3	0	0	0	0	0	0	0	0	0	0	Fed ✓
12.7	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	Date/time/Init.
50	0	0	0	0	0	0	0	0	0	0	11/1/00 jm
100	0	0	0	0	0	0	0	0	0	0	14:15
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 1
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18279
6.3	0	0	0	0	0	0	0	0	0	0	Fed ✓
12.7	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	Date/time/Init.
50	0	0	0	0	0	0	0	0	0	0	11/2/00 jm
100	0	0	0	0	0	0	0	0	0	0	14:00
Lab Contr	0	—	—	—	—	—	—	—	—	—	Day 2
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18279
6.3	0	—	—	—	—	—	—	—	—	—	Fed ✓
12.7	0	—	—	—	—	—	—	—	—	—	
25	0	—	—	—	—	—	—	—	—	—	Date/time/Init.
50	0	—	—	—	—	—	—	—	—	—	11/3/00
100	0	—	—	—	—	—	—	—	—	—	15:00 JG
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 3
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18279
6.3	0	0	0	0	0	0	0	0	0	0	Fed ✓
12.7	0	—	—	—	—	—	—	—	—	—	
25	0	—	—	—	—	—	—	—	—	—	Date/time/Init.
50	0	—	—	—	—	—	—	—	—	—	11/4/00
100	0	—	—	—	—	—	—	—	—	—	13:30 JG

0=original organism surviving, no young; D=original organism dead; #=# young released; *=lab-induced mortality

Site SW-FDA-2

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 26024 (x) Chronic ( ) Acute hours
TEST DATE: 1-Nov-00
SOURCE: SAUGET TEST MATERIAL: AMB2 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
50.00	D	8					0	0	0	0			
50.00	D	9					0	0	0	0			
50.00	D	10					0	0	0	0			
100.00	D	1					0	0	0	0			
100.00	D	2					0	0	0	0			
100.00	D	3					0	0	0	0			
100.00	D	4					0	0	0	0			
100.00	D	5					0	0	0	0			
100.00	D	6					0	0	0	0			
100.00	D	7					0	0	0	0			
100.00	D	8					0	0	0	0			
100.00	D	9					0	0	0	0			
100.00	D	10					0	0	0	0			

JM 12/28/00

Site SW-PDA-2

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 26024 (x) Chronic ( ) Acute hours
TEST DATE: 1-Nov-00
SOURCE: SAUGET TEST MATERIAL: AMB2 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
0.00	D	1					2	10	12	0			
0.00	D	2					1	9	10	0			
0.00	D	3					3	10	0	14			
0.00	D	4					5	10	0	4			
0.00	D	5					4	9	0	4			
0.00	D	6					2	9	0	16			
0.00	D	7					4	11	0	16			
0.00	D	8					4	11	0	13			
0.00	D	9					4	10	0	13			
0.00	D	10					5	11	14	0			
6.35	D	1					4	1	8	0			
6.35	D	2					0	0	0	0			
6.35	D	3					3	0	0	8			
6.35	D	4					0	0	0	2			
6.35	D	5					4	3	0	10			
6.35	D	6					4	0	0	11			
6.35	D	7					2	0	0	13			
6.35	D	8					1	1	0	13			
6.35	D	9					2	0	0	10			
6.35	D	10					4	2	6	0			
12.70	D	1					2	0	0	0			
12.70	D	2					0	0	0	0			
12.70	D	3					1	1	5	0			
12.70	D	4					1	0	0	0			
12.70	D	5					2	0	0	0			
12.70	D	6					0	1	0	0			
12.70	D	7					0	0	0	0			
12.70	D	8					0	0	0	9			
12.70	D	9					0	0	0	5			
12.70	D	10					2	0	0	0			
25.00	D	1					2	0	0	0			
25.00	D	2					4	0	0	0			
25.00	D	3					2	0	0	0			
25.00	D	4					4	0	0	11			
25.00	D	5					0	0	0	9			
25.00	D	6					0	0	0	0			
25.00	D	7					0	0	0	0			
25.00	D	8					0	0	0	0			
25.00	D	9					0	0	0	0			
25.00	D	10					0	0	0	0			
50.00	D	1					0	0	0	0			
50.00	D	2					0	0	0	0			
50.00	D	3					0	0	0	0			
50.00	D	4					0	0	0	0			
50.00	D	5					3	0	0	0			
50.00	D	6					0	0	0	0			
50.00	D	7					0	0	0	0			

Site SW-PDA-2

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 26134 .x. Chronic ( ) Acute hours
Test Date: 1-Nov-11
Source: SAUGET Test Material: AMEC (%)

Conc	Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Total Young	Max Young
50.00 D	8		F	1	1						0	0.00	0	0
50.00 D	9		F	1	1						1	1.00	0	0
50.00 D	10		F	1	1						1	1.00	0	0
100.00 D	1		F	1	1						0	0.00	0	0
100.00 D	2		F	1	1						0	0.00	0	0
100.00 D	3		F	1	1						0	0.00	0	0
100.00 D	4		F	1	1						0	0.00	0	0
100.00 D	5		F	1	1						0	0.00	0	0
100.00 D	6		F	1	1						0	0.00	0	0
100.00 D	7		F	1	1						0	0.00	0	0
100.00 D	8		F	1	1						0	0.00	0	0
100.00 D	9		F	1	1						0	0.00	0	0
100.00 D	10		F	1	1						0	0.00	0	0

jm 12/28/00

000022

Site SW-PDA-2

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 26024 (x) Chronic ( ) Acute hours
Test Date: 1-Nov-00
Source: SAUGET Test Material: AMS2 (%)

Conc	Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6 End	Prop Alive	Total Young	Max Young
0.00 D	1		F	1	1					1	1.00	24	12
0.00 D	2		F	1	1					1	1.00	21	10
0.00 D	3		F	1	1					1	1.00	27	14
0.00 D	4		F	1	1					1	1.00	19	10
0.00 D	5		F	1	1					1	1.00	17	9
0.00 D	6		F	1	1					1	1.00	27	16
0.00 D	7		F	1	1					1	1.00	31	16
0.00 D	8		F	1	1					1	1.00	26	13
0.00 D	9		F	1	1					1	1.00	27	13
0.00 D	10		F	1	1					1	1.00	30	14
6.35 D	1		F	1	1					1	1.00	13	8
6.35 D	2		F	1	1					1	1.00	0	0
6.35 D	3		F	1	1					0	0.00	11	8
6.35 D	4		F	1	1					1	1.00	2	2
6.35 D	5		F	1	1					1	1.00	17	10
6.35 D	6		F	1	1					1	1.00	15	11
6.35 D	7		F	1	1					1	1.00	15	13
6.35 D	8		F	1	1					1	1.00	15	13
6.35 D	9		F	1	1					1	1.00	12	10
6.35 D	10		F	1	1					1	1.00	12	6
12.70 D	1		F	1	1					0	0.00	2	2
12.70 D	2		F	1	1					1	1.00	0	0
12.70 D	3		F	1	1					1	1.00	7	5
12.70 D	4		F	1	1					1	1.00	1	1
12.70 D	5		F	1	1					1	1.00	2	2
12.70 D	6		F	1	1					1	1.00	1	1
12.70 D	7		F	1	1					1	1.00	0	0
12.70 D	8		F	1	1					1	1.00	9	9
12.70 D	9		F	1	1					1	1.00	5	5
12.70 D	10		F	1	1					1	1.00	2	2
25.00 D	1		F	1	1					1	1.00	2	2
25.00 D	2		F	1	1					1	1.00	4	4
25.00 D	3		F	1	1					1	1.00	2	2
25.00 D	4		F	1	1					1	1.00	15	11
25.00 D	5		F	1	1					1	1.00	9	9
25.00 D	6		F	1	1					1	1.00	0	0
25.00 D	7		F	1	1					1	1.00	0	0
25.00 D	8		F	1	1					1	1.00	0	0
25.00 D	9		F	1	1					1	1.00	0	0
25.00 D	10		F	1	1					1	1.00	0	0
50.00 D	1		F	1	1					1	1.00	0	0
50.00 D	2		F	1	1					1	1.00	1	1
50.00 D	3		F	1	1					1	1.00	0	0
50.00 D	4		F	1	1					1	1.00	0	0
50.00 D	5		F	1	1					1	1.00	3	3
50.00 D	6		F	1	1					0	0.00	0	0
50.00 D	7		F	1	1					1	1.00	0	0

Site SW-PDA-2

12/28/00 TOXIS ANALYSIS SUMMARY

Ceriodaphnia Reproduction

Lab	Species	Date	Test Material	Permit	Protocol	Test Number
VTABS	CD	11/01/0	AMB2 (%)	SAUGET	EPAF 94	26024

EPA Flowchart Auto growth select 1 control

	Conc	Mean	SD	N	T	Sum of Ranks
Data transformation: No transformation						
X	0.00D	25.00	4.807	10		
X	6.35D	11.20	5.692	10	7.228	55.500
X	12.70D	2.90	3.071	10	11.575	55.000
X	25.00D	3.20	5.029	10	11.418	55.000
X	50.00D	.30	.949	10	12.937	55.000
	100.00D	0.00	0.000	10		

NOEC	LOEC	TU	Alpha	Tail	Based on	Critical Sum of Ran
6.35	6.35	>15.74	.05	One-sided	Steel	76

Dunnett Test:

MSE	MSD % Reduction from Control	Critical T
18.226	16.9925	2.225

Shapiro-Wilk Test for Normality:

Alpha	W	Cutoff W	Normal?
.01	.970679	.93	Yes

Bartlett Test for Equal Variance:

Alpha	B	P(B)	Equal Var?
.01	21.772	.00022	No

000020

Site SW-PDA-2

12/28/00 TOXIS ANALYSIS SUMMARY

Ceriodaphnia Proportion Alive Day 7

Lab	Species	Date	Test Material	Permit	Protocol	Test Number
VTABS	CD	11/01/0	AMB2 (%)	SAUGET	EPAF 94	26C24

Fisher Exact Auto growth select 1 control

Transformation		Prop. Conc	Alive	P
No transformation				
	X	0.00D	1.00	
	X	6.35D	.90	.500
	X	12.70D	.90	.500
	X	25.00D	1.00	1.000
	X	50.00D	.60	.237
		100.00D	0.00	.000

NOEC	LOEC	TU	Alpha	Tail	Based on
50	100	2	.05	One-sided	Fisher Exact

Site SW-PDA-2

Inhibition Concentration (ICp) Using Linear Interpolation Analysis

Aquatec Biological Sciences

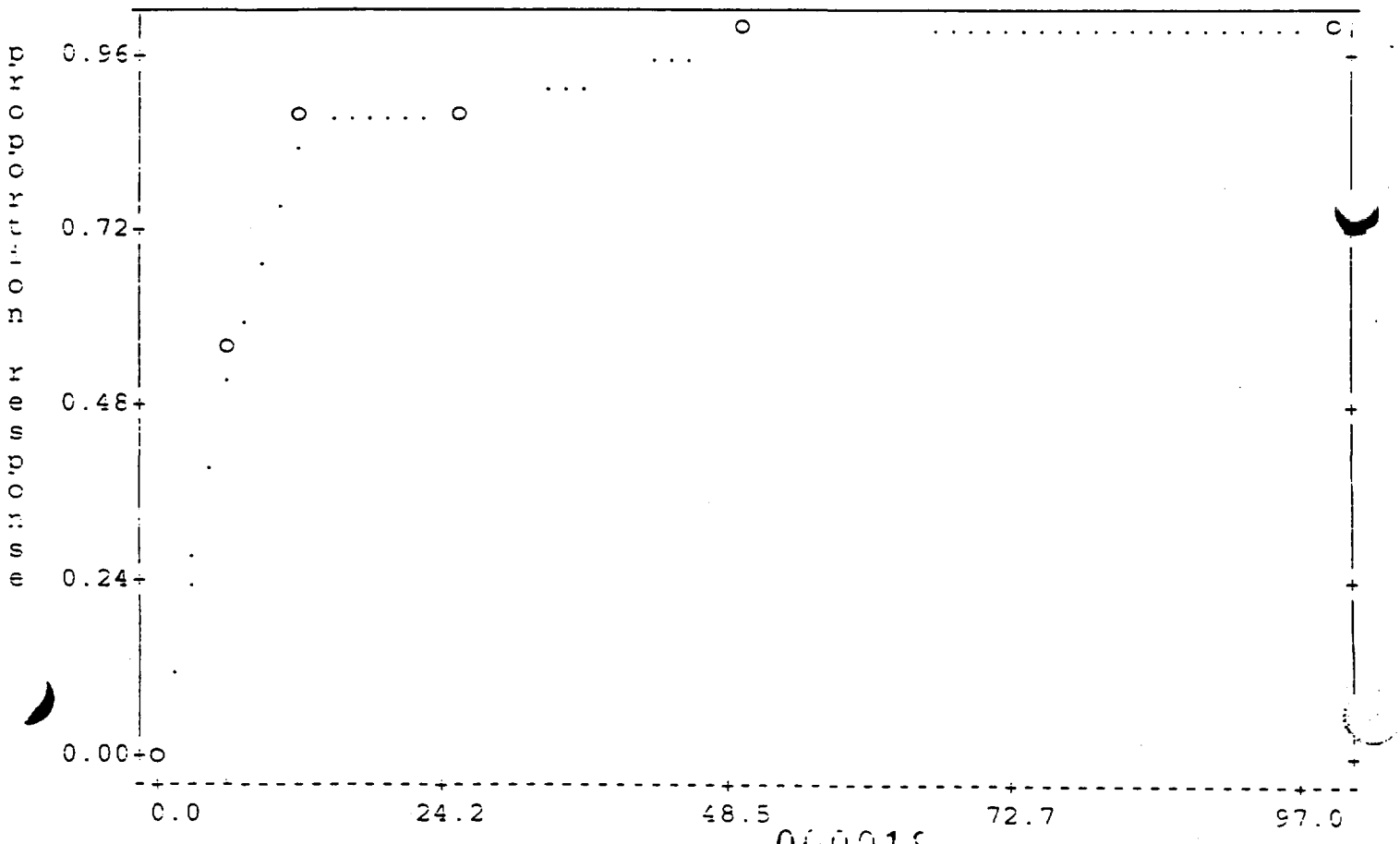
Species: Ceriodaphnia dubia
Test Material: Ambient water (%)
Endpoint: Total young

Test Number: 26024
Test Date: 11/01/0

Concentration	Mean	Pooled Mean	Proportion Response
0.0000	25.0000	25.0000	0.0000
6.3500	11.2000	11.2000	0.5520
12.7000	2.9000	3.0500	0.8780
25.0000	3.2000	3.0500	0.8780
50.0000	0.3000	0.3000	0.9880
100.0000	0.0000	0.0000	1.0000

P Value	Estimated Concentration	95% Confidence Limits Lower	Upper
10	1.1504	0.897	1.598
25	2.8759	2.381	3.915
50	5.7518	4.504	7.973

Note: # bootstrap resamplings = 120



Aquatec Biological Sciences

Ecology | Environmental Toxicology | Natural Resource Assessments | Microbiology

January 16, 2001

Ted Wickwire, Ph.D.
Menzie-Cura & Associates
1 Courthouse Lane
Chelmsford, Massachusetts 01824

Dear Dr. Wickwire:

Enclosed please find the report (one bound and one unbound copy) and electronic data deliverable (EDD) for amphipod, *Hyalella azteca*, 28-day chronic tests for the Sauget sediment toxicity assessment.

Sincerely,

John Williams
Manager, Environmental Toxicology

273 Commerce Street, Williston, VT 05495 Tel: 802.860.1638 Fax: 802.658.3189

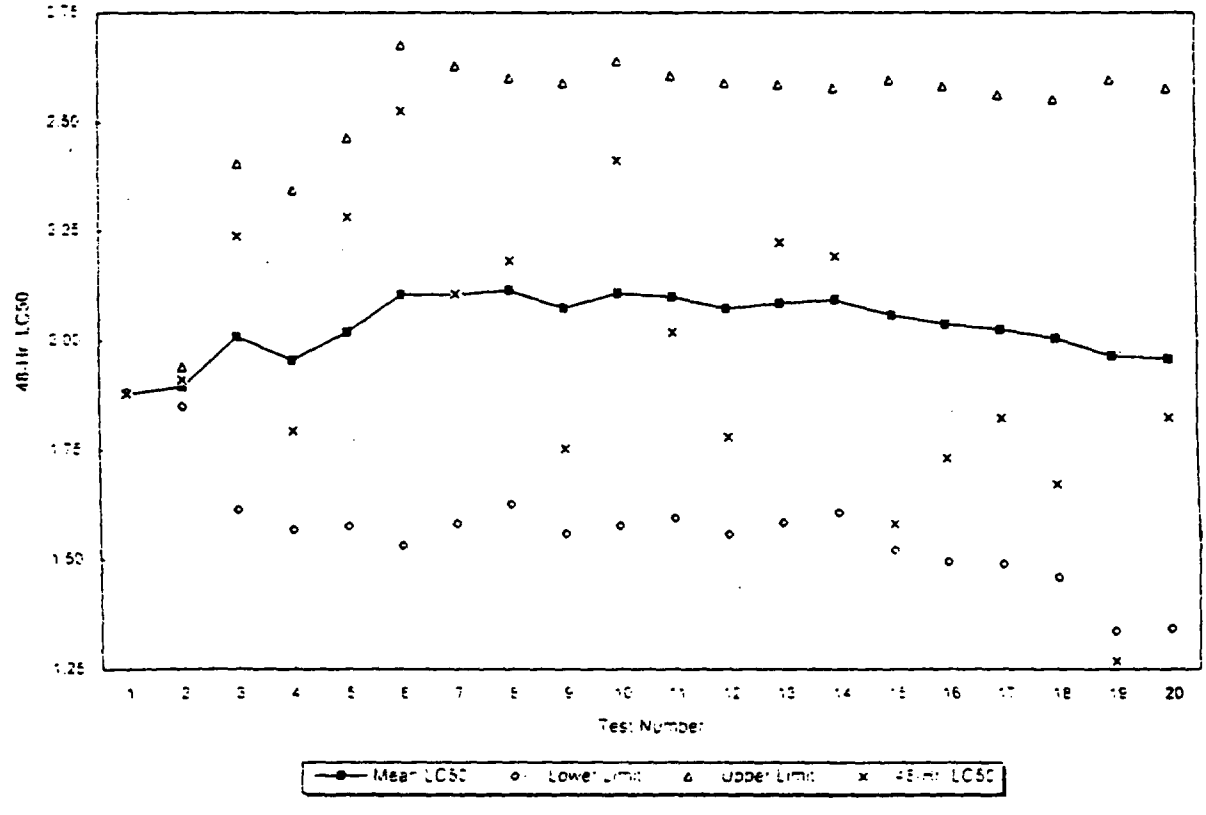
AMPHIPOD SEDIMENT
TOXICITY TEST
LABORATORY REPORT

Standard Reference Toxicant Control Charts

Menzie-Cura & Associates

Reference Toxicant Control Chart
Ceriodaphnia dubia
in Sodium chloride (g/L)

Test Number	Test Date	Organism Age (Days)	48-Hr. LC50	Mean LC50	Lower Limit	Upper Limit	Organism Source
1	06/08/99	1	1.879	1.88			Aquatec Biological Sciences
2	07/12/99	1	1.911	1.90	1.85	1.94	Aquatec Biological Sciences
3	08/24/99	1	2.236	2.01	1.61	2.40	Aquatec Biological Sciences
4	09/28/99	1	1.794	1.96	1.57	2.34	Aquatec Biological Sciences
5	10/05/99	1	2.280	2.02	1.58	2.46	Aquatec Biological Sciences
6	11/02/99	1	2.525	2.10	1.53	2.68	Aquatec Biological Sciences
7	12/07/99	1	2.105	2.10	1.58	2.63	Aquatec Biological Sciences
8	01/11/00	1	2.180	2.11	1.63	2.60	Aquatec Biological Sciences
9	02/03/00	1	1.754	2.07	1.56	2.59	Aquatec Biological Sciences
10	03/02/00	1	2.412	2.11	1.58	2.64	Aquatec Biological Sciences
11	04/04/00	1	2.019	2.10	1.59	2.61	Aquatec Biological Sciences
12	05/03/00	1	1.780	2.07	1.56	2.59	Aquatec Biological Sciences
13	06/06/00	1	2.222	2.08	1.58	2.59	Aquatec Biological Sciences
14	07/13/00	1	2.190	2.09	1.61	2.58	Aquatec Biological Sciences
15	08/08/00	1	1.581	2.06	1.52	2.59	Aquatec Biological Sciences
16	09/12/00	1	1.732	2.04	1.49	2.58	Aquatec Biological Sciences
17	10/17/00	1	1.823	2.02	1.49	2.56	Aquatec Biological Sciences
18	11/01/00	1	1.672	2.01	1.46	2.55	Aquatec Biological Sciences
19	12/05/00	1	1.268	1.97	1.34	2.60	Aquatec Biological Sciences
20	12/27/00	1	1.825	1.96	1.34	2.58	Aquatec Biological Sciences



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Documentation of Collection of *Ceriodaphnia dubia* for Toxicity Testing

Brood Board	Date / Time Init. when cleared of Neonates	Date / Time Init. when neonates collected	No. Cups with 8 or more neonates	Fed YCT / *Selenastrum*
10/22 A	10/30 13:30 jm	—	—	—
10/22 B	10/30 13:50 jm	—	—	—
10/22 A	→	10/30 16:40 jm	8	—
10/22 B	→	10/30 16:40 jm	8	—
10/22 A	10/31/00 09:30 jm	—	—	—
10/22 B	10/31/00 09:45 jm	—	—	—
10/22 A	10/31/00 13:00 jm	—	—	∅ ✓
10/22 B	10/31/00 13:00 jm	→	3	3 ✓
10/22 A		10/31 17:10 jm	8 *	✓
10/22 B	~~11/1/00 00:00 JG~~	10/31 17:10 jm	8 *	✓
10/22 A	11/1/00 00:00 JG	→	22 *	✓
10/22 B	11/1/00 00:00 JG	→	20 *	✓

Project Description / Test Use: Menzie Cura Sanger 18269

ccdoll.doc

* Neonates used to start tests jm 11/1

Sample Preparation

Client: MENZIE-CURA 00049 SAUGET	SDG: 4805
Test Description: *Ceriodaphnia dubia* acute / chronic toxicity tests	

Sample Identification:

Sample Description	SW-PDA-5	SW-PDA-2	SW-PDA-2 FD	SW-PDA-3	SW-PDA-4		
Sample #	18269	18279	18280	18281	18282		

Sample Preparation:

Filtration	60 micron	60 micron	60 micron	60 micron	60 micron		
Warm (25°C)	✓	✓	✓	✓	✓		
Prepared by (Init./date)	jm 11/1	jm 11/1	jm 11/1	jm 11/1	jm 11/1		

Daily Dilution Plan for: *Ceriodaphnia dubia* chronic toxicity tests

Concentration (%)	Volume Surface Water Sample (mL)	Volume Diluent * (mL)	Total Volume (mL)
Laboratory Control	0	~~600~~ 3w	600
6.3	19	281	~~600~~ 3w
12.7	38	262	~~600~~
25	75	225	~~600~~
50	150	150	600
100	300	0	600
Total Volume	582	1518	3600

Reduce to 200 mL per day. 6

* Control / Diluent = 1:1 mix of moderately hard water and Lamoille River (VT) water.

Comments:

Collect alkalinity and hardness samples on Lab water and each surface water sample on Day 0.
Measure initial chemistry on Day 0 (all dilutions) and final chemistry all subsequent days (all dilutions).

12.5
25
50
100
7w

Ceriodaphnia dubia Survival and Reproduction Data (Page 2 of 2)

Client: MENZIE-CURA 00049 SAUGET **Test #:** 26027 **SDG:** 4805

Test Description: *Ceriodaphnia dubia* acute / chronic toxicity test

Effluent (%)	Repl 1	Repl 2	Repl 3	Repl 4	Repl 5	Repl 6	Repl 7	Repl 8	Repl 9	Repl 10	Remarks
Lab Contr	4	0	4	0	0	3	1	4	4	4	Day 4
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample 18282
6.3	4	5	5	0	4	4	4	3	0	0	Fed ✓
12.7	4	2	1	1	0	4	1	3	3	0	
25	0	0	2	0	4	0	1	0	0	0	Date/time/Init.
50	0	0	0	Ø* D	0	0	0	0	0	0	11/5/00 jm
100	0	0	0	0	0	0	0	0	0	0	15:00
Lab Contr	10	10	12	10	9	9	7	10	11	9	Day 5
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample 18282
6.3	9	11	10	0	9	11	10	10	5	9	Fed ✓
12.7	3	1	3	3	0	4	1	5	2	0	
25	0	0	4	0	0	1	3	0	1	0	Date/time/Init.
50	0	0	0	D	0	0	0	0	1	3	11/6/00
100	0	0	0	0	0	0	0	0	0	0	16:00 jm
Lab Contr	16	15	0	0	0	0	0	0	0	14	Day 6
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample 18282
6.3	0	12	0	0	0	0	0	0	0	16	Fed ✓
12.7	11	13	14	0	0	0	0	0	13	8	
25	2	0	0	12	14	0	0	0	0	0	Date/time/Init.
50	0	0	0	D	0	0	0	0	0	0	11/7/00 jm
100	0	0	0	0	0	0	0	0	0	0	17:00
Lab Contr	0	0	15	14	15	15	11	17	15	0	Day 7
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample 18282
6.3	11	0	13	13	3	13	13	13	10	0	Fed —
12.7	0	0	0	4	10	13	9	13	0	0	
25	6	12	13	2	0	1	11	14	15	10	Date/time/Init.
50	13	0	0	D	0	0	11	0	0	0	11/8/00 jm
100	1	0	0	0	0	0	0	0	0	0	13:10

0=original organism surviving, no young; D=original organism dead; #=# young released; *=lab-induced mortality

Water Chemistry Data: ***C. dubia* acute / chronic toxicity**

Client: MENZIE-CURA 00049 SAUGET	Test #: 26027	SDG: 4805

	Day:	0	1	2	3	4	5	6	7	8
Lab Control	pH	7.9	7.8	7.8	7.8	7.7	7.7	7.7	7.7	
	DO	8.2	8.1	8.0	8.0	7.9	7.9	8.2	8.1	
	Temp.	24.5	24.1	24.0	24.5	24.3	24.6	24.4	24.0	
	Conduct.	200	200	205	210	210	220	220	215	
6.3%	pH	8.0	7.9	7.9	7.8	7.9	7.9	7.8	7.8	
	DO	8.3	8.1	7.9	8.0	8.0	8.1	8.2	8.1	
	Temp.	24.2	24.1	24.1	24.5	24.3	24.8	24.6	24.0	
	Conduct.	210	220	230	240	240	250	250	240	
12.7%	pH	8.1	8.0	7.9	7.9	8.0	8.0	7.9	7.9	
	DO	8.6	8.1	7.9	8.0	8.0	8.1	8.2	8.1	
	Temp.	24.2	24.0	24.1	24.5	24.4	24.8	24.8	24.1	
	Conduct.	230	240	250	260	260	270	270	260	
25%	pH	8.2	8.1	8.1	8.0	8.0	8.0	8.0	8.0	
	DO	8.4	8.1	7.9	8.0	8.1	8.1	8.1	8.2	
	Temp.	24.1	24.0	24.1	24.4	24.4	24.6	24.6	24.1	
	Conduct.	270	270	285	290	290	280	290	290	
50%	pH	8.3	8.3	8.2	8.2	8.2	8.2	8.2	82	
	DO	8.3	8.2	7.9	8.1	8.1	8.1	8.1	8.2	
	Temp.	24.2	24.0	24.1	24.5	24.5	24.6	24.8	24.0	
	Conduct.	340	340	350	360	350	350	360	355	
100%	pH	8.1	8.5	8.4	8.4	8.4	8.4	8.4	8.4	
	DO	8.6	8.1	7.9	8.0	8.1	8.1	8.2	8.1	
	Temp.	25.0	24.0	24.1	24.5	24.6	24.7	24.7	24.0	
	Conduct.	500	480	490	500	480	480	480	480	
	Sample #	18282	18282	18282	18282	18282	18282	18282	18282	18282
	Init./Date	jm 11/1	jm 11/2	JG 11/3	JG 11/4	jm 11/5	jm 11/6	jm 11/7	jm 11/8	

Aquatec Biological Sciences, Inc. Williston, Vermont

Reviewed by: _____ Date: 1/17/01

00003

CddilToxForm

Site SW-PDA-4

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 26027 (x) Chronic ( ) Acute hours
TEST DATE: 1-Nov-00
SOURCE: SAUGET TEST MATERIAL: AMB2 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
50.00	D	8					0	0	0	0			
50.00	D	9					0	1	0	0			
50.00	D	10					0	3	0	0			
100.00	D	1					0	0	0	1			
100.00	D	2					0	0	0	0			
100.00	D	3					0	0	0	0			
100.00	D	4					0	0	0	0			
100.00	D	5					0	0	0	0			
100.00	D	6					0	0	0	0			
100.00	D	7					0	0	0	0			
100.00	D	8					0	0	0	0			
100.00	D	9					0	0	0	0			
100.00	D	10					0	0	0	0			

jm 12/28/00

Ceriodaphnia dubia Survival and Reproduction Data (Page 1 of 2)

Client: MENZIE-CURA 00049 SAUGET Test #: 26027 SDG: 4805

Test Description: *Ceriodaphnia dubia* acute / chronic toxicity test

Effluent (%)	Repl 1	Repl 2	Repl 3	Repl 4	Repl 5	Repl 6	Repl 7	Repl 8	Repl 9	Repl 10	Remarks
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 0
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18282
6.3	0	0	0	0	0	0	0	0	0	0	Fed ✓
12.7	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	D	0	Date/time/Init
50	0	0	0	0	0	0	0	0	0	0	11/1/00 jm
100	0	0	0	0	0	0	0	0	0	0	16:00
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 1
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18282
6.3	0	0	0	0	0	0	0	0	0	0	Fed ✓
12.7	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	Date/time/Init
50	0	0	0	D	0	0	0	0	0	0	11/2/00 jm
100	0	0	0	0	0	0	0	0	0	0	16:00
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 2
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18282
6.3	0	—	—	—	—	—	—	—	—	—	Fed ✓
12.7	0	—	—	—	—	—	—	—	—	—	
25	0	—	—	—	—	—	—	—	—	—	Date/time/Init
50	0	0	0	D	0	0	0	0	0	0	11/3/00
100	0	—	—	—	—	—	—	—	—	—	16:20 JG
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 3
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18282
6.3	0	—	—	—	—	—	—	—	—	—	Fed ✓
12.7	0	—	—	—	—	—	—	—	—	—	
25	0	—	—	—	—	—	—	—	—	—	Date/time/Init
50	0	0	0	D	0	0	0	0	0	0	11/4/00
100	0	—	—	—	—	—	—	—	—	—	15:30 JG

0=original organism surviving, no young; D=original organism dead; #=# young released; *=lab-induced mortality

Site SW-PDA-4

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 26027 (x) Chronic ( ) Acute hours
Test Date: 1-Nov-00
Source: SAUGET Test Material: AM22 (%)

Conc	Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Total Young	Max Young
50.00 D	8		F	1	1						1	1.00	0	0
50.00 D	9		F	1	1						1	1.00	1	1
50.00 D	10		F	1	1						1	1.00	3	3
100.00 D	1		F	1	1						1	1.00	1	1
100.00 D	2		F	1	1						1	1.00	0	0
100.00 D	3		F	1	1						1	1.00	0	0
100.00 D	4		F	1	1						1	1.00	0	0
100.00 D	5		F	1	1						1	1.00	0	0
100.00 D	6		F	1	1						1	1.00	0	0
100.00 D	7		F	1	1						1	1.00	0	0
100.00 D	8		F	1	1						1	1.00	0	0
100.00 D	9		F	1	1						1	1.00	0	0
100.00 D	10		F	1	1						1	1.00	0	0

jm 12/28/00

Site SW-PDA-4

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 26027 (x) Chronic ( ) Acute hours
TEST DATE: 1-Nov-00
SOURCE: SAUGET TEST MATERIAL: AMB2 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
0.00	D	1					4	10	16	0			
0.00	D	2					0	10	15	0			
0.00	D	3					4	12	0	15			
0.00	D	4					0	10	0	14			
0.00	D	5					0	9	0	15			
0.00	D	6					3	9	0	15			
0.00	D	7					1	7	0	11			
0.00	D	8					4	10	0	17			
0.00	D	9					4	11	0	15			
0.00	D	10					4	9	14	0			
6.35	D	1					4	9	0	11			
6.35	D	2					5	11	12	0			
6.35	D	3					5	10	0	13			
6.35	D	4					0	0	0	13			
6.35	D	5					4	9	0	3			
6.35	D	6					4	11	0	13			
6.35	D	7					4	10	0	13			
6.35	D	8					3	10	0	13			
6.35	D	9					0	5	0	10			
6.35	D	10					0	9	16	0			
12.70	D	1					4	3	11	0			
12.70	D	2					2	1	13	0			
12.70	D	3					1	3	14	0			
12.70	D	4					1	3	0	4			
12.70	D	5					0	0	0	10			
12.70	D	6					4	4	0	13			
12.70	D	7					1	1	0	9			
12.70	D	8					3	5	0	13			
12.70	D	9					3	2	13	0			
12.70	D	10					0	0	8	0			
25.00	D	1					0	0	2	6			
25.00	D	2					0	0	0	12			
25.00	D	3					2	4	0	13			
25.00	D	4					0	0	12	2			
25.00	D	5					4	0	14	0			
25.00	D	6					0	1	0	1			
25.00	D	7					1	3	0	11			
25.00	D	8					0	0	0	14			
25.00	D	9					0	1	0	15			
25.00	D	10					0	0	0	10			
50.00	D	1					0	0	0	13			
50.00	D	2					0	0	0	0			
50.00	D	3					0	0	0	0			
50.00	D	4					0	0	0	0			
50.00	D	5					0	0	0	0			
50.00	D	6					0	0	0	0			
50.00	D	7					0	0	0	11			

Site SW-PDA-4

12/28/00 TOXIS ANALYSIS SUMMARY

Ceriodaphnia Reproduction

Lab	Species	Date	Test Material	Permit	Protocol	Test Number
VTABS	CD	11/01/0	AMB2 (%)	SAUGET	EPAF 94	26027

EPA Flowchart Auto growth select 1 control

	Conc	Mean	SD	N	T	Sum of Ranks
Data transformation:		No transformation				
X	0.00D	26.80	3.882	10		
X	6.35D	23.00	5.944	10	1.844	87.500
X	12.70D	14.90	5.152	10	5.775	57.000
X	25.00D	12.80	5.073	10	6.794	55.500
X	50.00D	2.80	4.962	10	11.646	55.000
X	100.00D	.10	.316	10	12.956	55.000

NOEC	LOEC	TU	Alpha	Tail	Based on	Critical Sum of Ran
6.35	12.7	15.74	.05	One-sided	Steel	75

Dunnett Test:	MSE	MSD % Reduction from Control	Critical T
	21.233	17.6009	2.289

Kolmogorov Test for Normality:	Alpha	D	Cutoff D	Normal?
	.01	.124676	.132	Yes

Bartlett Test for Equal Variance:	Alpha	B	P(B)	Equal Var?
	.01	39.930	0	No

000056

Sample 10202
Site SW-PDA-4

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 26027 (x) Chronic ( ) Acute hours
Test Date: 1-Nov-00
Source: SAUGET Test Material: AME2 (%)

Conc		Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Total Young	Max Young
0.00	D	1		F	1	1						1	1.00	30	16
0.00	D	2		F	1	1						1	1.00	25	15
0.00	D	3		F	1	1						1	1.00	31	15
0.00	D	4		F	1	1						1	1.00	24	14
0.00	D	5		F	1	1						1	1.00	24	15
0.00	D	6		F	1	1						1	1.00	27	15
0.00	D	7		F	1	1						1	1.00	19	11
0.00	D	8		F	1	1						1	1.00	31	17
0.00	D	9		F	1	1						1	1.00	30	15
0.00	D	10		F	1	1						1	1.00	27	14
6.35	D	1		F	1	1						1	1.00	24	11
6.35	D	2		F	1	1						1	1.00	28	12
6.35	D	3		F	1	1						1	1.00	28	13
6.35	D	4		F	1	1						1	1.00	13	13
6.35	D	5		F	1	1						1	1.00	16	9
6.35	D	6		F	1	1						1	1.00	28	13
6.35	D	7		F	1	1						1	1.00	27	13
6.35	D	8		F	1	1						1	1.00	26	13
6.35	D	9		F	1	1						1	1.00	15	10
6.35	D	10		F	1	1						1	1.00	25	16
12.70	D	1		F	1	1						1	1.00	16	11
12.70	D	2		F	1	1						1	1.00	16	13
12.70	D	3		F	1	1						1	1.00	16	14
12.70	D	4		F	1	1						1	1.00	6	4
12.70	D	5		F	1	1						1	1.00	10	10
12.70	D	6		F	1	1						1	1.00	21	13
12.70	D	7		F	1	1						1	1.00	11	9
12.70	D	8		F	1	1						1	1.00	21	13
12.70	D	9		F	1	1						1	1.00	16	13
12.70	D	10		F	1	1						1	1.00	8	8
25.00	D	1		F	1	1						1	1.00	6	6
25.00	D	2		F	1	1						1	1.00	12	12
25.00	D	3		F	1	1						1	1.00	13	13
25.00	D	4		F	1	1						1	1.00	14	12
25.00	D	5		F	1	1						1	1.00	18	14
25.00	D	6		F	1	1						1	1.00	2	1
25.00	D	7		F	1	1						1	1.00	15	11
25.00	D	8		F	1	1						1	1.00	14	14
25.00	D	9		F	1	1						1	1.00	16	15
25.00	D	10		F	1	1						1	1.00	10	10
50.00	D	1		F	1	1						1	1.00	13	13
50.00	D	2		F	1	1						1	1.00	1	0
50.00	D	3		F	1	1						1	1.00	0	0
50.00	D	4		F	1	0						1	0.00	0	0
50.00	D	5		F	1	1						1	1.00	0	0
50.00	D	6		F	1	1						1	1.00	0	0
50.00	D	7		F	1	1						1	1.00	11	11

Site SW-PDA-4

Inhibition Concentration (ICp) Using Linear Interpolation Analysis

Aquatec Biological Sciences

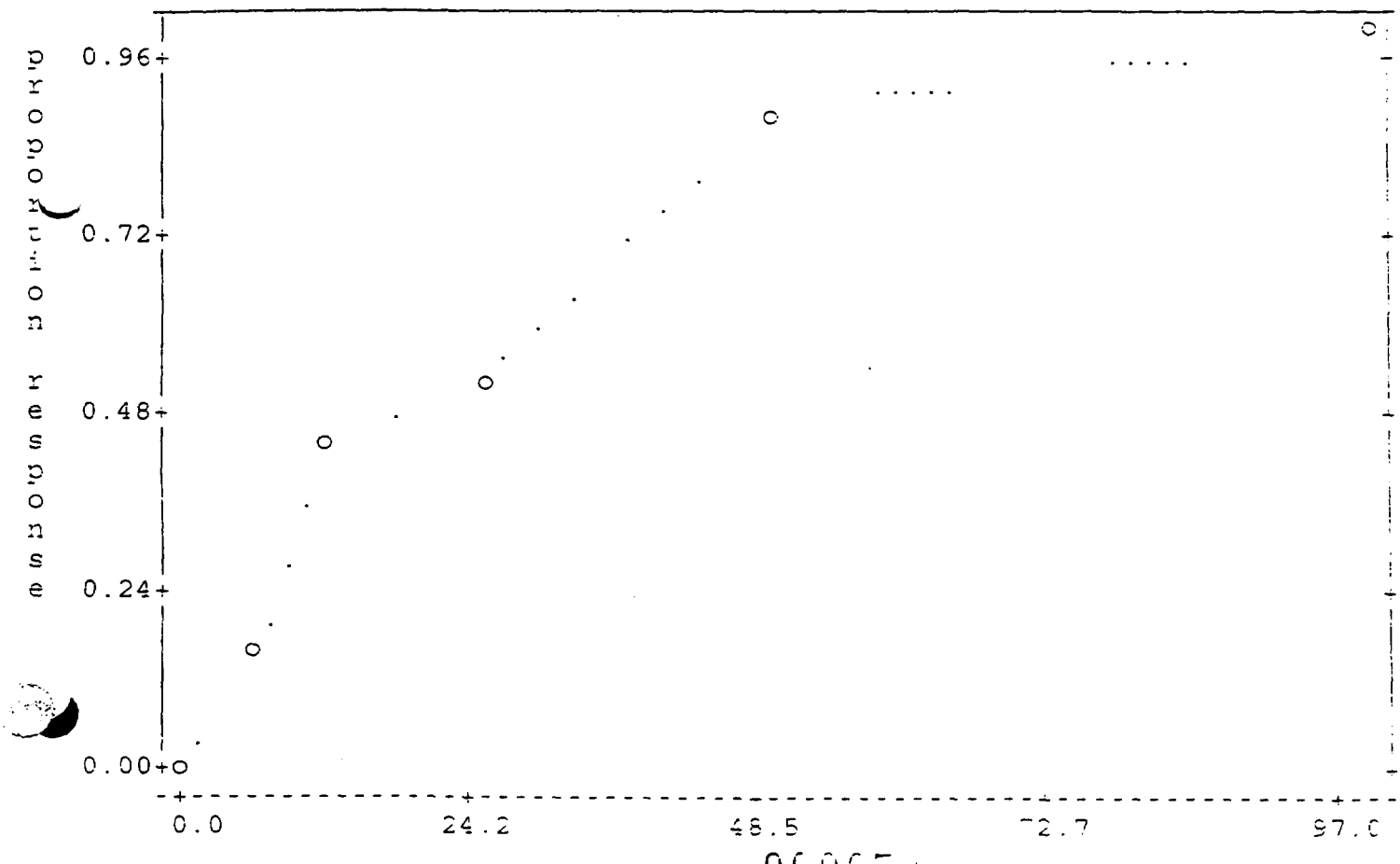
Species: Ceriodaphnia dubia
Test Material: Ambient water (%)
Endpoint: Total young

Test Number: 26027
Test Date: 11/01/0

Concentration	Mean	Pooled Mean	Proportion Response
0.0000	26.8000	26.8000	0.0000
6.3500	23.0000	23.0000	0.1418
12.7000	14.9000	14.9000	0.4440
25.0000	12.8000	12.8000	0.5224
50.0000	2.8000	2.8000	0.8955
100.0000	0.1000	0.1000	0.9963

P Value	Estimated Concentration	95% Confidence Limits Lower	Upper
10	4.4784	2.254	7.945
25	8.6235	5.164	10.597
50	21.4857	11.872	29.527

Note: # bootstrap resamplings = 120



Site SW-PDA-4

12/28/00 TOXIS ANALYSIS SUMMARY

Ceriodaphnia Proportion Alive Day 7

Lab	Species	Date	Test Material	Permit	Protocol	Test Number
VTABS	CD	11/01/0	AMB2 (%)	SAUGET	EPAF 94	26027

Fisher Exact Auto growth select 1 control

Transformation		Prop. Conc	Alive	P
No transformation				
	X	0.00D	1.00	
	X	6.35D	1.00	1.000
	X	12.70D	1.00	1.000
	X	25.00D	1.00	1.000
	X	50.00D	.90	.500
	X	100.00D	1.00	1.000

NOEC	LOEC	TU	Alpha	Tail	Based on
>100	>100	<1	.05	One-sided	Fisher Exact

Site SW-PDA-4

Aquatec Biological Sciences

Test Date: 11/01/00
Sample Date: 10/25/00
Species: Ceriodaphnia dubia
Test Type: Chronic

Test Number: 26027
Test Material: Ambient water
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	6.350	D	10	1.00	0.000	
			X	12.700	D	10	1.00	0.000	
			X	25.000	D	10	1.00	0.000	
			X	50.000	D	10	.90	.316	
			X	100.000	D	10	1.00	0.000	
Proportion Alive	7	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	6.350	D	10	1.00	0.000	
			X	12.700	D	10	1.00	0.000	
			X	25.000	D	10	1.00	0.000	
			X	50.000	D	10	.90	.316	
			X	100.000	D	10	1.00	0.000	
Reproduction		No transformation							
			X	0.000	D	10	26.80	3.882	
			X	6.350	D	10	23.00	5.944	
			X	12.700	D	10	14.90	5.182	
			X	25.000	D	10	12.60	5.073	
			X	50.000	D	10	2.80	4.962	
			X	100.000	D	10	.10	.316	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	No transformation					
		Fisher Exact	>100.000	>100.000	< 1.00		
Proportion Alive	7	No transformation					
		Fisher Exact	>100.000	>100.000	< 1.00		
Reproduction		No transformation					
		Steel many-one rank test	6.350	12.700	15.75	21.233	4.717

- GROWTH POINT ESTIMATE -

End Point	P	IC	95% CI
Reproduction			
	IC 10	4.478	2.25 - 7.94
	IC 25	8.624	5.16 - 10.60
	IC 50	21.466	11.87 - 39.53

Sample 18252
Site SW-PDA-4

12/28/00- 2:23 pm TOXIS ANALYSIS SUMMARY

Water Flea

Lab	Species	Test Date	Test Material	Permit	Protocol	Test Number
VTABS	CD	11/01/0	AMB2 (%)	SAUGET	EPAF 94	26027

Statistics Parameters

PROPORTION

End Point:	PA Proportion Alive		
Analysis:	Fisher Exact	Auto growth select	1 control
Transform:	No transformation		
Tail:	One-tailed, decreasing		
Constant:	-.01	Variance:	.01
Root:	0.00	Alpha Normality:	.01
		NOEC:	.05

EC/LC Method: F (P,S,G,L,N) Superdunnet: 4000

GROWTH

End Point:	GR Reproduction		
Analysis:	EPA Flowchart	Auto growth select	1 control
Transform:	No transformation		
Tail:	One-tailed, decreasing		
Constant:	-.01	Variance:	.01
Root:	0.00	Alpha Normality:	.01
		NOEC:	.05

Calculate IC? Y (Y,N) IC resamples: 120

Errors/Warnings

Type	Number	
EC/LC	71	No linear interpolation estimate can be calculated - none of the group response means < 100-p % of the control response me
IC	0	Analysis completed with no errors
PROP	0	Analysis completed with no errors
GROW	0	Analysis completed with no errors

Ceriodaphnia dubia Survival and Reproduction Data (Page 2 of 2)

Client: MENZIE-CURA 00049 SAUGET Test #: 26026 SDG: 4805

Test Description: *Ceriodaphnia dubia* acute / chronic toxicity test

Effluent (%)	Repl 1	Repl 2	Repl 3	Repl 4	Repl 5	Repl 6	Repl 7	Repl 8	Repl 9	Repl 10	Remarks
Lab Contr	0	2	4	4	4	3	3	0	1	2	Day 4
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18281
6.3	0	D*	1	4	4	4	4	0	0	2	Fed ✓
12.7	0	0	2	2	0	0	3	0	4	D	
25	0	0	0	0	D	0	0	0	0	1	Date/time/Init.
50	0	0	0	0	0	0	0	0	0	2	11/5/00 jm
100	0	0	0	0	0	0	0	0	0	0	14:45
Lab Contr	7	2	9	10	10	10	8	10	8	11	Day 5
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18281
6.3	9	D*	7	9	9	9	8	7	8	3	Fed ✓
12.7	7	4	0	0	0	5	0	0	6	D	
25	0	0	0	1	D	0	0	0	0	0	Date/time/Init.
50	0	0	0	0	0	0	0	0	0	0	11/6/00 jm
100	0	0	0	0	0	0	0	0	0	0	15:30
Lab Contr	13	1	0	0	0	0	0	0	17	14	Day 6
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18281
6.3	0	D*	0	0	0	0	0	0	0	13	Fed ✓
12.7	0	10	8	7	7	0	0	4	0	D	
25	4	0	2	3	D	1	7	2	2	4	Date/time/Init.
50	0	0	0	0	3	2	0	0	0	0	11/7/00 jm
100	0	1	0	0	0	0	0	0	0	0	16:30
Lab Contr	0	4	15	12	12	15	14	14	0	0	Day 7
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18281
6.3	11	D*	13	12	15	14	13	14	14	0	Fed ——
12.7	8	0	13	12	11	14	6	9	5	D	
25	11	0	0	0	D	8	8	10	7	9	Date/time/Init.
50	0	2	0	0	0	5	6	8	4	8	11/8/00 jm
100	0	0	6	5	3	3	6	0	0	0	12:30

0=original organism surviving, no young; D=original organism dead; #=# young released; *=lab-induced mortality

Water Chemistry Data: *C. dubia* acute / chronic toxicity

Client: MENZIE-CURA 00049 SAUGET	Test #: 26026	SDG: 4805

	Day:	0	1	2	3	4	5	6	7	8
Lab Control	pH	7.9	7.7	7.7	7.8	7.8	7.7	7.8	7.7	
	DO	8.2	8.2	8.1	8.1	8.0	8.0	8.2	8.2	
	Temp.	24.5	23.7	24.0	25.0	24.2	24.3	24.3	23.2	
	Conduct.	200	200	210	210	220	220	220	220	
6.3%	pH	8.0	7.9	7.8	7.9	7.9	7.8	7.9	7.9	
	DO	8.4	8.2	8.0	8.1	8.0	8.2	8.2	8.1	
	Temp.	24.0	23.8	24.0	24.8	24.5	24.7	24.7	23.9	
	Conduct.	210	220	230	240	240	250	250	250	
12.7%	pH	8.1	8.0	7.9	7.9	7.9	8.0	7.9	7.9	
	DO	8.4	8.2	8.0	8.1	8.0	8.2	8.2	8.1	
	Temp.	24.0	24.0	23.9	24.7	24.6	24.7	24.7	23.9	
	Conduct.	230	245	250	260	260	270	270	260	
25%	pH	8.2	8.1	8.0	8.0	8.0	8.0	8.0	8.0	
	DO	8.3	8.2	8.0	8.1	8.0	8.2	8.1	8.2	
	Temp.	24.6	24.0	23.9	24.6	24.6	24.8	24.6	23.9	
	Conduct.	270	280	285	280	290	290	300	300	
50%	pH	8.3	8.3	8.2	8.2	8.2	8.2	8.1	8.2	
	DO	8.3	8.3	8.0	8.1	8.1	8.2	8.2	8.2	
	Temp.	24.6	24.2	23.8	24.6	24.6	24.9	24.7	23.9	
	Conduct.	340	340	350	360	360	360	360	350	
100%	pH	8.2	8.5	8.4	8.4	8.4	8.4	8.4	8.4	
	DO	8.5	8.4	8.0	8.2	8.1	8.2	8.2	8.2	
	Temp.	24.7	24.2	24.0	24.6	24.6	24.9	24.7	23.9	
	Conduct.	470	470	480	490	480	480	480	470	
	Sample #	18281	18281	18281	18281	18281	18281	18281	18281	18281
	Init./Date	11/1 jm	11/2 jm	JG 11/3	11/4 JG	jm 11/5	jm 11/6	jm 11/7	jm 11/8	

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Reviewed by: [signature] Date 1/17/01

CddilToxForm

000051

Site SW-PDA-3

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 26026
TEST DATE: 1-Nov-00
SOURCE: SAUGET

(x) Chronic ( ) Acute hours

TEST MATERIAL: AMB2 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
50.00	D	9					0	0	0	4			
50.00	D	10					2	0	0	8			
100.00	D	1					0	0	0	0			
100.00	D	2					0	0	1	0			
100.00	D	3					0	0	0	6			
100.00	D	4					0	0	0	5			
100.00	D	5					0	0	0	3			
100.00	D	6					0	0	0	3			
100.00	D	7					0	0	0	6			
100.00	D	8					0	0	0	0			
100.00	D	9					0	0	0	0			
100.00	D	10					0	0	0	0			

jm 12/28/00

Ceriodaphnia dubia Survival and Reproduction Data (Page 1 of 2)

Client: MENZIE-CURA 00049 SAUGET **Test #:** 26026 **SDG:** 4805

Test Description: *Ceriodaphnia dubia* acute / chronic toxicity test

Effluent (%)	Repl 1	Repl 2	Repl 3	Repl 4	Repl 5	Repl 6	Repl 7	Repl 8	Repl 9	Repl 10	Remarks
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 0
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18281
6.3	0	0	0	0	0	0	0	0	0	0	Fed
12.7	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	Date/time/Init.
50	0	0	0	0	0	0	0	0	0	0	11/1/00 15:30
100	0	0	0	0	0	0	0	0	0	0	jm
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 1
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18281
6.3	0	0	0	0	0	0	0	0	0	0	Fed ✓
12.7	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	Date/time/Init.
50	0	0	0	0	0	0	0	0	0	0	11/2/00 jm
100	0	0	0	0	0	0	0	0	0	0	15:00
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 2
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18281
6.3	0	0	0	0	0	0	0	0	0	0	Fed ✓
12.7	0	0	0	0	0	0	0	0	0	1	
25	0	0	0	0	0	0	0	0	0	0	Date/time/Init.
50	0	0	0	0	0	0	0	0	0	0	11/3/00
100	0	0	0	0	0	0	0	0	0	0	15 00 JG
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 3
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18281
6.3	0	D①	0	0	0	0	0	0	0	0	Fed ✓
12.7	0	0	0	0	0	0	0	0	0	1	
25	0	0	0	0	0	0	0	0	0	0	Date/time/Init.
50	0	0	0	0	0	0	0	0	0	0	11/4/00
100	0	0	0	0	0	0	0	0	0	0	14:00 JG

0=original organism surviving, no young; D=original organism dead; #=# young released; *=lab-induced mortality

① Cup spilled. Adult lost 11/4/00

Aquatec Biological Sciences, Inc. Williston, Vermont

Reviewed by: _____ Date: 1/17/01

CddilToxForm

Sample 10 of 1
Site SW-PDA-3

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 26026 (x) Chronic ( ) Acute hours
Test Date: 1-Nov-00
Source: SAUGET Test Material: AMS2 (%)

Conc		Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6 End	Prop Alive	Total Young	Max Young
50.00	D	9		F	1	1					1	1.00	4	4
50.00	D	10		F	1	1					1	1.00	10	6
100.00	D	1		F	1	1					1	1.00	0	0
100.00	D	2		F	1	1					1	1.00	1	1
100.00	D	3		F	1	1					1	1.00	6	6
100.00	D	4		F	1	1					1	1.00	8	8
100.00	D	5		F	1	1					1	1.00	3	3
100.00	D	6		F	1	1					1	1.00	3	3
100.00	D	7		F	1	1					1	1.00	6	6
100.00	D	8		F	1	1					1	1.00	0	0
100.00	D	9		F	1	1					1	1.00	0	0
100.00	D	10		F	1	1					1	1.00	0	0

jm 12/28/00

Sample 10281
Site SW-PDA-3

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 26026 (x) Chronic ( ) Acute hours
TEST DATE: 1-Nov-00
SOURCE: SAUGET TEST MATERIAL: AMB2 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
0.00	D	1					0	7	13	0			
0.00	D	2					2	2	1	4			
0.00	D	3					4	9	0	15			
0.00	D	4					4	10	0	12			
0.00	D	5					4	10	0	12			
0.00	D	6					3	10	0	15			
0.00	D	7					3	8	0	14			
0.00	D	8					0	10	0	14			
0.00	D	9					1	8	17	0			
0.00	D	10					2	11	14	0			
6.35	D	1					0	9	0	11			
6.35	D	2					1	7	0	13			
6.35	D	3					4	9	0	12			
6.35	D	4					4	9	0	15			
6.35	D	5					4	9	0	14			
6.35	D	6					4	8	0	13			
6.35	D	7					0	7	0	14			
6.35	D	8					0	8	0	14			
6.35	D	9					2	3	13	0			
12.70	D	1					0	7	0	8			
12.70	D	2					0	4	10	0			
12.70	D	3					2	0	8	13			
12.70	D	4					2	0	7	12			
12.70	D	5					0	0	7	11			
12.70	D	6					0	5	0	14			
12.70	D	7					3	0	0	6			
12.70	D	8					0	0	4	9			
12.70	D	9					4	6	0	5			
12.70	D	10					0	0	0	0			
25.00	D	1					0	0	4	11			
25.00	D	2					0	0	0	0			
25.00	D	3					0	0	2	0			
25.00	D	4					0	1	3	0			
25.00	D	5					0	0	0	0			
25.00	D	6					0	0	1	8			
25.00	D	7					0	0	7	8			
25.00	D	8					0	0	2	10			
25.00	D	9					0	0	2	7			
25.00	D	10					1	0	4	9			
50.00	D	1					0	0	0	0			
50.00	D	2					0	0	0	2			
50.00	D	3					0	0	0	0			
50.00	D	4					0	0	0	0			
50.00	D	5					0	0	3	0			
50.00	D	6					0	0	2	5			
50.00	D	7					0	0	0	6			
50.00	D	8					0	0	0	8			

Site SW-PDA-3

12/28/00 TOXIS ANALYSIS SUMMARY

Ceriodaphnia Reproduction

Lab	Species	Date	Test Material	Permit	Protocol	Test Number
VTABS	CD	11/01/0	AMB2 (%)	SAUGET	EPAF 94	26026

EPA Flowchart Auto growth select 1 control

	Conc	Mean	SD	N	T
Data transformation:		No transformation			
X	0.00D	23.90	5.724	10	
X	6.35D	23.00	3.391	9	.398
X	12.70D	14.70	6.584	10	4.177
X	25.00D	8.00	6.074	10	7.219
X	50.00D	4.00	3.621	10	9.036
X	100.00D	2.40	2.547	10	9.762

NOEC	LOEC	TU	Alpha	Tail	Based on	Critical T
6.35	12.7	15.74	.05	One-sided	Bonferroni T	2.4001

Bonferroni T Test:

MSE	MSD % Reduction from Control	Critical T
24.252	22.1170	2.4001

Kolmogorov Test for Normality:

Alpha	D	Cutoff D	Normal?
.01	.092671	.133	Yes

Bartlett Test for Equal Variance:

Alpha	B	P(B)	Equal Var?
.01	10.673	.05825	Yes

Sample 13281
Site SW-PDA-3

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 06026 x Chronic Acute Hours
Test Date: 1-Nov-00
Source: SAUGET Test Material: AMB2 (%)

Conc	Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Total Young	Max Young
0.00 D	1		F	1	1						1	1.00	20	13
0.00 D	2		F	1	1						1	1.00	9	4
0.00 D	3		F	1	1						1	1.00	28	15
0.00 D	4		F	1	1						1	1.00	26	12
0.00 D	5		F	1	1						1	1.00	26	12
0.00 D	6		F	1	1						1	1.00	28	15
0.00 D	7		F	1	1						1	1.00	25	14
0.00 D	8		F	1	1						1	1.00	24	14
0.00 D	9		F	1	1						1	1.00	26	17
0.00 D	10		F	1	1						1	1.00	27	14
6.35 D	1		F	1	1						1	1.00	20	11
6.35 D	2		F	1	1						1	1.00	21	13
6.35 D	3		F	1	1						1	1.00	25	12
6.35 D	4		F	1	1						1	1.00	28	15
6.35 D	5		F	1	1						1	1.00	27	14
6.35 D	6		F	1	1						1	1.00	25	13
6.35 D	7		F	1	1						1	1.00	21	14
6.35 D	8		F	1	1						1	1.00	22	14
6.35 D	9		F	1	1						1	1.00	18	13
12.70 D	1		F	1	1						1	1.00	15	8
12.70 D	2		F	1	1						1	1.00	14	10
12.70 D	3		F	1	1						1	1.00	23	13
12.70 D	4		F	1	1						1	1.00	21	12
12.70 D	5		F	1	1						1	1.00	16	11
12.70 D	6		F	1	1						1	1.00	19	14
12.70 D	7		F	1	1						1	1.00	9	6
12.70 D	8		F	1	1						1	1.00	13	9
12.70 D	9		F	1	1						1	1.00	15	6
12.70 D	10		F	1	0						0	0.00	0	0
25.00 D	1		F	1	1						1	1.00	15	11
25.00 D	2		F	1	1						1	1.00	0	0
25.00 D	3		F	1	1						1	1.00	2	2
25.00 D	4		F	1	1						1	1.00	4	3
25.00 D	5		F	1	1						0	0.00	0	0
25.00 D	6		F	1	1						1	1.00	9	8
25.00 D	7		F	1	1						1	1.00	15	8
25.00 D	8		F	1	1						1	1.00	12	10
25.00 D	9		F	1	1						1	1.00	9	7
25.00 D	10		F	1	1						1	1.00	14	9
50.00 D	1		F	1	1						1	1.00	1	0
50.00 D	2		F	1	1						1	1.00	2	2
50.00 D	3		F	1	1						1	1.00	1	1
50.00 D	4		F	1	1						1	1.00	0	0
50.00 D	5		F	1	1						1	1.00	3	3
50.00 D	6		F	1	1						1	1.00	7	5
50.00 D	7		F	1	1						1	1.00	6	6
50.00 D	8		F	1	1						1	1.00	6	6

Site SW-PDA-3

Inhibition Concentration (ICp) Using Linear Interpolation Analysis

Aquatec Biological Sciences

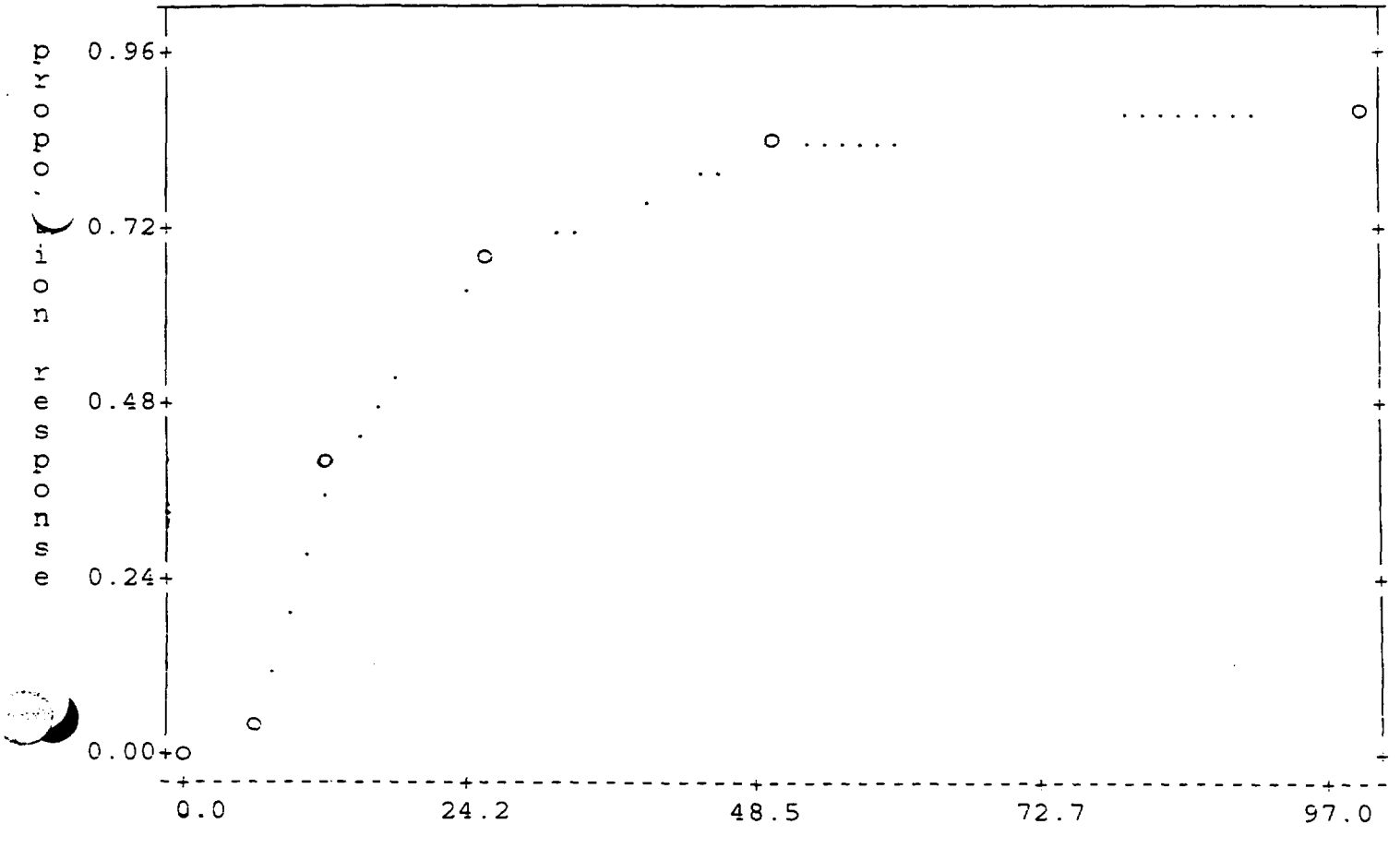
cies: Ceriodaphnia dubia
Test Material: Ambient water (%)
Endpoint: Total young

Test Number: 26026
Test Date: 11/01/0

Concentration	Mean	Pooled Mean	Proportion Response
0.0000	23.9000	23.9000	0.0000
6.3500	23.0000	23.0000	0.0377
12.7000	14.7000	14.7000	0.3849
25.0000	8.0000	8.0000	0.6653
50.0000	4.0000	4.0000	0.8326
100.0000	2.4000	2.4000	0.8996

alue	Estimated Concentration	95% Confidence Limits Lower	Upper
10	7.4899	3.863	9.120
25	10.2327	8.245	13.223
50	17.7485	11.648	24.650

Note: # bootstrap resamplings = 120



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Site SW-PDA-3

12/28/00 TOXIS ANALYSIS SUMMARY

Ceriodaphnia Proportion Alive Day 7

Lab	Species	Date	Test Material	Permit	Protocol	Test Number
VTABS	CD	11/01/0	AMB2 (%)	SAUGET	EPAF 94	26026

Fisher Exact Auto growth select 1 control

Transformation		Prop. Conc	Alive	P
No transformation				
	X	0.00D	1.00	
	X	6.35D	1.00	1.000
	X	12.70D	.90	.500
	X	25.00D	.90	.500
	X	50.00D	1.00	1.000
	X	100.00D	1.00	1.000

NOEC	LOEC	TU	Alpha	Tail	Based on
>100	>100	<1	.05	One-sided	Fisher Exact

Sample 10dc
Ste SW-PDA-3

Aquatec Biological Sciences

Test Date: 11/01/00
Sample Date: 10/25/00
Species: Ceriodaphnia dubia
Test Type: Chronic

Test Number: 26026
Test Material: Ambient water
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	6.350	D	9	1.00	0.000	
			X	12.700	D	10	.90	.316	
			X	25.000	D	10	1.00	0.000	
			X	50.000	D	10	1.00	0.000	
			X	100.000	D	10	1.00	0.000	
Proportion Alive	7	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	6.350	D	9	1.00	0.000	
			X	12.700	D	10	.90	.316	
			X	25.000	D	10	.90	.316	
			X	50.000	D	10	1.00	0.000	
			X	100.000	D	10	1.00	0.000	
Reproduction		No transformation							
			X	0.000	D	10	23.90	5.724	
			X	6.350	D	9	23.00	3.391	
			X	12.700	D	10	14.70	6.584	
			X	25.000	D	10	8.00	6.074	
			X	50.000	D	10	4.00	3.621	
			X	100.000	D	10	2.40	2.547	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	No transformation Fisher Exact	>100.000	>100.000	< 1.00		
Proportion Alive	7	No transformation Fisher Exact	>100.000	>100.000	< 1.00		
Reproduction		No transformation Multiple t-tests w/Bonfe	6.350	12.700	15.75	24.083	5.284

- GROWTH POINT ESTIMATE -

End Point	P	IC	95% CI
Reproduction			
	IC 10	7.490	3.66 - 9.12
	IC 25	10.233	8.25 - 13.22
	IC 50	17.749	11.68 - 24.69

Site SW-PDA-3

12/28/00- 2:09 pm TOXIS ANALYSIS SUMMARY

Water Flea

Lab	Species	Test Date	Test Material	Permit	Protocol	Test Number
VTABS	CD	11/01/0	AMB2 (%)	SAUGET	EPAF 94	26026

Statistics Parameters

PROPORTION

End Point:	PA Proportion Alive		
Analysis:	Fisher Exact	Auto growth select	1 control
Transform:	No transformation		
Tail:	One-tailed, decreasing		
Constant:	-.01	Variance:	.01
Root:	0.00	Alpha Normality:	.01
		NOEC:	.05

EC/LC Method: F (P,S,G,L,N) Superdunnet: 4000

GROWTH

End Point:	GR Reproduction		
Analysis:	EPA Flowchart	Auto growth select	1 control
Transform:	No transformation		
Tail:	One-tailed, decreasing		
Constant:	-.01	Variance:	.01
Root:	0.00	Alpha Normality:	.01
		NOEC:	.05

Calculate IC? Y (Y,N) IC resamples: 120

Errors/Warnings

Type	Number	
EC/LC	71	No linear interpolation estimate can be calculated - none of the group response means < 100-p % of the control response me
IC	0	Analysis completed with no errors
PROP	0	Analysis completed with no errors
GROW	0	Analysis completed with no errors

Ceriodaphnia dubia Survival and Reproduction Data (Page 2 of 2)

Client: MENZIE-CURA 00049 SAUGET **Test #:** 26025 **SDG:** 4805

Test Description: *Ceriodaphnia dubia* acute / chronic toxicity test

Effluent (%)	Repl 1	Repl 2	Repl 3	Repl 4	Repl 5	Repl 6	Repl 7	Repl 8	Repl 9	Repl 10	Remarks
Lab Contr	3	4	4	1	2	6	2	4	4	4	Day 4
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample 18280
6.3	0	5	5	0	3	0	2	3	4	4	Fed ✓
12.7	0	0	5	0	0	4	1	0	4	4	
25	0	3	3	0	0	0	0	0	5	0	Date/time/Init.
50	0	0	0	0	0	0	0	0	0	0	11/5/00 jm
100	0	0	0	0	0	0	0	0	0	D	14:00
Lab Contr	10	11	9	11	10	11	4	10	11	9	Day 5
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample 18280
6.3	2	8	4	1	9	10	5	8	5	10	Fed ✓
12.7	0	0	0	0	0	0	4	0	1	0	
25	0	0	0	0	0	0	0	0	0	0	Date/time/Init.
50	0	0	0	0	0	0	0	0	0	0	11/6/00 jm
100	0	0	0	0	0	0	0	0	0	D	14:45
Lab Contr	14	14	0	0	0	0	0	0	15	16	Day 6
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample 18280
6.3	1	12	3	0	0	0	0	12	15	13	Fed ✓
12.7	1	10	2	0	0	0	0	0	5	6	
25	0	0	0	0	0	0	0	0	0	0	Date/time/Init.
50	0	0	0	0	0	0	0	0	0	0	11/7/00 jm
100	0	0	0	0	0	0	0	0	0	D	16:00
Lab Contr	0	0	13	14	14	14	11	14	0	0	Day 7
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample 18280
6.3	0	0	7	0	14	1	4	0	0	0	Fed —
12.7	0	0	0	1	0	0	8	8	0	0	
25	0	0	3	7	0	10	2	0	0	0	Date/time/Init.
50	0	0	0	0	0	0	0	0	0	0	11/8/00 jm
100	0	0	0	0	0	0	0	0	0	D	12:15

0=original organism surviving, no young; D=original organism dead; #=# young released; *=lab-induced mortality

Aquatec Biological Sciences, Inc. Williston, Vermont

Reviewed by: _____ Date: 1/17/01

CddilToxForm

Water Chemistry Data: ***C. dubia*** **acute / chronic toxicity**

Client: MENZIE-CURA 00049 SAUGET	Test #: 26025	SDG: 4805

	Day:	0	1	2	3	4	5	6	7	8
Lab Control 50:50	pH	7.9	7.8	7.8	7.8	7.8	7.7	7.7	7.7	
	DO	8.2	8.1	7.9	8.0	8.0	8.1	8.2	8.1	
	Temp.	24.5	24.2	23.8	24.1	24.6	24.8	24.4	24.2	
	Conduct.	200	200	200	205	210	220	220	220	
6.3%	pH	8.0	7.9	7.9	7.8	7.9	7.9	7.8	7.8	
	DO	8.4	8.1	7.9	8.1	8.1	8.2	8.2	8.1	
	Temp.	24.0	24.2	23.7	24.2	24.5	25.1	24.5	24.2	
	Conduct.	210	220	230	230	240	250	250	240	
12.7%	pH	8.1	8.0	7.9	7.9	8.0	8.0	7.9	7.9	
	DO	8.3	8.1	7.9	8.1	8.1	8.1	8.2	8.1	
	Temp.	24.0	24.2	23.9	24.1	24.5	24.9	24.6	24.2	
	Conduct.	230	240	250	260	260	265	265	260	
25%	pH	8.1	8.1	8.0	8.0	8.1	8.1	8.0	8.0	
	DO	8.3	8.1	7.9	8.1	8.1	8.1	8.2	8.1	
	Temp.	24.5	24.1	23.8	24.1	24.4	24.6	24.5	24.1	
	Conduct.	270	280	280	290	300	300	300	290	
50%	pH	8.2	8.2	8.2	8.2	8.2	8.2	8.0	8.2	
	DO	8.2	8.1	7.9	8.1	8.1	8.2	8.2	8.2	
	Temp.	24.5	24.2	23.9	24.1	24.5	24.8	24.7	24.1	
	Conduct.	340	340	350	360	360	360	360	360	
100%	pH	8.3	8.4	8.4	8.4	8.5	8.5	8.5	8.4	
	DO	8.3	8.2	8.0	8.2	8.2	8.2	8.2	8.1	
	Temp.	24.7	24.4	23.9	24.2	24.6	25.0	24.7	24.2	
	Conduct.	460	470	480	490	480	480	480	480	
	Sample #	18280	18280	18280	18280	18280	18280	18280	18280	18280
	Init./Date	jm 11/1	jm 11/2	JG 11/3	JG 11/4	jm 11/5	jm 11/6	jm 11/7	jm 11/8	

Site SW-PDA-2 FD

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 26025 (x) Chronic ( ) Acute hours
TEST DATE: 1-Nov-00
SOURCE: SAUGET TEST MATERIAL: AMB2 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
50.00	D	8					0	0	0	0			
50.00	D	9					0	0	0	0			
50.00	D	10					0	0	0	0			
100.00	D	1					0	0	0	0			
100.00	D	2					0	0	0	0			
100.00	D	3					0	0	0	0			
100.00	D	4					0	0	0	0			
100.00	D	5					0	0	0	0			
100.00	D	6					0	0	0	0			
100.00	D	7					0	0	0	0			
100.00	D	8					0	0	0	0			
100.00	D	9					0	0	0	0			
100.00	D	10					0	0	0	0			

JM 12/28/00

Ceriodaphnia dubia Survival and Reproduction Data (Page 1 of 2)

Client: MENZIE-CURA 00049 SAUGET **Test #:** 26025 **SDG:** 4805

Test Description: *Ceriodaphnia dubia* acute / chronic toxicity test

Effluent (%)	Repl 1	Repl 2	Repl 3	Repl 4	Repl 5	Repl 6	Repl 7	Repl 8	Repl 9	Repl 10	Remarks
Lab Contr	0	0	0	0	0	0	0	0	0	0	Day 0
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18280
6.3	0	0	0	0	0	0	0	0	0	0	Fed ✓
12.7	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	Date/time/Init.
50	0	0	0	0	0	0	0	0	0	0	11/1/00 jm
100	0	0	0	0	0	0	0	0	0	0	15:00
Lab Contr	O	O	O	O	O	O	O	O	O	O	Day 1
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18280
6.3	O	O	O	O	O	O	O	O	O	O	Fed ✓
12.7	O	O	O	O	O	O	O	O	O	O	
25	O	O	O	O	O	O	O	O	O	O	Date/time/Init.
50	O	O	O	O	O	O	O	O	O	O	11/2/00 jm
100	O	O	O	O	O	O	O	O	O	O	14:30
Lab Contr	O	O	O	O	O	O	O	O	O	O	Day 2
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18280
6.3	O										Fed ✓
12.7	O										
25	O										Date/time/Init.
50	O										11/3/00
100	O	O	O	O	O	O	O	O	O	D	15:45 JG
Lab Contr	O	O	O	O	O	O	O	O	O	O	Day 3
Rec Contr	--	--	--	--	--	--	--	--	--	--	Sample: 18280
6.3	O										Fed ✓
12.7	O										
25	O										Date/time/Init.
50	O										11/4/00
100	O									D	14:15 JG

0=original organism surviving, no young; D=original organism dead; #=# young released; *=lab-induced mortality

Sample [illegible]
Site SW-PDA -2F

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 26025 (x) Chronic ( ) Acute hours
Test Date: 1-Nov-00
Source: SAUGET Test Material: AMB2 (%)

Conc	Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6	End	Prop Alive	Total Young	Max Young
50.00 D	8		F	1	1						1	1.00	0	0
50.00 D	9		F	1	1						1	1.00	0	0
50.00 D	10		F	1	1						1	1.00	0	0
100.00 D	1		F	1	1						1	1.00	0	0
100.00 D	2		F	1	1						1	1.00	0	0
100.00 D	3		F	1	1						1	1.00	0	0
100.00 D	4		F	1	1						1	1.00	0	0
100.00 D	5		F	1	1						1	1.00	0	0
100.00 D	6		F	1	1						1	1.00	0	0
100.00 D	7		F	1	1						1	1.00	0	0
100.00 D	8		F	1	1						1	1.00	0	0
100.00 D	9		F	1	1						1	1.00	0	0
100.00 D	10		F	1	1						1	1.00	0	0

jm 12/28/00

Sample 13250
Site SW-PDA-2 FD

Aquatec Biological Sciences

WATER FLEA DAILY REPORT

TEST NUMBER: 26025 (x) Chronic ( ) Acute hours
TEST DATE: 1-Nov-00
SOURCE: SAUGET TEST MATERIAL: AMB2 (%)

Conc	Ctrl	Rep	Cont. #	Daily Reproduction 1	2	3	4	5	6	7	8	9	10
0.00	D	1					3	10	14	0			
0.00	D	2					4	11	14	0			
0.00	D	3					4	9	0	13			
0.00	D	4					1	11	0	14			
0.00	D	5					2	10	0	14			
0.00	D	6					6	11	0	14			
0.00	D	7					2	4	0	11			
0.00	D	8					4	10	0	14			
0.00	D	9					4	11	15	0			
0.00	D	10					4	9	16	0			
6.35	D	1					0	2	1	0			
6.35	D	2					5	8	12	0			
6.35	D	3					5	4	3	7			
6.35	D	4					0	1	0	0			
6.35	D	5					3	9	0	14			
6.35	D	6					0	10	0	1			
6.35	D	7					2	5	0	4			
6.35	D	8					3	8	12	0			
6.35	D	9					4	5	15	0			
6.35	D	10					4	10	13	0			
12.70	D	1					0	0	1	0			
12.70	D	2					0	0	10	0			
12.70	D	3					5	0	2	0			
12.70	D	4					0	0	0	1			
12.70	D	5					0	0	0	0			
12.70	D	6					4	0	0	0			
12.70	D	7					1	4	0	8			
12.70	D	8					0	0	0	8			
12.70	D	9					4	1	5	0			
12.70	D	10					4	0	6	0			
25.00	D	1					0	0	0	0			
25.00	D	2					3	0	0	0			
25.00	D	3					3	0	0	3			
25.00	D	4					0	0	0	7			
25.00	D	5					0	0	0	0			
25.00	D	6					0	0	0	10			
25.00	D	7					0	0	0	2			
25.00	D	8					0	0	0	0			
25.00	D	9					5	0	0	0			
25.00	D	10					0	0	0	0			
50.00	D	1					0	0	0	0			
50.00	D	2					0	0	0	0			
50.00	D	3					0	0	0	0			
50.00	D	4					0	0	0	0			
50.00	D	5					0	0	0	0			
50.00	D	6					0	0	0	0			
50.00	D	7					0	0	0	0			

Sample 1080
Site SW-PDA-2 FD

12/28/00 TOXIS ANALYSIS SUMMARY

Ceriodaphnia Reproduction

Lab	Species	Date	Test Material	Permit	Protocol	Test Number
VTABS	CD	11/01/0	AMB2 (%)	SAUGET	EPAF 94	26025

EPA Flowchart Auto growth select 1 control

	Conc	Mean	SD	N	T	Sum of Ranks
Data transformation: No transformation						
X	0.00D	26.90	3.900	10		
X	6.35D	17.00	9.764	10	4.513	66.000
X	12.70D	6.40	4.600	10	9.345	55.000
X	25.00D	3.30	3.561	10	10.758	55.000
X	50.00D	0.00	0.000	10	12.262	55.000
X	100.00D	0.00	0.000	10	12.262	55.000

NOEC	LOEC	TU	Alpha	Tail	Based on	Critical Sum of Ran
6.35	6.35	>15.74	.05	One-sided	Steel	75

Dunnett Test:

MSE	MSD % Reduction from Control	Critical T
24.062	18.6673	2.289

Kolmogorov Test for Normality:

Alpha	D	Cutoff D	Normal?
.01	.2	.132	No

Bartlett Test for Equal Variance:

Alpha	B	P(B)	Equal Var?
.01	9999	0	No

Sample 16280
Site SW-PDA-2 F.

Aquatec Biological Sciences

WATER FLEA TEST DATA

Test Number: 26025 (x) Chronic ( ) Acute hours
Test Date: 1-Nov-10
Source: SAUGET Test Material: AMB2 (%)

Conc	Rep	Cont. No.	Sex	Start	Daily Survival 1	2	3	4	5	6 End	Prop Alive	Total Young	Max Young
0.00 D	1		F	1	1					1	1.00	27	14
0.00 D	2		F	1	1					1	1.00	29	14
0.00 D	3		F	1	1					1	1.00	26	13
0.00 D	4		F	1	1					1	1.00	26	14
0.00 D	5		F	1	1					1	1.00	26	14
0.00 D	6		F	1	1					1	1.00	31	14
0.00 D	7		F	1	1					1	1.00	17	11
0.00 D	8		F	1	1					1	1.00	28	14
0.00 D	9		F	1	1					1	1.00	30	15
0.00 D	10		F	1	1					1	1.00	29	16
6.35 D	1		F	1	1					1	1.00	3	2
6.35 D	2		F	1	1					1	1.00	25	12
6.35 D	3		F	1	1					1	1.00	19	7
6.35 D	4		F	1	1					1	1.00	1	1
6.35 D	5		F	1	1					1	1.00	26	14
6.35 D	6		F	1	1					1	1.00	11	10
6.35 D	7		F	1	1					1	1.00	11	5
6.35 D	8		F	1	1					1	1.00	23	12
6.35 D	9		F	1	1					1	1.00	24	15
6.35 D	10		F	1	1					1	1.00	27	13
12.70 D	1		F	1	1					1	1.00	1	1
12.70 D	2		F	1	1					1	1.00	10	10
12.70 D	3		F	1	1					1	1.00	7	5
12.70 D	4		F	1	1					1	1.00	1	1
12.70 D	5		F	1	1					1	1.00	0	0
12.70 D	6		F	1	1					1	1.00	4	4
12.70 D	7		F	1	1					1	1.00	13	6
12.70 D	8		F	1	1					1	1.00	8	8
12.70 D	9		F	1	1					1	1.00	10	5
12.70 D	10		F	1	1					1	1.00	10	6
25.00 D	1		F	1	1					1	1.00	0	0
25.00 D	2		F	1	1					1	1.00	3	3
25.00 D	3		F	1	1					1	1.00	6	3
25.00 D	4		F	1	1					1	1.00	7	7
25.00 D	5		F	1	1					1	1.00	0	0
25.00 D	6		F	1	1					1	1.00	10	10
25.00 D	7		F	1	1					1	1.00	2	2
25.00 D	8		F	1	1					1	1.00	0	0
25.00 D	9		F	1	1					1	1.00	5	5
25.00 D	10		F	1	1					1	1.00	0	0
50.00 D	1		F	1	1					1	1.00	0	0
50.00 D	2		F	1	1					1	1.00	0	0
50.00 D	3		F	1	1					1	1.00	0	0
50.00 D	4		F	1	1					1	1.00	0	0
50.00 D	5		F	1	1					1	1.00	0	0
50.00 D	6		F	1	1					1	1.00	0	0
50.00 D	7		F	1	1					1	1.00	0	0

Sample 18280
Site SW-PDA-2 FD

Inhibition Concentration (ICp) Using Linear Interpolation Analysis

Aquatec Biological Sciences

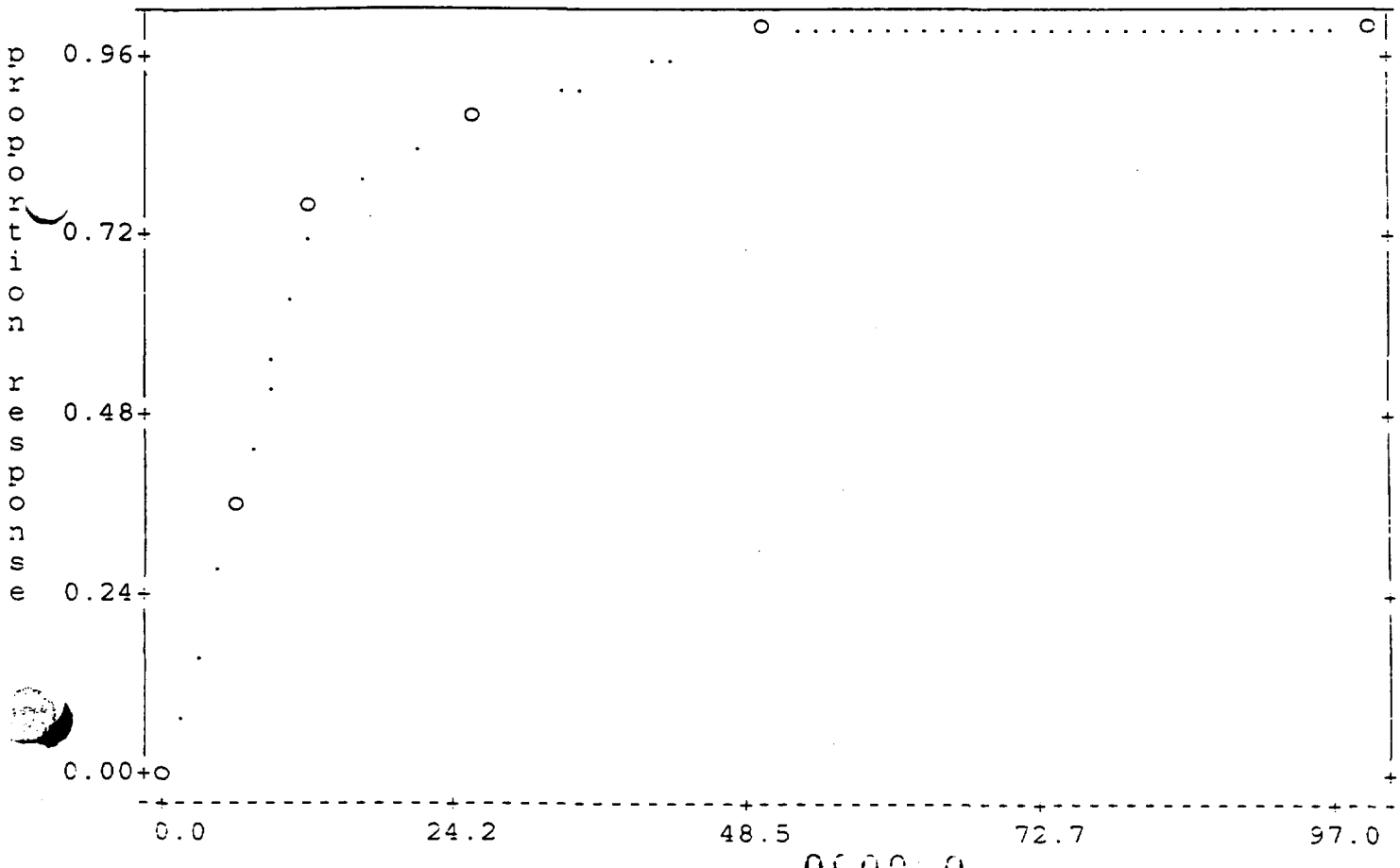
Species: Ceriodaphnia dubia
Test Material: Ambient water (%)
Endpoint: Total young

Test Number: 26025
Test Date: 11/01/0

Concentration	Mean	Pooled Mean	Proportion Response
0.0000	26.9000	26.9000	0.0000
6.3500	17.0000	17.0000	0.3680
12.7000	6.4000	6.4000	0.7621
25.0000	3.3000	3.3000	0.8773
50.0000	0.0000	0.0000	1.0000
100.0000	0.0000	0.0000	1.0000

P value	Estimated Concentration	95% Confidence Limits Lower	Upper
10	1.7254	1.050	3.965
25	4.3135	2.558	7.197
50	8.4767	5.348	10.123

Note: # bootstrap resamplings = 120



Sample 18280
Site SW-PDA-2 FD

12/28/00 TOXIS ANALYSIS SUMMARY

Ceriodaphnia Proportion Alive Day

Lab	Species	Date	Test Material	Permit	Protocol	Test Number
VTABS	CD	11/01/0	AMB2 (%)	SAUGET	EPAF 94	26025

Fisher Exact Auto growth select 1 control

Transformation		Prop. Conc	Alive	P
No transformation				
	X	0.00D	1.00	
	X	6.35D	1.00	1.000
	X	12.70D	1.00	1.000
	X	25.00D	1.00	1.000
	X	50.00D	1.00	1.000
	X	100.00D	.90	.500

NOEC	LOEC	TU	Alpha	Tail	Based on
>100	>100	<1	.05	One-sided	Fisher Exact

Sample 10000
Site SW-PDA-2 FD

Aquatec Biological Sciences

Test Date: 11/01/00
Sample Date: 10/25/00
Species: Ceriodaphnia dubia
Test Type: Chronic

Test Number: 26125
Test Material: Ambient water
Source: SAUGET
Sauget
Menzie Cura, Sauget

SUMMARY

End Point	Day	Transformation		Conc		#Reps	Mean	StDev	% Surv
Proportion Alive	2	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	6.350	D	10	1.00	0.000	
			X	12.700	D	10	1.00	0.000	
			X	25.000	D	10	1.00	0.000	
			X	50.000	D	10	1.00	0.000	
			X	100.000	D	10	1.00	0.000	
Proportion Alive	7	No transformation							
			X	0.000	D	10	1.00	0.000	
			X	6.350	D	10	1.00	0.000	
			X	12.700	D	10	1.00	0.000	
			X	25.000	D	10	1.00	0.000	
			X	50.000	D	10	1.00	0.000	
			X	100.000	D	10	.90	.316	
Reproduction		No transformation							
			X	0.000	D	10	26.90	3.900	
			X	6.350	D	10	17.00	9.764	
			X	12.700	D	10	6.40	4.600	
			X	25.000	D	10	3.30	3.561	
			X	50.000	D	10	0.00	0.000	
			X	100.000	D	10	0.00	0.000	

X = indicates concentrations used in calculations

- HYPOTHESIS TEST -

End Point	Day	Transformation/Analysis	NOEC	LOEC	TU	MSE	MSD
Proportion Alive	2	No transformation					
		Fisher Exact	>100.000	>100.000	< 1.00		
Proportion Alive	7	No transformation					
		Fisher Exact	>100.000	>100.000	< 1.00		
Reproduction		No transformation					
		Steel many-one rank test	< 6.350	6.350	> 15.75	24.063	5.022

- GROWTH POINT ESTIMATE -

End Point	P	IC	95% CI
Reproduction			
	IC 10	1.725	1.05 - 3.96
	IC 25	4.314	2.56 - 7.00
	IC 50	8.477	5.35 - 10.12

Sample 1828
Site SW-PDA-2FD

12/28/00- 1:49 pm TOXIS ANALYSIS SUMMARY

Water Flea

Lab	Species	Test Date	Test Material	Permit	Protocol	Test Number
VTABS	CD	11/01/0	AMB2 (%)	SAUGET	EPAF 94	26025

Statistics Parameters

PROPORTION

End Point:	PA Proportion Alive		
Analysis:	Fisher Exact	Auto growth select	1 control
Transform:	No transformation		
Tail:	One-tailed, decreasing		
Constant:	-.01	Variance:	.01
Root:	0.00	Alpha Normality:	.01
		NOEC:	.05

EC/LC Method: F (P,S,G,L,N) Superdunnet: 4000

GROWTH

End Point:	GR Reproduction		
Analysis:	EPA Flowchart	Auto growth select	1 control
Transform:	No transformation		
Tail:	One-tailed, decreasing		
Constant:	-.01	Variance:	.01
Root:	0.00	Alpha Normality:	.01
		NOEC:	.05

Calculate IC? Y (Y,N) IC resamples: 120

Errors/Warnings

Type	Number	
EC/LC	71	No linear interpolation estimate can be calculated - none of the group response means < 100-p % of the control response me
IC	0	Analysis completed with no errors
PROP	0	Analysis completed with no errors
GROW	0	Analysis completed with no errors

Toxicity Test Methods

Menzie-Cura & Associates

Supportive Documentation

Toxicity Test Methods

Chain-Of-Custody

Amphipod, Hyalella azteca, 28-day survival and growth

Standard Reference Toxicant Control Charts

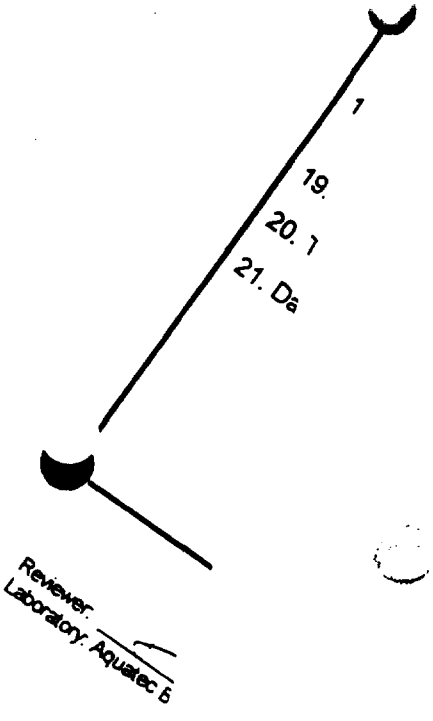
Client: Menzie-Cura **Project: 00049, Sauget Sediment Assessment** **SDG: 4806**

Test Description: Amphipod *(Hyalella azteca)* 28-day survival and growth toxicity test

ASSOCIATED PROTOCOL: EPA 2000. *Draft Method for Measuring Sublethal Effects of Sediment-Associated Contaminants*, EPA/600/R-99/064 Method 100.4 (modified)

1. Test type:	Whole sediment toxicity (static renewal)
2. Test temperature:	23 ± 1°C
3. Light quality:	Ambient laboratory illumination
4. Photoperiod:	16 hr. light, 8 hr. dark
5. Test chamber:	300 ml glass beaker with screened overflow
6. Sediment / overlying water volumes:	150 / 125 mL
7. Renewal of overlying water:	1 volume exchange per day
8. Age of test organisms:	7 – 8 days old at the start of the test
9. No. amphipods / test chamber:	10
10. No. of replicate chambers / sample	8
11. Feeding regime:	1.0 mL YCT daily to each replicate
12. Cleaning:	Clean overflow screens, replace water delivery tips as needed
13. Aeration:	None, unless dissoved oxygen drops below 2.5 mg/L
14. Overlying water:	1:1 mix of reconstituted water and lake water
15. Control sediment:	Formulated sediment (EPA/600/R-94/024)
16. Test duration:	28 days
17. Monitoring:	Overlying water chemistry: Daily temperature. Dissolved oxygen, pH three times weekly. Conductivity weekly. Hardness, alkalinity, ammonia on Days 0 and 28. Biological monitoring: Daily check organism behavior. Day 28 endpoint assessments.
18. End points:	Day 28: survival and growth (dry weight based on surviving number of organisms)
19. Reference toxicant test:	Potassium chloride 96-h LC50, water only
20. Test acceptability (control performance):	80% or greater survival and performance-based criteria.
21. Data interpretation:	Hypothesis test statistics (e.g., t-test) to identify samples with significant reductions in organism responses compared to the control organism responses ($p<0.05$). If the organism average response value for the test sample was numerically equal to or greater than the control average response value, the result was assumed to be not significant (statistical analysis not performed). If a significant reduction in survival was observed, statistical analysis of growth data was not performed.

Chain-Of-Custody



Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
TEL: (802) 860-1638
FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Sauget Sed / Water Tox & Macro	Carrier:	4°C
Address: 1 Courthouse Lane	Project Number: 00049	Airbill Number:	plastic
Chelmsford, Massachusetts 01824	Sampler Name(s):	Date Shipped:	1 gal
Telephone: (978) 322-2824			
Facsimile: (978) 453-7260	Quote #: 10/16/00 Client Code: MENCUR	Hand Delivered: ___Yes ___No	
Contact Name: Ted Wickwire			

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	NUMBER OF CONTAINERS
SD-DDA-13	10/23/00	10:25A	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
SD-UDA-11	10/23/00	3:40P	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	

	DATE	TIME		
Relinquished by: *(signature)* Ted W	10/23/00	1720	Received by: *(signature)*	
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*	
Relinquished by: *(signature)*	DATE 10/24/00	TIME 09:30	Received by: *(signature)* Tammy Martin	

NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)

Notes to Lab: Ambient temperature of cooler on delivery 1.4 °C jm

SDG 4806

Page ___ of ___

Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
TEL: (802) 860-1638
FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Sauget Sed / Water Tox & Macro	Carrier:
Address: 1 Courthouse Lane, Chelmsford, Massachusetts 01824	Project Number: 00049	Airbill Number:
Telephone: (978) 322-2824	Sampler Name(s):	Date Shipped:
Facsimile: (978) 453-7260		Hand Delivered: ___Yes ___No
Contact Name: Ted Wickwire	Quote #: 10/18/00 Client Code: MENCUR	

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)	NUMBER OF CONTAINERS
SD-PDA-7	10/24/00	9:35A	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	4°C glass; plastic; 1 gal	1
SD-PDA-6		11:20A	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		1
SD-PDA-5		14:20	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		1
SW-PDA-10 SD DUP	↓	15:40	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		1
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		
NOTE: SD-PDA-5					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		
MS/MSD VOC both bioassays.					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		
START AND END					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		

Relinquished by (signature)	DATE	TIME	Received by: (signature)
Ted Wickwire	10/24/00	17:10	
Relinquished by (signature)	DATE	TIME	Received by: (signature)
	10/25/00	10:15	Philip C Story
Relinquished by (signature)	DATE	TIME	Received by: (signature)

NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)

Notes to Lab: Ambient temperature of cooler on delivery: °C

Temp = 0.6°C

→(3 coolers Total (Sed + SW)

Page ___ of ___

Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
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FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Sauget Sed / Water Tox & Macro	Carrier:
Address: 1 Courthouse Lane Chelmsford, Massachusetts 01824	Project Number: 00049	Airbill Number:
Telephone: (978) 322-2824	Sampler Name(s):	Date Shipped:
Facsimile: (978) 453-7260		
Contact Name: Ted Wickwire	Quote #: 10/18/00 Client Code: MENCUR	Hand Delivered: ___ Yes ___ No

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4) 4°C plastic 1 gal
SD-PDA-2	10/25/00	9:50	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
SD-PDA-3		12:10	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
SD-PDA 3 FD		12:20	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
SD-PDA 4		15:20	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	

Relinquished by: (signature)	DATE	TIME	Received by: (signature)
Ted W	10/25/00	17:30	
Relinquished by: (signature)	DATE	TIME	Received by: (signature)
	10/26/00	9:30	Karen Downey
Relinquished by: (signature)	DATE	TIME	Received by: (signature)

NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)

Notes to Lab: Ambient temperature of cooler on delivery 0.3°C #1 Cooler
0.4°C #2 " "
0.3°C #3 " "

Aquatec Biological Sciences

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273 Commerce Street
Williston, VT 05495
TEL: (802) 860-1638
FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Sauget Sed / Water Tox & Macro	Carrier:
Address: 1 Courthouse Lane Chelmsford, Massachusetts 01824	Project Number: 00049	Airbill Number:
Telephone: (978) 322-2024	Sampler Name(s):	Date Shipped:
Facsimile: (978) 453-7260		Hand Delivered: ___Yes ___No
Contact Name: Ted Wickwire	Quote #: 10/10/00 Client Code: MENCUR	

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)	NUMBER OF CONTAINERS
SD-PDA-8	10/24/0	10:35	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	4°C plastic 1 gal	1
SD-PDA-9	↓	12:15	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		1
SD-UDA 12	↓	15:05	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		1
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic		

	DATE	TIME		
Relinquished by: *(signature)* Ted W	10/26/00	17:00	Received by: *(signature)*	
Relinquished by: *(signature)*	10/27/00	10:00	Received by: *(signature)* Philip C Downey	
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*	

NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)

Notes to Lab: Ambient temperature of cooler on delivery: °C

Temp -0.3°C

Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
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FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Sauget Sed / Water Tox & Macro	Carrier:	4°C
Address: 1 Courthouse Lane			—
Chelmsford, Massachusetts 01824	Project Number: 00049	Airbill Number:	plastic
Telephone: (978) 322-2824	Sampler Name(s):		—
Facsimile: (978) 453-7260		Date Shipped:	1 gal
Contact Name: Ted Wickwire	Quote #: 10/18/00 Client Code: MENCUR	Hand Delivered: ___Yes ___No	

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	NUMBER OF CONTAINERS
SD-DDA-1	10/27/00	10:30	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	

	DATE	TIME		
Relinquished by: *(signature)* Ted W	10/27/00	15:00	Received by *(signature)*	
Relinquished by: *(signature)*	10/28	10:00	Received by *(signature)* J Bold Smith	
Relinquished by: *(signature)*	DATE	TIME	Received by *(signature)*	

NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)

Notes to Lab: Ambient temperature of cooler on delivery: °C

Cooler Temp = 4.3°C

Woods Hole Group
Environmental Laboratories

375 Paramount Drive • Suite B
Raynham, MA 02767-5154 • USA
Phone: 508-822-9300
Fax: 508-822-3288

Sampling Protocol for Method 5035: VOC's in Soil

CLIENT: Menzie Cura Associates Client Project: _____

CONTACT: Ted Wickwire WHG Project Mgr: Edie Hutchinson

TEL.: _____ Date: 10/23/00

FOR EACH SAMPLE LOCATION, PLEASE COLLECT:

- 2 Low-level samples (preserved with ~~Sodium Bisulfate~~ H_2O), 5g Soil/Sediment. (hold time is 7 days)
- 1 High-level sample (preserved with Methanol), 5g Soil/Sediment.
- 1 unpreserved sample for percent solids determination.

IF YOU WISH TO ANALYZE A MS/MSD PAIR, PLEASE COLLECT AN ADDITIONAL FOUR (4) LOW-LEVEL SAMPLES *(We must supply the additional sample vials, so advance notice is critical)*

NOTE: You have been sent 20 Low-Level sample vials. ***Please RETURN all UNUSED Low-Level sample vials or you will be charged an additional $10.00 for EACH one that is not returned.***

Any questions, please call your Project Manager: 508-822-9300

Field Sampling:

1.) If possible, try to evaluate the soil type to determine if:
   a. The acid solution will reduce the pH to <2, (if pH>2, note on Chain of Custody)
   b. There is a possibility for effervescence due to carbonates in the soil*

2.) Collect a 5 gram sample using a cut off plastic syringe ~~or other coring device (i.e. EnCore Sampler**)~~
   a. Withdraw the plunger and insert the barrel into the soil
   b. Adjust the plunger so the syringe barrel holds approximately 4 to 4.5 cc of soil***
   c. Place the syringe inside the VOA vial and gently push the soil into the solution (~~Sodium Bisulfate~~ H_2O, Methanol, or directly into the empty VOA vial for percent solids)
   d. **Be sure not to spill or splash ANY of the solution**
   e. **Re-cap the vial ensuring NO debris is in the vial threads**

3.) Collect all four (4) aliquots for this sample, at this time, using the same syringe.

4.) Move to the next sample location. Using a new syringe (or coring device), collect the next sample in this same way.

---

* *If effervescing occurs when soil is added to the Sodium Bisulfate preserved vials collect a sample with no pre... result in a loss of volatiles and may cause vials to break during shipping*

** *If necessary, samples can be shipped in the sealed EnCore Sampler but they MUST be received by the lab for sample preservation by the lab, or there is a potential for the loss of volatiles. The Laboratory violations when samples are received after 24 hours from collection.*

*** *It has been determined that 4 - 4.5 cc (or mL) marked on the collection syringe, is approximately equiv... EnCore Sampler also should hold a 5 gram sample. Since different soil types have different densities, the ... use of an analytical balance in the field that can weigh to 0.01g, to ensure that the proper sample weight is col...*

F:\SYSTEM\SHARE...

Woods Hole Group
Environmental Laboratories

Chain-of-Custody Record

375 Paramount Drive
Raynham, MA 02767

TEL: (508) 822-9300
FAX: (508) 822-3288

PAGE 1 OF 1

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)
Name: [illegible]	Regulatory Protocol:	Carrier:	
Address: [illegible]	For the State of:	Airbill Number: 62[illegible]0378 9760	
[illegible]	Project Name:	Date Shipped: 10/31/00	
[illegible]	Project Number:	Quote #:	
Telephone: (508) 360 1638	P.O. #		
Facsimile: (508) 8[illegible]-7863	Sampler Name(s): John Williams for Ted Wickwire / Menzie Cura		
Contact Name: [illegible]	TAT ___ 10 Day ___ 5 Day ___ 3 Day ___ 48 Hr ___ 24 Hr ___ Other		

WHG LAB #	SAMPLE ID (NOTE 1)	COLLECTION DATE	COLLECTION TIME	COMPOSITE (GRAB)	MATRIX	ANALYSIS/REMARKS (NOTE 2, 3)	NUMBER OF CONTAINERS
	18273 PP Day 0 SD PDA 5	10/31/00	1315	X	Sediment	VOCs per Menzie Cura	
	18273 HA Day 0 SD PDA 5	10/31/00	1315	X			
	18297 PP Day 0 SD PDA 9	10/31/00	1355	X			
	18297 HA Day 0 SD PDA 9	10/31/00	1405	X			

Relinquished by: (signature)	DATE	TIME	Received by: (signature)
[signature]	10/31/00	1430	to FED EX
Relinquished by: (signature)	DATE	TIME	Received by: (signature)
Relinquished by: (signature)	DATE	TIME	Received for Laboratory by: (signature)

NOTES TO SAMPLER (S): (1) Limit Sample Identification to 6 characters, if possible; (2) Indicate designated Lab Q.C. sample and type (e.g.; MS/MSD/REP) and provide sufficient sample; (3) Field duplicates are separate sample; (4) e.g.; 40ml/glass/H_2SO_4

Notes to Lab: Overlying water decanted prior to sampling sediment from test beakers. After VOC sampling, overlying water replaced. VOC samples placed in ice for shipping.

Aquatec Biological Sciences
Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
TEL (802) 860-1638
FAX (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)
Name: John Williams	Project Name: Menzie Cura Sauget	Carrier: FED EX	glass
Address: Aquatec Biol Sciences 273 Commerce St	Project Number: 00049	Airbill Number: 8235 5398 9992	
City/State/Zip: Williston, VT 05495	Sampler Name(s): John Williams	Date Shipped:	10 mL vials
Telephone: (802) 860-1638			
Facsimile: (802) 658-9863			
Contact Name: John Williams	Quote #: ___ Client Code: ___	Hand Delivered: ☐ Yes ☐ No	

SAMPLE IDENTIFICATION (NOTE1)	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS (NOTE 2,3)	NUMBER OF CONTAINERS
18273 Ha Day 28 SD PDA 5	11/28/00	1130	✓		Sediment	VOCs per Menzie Cura (Wirewire)	4
18297 Ha Day 28 SD PDA 9	11/28/00	1135	X				

Relinquished by: (signature)	DATE	TIME	Received by: (signature)
[signature]	11/28/00	1145	To FED EX
Relinquished by: (signature)	DATE	TIME	Received by: (signature)
Relinquished by: (signature)	DATE	TIME	Received by: (signature)

NOTES TO SAMPLER(S): (1) Limit Sample Identification to 30 characters, if possible; (2) Indicate designated Lab Q.C. sample and type (e.g.:MS/MSD/REP) and provide sufficient sample; (3) Field duplicates are separate sample; (4) e.g.: 40 ml/glass/H_2SO_4

Notes to Lab:

Distribution: Original Accompanies Shipment; Copy to Coordinator Field File

Amphipod, Hyalella azteca, 28-day survival and growth

Title: 4806 18228 100.4-28d HA S
File: 18228has . Transform: ARC SINE(SQUARE ROOT(Y))

Shapiro - Wilk's Test for Normality

D = 1.7419
W = 0.9219

Critical W = 0.8440 (alpha = 0.01 , N = 16)
W = 0.8870 (alpha = 0.05 , N = 16)

Data PASS normality test (alpha = 0.01). Continue analysis.

Title: 4806 18228 100.4-28d HA S
File: 18228has Transform: ARC SINE(SQUARE ROOT(Y))

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18230	0.0355	
2	18228	0.2133	6.0072

(p-value = 0.0305)

Critical F = 8.8854 (P=0.01, 7, 7)
4.9949 (P=0.05, 7, 7)

Since F <= Critical F, FAIL TO REJECT Ho: Equal Variances (alpha = 0.01).

Title: 4806 18228 100.4-28d HA S
File: 18228has Transform: ARC SINE(SQUARE ROOT(Y))
Number of Groups: 2

GRP	IDENTIFICATION	REP	VALUE	TRANS VALUE
1	18230	1	1.0000	1.4120
1	18230	2	1.0000	1.4120
1	18230	3	0.9000	1.2490
1	18230	4	0.6000	0.8861
1	18230	5	0.9000	1.2490
1	18230	6	1.0000	1.4120
1	18230	7	0.8000	1.1071
1	18230	8	0.8000	1.1071
2	18228	1	0.8000	1.1071
2	18228	2	0.0000	0.1588
2	18228	3	0.6000	0.8861
2	18228	4	1.0000	1.4120
2	18228	5	0.8000	1.1071
2	18228	6	0.6000	0.8861
2	18228	7	1.0000	1.4120
2	18228	8	0.1000	0.3218

Title: 4806 18228 100.4-28d HA S
File: 18228has Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 1 OF 2 Ho: Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS t STAT	SIG 0.05
1	18230	1.2293	0.8750		
2	18228	0.9114	0.6125	1.8027	*

Equal Var: t critical value = 1.7613 (1 Tailed, alpha = 0.05, df = 14)
(p-value = 0.0465)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS T STAT	SIG 0.05
1	18230	1.2293	0.8750		
2	18228	0.9114	0.6125	1.8027	

Unequal Var: t critical value = 1.8331 (1 Tailed, alpha = 0.05, df = 9)
(p-value = 0.0525)

Title: 4806 18228 100.4-28d HA S
File: 18228has Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 2 OF 2 Ho: Control<Treatment

Equal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18230	8			
2	18228	8	0.2561	28.8	0.2625

Unequal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18230	8			
2	18228	8	0.2684	30.2	0.2625

Title: 4806 18228 100.4-28d HA S
File: 18228has Transform: ARC SINE(SQUARE ROOT(Y))

Wilcoxon's Rank Sum Test w/ Bonferroni Adjustment Ho: Control<Treatme

GROUP	IDENTIFICATION	TRANSFORMED MEAN	RANK SUM	CRIT. VALUE	REPS	SIG 0.05
1	18230	1.2293				
2	18228	0.9114	54.00	51	8	

Critical values are 1 tailed (k = 1)

Title: 4806 18229 100.4-28d HA S
File: 18229has Transform: NO TRANSFORMATION

Shapiro - Wilk's Test for Normality

D = 0.7637
W = 0.7381

Critical W = 0.8440 (alpha = 0.01 , N = 16)
W = 0.8870 (alpha = 0.05 , N = 16)

Data FAIL normality test (alpha = 0.01). Try another transformation.

Warning - The F-test of homogeneity is sensitive to non-normality and should not be performed with this data as is.

Title: 4806 18229 100.4-28d HA S
File: 18229has Transform: NO TRANSFORMATION

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18230	0.0193	
2	18229	0.0898	4.6574

(p-value = 0.0599)

Critical F = 8.8654 (P=0.01, 7, 7)
4.9949 (P=0.05, 7, 7)

Since F <= Critical F, FAIL TO REJECT Ho: Equal Variances (alpha = 0.01).

Toxicity Test Methods

Supportive Documentation

Toxicity Test Methods

Chain-Of-Custody

Amphipod, Hyalella azteca, 28-day survival and growth

Standard Reference Toxicant Control Charts

Client: Menzie-Cura **Project: 00049, Sauget Sediment Assessment** **SDG: 4806**

Test Description: Amphipod *(Hyalella azteca)* 28-day survival and growth toxicity test

ASSOCIATED PROTOCOL: EPA 2000. *Draft Method for Measuring Sublethal Effects of Sediment-Associated Contaminants*, EPA/600/R-99/064 Method 100.4 (modified)

1. Test type:	Whole sediment toxicity (static renewal)
2. Test temperature:	23 ± 1°C
3. Light quality:	Ambient laboratory illumination
4. Photoperiod:	16 hr. light, 8 hr. dark
5. Test chamber:	300 ml glass beaker with screened overflow
6. Sediment / overlying water volumes:	150 / 125 mL
7. Renewal of overlying water:	1 volume exchange per day
8. Age of test organisms:	7 – 8 days old at the start of the test
9. No. amphipods / test chamber:	10
10. No. of replicate chambers / sample	8
11. Feeding regime:	1.0 mL YCT daily to each replicate
12. Cleaning:	Clean overflow screens, replace water delivery tips as needed
13. Aeration:	None, unless dissoved oxygen drops below 2.5 mg/L
14. Overlying water:	1:1 mix of reconstituted water and lake water
15. Control sediment:	Formulated sediment (EPA/600/R-94/024)
16. Test duration:	28 days
17. Monitoring:	Overlying water chemistry: Daily temperature. Dissolved oxygen, pH three times weekly. Conductivity weekly. Hardness, alkalinity, ammonia on Days 0 and 28. Biological monitoring: Daily check organism behavior. Day 28 endpoint assessments.
18. End points:	Day 28: survival and growth (dry weight based on surviving number of organisms)
19. Reference toxicant test:	Potassium chloride 96-h LC50, water only
20. Test acceptability (control performance):	80% or greater survival and performance-based criteria.
21. Data interpretation:	Hypothesis test statistics (e.g., t-test) to identify samples with significant reductions in organism responses compared to the control organism responses ($p<0.05$). If the organism average response value for the test sample was numerically equal to or greater than the control average response value, the result was assumed to be not significant (statistical analysis not performed). If a significant reduction in survival was observed, statistical analysis of growth data was not performed.

Reviewer: _____ Date 10/30/02

Laboratory: Aquatec Biological Sciences, Inc. Williston, Vermont

Chain-Of-Custody

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273 Commerce Street
Williston, VT 05495
TEL: (802) 860-1638
FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Saugel Sed / Water Tox & Macro	Carrier:
Address: 1 Courthouse Lane Chelmsford, Massachusetts 01824	Project Number: 00049	Airbill Number:
Telephone: (978) 322-2824	Sampler Name(s):	Date Shipped:
Facsimile: (978) 453-7260		
Contact Name: Ted Wickwire	Quote #: 10/18/00 Client Code: MENCUR	Hand Delivered: ___Yes ___No

VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)						
4°C	—	—	—	—	—	—
plastic	—	—	—	—	—	—
1 gal						

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	NUMBER OF CONTAINERS
SD-DDA-13	10/23/00	10:25A	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
SD-UDA-11	10/23/00	3:40P	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	

	DATE	TIME		NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)
Relinquished by: *(signature)* Ted W	10/23/00	1720	Received by: *(signature)*	
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*	Notes to Lab: Ambient temperature of cooler on delivery: 1.9 °C jm
Relinquished by: *(signature)*	10/24/00	09:30	Received by: *(signature)* Jammy Martin	

SDG 4806

Page ___ of ___

Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
TEL: (802) 860-1638
FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Sauget Sed / Water Tox & Macro	Carrier:	4°C
Address: 1 Courthouse Lane Chelmsford, Massachusetts 01824	Project Number: 00049	Airbill Number:	plastic
Telephone: (978) 322-2824	Sampler Name(s):	Date Shipped:	1 gal
Facsimile: (978) 453-7260	Quote #: 10/18/00 Client Code: MENCUR	Hand Delivered: ___Yes ___No	
Contact Name: Ted Wickwire			

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	NUMBER OF CONTAINERS
SD-PDA-7	10/24/00	9:35A	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
SD-PDA-6	"	11:20A	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
SD-PDA-5	"	14:20	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
SW-PDA-10 SD DUP	"	15:40	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
NOTE: SD-PDA-5					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
MEASURE VOC both bioassays					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
START AND END					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	

	DATE	TIME		
Relinquished by: *(signature)* Ted W	10/27/00	17:10	Received by: *(signature)*	
Relinquished by: *(signature)*	DATE 10/25/00	TIME 10:15	Received by: *(signature)* Philip C Thomas	
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*	

NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)

Notes to Lab: Ambient temperature of cooler on delivery: °C

Temp = 0.6°C

→ 3 coolers Total (Set + Sw)

Page ___ of ___

Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
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FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Sauget Sed / Water Tox & Macro	Carrier:
Address: 1 Courthouse Lane Chelmsford, Massachusetts 01824	Project Number: 00049	Airbill Number:
Telephone: (978) 322-2824	Sampler Name(s):	Date Shipped:
Facsimile: (978) 453-7260		
Contact Name: Ted Wickwire	Quote #: 10/18/00 Client Code: MENCUR	Hand Delivered: ___Yes ___No

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4) NUMBER OF CONTAINERS
SD-PDA-2	10/25/00	9:50	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	4°C plastic 1 gal: 1
SD-PDA-3		12:10	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
SD-PDA 3 FD		12:20	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
SD-PDA 4		15:20	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	

	DATE	TIME		
Relinquished by: *(signature)* Ted W	10/25/00	17:30	Received by: *(signature)*	
Relinquished by: *(signature)*	10/26/00	9:30	Received by: *(signature)* Karen Downey	
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*	

NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)

Notes to Lab: Ambient temperature of cooler on delivery 0.3°C #1 Cooler
0.4°C #2 " "
0.3°C #3 " "

Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
TEL: (802) 860-1638
FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Sauget Sed / Water Tox & Macro	Carrier:
Address: 1 Courthouse Lane	Project Number: 00049	Airbill Number:
Chelmsford, Massachusetts 01824	Sampler Name(s):	Date Shipped:
Telephone: (978) 322-2024		Hand Delivered: ___Yes ___No
Facsimile: (978) 453-7260	Quote #: 10/18/00 Client Code: MENCUR	
Contact Name: Ted Wickwire		

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	NUMBER OF CONTAINERS
SD-PDA-8	10/24/00	10:35	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
SD-PDA-9	↓	12:15	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
SD-UDA 12	↓	15:05	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	

VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)

4°C						
plastic						
1 gal						

Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*
Ted W	10/24/00	17:00	
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*
	10/25/00	10:00	Philip C Downey
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*

NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)

Notes to Lab: Ambient temperature of cooler on delivery: °C

Temp -0.3°C

Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
TEL: (802) 860-1638
FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)
Name: Menzie-Cura & Associates, Inc.	Project Name: Solutia / Sauget Sed / Water Tox & Macro	Carrier:	4°C
Address: 1 Courthouse Lane Chelmsford, Massachusetts 01824	Project Number: 00049	Airbill Number:	plastic
Telephone: (978) 322-2824	Sampler Name(s):	Date Shipped:	1 gal
Facsimile: (978) 453-7260			
Contact Name: Ted Wickwire	Quote #: 10/18/00 Client Code: MENCUR	Hand Delivered: ___Yes ___No	

SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS	NUMBER OF CONTAINERS
SD - DDA - 1	10/27/00	10:36	✓		Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	1
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	
					Sediment	*Hyalella azteca* 28-d chronic *Pimephales promelas* 7-d chronic	

	DATE	TIME		
Relinquished by: *(signature)* Ted W	10/27/00	15:00	Received by: *(signature)*	NOTES TO SAMPLER(S): We recommend nesting samples in ice to maintain 4°C during shipment. Please cover completed sample bottle labels with clear tape (they are not waterproof)
Relinquished by: *(signature)*	10/28	10:00	Received by: *(signature)*	Notes to Lab: Ambient temperature of cooler on delivery: °C
Relinquished by: *(signature)*	DATE	TIME	Received by: *(signature)*	

Cooler Temp = 4.3°C

Woods Hole Group
Environmental Laboratories

375 Paramount Drive • Suite B
Raynham, MA 02767-5154 • USA
Phone: 508-822-9300
Fax: 508-822-3288

Sampling Protocol for Method 5035: VOC's in Soil

CLIENT: Menzie Cura Associates Client Project: _____

CONTACT: Ted Wickwire WHG Project Mgr: Edie Hutchinson

TEL.: _____ Date: 10/23/00

FOR EACH SAMPLE LOCATION, PLEASE COLLECT:

- 2 Low-level samples (preserved with ~~Sodium Bisulfate~~ H_2O), 5g Soil/Sediment. (hold time is 7 days)
- 1 High-level sample (preserved with Methanol), 5g Soil/Sediment.
- 1 unpreserved sample for percent solids determination.

IF YOU WISH TO ANALYZE A MS/MSD PAIR, PLEASE COLLECT AN ADDITIONAL FOUR (4) LOW-LEVEL SAMPLES *(We must supply the additional sample vials, so advance notice is critical)*

NOTE: You have been sent 20 Low-Level sample vials. ***Please RETURN all UNUSED Low-Level sample vials or you will be charged an additional $10.00 for EACH one that is not returned.***

Any questions, please call your Project Manager: 508-822-9300

Field Sampling:

1.) If possible, try to evaluate the soil type to determine if:
   a. The acid solution will reduce the pH to <2, (if pH>2, note on Chain of Custody)
   b. There is a possibility for effervescence due to carbonates in the soil*

2.) Collect a 5 gram sample using a cut off plastic syringe ~~or other coring device (i.e. EnCore Sampler~~**)
   a. Withdraw the plunger and insert the barrel into the soil
   b. Adjust the plunger so the syringe barrel holds approximately 4 to 4.5 cc of soil***
   c. Place the syringe inside the VOA vial and gently push the soil into the solution (~~Sodium Bisulfate~~ H_2O, Methanol, or directly into the empty VOA vial for percent solids)
   d. **Be sure not to spill or splash ANY of the solution**
   e. **Re-cap the vial ensuring NO debris is in the vial threads**

3.) Collect all four (4) aliquots for this sample, at this time, using the same syringe.

4.) Move to the next sample location. Using a new syringe (or coring device), collect the next sample (and all aliquots) in this same way.

---

* *If effervescing occurs when soil is added to the Sodium Bisulfate preserved vial, collect a sample with no preservative. Effervescence could result in a loss of volatiles and may cause vials to break during shipping.*

** *If necessary, samples can be shipped in the sealed EnCore Sampler, but they MUST be received by the laboratory within 24 hours of collection for sample preservation by the lab, or there is a potential for the loss of volatiles. The Laboratory will NOT be responsible for hold-time violations when samples are received after 24 hours from collection.*

*** *It has been determined that 4 - 4.5 cc (or mL) marked on the collection syringe, is approximately equivalent to 5 grams of soil. The 5 gram EnCore Sampler also should hold a 5 gram sample. Since different soil types have different densities, the laboratory strongly recommends the use of an analytical balance in the field that can weigh to 0.01g, to ensure that the proper sample weight is collected.*

Woods Hole Group
Environmental Laboratories

Chain-of-Custody Record

375 Paramount Drive
Raynham, MA 02767

TEL: (508) 822-5300
FAX: (508) 822-3288

PAGE 1 OF 1

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION
Name:	Regulatory Protocol:	Carrier:
Address:	For the State of:	Airbill Number: 0227 3378 7760
Telephone: (401) 360 1679	Project Name:	Date Shipped: 10/31/00
Facsimile: (401) 849-7843	Project Number:	Quote #:
Contact Name:	P.O. #	
	Sampler Name(s): John Williams for Tim Wickwire	

TAT ___ 10 Day ___ 5 Day ___ 3 Day ___ 48 Hr ___ 24 Hr ___ Other

WHG LAB #	SAMPLE ID (NOTE 1)	COLLECTION DATE	COLLECTION TIME	COMPOSITE / GRAB	MATRIX	ANALYSIS/REMARKS (NOTE 2, 3)	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4) / NUMBER OF CONTAINERS
	18273 TP MW0 SD DUP 5	10/31/00	1315	Grab	Sediment	VOCs per Mass Corps	
	18273 MW0 SD DUP 5	10/31/00	1315	Grab			
	18273 TP MW0 SD DUP 9	10/31/00	1355	Grab			
	18273 MW0 SD DUP 9	10/31/00	1405	Grab			

Relinquished by: (signature)	DATE	TIME	Received by: (signature)
	10/31/00	1430	to FEDEX
Relinquished by: (signature)	DATE	TIME	Received by: (signature)
Relinquished by: (signature)	DATE	TIME	Received for Laboratory by: (signature)

NOTES TO SAMPLER (S): (1) Limit Sample Identification to 6 characters, if possible; (2) Indicate designated Lab Q.C. sample and type (e.g.; MS/MSD/REP) and provide sufficient sample; (3) Field duplicates are separate sample; (4) e.g.; 40ml/glass/H_2SO_4

Notes to Lab: Overlying water decanted prior to sampling sediment from test beakers. Acid VOC vials, overlying water received. VOC temps. not in acceptable range.

Please Fax written changes to (508) 822-3288

Aquatec Biological Sciences
Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
TEL (802) 860-1638
FAX (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)
Name: John Williams	Project Name: Menzie Cura Sauget	Carrier: FED EX	glass
Address: Aquatec Biol Sciences 273 Commerce St	Project Number: 00049	Airbill Number: 8235 5398 9992	
City/State/Zip: Williston, VT 05495	Sampler Name(s): John Williams	Date Shipped:	10 ml vials
Telephone: (802) 860 1638			
Facsimile: (802) 658-9863			
Contact Name: John Williams	Quote #: ___ Client Code: ___	Hand Delivered: ☐ Yes ☐ No	

SAMPLE IDENTIFICATION (NOTE1)	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS (NOTE 2,3)	NUMBER OF CONTAINERS
18273 Ha Day 28 SD PDA 5	11/28/00	1130	✓		Sediment	VOCs per Menzie Cura (Wickwire)	4
18297 Ha Day 28 SD PDA 9	11/28/00	1135	X				

Relinquished by: (signature)	DATE	TIME	Received by: (signature)
[signature]	11/28/00	1145	To FED EX
Relinquished by: (signature)	DATE	TIME	Received by: (signature)
Relinquished by: (signature)	DATE	TIME	Received by: (signature)

NOTES TO SAMPLER(S): (1) Limit Sample Identification to 30 characters, if possible; (2) Indicate designated Lab Q.C. sample and type (e.g.:MS/MSD/REP) and provide sufficient sample; (3) Field duplicates are separate sample; (4) e.g.: 40 ml/glass/H_2SO_4

Notes to Lab:

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

Amphipod, Hyalella azteca, 28-day survival and growth

Title: 4806 18228 100.4-28d HA S
File: 18228has Transform: ARC SINE(SQUARE ROOT(Y))

Shapiro - Wilk's Test for Normality

D = 1.7419
W = 0.9219

Critical W = 0.8440 (alpha = 0.01 , N = 16)
W = 0.8870 (alpha = 0.05 , N = 16)

Data PASS normality test (alpha = 0.01). Continue analysis.

Title: 4806 18228 100.4-28d HA S
File: 18228has Transform: ARC SINE(SQUARE ROOT(Y))

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18230	0.0355	
2	18228	0.2133	6.0072

(p-value = 0.0305)

Critical F = 8.8854 (P=0.01, 7, 7)
4.9949 (P=0.05, 7, 7)

Since F <= Critical F, FAIL TO REJECT Ho: Equal Variances (alpha = 0.01).

Title: 4806 18228 100.4-28d HA S
File: 18228has Transform: ARC SINE(SQUARE ROOT(Y))
Number of Groups: 2

GRP	IDENTIFICATION	REP	VALUE	TRANS VALUE
1	18230	1	1.0000	1.4120
1	18230	2	1.0000	1.4120
1	18230	3	0.9000	1.2490
1	18230	4	0.6000	0.8861
1	18230	5	0.9000	1.2490
1	18230	6	1.0000	1.4120
1	18230	7	0.8000	1.1071
1	18230	8	0.8000	1.1071
2	18228	1	0.8000	1.1071
2	18228	2	0.0000	0.1588
2	18228	3	0.6000	0.8861
2	18228	4	1.0000	1.4120
2	18228	5	0.8000	1.1071
2	18228	6	0.6000	0.8861
2	18228	7	1.0000	1.4120
2	18228	8	0.1000	0.3218

Title: 4806 18228 100.4-28d HA S
File: 18228has Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 1 OF 2 Ho: Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS t STAT	SIG 0.05
1	18230	1.2293	0.8750		
2	18228	0.9114	0.6125	1.8027	*

Equal Var: t critical value = 1.7613 (1 Tailed, alpha = 0.05, df = 14)
(p-value = 0.0465)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS T STAT	SIG 0.05
1	18230	1.2293	0.8750		
2	18228	0.9114	0.6125	1.8027	

Unequal Var: t critical value = 1.8331 (1 Tailed, alpha = 0.05, df = 9)
(p-value = 0.0525)

Title: 4806 18228 100.4-28d HA S
File: 18228has Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 2 OF 2 Ho: Control<Treatment

Equal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18230	8			
2	18228	8	0.2561	28.8	0.2625

Unequal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18230	8			
2	18228	8	0.2684	30.2	0.2625

Title: 4806 18228 100.4-28d HA S
File: 18228has Transform: ARC SINE(SQUARE ROOT(Y))

Wilcoxon's Rank Sum Test w/ Bonferroni Adjustment Ho: Control<Treatmen

GROUP	IDENTIFICATION	TRANSFORMED MEAN	RANK SUM	CRIT. VALUE	REPS	SIG 0.05
1	18230	1.2293				
2	18228	0.9114	54.00	51	8	

Critical values are 1 tailed (k = 1)

Title: 4806 18229 100.4-28d HA S
File: 18229has Transform: NO TRANSFORMATION

Shapiro - Wilk's Test for Normality

D = 0.7637
W = 0.7381

Critical W = 0.8440 (alpha = 0.01 , N = 16)
W = 0.8870 (alpha = 0.05 , N = 16)

Data FAIL normality test (alpha = 0.01). Try another transformation.

Warning - The F-test of homogeneity is sensitive to non-normality and should not be performed with this data as is.

Title: 4806 18229 100.4-28d HA S
File: 18229has Transform: NO TRANSFORMATION

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18230	0.0193	
2	18229	0.0898	4.6574

(p-value = 0.0599)

Critical F = 8.8854 (P=0.01, 7, 7)
4.9949 (P=0.05, 7, 7)

Since F <= Critical F, FAIL TO REJECT Ho: Equal Variances (alpha = 0.01).

Title: 4806 18278 100.4-28d HA S
File: 18278has Transform: NO TRANSFORMATION
Number of Groups: 2

GRP	IDENTIFICATION	REP	VALUE	TRANS VALUE
1	18230	1	1.0000	1.0000
1	18230	2	1.0000	1.0000
1	18230	3	0.9000	0.9000
1	18230	4	0.6000	0.6000
1	18230	5	0.9000	0.9000
1	18230	6	1.0000	1.0000
1	18230	7	0.8000	0.8000
1	18230	8	0.8000	0.8000
2	18278	1	0.2000	0.2000
2	18278	2	0.9000	0.9000
2	18278	3	1.0000	1.0000
2	18278	4	1.0000	1.0000
2	18278	5	1.0000	1.0000
2	18278	6	1.0000	1.0000
2	18278	7	0.1000	0.1000
2	18278	8	0.9000	0.9000

Title: 4806 18278 100.4-28d HA S
File: 18278has Transform: NO TRANSFORMATION

2 Sample t-Test - TABLE 1 OF 2 Ho: Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	t STAT	SIG 0.05
1	18230	0.8750	0.8750		
2	18278	0.7625	0.7625	0.7838	

Equal Var: t critical value = 1.7613 (1 Tailed, alpha = 0.05, df = 14)
(p-value = 0.2231)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T STAT	SIG 0.05
1	18230	0.8750	0.8750		
2	18278	0.7625	0.7625	0.7838	

Unequal Var: t critical value = 1.8331 (1 Tailed, alpha = 0.05, df = 9)
(p-value = 0.2267)

Title: 4806 18278 100.4-28d HA S
File: 18278has Transform: NO TRANSFORMATION

2 Sample t-Test - TABLE 2 OF 2 Ho: Control<Treatment

Equal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18230	8			
2	18278	8	0.2528	28.9	0.1125

Unequal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18230	8			
2	18278	8	0.2631	30.1	0.1125

Title: 4806 18297 100.4-28d HA S
File: 18297has Transform: ARC SINE(SQUARE ROOT(Y))

Shapiro - Wilk's Test for Normality

D = 0.8945
W = 0.9587

Critical W = 0.8440 (alpha = 0.01 , N = 16)
W = 0.8870 (alpha = 0.05 , N = 16)

Data PASS normality test (alpha = 0.01). Continue analysis.

Title: 4806 18297 100.4-28d HA S
File: 18297has Transform: ARC SINE(SQUARE ROOT(Y))

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18230	0.0355	
2	18297	0.0923	2.5986

(p-value = 0.2310)

Critical F = 8.8854 (P=0.01, 7, 7)
4.9949 (P=0.05, 7, 7)

Since F <= Critical F, FAIL TO REJECT Ho: Equal Variances (alpha = 0.01).

Title: 4806 18297 100.4-28d HA S
File: 18297has Transform: ARC SINE(SQUARE ROOT(Y))
Number of Groups: 2

GRP	IDENTIFICATION	REP	VALUE	TRANS VALUE
1	18230	1	1.0000	1.4120
1	18230	2	1.0000	1.4120
1	18230	3	0.9000	1.2490
1	18230	4	0.6000	0.8861
1	18230	5	0.9000	1.2490
1	18230	6	1.0000	1.4120
1	18230	7	0.8000	1.1071
1	18230	8	0.8000	1.1071
2	18297	1	0.9000	1.2490
2	18297	2	0.4000	0.6847
2	18297	3	0.8000	1.1071
2	18297	4	0.7000	0.9912
2	18297	5	0.3000	0.5796
2	18297	6	0.1000	0.3218
2	18297	7	0.6000	0.8861
2	18297	8	0.7000	0.9912

Title: 4806 18297 100.4-28d HA S
File: 18297has Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 1 OF 2 Ho: Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS t STAT	SIG 0.05
1	18230	1.2293	0.8750		
2	18297	0.8513	0.5625	2.9906	*

Equal Var: t critical value = 1.7613 (1 Tailed, alpha = 0.05, df = 14)
(p-value = 0.0049)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS T STAT	SIG 0.05
1	18230	1.2293	0.8750		
2	18297	0.8513	0.5625	2.9906	*

Unequal Var: t critical value = 1.7823 (1 Tailed, alpha = 0.05, df = 12)
(p-value = 0.0056)

Title: 4806 18297 100.4-28d HA S
File: 18297has Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 2 OF 2 Ho: Control<Treatment

Equal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18230	8			
2	18297	8	0.1737	19.6	0.3125

Unequal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18230	8			
2	18297	8	0.1761	19.8	0.3125

Title: 4806 18278 100.4-28d HA S
File: 18278has Transform: NO TRANSFORMATION

Shapiro - Wilk's Test for Normality

D = 1.1537
W = 0.7922

Critical W = 0.8440 (alpha = 0.01 , N = 16)
W = 0.8870 (alpha = 0.05 , N = 16)

Data FAIL normality test (alpha = 0.01). Try another transformation.

Warning - The F-test of homogeneity is sensitive to non-normality and should not be performed with this data as is.

Title: 4806 18278 100.4-28d HA S
File: 18278has Transform: NO TRANSFORMATION

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18230	0.0193	
2	18278	0.1455	7.5463

(p-value = 0.0161)

Critical F = 8.8854 (P=0.01, 7, 7)
4.9949 (P=0.05, 7, 7)

Since F <= Critical F, FAIL TO REJECT Ho: Equal Variances (alpha = 0.01).

Title: 4806 18229 100.4-28d HA S
File: 18229has Transform: NO TRANSFORMATION
Number of Groups: 2

GRP	IDENTIFICATION	REP	VALUE	TRANS VALUE
1	18230	1	1.0000	1.0000
1	18230	2	1.0000	1.0000
1	18230	3	0.9000	0.9000
1	18230	4	0.6000	0.6000
1	18230	5	0.9000	0.9000
1	18230	6	1.0000	1.0000
1	18230	7	0.8000	0.8000
1	18230	8	0.8000	0.8000
2	18229	1	0.9000	0.9000
2	18229	2	1.0000	1.0000
2	18229	3	0.8000	0.8000
2	18229	4	0.8000	0.8000
2	18229	5	1.0000	1.0000
2	18229	6	0.9000	0.9000
2	18229	7	1.0000	1.0000
2	18229	8	0.1000	0.1000

Title: 4806 18229 100.4-28d HA S
File: 18229has Transform: NO TRANSF

2 Sample t-Test - TABLE 1 OF 2 Ho: Control<Tre

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	t S
1	18230	0.8750	0.8750	
2	18229	0.8125	0.8125	0.5

Equal Var: t critical value = 1.7613 (1 Tailed, alpha = 0.05, df
(p-value = 0.3

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T S
1	18230	0.8750	0.8750	
2	18229	0.8125	0.8125	0.5

Unequal Var: t critical value = 1.8125 (1 Tailed, alpha = 0.05, d:
(p-value = 0.:

Title: 4806 18229 100.4-28d HA S
File: 18229has Transform: NO TRANS

2 Sample t-Test - TABLE 2 OF 2 Ho: Control<Tr

Equal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTR
1	18230	8		
2	18229	8	0.2057	

Unequal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNI
1	18230	8	
2	18229	8	0.2

Title: 4806 18273 100.4-28d HA S
File: 18273has Transform: ARC SINE(SQUARE ROOT(Y))

Shapiro - Wilk's Test for Normality

D = 0.4469
W = 0.9177

Critical W = 0.8440 (alpha = 0.01 , N = 16)
W = 0.8870 (alpha = 0.05 , N = 16)

Data PASS normality test (alpha = 0.01). Continue analysis.

Title: 4806 18273 100.4-28d HA S
File: 18273has Transform: ARC SINE(SQUARE ROOT(Y))

F-Test for Equality of Two Variances

GROUP	IDENTIFICATION	VARIANCE	F
1	18230	0.0355	
2	18273	0.0283	1.2532

(p-value = 0.7735)

Critical F = 8.8854 (P=0.01, 7, 7)
4.9949 (P=0.05, 7, 7)

Since F <= Critical F, FAIL TO REJECT Ho: Equal Variances (alpha = 0.01).

Title: 4806 18273 100.4-28d HA S
File: 18273has Transform: ARC SINE(SQUARE ROOT(Y))
Number of Groups: 2

GRP	IDENTIFICATION	REP	VALUE	TRANS VALUE
1	18230	1	1.0000	1.4120
1	18230	2	1.0000	1.4120
1	18230	3	0.9000	1.2490
1	18230	4	0.6000	0.8861
1	18230	5	0.9000	1.2490
1	18230	6	1.0000	1.4120
1	18230	7	0.8000	1.1071
1	18230	8	0.8000	1.1071
2	18273	1	0.2000	0.4636
2	18273	2	0.1000	0.3218
2	18273	3	0.3000	0.5796
2	18273	4	0.2000	0.4636
2	18273	5	0.0000	0.1588
2	18273	6	0.0000	0.1588
2	18273	7	0.1000	0.3218
2	18273	8	0.3000	0.5796

Title: 4806 18273 100.4-28d HA S
File: 18273has Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 1 OF 2 Ho: Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS t STAT	SIG 0.05
1	18230	1.2293	0.8750		
2	18273	0.3810	0.1500	9.4962	*

Equal Var: t critical value = 1.7613 (1 Tailed, alpha = 0.05, df = 14)
(p-value = 0.0000)

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	TRANS T STAT	SIG 0.05
1	18230	1.2293	0.8750		
2	18273	0.3810	0.1500	9.4962	*

Unequal Var: t critical value = 1.7613 (1 Tailed, alpha = 0.05, df = 14)
(p-value = 0.0000)

Title: 4806 18273 100.4-28d HA S
File: 18273has Transform: ARC SINE(SQUARE ROOT(Y))

2 Sample t-Test - TABLE 2 OF 2 Ho: Control<Treatment

Equal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18230	8			
2	18273	8	0.1167	13.1	0.7250

Unequal Variances:

GROUP	IDENTIFICATION	NUM OF REPS	MIN SIG DIFF (IN ORIG. UNITS)	% OF CONTROL	DIFFERENCE FROM CONTROL
1	18230	8			
2	18273	8	0.1167	13.1	0.7250

Amphipod (*Hyalella azteca*) Day 28 Survival and Dry Weight Data

Client: MENZIE-CURA	Project: 00049, Sauget Sed.	SDG: ~~4452~~ 4806
	Test Start: October 31, 2000	Test End: Novtember 27, 2000

Sample	Repl.	# Alive	Init.	Repick #	Repick Init.	Total Surv	# Weighed	Init Pan Wt.	Total Dry Wt.	
18228	A	8	JG	—	—	8	8	24.68	27.80	
	B	0	P	—	—	0	0	28.16	—	
	C	6	P	—	—	6	6	25.86	28.05	
	D	10	RB	—	—	10	10	23.37	26.46	
	E	8	JG	—	—	8	8	25.35	28.60	
	F	6	RB	—	—	6	6	25.57	27.09	
	G	10	P	—	—	10	10	24.91	28.26	
	H	1	P	—	—	1	1	25.02	25.43	
18229	A	9	RB	—	—	9	9	23.21	25.77	
	B	10	P	—	—	10	10	25.13	29.21	
	C	8	P	—	—	8	8	25.76	28.36	
	D	8	RB	0	JG	8	8	25.97	28.46	
	E	10	JG	—	—	10	10	23.84	27.57	
	F	9	RB	—	—	9	9	24.84	28.35	
	G	10	P	—	—	10	10	22.41	25.18	
	H	1	JG	5 dead found	—	1	1	22.72	22.91	
18230	A	10	RB	—	—	10	10	22.~~71~~86 MM	24.70	
	B	10	JG	—	—	10	10	26.51	29.04	
	C	9	JG	—	—	9	9	25.10	26.44	
	D	6	JG	0	JG	6	6	20.76	21.52	
	E	9	JG	—	—	9	9	26.33	28.08	
	F	10	RB	—	—	10	10	25.67	26.79	
	G	8	JG	0	JG	8	8	24.36	25.99	
	H	8	RB	0	JG	8	8	24.53	25.69	
18271	A	9	P	—	—	9	9	23.45	26.86	
	B	10	RB	—	—	10	10	23.72	26.89	
	C	10	P JG	—	—	10	10	25.46	28.58	
	D	9	P JG	—	—	9	9	20.55	24.27	
	E	9	RB	—	—	9	9	21.15	25.11	
	F	8	JG	0	JG	8	8	24.96	28.81	
	G	8	JG	—	—	8	8	24.67	28.45	
	H	10	JG	—	—	10	10	25.48	29.26	
18272	A	10	JG	—	—	10	10	24.73	27.41	
	B	8	JG	0	JG	8	8	25.19	28.69	
	C	9	JG	—	—	9	9	24.78	27.12	
	D	10	RB	—	—	10	10	24.99	27.50	
	E	10	RB	—	—	10	10	24.41	27.18	
	F	9	JG	—	—	9	9	23.07	25.46	1 dead. JG
	G	10	RB	—	—	10	10	25.42	28.65	
	H	10	RB	—	—	10	10	27.05	30.42	

Balance QC: Initial (20 mg = 19.98) Final (20 mg = 19.98 Oven °C in: 11/29 1600 JG D/T/I Oven °C out: 85 D/T/I JM 11/29 16:00

Re: repicks - very little material remaining after sieving. JG

Reviewer: JG Date 12/20/00

Laboratory: Aquatec Biological Sciences, Inc. Williston, Vermont

Ha28dpkg

Amphipod (*Hyalella azteca*) Day 28 Survival and Dry Weight Data

Client: MENZIE-CURA	Project: 00049, Sauget Sed.	SDG: ~~4452~~ & ~~4806~~
	Test Start: October 31, 2000	Test End: Novtember 27, 2000

Sample	Repl.	# Alive	Init.	Repick #	Repick Init.	Total Surv	# Weighed	Init Pan Wt.	Total Dry Wt.
18273	A	2	J	—	—	2	2	25.77	26.29
	B	1	J	—	—	1	1	25.46	25.868
	C	3	J	—	—	3	3	22.88	24.36
	D	2	J	—	—	2	2	24.95	25.90
	E	0	J	—	—	0	0	25.17	—
	F	0	J	—	—	0	0	24.52	—
	G	1	J	—	—	1	1	25.74	26.17
	H	3	J	—	—	3	3	26.90	28.00
18274	A	9 ~~8 10~~	JP	—	—	9 ~~8~~ PC	9	26.53	29.12
	B	10	JG	—	—	10	10	25.04	28.79
	C	9	JG	—	—	9	9	25.90	28.34
	D	10	RB	—	—	10	10	29.42	32.55
	E	9	RB	—	—	9	9	26.78	29.48
	F	9	JG	—	—	9	9	26.87	29.38
	G	10	P	—	—	10	10	28.98	32.66
	H	9	JG	—	—	9	9	28.42	30.49
18275	A	9	RB	—	—	9	9	24.79	28.97
	B	10	JG	—	—	10	10	27.74	33.40
	C	8	P	—	—	8	8	22.16	26.38
	D	8	JG	—	—	9	9	29.12	34.42
	E	8	P	—	—	8	8	26.94	32.21
	F	10	JG	—	—	10	10	26.92	32.06
	G	10	JG	—	—	10	10	24.21	29.72
	H	10	JG	—	—	10	10	25.38	30.51
18276	A	10	RB	—	—	10	10	25.15	28.68
	B	10	P	—	—	10	10	25.58	28.31
	C	9	JG	—	—	9	9	26.86	31.57
	D	8	RB	—	—	8	8	27.00	30.27
	E	9	P	—	—	9	9	26.45	30.34
	F	10	RB	—	—	10	10	25.00	28.82
	G	9	P	—	—	9	9	26.05	29.71
	H	10	RB	—	—	10	10	24.54	28.27
18277	A	9	JG	—	—	9	9	28.03	31.45
	B	10	JG	—	—	10	10	24.33	29.49
	C	~~10~~ 9	RB ~~JG~~	—	—	~~10~~ 9 RB	9	27.46	31.30
	D	10	JG	—	—	10	10	28.97	33.79
	E	9	P	—	—	9	9	27.43	32.37
	F	8	JG	0	JT	8	8	28.84	32.65
	G	10	JG	—	—	10	10	23.78	28.62
	H	10	JG	—	—	10	10	27.16	32.33

Balance QC: Initial (20 mg = 19.9) Final (20 mg =) Oven °C in: D/T/I Oven °C out 85 D/T/I 11/29 14:0

Reviewer: _____ Date 12/20/00

Laboratory: Aquatec Biological Sciences, Inc. Williston, Vermont

Ha28dpkg

Amphipod (*Hyalella azteca*) Day 28 Survival and Dry Weight Data

Client: MENZIE-CURA	Project: 00049, Sauget Sed.	SDG: ~~4452~~ 4806
	Test Start: October 31, 2000	Test End: Novtember 27, 2000

Sample	Repl.	# Alive	Init.	Repick #	Repick Init.	Total Surv	# Weighed	Init Pan Wt.	Total Dry Wt.
18278	A	8D-2	RB	—	—	2	2	28.14	28.73
	B	9	JG	—	—	9	9	26.45	30.85
	C	10	P	—	—	10	10	26.30	30.51
	D	9	JG	—	—	9	9	25.82	29.45
	E	10	RB	—	—	10	10	28.45	32.13
	F	10	P	—	—	10	10	26.12	30.88
	G	4-D 1	RB	—	—	1	1	26.64	27.05
	H	9	JG	—	—	9	9	25.33	28.76
18296	A	10	JG	—	—	10	10	23.26	26.84
	B	10	JG	—	—	10	10	23.06	24.74
	C	9	JG	—	—	9	9	24.29	26.26
	D	8	JG	—	—	8	8	23.85	25.15
	E	10	P	—	—	10	10	24.59	26.90
	F	7D8	JG	—	—	8	8	21.71	24.66
	G	10	P	—	—	10	10	23.53	28.28
	H	7	JG	—	—	7	7	24.43	25.69
18297	A	9	J	—	—	9	9 MM	27.45	29.20 MM 27.81
	B	4	J	—	—	4	4 MM	26.24	~~27.22~~
	C	8	J	—	—	8	8	26.59	30.59
	D	7	J	—	—	7	7	25.11	28.31
	E	3	J	—	—	3	3	26.22	27.32
	F	1	J	—	—	1	1	24.78	25.20
	G	6	J	—	—	6	6	25.56	27.79
	H	7	J	—	—	7	7	22.95	25.86
18298	A	9	RB	—	—	9	9	29.05	33.79
	B	9	P	—	—	9	9	27.48	32.00
	C	10	JG	—	—	10	10	22.38	26.97
	D	10	JG	—	—	10	10	28.03	32.62
	E	10	RB	—	—	10	10	28.21	32.20
	F	9	JG	—	—	9	9	24.42	28.34
	G	8	P	—	—	8	8	25.52	29.79
	H	9	RB	—	—	9	9	25.94	29.96
18305	A	9	JG	—	—	9	9	28.40	31.22
	B	10	P			10	10	25.87	29.99
	C	10	JG	—	—	10	10	23.48	27.03
	D	9	JG	—	—	9	9	21.47	25.29
	E	10	RB	—	—	10	10	25.04	28.15
	F	10	P			10	10	24.76	28.67
	G	10	JG	—	—	10	10	23.55	27.88
	H	10	RB	—	—	10	10	25.39	28.93

Balance QC: Initial (20 mg = 19.99) Final (20 mg =) Oven °C in: D/T/I Oven °C out: 85 D/T/I 11/29 @ 07

Reviewer: _____ Date 12/20/00

Laboratory: Aquatec Biological Sciences, Inc. Williston, Vermont

Ha28dpkg

Organism Holding and Acclimation

Species: *Hyalella azteca*	Date Received: 10/27/00 # Rec. 1500
Supplier: Aquatic Research Organisms	Age: Hatch 10/23/00
Apparent Conditon: OK	Culture ID: HA1027

Acclimation / Holding Procedures: Transfer to holding culture boxes, add laboratory water. Acclimate to water to be used for testing (sediment overlying water formulation). Aerate lightly. Water change once (50%) weekly.
Daily Feeding: 1:1 mix of *Selenastrum* / YCT, 1-3 mL (maintain hint of green algal coloration on culture box bottom). Also, pinch of ground Tetrafin/Ceraphyll. Do not allow excess food/fungus to accumulate.
Monitoring: Examine over a light box daily, record apparent condition. Temperature daily; pH, D.O, on Mon., Weds., Fri., (miniumum). Conductivity weekly.
Test starts: record date, time, initials for sediment test and SRT test starts.

2000 Date	Fed	Temp	pH	D.O.	Conduct.			Water Chg.	Age (Days)	Init.
10/27	yes	21.7	7.2	>18	700			50%	4	jww
10/28	Sed/YCT	20.1						50%	5	JG
10/29	✓	20.0	8.0	9.3	600			50%	6	jm
10/30	Sed/YCT	18.6	~	~	~				7	JG
10/31	✓	21.0	7.8	8.6	460				8	jm

* N = normal, appear healthy. Record # dead if any observed.

Sediment test start (Date) 10/31/00 SRT test start: (Date) 10/31/00

Hyalella azteca Initial Dry Wt.
(Organisms used to initiate chronic toxicity test)

Project: 00049 Menzie-Cura Sauget Sediment Assessment	
Culture ID:	Age: 7-8 days

Replicate	Number of Organisms weighed	Initial Pan Weight (mg)	Final Pan Weight (mg)	INITIAL DRY WT (mg)
1	10	30.13	30.25	0.012
2	10	32.61	32.78	0.017
3	10	35.13	35.30	0.017
4	10	36.03	36.18	0.015
5	10	34.25	34.40	0.015
6	10	35.85	36.05	0.02
~~7~~	~~10~~	~~36.50~~		
~~8~~	~~10~~	~~37.27~~		
Initials:				
Date:				

Balance QC:	Initial (20 mg = 19.99)		Final (20 mg = 19.98)		Balance Asset #:			
Date/time In 10/31 17:30	Temp(°C) 100	Init. JG RB	Date/time out JM 11/1 17:00	Temp(°C) 86	Init. JM			
Comments:								

Reviewer: [signature] Date 12/20/00

Laboratory: Aquatec Biological Sciences, Inc. Williston, Vermont

Ha28dpkg

Aquatic Research Organisms

DATA SHEET

I. Organism History

Species: Hyalella azteca

Source: Lab reared ✓ Hatchery reared _____ Field collected _____

Hatch date 10/23/00 Receipt date _____

Lot number 102300Hy Strain ARO

Brood Origination USFWS MO

II. Water Quality

Temperature 23 °C Salinity — ppt DO Sat

pH 7.4 Hardness ~180 ppm

III. Culture Conditions

System: FW static renewal

Diet: Flake Food ✓ Phytoplankton _____ Trout Chow _____

Brine Shrimp _____ Rotifers _____ Other _____

Prophylactic Treatments: _____

Comments: _____

IV. Shipping Information

Client: AQUATECH VT # of Organisms: 1500

Carrier: FED EX Date Shipped: 10-26-00

Biologist: Stan Sinitski

Rec. 10/27/00
Conductivity 700
D.O. >18
pH 7.2
Temp 21.7

1 - 800 - 927 - 1650

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Amphipod (*Hyalella azteca*) Environmental Monitoring for 28-day Chronic Toxicity Test

Client: Menzie-Cura	Project: 00049, Sauget Sediment Assessment	SDG: 4806

Sample	Parameter	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
18228	T (°C)	23.6	24.3	22.6	21.4	22.9	23.2	22.9	23.2	22.8	23.4	23.5	22.8	22.6	22.8	23.6
	pH	8.1	7.9		7.6			7.7		7.6	–	7.4		–	7.5	
	DO (mg/L)	8.4	7.9		7.7			7.6		6.9		7.1			7.6	
	Conductivity	280	–		–			270				–			270	
18229	T (°C)	23.9	24.0	22.7	21.5	22.9	23.0	23.5	23.1	23.0	23.5	23.6	22.8	23.1	23.2	23.6
	pH	8.1	7.9		7.7			7.7		7.5		7.5			7.5	
	DO (mg/L)	8.4	7.7		7.5			7.4		6.5		7.0			7.3	
	Conductivity	310	–		–			280				–			280	
18230	T (°C)	23.1	24.2	22.5	22.6	23.0	22.9	23.2	23.1	22.6	23.0	23.3	22.9	22.6	23.2	23.1
	pH	7.6	7.5		7.6			7.6		7.5		7.4			7.5	
	DO (mg/L)	8.5	7.4		7.5			7.5		6.6		6.8			7.1	
	Conductivity	400	–		–			385				–			370	
18271	T (°C)	23.5	23.9	22.6	23.4	22.7	23.1	23.2	23.1	23.6	23.1	23.3	23.1	23.2	23.2	23.1
	pH	8.0	7.8		7.8			7.7		7.6		7.5			7.6	
	DO (mg/L)	8.5	7.6		7.6			7.6		7.2		6.7			7.1	
	Conductivity	260	–		–			270				–			280	
2000	Init./Date:	10/31 JG	11/1 JG	11/2 JG	11/3 RS	11/4 JG	11/5 jm	11/6 jm	11/7 jm	11/8 jm	11/9 JG	11/10 JG	11/11 JG	11/12 jm	11/13 jm	11/14 jm

OLW water chemistry: Temperature daily, pH, DO three times weekly, conductivity weekly. Ammonia, alkalinity, and hardness samples on Days 0 and 28. Organisms distributed 10/31/00 1615 JG

Review: J Date 12/20/00

Aquatec Biological Sciences, Inc. Willison, Vermont

ha42dpkg

Amphipod (*Hyalella azteca*) Environmental Monitoring for 28-day Chronic Toxicity Test

Client: Menzie-Cura	Project: 00049, Sauget Sediment Assessment	SDG: 4806

Sample	Parameter	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
18272	T (°C)	23.6	24.2	22.4	22.2	22.9	23.2	23.2	23.1	23.2	23.4	23.2	23.4	23.1	23.2	23.1
	pH	7.9	7.8		7.8			7.7		7.5		7.6			7.6	
	DO (mg/L)	8.3	7.5		7.8			7.5		6.8		7.1			7.5	
	Conductivity	300	–		–			280				–			290	
18273	T (°C)	22.8	23.7	22.5	22.8	22.9	22.9	22.9	22.8	22.8	23.5	23.5	22.8	23.1	23.2	22.8
	pH	7.8	7.5		7.7			7.6		7.5		7.5			7.6	
	DO (mg/L)	6.8	5.0		6.8			6.4		5.8		6.5			6.7	
	Conductivity	600	–		–			330				–			320	
18274	T (°C)	23.5	23.7	22.6	23.0	22.6	22.8	23.0	23.3	22.8	23.1	23.0	23.2	23.1	23.2	22.9
	pH	8.0	7.9		7.8			7.8		7.6		7.6			7.6	
	DO (mg/L)	7.8	7.6		8.0			7.7		7.0		6.9			7.4	
	Conductivity	~~600~~ 320	–		–			280				–			290	
18275	T (°C)	23.6	24.0	22.5	23.4	22.7	22.9	22.6	22.4	22.2	22.5	23.0	22.8	22.2	22.6	22.4
	pH	7.8	7.7		7.8			7.7		7.5		7.5			7.5	
	DO (mg/L)	7.2	6.3		7.2			6.5		6.9		6.7			5.7	
	Conductivity	~~320~~ 420	–		–			340				–			320	
2000	Init./Date:	10/31 JG	11/1 JG	11/2 JG	11/3 RB	11/4 JG	11/5 jm	11/6 jm	11/7 jm	11/8 jm	11/9 JG	11/10 JG	11/11 JG	11/12 jm	11/13 jm	11/14 jm

OLW water chemistry: Temperature daily. pH, DO three times weekly. Conductivity weekly. Ammonia, alkalinity, and hardness samples on Days 0 and 28.

Review: [signature] Date: 12/29/00

Aquatec Biological Sciences, Inc. Willison, Vermont

ha42dpkg

Amphipod (*Hyalella azteca*) Environmental Monitoring for 28-day Chronic Toxicity Test

Client: Menzie-Cura	Project: 00049, Sauget Sediment Assessment	SDG: 4806

Sample	Parameter	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
18276	T (°C)	22.8	24.0	22.1	23.2	~~22.8~~ 22.9	23.0	22.8	23.0	23.0	23.4	23.4	23.0	22.8	23.2	23.0
	pH	7.6	7.6		7.8			7.7		7.6		7.6			7.6	
	DO (mg/L)	5.0	5.4		7.1			6.6		6.5		6.7			6.9	
	Conductivity	450	–		–			320				–			300	
18277	T (°C)	23.1	24.4	22.2	22.8	23.0	23.2	23.1	23.1	23.0	23.4	23.8	23.3	23.0	23.2	23.1
	pH	7.6	7.6		7.8			7.7		7.5		7.5			7.6	
	DO (mg/L)	5.5	5.8		7.3			6.8		6.5		6.5			6.2	
	Conductivity	440	–		–			290				–			300	
18278	T (°C)	23.1	24.3	22.4	22.4	23.0	23.2	22.9	23.1	22.5	23.2	23.2	23.2	23.0	22.8	23.1
	pH	7.8	7.8		7.8			7.8		7.7		7.7			7.7	
	DO (mg/L)	7.2	6.3		7.1			6.8		6.7		6.6			6.4	
	Conductivity	370	–		–			305				–			320	
18296	T (°C)	22.8	24.2	22.4	22.5	23.0	22.9	22.9	22.8	22.5	23.4	23.3	23.0	22.8	22.8	22.5
	pH	7.9	7.8		7.8			7.8		7.6		7.6			7.6	
	DO (mg/L)	6.6	6.4		7.4			7.2		6.5		6.7			7.1	
	Conductivity	460	–		–			310				–			310	
2000	Init./Date:	10/31 JG	11/1 JG	11/2 JG	11/3 DB	11/4 JG	11/5 jm	11/6 jm	11/7 jm	11/8 jm	11/9 JG	11/10 JG	11/11 JG	11/12 jm	11/13 jm	11/14 jm

OLW water chemistry: Temperature daily. pH, DO three times weekly. Conductivity weekly. Ammonia, alkalinity, and hardness samples on Days 0 and 28

Review: _____ Date 12/29/00

Amphipod (*Hyalella azteca*) Environmental Monitoring for 28-day Chronic Toxicity Test

Client: Menzie-Cura	Project: 00049, Sauget Sediment Assessment	SDG: 4806

Sample	Parameter	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
18297	T (°C)	23.2	24.0	22.2	22.6	23.0	22.9	23.0	22.8	22.7	22.9	23.0	13.0	22.9	22.9	22.4
	pH	8.0	7.7		7.7			7.8		7.6		7.6			8.1	
	DO (mg/L)	8.5	7.0		7.4			6.3		6.0		6.6			6.3	
	Conductivity	350	—		—			290				—			380	
18298	T (°C)	23.2	24.5	22.1	23.4	23.1	22.9	21.9	22.8	22.7	22.6	23.4	22.9	22.2	22.8	22.4
	pH	7.7	7.6		7.8			7.8		7.8		7.8			7.8	
	DO (mg/L)	7.0	6.0		7.3			6.3		6.2		5.6			6.9	
	Conductivity	360	—		—			350				—			300	
18305	T (°C)	22.7	24.4	22.3	22.8	22.1	22.8	23.0	22.7	22.6	22.8	23.2	22.8	22.7	22.6	22.8
	pH	7.7	7.6		7.8			7.8		7.8		7.9			8.0	
	DO (mg/L)	7.3	6.2		7.1			6.4		6.3		5.7			6.6	
	Conductivity	400	—		—			340				—			330	
	T (°C)															
	pH															
	DO (mg/L)															
	Conductivity															
2000	Init./Date:	10/31 JG	11/1 JG	11/2 JG	11/3 JG	11/4	11/5 jm	11/6 jm	11/7 jm	11/8 jm	11/9 JG	11/10 JG	11/11 JG	11/12 jm	11/13 jm	11/14 jm

OLW water chemistry: Temperature daily. pH, DO three times weekly. Conductivity weekly. Ammonia, alkalinity, and hardness samples on Days 0 and 28.

Review JT Date: 12/20/05

Amphipod (*Hyalella azteca*) Environmental Monitoring for 28-day Chronic Toxicity Test

Client: Menzie-Cura	Project: 00049, Sauget Sediment Assessment	SDG: 4806

Sample	Parameter	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
18228	T (°C)	22.6	22.4	23.5	23.0	22.5	22.3	22.4	23.2	22.4	23.0	22.9	22.2	22.8	23.9	
	pH	7.7		7.5			7.7		7.8		7.8			7.7		
	DO (mg/L)	7.2		7.4			7.7		7.6		7.7			7.6		
	Conductivity	—		—			270		—		—			300		
18229	T (°C)	23.0	22.8	22.9	22.9	22.8	22.6	22.5	23.0	22.3	22.8	22.8	22.8	23.0	24.1	
	pH	7.6		7.5			7.7		7.7		7.8			7.7		
	DO (mg/L)	7.3		7.3			7.3		7.4		7.6			7.0		
	Conductivity	—		—			280		—		—			295		
18230	T (°C)	22.8	22.6	22.9	22.8	22.5	22.6	22.2	22.8	22.0	22.5	22.8	21.8	22.8	23.3	
	pH	7.6		7.5			7.7		7.7		7.7			7.7		
	DO (mg/L)	7.1		7.1			7.3		7.2		7.5			7.0		
	Conductivity	—		—			330		—		—			330		
18271	T (°C)	23.2	23.0	22.8	22.8	22.9	22.8	22.4	22.8	22.0	22.6	22.9	22.8	23.1	23.0	
	pH	7.6		7.6			7.8		7.8		7.8			7.8		
	DO (mg/L)	7.2		7.1			7.5		7.3		7.6			7.1		
	Conductivity	—		—			290		—		—			300		
2000	Init./Date:	11/15 JM	11/16 JM	11/17 JG	11/18 JG	11/19 JM	11/20 JM	11/21 JM	11/22 JG	11/23 JG	11/24 JG	11/25 JG	11/26 JM	11/27 JM	11/28	

OLW water chemistry: Temperature daily, pH, DO three times weekly, conductivity weekly. Ammonia, alkalinity, and hardness samples on Days 0 and 28.

Review: _____ Date 12/20/00

Amphipod (*Hyalella azteca*) Environmental Monitoring for 28-day Chronic Toxicity Test

Client: Menzie-Cura	Project: 00049, Sauget Sediment Assessment	SDG: 4806

Sample	Parameter	15	16	17	18	19	20	21	22	23	24	25	26	27	28
18272	T (°C)	23.2	23.0	23.1	22.8	22.8	22.8	22.8	22.9	22.0	22.5	22.6	22.6	22.9	23.5
	pH	7.7		7.6			7.8		7.8		7.8			7.8	
	DO (mg/L)	7.4		7.3			7.7		7.5		7.7			7.5	
	Conductivity	–		–			285		–		–			300	
18273	T (°C)	23.2	22.6	23.1	22.8	22.6	22.4	22.2	22.8	22.1	22.5	22.5	22.4	22.6	23.0
	pH	7.6		7.6			7.7		7.6		7.7			7.7	
	DO (mg/L)	6.7		7.0			7.8		7.0		7.3			6.6	
	Conductivity	–		–			310		–		–			305	
18274	T (°C)	23.1	22.8	23.0	22.7	22.6	22.8	22.4	22.8	22.0	22.4	22.6	22.2	22.8	22.9
	pH	7.6		7.6			7.8		7.8		7.8			7.8	
	DO (mg/L)	6.9		7.0			7.2		7.3		7.3			7.2	
	Conductivity	–		–			300		–		–			308	
18275	T (°C)	22.0	22.1	22.2	22.1	21.9	22.0	21.6	22.5	22.1	22.0	22.1	22.6	22.2	23.1
	pH	7.6		7.6			8.0		7.7		7.7			7.9	
	DO (mg/L)	5.9		6.1			5.2		5.8		6.0			5.5	
	Conductivity	–		–			360		–		–			355	
2000	Init./Date:	11/15 jm	11/16 jm	11/17 JG	11/18 JG	11/19 jm	11/20 jm	11/21 jm	11/22 JG	11/23 JG	11/24 JG	11/25 JG	11/26 jm	11/27 jm	11/28

OLW water chemistry: Temperature daily, pH, DO three times weekly, conductivity weekly. Ammonia, alkalinity, and hardness samples on Days 0 and 28.

Review: J Date: 12/20/00

Amphipod (*Hyalella azteca*) Environmental Monitoring for 28-day Chronic Toxicity Test

Client: Menzie-Cura	Project: 00049, Sauget Sediment Assessment	SDG: 4806

Sample	Parameter	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
18276	T (°C)	23.1	22.8	22.8	22.7	22.8	22.8	22.5	22.6	22.5	22.5	22.6	22.7	23.0	23.3	
	pH	7.7		7.6			7.7		7.7		7.8			7.7		
	DO (mg/L)	6.5		6.4			6.9		6.8		7.0			6.8		
	Conductivity	—		—			290		—	—	—			290		
18277	T (°C)	23.1	23.0	22.9	22.8	23.0	22.8	22.7	22.6	22.6	22.4	22.5	22.5	23.0	23.5	
	pH	7.6		7.6			7.6		7.6		7.7			7.7		
	DO (mg/L)	6.6		6.4			6.9		6.8		7.0			6.8		
	Conductivity	—		—			280		—	—	—			290		
18278	T (°C)	22.5	22.9	22.8	22.7	22.8	22.7	22.8	22.7	22.5	22.3	22.2	22.6	22.8	23.1	
	pH	7.7		7.8			7.9		7.9		7.8			7.8		
	DO (mg/L)	6.5		6.7			6.9		6.8		6.9			6.6		
	Conductivity	—		—			310		—		—			315		
18296	T (°C)	22.8	22.5	22.6	22.5	22.5	22.2	22.3	22.5	22.6	22.0	21.9	21.9	22.6	23.1	
	pH	7.7		7.7			7.8		7.7		7.8			7.8		
	DO (mg/L)	6.9		6.9			7.3		7.0		7.1			7.0		
	Conductivity	—		—			300		—		—			310		
2000	Init./Date:	11/15 JM	11/16 JM	11/17 JG	11/18 JG	11/19 JM	11/20 JM	11/21 JM	11/22 JG	11/23 JG	11/24 JG	11/25 JG	11/26 JM	11/27 JM	11/28 JG	

OLW water chemistry: Temperature daily, pH, DO three times weekly, conductivity weekly. Ammonia, alkalinity, and hardness samples on Days 0 and 28.

Review JG Date 12/20/00

Amphipod (*Hyalella azteca*) Environmental Monitoring for 28-day Chronic Toxicity Test

Client: Menzie-Cura	Project: 00049, Sauget Sediment Assessment	SDG: 4806

Sample	Parameter	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
18297	T (°C)	22.8	22.7	22.5	22.6	22.1	22.8	21.8	22.6	22.3	21.9	22.2	21.8	22.6	23.3	
	pH	7.6		7.6			~~8.1~~ 7.7		7.7		7.7			7.7		
	DO (mg/L)	6.8		6.7			~~6.4~~ 7.2		7.1		7.4			7.1		
	Conductivity	—		—			300		—		—			300		
18298	T (°C)	22.8	22.9	22.6	22.4	22.4	22.2	21.9	22.7	22.4	21.9	21.8	21.8	22.4	22.7	
	pH	8.0		8.0			~~7.8~~ 8.1		8.2		8.2			8.1		
	DO (mg/L)	5.8		5.7			6.4		5.9		6.5			6.2		
	Conductivity	—		—			340		—		—			360		
18305	T (°C)	22.7	22.6	22.7	22.5	22.5	22.3	22.4	22.5	22.3	22.1	22.2	21.9	22.7	23.0	
	pH	8.1		8.0			8.1		8.1		8.1			8.1		
	DO (mg/L)	6.4		5.8			6.4		5.9		6.3			6.3		
	Conductivity	—		—			350		—		—			350		
	T (°C)															
	pH															
	DO (mg/L)															
	Conductivity															
2000	Init./Date:	11/15 jm	11/16 jm	11/17 JG	11/18 JG	11/19 jm	11/20 jm	11/21 jm	11/22 JG	11/23 JG	11/24 JG	11/25 JG	11/26 jm	11/27 jm	11/28	

OLW water chemistry: Temperature daily, pH, DO three times weekly, conductivity weekly. Ammonia, alkalinity, and hardness samples on Days 0 and 28.

Review Date: 12/20/00

H.a. Day 0

Alkalinity and Hardness

Sample Number	Type	Collection Date	Alkalinity Volume (ml)	Initial Titrant	Final Titrant	Alkalinity (mg/l)	Hardness Volume (ml)	Initial Titrant	Final Titrant	Hardness (mg/l)
18228	HA	10/31/00	50	19	20.8	**36.0**	50	3.4	9.6	**124.0**
18229	HA	10/31/00	50	20.8	22.2	**28.0**	50	9.6	16.1	**130.0**
18230	HA	10/31/00	50	22.2	25.2	**60.0**	50	16.1	26.6	**210.0**
18271	HA	10/31/00	50	25.2	26.5	**26.0**	50	26.6	31.8	**104.0**
18272	HA	10/31/00	50	26.5	28.2	**34.0**	50	31.8	38.1	**126.0**
18273	HA	10/31/00	50	3.5	6.5	**60.0**	50	38.1	48.7	**212.0**
18274	HA	10/31/00	50	6.5	8.1	**32.0**	50	5.7	11.1	**108.0**
18275	HA	10/31/00	50	1.5	5.4	**78.0**	50	11.1	11.6	**10.0**
18276	HA	10/31/00	50	5.4	8.1	**54.0**	50	11.6	12.1	**10.0**
18277	HA	10/31/00	50	8.1	10.9	**56.0**	50	12.1	13.7	**32.0**
18278	HA	10/31/00	50	10.9	13.3	**48.0**	50	13.7	21.6	**158.0**
18296	HA	10/31/00	50	13.3	16.5	**64.0**	50	21.6	32.3	**214.0**
18297	HA	10/31/00	50	16.5	18.3	**36.0**	50	32.3	39	**134.0**

M C. Sawyer
H.a. Day 0

Alkalinity and Hardness

Sample Number	Type	Collection Date	Alkalinity Volume (ml)	Initial Titrant	Final Titrant	Alkalinity (mg/l)	Hardness Volume (ml)	Initial Titrant	Final Titrant	Hardness (mg/l)
18298	HA	10/31/00	50	18.3	21.2	**58.0**	50	8.5	16.2	**154.0**
18305	HA	10/31/00	50	21.2	24.5	**66.0**	50	16.2	25.2	**180.0**

H.a. Day 28

Alkalinity and Hardness

Sample Number	Type	Collection Date	Alkalinity Volume (ml)	Initial Titrant	Final Titrant	Alkalinity (mg/l)	Hardness Volume (ml)	Initial Titrant	Final Titrant	Hardness (mg/l)
18228	HA	11/28/00	50	11	12.3	**26.0**	50	14.5	19.2	**94.0**
18229	HA	11/28/00	50	12.3	13.6	**26.0**	50	19.2	24	**96.0**
18230	HA	11/28/00	50	13.6	15.6	**40.0**	50	24	30.1	**122.0**
18271	HA	11/28/00	50	15.6	17.1	**30.0**	50	30.1	34.7	**92.0**
18272	HA	11/28/00	50	17.1	18.5	**28.0**	50	34.7	39.4	**94.0**
18273	HA	11/28/00	50	18.5	19.9	**28.0**	50	39.4	44.2	**96.0**
18274	HA	11/28/00	50	19.9	21.3	**28.0**	50	1.5	6.2	**94.0**
18275	HA	11/28/00	50	21.3	23.3	**40.0**	50	6.2	12.4	**124.0**
18276	HA	11/28/00	50	23.3	24.8	**30.0**	50	12.4	17.3	**98.0**
18277	HA	11/28/00	50	24.8	26.2	**28.0**	50	17.3	22.2	**98.0**
18278	HA	11/28/00	50	26.2	27.9	**34.0**	50	22.2	27.7	**110.0**
18296	HA	11/28/00	50	28	29.5	**30.0**	50	27.7	32.7	**100.0**
18297	HA	11/28/00	50	29.5	31	**30.0**	50	32.7	37.6	**98.0**

H.a. Day 28

Alkalinity and Hardness

Sample Number	Type	Collection Date	Alkalinity Volume (ml)	Initial Titrant	Final Titrant	Alkalinity (mg/l)	Hardness Volume (ml)	Initial Titrant	Final Titrant	Hardness (mg/l)
18298	HA	11/28/00	50	31	33.2	**44.0**	50	37.6	44.4	**136.0**
18305	HA	11/28/00	50	33.2	35.5	**46.0**	50	1	8	**140.0**

Peak	Cup	Name	Type	Dil	Wt	Height	Calc. (mg/L)	Flags
55	32	16622HA27	U	1	1	50817	0.236212	
56	33	16623HA27	U	1	1	50304	0.233728	
57	34	16624HA27	U	1	1	43272	0.199644	
	35	16685HA27	U	1	1	44441	0.205312	
	36	16691HA27	U	1	1	50914	0.236685	
60	37	16727HA27	U	1	1	43247	0.199523	
61	38	17742HA27	U	1	1	55125	0.257094	
62	5	CCV (1) Correction - should be	U	1	1	1037877	5.020234	
63	1	CCB L.P. on	U	1	1	2913	0.004034	
B	0	Baseline	RB	1	1	0	-0.010084	BL
65	61	18228PP0	U	1	1	-9079	-0.054086	LO
66	62	18229PP0	U	1	1	4662	0.012514	
67	63	18230PP0	U	1	1	176497	0.845351	
68	64	18271PP0	U	1	1	-7852	-0.048142	LO
69	65	18272PP0	U	1	1	44260	0.204431	
70	66	18273PP0	U	1	1	203838	0.977864	
71	67	18274PP0	U	1	1	91117	0.431537	
72	68	18275PP0	U	1	1	1938868	9.387097	
73	69	18276PP0	U	1	1	445973	2.151428	
74	70	18277PP0	U	1	1	424342	2.046588	
75	5	CCV	U	1	1	1047728	5.067979	
[illegible]	1	CCB	U	1	1	2417	0.001630	
B	0	Baseline	RB	1	1	0	-0.010084	BL
78	71	18278PP0	U	1	1	81605	0.385433	
79	72	18296PP0	U	1	1	94778	0.449266	
80	73	18297PP0	U	1	1	70811	0.333116	
81	74	18298PP0	U	1	1	689744	3.332922	
82	75	18305PP0	U	1	1	665373	3.214804	
[illegible]	76	18228HA0	U	1	1	541	-0.007463	LO
	77	18229HA0	U	1	1	-730	-0.013620	LO
	78	18230HA0	U	1	1	150823	0.720914	
86	79	18271HA0	U	1	1	104	-0.009582	LO
87	80	18272HA0	U	1	1	55341	0.258138	
88	5	CCV	U	1	1	1054297	5.099815	
89	1	CCB	U	1	1	2817	0.003568	
B	0	Baseline	RB	1	1	0	-0.010084	BL
91	81	18273HA0	U	1	1	233251	1.120423	
92	82	18274HA0	U	1	1	88486	0.418782	
	83	18275HA0	U	1	1	1933199	9.359619	
94	84	18276HA0	U	1	1	383934	1.850741	
95	85	18277HA0	U	1	1	370180	1.784079	
96	86	18278HA0	U	1	1	56500	0.263757	
97	87	18296HA0	U	1	1	153548	0.734121	
98	88	18297HA0	U	1	1	66521	0.312324	
99	89	18298HA0	U	1	1	576358	2.783373	
100	90	18305HA0	U	1	1	603239	2.913656	
101	5	CCV	U	1	1	1058191	5.118690	
102	1	CCB	U	1	1	3508	0.006920	
B	0	Baseline	RB	1	1	0	-0.010084	BL
104	91	18228PP7	U	1	1	8441	0.030828	
105	92	18229PP7	U	1	1	-7489	-0.046234	LO
106	93	18230PP7	U	1	1	111178	0.528768	
107	94	18271PP7	U	1	1	-1501	-0.017360	LO
108	95	18272PP7	U	1	1	-5366	-0.036093	LO
109	96	18274PP7	U	1	1	14247	-0.058969	
[illegible]	97	18275PP7	U	1	1	531894	2.567868	
111	98	18276PP7	U	1	1	-1107	-0.015450	LO
112	99	18277PP7	U	1	1	-2983	-0.024543	LO
113	100	18278PP7	U	1	1	-539	-0.012697	LO

Hydrazine - Day 0 dw

Total Ammonia (mg/L)

Peak Table: ammonia

File name: A:\120500B.RST
Date: December 05, 2000
Operator: NVW

Peak	Cup	Name	Type	Dil	Wt	Height	Calc. (mg/L)	Flags
1	6	Sync	SYNC	1	1	992118	4.935741	
2	0	Carryover	CO	1	1	7263	0.026714	
3	0	Carryover	CO	1	1	295	-0.008015	LO
B	0	Baseline	RB	1	1	0	-0.009488	BL
B	0	Baseline	RB	1	1	0	-0.009488	BL
6	1	Cal 0	C	1	1	169	-0.008647	LO
7	2	Cal 1	C	1	1	42254	0.201129	
8	3	Cal 2	C	1	1	82932	0.403890	
9	4	Cal 3	C	1	1	205903	1.016839	
10	5	Cal 4	C	1	1	1004262	4.996275	
11	6	ICV	U	1	1	993480	4.942531	
12	0	Blank	U	1	1	712	-0.005941	LO
B	0	Baseline	RB	1	1	0	-0.009488	BL
14	7	MISINJECT	U	1	1	15311	0.066828	
15	1	ICB	U	1	1	-330	-0.011132	LO
16	31	18228HA28	U	1	1	5733	0.019088	
17	32	18229HA28	U	1	1	4379	0.012339	
18	33	18230HA28	U	1	1	886	-0.005070	LO
19	34	18271HA28	U	1	1	5421	0.017535	
20	35	18272HA28	U	1	1	1776	-0.000635	LO
21	36	18273HA28	U	1	1	159476	0.785422	
22	37	18274HA28	U	1	1	4315	0.012021	
23	38	18275HA28	U	1	1	9432	0.037527	
24	39	18276HA28	U	1	1	726	-0.005868	LO
[illegible]	40	18277HA28	U	1	1	3473	0.007822	
26	6	CCV	U	1	1	1013920	5.044415	
27	1	CCB	U	1	1	232	-0.008331	LO
B	0	Baseline	RB	1	1	0	-0.009488	BL
29	41	18278HA28	U	1	1	984	-0.004581	LO
30	42	18296HA28	U	1	1	-465	-0.011807	LO
31	43	18297HA28	U	1	1	91659	0.447388	
32	44	18298HA28	U	1	1	24684	0.113552	
33	45	18305HA28	U	1	1	2561	0.003279	
34	46	18420CT0	U	1	1	6257	0.021701	
35	47	18421CT0	U	1	1	11977	0.050213	
36	48	18422CT0	U	1	1	5410	0.017480	
37	49	18423CT0	U	1	1	60642	0.292782	
38	50	18425CT0	U	1	1	69098	0.334930	
39	6	CCV	U	1	1	1003144	4.990701	
40	1	CCB	U	1	1	117	-0.008902	LO
B	0	Baseline	RB	1	1	0	-0.009488	BL
42	51	18420HA10	U	1	1	3461	0.007764	
43	52	18421HA10	U	1	1	8773	0.034242	
44	53	18422HA10	U	1	1	4855	0.014713	
45	54	18423HA10	U	1	1	30865	0.144359	
46	55	18425HA10	U	1	1	34779	0.163867	
47	56	9/27/00 Nano	U	1	1	-978	-0.014361	LO
48	57	11/28/00 Nano	U	1	1	-832	-0.013636	LO
49	6	CCV	U	1	1	997724	4.963688	
50	1	CCB	U	1	1	563	-0.006681	LO
[illegible]	0	Baseline	RB	1	1	0	-0.009488	BL

Sediment Characterization

Project Description: 00049 SDG: 4806
Menzie-Cura Sauget Sediment Assessment

Sample Number	Sediment Visual Characterization
18228	Sand
18229	Sand
18230	EPA artificial control sediment (77% med. and fine sand; 17% kaolinite clay; 5% 0.5 mm-sieved peat; 1% CaCO3). Stored dry, then hydrated prior to addition to test chambers.
18271	Sand
18272	Coarse sand
18273	Sand, VOC odor, extra replicate for VOC analysis
18274	Coarse sand
18275	Soft mud, sulfide odor
18276	Sand, gravel, mud. Some pebbles
18277	Sand, gravel, some mud
18278	Sand, gravel, some pebbles
18296	Sand
18297	Sand, extra replicate for VOC analysis
18298	Mud
18305	Mud, organic debris

Sediments were loaded into test beakers on 10/30/00. Nominal 150 mL sediment per beaker covered with approximately 125 mL overlying water. All replicates for *Hyalella azteca* and *Pimephales promelas* chronic tests were loaded and allowed to sit overnight without overlying water renewal or aeration.

Entered by: jww Date: 10/30/00

Reviewer: _____ Date 12/20/00

Laboratory: Aquatec Biological Sciences, Inc. Williston, Vermont

Ha28dpkg

DAILY CHECKLIST FOR AUTOMATED DELIVERY
SEDIMENT TOXICITY TESTS

Week of October 29, 2000

ACTIVITY / DAY	Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Prior to noon fill reservoirs			✓	✓		✓	✓
Noon delivery cycle			MANUAL RENEWAL	MANUAL Renewal	MANUAL Renewal		
• splitter boxes filling?			1500	1600	1430	11:00	12:00 ✓
• syringes filling?			✓	✓	✓	✓	✓
• needles flowing?			✓	✓	✓	✓	✓
• beaker screens clear, flowing?			✓	✓	✓	✓	✓
• drainage to waste ok?			✓	✓	✓	✓	✓
• empty waste buckets?					✓	✓	✓
Test monitoring							
• test temperature ok?				✓		✓	✓
• D.O. ok?			✓	✓		✓	—
• check for floating organisms			✓	✓	PM	✓	✓
• feeding completed?			✓ Ha/Pp	AM Pp PM Ha Pp	AM Pp ✓ HA Pp	✓ Ha. AM ✓ P.P.	Ha. ✓ AM P.P. ✓ ✓
Additional activities							
Prior to midnight fill reservoirs *	--	--	--	--	--	--	--
Check sediment water supply			✓	✓	✓	✓	✓
Corrective Action / Comments				Incr. Temp to 1 Pp water bath			
Initials/Date			J 10/31/00	J 11/1/00	J 11/2/00	JG 11/3 RB 11/3	JG 11/4

Procedure: All operating systems listed above must be checked on a daily basis when sediment toxicity tests are in progress. Corrective action must be taken whenever appropriate. Document corrective action on this form. If project-specific documentation is required, write a brief description (on Project Documentation form) and include with the test data package.

Comments: * One daily renewal	Hyalella distributed 10/31/00 1615
	C. promelas distributed 10/31/00 1630

Reviewer: J Date 12/20/00

Laboratory: Aquatec Biological Sciences, Inc. Williston, Vermont

Ha28dpkg

DAILY CHECKLIST FOR AUTOMATED DELIVERY
SEDIMENT TOXICITY TESTS

Week of November 5, 2000

ACTIVITY / DAY	Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Prior to noon fill reservoirs	✓	✓	✓	✓	✓	✓	✓
Noon delivery cycle	Manual @ 11:30	Manual @ 11:30				Manual @ 11:20	
• splitter boxes filling?	✓	✓	✓	✓	✓	✓	✓
• syringes filling?	✓	✓	✓	✓	✓	✓	✓
• needles flowing?	✓	✓	✓	✓	✓	✓	✓
• beaker screens clear, flowing?	✓	✓	✓	✓	✓	✓	✓
• drainage to waste ok?	✓	✓	✓	✓	✓	✓	✓
• empty waste buckets?	✓	✓	✓	✓	✓ ✓	✓	✓
Test monitoring							
• test temperature ok?	✓	✓ ①	✓	✓	✓	✓	✓
• D.O. ok?	—	✓	—	✓	—	✓	—
• check for floating organisms	✓	✓	✓	✓	✓	✓	✓
• feeding completed?	Am ✓ Pm ✓	Am ✓ Pm ✓ 1630 σ	✓	✓	✓	✓	✓
Additional activities							
Prior to midnight fill reservoirs *	--	--	--	--	--	--	--
Check sediment water supply	✓	✓	✓	✓	✓	✓	✓
Corrective Action / Comments							
Initials/Date	11/5 jm	11/6 jm	JG 11/7	jm 11/8	JG 11/9	JG 11/10	JG 11/11

Procedure: All operating systems listed above must be checked on a daily basis when sediment toxicity tests are in progress. Corrective action must be taken whenever appropriate. Document corrective action on this form. If project-specific documentation is required, write a brief description (on Project Documentation form) and include with the test data package.

Comments: * One daily renewal
① Increased cart temp on P.p. sed. tests 11/6 jm

Reviewer: [signature] Date 12/20/00

Laboratory: Aquatec Biological Sciences, Inc. Williston, Vermont

Ha28dpkg

DAILY CHECKLIST FOR AUTOMATED DELIVERY
SEDIMENT TOXICITY TESTS

Week of November 12, 2000

ACTIVITY / DAY	Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Prior to noon fill reservoirs	✓	✓	✓	✓	✓	✓	✓

Noon delivery cycle

• splitter boxes filling?	✓	✓	✓	✓	✓	✓	✓
• syringes filling?	✓	✓	✓	✓	✓	✓	✓
• needles flowing?	✓	✓	✓	✓	✓	✓	✓
• beaker screens clear, flowing?	✓	✓	✓	✓	✓	✓	✓
• drainage to waste ok?	✓	✓	✓	✓	✓	✓	✓
• empty waste buckets?	✓	✓	✓	✓	✓	✓	✓

Test monitoring

• test temperature ok?	✓	✓	✓	✓	✓	✓	✓
• D.O. ok?	—	✓	—	✓	—	✓	—
• check for floating organisms	✓	✓	✓	✓	✓	✓	✓
• feeding completed?	✓	✓	✓	✓	✓	✓	✓

Additional activities

Prior to midnight fill reservoirs *	--	--	--	--	--	--	--
Check sediment water supply	✓	✓	✓	✓	✓	✓	✓

Corrective Action / Comments							
Initials/Date	jm 11/12	jm 11/13	jm 11/14	jm 11/15	jm 11/16	JG 11/17	JG 11/18

Procedure: All operating systems listed above must be checked on a daily basis when sediment toxicity tests are in progress. Corrective action must be taken whenever appropriate. Document corrective action on this form. If project-specific documentation is required, write a brief description (on Project Documentation form) and include with the test data package.

Comments: * One daily renewal

Reviewer: _____ Date 12/20/00

Laboratory: Aquatec Biological Sciences, Inc. Williston, Vermont

Ha28dpkg

DAILY CHECKLIST FOR AUTOMATED DELIVERY
SEDIMENT TOXICITY TESTS

Week of November 19, 2000

ACTIVITY / DAY	Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Prior to noon fill reservoirs	✓	✓	✓	✓	✓	✓	✓
Noon delivery cycle					11:00 JG		
• splitter boxes filling?	✓	✓	✓	✓	✓	✓	✓
• syringes filling?	✓	✓	✓	✓	✓	✓	✓
• needles flowing?	✓	✓	✓	✓	✓	✓	✓
• beaker screens clear, flowing?	✓	✓	✓	✓	✓	✓	✓
• drainage to waste ok?	✓	✓	✓	✓	✓	✓	✓
• empty waste buckets?	✓	✓	✓	✓	✓	✓	✓
Test monitoring							
• test temperature ok?	✓	✓	✓	✓	✓	✓	✓
• D.O. ok?	✓	✓	✓	✓	—	✓	—
• check for floating organisms	✓	✓	✓	✓	✓	✓	✓
• feeding completed?	✓	✓	✓	✓	✓	✓	✓
Additional activities							
Prior to midnight fill reservoirs *	-- ✓	-- ✓	-- ✓	-- ✓	-- ✓	-- ✓	-- ✓
Check sediment water supply							
Corrective Action / Comments							
Initials/Date	11/19 jm	11/20 jm	11/21 jm	JG 11/22	JG 11/23	JG 11/24	JG 11/25

Procedure: All operating systems listed above must be checked on a daily basis when sediment toxicity tests are in progress. Corrective action must be taken whenever appropriate. Document corrective action on this form. If project-specific documentation is required, write a brief description (on Project Documentation form) and include with the test data package.

Comments: * One daily renewal

Reviewer: _____ Date 12/20/00

Laboratory: Aquatec Biological Sciences, Inc. Williston, Vermont

Ha28dpkg

DAILY CHECKLIST FOR AUTOMATED DELIVERY
SEDIMENT TOXICITY TESTS

Week of November 26, 2000

ACTIVITY / DAY	Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Prior to noon fill reservoirs	✓	✓					
Noon delivery cycle							
• splitter boxes filling?	✓	✓					
• syringes filling?	✓	✓					
• needles flowing?	✓	✓					
• beaker screens clear, flowing?	✓	✓					
• drainage to waste ok?	✓	✓					
• empty waste buckets?	✓	✓					
Test monitoring							
• test temperature ok?	✓	✓					
• D.O. ok?	✓	✓					
• check for floating organisms	✓	✓					
• feeding completed?	✓	✓					
Additional activities							
Prior to midnight fill reservoirs *	-- ✓	-- ✓	--	--	--	--	--
Check sediment water supply	✓	✓					
Corrective Action / Comments							
Initials/Date	JM 11/26	JM 11/27					

Procedure: All operating systems listed above must be checked on a daily basis when sediment toxicity tests are in progress. Corrective action must be taken whenever appropriate. Document corrective action on this form. If project-specific documentation is required, write a brief description (on Project Documentation form) and include with the test data package.

Comments: * One daily renewal

Reviewer: _____ Date 12/20/00

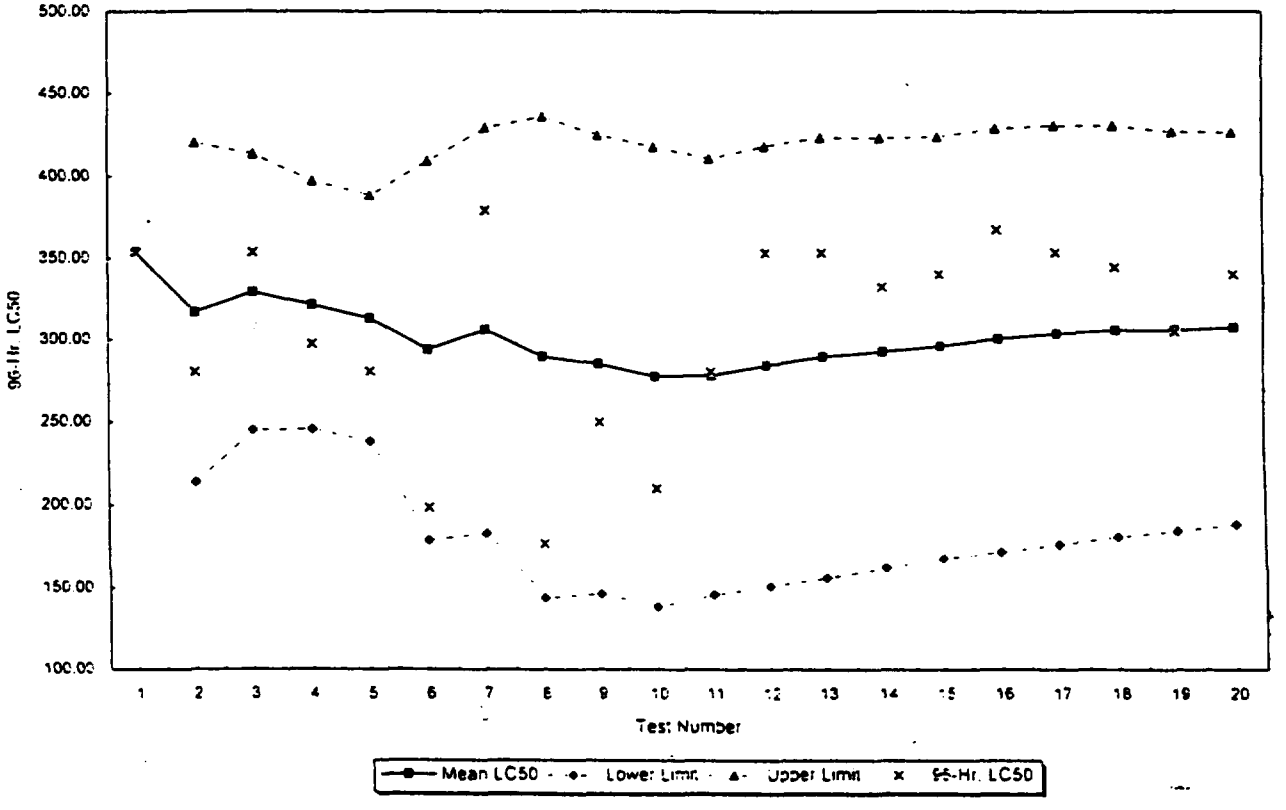
Laboratory: Aquatec Biological Sciences, Inc. Williston, Vermont

Ha28dpkg

Standard Reference Toxicant Control Charts

Reference Toxicant Control Chart
Hyalella azteca
in Potassium chloride (mg/L)

Test Number	Test Date	Organism Age (Days)	96-Hr. LC50	Mean LC50	Lower Limit	Upper Limit	Organism Source
1	02/19/99	9	353.553	353.55			Env. Consult & Testing
2	05/13/99	8	280.616	317.08	213.94	420.23	Env. Consult & Testing
3	06/21/99	12	353.553	329.24	245.02	413.46	Env. Consult & Testing
4	06/25/99	14	297.302	321.26	245.44	397.08	Env. Consult & Testing
5	06/26/99	10	280.616	313.13	238.06	388.18	Env. Consult & Testing
6	07/02/99	7	198.425	294.01	178.78	409.24	Env. Consult & Testing
7	07/07/99	8	378.929	306.14	182.91	429.37	Env. Consult & Testing
8	07/07/99	7	176.777	289.97	143.74	436.20	Aquatic Research Organisms
9	09/13/99	11	250.000	285.53	146.17	424.89	Aquatic Research Organisms
10	10/08/99	9	210.224	278.00	138.25	417.75	Aquatic Research Organisms
11	10/23/99	13	280.616	278.24	145.65	410.83	Aquatic Research Organisms
12	10/23/99	9	353.553	284.51	150.82	418.20	Aquatic Research Organisms
13	11/09/99	12	353.553	289.82	156.22	423.43	Aquatic Research Organisms
14	07/18/00	12	332.578	292.88	162.50	423.26	Aquatic Bio Systems
15	07/31/00	11	340.198	296.03	168.04	424.03	Aquatic Bio Systems
16	09/10/00	12	367.434	300.50	171.79	429.20	Aquatic Bio Systems
17	09/21/00	7	353.553	303.62	176.37	430.86	Aquatic Research Organisms
18	09/21/00	14	344.552	305.89	180.94	430.84	Aquatic Research Organisms
19	10/31/00	8	304.753	305.83	184.40	427.26	Aquatic Research Organisms
20	11/11/00	9	340.198	307.55	188.36	426.74	Aquatic Research Organisms



SEDIMENT TOXICITY TEST

VOC ANALYSIS

LABORATORY REPORTS

Woods Hole Group

Environmental Laboratories

ANALYTICAL REPORT

Prepared for:

Menzie Cura & Associates
One Courthouse Lane Suite 2
Chelmsford, MA 01824

Project:	Krummich
ETR:	00045202
Report Date:	12/04/2000

Certificates

Massachusetts MA030
Connecticut PH-0141
New Hampshire 220699
Rhode Island 64
New Jersey 59015
Maine MA030

CASE NARRATIVE

Woods Hole Group Environmental Laboratories

ETR: 45202
Project: Krummich

All analyses were performed according to Woods Hole Group's documented Standard Operating Procedures (SOPs), within holding time and with appropriate quality control measures except where noted. Blank correction of results is not performed in the laboratory for any parameter. Soil/sediment samples are reported on a dry weight basis unless otherwise noted.

The enclosed results of analyses are representative of the samples as received by the laboratory. Woods Hole Group makes no representations or certifications as to the method of sample collection, sample identification, or transporting/handling procedures used prior to the receipt of samples by Woods Hole Group. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved by: _____ Date: 12/5/10
Woods Hole Group Environmental Laboratories

Woods Hole Group Environmental Laboratories 375 Paramount Drive, Suite 2, Raynham, MA 02767-5150 Ph: 508-822-9300

Volatile Organics by GC/MS

Woods Hole Group

Client: **Menzie Cura & Associates**
Project: **Krummich**

Sample ID: **HA Day 28 SD PDA 5**
Sample Matrix: Sediment

ETR: 00045202
Lab Sample ID: 45202-01
Associated Blank: B2113002
Concentration Units: µg/Kg

Date Collected	Date Received	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
11/28/00	11/29/00	11/30/00	82.1	10.25	5	1	AL

Parameter			Parameter		
Chloromethane	1	U	Trichloroethene	4	
Vinyl chloride	1	U	1,2-Dichloropropane	1	U
Bromomethane	1	U	Bromodichloromethane	1	U
Chloroethane	1	U	2-Chloroethylvinyl ether	1	U
Trichlorofluoromethane	1	U	Methyl isobutyl ketone (MIBK)	6	
Acetone	64		cis-1,3-Dichloropropene	1	U
1,1-Dichloroethene	1	U	Toluene	37	
Carbon disulfide	1	U	trans-1,3-Dichloropropene	1	U
Methylene chloride	4	B	1,1,2-Trichloroethane	1	U
Methyl tert-butyl ether (MTBE)	1	U	2-Hexanone	1	U
trans-1,2-Dichloroethene	1	U	Tetrachloroethene	4	
1,1-Dichloroethane	1	U	Dibromochloromethane	1	U
Vinyl acetate	1	U	Chlorobenzene	86	
2-Butanone (MEK)	1	U	1,1,1,2-Tetrachloroethane	1	U
cis-1,2-Dichloroethene	1	U	Ethylbenzene	5	
Chloroform	2		p/m-Xylene	40	
1,1,1-Trichloroethane	1	U	o-Xylene	5	
Carbon tetrachloride	1	U	Styrene	1	U
Benzene	23		Bromoform	1	U
1,2-Dichloroethane	12				

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	107	78-118
Toluene-d8	101	87-113
4-Bromofluorobenzene	105	76-120

B - Found in associated blank as well as sample.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Volatile Organics by GC/MS

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045202
Lab Sample ID: 45202-02
Associated Blank: B2113002

Sample ID: **HA Day 28 SD PDA 9**
Sample Matrix: Sediment

Concentration Units: µg/Kg

Date Collected	Date Received	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
11/28/00	11/29/00	11/30/00	82	10.26	5	1	AL

Parameter			Parameter		
Chloromethane	1	U	Trichloroethene	1	U
Vinyl chloride	1	U	1,2-Dichloropropane	1	U
Bromomethane	1	U	Bromodichloromethane	1	U
Chloroethane	1	U	2-Chloroethylvinyl ether	1	U
Trichlorofluoromethane	1	U	Methyl isobutyl ketone (MIBK)	1	U
Acetone	3	J	cis-1,3-Dichloropropene	1	U
1,1-Dichloroethene	1	U	Toluene	1	
Carbon disulfide	1	U	trans-1,3-Dichloropropene	1	U
Methylene chloride	3	JB	1,1,2-Trichloroethane	1	U
Methyl tert-butyl ether (MTBE)	1	U	2-Hexanone	1	U
trans-1,2-Dichloroethene	1	U	Tetrachloroethene	1	U
1,1-Dichloroethane	1	U	Dibromochloromethane	1	U
Vinyl acetate	1	U	Chlorobenzene	11	
2-Butanone (MEK)	1	U	1,1,1,2-Tetrachloroethane	1	U
cis-1,2-Dichloroethene	1	U	Ethylbenzene	1	U
Chloroform	1		p/m-Xylene	2	
1,1,1-Trichloroethane	1	U	o-Xylene	1	U
Carbon tetrachloride	1	U	Styrene	1	U
Benzene	1	U	Bromoform	1	U
1,2-Dichloroethane	1				

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	109	78-118
Toluene-d8	100	87-113
4-Bromofluorobenzene	106	76-120

B - Found in associated blank as well as sample.
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Volatile Organics by GC/MS

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045202
Lab Sample ID: 45202-03
Associated Blank: B2113002

Sample ID: **Trip Blank**
Sample Matrix: Sediment

Concentration Units: µg/Kg

Date Collected	Date Received	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
11/28/00	11/29/00	11/30/00	100	5	5	1	AL

Parameter			Parameter		
Chloromethane	2	U	Trichloroethene	2	U
Vinyl chloride	2	U	1,2-Dichloropropane	2	U
Bromomethane	2	U	Bromodichloromethane	2	U
Chloroethane	2	U	2-Chloroethylvinyl ether	2	U
Trichlorofluoromethane	2	U	Methyl isobutyl ketone (MIBK)	2	U
Acetone	5	U	cis-1,3-Dichloropropene	2	U
1,1-Dichloroethene	2	U	Toluene	2	U
Carbon disulfide	2	U	trans-1,3-Dichloropropene	2	U
Methylene chloride	7	B	1,1,2-Trichloroethane	2	U
Methyl tert-butyl ether (MTBE)	2	U	2-Hexanone	2	U
trans-1,2-Dichloroethene	2	U	Tetrachloroethene	2	U
1,1-Dichloroethane	2	U	Dibromochloromethane	2	U
Vinyl acetate	2	U	Chlorobenzene	2	U
2-Butanone (MEK)	2	U	1,1,1,2-Tetrachloroethane	2	U
cis-1,2-Dichloroethene	2	U	Ethylbenzene	2	U
Chloroform	1	J	p/m-Xylene	4	U
1,1,1-Trichloroethane	2	U	o-Xylene	2	U
Carbon tetrachloride	2	U	Styrene	2	U
Benzene	2	U	Bromoform	2	U
1,2-Dichloroethane	2	U			

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	105	78-118
Toluene-d8	100	87-113
4-Bromofluorobenzene	96	76-120

B - Found in associated blank as well as sample.
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quality Control Results
Volatile Organics by GC/MS

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045202
Lab Sample ID: B2113002
Associated Blank: N/A

Sample ID: **Method Blank**
Sample Matrix: Sediment

Concentration Units: µg/Kg

Date Collected	Date Received	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	11/30/00	100	5	5	1	AL

Parameter			Parameter		
Chloromethane	2	U	Trichloroethene	2	U
Vinyl chloride	2	U	1,2-Dichloropropane	2	U
Bromomethane	2	U	Bromodichloromethane	2	U
Chloroethane	2	U	2-Chloroethylvinyl ether	2	U
Trichlorofluoromethane	2	U	Methyl isobutyl ketone (MIBK)	2	U
Acetone	5	U	cis-1,3-Dichloropropene	2	U
1,1-Dichloroethene	2	U	Toluene	2	U
Carbon disulfide	2	U	trans-1,3-Dichloropropene	2	U
Methylene chloride	4	J	1,1,2-Trichloroethane	2	U
Methyl tert-butyl ether (MTBE)	2	U	2-Hexanone	2	U
trans-1,2-Dichloroethene	2	U	Tetrachloroethene	2	U
1,1-Dichloroethane	2	U	Dibromochloromethane	2	U
Vinyl acetate	2	U	Chlorobenzene	2	U
2-Butanone (MEK)	2	U	1,1,1,2-Tetrachloroethane	2	U
cis-1,2-Dichloroethene	2	U	Ethylbenzene	2	U
Chloroform	2	U	p/m-Xylene	4	U
1,1,1-Trichloroethane	2	U	o-Xylene	2	U
Carbon tetrachloride	2	U	Styrene	2	U
Benzene	2	U	Bromoform	2	U
1,2-Dichloroethane	2	U			

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	100	78-118
Toluene-d8	100	87-113
4-Bromofluorobenzene	99	76-120

J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.
N/A - Not Applicable

375 Paramount Drive, Suite 2, Raynham, Massachusetts 02767, (508) 822-9300, Fax (508) 822-3288, whale@ultranet.com

Quality Control Results
Volatile Organics by GC/MS

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045202
Lab Sample ID: See Below
Associated Blank: N/A

Sample ID: **Method Blank**
Sample Matrix: Sediment

Concentration Units: µg/Kg

Date Collected	Date Received	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	11/30/00	100	5	5	1	AL

Lab Sample ID: B2113002 Q2113001 Q2113002

Parameter	Spike Added	Method Blank Conc.	Blank Spike Conc.	Blank Spike % Recovery	Blank Spike Dup. Conc.	Blank Spike Dup. % Recovery	% RPD	RPD Limit	% Recovery Limits
1,1-Dichloroethene	20	2 U	25	123	24	119	3	30	60-142
Benzene	20	2 U	22	110	22	110	0	30	56-143
Trichloroethene	20	2 U	23	115	23	114	1	30	76-127
Toluene	20	2 U	22	112	22	111	1	30	52-147
Chlorobenzene	20	2 U	22	109	22	109	0	30	62-132

U - The analyte was analyzed for but not detected at the sample specific level reported.
N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Spike added, percent recoveries and RPD values are reported based on the raw data.

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45202

Page ___ of ___

Aquatec Biological Sciences

Chain-of-Custody Record

273 Commerce Street
Williston, VT 05495
TEL: (802) 860-1638
FAX: (802) 658-3189

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)
Name: John Williams	Project Name: Minzie Cira Sauget	Carrier: FED EX	glass
Address: Aquatec Biol Sciences 273 Commerce St.	Project Number: 00049	Airbill Number: 8235 5398 9992	
City/State/Zip: Williston, VT 5495	Sampler Name(s): John Williams	Date Shipped:	40 ml Vials
Telephone: (802) 860-1638			
Facsimile: (802) 658-9863			
Contact Name: John Williams	Quote #: ____ Client Code: ____	Hand Delivered: ☐ Yes ☐ No	

	SAMPLE IDENTIFICATION (NOTE1)	COLLECTION DATE	COLLECTION TIME	GRAB	COMPOSITE	MATRIX	ANALYSIS/REMARKS (NOTE 2,3)	NUMBER OF CONTAINERS
1	18273 Ha Day 28 SD PDA 5	11/28/00	1130	X		Sediment	VOCs per Minzie Cira (Williams)	4
2	18297 Ha Day 28 SD PDA 9	11/28/00	1135	X				

	DATE	TIME		
Relinquished by: (signature)	11/28/00	1145	Received by: (signature)	TE FED EX
Relinquished by: (signature) FED Ex	11/29/2000	0745	Received by: (signature)	
Relinquished by: (signature)	DATE	TIME	Received by: (signature)	

NOTES TO SAMPLER(S): (1) Limit Sample Identification to 30 characters, if possible; (2) Indicate designated Lab Q.C. sample and type (e.g.:MS/MSD/REP) and provide sufficient sample; (3) Field duplicates are separate sample; (4) e.g.: 40 ml/glass/H_2SO_4

Notes to Lab:

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

Woods Hole Group

Environmental Laboratories

ANALYTICAL REPORT

Prepared for:

Menzie Cura & Associates
One Courthouse Lane Suite 2
Chelmsford, MA 01824

Project:	Krummich
ETR:	00045137
Report Date:	11/17/2000

Certificates

Massachusetts MA030
Connecticut PH-0141
New Hampshire 220699
Rhode Island 64
New Jersey 59015
Maine MA030

CASE NARRATIVE

Woods Hole Group Environmental Laboratories

ETR: 45137
Project: Krummich

All analyses were performed according to Woods Hole Group's documented Standard Operating Procedures (SOPs), within holding time and with appropriate quality control measures except where noted. Blank correction of results is not performed in the laboratory for any parameter. Soil/sediment samples are reported on a dry weight basis unless otherwise noted.

The enclosed results of analyses are representative of the samples as received by the laboratory. Woods Hole Group makes no representations or certifications as to the method of sample collection, sample identification, or transporting/handling procedures used prior to the receipt of samples by Woods Hole Group. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved by: _____ Date: 11/21/00
Woods Hole Group Environmental Laboratories

Woods Hole Group Environmental Laboratories 375 Paramount Drive, Suite 2, Raynham, MA 02767-5150 Ph: 508-822-9300

Volatile Organics by GC/MS

Woods Hole Group

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045137
Lab Sample ID: 45137-01
Associated Blank: B2111003

Sample ID: **PP Day 7 SD PDA 9**
Sample Matrix: Sediment

Concentration Units: µg/Kg

Date Collected	Date Received	Date Analyzed	Percent Solid	Methanol Volume (ml)	Sample Amount (g)	Extract Volume (ml)	Final Volume (ml)	Dilution Factor	Analyst
11/07/00	11/08/00	11/10/00	82.2	5	10.81	0.1	5	1	AL

Parameter			Parameter		
Chloromethane	56	U	Trichloroethene	56	U
Vinyl chloride	56	U	1,2-Dichloropropane	56	U
Bromomethane	56	JB	Bromodichloromethane	56	U
Chloroethane	56	U	2-Chloroethylvinyl ether	56	U
Trichlorofluoromethane	56	U	Methyl isobutyl ketone (MIBK)	56	U
Acetone	140	U	cis-1,3-Dichloropropene	56	U
1,1-Dichloroethene	56	U	Toluene	31	J
Carbon disulfide	56	U	trans-1,3-Dichloropropene	56	U
Methylene chloride	84	JB	1,1,2-Trichloroethane	56	U
Methyl tert-butyl ether (MTBE)	56	U	2-Hexanone	56	U
trans-1,2-Dichloroethene	56	U	Tetrachloroethene	56	U
1,1-Dichloroethane	56	U	Dibromochloromethane	56	U
Vinyl acetate	56	U	Chlorobenzene	200	
2-Butanone (MEK)	56	U	1,1,1,2-Tetrachloroethane	56	U
cis-1,2-Dichloroethene	56	U	Ethylbenzene	56	U
Chloroform	35	J	p/m-Xylene	33	J
1,1,1-Trichloroethane	56	U	o-Xylene	56	U
Carbon tetrachloride	56	U	Styrene	56	U
Benzene	56	U	Bromoform	56	U
1,2-Dichloroethane	56	U			

Surrogate	% Recovery	Acceptance Range (%)
2-Bromo-1-chloropropane	82	70-130
1-Chloro-2-fluorobenzene	88	70-130
1.4-Dichlorobutane	78	70-130
Dibromofluoromethane	94	78-118
Toluene-d8	110	87-113
Bromofluorobenzene	110	76-120

B - Found in associated blank as well as sample.
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Volatile Organics by GC/MS

Woods Hole Group

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045137
Lab Sample ID: 45137-02
Associated Blank: B2111003

Sample ID: **Trip Blank**
Sample Matrix: Sediment

Concentration Units: µg/Kg

Date Collected	Date Received	Date Analyzed	Percent Solid	Methanol Volume (ml)	Sample Amount (g)	Extract Volume (ml)	Final Volume (ml)	Dilution Factor	Analyst
11/07/00	11/08/00	11/10/00	100	5	5	0.1	5	1	AL

Parameter		
Chloromethane	100	U
Vinyl chloride	100	U
Bromomethane	67	JB
Chloroethane	100	U
Trichlorofluoromethane	100	U
Acetone	250	U
1,1-Dichloroethene	100	U
Carbon disulfide	100	U
Methylene chloride	140	JB
Methyl tert-butyl ether (MTBE)	100	U
trans-1,2-Dichloroethene	100	U
1,1-Dichloroethane	100	U
Vinyl acetate	100	U
2-Butanone (MEK)	100	U
cis-1,2-Dichloroethene	100	U
Chloroform	100	U
1,1,1-Trichloroethane	100	U
Carbon tetrachloride	100	U
Benzene	100	U
1,2-Dichloroethane	100	U

Parameter		
Trichloroethene	100	U
1,2-Dichloropropane	100	U
Bromodichloromethane	100	U
2-Chloroethylvinyl ether	100	U
Methyl isobutyl ketone (MIBK)	100	U
cis-1,3-Dichloropropene	100	U
Toluene	100	U
trans-1,3-Dichloropropene	100	U
1,1,2-Trichloroethane	100	U
2-Hexanone	100	U
Tetrachloroethene	100	U
Dibromochloromethane	100	U
Chlorobenzene	100	U
1,1,1,2-Tetrachloroethane	100	U
Ethylbenzene	100	U
p/m-Xylene	200	U
o-Xylene	100	U
Styrene	100	U
Bromoform	100	U

Surrogate	% Recovery	Acceptance Range (%)
2-Bromo-1-chloropropane	105	70-130
1-Chloro-2-fluorobenzene	118	70-130
1.4-Dichlorobutane	103	70-130
Dibromofluoromethane	94	78-118
Toluene-d8	107	87-113
Bromofluorobenzene	111	76-120

B - Found in associated blank as well as sample.
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

Quality Control Results
Volatile Organics by GC/MS

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045137
Lab Sample ID: B2111003
Associated Blank: N/A

Sample ID: **Method Blank**
Sample Matrix: Sediment

Concentration Units: µg/Kg

Date Collected	Date Received	Date Analyzed	Percent Solid	Methanol Volume (ml)	Sample Amount (g)	Extract Volume (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	11/10/00	100	5	5	0.1	5	1	AL

Parameter		
Chloromethane	100	U
Vinyl chloride	100	U
Bromomethane	110	
Chloroethane	100	U
Trichlorofluoromethane	100	U
Acetone	250	U
1,1-Dichloroethene	100	U
Carbon disulfide	100	U
Methylene chloride	130	J
Methyl tert-butyl ether (MTBE)	100	U
trans-1,2-Dichloroethene	100	U
1,1-Dichloroethane	100	U
Vinyl acetate	100	U
2-Butanone (MEK)	100	U
cis-1,2-Dichloroethene	100	U
Chloroform	100	U
1,1,1-Trichloroethane	100	U
Carbon tetrachloride	100	U
Benzene	100	U
1,2-Dichloroethane	100	U

Parameter		
Trichloroethene	100	U
1,2-Dichloropropane	100	U
Bromodichloromethane	100	U
2-Chloroethylvinyl ether	100	U
Methyl isobutyl ketone (MIBK)	100	U
cis-1,3-Dichloropropene	100	U
Toluene	100	U
trans-1,3-Dichloropropene	100	U
1,1,2-Trichloroethane	100	U
2-Hexanone	100	U
Tetrachloroethene	100	U
Dibromochloromethane	100	U
Chlorobenzene	100	U
1,1,1,2-Tetrachloroethane	100	U
Ethylbenzene	100	U
p/m-Xylene	200	U
o-Xylene	100	U
Styrene	100	U
Bromoform	100	U

Surrogate	% Recovery	Acceptance Range (%)
2-Bromo-1-chloropropane	106	70-130
1-Chloro-2-fluorobenzene	116	70-130
1,4-Dichlorobutane	99	70-130
Dibromofluoromethane	94	78-118
Toluene-d8	109	87-113
Bromofluorobenzene	111	76-120

J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

Quality Control Results
Volatile Organics by GC/MS

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045137
Lab Sample ID: See Below
Associated Blank: B2111003

Sample ID: **Method Blank/Blank Spike**
Sample Matrix: Sediment

Concentration Units: µg/Kg

Date Collected	Date Received	Date Analyzed	Percent Solid	Methanol Volume (ml)	Sample Amount (g)	Extract Volume (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	11/10/00	100	5	5	0.1	5	1	AL

Lab Sample ID: B2111003 Q2111001 Q2111002

Parameter	Method Blank Conc.	Blank Spike Conc.	Blank Spike % Recovery	Blank Spike Duplicate Conc.	Blank Spike Duplicate % Recovery	% RPD	RPD Limit	% Recovery Limits
1,1-Dichloroethene	100 U	960	96	1000	100	4	30	60-142
Benzene	100 U	1000	103	1100	107	3	30	56-143
Trichloroethene	100 U	1000	103	1100	108	5	30	76-127
Toluene	100 U	1100	108	1100	114	5	30	52-147
Chlorobenzene	100 U	1000	102	1100	107	5	30	62-132

U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are reported based on the raw data.

375 Paramount Drive, Suite 2, Raynham, Massachusetts 02767, (508) 822-9300, Fax (508) 822-3288, whale@ultranet.com

Woods Hole Group
Environmental Laboratories

Chain-of-Custody Record

375 Paramount Drive
Raynham, MA 02767

TEL: (508) 822-9300
FAX: (508) 822-3288

45137

PAGE ___ OF ___

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)
Name: John Williams	Regulatory Protocol:	Carrier: FED Ex	glass
Address: Aquatec Biological Services, 273 Commerce Street, Williston, VT 0495	For the State of:	Airbill Number:	
Telephone: (802) 860-1638	Project Name:	Date Shipped:	
Facsimile: (802) 8-7-9863	Project Number:	Quote #:	40 ml
Contact Name: John Williams	P.O. #		
	Sampler Name(s): John Williams		

TAT ___ 10 Day ___ 5 Day ___ 3 Day ___ 48 Hr ___ 24 Hr ___ Other

WHG LAB #	SAMPLE ID (NOTE 1)	COLLECTION DATE	COLLECTION TIME	COMPOSITE GRAB	MATRIX	ANALYSIS/REMARKS (NOTE 2, 3)	NUMBER OF CONTAINERS
-1	18297 Pp Day 7 SD PDA 9	11/7/00	11:40	X	Sediment	VOCs per Menzie Cura	4

Relinquished by: (signature)	DATE	TIME	Received by: (signature)
[signature]	11/7/00	1200	To Fed Ex
Relinquished by: (signature)	DATE	TIME	Received by: (signature)
FED EX	11/8/2000	0945	[signature]
Relinquished by: (signature)	DATE	TIME	Received for Laboratory by: (signature)

NOTES TO SAMPLER (S): (1) Limit Sample Identification to 6 characters, if possible; (2) Indicate designated Lab Q.C. sample and type (e.g.; MS/MSD/REP) and provide sufficient sample; (3) Field duplicates are separate sample; (4) e.g.; 40ml/glass/H_2SO_4

Notes to Lab: Samples packed in ice for shipping.

... changes. Please fax written changes to (508) 822-3288

Woods Hole Group

Environmental Laboratories

ANALYTICAL REPORT

Prepared for:

Menzie Cura & Associates
One Courthouse Lane Suite 2
Chelmsford, MA 01824

Project:	Krummich
ETR:	00045098
Report Date:	11/20/2000

Certificates
Massachusetts MA030
Connecticut PH-0141
New Hampshire 220699
Rhode Island 64
New Jersey 59015
Maine MA030

CASE NARRATIVE

Woods Hole Group Environmental Laboratories

ETR: 45098
Project: Krummich

All analyses were performed within holding time and with appropriate quality control measures except where noted. Blank correction of results is not performed in the laboratory for any parameter. Soil/sediment samples are reported on a dry weight basis unless otherwise noted.

Samples were received at Woods Hole Group on November 1, 2000 in a cooler containing ice. The cooler temperature was 10 °C that is above the acceptable range of 4 °C ± 2 °C. The client was notified.

Volatile Organic Analysis

1. Sample HA Day 0 SD PDA 5 (45098-02) was received with a visibly lower methanol volume than the other samples associated with this project. When the sample was spiked with extraction surrogate for analysis, the resulting recoveries were approximately double the expected recovery. The laboratory believes that the true methanol volume was approximately 2.5mL, which is half of the normal methanol volume of 5.0mL, thus causing the extraction surrogate recoveries to be approximately 2x the expected recovery. Please note that the analytical report for this sample has not been adjusted, as the true volume of methanol in the sample cannot be accurately determined.

The enclosed results of analyses are representative of the samples as received by the laboratory. Woods Hole Group makes no representations or certifications as to the method of sample collection, sample identification, or transporting/handling procedures used prior to the receipt of samples by Woods Hole Group. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved by: Edith Hutchinson Date: 11/21/00
Woods Hole Group Environmental Laboratories

F:\SHARED\NARRTEMP\MENCUR\45098.dot

Group Environmental Laboratories 375 Paramount Drive, Suite 2, Raynham, MA 02767-5150 Ph: 508-822-9300

Volatile Organics by GC/MS

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045098
Lab Sample ID: 45098-01
Associated Blank: B2110803

Sample ID: **PP Day 0 SD PDA 5**
Sample Matrix: Sediment

Concentration Units: µg/Kg

Date Collected	Date Received	Date Analyzed	Percent Solid	Methanol Volume (ml)	Sample Amount (g)	Extract Volume (ml)	Final Volume (ml)	Dilution Factor	Analyst
10/31/00	11/01/00	11/09/00	82.8	5	10.43	0.1	5	1	AL

Parameter			Parameter		
Chloromethane	58	U	Trichloroethene	58	U
Vinyl chloride	58	U	1,2-Dichloropropane	58	U
Bromomethane	58	U	Bromodichloromethane	58	U
Chloroethane	58	U	2-Chloroethylvinyl ether	58	U
Trichlorofluoromethane	58	U	Methyl isobutyl ketone (MIBK)	58	U
Acetone	900	B	cis-1,3-Dichloropropene	58	U
1,1-Dichloroethene	58	U	Toluene	190	
Carbon disulfide	58	U	trans-1,3-Dichloropropene	58	U
Methylene chloride	120	JB	1,1,2-Trichloroethane	58	U
Methyl tert-butyl ether (MTBE)	58	U	2-Hexanone	58	U
trans-1,2-Dichloroethene	58	U	Tetrachloroethene	58	U
1,1-Dichloroethane	58	U	Dibromochloromethane	58	U
Vinyl acetate	58	U	Chlorobenzene	420	
2-Butanone (MEK)	79	B	1,1,1,2-Tetrachloroethane	58	U
cis-1,2-Dichloroethene	58	U	Ethylbenzene	58	U
Chloroform	46	JB	p/m-Xylene	160	
1,1,1-Trichloroethane	58	U	o-Xylene	58	U
Carbon tetrachloride	58	U	Styrene	58	U
Benzene	120		Bromoform	58	U
1,2-Dichloroethane	83				

Surrogate	% Recovery	Acceptance Range (%)
2-Bromo-1-chloropropane	72	70-130
1-Chloro-2-fluorobenzene	85	70-130
1,4-Dichlorobutane	75	70-130
Dibromofluoromethane	98	78-118
Toluene-d8	99	87-113
Bromofluorobenzene	106	76-120

B - Found in associated blank
J - Estimated value, below o
U - The analyte was analy
level reported.

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Woods Hole

Volatile Organics by GC/MS

Woods Hole Group

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045098
Lab Sample ID: 45098-02
Associated Blank: B2110603

Sample ID: **HA Day 0 SD PDA 5**
Sample Matrix: Sediment
Concentration Units: µg/Kg

Date Collected	Date Received	Date Analyzed	Percent Solid	Methanol Volume (ml)	Sample Amount (g)	Extract Volume (ml)	Final Volume (ml)	Dilution Factor	Analyst
10/31/00	11/01/00	11/07/00	83.3	5	6.8	0.1	5	1	AL

Parameter			Parameter		
Chloromethane	88	U	Trichloroethene	88	U
Vinyl chloride	88	U	1,2-Dichloropropane	88	U
Bromomethane	88	U	Bromodichloromethane	88	U
Chloroethane	88	U	2-Chloroethylvinyl ether	88	U
Trichlorofluoromethane	88	U	Methyl isobutyl ketone (MIBK)	56	J
Acetone	1800		cis-1,3-Dichloropropene	88	U
1,1-Dichloroethene	88	U	Toluene	300	
Carbon disulfide	88	U	trans-1,3-Dichloropropene	88	U
Methylene chloride	200	JB	1,1,2-Trichloroethane	88	U
Methyl tert-butyl ether (MTBE)	88	U	2-Hexanone	88	U
trans-1,2-Dichloroethene	88	U	Tetrachloroethene	88	U
1,1-Dichloroethane	88	U	Dibromochloromethane	88	U
Vinyl acetate	88	U	Chlorobenzene	760	
2-Butanone (MEK)	350	B	1,1,1,2-Tetrachloroethane	88	U
cis-1,2-Dichloroethene	88	U	Ethylbenzene	88	U
Chloroform	69	JB	p/m-Xylene	250	
1,1,1-Trichloroethane	88	U	o-Xylene	88	U
Carbon tetrachloride	88	U	Styrene	88	U
Benzene	140		Bromoform	88	U
1,2-Dichloroethane	130				

Surrogate	% Recovery		Acceptance Range (%)
2-Bromo-1-chloropropane	179	§	70-130
1-Chloro-2-fluorobenzene	204	§	70-130
1,4-Dichlorobutane	191	§	70-130
Dibromofluoromethane	100		78-118
Toluene-d8	101		87-113
Bromofluorobenzene	109		76-120

§ - Surrogate value outside of acceptable range.
B - Found in associated blank as well as sample.
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

Volatile Organics by GC/MS

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045098
Lab Sample ID: 45098-03
Associated Blank: B2110603

Sample ID: **PP Day 0 SD PDA 9**
Sample Matrix: Sediment

Concentration Units: µg/Kg

Date Collected	Date Received	Date Analyzed	Percent Solid	Methanol Volume (ml)	Sample Amount (g)	Extract Volume (ml)	Final Volume (ml)	Dilution Factor	Analyst
10/31/00	11/01/00	11/07/00	83.3	5	10.46	0.1	5	1	AL

Parameter			Parameter		
Chloromethane	57	U	Trichloroethene	57	U
Vinyl chloride	57	U	1,2-Dichloropropane	57	U
Bromomethane	57	U	Bromodichloromethane	57	U
Chloroethane	57	U	2-Chloroethylvinyl ether	57	U
Trichlorofluoromethane	57	U	Methyl isobutyl ketone (MIBK)	57	U
Acetone	**180**		cis-1,3-Dichloropropene	57	U
1,1-Dichloroethene	57	U	Toluene	**53**	J
Carbon disulfide	57	U	trans-1,3-Dichloropropene	57	U
Methylene chloride	**110**	JB	1,1,2-Trichloroethane	57	U
Methyl tert-butyl ether (MTBE)	57	U	2-Hexanone	57	U
trans-1,2-Dichloroethene	57	U	Tetrachloroethene	57	U
1,1-Dichloroethane	57	U	Dibromochloromethane	57	U
Vinyl acetate	57	U	Chlorobenzene	**380**	
2-Butanone (MEK)	**90**	B	1,1,1,2-Tetrachloroethane	57	U
cis-1,2-Dichloroethene	57	U	Ethylbenzene	57	U
Chloroform	**41**	JB	p/m-Xylene	**58**	J
1,1,1-Trichloroethane	57	U	o-Xylene	57	U
Carbon tetrachloride	57	U	Styrene	57	U
Benzene	57	U	Bromoform	57	U
1,2-Dichloroethane	**46**	J			

Surrogate	% Recovery	Acceptance Range (%)
2-Bromo-1-chloropropane	71	70-130
1-Chloro-2-fluorobenzene	80	70-130
1,4-Dichlorobutane	75	70-130
Dibromofluoromethane	97	78-118
Toluene-d8	101	87-113
Bromofluorobenzene	107	76-120

B - Found in associated blank as well as sample.
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Volatile Organics by GC/MS

Woods Hole Group

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045098
Lab Sample ID: 45098-04
Associated Blank: B2110603

Sample ID: **HA Day 0 SD PDA 9**
Sample Matrix: Sediment
Concentration Units: µg/Kg

Date Collected	Date Received	Date Analyzed	Percent Solid	Methanol Volume (ml)	Sample Amount (g)	Extract Volume (ml)	Final Volume (ml)	Dilution Factor	Analyst
10/31/00	11/01/00	11/07/00	81.7	5	9.79	0.1	5	1	AL

Parameter			Parameter		
Chloromethane	63	U	Trichloroethene	63	U
Vinyl chloride	63	U	1,2-Dichloropropane	63	U
Bromomethane	33	JB	Bromodichloromethane	63	U
Chloroethane	63	U	2-Chloroethylvinyl ether	63	U
Trichlorofluoromethane	63	U	Methyl isobutyl ketone (MIBK)	63	U
Acetone	200		cis-1,3-Dichloropropene	63	U
1,1-Dichloroethene	63	U	Toluene	32	J
Carbon disulfide	63	U	trans-1,3-Dichloropropene	63	U
Methylene chloride	110	JB	1,1,2-Trichloroethane	63	U
Methyl tert-butyl ether (MTBE)	63	U	2-Hexanone	63	U
trans-1,2-Dichloroethene	63	U	Tetrachloroethene	63	U
1,1-Dichloroethane	63	U	Dibromochloromethane	63	U
Vinyl acetate	63	U	Chlorobenzene	260	
2-Butanone (MEK)	99	B	1,1,1,2-Tetrachloroethane	63	U
cis-1,2-Dichloroethene	63	U	Ethylbenzene	63	U
Chloroform	44	JB	p/m-Xylene	37	J
1,1,1-Trichloroethane	63	U	o-Xylene	63	U
Carbon tetrachloride	63	U	Styrene	63	U
Benzene	63	U	Bromoform	63	U
1,2-Dichloroethane	37	J			

Surrogate	% Recovery	Acceptance Range (%)
2-Bromo-1-chloropropane	72	70-130
1-Chloro-2-fluorobenzene	83	70-130
1.4-Dichlorobutane	77	70-130
Dibromofluoromethane	98	78-118
Toluene-d8	100	87-113
Bromofluorobenzene	108	76-120

B - Found in associated blank as well as sample.
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

Volatile Organics by GC/MS

Woods Hole Group

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045098
Lab Sample ID: 45098-05
Associated Blank: B2110603

Sample ID: **Trip Blank**
Sample Matrix: Sediment
Concentration Units: µg/Kg

Date Collected	Date Received	Date Analyzed	Percent Solid	Methanol Volume (ml)	Sample Amount (g)	Extract Volume (ml)	Final Volume (ml)	Dilution Factor	Analyst
10/31/00	11/01/00	11/06/00	100	5	5	0.1	5	1	AL

Parameter			Parameter		
Chloromethane	100	U	Trichloroethene	100	U
Vinyl chloride	100	U	1,2-Dichloropropane	100	U
Bromomethane	100	U	Bromodichloromethane	100	U
Chloroethane	100	U	2-Chloroethylvinyl ether	100	U
Trichlorofluoromethane	100	U	Methyl isobutyl ketone (MIBK)	100	U
Acetone	250	U	cis-1,3-Dichloropropene	100	U
1,1-Dichloroethene	100	U	Toluene	100	U
Carbon disulfide	100	U	trans-1,3-Dichloropropene	100	U
Methylene chloride	140	JB	1,1,2-Trichloroethane	100	U
Methyl tert-butyl ether (MTBE)	100	U	2-Hexanone	100	U
trans-1,2-Dichloroethene	100	U	Tetrachloroethene	100	U
1,1-Dichloroethane	100	U	Dibromochloromethane	100	U
Vinyl acetate	100	U	Chlorobenzene	100	U
2-Butanone (MEK)	170	B	1,1,1,2-Tetrachloroethane	100	U
cis-1,2-Dichloroethene	100	U	Ethylbenzene	100	U
Chloroform	75	JB	p/m-Xylene	200	U
1,1,1-Trichloroethane	100	U	o-Xylene	100	U
Carbon tetrachloride	100	U	Styrene	100	U
Benzene	100	U	Bromoform	100	U
1,2-Dichloroethane	100	U			

Surrogate	% Recovery	Acceptance Range (%)
2-Bromo-1-chloropropane	92	70-130
1-Chloro-2-fluorobenzene	108	70-130
1,4-Dichlorobutane	94	70-130
Dibromofluoromethane	95	78-118
Toluene-d8	101	87-113
Bromofluorobenzene	105	76-120

B - Found in associated blank as well as sample.
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quality Control Results
Volatile Organics by GC/MS

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045098
Lab Sample ID: B2110603
Associated Blank: N/A
Concentration Units: µg/Kg

Sample ID: **Method Blank**
Sample Matrix: Sediment

Date Collected	Date Received	Date Analyzed	Percent Solid	Methanol Volume (ml)	Sample Amount (g)	Extract Volume (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	11/06/00	100	5	5	0.1	5	1	AL

Parameter		
Chloromethane	67	J
Vinyl chloride	100	U
Bromomethane	87	J
Chloroethane	100	U
Trichlorofluoromethane	100	U
Acetone	250	U
1,1-Dichloroethene	100	U
Carbon disulfide	100	U
Methylene chloride	180	J
Methyl tert-butyl ether (MTBE)	100	U
trans-1,2-Dichloroethene	100	U
1,1-Dichloroethane	100	U
Vinyl acetate	100	U
2-Butanone (MEK)	290	
cis-1,2-Dichloroethene	100	U
Chloroform	56	J
1,1,1-Trichloroethane	100	U
Carbon tetrachloride	100	U
Benzene	100	U
1,2-Dichloroethane	100	U

Parameter		
Trichloroethene	100	U
1,2-Dichloropropane	100	U
Bromodichloromethane	100	U
2-Chloroethylvinyl ether	100	U
Methyl isobutyl ketone (MIBK)	100	U
cis-1,3-Dichloropropene	100	U
Toluene	100	U
trans-1,3-Dichloropropene	100	U
1,1,2-Trichloroethane	100	U
2-Hexanone	100	U
Tetrachloroethene	100	U
Dibromochloromethane	100	U
Chlorobenzene	100	U
1,1,1,2-Tetrachloroethane	100	U
Ethylbenzene	100	U
p/m-Xylene	200	U
o-Xylene	100	U
Styrene	100	U
Bromoform	100	U

Surrogate	% Recovery	Acceptance Range (%)
2-Bromo-1-chloropropane	104	70-130
1-Chloro-2-fluorobenzene	120	70-130
1,4-Dichlorobutane	108	70-130
Dibromofluoromethane	96	78-118
Toluene-d8	102	87-113
Bromofluorobenzene	109	76-120

J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quality Control Results
Volatile Organics by GC/MS

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045098
Lab Sample ID: B2110803
Associated Blank: N/A

Sample ID: **Method Blank**
Sample Matrix: Sediment

Concentration Units: µg/Kg

Date Collected	Date Received	Date Analyzed	Percent Solid	Methanol Volume (ml)	Sample Amount (g)	Extract Volume (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	11/08/00	100	5	5	0.1	5	1	AL

Parameter		
Chloromethane	100	U
Vinyl chloride	100	U
Bromomethane	100	U
Chloroethane	100	U
Trichlorofluoromethane	100	U
Acetone	140	J
1,1-Dichloroethene	100	U
Carbon disulfide	100	U
Methylene chloride	210	J
Methyl tert-butyl ether (MTBE)	100	U
trans-1,2-Dichloroethene	100	U
1,1-Dichloroethane	100	U
Vinyl acetate	100	U
2-Butanone (MEK)	270	
cis-1,2-Dichloroethene	100	U
Chloroform	56	J
1,1,1-Trichloroethane	100	U
Carbon tetrachloride	100	U
Benzene	100	U
1,2-Dichloroethane	100	U

Parameter		
Trichloroethene	100	U
1,2-Dichloropropane	100	U
Bromodichloromethane	100	U
2-Chloroethylvinyl ether	100	U
Methyl isobutyl ketone (MIBK)	100	U
cis-1,3-Dichloropropene	100	U
Toluene	100	U
trans-1,3-Dichloropropene	100	U
1,1,2-Trichloroethane	100	U
2-Hexanone	100	U
Tetrachloroethene	100	U
Dibromochloromethane	100	U
Chlorobenzene	100	U
1,1,1,2-Tetrachloroethane	100	U
Ethylbenzene	100	U
p/m-Xylene	200	U
o-Xylene	100	U
Styrene	100	U
Bromoform	100	U

Surrogate	% Recovery	Acceptance Range (%)
2-Bromo-1-chloropropane	116	70-130
1-Chloro-2-fluorobenzene	126	70-130
1,4-Dichlorobutane	109	70-130
Dibromofluoromethane	95	78-118
Toluene-d8	108	87-113
Bromofluorobenzene	106	76-120

J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quality Control Results
Volatile Organics by GC/MS

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045098
Lab Sample ID: See Below
Associated Blank: B2110603

Sample ID: **Method Blank/Blank Spike**
Sample Matrix: Sediment

Concentration Units: µg/Kg

Date Collected	Date Received	Date Analyzed	Percent Solid	Methanol Volume (ml)	Sample Amount (g)	Extract Volume (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	11/06/00	100	5	5	0.1	5	1	AL

Lab Sample ID:		B2110603	Q2110601		Q2110602				
Parameter	Spike Added	Method Blank Conc.	Blank Spike Conc.	Blank Spike % Recovery	Blank Spike Dup. Conc.	Blank Spike Dup. % Recovery	% RPD	RPD Limit	% Recovery Limits
1,1-Dichloroethene	20	100 U	890	89	880	88	1	30	60-142
Benzene	20	100 U	1000	104	1000	104	0	30	56-143
Trichloroethene	20	100 U	1000	104	1000	104	0	30	76-127
Toluene	20	100 U	1100	106	1100	106	0	30	52-147
Chlorobenzene	20	100 U	1100	108	1100	110	2	30	62-132

U - The analyte was analyzed for but not detected at the sample specific level reported.
N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are reported based on the raw data.

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Quality Control Results
Volatile Organics by GC/MS

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045098
Lab Sample ID: See Below
Associated Blank: B2110803

Sample ID: **Method Blank/Blank Spike**
Sample Matrix: Sediment

Concentration Units: µg/Kg

Date Collected	Date Received	Date Analyzed	Percent Solid	Methanol Volume (ml)	Sample Amount (g)	Extract Volume (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	11/08/00	100	5	5	0.1	5	1	AL

Lab Sample ID: B2110803 Q2110801 Q2110802

Parameter	Spike Added	Method Blank Conc.	Blank Spike Conc.	Blank Spike % Recovery	Blank Spike Dup. Conc.	Blank Spike Dup. % Recovery	% RPD	RPD Limit	% Recovery Limits
1,1-Dichloroethene	20	100 U	940	94	1000	102	8	30	60-142
Benzene	20	100 U	1000	101	1100	107	6	30	56-143
Trichloroethene	20	100 U	1000	104	1100	110	5	30	76-127
Toluene	20	100 U	1100	112	1200	115	3	30	52-147
Chlorobenzene	20	100 U	1000	104	1100	111	6	30	62-132

U - The analyte was analyzed for but not detected at the sample specific level reported.
N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are reported based on the raw data.

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Chain-of-Custody Record

Woods Hole Group Environmental Laboratories
375 Paramount Drive
Raynham, MA 02767
TEL: (508) 822-9300
FAX: (508) 822-3288

45098

PAGE 1 OF 1

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)
Name: John Williams Address: Aquatic Biological Sciences 73 Commerce Street Williston, VT 05495 Telephone: (802) 860 1638 Facsimile: (802) 859-9863 Contact Name: John Williams	Regulatory Protocol: For the State of: Project Name: SAUGET SED TOX Project Number: P.O. # Sampler Name(s): John Williams For Ted Wickwire / Menzie Cura	Carrier: FED EX Airbill Number: 8235 5398 9960 Date Shipped: 10/31/00 Quote #:	8 glass ml vials

TAT ___ 10 Day ___ 5 Day ___ 3 Day ___ 48 Hr ___ 24 Hr ___ Other

WHG LAB #	SAMPLE ID (NOTE 1)	COLLECTION DATE	COLLECTION TIME	COMPOSITE GRAB	MATRIX	ANALYSIS/REMARKS (NOTE 2, 3)	NUMBER OF CONTAINERS
-1	18273 PP Day 0 SD PDA 5	10/31/00	1325	X	Sediment	VOCs per Menzie Cura	
-2	18273 HA Day 0 SD PDA 5	10/31/00	1345	X			
-3	18297 PP Day 0 SD PDA 9	10/31/00	1355	X			
-4	18297 HA Day 0 SD PDA 9	10/31/00	1405	X			
-5	TRIP Blank						

Relinquished by: (signature)	DATE	TIME	Received by: (signature)
[signature]	10/31/00	1430	To FED EX
Relinquished by: (signature)	DATE	TIME	Received by: (signature)
FED Ex	11/1/2000	0950	[signature]
Relinquished by: (signature)	DATE	TIME	Received for Laboratory by: (signature)

NOTES TO SAMPLER (S): (1) Limit Sample Identification to 6 characters, if possible; (2) Indicate designated Lab Q.C. sample and type (e.g.; MS/MSD/REP) and provide sufficient sample; (3) Field duplicates are separate sample; (4) e.g.; 40ml/glass/H_2SO_4

Notes to Lab: Overlying water decanted prior to sampling sediment from test beakers. After VOC sampling, overlying water replaced. VOC samples placed in ice for shipping.

Woods Hole Group

Environmental Laboratories

ANALYTICAL REPORT

Prepared for:

Menzie Cura & Associates
One Courthouse Lane Suite 2
Chelmsford, MA 01824

Project: Krummich

ETR: 00045120

Report Date:

Certificates

Massachusetts MA030
Connecticut PH-0141
New Hampshire 220699
Rhode Island 64
New Jersey 59015
Maine MA030

CASE NARRATIVE

Woods Hole Group Environmental Laboratories

ETR: 45120
Project: Krummich

All analyses were performed within holding time and with appropriate quality control measures except where noted. Blank correction of results is not performed in the laboratory for any parameter. Soil/sediment samples are reported on a dry weight basis unless otherwise noted.

Samples were received at Woods Hole Group on November 4, 2000 in a cooler containing ice. The cooler temperature was 10 °C that is above the acceptable range of 4 °C ± 2 °C. The client was notified.

Volatile Organic Analysis

1. Woods Hole Group inadvertently sent a water trip blank to the client which was submitted with sample PP Day 3 SD PDA 5 (45120-01). The trip blank was analyzed at no charge.

The enclosed results of analyses are representative of the samples as received by the laboratory. Woods Hole Group makes no representations or certifications as to the method of sample collection, sample identification, or transporting/handling procedures used prior to the receipt of samples by Woods Hole Group. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved by: _____ Date: 11/21/00
Woods Hole Group Environmental Laboratories

Woods Hole Group Environmental Laboratories 375 Paramount Drive, Suite 2, Raynham, MA 02767-5150 Ph: 508-822-9300

Volatile Organics by GC/MS

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045120
Lab Sample ID: 45120-01
Associated Blank: B2111003

Sample ID: **PP Day 3 SD PDA 5**
Sample Matrix: Sediment

Concentration Units: µg/Kg

Date Collected	Date Received	Date Analyzed	Percent Solid	Methanol Volume (ml)	Sample Amount (g)	Extract Volume (ml)	Final Volume (ml)	Dilution Factor	Analyst
11/03/00	11/04/00	11/10/00	82.6	5	10.12	0.1	5	1	AL

Parameter			Parameter		
Chloromethane	60	U	Trichloroethene	60	U
Vinyl chloride	60	U	1,2-Dichloropropane	60	U
Bromomethane	82	B	Bromodichloromethane	60	U
Chloroethane	60	U	2-Chloroethylvinyl ether	60	U
Trichlorofluoromethane	60	U	Methyl isobutyl ketone (MIBK)	60	U
Acetone	920		cis-1,3-Dichloropropene	60	U
1,1-Dichloroethene	60	U	Toluene	260	
Carbon disulfide	60	U	trans-1,3-Dichloropropene	60	U
Methylene chloride	97	JB	1,1,2-Trichloroethane	60	U
Methyl tert-butyl ether (MTBE)	60	U	2-Hexanone	60	U
trans-1,2-Dichloroethene	60	U	Tetrachloroethene	60	U
1,1-Dichloroethane	60	U	Dibromochloromethane	60	U
Vinyl acetate	60	U	Chlorobenzene	570	
2-Butanone (MEK)	60	U	1,1,1,2-Tetrachloroethane	60	U
cis-1,2-Dichloroethene	60	U	Ethylbenzene	30	J
Chloroform	42	J	p/m-Xylene	200	
1,1,1-Trichloroethane	60	U	o-Xylene	60	U
Carbon tetrachloride	60	U	Styrene	60	U
Benzene	140		Bromoform	60	U
1,2-Dichloroethane	90				

Surrogate	% Recovery	Acceptance Range (%)
2-Bromo-1-chloropropane	78	70-130
1-Chloro-2-fluorobenzene	85	70-130
1,4-Dichlorobutane	76	70-130
Dibromofluoromethane	95	78-118
Toluene-d8	110	87-113
Bromofluorobenzene	111	76-120

B - Found in associated blank as well as sample.
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

Volatile Organics by GC/MS

Woods Hole Group

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045120
Lab Sample ID: 45120-02
Associated Blank: B1110802

Sample ID: **Trip Blank**
Sample Matrix: Water

Concentration Units: µg/L

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
11/03/00	11/04/00	11/08/00	5	5	1	JAD

Parameter			Parameter		
Chloromethane	2	U	Trichloroethene	2	U
Vinyl chloride	2	U	1,2-Dichloropropane	2	U
Bromomethane	2	U	Bromodichloromethane	2	U
Chloroethane	2	U	2-Chloroethylvinyl ether	2	U
Trichlorofluoromethane	2	U	Methyl isobutyl ketone (MIBK)	2	U
Acetone	5	U	cis-1,3-Dichloropropene	2	U
1,1-Dichloroethene	2	U	Toluene	2	U
Carbon disulfide	2	U	trans-1,3-Dichloropropene	2	U
Methylene chloride	5	U	1,1,2-Trichloroethane	2	U
Methyl tert-butyl ether (MTBE)	2	U	2-Hexanone	2	U
trans-1,2-Dichloroethene	2	U	Tetrachloroethene	2	U
1,1-Dichloroethane	2	U	Dibromochloromethane	2	U
Vinyl acetate	2	U	Chlorobenzene	2	U
2-Butanone (MEK)	2	U	1,1,1,2-Tetrachloroethane	2	U
cis-1,2-Dichloroethene	2	U	Ethylbenzene	2	U
Chloroform	2	U	p/m-Xylene	4	U
1,1,1-Trichloroethane	2	U	o-Xylene	2	U
Carbon tetrachloride	2	U	Styrene	2	U
Benzene	2	U	Bromoform	2	U
1,2-Dichloroethane	2	U			

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	99	86-116
Toluene-d8	99	87-111
Bromofluorobenzene	96	79-112

U - The analyte was analyzed for but not detected at the sample specific level reported.

Quality Control Results
Volatile Organics by GC/MS

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045120
Lab Sample ID: B1110802
Associated Blank: N/A

Sample ID: **Method Blank**
Sample Matrix: Water

Concentration Units: µg/L

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	11/08/00	5	5	1	JAD

Parameter			Parameter		
Chloromethane	2	U	Trichloroethene	2	U
Vinyl chloride	2	U	1,2-Dichloropropane	2	U
Bromomethane	2	U	Bromodichloromethane	2	U
Chloroethane	2	U	2-Chloroethylvinyl ether	2	U
Trichlorofluoromethane	2	U	Methyl isobutyl ketone (MIBK)	2	U
Acetone	4	J	cis-1,3-Dichloropropene	2	U
1,1-Dichloroethene	2	U	Toluene	2	U
Carbon disulfide	2	U	trans-1,3-Dichloropropene	2	U
Methylene chloride	5	U	1,1,2-Trichloroethane	2	U
Methyl tert-butyl ether (MTBE)	2	U	2-Hexanone	2	U
trans-1,2-Dichloroethene	2	U	Tetrachloroethene	2	U
1,1-Dichloroethane	2	U	Dibromochloromethane	2	U
Vinyl acetate	2	U	Chlorobenzene	2	U
2-Butanone (MEK)	2	U	1,1,1,2-Tetrachloroethane	2	U
cis-1,2-Dichloroethene	2	U	Ethylbenzene	2	U
Chloroform	2	U	p/m-Xylene	4	U
1,1,1-Trichloroethane	2	U	o-Xylene	2	U
Carbon tetrachloride	2	U	Styrene	2	U
Benzene	2	U	Bromoform	2	U
1,2-Dichloroethane	2	U			

Surrogate	% Recovery	Acceptance Range (%)
Dibromofluoromethane	98	86-116
Toluene-d8	99	87-111
Bromofluorobenzene	96	79-112

J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

Quality Control Results
Volatile Organics by GC/MS

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045120
Lab Sample ID: B2111003
Associated Blank: N/A

Sample ID: **Method Blank**
Sample Matrix: Sediment

Concentration Units: µg/Kg

Date Collected	Date Received	Date Analyzed	Percent Solid	Methanol Volume (ml)	Sample Amount (g)	Extract Volume (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	11/10/00	100	5	5	0.1	5	1	AL

Parameter			Parameter		
Chloromethane	100	U	Trichloroethene	100	U
Vinyl chloride	100	U	1,2-Dichloropropane	100	U
Bromomethane	110		Bromodichloromethane	100	U
Chloroethane	100	U	2-Chloroethylvinyl ether	100	U
Trichlorofluoromethane	100	U	Methyl isobutyl ketone (MIBK)	100	U
Acetone	250	U	cis-1,3-Dichloropropene	100	U
1,1-Dichloroethene	100	U	Toluene	100	U
Carbon disulfide	100	U	trans-1,3-Dichloropropene	100	U
Methylene chloride	130	J	1,1,2-Trichloroethane	100	U
Methyl tert-butyl ether (MTBE)	100	U	2-Hexanone	100	U
trans-1,2-Dichloroethene	100	U	Tetrachloroethene	100	U
1,1-Dichloroethane	100	U	Dibromochloromethane	100	U
Vinyl acetate	100	U	Chlorobenzene	100	U
2-Butanone (MEK)	100	U	1,1,1,2-Tetrachloroethane	100	U
cis-1,2-Dichloroethene	100	U	Ethylbenzene	100	U
Chloroform	100	U	p/m-Xylene	200	U
1,1,1-Trichloroethane	100	U	o-Xylene	100	U
Carbon tetrachloride	100	U	Styrene	100	U
Benzene	100	U	Bromoform	100	U
1,2-Dichloroethane	100	U			

Surrogate	% Recovery	Acceptance Range (%)
2-Bromo-1-chloropropane	106	70-130
1-Chloro-2-fluorobenzene	116	70-130
1,4-Dichlorobutane	99	70-130
Dibromofluoromethane	94	78-118
Toluene-d8	109	87-113
Bromofluorobenzene	111	76-120

J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

Quality Control Results
Volatile Organics by GC/MS

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045120
Lab Sample ID: See Below
Associated Blank: B1110802
Concentration Units: µg/L

Sample ID: **Method Blank/Blank Spike**
Sample Matrix: Water

Date Collected	Date Received	Date Analyzed	Sample Amount (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	11/08/00	5	5	1	JAD

Lab Sample ID: B1110802 Q1110801 Q1110802

Parameter	Method Blank Conc.	Blank Spike Conc.	Blank Spike % Recovery	Blank Spike Duplicate Conc.	Blank Spike Duplicate % Recovery	% RPD	RPD Limit	% Recovery Limits
1,1-Dichloroethene	2 U	21	104	20	98	7	30	47-160
Benzene	2 U	21	107	20	102	5	30	60-143
Trichloroethene	2 U	22	109	21	104	4	30	63-136
Toluene	2 U	21	107	21	105	1	30	69-132
Chlorobenzene	2 U	21	104	20	102	2	30	71-125

U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are reported based on the raw data.

375 Paramount Drive, Suite 2, Raynham, Massachusetts 02767, (508) 822-9300, Fax (508) 822-3288, whale@ultranet.com

Quality Control Results
Volatile Organics by GC/MS

Client: **Menzie Cura & Associates**
Project: **Krummich**

ETR: 00045120
Lab Sample ID: See Below
Associated Blank: B2111003

Sample ID: **Method Blank/Blank Spike**
Sample Matrix: Sediment

Concentration Units: µg/Kg

Date Collected	Date Received	Date Analyzed	Percent Solid	Methanol Volume (ml)	Sample Amount (g)	Extract Volume (ml)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	11/10/00	100	5	5	0.1	5	1	AL

Lab Sample ID: B2111003 Q2111001 Q2111002

Parameter	Method Blank Conc.	Blank Spike Conc.	Blank Spike % Recovery	Blank Spike Duplicate Conc.	Blank Spike Duplicate % Recovery	% RPD	RPD Limit	% Recovery Limits
1,1-Dichloroethene	100 U	960	96	1000	100	4	30	60-142
Benzene	100 U	1000	103	1100	107	3	30	56-143
Trichloroethene	100 U	1000	103	1100	108	5	30	76-127
Toluene	100 U	1100	108	1100	114	5	30	52-147
Chlorobenzene	100 U	1000	102	1100	107	5	30	62-132

U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are reported based on the raw data.

375 Paramount Drive, Suite 2, Raynham, Massachusetts 02767, (508) 822-9300, Fax (508) 822-3288, whale@ultranet.com

Chain-of-Custody Record

Woods Hole Group Environmental Laboratories
375 Paramount Drive
Raynham, MA 02767
TEL: (508) 822-9300
FAX: (508) 822-3288

45120

PAGE ___ OF ___

COMPANY INFORMATION	COMPANY'S PROJECT INFORMATION	SHIPPING INFORMATION	VOLUME/CONTAINER TYPE/ PRESERVATIVE (NOTE 4)
Name: John Williams	Regulatory Protocol:	Carrier: FED Ex	
Address: Aquatic Biological Sciences, 273 Commerce Street, Williston, VT 05495	For the State of:	Airbill Number: 8235 5398 7981	
Telephone: (802) 860-1038	Project Name:	Date Shipped: 11/3/00	
Facsimile: (802) 859-7863	Project Number:	Quote #:	
Contact Name: John Williams	P.O. #		
	Sampler Name(s): John Williams		

TAT ___ 10 Day ___ 5 Day ___ 3 Day ___ 48 Hr ___ 24 Hr ___ Other

WHG LAB #	SAMPLE ID (NOTE 1)	COLLECTION DATE	COLLECTION TIME	COMPOSITE GRAB	MATRIX	ANALYSIS/REMARKS (NOTE 2, 3)	NUMBER OF CONTAINERS
-1	18273 DAY 3 (Pp) SD PDA 5	11/3/00	12:45		Sediment	VOCs per Menzie Cura	

Relinquished by: (signature)	DATE	TIME	Received by: (signature)
[signature]	11/3/00	1400	To FED EX.
Relinquished by: (signature) FED Ex	DATE 11/4/2000	TIME 1030	Received by: (signature) [signature]
Relinquished by: (signature)	DATE	TIME	Received for Laboratory by: (signature)

NOTES TO SAMPLER (S): (1) Limit Sample Identification to 6 characters, if possible; (2) Indicate designated Lab Q.C. sample and type (e.g.; MS/MSD/REP) and provide sufficient sample; (3) Field duplicates are separate sample; (4) e.g.; 40ml/glass/H_2SO_4

Notes to Lab: ~~(1) Samples were collected and stored refrigerated. To be shipped for analysis on Monday 11/6/00.~~ (1) Correction, samples shipped 11/3/00 Saturday delivery.

Fax written changes to (508) 822-3288

APPENDIX D

FOOD CHAIN MODELS

Appendix D
Food Chain Model Overview

The following food chain models and assumptions are used to estimate exposure of wildlife species to Chemicals of Potential Concern (COPCs) via the food chain. The models apply to select species that may use the aquatic environments adjacent to the WGK Plant. The selected species have also been chosen to represent different feeding guilds. The wildlife species for which food chain models were applied are described in Table D-1. This appendix describes the food chain models used in this assessment, presents the exposure parameters (Table D-2), exposure point concentrations (Tables D-3 through D-8) and toxicity reference values for wildlife (Tables D-9 and D-10). The last section of this appendix is the results of the food chain modeling (Tables D-12 to D-47).

Table D-1. Wildlife species used to assess ecological risks

Species	Feeding Guild	Primary Habitat	Use in ERA
Great Blue Heron	Eats fish and other small animals	Aquatic	Evaluate exposure to COPCs in aquatic food webs
Osprey	Eats fish	Aquatic	Evaluate exposure to COPCs in aquatic food webs
River Otter	Eats fish, other small animals and some invertebrates	Aquatic	Evaluate exposure to COPCs in aquatic food webs

Model Structure

The general form of the wildlife exposure model is:

$$\textbf{Exposure Dose (oral)} = \{ [\textbf{Conc}_{food} * \textbf{Ingest}_{food}] + [\textbf{RAF} * \textbf{Conc}_{soil} * \textbf{Sediment}_{diet} * \textbf{Ingest}_{food}] + [\textbf{Conc}_{water} * \textbf{Ingest}_{water}] \} \times \textbf{f}_{foraging\ area}$$

Where:

Exposure Dose (oral) = dose of a COPC in mg/kg-day

$Conc_{food}$ = measured concentration of the COPC (mg/kg) in the food; this is the average and maximum concentration in the relevant exposure zone, an area determined by the size and locations of foraging areas. The average is the appropriate statistic because ecological receptors integrate exposure over their foraging areas. We will also use the maximum concentration and calculate risk from this exposure separately. We will not use the 95% upper confidence limit (UCL) on the mean because of the low number of samples collected from each exposure area and

medium.

$Ingest_{food}$ = amount of food ingested per day normalized to body weight (kg/kg-day) and usually expressed in terms of wet weight of food/live body weight.

RAF – relative availability factor for COPCs in sediment via incidental ingestion of sediment.

$Conc_{sediment}$ = concentration mg/kg in the relevant exposure zone; this is estimated as an average concentration in the exposure zone for chronic exposure and effects, and a maximum for evaluation of potential maximum exposure. The average is the appropriate statistic because ecological receptors integrate exposure over their foraging areas. However, the maximum concentration is used to evaluate a maximum exposure or worst-case scenario.

$Sediment_{diet}$ = fraction of sediment in the diet; the product of this number and $Ingest_{food}$ yields an estimate of the amount of sediment that is incidentally ingested during foraging, grooming, etc.

$Conc_{water}$ = concentration mg/L in the relevant exposure zone; the exposure concentration is the average surface water concentration, and a maximum for evaluation of potential maximum exposure;

$Ingest_{water}$ = drinking water ingestion rate in L/kg-day; the $ingest_{water}$ x $conc_{water}$ yields an estimate of the amount of water that is ingested as drinking water. The drinking water component is in addition to other water sources. USEPA (1993) states that "under some conditions, some species can meet their water requirements with only the water contained in the diet and metabolic water production".

$F_{foraging}$ area = the ratio of the area of the site to the species foraging area. If this value is greater than 1, it can be assumed to be equal to 1 or, if sufficient data are available, the site can be subdivided into smaller foraging areas.

Incidental Sediment Ingestion Rate Estimation

The wildlife sediment ingestion values applied in the food chain models are from Beyer et al. (1994) and are a percentage of the dry mass of food ingested per day.

For the receptors at the WGK Plant, the food ingestion rate is given as grams of wet food/gram of body weight/day, and these food ingestion rates are applied in the model.

To estimate a soil ingestion rate, we assumed a moisture content of fish of approximately 80% (percent solids of 20%). This value is used to convert the receptor's food ingestion rate from wet weight to dry weight, and then calculate a soil ingestion rate from the proportion estimated by Beyer et al (1994). For example, a river otter that eats a diet of 100% fish at a rate of 0.1 g wet

food/g body weight/day, will have a dry food consumption rate of:

0.1 g wet food/g body weight/day x 0.2 g dry food/g wet food = 0.02 g dry food/g body weight/day

If the otter ingests 2% of the dry mass of its diet as sediment, the resulting sediment ingestion weight is:

0.02 g dry food/g body weight/day x 0.02 g sediment/g dry food ingested = 0.0004 g dry sediment/g body weight/day

This can be used directly with the dry weight concentration of sediment to calculate an exposure dose.

Model Application

The model will be applied in two ways:

1. **Chronic exposure of individuals**: Local ecological receptors may continually be exposed to COPCs as they feed throughout the aquatic environment adjacent to the WGK Plant. The potential for chronic exposure to individuals is considered by calculating an average concentration for food, water and sediments at spatial scales defined by the foraging areas of the species. For example, exposure concentrations for a species with a foraging area of 10 ha would be determined by averaging the food and sediments concentrations within this spatial scale. A species with a foraging area of 0.1 ha would have an averaging area that is 100 times less. As a simplifying assumption, the health of an individual is assumed to be reflective of the health of a subpopulation. Comparisons to criteria and guidelines and the additional components of the weight-of-evidence approach also provide insights into population health.

2. **Potential maximum exposure**: As part of a sensitivity analysis, we will evaluate the worst-case scenario potential for risk to ecological receptors by using maximum exposure concentrations. The potential for maximum exposure is considered by calculating a maximum concentration for food, water and sediment and incorporating information on the receptor's foraging area.

Because exposure of a receptor to Site-related COPCs can be sensitive to the foraging areas of the receptors, we will run these two model applications with *and* without accounting for the receptors' foraging areas.

Site Area

The area of the PDA adjacent to WGK Plant was estimated to be 20 acres. This area is defined by the northern and southern boundaries of Site R extending approximately 300 feet from shore into the Mississippi River. For comparative purposes in the food chain modeling, we assumed

that the areas of the upstream and downstream locations were the same as the PDA.

Model Parameters for Wildlife Species

Great Blue Heron Model

Feeding Habits: In marsh environments, the great blue heron is an opportunistic feeder; they prefer fish, but they will also eat amphibians, reptiles, crustaceans, insects, birds, and mammals. The diet varies but may include up to 100% fish. A Nova Scotia study found 6% forage fish (Atlantic silverside and mummichog), 52.6% eels, and 41.4% other fish in the diet of great blue heron (USEPA, 1993). However, fish are their main diet. Based on information presented in USEPA (1993), we assume that the great blue heron's diet consists of 100% fish.

Food Ingestion Rate: The estimated food consumption calculated using Kushlan's equation for wading birds is 0.18 kg/kg-day, as reported in USEPA (1993).

Incidental Sediment Ingestion: Because blue herons feed primarily on fish, estimated sediment consumption is presumed to be negligible.

Water Ingestion Rate: The estimated water ingestion rate using the allometric relationship developed by Calder and Braun (1983) in USEPA (1993) with a body weight from Quinney (1982) is 0.0443 L/kg-day.

Foraging Area: Great blue heron tend to forage near nesting sites (USEPA, 1993). However, the Illinois Natural Heritage Inventory has documented two 1000-2000 nest mixed-species colonies in East St. Louis. The closer of these two colonies is approximately one mile east of the WGK Plant near the Alton & Southern rail yards in Alorton. The second site is almost two miles to the north at Audubon Avenue and 26th Street. These two colonies contain the only breeding little blue heron and snowy egret in Illinois. In addition, black-crowned night heron, great egret, cattle egret, great blue heron, and green-backed heron nest in the colonies.

A study in Minnesota measured the distance between nesting and foraging grounds to range from 0 to 2.7 miles. A Carolina study found the same distance to be 4 to 5 miles. The maximum distance great blue heron will fly between foraging areas is 9 to 13 miles (USEPA, 1993). The size of the feeding territory in a freshwater area in Oregon was 0.6 to 8.4 hectares (USEPA, 1993). It appears that the feeding territories of great blue heron are variable. Some colonies may feed in one particular area while others will feed anywhere prey is available within a radius of at least several miles. This assessment uses the reported 0.6 hectares (20.8 acres) feeding area. As a sensitivity analysis, it also uses a feeding area with a radius of 15.2 miles (462,164 acres).

Osprey Model

Feeding Habits: Ospreys are large birds of prey that consume fish almost exclusively. In fresh environments, common prey items include carp, crappie, sunfish, brown bullhead, and salmonid

species. A study of adult female osprey in Massachusetts estimated a food ingestion rate of 0.21 kg/kg-day (USEPA, 1993). This is the only food ingestion rate reported in the EPA Wildlife Exposure Factors Handbook (USEPA, 1993). Therefore, in this assessment we have assumed a food ingestion rate of 0.21 kg/kg-day.

Incidental Sediment Ingestion: We assume that an osprey does not incidentally ingest sediment while feeding, since its diet consists strictly of fish.

Water Ingestion Rate: USEPA (1993) reports a water ingestion rate of 0.051 L/kg-day.

Foraging Area: Foraging areas vary according location. The USEPA (1993) reports a foraging length of 3 to 8 km the northwest coast of California. At a Minnesota lake, osprey can forage from 0.7 to 2.7 km (USEPA, 1993). In Novia Scotia, osprey have been reported to forage 10 km along a coastal bay (USEPA, 1993). A foraging area of 3 km radius (6986 acres) was selected as the foraging range for this assessment.

River Otter Model

Feeding Habits: The diet of the river otter consists primarily of aquatic animals, e.g. fish (93 – 100% of diet), although they may consume small numbers of crustaceans, aquatic insects, young mammals and turtles. Otters have also been observed to consume waterfowl in the northerly latitudes (USEPA, 1993). For the model, the diet of river otter is assumed to consist of 100% fish.

Food Ingestion Rate: Food intake has been reported to range between 700 to 900g of food daily in captivity (Harris, 1968). The average body size of river otter is reported to range from about 8 to 9 kg for males and from about 7 to 8 kg for females. For the purpose of the model, we assumed an ingestion rate of 800 g/day (the middle of the range) and a body weight of 8 kg (again the middle of the range). This yields an ingestion rate of 0.1 kg/kg-day wet weight for the otter.

Incidental Sediment Ingestion: The river otter is expected to feed primarily on fish and incidental sediment ingestion is expected to be negligible. However, otters are known to eat clams and therefore some sediment ingestion may occur. Consistent with the expectation that incidental sediment ingestion rate is low, we used a sediment ingestion rate of 2% of the diet. The incidental sediment ingestion rate is 0.0004 kg/kg-day dry weight assuming that soil ingestion is 2% of food ingestion based on a 100% fish diet.

Water Ingestion Rate: The estimated water ingestion rate using the allometric relationship developed by Calder and Braun (1983) in USEPA (1993) with a body weight from Lauhachinda (1978) is 0.08 L/kg-day.

Foraging Area: This parameter varies by habitat type. On long shorelines, it can encompass kilometers, or it can measure in hectares in marshes or small stream areas. These areas generally

contain smaller areas of concentrated activity (USEPA, 1993). The otter dens in banks, in hollow logs, or similar burrow-like places. Home range varies depending on habitat and sex. A range of 400 to 1,900 hectares has been reported for Missouri marshes and streams (USEPA, 1993).

Exposure Point Concentrations

Exposure point concentrations (EPCs) for each COPC were developed for the different media to which a receptor may be exposed by dietary exposure. The arithmetic means of each data set, which best represents the average value of the data, and the maximum concentrations of the detected values were used to represent the EPCs. Average EPCs are used in the chronic exposure models, whereas the maximum EPCs are used in the potential maximum exposure models. EPCs for each media and location are listed Tables D-3 through D-8.

The risk tables (Tables D-12 through D-47) at the end of this appendix demonstrate how EPCs and receptor profile parameters are used to calculate exposure doses of metals to wildlife receptors.

Toxicity Reference Values for Dietary Doses to Birds and Mammals

TRVs, chronic No-Adverse-Effects-Levels (NOAELs) and Lowest-Adverse-Effects-Levels (LOAELs), for the wildlife species are based on the results of laboratory studies reported in the literature. The NOAEL is the highest concentration of a particular contaminant at which no adverse effects are observed in the test species. The LOAEL is the lowest concentration of a particular contaminant at which adverse effects are observed in the test species. NOAELs and LOAELs are daily doses of metals (mg/kg/d) which are compared to the exposure doses (mg/kg/d) calculated in the risk tables in this appendix.

Sources of the TRVs for avian and mammalian species include: Sample et al., 1996 and various databases. If available in Sample et al. (1996), these TRVs for both birds and mammals were preferred. If not available in Sample et al. (1996), TRVs for avian species were taken from the USEPA ECOTOXicology on-line database, USEPA-Office of Pesticide's Effects Database, and/or the scientific literature. For those mammalian TRVs not available in Sample et al. (1996), appropriate TRVs were taken from the latest versions of toxicological profiles compiled by the Agency of Toxic Substances and Disease Registry (ATSDR), the USEPA Integrated Risk Information System (IRIS), and/or scientific literature.

TRVs were taken from studies that met the following criteria:

- Close taxonomic relationship between the test species and the receptor species;
- Ecologically relevant endpoints – Endpoints, such as reproduction, development, growth, and mortality, were chosen because they can lead to population-level effects;
- Appropriate exposure duration – Chronic studies were considered to be longer than 70 days for birds and 1 year for mammals or for shorter periods during critical life stages;

- Appropriate exposure route – Studies in which the test species received the chemical dose by the diet were preferred to those that in which the test species received an oral capsule or by gavage.

If only subchronic studies were available for selecting chronic TRVs, an Acute to Chronic Ratio of 10 (Sample et al., 1996) was applied. If only a LOAEL was provided by the authors of the selected study, then the LOAEL was divided by a factor of 10 to derive the NOAEL benchmark.

No toxicological data were available for MCPP. Effect levels for MCPA, which is structurally similar to MCPP, is used as a surrogate for MCPP.

Table D-9 through D-10 list chronic COPC-specific NOAELs and LOAELs for the avian and mammalian receptors in this assessment, respectively. Please note that toxicological studies were not available for all COPCs, therefore risk from exposure to those COPCs cannot be evaluated. Uncertainty associated with the inability to assess risk associated with COPCs for which TRVs are unavailable is discussed in the uncertainty section.

Not many studies exist for the river otter, therefore TRVs (either NOAEL or LOAEL) were derived from rat and mouse studies using this allometric relationship described by Sample et al. (1996):

$$NOAEL_w = NOAEL_t \{bw_t/bw_w\}^{1/4}$$

where:

$NOAEL_w$ is the NOAEL for the wildlife species in question;

$NOAEL_t$ is the NOAEL for the test species;

bw_t is the body weight of the test species;

bw_w is the body weight of the wildlife species in question.

Note that smaller animals will have larger NOAELs because, according to Sample et al. (1996), the smaller animals tend to have higher metabolic rates and are more resistant to toxic chemicals.

Because dioxins are complex mixtures that exert varying degrees of toxicity, scientists have developed Toxicity Equivalency Factors (TEFs) in order to assess risk to humans, wildlife, and fish. The mechanism of action through which dioxin compounds exert their toxic effects is shared with that of 2,3,7,8-TCDD, the most potent of all of these compounds. Therefore, the relative toxicity of dioxin compounds is normalized to those effects of 2,3,7,8-TCDD for mammals, birds, and fish (Van den Berg et al., 1998). For example, the TEF of 2,3,7,8-TCDD for mammals, birds, and fish is 1, whereas the TEF of 1,2,3,4,6,7,8-HpCDD for mammals, birds, and fish is 0.01, 0.001, and 0.001, respectively. Table D-12 lists the PCB congener TEFs for

mammals, birds, and fish taken from Van den Berg et al. (1998). Daily exposure doses from the individual dioxin compounds to avian and mammalian receptors are multiplied by the TEF reported in Van den Berg et al. (1998) in order to convert the doses into dioxin toxic equivalent (TEQ) doses. The sum of the daily exposure doses in the form of TEQs is compared to appropriate dioxin-based benchmarks for chronic exposures.

Interpretation of Food Chain Models

Estimated dietary doses to ecological receptors at the aquatic environment adjacent to the WGK Plant are compared to NOAEL- and LOAEL- based TRVs. Results of these comparisons, expressed as the quotient of the exposure dose to the TRV, are interpreted as follows:

- An exposure dose for which both the NOAEL- and LOAEL-based Hazard Quotient (HQ) are less than 1 does not provide any indication of a potential for harm;
- An exposure dose for which the NOAEL-based is greater than 1 and the LOAEL-based HQ is equal to or greater than 1 provides an indication of potential for harm;
- An exposure dose for which the NOAEL-based HQ is greater than 1, but the LOAEL-based HQ is less than 1, does not provide a basis for reaching a conclusion.

The results of the food chain models are presented in Tables D-12 through D-47 and discussed in Section 8.2.5 of the main report.

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TABLE D-2
Receptor Profiles for
Food Chain Models
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Species Parameter	Ecological Receptor		
	Ardea herodias[b] (Great Blue Heron)	*Pandion haliaetus*[e] (Osprey)	*Lutra candaensis*[e] (River Otter)
Body Weight (kg)	2.204	1.568[d]	8
Normalized Food Ingestion Rate (kg/kg-d, wet wt.)	0.18[c]	0.21[e]	0.1[h]
Percent Sediment/Soil of diet (%, dry wt)	0	0	2
Normalized Food Ingestion Rate (kg/kg-d, dry wt.)	NA	NA	0.02
Normalized Sediment Ingestion Rate (kg/kg-d, dry wt)	0	0	0.0004
Normalized Water Ingestion Rate (L/kg-d, wet wt.)	0.0443	0.051[f]	0.082
Dietary Components	100% Fish	100%Fish[c]	100% Fish
Foraging Range[a]	0.6 to 8.4 ha[c]	3 to 8 km radius[g]	400 to 1,900 ha[i]

Note that all of the parameters for a species are taken from the reference (either note b,e) next to the species name, unless otherwise noted.

[a] Foraging range is assumed to be equivalent to home range.

[b] Sample, B. E. and G. W. Suter II. 1994. Estimating Exposure of Terresterial Wildlife to Contaminants. Oak Ridge National Laboratory. DE-AC05-84OR21400.

[c] EPA. 1993. Wildlife Exposure Factors Handbook: Volume I of II. United States Environmental Protection Agency. EPA/600/R-93/187a.

[d] Brown, L. and D. Amadon. 1968. Eagels, hawks, and falcons of th world, vol. 1. New York, NY: McGraw-Hill.

[e] Poole, A. F. 1983. Courtship feeding, clutch size, and egg size in ospreys: a preliminary report. In: D.M. Bird, N.R. Seymour, J.M. Gerrard, eds. Biology and management of bald eagles and ospreys. St. Anne de Bellvue, Quebec: Harpell Press. pp. 243-256.

[f] Allometrically determined using the following EPA, 1993 equation:
WI(L/day)=0.059 Wt0.67 (kg); NWIR (L/kg-d) = WIR (L/D) *1/Wt (kg) and body weight data from Brown and Amadon, 1968.

[g] Koplin, 1981. Reproductive performance of ospreys (*Pandion haliaetus*) in northwestern California. Natl. Geogr. Soc. Res. Rep. 13: 337-344.

[h] Estimated using a food intake rate of captive otters (800 g/d) and a body weight of 8 kg.

[i] Foy, M. K. 1984. Seasonal movement, home range, and habitat use of river otter in southeastern Texas (master's thesis). College Station, TX: Texas A&M University.

Calculation of Normalized Sediment Ingestion Rate:
$NFIR_{dry}$=$NFIR_{wet}$*wet to dry factor for fish (assumed to be 0.20);
NSIRdry=NFIRdry*percentage of soil in diet

TABLE D-3
Average Exposure Point Concentrations-Surface Water
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

CAS Number	Compound	Site Average (mg/L)	TEFs-Mammal	TEFs-Bird	Site Average (mg/L) Mammal	Site Average (mg/L) Bird	DDA Average (mg/L)	DDA Average (mg/L) Mammal	DDA Average (mg/L) Bird	UDA Average (mg/L)	UDA Average (mg/L) Mammal	UDA Average (mg/L) Bird
3268-87-9	1,2,3,4,6,7,8,9-OCDD	1.57E-07	0.0001	0.0001	1.57E-11	1.57E-11	2.21E-07	2.21E-11	2.21E-11	1.82E-07	1.82E-11	1.82E-11
39001-02-0	1,2,3,4,6,7,8,9-OCDF	4.01E-09	0.0001	0.0001	4.01E-13	4.01E-13	ND	ND	ND	ND	ND	ND
35822-46-9	1,2,3,4,6,7,8-HpCDD	4.60E-09	0.01	0.001	4.60E-11	4.60E-12	ND	ND	ND	ND	ND	ND
67562-39-4	1,2,3,4,6,7,8-HpCDF	ND	0.01	0.01	ND	ND	ND	ND	ND	ND	ND	ND
55673-89-7	1,2,3,4,7,8,9-HpCDF	ND	0.01	0.01	ND	ND	ND	ND	ND	ND	ND	ND
39227-28-6	1,2,3,4,7,8-HxCDD	ND	0.1	0.05	ND	ND	ND	ND	ND	ND	ND	ND
70648-26-9	1,2,3,4,7,8-HxCDF	1.30E-09	0.1	0.1	1.30E-10	1.30E-10	ND	ND	ND	ND	ND	ND
57653-85-7	1,2,3,6,7,8-HxCDD	ND	0.1	0.01	ND	ND	ND	ND	ND	ND	ND	ND
57117-44-9	1,2,3,6,7,8-HxCDF	ND	0.1	0.1	ND	ND	ND	ND	ND	ND	ND	ND
19408-74-3	1,2,3,7,8,9-HxCDD	ND	0.1	0.1	ND	ND	ND	ND	ND	ND	ND	ND
40321-76-4	1,2,3,7,8-PeCDD	ND	1	1	ND	ND	ND	ND	ND	ND	ND	ND
57117-41-6	1,2,3,7,8-PeCDF	ND	0.05	0.1	ND	ND	ND	ND	ND	ND	ND	ND
60851-34-5	2,3,4,6,7,8-HxCDF	ND	0.1	0.1	ND	ND	ND	ND	ND	ND	ND	ND
57117-31-4	2,3,4,7,8-PeCDF	ND	0.5	1	ND	ND	ND	ND	ND	ND	ND	ND
1746-01-6	2,3,7,8-TCDD	ND	1	1	ND	ND	ND	ND	ND	ND	ND	ND
51207-31-9	2,3,7,8-TCDF	ND	0.1	1	ND	ND	ND	ND	ND	ND	ND	ND
	Dioxin (TEQ)				1.92E-10	1.50E-10		2.21E-11	2.21E-11		1.82E-11	1.82E-11
93-76-5	2,4,5-T	ND			ND	ND	1.80E-10	1.80E-10	1.80E-10	ND	ND	ND
93-72-1	2,4,5-TP (Silvex)	2.38E-04			2.38E-04	2.38E-04	ND	ND	ND	ND	ND	ND
94-75-7	2,4-D	3.08E-03			3.08E-03	3.08E-03	4.80E-04	4.80E-04	4.80E-04	ND	ND	ND
1918-00-9	Dicamba	5.46E-04			5.46E-04	5.46E-04	ND	ND	ND	ND	ND	ND
120-36-5	Dichloroprop	2.59E-03			2.59E-03	2.59E-03	ND	ND	ND	ND	ND	ND
7085-19-0	MCPP[2-(4-chloro-2-	ND			ND	ND	ND	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	ND			ND	ND	ND	ND	ND	ND	ND	ND
72-55-9	4,4'-DDE	ND			ND	ND	ND	ND	ND	ND	ND	ND
50-29-3	4,4'-DDT	ND			ND	ND	ND	ND	ND	ND	ND	ND
319-84-6	alpha-BHC	ND			ND	ND	ND	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	ND			ND	ND	ND	ND	ND	ND	ND	ND
60-57-1	Dieldrin	ND			ND	ND	ND	ND	ND	ND	ND	ND
959-98-8	Endosulfan I	ND			ND	ND	ND	ND	ND	ND	ND	ND
72-20-8	Endrin	ND			ND	ND	ND	ND	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	ND			ND	ND	ND	ND	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	ND			ND	ND	ND	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	ND			ND	ND	ND	ND	ND	ND	ND	ND
72-43-5	Methoxychlor	ND			ND	ND	ND	ND	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	2.25E-03			2.25E-03	2.25E-03	ND	ND	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	4.82E-03			4.82E-03	4.82E-03	ND	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	ND			ND	ND	ND	ND	ND	ND	ND	ND
88-06-2	2,4,6-Trichlorophenol	3.52E-03			3.52E-03	3.52E-03	ND	ND	ND	ND	ND	ND
120-83-2	2,4-Dichlorophenol	9.84E-03			9.84E-03	9.84E-03	1.75E-03	1.75E-03	1.75E-03	ND	ND	ND
105-67-9	2,4-Dimethylphenol	2.52E-03			2.52E-03	2.52E-03	ND	ND	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ND			ND	ND	ND	ND	ND	ND	ND	ND
95-57-8	2-Chlorophenol	6.90E-03			6.90E-03	6.90E-03	1.43E-03	1.43E-03	1.43E-03	ND	ND	ND
95-48-7	2-Methylphenol (o-Cresol)	ND			ND	ND	ND	ND	ND	ND	ND	ND
88-74-4	2-Nitroaniline	ND			ND	ND	ND	ND	ND	ND	ND	ND

TABLE D-3
Average Exposure Point Concentrations-Surface Water
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

CAS Number	Compound	Site Average (mg/L)	TEFs-Mammal	TEFs-Bird	Site Average (mg/L) Mammal	Site Average (mg/L) Bird	DDA Average (mg/L)	DDA Average (mg/L) Mammal	DDA Average (mg/L) Bird	UDA Average (mg/L)	UDA Average (mg/L) Mammal	UDA Average (mg/L) Bird
106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	3.93E-03			3.93E-03	3.93E-03	ND	ND	ND	ND	ND	ND
101-55-3	4-Bromophenylphenyl ether	ND			ND	ND	ND	ND	ND	ND	ND	ND
106-47-8	4-Chloroaniline	1.41E-02			1.41E-02	1.41E-02	3.30E-03	3.30E-03	3.30E-03	ND	ND	ND
117-81-7	bis(2-Ethylhexyl)phthalate	2.56E-03			2.56E-03	2.56E-03	ND	ND	ND	ND	ND	ND
84-74-2	Di-n-butylphthalate	2.11E-03			2.11E-03	2.11E-03	ND	ND	ND	ND	ND	ND
91-20-3	Naphthalene	ND			ND	ND	ND	ND	ND	ND	ND	ND
98-95-3	Nitrobenzene	2.20E-03			2.20E-03	2.20E-03	ND	ND	ND	ND	ND	ND
87-86-5	Pentachlorophenol	5.19E-04			5.19E-04	5.19E-04	ND	ND	ND	ND	ND	ND
108-95-2	Phenol	3.89E-03			3.89E-03	3.89E-03	ND	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	8.72E-04			8.72E-04	8.72E-04	ND	ND	ND	ND	ND	ND
78-93-3	2-Butanone (MEK)	ND			ND	ND	ND	ND	ND	7.00E-03	7.00E-03	7.00E-03
108-10-1	4-Methyl-2-pentanone (MIBK)	3.91E-03			3.91E-03	3.91E-03	ND	ND	ND	ND	ND	ND
67-64-1	Acetone	ND			ND	ND	ND	ND	ND	ND	ND	ND
71-43-2	Benzene	1.17E-03			1.17E-03	1.17E-03	1.95E-04	1.95E-04	1.95E-04	8.93E-04	8.93E-04	8.93E-04
75-15-0	Carbon disulfide	ND			ND	ND	ND	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	7.59E-03			7.59E-03	7.59E-03	1.75E-03	1.75E-03	1.75E-03	8.88E-04	8.88E-04	8.88E-04
75-00-3	Chloroethane	ND			ND	ND	ND	ND	ND	ND	ND	ND
67-66-3	Chloroform	ND			ND	ND	ND	ND	ND	ND	ND	ND
156-59-2	cis-1,2-Dichloroethene	ND			ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	6.88E-04			6.88E-04	6.88E-04	ND	ND	ND	ND	ND	ND
108-38-3	m&p-Xylene	1.09E-03			1.09E-03	1.09E-03	ND	ND	ND	ND	ND	ND
75-09-2	Methylene chloride (Dichloromethane)	ND			ND	ND	ND	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	ND			ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	1.18E-03			1.18E-03	1.18E-03	7.00E-04	7.00E-04	7.00E-04	ND	ND	ND
156-60-5	trans-1,2-Dichloroethene	ND			ND	ND	ND	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	9.22E-04			9.22E-04	9.22E-04	ND	ND	ND	ND	ND	ND
75-01-4	Vinyl chloride	ND			ND	ND	ND	ND	ND	8.38E-04	8.38E-04	8.38E-04
1330-20-7	Xylenes, Total	1.15E-03			1.15E-03	1.15E-03	ND	ND	ND	ND	ND	ND

TABLE D-4
Average Exposure Point Concentration-Sediment
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

CAS Number	Compound	Site Average (mg/kg, dry)	TEFs-Mammals	TEFs-Bird	Site Average (mg/kg,dry) Mammmal	Site Average (mg/kg,dry) Bird	DDA Average (mg/kg; dry)	DDA Average (mg/kg,dry) Mammmal	DDA Average (mg/kg,dry) Bird	UDA Average (mg/kg, dry)	UDA Average (mg/kg,dry) Mammmal	UDA Average (mg/kg,dry) Bird
3268-87-9	1,2,3,4,6,7,8,9-OCDD	1.66E-04	0.0001	0.0001	1.66E-08	1.66E-08	5.96E-04	5.96E-08	5.96E-08	1.49E-04	1.49E-08	1.49E-08
39001-02-0	1,2,3,4,6,7,8,9-OCDF	1.08E-05	0.0001	0.0001	1.08E-09	1.08E-09	7.44E-06	7.44E-10	7.44E-10	3.29E-06	3.29E-10	3.29E-10
35822-46-9	1,2,3,4,6,7,8-HpCDD	1.08E-05	0.01	0.001	1.08E-07	1.08E-08	1.58E-05	1.58E-07	1.58E-08	5.70E-06	5.70E-08	5.70E-09
67562-39-4	1,2,3,4,6,7,8-HpCDF	1.52E-06	0.01	0.01	1.52E-08	1.52E-08	1.55E-06	1.55E-08	1.55E-08	ND	ND	ND
55673-89-7	1,2,3,4,7,8,9-HpCDF	3.51E-07	0.01	0.01	3.51E-09	3.51E-09	ND	ND	ND	ND	ND	ND
39227-28-6	1,2,3,4,7,8-HxCDD	ND	0.1	0.05	ND	ND	ND	ND	ND	ND	ND	ND
70648-26-9	1,2,3,4,7,8-HxCDF	4.18E-07	0.1	0.1	4.18E-08	4.18E-08	ND	ND	ND	1.98E-07	1.98E-08	1.98E-08
57653-85-7	1,2,3,6,7,8-HxCDD	3.18E-07	0.1	0.01	3.18E-08	3.18E-09	ND	ND	ND	2.73E-07	2.73E-08	2.73E-09
57117-44-9	1,2,3,6,7,8-HxCDF	1.94E-07	0.1	0.1	1.94E-08	1.94E-08	ND	ND	ND	ND	ND	ND
19408-74-3	1,2,3,7,8,9-HxCDD	ND	0.1	0.1	ND	ND	ND	ND	ND	2.63E-07	2.63E-08	2.63E-08
40321-76-4	1,2,3,7,8-PeCDD	ND	1	1	ND	ND	ND	ND	ND	ND	ND	ND
57117-41-6	1,2,3,7,8-PeCDF	2.03E-07	0.05	0.1	1.02E-08	2.03E-08	ND	ND	ND	ND	ND	ND
60851-34-5	2,3,4,6,7,8-HxCDF	1.61E-07	0.1	0.1	1.61E-08	1.61E-08	ND	ND	ND	ND	ND	ND
57117-31-4	2,3,4,7,8-PeCDF	1.70E-07	0.5	1	8.50E-08	1.70E-07	ND	ND	ND	ND	ND	ND
1746-01-6	2,3,7,8-TCDD	ND	1	1	ND	ND	ND	ND	ND	ND	ND	ND
51207-31-9	2,3,7,8-TCDF	3.01E-07	0.1	1	3.01E-08	3.01E-07	ND	ND	ND	ND	ND	ND
	Dioxin (TEQ)				3.79E-07	6.19E-07		2.33E-07	9.16E-08		1.46E-07	6.97E-08
93-76-5	2,4,5-T	ND			ND	ND	ND	ND	ND	ND	ND	ND
93-72-1	2,4,5-TP (Silvex)	ND			ND	ND	ND	ND	ND	ND	ND	ND
94-75-7	2,4-D	2.77E-01			2.77E-01	2.77E-01	ND	ND	ND	ND	ND	ND
1918-00-9	Dicamba	ND			ND	ND	ND	ND	ND	ND	ND	ND
120-36-5	Dichloroprop	1.65E-01			1.65E-01	1.65E-01	ND	ND	ND	ND	ND	ND
7085-19-0	MCPP[2-(4-chloro-2-	1.95E+01			1.95E+01	1.95E+01	ND	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	2.04E-03			2.04E-03	2.04E-03	ND	ND	ND	ND	ND	ND
72-55-9	4,4'-DDE	ND			ND	ND	ND	ND	ND	ND	ND	ND
50-29-3	4,4'-DDT	ND			ND	ND	ND	ND	ND	ND	ND	ND
319-84-6	alpha-BHC	ND			ND	ND	ND	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	ND			ND	ND	ND	ND	ND	ND	ND	ND
60-57-1	Dieldrin	ND			ND	ND	ND	ND	ND	ND	ND	ND
959-98-8	Endosulfan I	ND			ND	ND	ND	ND	ND	ND	ND	ND
72-20-8	Endrin	ND			ND	ND	ND	ND	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	ND			ND	ND	ND	ND	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	ND			ND	ND	ND	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	ND			ND	ND	ND	ND	ND	ND	ND	ND
72-43-5	Methoxychlor	ND			ND	ND	ND	ND	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ND			ND	ND	ND	ND	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	1.00E-01			1.00E-01	1.00E-01	ND	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	1.06E-01			1.06E-01	1.06E-01	ND	ND	ND	ND	ND	ND
88-06-2	2,4,6-Trichlorophenol	1.44E-01			1.44E-01	1.44E-01	ND	ND	ND	ND	ND	ND
120-83-2	2,4-Dichlorophenol	2.08E-01			2.08E-01	2.08E-01	ND	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	9.81E-02			9.81E-02	9.81E-02	ND	ND	ND	ND	ND	ND

TABLE D-4
Average Exposure Point Concentration-Sediment
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

CAS Number	Compound	Site Average (mg/kg, dry)	TEFs-Mammals	TEFs-Bird	Site Average (mg/kg,dry) Mammmal	Site Average (mg/kg,dry) Bird	DDA Average (mg/kg, dry)	DDA Average (mg/kg,dry) Mammmal	DDA Average (mg/kg,dry) Bird	UDA Average (mg/kg, dry)	UDA Average (mg/kg,dry) Mammmal	UDA Average (mg/kg,dry) Bird
121-14-2	2,4-Dinitrotoluene	1.95E-01			1.95E-01	1.95E-01	ND	ND	ND	ND	ND	ND
95-57-8	2-Chlorophenol	1.37E-01			1.37E-01	1.37E-01	ND	ND	ND	ND	ND	ND
95-48-7	2-Methylphenol (o-Cresol)	ND			ND	ND	ND	ND	ND	ND	ND	ND
88-74-4	2-Nitroaniline	4.71E-01			4.71E-01	4.71E-01	ND	ND	ND	ND	ND	ND
106-44-5	3-Methylphenol/4-	1.92E-01			1.92E-01	1.92E-01	ND	ND	ND	ND	ND	ND
101-55-3	4-Bromophenylphenyl	1.08E-01			1.08E-01	1.08E-01	ND	ND	ND	ND	ND	ND
106-47-8	4-Chloroaniline	1.08E+00			1.08E+00	1.08E+00	ND	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl)phthalate	ND			ND	ND	ND	ND	ND	1.09E-01	1.09E-01	1.09E-01
84-74-2	Di-n-butylphthalate	ND			ND	ND	ND	ND	ND	ND	ND	ND
91-20-3	Naphthalene	1.18E-01			1.18E-01	1.18E-01	ND	ND	ND	ND	ND	ND
98-95-3	Nitrobenzene	ND			ND	ND	ND	ND	ND	ND	ND	ND
87-86-5	Pentachlorophenol	1.37E-02			1.37E-02	1.37E-02	7.80E-03	7.80E-03	7.80E-03	8.03E-03	8.03E-03	8.03E-03
108-95-2	Phenol	7.19E-01			7.19E-01	7.19E-01	ND	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	5.11E-02			5.11E-02	5.11E-02	ND	ND	ND	ND	ND	ND
78-93-3	2-Butanone (MEK)	1.86E-02			1.86E-02	1.86E-02	ND	ND	ND	1.29E-02	1.29E-02	1.29E-02
108-10-1	4-Methyl-2-pentanone	3.52E-02			3.52E-02	3.52E-02	ND	ND	ND	ND	ND	ND
67-64-1	Acetone	4.16E-01			4.16E-01	4.16E-01	2.29E-02	2.29E-02	2.29E-02	6.85E-02	6.85E-02	6.85E-02
71-43-2	Benzene	9.83E-02			9.83E-02	9.83E-02	ND	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	8.13E-04			8.13E-04	8.13E-04	ND	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	1.95E+00			1.95E+00	1.95E+00	ND	ND	ND	ND	ND	ND
75-00-3	Chloroethane	7.29E-04			7.29E-04	7.29E-04	ND	ND	ND	ND	ND	ND
67-66-3	Chloroform	1.60E-03			1.60E-03	1.60E-03	ND	ND	ND	ND	ND	ND
156-59-2	cis-1,2-Dichloroethene	1.65E-03			1.65E-03	1.65E-03	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	2.48E-02			2.48E-02	2.48E-02	ND	ND	ND	ND	ND	ND
108-38-3	m&p-Xylene	1.22E-01			1.22E-01	1.22E-01	ND	ND	ND	ND	ND	ND
75-09-2	Methylene chloride	3.32E-03			3.32E-03	3.32E-03	ND	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	5.13E-03			5.13E-03	5.13E-03	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	9.98E-01			9.98E-01	9.98E-01	1.10E-03	1.10E-03	1.10E-03	3.08E-03	3.08E-03	3.08E-03
156-60-5	trans-1,2-Dichloroethene	6.19E-04			6.19E-04	6.19E-04	ND	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	5.94E-03			5.94E-03	5.94E-03	ND	ND	ND	ND	ND	ND
75-01-4	Vinyl chloride	9.88E-04			9.88E-04	9.88E-04	ND	ND	ND	ND	ND	ND
1330-20-7	Xylenes, Total	1.42E-01			1.42E-01	1.42E-01	ND	ND	ND	ND	ND	ND

TABLE D-5
Average Exposure Point Concentrations-Fish Tissue
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

CAS Number	Compound	Site Average (mg/kg)	TEFs-Mammal	TEFs-Bird	Site Average (mg/kg) Mammal	Site Average (mg/kg) Bird	DDA Average (mg/kg)	DDA Average (mg/kg) Mammal	DDA Average (mg/kg) Bird	UDA Average (mg/kg)	UDA Average (mg/kg) Mammal	UDA Average (mg/kg) Bird
3268-87-9	1,2,3,4,6,7,8,9-OCDD	2.96E-05	0.0001	0.0001	2.96E-09	2.96E-09	4.49E-05	4.49E-09	4.49E-09	3.09E-05	3.09E-09	3.09E-09
39001-02-0	1,2,3,4,6,7,8,9-OCDF	6.82E-07	0.0001	0.0001	6.82E-11	6.82E-11	9.73E-07	9.73E-11	9.73E-11	ND	ND	ND
35822-46-9	1,2,3,4,6,7,8-HpCDD	2.91E-06	0.01	0.001	2.91E-08	2.91E-09	3.07E-06	3.07E-08	3.07E-09	4.12E-06	4.12E-08	4.12E-09
67562-39-4	1,2,3,4,6,7,8-HpCDF	1.37E-07	0.01	0.01	1.37E-09	1.37E-09	ND	ND	ND	2.17E-07	2.17E-09	2.17E-09
55673-89-7	1,2,3,4,7,8,9-HpCDF	ND	0.01	0.01	ND	ND	ND	ND	ND	ND	ND	ND
39227-28-6	1,2,3,4,7,8-HxCDD	1.41E-07	0.1	0.05	1.41E-08	7.06E-09	2.20E-07	2.20E-08	1.10E-08	2.22E-07	2.22E-08	1.11E-08
70648-26-9	1,2,3,4,7,8-HxCDF	3.51E-07	0.1	0.1	3.51E-08	3.51E-08	3.22E-07	3.22E-08	3.22E-08	5.93E-07	5.93E-08	5.93E-08
57653-85-7	1,2,3,6,7,8-HxCDD	8.47E-07	0.1	0.01	8.47E-08	8.47E-09	9.03E-07	9.03E-08	9.03E-09	1.15E-06	1.15E-07	1.15E-08
57117-44-9	1,2,3,6,7,8-HxCDF	1.07E-07	0.1	0.1	1.07E-08	1.07E-08	1.33E-07	1.33E-08	1.33E-08	1.63E-07	1.63E-08	1.63E-08
19408-74-3	1,2,3,7,8,9-HxCDD	3.99E-07	0.1	0.1	3.99E-08	3.99E-08	4.13E-07	4.13E-08	4.13E-08	6.03E-07	6.03E-08	6.03E-08
40321-76-4	1,2,3,7,8-PeCDD	3.33E-07	1	1	3.33E-07	3.33E-07	4.88E-07	4.88E-07	4.88E-07	5.47E-07	5.47E-07	5.47E-07
57117-41-6	1,2,3,7,8-PeCDF	7.39E-08	0.05	0.1	3.69E-09	7.39E-09	ND	ND	ND	ND	ND	ND
60851-34-5	2,3,4,6,7,8-HxCDF	1.93E-07	0.1	0.1	1.93E-08	1.93E-08	4.13E-07	4.13E-08	4.13E-08	2.15E-07	2.15E-08	2.15E-08
57117-31-4	2,3,4,7,8-PeCDF	3.16E-07	0.5	1	1.58E-07	3.16E-07	4.10E-07	2.05E-07	4.10E-07	2.88E-07	1.44E-07	2.88E-07
1746-01-6	2,3,7,8-TCDD	5.79E-07	1	1	5.79E-07	5.79E-07	4.42E-07	4.42E-07	4.42E-07	6.00E-07	6.00E-07	6.00E-07
51207-31-9	2,3,7,8-TCDF	1.40E-06	0.1	1	1.40E-07	1.40E-06	6.20E-07	6.20E-08	6.20E-07	1.32E-06	1.32E-07	1.32E-06
	Dioxin (TEQ)				1.45E-06	2.77E-06		1.47E-06	2.12E-06		1.76E-06	2.94E-06
93-76-5	2,4,5-T	5.74E-03			5.74E-03	5.74E-03	ND	ND	ND	5.13E-03	5.13E-03	5.13E-03
93-72-1	2,4,5-TP (Silvex)	4.87E-03			4.87E-03	4.87E-03	4.98E-03	4.98E-03	4.98E-03	5.27E-03	5.27E-03	5.27E-03
94-75-7	2,4-D	ND			ND	ND	ND	ND	ND	ND	ND	ND
1918-00-9	Dicamba	ND			ND	ND	ND	ND	ND	7.23E-03	7.23E-03	7.23E-03
120-36-5	Dichloroprop	ND			ND	ND	ND	ND	ND	ND	ND	ND
7085-19-0	MCPP[2-(4-chloro-2-	2.30E+00			2.30E+00	2.30E+00	ND	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	1.12E-02			1.12E-02	1.12E-02	1.65E-02	1.65E-02	1.65E-02	ND	ND	ND
72-55-9	4,4'-DDE	1.84E-02			1.84E-02	1.84E-02	1.34E-02	1.34E-02	1.34E-02	2.10E-02	2.10E-02	2.10E-02
50-29-3	4,4'-DDT	1.26E-02			1.26E-02	1.26E-02	ND	ND	ND	1.50E-02	1.50E-02	1.50E-02
319-84-6	alpha-BHC	1.14E-02			1.14E-02	1.14E-02	ND	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	1.17E-02			1.17E-02	1.17E-02	1.09E-02	1.09E-02	1.09E-02	ND	ND	ND
60-57-1	Dieldrin	1.49E-02			1.49E-02	1.49E-02	1.39E-02	1.39E-02	1.39E-02	2.12E-02	2.12E-02	2.12E-02
959-98-8	Endosulfan I	1.16E-02			1.16E-02	1.16E-02	ND	ND	ND	1.35E-02	1.35E-02	1.35E-02
72-20-8	Endrin	1.22E-02			1.22E-02	1.22E-02	ND	ND	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	1.15E-02			1.15E-02	1.15E-02	1.41E-02	1.41E-02	1.41E-02	1.25E-02	1.25E-02	1.25E-02
5103-74-2	gamma-Chlordane	1.10E-02			1.10E-02	1.10E-02	1.37E-02	1.37E-02	1.37E-02	1.44E-02	1.44E-02	1.44E-02
1024-57-3	Heptachlor epoxide	1.07E-02			1.07E-02	1.07E-02	ND	ND	ND	ND	ND	ND
72-43-5	Methoxychlor	ND			ND	ND	ND	ND	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ND			ND	ND	ND	ND	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	2.28E-01			2.28E-01	2.28E-01	ND	ND	ND	ND	ND	ND

TABLE D-5
Average Exposure Point Concentrations-Fish Tissue
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

CAS Number	Compound	Site Average (mg/kg)	TEFs-Mammal	TEFs-Bird	Site Average (mg/kg) Mammal	Site Average (mg/kg) Bird	DDA Average (mg/kg)	DDA Average (mg/kg) Mammal	DDA Average (mg/kg) Bird	UDA Average (mg/kg)	UDA Average (mg/kg) Mammal	UDA Average (mg/kg) Bird
106-46-7	1,4-Dichlorobenzene	2.41E-01			2.41E-01	2.41E-01	ND	ND	ND	ND	ND	ND
88-06-2	2,4,6-Trichlorophenol	ND			ND	ND	ND	ND	ND	ND	ND	ND
120-83-2	2,4-Dichlorophenol	2.27E-01			2.27E-01	2.27E-01	ND	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	ND			ND	ND	ND	ND	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ND			ND	ND	ND	ND	ND	ND	ND	ND
95-57-8	2-Chlorophenol	ND			ND	ND	ND	ND	ND	ND	ND	ND
95-48-7	2-Methylphenol (o-Cresol)	2.22E-01			2.22E-01	2.22E-01	3.17E-01	3.17E-01	3.17E-01	ND	ND	ND
88-74-4	2-Nitroaniline	ND			ND	ND	ND	ND	ND	ND	ND	ND
106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ND			ND	ND	ND	ND	ND	ND	ND	ND
101-55-3	4-Bromophenylphenyl ether	ND			ND	ND	ND	ND	ND	ND	ND	ND
106-47-8	4-Chloroaniline	ND			ND	ND	ND	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl)phthalate	ND			ND	ND	ND	ND	ND	ND	ND	ND
84-74-2	Di-n-butylphthalate	ND			ND	ND	ND	ND	ND	ND	ND	ND
91-20-3	Naphthalene	ND			ND	ND	ND	ND	ND	ND	ND	ND
98-95-3	Nitrobenzene	ND			ND	ND	ND	ND	ND	ND	ND	ND
87-86-5	Pentachlorophenol	ND			ND	ND	ND	ND	ND	ND	ND	ND
108-95-2	Phenol	ND			ND	ND	ND	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	ND			ND	ND	ND	ND	ND	ND	ND	ND
78-93-3	2-Butanone (MEK)	ND			ND	ND	ND	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone (MIBK)	ND			ND	ND	ND	ND	ND	ND	ND	ND
67-64-1	Acetone	ND			ND	ND	ND	ND	ND	ND	ND	ND
71-43-2	Benzene	ND			ND	ND	ND	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	ND			ND	ND	ND	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	ND			ND	ND	ND	ND	ND	ND	ND	ND
75-00-3	Chloroethane	ND			ND	ND	ND	ND	ND	ND	ND	ND
67-66-3	Chloroform	ND			ND	ND	ND	ND	ND	ND	ND	ND
156-59-2	cis-1,2-Dichloroethene	ND			ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	ND			ND	ND	ND	ND	ND	ND	ND	ND
108-38-3	m&p-Xylene	ND			ND	ND	ND	ND	ND	ND	ND	ND
75-09-2	Methylene chloride (Dichloromethane)	ND			ND	ND	ND	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	ND			ND	ND	ND	ND	ND	ND	ND	ND

TABLE D-5
Average Exposure Point Concentrations-Fish Tissue
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

CAS Number	Compound	Site Average (mg/kg)	TEFs-Mammal	TEFs-Bird	Site Average (mg/kg) Mammal	Site Average (mg/kg) Bird	DDA Average (mg/kg)	DDA Average (mg/kg) Mammal	DDA Average (mg/kg) Bird	UDA Average (mg/kg)	UDA Average (mg/kg) Mammal	UDA Average (mg/kg) Bird
108-88-3	Toluene	ND			ND	ND	ND	ND	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloroethene	ND			ND	ND	ND	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	ND			ND	ND	ND	ND	ND	ND	ND	ND
75-01-4	Vinyl chloride	ND			ND	ND	ND	ND	ND	ND	ND	ND
1330-20-7	Xylenes, Total	ND			ND	ND	ND	ND	ND	ND	ND	ND

TABLE D-6
Maximum Exposure Point Concentrations-Surface Water
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

CAS Number	Compound	Site Maximum (mg/L)	TEFs-Mam	TEFs-Bird	Site Maximum (mg/L) Mammal	Site Maximum (mg/L) Bird	DDA Maximum (mg/L)	DDA Maximum (mg/L) Mammal	DDA Maximum (mg/L) Bird	UDA Max	UDA Maximum (mg/L)	UDA Maximum (mg/L) Mammal	UDA Maximum (mg/L) Bird
3268-87-9	1,2,3,4,6,7,8,9-OCDD	1.69E-07	0.0001	0.0001	1.69E-11	1.69E-11	2.22E-07	2.22E-11	2.22E-11	195	1.95E-07	1.95E-11	1.95E-11
39001-02-0	1,2,3,4,6,7,8,9-OCDF	5.20E-09	0.0001	0.0001	5.20E-13	5.20E-13	ND	ND	ND	ND	ND	ND	ND
35822-46-9	1,2,3,4,6,7,8-HpCDD	7.00E-09	0.01	0.001	7.00E-11	7.00E-12	ND	ND	ND	ND	ND	ND	ND
67562-39-4	1,2,3,4,6,7,8-HpCDF	ND	0.01	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND
55673-89-7	1,2,3,4,7,8,9-HpCDF	ND	0.01	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND
39227-28-6	1,2,3,4,7,8-HxCDD	ND	0.1	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND
70648-26-9	1,2,3,4,7,8-HxCDF	2.20E-09	0.1	0.1	2.20E-10	2.20E-10	ND	ND	ND	ND	ND	ND	ND
57653-85-7	1,2,3,6,7,8-HxCDD	ND	0.1	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND
57117-44-9	1,2,3,6,7,8-HxCDF	ND	0.1	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
19408-74-3	1,2,3,7,8,9-HxCDD	ND	0.1	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
40321-76-4	1,2,3,7,8-PeCDD	ND	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND
57117-41-6	1,2,3,7,8-PeCDF	ND	0.05	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
60851-34-5	2,3,4,6,7,8-HxCDF	ND	0.1	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
57117-31-4	2,3,4,7,8-PeCDF	ND	0.5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND
1746-01-6	2,3,7,8-TCDD	ND	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND
51207-31-9	2,3,7,8-TCDF	ND	0.1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Dioxin (TEQ)				3.07E-10	2.44E-10		2.22E-11	2.22E-11			1.95E-11	1.95E-11
93-76-5	2,4,5-T	ND			ND	ND	1.10E-10	1.10E-10	1.10E-10	ND	ND	ND	ND
93-72-1	2,4,5-TP (Silvex)	1.40E-04			1.40E-04	1.40E-04	ND	ND	ND	ND	ND	ND	ND
94-75-7	2,4-D	1.00E-02			1.00E-02	1.00E-02	6.30E-04	6.30E-04	6.30E-04	ND	ND	ND	ND
1918-00-9	Dicamba	1.10E-04			1.10E-04	1.10E-04	ND	ND	ND	ND	ND	ND	ND
120-36-5	Dichloroprop	1.85E-03			1.85E-03	1.85E-03	ND	ND	ND	ND	ND	ND	ND
7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
72-55-9	4,4'-DDE	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
50-29-3	4,4'-DDT	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
319-84-6	alpha-BHC	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
60-57-1	Dieldrin	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
959-98-8	Endosulfan I	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
72-20-8	Endrin	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
72-43-5	Methoxychlor	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	1.53E-03			1.53E-03	1.53E-03	ND	ND	ND	ND	ND	ND	ND

TABLE D-6
Maximum Exposure Point Concentrations-Surface Water
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

CAS Number	Compound	Site Maximum (mg/L)	TEFs-Mam	TEFs-Bird	Site Maximum (mg/L) Mammal	Site Maximum (mg/L) Bird	DDA Maximum (mg/L)	DDA Maximum (mg/L) Mammal	DDA Maximum (mg/L) Bird	UDA Max	UDA Maximum (mg/L)	UDA Maximum (mg/L) Mammal	UDA Maximum (mg/L) Bird
95-50-1	1,2-Dichlorobenzene	1.33E-02			1.33E-02	1.33E-02	ND	ND	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
88-06-2	2,4,6-Trichlorophenol	8.00E-03			8.00E-03	8.00E-03	ND	ND	ND	ND	ND	ND	ND
120-83-2	2,4-Dichlorophenol	3.10E-02			3.10E-02	3.10E-02	1.00E-03	1.00E-03	1.00E-03	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	3.70E-03			3.70E-03	3.70E-03	ND	ND	ND	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
95-57-8	2-Chlorophenol	2.00E-02			2.00E-02	2.00E-02	3.60E-04	3.60E-04	3.60E-04	ND	ND	ND	ND
95-48-7	2-Methylphenol (o-Cresol)	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
88-74-4	2-Nitroaniline	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	1.10E-02			1.10E-02	1.10E-02	ND	ND	ND	ND	ND	ND	ND
101-55-3	4-Bromophenylphenyl ether	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
106-47-8	4-Chloroaniline	4.50E-02			4.50E-02	4.50E-02	1.60E-03	1.60E-03	1.60E-03	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl)phthalate	2.20E-03			2.20E-03	2.20E-03	ND	ND	ND	ND	ND	ND	ND
84-74-2	Di-n-butylphthalate	3.40E-04			3.40E-04	3.40E-04	ND	ND	ND	ND	ND	ND	ND
91-20-3	Naphthalene	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
98-95-3	Nitrobenzene	9.30E-04			9.30E-04	9.30E-04	ND	ND	ND	ND	ND	ND	ND
87-86-6	Pentachlorophenol	8.70E-04			8.70E-04	8.70E-04	ND	ND	ND	ND	ND	ND	ND
108-95-2	Phenol	1.50E-02			1.50E-02	1.50E-02	ND	ND	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	7.75E-04			7.75E-04	7.75E-04	ND	ND	ND	ND	ND	ND	ND
78-93-3	2-Butanone (MEK)	ND			ND	ND	ND	ND	ND	9	9.00E-03	9.00E-03	9.00E-03
108-10-1	4-Methyl-2-pentanone (MIBK)	2.20E-03			2.20E-03	2.20E-03	ND	ND	ND	ND	ND	ND	ND
67-64-1	Acetone	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
71-43-2	Benzene	1.80E-03			1.80E-03	1.80E-03	2.40E-04	2.40E-04	2.40E-04	0.785	7.85E-04	7.85E-04	7.85E-04
75-15-0	Carbon disulfide	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	2.40E-02			2.40E-02	2.40E-02	2.30E-03	2.30E-03	2.30E-03	0.775	7.75E-04	7.75E-04	7.75E-04
75-00-3	Chloroethane	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
67-66-3	Chloroform	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
156-59-2	cis-1,2-Dichloroethene	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	3.80E-04			3.80E-04	3.80E-04	ND	ND	ND	ND	ND	ND	ND
108-38-3	m&p-Xylene	2.40E-03			2.40E-03	2.40E-03	ND	ND	ND	ND	ND	ND	ND
75-09-2	Methylene chloride (Dichloromethane)	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE D-6
Maximum Exposure Point Concentrations-Surface Water
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

CAS Number	Compound	Site Maximum (mg/L)	TEFs-Mam	TEFs-Bird	Site Maximum (mg/L) Mammal	Site Maximum (mg/L) Bird	DDA Maximum (mg/L)	DDA Maximum (mg/L) Mammal	DDA Maximum (mg/L) Bird	UDA Max	UDA Maximum (mg/L)	UDA Maximum (mg/L) Mammal	UDA Maximum (mg/L) Bird
127-18-4	Tetrachloroethene	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	1.70E-03			1.70E-03	1.70E-03	4.00E-04	4.00E-04	4.00E-04	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloroethene	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	3.00E-04			3.00E-04	3.00E-04	ND	ND	ND	ND	ND	ND	ND
75-01-4	Vinyl chloride	ND			ND	ND	ND	ND	ND	0.675	6.75E-04	6.75E-04	6.75E-04
1330-20-7	Xylenes, Total	2.70E-03			2.70E-03	2.70E-03	ND	ND	ND	ND	ND	ND	ND

TABLE D-7
Maximum Exposure Point Concentrations-Sediment
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

CAS Number	Compound	Site Maximum (mg/kg, dry)	TEFs-Mammal	TEFs-Bird	Site Maximum (mg/kg, dry) Mammal	Site Maximum (mg/kg, dry) Bird	DDA Maximum (mg/kg, dry)	DDA Maximum (mg/kg, dry) Mammal	DDA Maximum (mg/kg, dry) Bird	UDA Maximum (mg/kg, dry)	UDA Maximum (mg/kg, dry) Mammal	UDA Maximum (mg/kg, dry) Bird
3268-87-9	1,2,3,4,6,7,8,9-OCDD	9.11E-04	0.0001	0.0001	9.11E-08	9.11E-08	1.18E-03	1.18E-07	1.18E-07	2.87E-04	2.87E-08	2.87E-08
39001-02-0	1,2,3,4,6,7,8,9-OCDF	7.49E-05	0.0001	0.0001	7.49E-09	7.49E-09	1.43E-05	1.43E-09	1.43E-09	6.20E-06	6.20E-10	6.20E-10
35822-46-9	1,2,3,4,6,7,8-HpCDD	7.08E-05	0.01	0.001	7.08E-07	7.08E-08	3.13E-05	3.13E-07	3.13E-08	1.11E-05	1.11E-07	1.11E-08
67562-39-4	1,2,3,4,6,7,8-HpCDF	1.04E-05	0.01	0.01	1.04E-07	1.04E-07	3.00E-06	3.00E-08	3.00E-08	ND	ND	ND
55673-89-7	1,2,3,4,7,8,9-HpCDF	7.90E-07	0.01	0.01	7.90E-09	7.90E-09	ND	ND	ND	ND	ND	ND
39227-28-6	1,2,3,4,7,8-HxCDD	ND	0.1	0.05	ND	ND	ND	ND	ND	ND	ND	ND
70648-26-9	1,2,3,4,7,8-HxCDF	6.20E-07	0.1	0.1	6.20E-08	6.20E-08	ND	ND	ND	2.70E-07	2.70E-08	2.70E-08
57653-85-7	1,2,3,6,7,8-HxCDD	1.20E-06	0.1	0.01	1.20E-07	1.20E-08	ND	ND	ND	3.70E-07	3.70E-08	3.70E-09
57117-44-9	1,2,3,6,7,8-HxCDF	3.80E-07	0.1	0.1	3.80E-08	3.80E-08	ND	ND	ND	ND	ND	ND
19408-74-3	1,2,3,7,8,9-HxCDD	ND	0.1	0.1	ND	ND	ND	ND	ND	3.50E-07	3.50E-08	3.50E-08
40321-76-4	1,2,3,7,8-PeCDD	ND	1	1	ND	ND	ND	ND	ND	ND	ND	ND
57117-41-6	1,2,3,7,8-PeCDF	4.80E-07	0.05	0.1	2.40E-08	4.80E-08	ND	ND	ND	ND	ND	ND
60851-34-5	2,3,4,6,7,8-HxCDF	1.95E-07	0.1	0.1	1.95E-08	1.95E-08	ND	ND	ND	ND	ND	ND
57117-31-4	2,3,4,7,8-PeCDF	1.80E-07	0.5	1	9.00E-08	1.80E-07	ND	ND	ND	ND	ND	ND
1746-01-6	2,3,7,8-TCDD	ND	1	1	ND	ND	ND	ND	ND	ND	ND	ND
51207-31-9	2,3,7,8-TCDF	8.00E-07	0.1	1	8.00E-08	8.00E-07	ND	ND	ND	ND	ND	ND
	Dioxin (TEQ)				1.35E-06	1.44E-06		4.62E-07	1.81E-07		2.39E-07	1.06E-07
93-76-5	2,4,5-T	ND			ND	ND	ND	ND	ND	ND	ND	ND
93-72-1	2,4,5-TP (Silvex)	ND			ND	ND	ND	ND	ND	ND	ND	ND
94-75-7	2,4-D	2.30E+00			2.30E+00	2.30E+00	ND	ND	ND	ND	ND	ND
1918-00-9	Dicamba	ND			ND	ND	ND	ND	ND	ND	ND	ND
120-36-5	Dichloroprop	1.10E+00			1.10E+00	1.10E+00	ND	ND	ND	ND	ND	ND
7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	1.60E+02			1.60E+02	1.60E+02	ND	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	1.60E-03			1.60E-03	1.60E-03	ND	ND	ND	ND	ND	ND
72-55-9	4,4'-DDE	ND			ND	ND	ND	ND	ND	ND	ND	ND
50-29-3	4,4'-DDT	ND			ND	ND	ND	ND	ND	ND	ND	ND
319-84-6	alpha-BHC	ND			ND	ND	ND	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	ND			ND	ND	ND	ND	ND	ND	ND	ND
60-57-1	Dieldrin	ND			ND	ND	ND	ND	ND	ND	ND	ND
959-98-8	Endosulfan I	ND			ND	ND	ND	ND	ND	ND	ND	ND
72-20-8	Endrin	ND			ND	ND	ND	ND	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	ND			ND	ND	ND	ND	ND	ND	ND	ND
5103-74-2	gamma-Chlordane	ND			ND	ND	ND	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	ND			ND	ND	ND	ND	ND	ND	ND	ND
72-43-5	Methoxychlor	ND			ND	ND	ND	ND	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ND			ND	ND	ND	ND	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	1.10E-01			1.10E-01	1.10E-01	ND	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	8.15E-02			8.15E-02	8.15E-02	ND	ND	ND	ND	ND	ND
88-06-2	2,4,6-Trichlorophenol	4.70E-01			4.70E-01	4.70E-01	ND	ND	ND	ND	ND	ND
120-83-2	2,4-Dichlorophenol	1.00E+00			1.00E+00	1.00E+00	ND	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	8.00E-02			8.00E-02	8.00E-02	ND	ND	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	7.50E-01			7.50E-01	7.50E-01	ND	ND	ND	ND	ND	ND
95-57-8	2-Chlorophenol	3.60E-01			3.60E-01	3.60E-01	ND	ND	ND	ND	ND	ND

TABLE D-7
Maximum Exposure Point Concentrations-Sediment
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

CAS Number	Compound	Site Maximum (mg/kg, dry)	TEFs-Mammal	TEFs-Bird	Site Maximum (mg/kg, dry) Mammal	Site Maximum (mg/kg, dry) Bird	DDA Maximum (mg/kg, dry)	DDA Maximum (mg/kg, dry) Mammal	DDA Maximum (mg/kg, dry) Bird	UDA Maximum (mg/kg, dry)	UDA Maximum (mg/kg, dry) Mammal	UDA Maximum (mg/kg, dry) Bird
95-48-7	2-Methylphenol (o-Cresol)	ND			ND	ND	ND	ND	ND	ND	ND	ND
88-74-4	2-Nitroaniline	7.60E-02			7.60E-02	7.60E-02	ND	ND	ND	ND	ND	ND
106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	8.00E-01			8.00E-01	8.00E-01	ND	ND	ND	ND	ND	ND
101-55-3	4-Bromophenylphenyl	9.65E-02			9.65E-02	9.65E-02	ND	ND	ND	ND	ND	ND
106-47-8	4-Chloroaniline	4.80E+00			4.80E+00	4.80E+00	ND	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl)phthalate	ND			ND	ND	ND	ND	ND	1.10E-01	1.10E-01	1.10E-01
84-74-2	Di-n-butylphthalate	ND			ND	ND	ND	ND	ND	ND	ND	ND
91-20-3	Naphthalene	1.90E-01			1.90E-01	1.90E-01	ND	ND	ND	ND	ND	ND
98-95-3	Nitrobenzene	ND			ND	ND	ND	ND	ND	ND	ND	ND
87-86-5	Pentachlorophenol	4.50E-02			4.50E-02	4.50E-02	1.60E-03	1.60E-03	1.60E-03	1.55E-03	1.55E-03	1.55E-03
108-95-2	Phenol	5.60E+00			5.60E+00	5.60E+00	ND	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	2.50E-01			2.50E-01	2.50E-01	ND	ND	ND	ND	ND	ND
78-93-3	2-Butanone (MEK)	9.10E-02			9.10E-02	9.10E-02	ND	ND	ND	2.30E-02	2.30E-02	2.30E-02
108-10-1	4-Methyl-2-pentanone	1.50E-01			1.50E-01	1.50E-01	ND	ND	ND	ND	ND	ND
67-64-1	Acetone	3.00E+00			3.00E+00	3.00E+00	4.10E-02	4.10E-02	4.10E-02	1.30E-01	1.30E-01	1.30E-01
71-43-2	Benzene	4.60E-01			4.60E-01	4.60E-01	ND	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	3.30E-03			3.30E-03	3.30E-03	ND	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	7.20E+00			7.20E+00	7.20E+00	ND	ND	ND	ND	ND	ND
75-00-3	Chloroethane	1.90E-03			1.90E-03	1.90E-03	ND	ND	ND	ND	ND	ND
67-66-3	Chloroform	9.70E-03			9.70E-03	9.70E-03	ND	ND	ND	ND	ND	ND
156-59-2	cis-1,2-Dichloroethene	5.80E-03			5.80E-03	5.80E-03	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	8.20E-02			8.20E-02	8.20E-02	ND	ND	ND	ND	ND	ND
108-38-3	m&p-Xylene	6.30E-01			6.30E-01	6.30E-01	ND	ND	ND	ND	ND	ND
75-09-2	Methylene chloride	1.70E-02			1.70E-02	1.70E-02	ND	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	2.40E-02			2.40E-02	2.40E-02	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	7.80E+00			7.80E+00	7.80E+00	1.80E-03	1.80E-03	1.80E-03	5.60E-03	5.60E-03	5.60E-03
156-60-5	trans-1,2-Dichloroethene	9.10E-04			9.10E-04	9.10E-04	ND	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	4.20E-02			4.20E-02	4.20E-02	ND	ND	ND	ND	ND	ND
75-01-4	Vinyl chloride	4.00E-03			4.00E-03	4.00E-03	ND	ND	ND	ND	ND	ND
1330-20-7	Xylenes, Total	7.10E-01			7.10E-01	7.10E-01	ND	ND	ND	ND	ND	ND

TABLE D-8
Maximum Exposure Point Concentrations-Fish Tissue
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

CAS Number	Compound	Site Maximum (mg/kg)	TEFs-Mammal	TEFs-Bird	Site Maximum (mg/kg) Mammal	Site Maximum (mg/kg) Bird	DDA Maximum (mg/kg)	DDA Maximum (mg/kg) Mammal	DDA Maximum (mg/kg) Bird	UDA Maximum (mg/kg)	UDA Maximum (mg/kg) Mammal	UDA Maximum (mg/kg) Bird
3268-87-9	1,2,3,4,6,7,8,9-OCDD	1.89E-04	0.0001	0.0001	1.89E-08	1.89E-08	1.19E-04	1.19E-08	1.19E-08	7.97E-05	7.97E-09	7.97E-09
39001-02-0	1,2,3,4,6,7,8,9-OCDF	4.30E-06	0.0001	0.0001	4.30E-10	4.30E-10	2.70E-06	2.70E-10	2.70E-10	ND	ND	ND
35822-46-9	1,2,3,4,6,7,8-HpCDD	7.10E-06	0.01	0.001	7.10E-08	7.10E-09	4.30E-06	4.30E-08	4.30E-09	8.80E-06	8.80E-08	8.80E-09
67562-39-4	1,2,3,4,6,7,8-HpCDF	1.00E-06	0.01	0.01	1.00E-08	1.00E-08	ND	ND	ND	5.90E-07	5.90E-09	5.90E-09
55673-89-7	1,2,3,4,7,8,9-HpCDF	ND	0.01	0.01	ND	ND	ND	ND	ND	ND	ND	ND
39227-28-6	1,2,3,4,7,8-HxCDD	3.00E-07	0.1	0.05	3.00E-08	1.50E-08	5.80E-07	5.80E-08	2.90E-08	3.30E-07	3.30E-08	1.65E-08
70648-26-9	1,2,3,4,7,8-HxCDF	8.40E-07	0.1	0.1	8.40E-08	8.40E-08	7.10E-07	7.10E-08	7.10E-08	8.50E-07	8.50E-08	8.50E-08
57653-85-7	1,2,3,6,7,8-HxCDD	1.20E-06	0.1	0.01	1.20E-07	1.20E-08	2.00E-06	2.00E-07	2.00E-08	1.80E-06	1.80E-07	1.80E-08
57117-44-9	1,2,3,6,7,8-HxCDF	2.20E-07	0.1	0.1	2.20E-08	2.20E-08	3.40E-07	3.40E-08	3.40E-08	2.60E-07	2.60E-08	2.60E-08
19408-74-3	1,2,3,7,8,9-HxCDD	5.80E-07	0.1	0.1	5.80E-08	5.80E-08	7.80E-07	7.80E-08	7.80E-08	1.10E-06	1.10E-07	1.10E-07
40321-76-4	1,2,3,7,8-PeCDD	6.40E-07	1	1	6.40E-07	6.40E-07	1.20E-06	1.20E-06	1.20E-06	1.00E-06	1.00E-06	1.00E-06
57117-41-6	1,2,3,7,8-PeCDF	4.30E-07	0.05	0.1	2.15E-08	4.30E-08	ND	ND	ND	ND	ND	ND
60851-34-5	2,3,4,6,7,8-HxCDF	4.80E-07	0.1	0.1	4.80E-08	4.80E-08	8.60E-07	8.60E-08	8.60E-08	3.00E-07	3.00E-08	3.00E-08
57117-31-4	2,3,4,7,8-PeCDF	6.40E-07	0.5	1	3.20E-07	6.40E-07	1.00E-06	5.00E-07	1.00E-06	5.90E-07	2.95E-07	5.90E-07
1746-01-6	2,3,7,8-TCDD	2.40E-06	1	1	2.40E-06	2.40E-06	9.60E-07	9.60E-07	9.60E-07	1.10E-06	1.10E-06	1.10E-06
51207-31-9	2,3,7,8-TCDF	5.70E-06	0.1	1	5.70E-07	5.70E-06	1.00E-06	1.00E-07	1.00E-06	2.60E-06	2.60E-07	2.60E-06
	Dioxin (TEQ)				4.41E-06	9.70E-06		3.34E-06	4.49E-06		3.22E-06	5.60E-06
93-76-5	2,4,5-T	1.30E-02			1.30E-02	1.30E-02	ND	ND	ND	7.10E-03	7.10E-03	7.10E-03
93-72-1	2,4,5-TP (Silvex)	8.70E-03			8.70E-03	8.70E-03	6.90E-03	6.90E-03	6.90E-03	7.50E-03	7.50E-03	7.50E-03
94-75-7	2,4-D	ND			ND	ND	ND	ND	ND	ND	ND	ND
1918-00-9	Dicamba	ND			ND	ND	ND	ND	ND	6.50E-03	6.50E-03	6.50E-03
120-36-5	Dichloroprop	ND			ND	ND	ND	ND	ND	ND	ND	ND
7085-19-0	MCPP[2-(4-chloro-2-methylphenoxy)-propanoic acid]	8.60E+00			8.60E+00	8.60E+00	ND	ND	ND	ND	ND	ND
72-54-8	4,4'-DDD	6.70E-03			6.70E-03	6.70E-03	1.20E-02	1.20E-02	1.20E-02	ND	ND	ND
72-55-9	4,4'-DDE	6.00E-02			6.00E-02	6.00E-02	1.90E-02	1.90E-02	1.90E-02	2.50E-02	2.50E-02	2.50E-02
50-29-3	4,4'-DDT	1.30E-02			1.30E-02	1.30E-02	ND	ND	ND	7.60E-03	7.60E-03	7.60E-03
319-84-6	alpha-BHC	2.60E-03			2.60E-03	2.60E-03	ND	ND	ND	ND	ND	ND
5103-71-9	alpha-Chlordane	1.40E-02			1.40E-02	1.40E-02	7.70E-03	7.70E-03	7.70E-03	ND	ND	ND
60-57-1	Dieldrin	6.40E-02			6.40E-02	6.40E-02	1.90E-02	1.90E-02	1.90E-02	3.20E-02	3.20E-02	3.20E-02
959-98-8	Endosulfan I	4.30E-03			4.30E-03	4.30E-03	ND	ND	ND	3.00E-03	3.00E-03	3.00E-03
72-20-8	Endrin	1.50E-02			1.50E-02	1.50E-02	ND	ND	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	1.00E-02			1.00E-02	1.00E-02	4.90E-03	4.90E-03	4.90E-03	7.40E-03	7.40E-03	7.40E-03
5103-74-2	gamma-Chlordane	8.10E-03			8.10E-03	8.10E-03	3.50E-03	3.50E-03	3.50E-03	5.80E-03	5.80E-03	5.80E-03
1024-57-3	Heptachlor epoxide	5.30E-03			5.30E-03	5.30E-03	ND	ND	ND	ND	ND	ND
72-43-5	Methoxychlor	ND			ND	ND	ND	ND	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ND			ND	ND	ND	ND	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	2.40E-01			2.40E-01	2.40E-01	ND	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	1.30E-01			1.30E-01	1.30E-01	ND	ND	ND	ND	ND	ND
88-06-2	2,4,6-Trichlorophenol	ND			ND	ND	ND	ND	ND	ND	ND	ND
120-83-2	2,4-Dichlorophenol	1.90E-01			1.90E-01	1.90E-01	ND	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	ND			ND	ND	ND	ND	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ND			ND	ND	ND	ND	ND	ND	ND	ND

TABLE D-8
Maximum Exposure Point Concentrations-Fish Tissue
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

CAS Number	Compound	Site Maximum (mg/kg)	TEFs-Mammal	TEFs-Bird	Site Maximum (mg/kg) Mammal	Site Maximum (mg/kg) Bird	DDA Maximum (mg/kg)	DDA Maximum (mg/kg) Mammal	DDA Maximum (mg/kg) Bird	UDA Maximum (mg/kg)	UDA Maximum (mg/kg) Mammal	UDA Maximum (mg/kg) Bird
95-57-8	2-Chlorophenol	ND			ND	ND	ND	ND	ND	ND	ND	ND
95-48-7	2-Methylphenol (o-Cresol)	2.20E-01			2.20E-01	2.20E-01	3.40E-01	3.40E-01	3.40E-01	1.10E-01	1.10E-01	1.10E-01
88-74-4	2-Nitroaniline	ND			ND	ND	ND	ND	ND	ND	ND	ND
106-44-5	3-Methylphenol/4-Methylphenol (m&p-Cresol)	ND			ND	ND	ND	ND	ND	ND	ND	ND
101-55-3	4-Bromophenylphenyl ether	ND			ND	ND	ND	ND	ND	ND	ND	ND
106-47-8	4-Chloroaniline	ND			ND	ND	ND	ND	ND	ND	ND	ND
117-81-7	bis(2-Ethylhexyl)phthalate	ND			ND	ND	ND	ND	ND	ND	ND	ND
84-74-2	Di-n-butylphthalate	ND			ND	ND	ND	ND	ND	ND	ND	ND
91-20-3	Naphthalene	ND			ND	ND	ND	ND	ND	ND	ND	ND
98-95-3	Nitrobenzene	ND			ND	ND	ND	ND	ND	ND	ND	ND
87-86-5	Pentachlorophenol	ND			ND	ND	ND	ND	ND	ND	ND	ND
108-95-2	Phenol	ND			ND	ND	ND	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	ND			ND	ND	ND	ND	ND	ND	ND	ND
78-93-3	2-Butanone (MEK)	ND			ND	ND	ND	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone (MIBK)	ND			ND	ND	ND	ND	ND	ND	ND	ND
67-64-1	Acetone	ND			ND	ND	ND	ND	ND	ND	ND	ND
71-43-2	Benzene	ND			ND	ND	ND	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	ND			ND	ND	ND	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	ND			ND	ND	ND	ND	ND	ND	ND	ND
75-00-3	Chloroethane	ND			ND	ND	ND	ND	ND	ND	ND	ND
67-66-3	Chloroform	ND			ND	ND	ND	ND	ND	ND	ND	ND
156-59-2	cis-1,2-Dichloroethene	ND			ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	ND			ND	ND	ND	ND	ND	ND	ND	ND
108-38-3	m&p-Xylene	ND			ND	ND	ND	ND	ND	ND	ND	ND
75-09-2	Methylene chloride (Dichloromethane)	ND			ND	ND	ND	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	ND			ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	ND			ND	ND	ND	ND	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloroethene	ND			ND	ND	ND	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	ND			ND	ND	ND	ND	ND	ND	ND	ND
75-01-4	Vinyl chloride	ND			ND	ND	ND	ND	ND	ND	ND	ND
1330-20-7	Xylenes, Total	ND			ND	ND	ND	ND	ND	ND	ND	ND

TABLE D-9
Toxicological Endpoints for Birds
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Compound	Chemical Form	Test Species	Exposure Route	Exposure Duration (Days)	Effect	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	LC50 (mg/kg/d)	Source
Dioxin									
TEQ	2,3,7,8-TCDD	Ring-necked Pheasant	Intraperitoneal	70	Fertility, Embryo Mortalitiy	0.014 [a]	0.14	NA	Nosek et al., 1992
2,4,5-T						NA	NA	NA	
2,4,5-TP (Silvex)						NA	NA	NA	
2,4-D						NA	NA	NA	
Dicamba	Dicamba acid	Mallard Duck	Oral in diet	147	Reproduction	800	1600	NA	EPA's Pesticides Database
Dichloroprop						NA	NA	NA	
MCPP	MCPA acid[1]	Bobwhite Quail	Oral in diet	98	Reproduction	100 [a]	1000	NA	EPA's Pesticides Database
4,4'-DDD						NA	NA	NA	
4,4'-DDE						NA	NA	NA	
4,4'-DDT	Total DDT	Brown Pelican	Oral in diet	5 years	Reproduction	0.0028	0.028	NA	Sample et al., 1996.
alpha-BHC	mixed isomers	Japanese Quail	Oral in diet	90	Reproduction	0.56	2.25	NA	Sample et al., 1996
alpha-Chlordane	Chlordane	Red-winged Blackbird	Oral in diet	84	Mortality	2.14	10.7	NA	Sample et al., 1996
Dieldrin	Dieldrin	Barn Owl	Oral in diet	730	Reproduction	0.077	NA	NA	Sample et al., 1996
Endosulfan I	Endosulfan	Gray Partridge	Oral in diet	28 during critical life	Reproduction	10	NA	NA	Sample et al., 1996
Endrin	Endrin	Screech Owl	Oral in diet	> 83	Reproduction	0.01 [a]	0.1	NA	Sample et al., 1996
Endrin aldehyde	Endrin	Screech Owl	Oral in diet	> 83	Reproduction	0.01 [a]	0.1	NA	Sample et al., 1996
gamma-Chlordane	Chlordane	Red-winged Blackbird	Oral in diet	84	Mortality	2.14	10.7	NA	Sample et al., 1996
Heptachlor epoxide			Oral in diet			NA	NA	NA	
Methoxychlor						NA	NA	NA	
1,2,4-Trichlorobenzene						NA	NA	NA	
1,2-Dichlorobenzene						NA	NA	NA	
1,4-Dichlorobenzene						NA	NA	NA	
2,4,6-Trichlorophenol						NA	NA	NA	
2,4-Dichlorophenol						NA	NA	NA	
2,4-Dimethylphenol						NA	NA	NA	
2,4-Dinitrotoluene						NA	NA	NA	
2-Chlorophenol						NA	NA	NA	
o-Cresol						NA	NA	NA	
2-Nitroaniline						NA	NA	NA	
m &*p*-Cresol						NA	NA	NA	
4-Bromophenylphenyl ether						NA	NA	NA	
4-Chloroaniline						NA	NA	NA	
bis(2-Ethylhexyl)phthalate	Bis(2-ethylhexyl)phthalate	Ringed Dove	Oral in diet	28 during critical life stage = chronic	Reproduction	1.1	NA	NA	Sample et al., 1996
Di-n-butylphthalate						NA	NA	NA	
Naphthalene						NA	NA	NA	
Nitrobenzene						NA	NA	NA	
Pentachlorophenol						NA	NA	NA	
Phenol						NA	NA	NA	
1,2-Dichloroethane	NA	Chicken	Oral in diet	730	Reproduction	17.2	34.4	NA	Sample et al., 1996
2-Butanone (MEK)						NA	NA	NA	
4-Methyl-2-pentanone (MIBK)						NA	NA	NA	
Acetone						NA	NA	NA	
Benzene						NA	NA	NA	
Carbon disulfide						NA	NA	NA	
Chlorobenzene						NA	NA	NA	
Chloroethane						NA	NA	NA	
Chloroform						NA	NA	NA	
cis-1,2-Dichloroethene						NA	NA	NA	
Ethylbenzene						NA	NA	NA	
p/m-Xylene						NA	NA	NA	
Methylene chloride						NA	NA	NA	
Tetrachloroethene						NA	NA	NA	
Toluene						NA	NA	NA	

TABLE D-9
Toxicological Endpoints for Birds
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Compound	Chemical Form	Test Species	Exposure Route	Exposure Duration (Days)	Effect	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	LC50 (mg/kg/d)	Source
trans-1,2-Dichloroethene						NA	NA	NA	
Trichloroethene						NA	NA	NA	
Vinyl chloride						NA	NA	NA	
Xylene (total)						NA	NA	NA	

NA = Not Available
TEF = Toxicity equivalency factor
- NOAEL value was derived by applying an Acute to Chronic Ratio of 10 to the LOAEL value.
No toxicological data were available for MCPP. Effect levels for MCPA, which is structurally similar to MCPP, is used as a surrogate for MCPP.

Sources:

Sample, B.E., D.M. Opresko, and G.W. Suter II. 1996. Toxicological Benchmarks for Wildlife: 1996 Revision. Risk Assessment Program. Health Sciences Reasearch Division. Oak Ridge, TN. ES/ER/TM-86/R3.
Nosek, J.A., J.R. Sullivan, S.S. Hurley, S.R. Craven, and R.E. Peterson. 1992. Toxicity and reproductive effects of 2,3,7,8-tetrachlorodibenzo-*p*-dioxin in ring-necked pheasant hens. Journal of Toxicology and Environmental Health. 35: 187-198.

TABLE D-10
Toxicological Endpoints for Mammals
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Compound	Test Species									RIVER OTTER		
	Exposure Route	Effect Endpoint	Exposure Duration	Chemical Form	Test Species	Body Weight[a] (kg)	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	Reference	Body Weight (kg)	Final NOAEL (mg/kg/d)	Final LOAEL (mg/kg/d)
TEQ	Oral-diet	Pup Weight, Litter Size	3 generations	2,3,7,8-TCDD	Rat	0.35	0.001 [b]	0.01	Murray et al., 1979	8	0.0005	0.005
2,4,5-T	Oral-diet	Reduced neonatal survival	3 generations	2,4,5-T	Rat	0.35	3	10	IRIS, 2001	8	1.3720	4.573
2,4,5-TP (Silvex)	Oral-diet	Growth, Food consumption, hematological parameters	2 years	2,4,5-TP	Dog	12.7	0.8	NA	IRIS, 2001	8	0.8980	NA
2-4,D	Oral-diet	Blood, kidney, and liver toxicity	90 days	2,4-D	Rat	0.35	1	5	IRIS, 2000	8	0.4573	2.287
Dicamba	Oral-diet	Reproduction	13 days - gestation	Dicamba	Rabbit	1.2	0.3	1	IRIS, 2000	8	0.1867	0.622
Dichloroprop							NA	NA		8	NA	NA
MCPP	Oral-diet	Renal effects	90 days	MCPP	Rat	0.35	3	9	IRIS, 2000	8	1.3720	4.116
4-4'-DDD							NA	NA		8	NA	NA
4-4'-DDE	Oral-diet	Reproduction	730	DDT	Rat	0.35	0.8	4	Sample et al., 1996	8	0.3659	1.829
4-4'-DDT	Oral-diet	Reproduction	730	DDT	Rat	0.35	0.8	4	Sample et al., 1996	8	0.3659	1.829
alpha-BHC	Oral-diet	Reproduction	331 days	BHC mixed isomers	Mink	1	0.014 [b]	0.14	Sample et al., 1996	8	0.0083	0.083
alpha-Chlordane	Oral-diet	Reproduction	6 generations	Chlordane	Mouse	0.03	4.6	9.2	Sample et al., 1996	8	1.1383	2.277
Dieldrin	Oral-diet	Reproduction	3 generations	NA	Rat	0.35	0.02 [b]	0.2	Sample et al., 1996	8	0.0091	0.091
Endosulfan I	Oral intubation	Reproduction/blood chemistry	30 days	Endosulfan	Rat	0.35	0.15 [c]	NA	Sample et al., 1996	8	0.0686	NA
Endrin	Oral - diet	Reproduction	120 days	Endrin	Mouse	0.03	0.092 [b]	0.92	Sample et al., 1996	8	0.0228	0.228
Endrin aldehyde	Oral - diet	Reproduction	120 days	Endrin	Mouse	0.03	0.092 [b]	0.92	Sample et al., 1996	8	0.0228	0.228
gamma-Chlordane	Oral-diet	Reproduction	6 generations	Chlordane	Mouse	0.03	4.6	9.2	Sample et al., 1996	8	1.1383	2.277
Heptachlor epoxide	Oral-diet	Reproduction	181 days	Heptachlor	Mink	1	0.1 [b]	1	Sample et al., 1996	8	0.0595	0.595
Methoxychlor	Oral-diet	Reproduction	11 month	Methoxychlor	Rat	0.35	4	8	Sample et al., 1996	8	1.8294	3.659
1,2,4-Trichlorobenzene	Oral-water	Adrenal weight	multigenerational	NA	Rat	0.35	14.8	53.6	IRIS	8	6.7687	24.514
1,2-Dichlorobenzene	Oral-gavage	Mortality	515	NA	Rat	0.35	86 [c]	NA	IRIS	8	39.3317	NA
1,4-Dichlorobenzene	Oral-gavage	Mortality - 52%	515	NA	Rat	0.35	21 [b]	210 [c]	ATSDR	8	9.6043	96.043
2,4,6-Trichlorophenol							NA	NA		8	NA	NA
2,4-Dichlorophenol							NA	NA		8	NA	NA
2,4-Dimethylphenol							NA	NA		8	NA	NA
2,4-Dinitrotoluene							NA	NA		8	NA	NA
2-Chlorophenol							NA	NA		8	NA	NA
o-Cresol	Oral-diet	Reproduction	6 months	NA	Mink	1	219.2	NA	Sample et al., 1996	8	130.3371	NA
2-Nitroaniline							NA	NA		8	NA	NA
m &*p*-Cresol							NA	NA		8	NA	NA
4-Bromophenylphenyl ether							NA	NA		8	NA	NA
4-Chloroaniline	Oral-gavage	Growth, Mortality	515	NA	Rat	0.35	10 [c]	NA	NTP, 1989	8	4.5735	NA
bis(2-Ethylhexyl)phthalate	Oral-diet	Reproduction	28	NA	Mouse	0.03	18.3	183	Sample et al., 1996	8	4.5285	45.285
Di-n-butylphthalate							NA	NA		8	NA	NA
Naphthalene	Oral-gavage	Body Weight	65-applied ACR	NA	Rat	0.35	7.1 [c]	14 [c]	IRIS	8	3.2472	6.403
Nitrobenzene							NA	NA		8	NA	NA
Pentachlorophenol	Oral-diet	Body Weight	181	NA	Rat	0.35	4	13	ATSDR	8	1.8294	5.945
Phenol							NA	NA		8	NA	NA
1,2-Dichloroethane							NA	NA		8	NA	NA
2-Butanone (MEK)	Oral-water	Reproduction	2 generations	NA	Rat	0.35	1771	4571	Sample et al., 1996	8	809.9591	2090.527
4-Methly-2-pentanone (MIBK)							NA	NA		8	NA	NA
Acetone	Oral intubation	Liver and kidney damage	90 days	NA	Rat	0.35	10	50	Sample et al., 1996	8	4.5735	22.867
Benzene	Oral-gavage	Reproduction	Days 6-12 of gestation	NA	Mouse	0.03	26.36	263.6	Sample et al., 1996	8	6.5231	65.231
Carbon disulfide							NA	NA		8	NA	NA
Chlorobenzene	Oral-gavage	Mortality	515	NA	Mouse	0.03	86 [c]	NA	ATSDR	8	21.2817	NA
Chloroethane							NA	NA		8	NA	NA
Chloroform	Oral intubation	Liver, kidney, gonad condition	13 weeks	NA	Rat	0.35	15	41	Sample et al., 1996	8	6.8602	18.751
cis-1,2-Dichloroethene	Oral-gavage	Body Weight	90 - applied ACR	NA	Rat	0.35	3.2	29	ATSDR	8	1.4635	13.263

TABLE D-10
Toxicological Endpoints for Mammals
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Compound	Test Species									RIVER OTTER		
	Exposure Route	Effect Endpoint	Exposure Duration	Chemical Form	Test Species	Body Weight[a] (kg)	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	Reference	Body Weight (kg)	Final NOAEL (mg/kg/d)	Final LOAEL (mg/kg/d)
Ethylbenzene	Oral-gavage	Liver Histology	182 days	ethylbenzene	Rat	0.35	136[d]	408		8	62.1990	186.597
p/m-Xylene	Oral-gavage	Reproduction	Days 6-15 of gestation	Xylene (mixed isomers)	Mouse	0.03	2.1	2.6	Sample et al., 1996	8	0.5197	0.643
Methylene chloride	Oral-water	Liver Histology	2 years	NA	Rat	0.35	5.85	50	Sample et al., 1996	8	2.6755	22.867
Tetrachloroethene							NA	NA		8	NA	NA
Toluene	Oral-gavage	Reproduction	7 of gestation	NA	Mouse	0.03	26	260	Sample et al., 1996	8	6.4340	64.340
trans-1,2-Dichloroethene							NA	NA		8	NA	NA
Trichloroethene							NA	NA		8	NA	NA
Vinyl chloride	Oral-diet	Longevity, Mortality	Lifetime (144 days)	NA	Rat	0.35	0.17	1.7	Sample et al., 1996	8	0.0777	0.777
Xylene (total)	Oral-gavage	Reproduction	Days 6-15 of gestation	Xylene (mixed isomers)	Mouse	0.03	2.1	2.6	Sample et al., 1997	8	0.5197	0.643

[a]If the test species' body weight was not identified in the study than the following values were used: Rat = 0.35kg, Mouse = 0.03kg, Mink = 1.0kg
[b]Calculated from LOAEL
[c]Calculated based on five days per week exposure ((concentration*5)/7)
[d]No NOAEL was given in the IRIS file, but this values was the next lowest dose.

NA = Not Available/Not Applicable
NOAEL = No Observed Adverse Effect Level
LOAEL = Lowest Observed Adverse Effect Level

References:
Sample, B E., D M. Opresko, G W. Suter II. Toxicological Benchmarks for Wildlife: 1996 Revision. U S. Department of Energy, Office of Environmental Management. ES/ER/TM-86/R3.
Agency of Toxic Substances and Disease Registry (ATSDR). Toxicological Profiles.
Integrated Risk Information System (IRIS). Substance Files. U.S. Environmental Protection Agency.

Murray, F J., F A. Smith, and K.D. Nitschke. 1979. Three-Generation Reproduction Study of Rats Given 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) in the Diet. Toxicology and Applied Pharmacology. 50:

TABLE D-11
Toxicity Equivalency Factors (TEFs) for Wildlife
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

PCB Congeners	Mammals	Fish	Birds
1,2,3,4,6,7,8,9-OCDD	0.0001	0.0001	0.0001
1,2,3,4,6,7,8,9-OCDF	0.0001	0.0001	0.0001
1,2,3,4,6,7,8-HpCDD	0.01	0.001	0.001
1,2,3,4,6,7,8-HpCDF	0.01	0.01	0.01
1,2,3,4,7,8,9-HpCDF	0.01	0.01	0.01
1,2,3,4,7,8-HxCDD	0.1	0.5	0.05
1,2,3,4,7,8-HxCDF	0.1	0.1	0.1
1,2,3,6,7,8-HxCDD	0.1	0.01	0.01
1,2,3,6,7,8-HxCDF	0.1	0.1	0.1
1,2,3,7,8,9-HxCDD	0.1	0.01	0.1
1,2,3,7,8-PeCDD	1	1	1
1,2,3,7,8-PeCDF	0.05	0.05	0.1
2,3,4,6,7,8-HxCDF	0.1	0.1	0.1
2,3,4,7,8-PeCDF	0.5	0.5	1
2,3,7,8-TCDD	1	1	1
2,3,7,8-TCDF	0.1	0.05	1

Source: Van den Berg, M., L. Birnbaum, A.T.C. Bosveld, B. Brunstrom, P. Cook, M. Feeley, J. P. Giesy, A. Hanberg, R. Hasegawa, S. W. Kennedy, T. Kubiak, J.C. Larsen, F.X. Rolaf van Leeuwen,A.K. Dijien Liem, C. Nolt, R.E. Peterson, L. Poellinger, S. Safe, D.Schrenk, D. Tillitt, M. Tysklind, M. Younes, F. Warn, and T. Zacharewski. 1998. Toxic Equivalency Factors (TEFs) for PCBs, PCDDs, PCDFs for Humans and Wildlife. Environ. Heal. Persp. 106(12): 775-792.

Table D-12
Food Chain Model For Chronic Exposures
Great Blue Heron Analysis
Ingestion of Fish
Site
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Foraging Area acres	Site Area acres	Exposure Dose mg/kg/day	Food: Total Conc. in Food mg/kg wet	Food: Fish Tissue Concentration mg/kg wet	Food: Proportion Fish in Diet	Food: Ingestion Rate kg/kg/day	Food: Proportion of Dose	Water: Conc. in Water mg/l	Water: Ingestion Rate l/kg/day	Water: Proportion of Dose
Dioxin (TEQ)	0.00003	0.000003	0.014	0.14	4.79E-07	9.62E-01	20.8	20	4.98E-07	2.77E-06	2.77E-06	1	0.18	1.00	1.60E-10	0.0443	0.00
2,4,5-T	Bench NA	Bench NA	NA	NA	6.83E-04	9.62E-01	20.8	20	1.03E-03	5.74E-03	5.74E-03	1	0.18	1.00	ND	0.0443	0.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	6.53E-04	9.62E-01	20.8	20	8.87E-04	4.87E-03	4.87E-03	1	0.18	0.99	2.38E-04	0.0443	0.01
2,4-D	Bench NA	Bench NA	NA	NA	1.31E-04	9.62E-01	20.8	20	1.36E-04	0.00E+00	ND	1	0.18	0.00	3.06E-03	0.0443	1.00
Dicamba	0.00000003	0.00000001	800	1400	2.33E-06	9.62E-01	20.8	20	2.42E-06	0.00E+00	ND	1	0.18	0.00	5.46E-04	0.0443	1.00
Dichlorprop	Bench NA	Bench NA	NA	NA	1.10E-04	9.62E-01	20.8	20	1.15E-04	0.00E+00	ND	1	0.18	0.00	2.56E-03	0.0443	1.00
MCPP	0.004	0.0004	100	1000	3.88E-01	9.62E-01	20.8	20	4.14E-01	2.30E+00	2.30E+00	1	0.18	1.00	ND	0.0443	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	1.94E-03	9.62E-01	20.8	20	2.02E-03	1.12E-02	1.12E-02	1	0.18	1.00	ND	0.0443	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	3.18E-03	9.62E-01	20.8	20	3.31E-03	1.84E-02	1.84E-02	1	0.18	1.00	ND	0.0443	0.00
4,4'-DDT	0.8	0.08	0.0028	0.028	2.18E-03	9.62E-01	20.8	20	2.27E-03	1.26E-02	1.26E-02	1	0.18	1.00	ND	0.0443	0.00
alpha-BHC	0.004	0.0008	0.56	2.25	1.97E-03	9.62E-01	20.8	20	2.05E-03	1.14E-02	1.14E-02	1	0.18	1.00	ND	0.0443	0.00
alpha-Chlordane	0.0008	0.0002	2.14	10.7	2.03E-03	9.62E-01	20.8	20	2.11E-03	1.17E-02	1.17E-02	1	0.18	1.00	ND	0.0443	0.00
Dieldrin	0.03	Bench NA	0.077	NA	2.56E-03	9.62E-01	20.8	20	2.66E-03	1.48E-02	1.48E-02	1	0.18	1.00	ND	0.0443	0.00
Endosulfan I	0.0002	Bench NA	16	NA	2.01E-03	9.62E-01	20.8	20	2.09E-03	1.16E-02	1.16E-02	1	0.18	1.00	ND	0.0443	0.00
Endrin	0.2	0.02	0.01	0.1	2.11E-03	9.62E-01	20.8	20	2.20E-03	1.22E-02	1.22E-02	1	0.18	1.00	ND	0.0443	0.00
Endrin aldehyde	0.2	0.02	0.01	0.1	1.99E-03	9.62E-01	20.8	20	2.07E-03	1.15E-02	1.15E-02	1	0.18	1.00	ND	0.0443	0.00
gamma-Chlordane	0.0008	0.0002	2.14	10.7	1.90E-03	9.62E-01	20.8	20	1.98E-03	1.10E-02	1.10E-02	1	0.18	1.00	ND	0.0443	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	1.83E-03	9.62E-01	20.8	20	1.93E-03	1.07E-02	1.07E-02	1	0.18	1.00	ND	0.0443	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	9.58E-06	9.62E-01	20.8	20	9.97E-06	0.00E+00	ND	1	0.18	0.00	2.25E-03	0.0443	1.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	3.97E-02	9.62E-01	20.8	20	4.13E-02	2.26E-01	2.26E-01	1	0.18	0.99	4.62E-03	0.0443	0.01
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	4.17E-02	9.62E-01	20.8	20	4.34E-02	2.41E-01	2.41E-01	1	0.18	1.00	ND	0.0443	0.00
2,4,5-Trichlorophenol	Bench NA	Bench NA	NA	NA	1.80E-04	9.62E-01	20.8	20	1.56E-04	0.00E+00	ND	1	0.18	0.00	3.62E-03	0.0443	1.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	3.97E-02	9.62E-01	20.8	20	4.13E-02	2.27E-01	2.27E-01	1	0.18	0.99	8.84E-03	0.0443	0.01
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	1.07E-04	9.62E-01	20.8	20	1.12E-04	0.00E+00	ND	1	0.18	0.00	2.62E-03	0.0443	1.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	2.84E-04	9.62E-01	20.8	20	3.06E-04	0.00E+00	ND	1	0.18	0.00	6.90E-03	0.0443	1.00
o-Cresol	Bench NA	Bench NA	NA	NA	3.84E-02	9.62E-01	20.8	20	4.00E-02	2.22E-01	2.22E-01	1	0.18	1.00	ND	0.0443	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
m&p-Cresol	Bench NA	Bench NA	NA	NA	1.67E-04	9.62E-01	20.8	20	1.74E-04	0.00E+00	ND	1	0.18	0.00	3.93E-03	0.0443	1.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	6.01E-04	9.62E-01	20.8	20	6.25E-04	0.00E+00	ND	1	0.18	0.00	1.41E-02	0.0443	1.00
bis(2-Ethylhexyl)phthalate	0.0001	1.1	NA	NA	1.09E-04	9.62E-01	20.8	20	1.13E-04	0.00E+00	ND	1	0.18	0.00	2.66E-03	0.0443	1.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	8.99E-05	9.62E-01	20.8	20	9.36E-05	0.00E+00	ND	1	0.18	0.00	2.11E-03	0.0443	1.00
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	9.37E-05	9.62E-01	20.8	20	9.75E-05	0.00E+00	ND	1	0.18	0.00	2.20E-03	0.0443	1.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	2.21E-06	9.62E-01	20.8	20	2.30E-06	0.00E+00	ND	1	0.18	0.00	5.18E-04	0.0443	1.00
Phenol	Bench NA	Bench NA	NA	NA	1.68E-04	9.62E-01	20.8	20	1.72E-04	0.00E+00	ND	1	0.18	0.00	3.88E-03	0.0443	1.00
1,2-Dichloroethane	0.000002	0.000001	17.2	34.4	3.71E-06	9.62E-01	20.8	20	3.86E-06	0.00E+00	ND	1	0.18	0.00	8.72E-04	0.0443	1.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	1.67E-04	9.62E-01	20.8	20	1.73E-04	0.00E+00	ND	1	0.18	0.00	3.91E-03	0.0443	1.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Benzene	Bench NA	Bench NA	NA	NA	4.06E-06	9.62E-01	20.8	20	4.19E-06	0.00E+00	ND	1	0.18	0.00	1.17E-03	0.0443	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	3.23E-04	9.62E-01	20.8	20	3.36E-04	0.00E+00	ND	1	0.18	0.00	7.56E-03	0.0443	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	2.83E-06	9.62E-01	20.8	20	2.95E-06	0.00E+00	ND	1	0.18	0.00	6.88E-04	0.0443	1.00
p/m-Xylene	Bench NA	Bench NA	NA	NA	4.84E-05	9.62E-01	20.8	20	4.83E-05	0.00E+00	ND	1	0.18	0.00	1.06E-03	0.0443	1.00
Methylene chloride	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Toluene	Bench NA	Bench NA	NA	NA	5.03E-05	9.62E-01	20.8	20	5.23E-05	0.00E+00	ND	1	0.18	0.00	1.18E-03	0.0443	1.00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	3.83E-06	9.62E-01	20.8	20	4.06E-06	0.00E+00	ND	1	0.18	0.00	9.22E-04	0.0443	1.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Xylene (total)	Bench NA	Bench NA	NA	NA	4.90E-05	9.62E-01	20.8	20	5.09E-05	0.00E+00	ND	1	0.18	0.00	1.18E-03	0.0443	1.00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND = Not detected

	Samples Comprising Foraging Area
Fish Samples	3 PDA whole body composites (shad, drum, catfish)
Water Samples	All PDA samples

Food Chain Model Components:
Hazard Index Estimate = [Food Dose] + [Drinking Water Dose] / Toxicological Benchmark

Food and Water Ingestion Rate (Sample and Suter 1994)

As a piscivore, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample et al., 1994).

Table D-13
Food Chain Model For Chronic Exposures
Great Blue Heron Analysis
Ingestion of Fish
DOA
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Foraging Area acres	Site Area acres	Exposure Dose mg/kg/day	Food: Total Conc. In Food mg/kg wet	Food: Fish Tissue Concentration mg/kg wet	Food: Proportion Fish in Diet	Food: Ingestion Rate kg/kg/day	Food: Proportion of Dose	Water: Conc. in Water mg/l	Water: Ingestion Rate L/kg/day	Water: Proportion of Dose
Dioxin (TEQ)	0.00003	0.000003	0.014	0.14	3.66E-07	9.62E-01	20.8	20	3.51E-07	2.12E-06	2.12E-06	1	0.18	1.00	2.21E-11	0.0443	0.00
2,4-D Y	Bench NA	Bench NA	NA	NA	7.67E-13	9.62E-01	20.8	20	7.37E-13	0.00E+00	ND	1	0.18	0.00	1.85E-16	0.0443	1.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	8.62E-04	9.62E-01	20.8	20	8.28E-04	4.66E-03	4.66E-03	1	0.18	1.00	ND	0.0443	0.00
2,4-D	Bench NA	Bench NA	NA	NA	2.24E-06	9.62E-01	20.8	20	2.15E-06	0.00E+00	ND	1	0.18	0.00	4.88E-04	0.0443	1.00
Dicamba	#NUM!	#NUM!	800	1600	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Dichlorprop	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
MCPP	#NUM!	#NUM!	100	1000	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	2.98E-03	9.62E-01	20.8	20	2.87E-03	1.69E-02	1.69E-02	1	0.18	1.00	ND	0.0443	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	2.32E-03	9.62E-01	20.8	20	2.41E-03	1.34E-02	1.34E-02	1	0.18	1.00	ND	0.0443	0.00
4,4'-DDT	#NUM!	#NUM!	0.0028	0.028	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
alpha-BHC	#NUM!	#NUM!	0.56	2.25	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
alpha-Chlordane	0.0009	0.0003	2.14	10.7	1.88E-03	9.62E-01	20.8	20	1.98E-03	1.08E-02	1.08E-02	1	0.18	1.00	ND	0.0443	0.00
Dieldrin	0.03	Bench NA	0.077	NA	2.41E-03	9.62E-01	20.8	20	2.98E-03	1.39E-02	1.39E-02	1	0.18	1.00	ND	0.0443	0.00
Endosulfan I	#NUM!	Bench NA	10	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Endrin	#NUM!	#NUM!	0.01	0.1	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Endrin aldehyde	0.2	0.02	0.01	0.1	2.24E-05	9.62E-01	20.8	20	2.31E-05	1.41E-04	1.41E-04	1	0.18	1.00	ND	0.0443	0.00
gamma-Chlordane	0.001	0.0003	2.14	10.7	1.37E-03	9.62E-01	20.8	20	1.41E-03	1.37E-02	1.37E-02	1	0.18	1.00	ND	0.0443	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2,4,5-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	7.49E-06	9.62E-01	20.8	20	7.79E-06	0.00E+00	ND	1	0.18	0.00	1.76E-05	0.0443	1.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	1.43E-05	0.0443	1.00
o-Cresol	Bench NA	Bench NA	NA	NA	6.44E-02	9.62E-01	20.8	20	6.71E-02	3.17E-01	3.17E-01	1	0.18	1.00	ND	0.0443	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
m,p-Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	1.61E-04	9.62E-01	20.8	20	1.68E-04	0.00E+00	ND	1	0.18	0.00	3.38E-03	0.0443	1.00
bis(2-Ethylhexyl)phthalate	#NUM!	Bench NA	1.1	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,2-Dichloroethane	#NUM!	#NUM!	17.2	34.4	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Benzene	Bench NA	Bench NA	NA	NA	3.31E-06	9.62E-01	20.8	20	3.44E-06	0.00E+00	ND	1	0.18	0.00	1.88E-04	0.0443	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	7.49E-06	9.62E-01	20.8	20	7.79E-06	0.00E+00	ND	1	0.18	0.00	1.76E-05	0.0443	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
m,p-Xylene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Methylene chloride	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Toluene	Bench NA	Bench NA	NA	NA	2.98E-04	9.62E-01	20.8	20	3.10E-04	0.00E+00	ND	1	0.18	0.00	7.89E-04	0.0443	1.00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Xylene (total)	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND = Not detected
$NUM! = Not calculated because contaminant was not detected in any media. It is retained here for completeness

Samples Comprising Foraging Area	
Fish Samples:	1 DOA whole body composite (shad, drum, catfish)
Water Samples:	All DOA samples

Food Chain Model Components:
Hazard Index Estimate = (Food Dose) + (Drinking Water Dose) / Toxicological Benchmark

Food and Water Ingestion Rate (Sample and Suter 1994)

As a piscivore, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample et al., 1994)

Table D-14
Food Chain Model For Chronic Exposures
Great Blue Heron Analysis
Ingestion of Fish
UDA
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Foraging Area acres	Site Area acres	Exposure Dose mg/kg/day	Food					Water		
										Total Conc. in Food mg/kg wet	Fish Tissue Concentration mg/kg wet	Proportion Fish in Diet	Ingestion Rate kg/kg/day	Proportion of Dose	Conc. in Water mg/l	Ingestion Rate l/kg/day	Proportion of Dose
Dioxin (TEQ)	0 00004	0 000004	0 014	0 14	5 06E-07	9 62E-01	20 8	20	5 29E-07	2 94E-06	2 94E-06	1	0 18	1 00	1 62E-11	0 0443	0 00
2,4,5-T	Bench NA	Bench NA	NA	NA	8 68E-04	9 62E-01	20 8	20	9 23E-04	6 13E-03	6 13E-03	1	0 18	1 00	ND	0 0443	0 00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	8 12E-04	9 62E-01	20 8	20	8 49E-04	5 27E-03	5 27E-03	1	0 18	1 00	ND	0 0443	0 00
2,4-D	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
Dicamba	0 000002	0 0000098	800	1600	1 25E-03	9 62E-01	20 8	20	1 30E-03	7 23E-03	7 23E-03	1	0 18	1 00	ND	0 0443	0 00
Dichloroprop	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
MCPP	#NUM!	#NUM!	100	1000	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
4,4'-DDD	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
4,4'-DDE	Bench NA	Bench NA	NA	NA	3 65E-03	9 62E-01	20 8	20	3 79E-03	2 10E-02	2 10E-02	1	0 18	1 00	ND	0 0443	0 00
4,4'-DDT	0 8	0 08	0 0028	0 028	2 60E-03	9 62E-01	20 8	20	2 70E-03	1 60E-02	1 60E-02	1	0 18	1 00	ND	0 0443	0 00
alpha-BHC	#NUM!	#NUM!	0 56	2 25	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
alpha-Chlordane	#NUM!	#NUM!	2 14	10 7	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
Dieldrin	0 050	Bench NA	0 077	NA	3 67E-03	9 62E-01	20 8	20	3 82E-03	2 12E-02	2 12E-02	1	0 18	1 00	ND	0 0443	0 00
Endosulfan I	0 0002	Bench NA	10	NA	2 34E-03	9 62E-01	20 8	20	2 43E-03	1 35E-02	1 35E-02	1	0 18	1 00	ND	0 0443	0 00
Endrin	#NUM!	#NUM!	0 01	0 1	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
Endrin aldehyde	0 2	0 02	0 01	0 1	2 16E-03	9 62E-01	20 8	20	2 25E-03	1 25E-02	1 25E-02	1	0 18	1 00	ND	0 0443	0 00
gamma-Chlordane	0 001	0 0002	2 14	10 7	2 46E-03	9 62E-01	20 8	20	2 56E-03	1 44E-02	1 44E-02	1	0 18	1 00	ND	0 0443	0 00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
Methoxychlor	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
o-Cresol	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
m &p -Cresol	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
bis(2-Ethylhexyl)phthalate	#NUM!	Bench NA	1 1	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
Naphthalene	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
Phenol	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
1,2-Dichloroethene	#NUM!	#NUM!	17 2	34 4	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	2 98E-04	9 62E-01	20 8	20	3 10E-04	0 00E+00	ND	1	0 18	0 00	7 00E-03	0 0443	1 00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
Acetone	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
Benzene	Bench NA	Bench NA	NA	NA	3 80E-05	9 62E-01	20 8	20	3 95E-05	0 00E+00	ND	1	0 18	0 00	8 83E-04	0 0443	1 00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
Chlorobenzene	Bench NA	Bench NA	NA	NA	3 78E-06	9 62E-01	20 8	20	3 93E-06	0 00E+00	ND	1	0 18	0 00	8 88E-04	0 0443	1 00
Chloroethane	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
Chloroform	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
Ethylbenzene	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
p/m-Xylene	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
Methylene chloride	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
Toluene	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
Trichloroethene	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00
Vinyl chloride	Bench NA	Bench NA	NA	NA	3 57E-05	9 62E-01	20 8	20	3 71E-05	0 00E+00	ND	1	0 18	0 00	8 36E-04	0 0443	1 00
Xylene (total)	Bench NA	Bench NA	NA	NA	0 00E+00	9 62E-01	20 8	20	0 00E+00	0 00E+00	ND	1	0 18	0 00	ND	0 0443	0 00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND = Not detected
$NUM! = Not calculated because contaminant was not detected in env media. It is retained here for completeness

	Samples Comprising Foraging Area
Fish Samples	1 UDA whole body composite (shad, drum, catfish)
Water Samples	All UDA samples

Food Chain Model Components:
Hazard Index Estimate = (Food Dose) + (Drinking Water Dose) / Toxicological Benchmark

Food and Water Ingestion Rate (Sample and Suter 1994)

As a piscivore, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample et al., 1994)

Table D-16
Food Chain Model For Chronic Exposures
Great Blue Heron Analysis
Ingestion of Fish
Site (NO AUF)
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Exposure Dose mg/kg/day	Food					Water		
								Total Conc in Food mg/kg wet	Fish Tissue Concentration mg/kg wet	Proportion Fish in Diet	Ingestion Rate kg/kg/day	Proportion of Dose	Conc in Water mg/l	Ingestion Rate l/kg/day	Proportion of Dose
Dioxin (TEQ)	0.00004	0.000004	0.014	0.14	4.86E-07	1.00E+00	4.86E-07	2.77E-06	2.77E-06	1	0.16	1.00	1.50E-10	0.0443	0.00
2,4,5-Y	Bench NA	Bench NA	NA	NA	1.63E-03	1.00E+00	1.63E-03	9.74E-03	9.74E-03	1	0.16	1.00	ND	0.0443	0.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	8.07E-04	1.00E+00	8.07E-04	4.87E-03	4.87E-03	1	0.16	0.99	2.36E-04	0.0443	0.01
2,4-D	Bench NA	Bench NA	NA	NA	1.38E-04	1.00E+00	1.38E-04	0.00E+00	ND	1	0.16	0.00	3.66E-03	0.0443	1.00
Dicamba	0.00000003	0.00000002	800	1600	2.42E-06	1.00E+00	2.42E-06	0.00E+00	ND	1	0.16	0.00	6.44E-04	0.0443	1.00
Dichloroprop	Bench NA	Bench NA	NA	NA	1.11E-04	1.00E+00	1.11E-04	0.00E+00	ND	1	0.16	0.00	2.96E-03	0.0443	1.00
MCPP	0.004	0.0004	160	1000	4.14E-01	1.00E+00	4.14E-01	2.50E+00	2.50E+00	1	0.16	1.00	ND	0.0443	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	2.02E-03	1.00E+00	2.02E-03	1.12E-02	1.12E-02	1	0.16	1.00	ND	0.0443	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	3.31E-03	1.00E+00	3.31E-03	1.84E-02	1.84E-02	1	0.16	1.00	ND	0.0443	0.00
4,4'-DDT	0.8	0.08	0.0028	0.028	2.27E-03	1.00E+00	2.27E-03	1.26E-02	1.26E-02	1	0.16	1.00	ND	0.0443	0.00
alpha-BHC	0.004	0.0008	0.56	2.25	2.06E-03	1.00E+00	2.06E-03	1.14E-02	1.14E-02	1	0.16	1.00	ND	0.0443	0.00
alpha-Chlordane	0.051	0.0002	2.14	10.7	2.11E-03	1.00E+00	2.11E-03	1.17E-02	1.17E-02	1	0.16	1.00	ND	0.0443	0.00
Dieldrin	0.83	Bench NA	0.077	NA	2.68E-03	1.00E+00	2.68E-03	1.48E-02	1.48E-02	1	0.16	1.00	ND	0.0443	0.00
Endosulfan I	0.0003	Bench NA	10	NA	2.09E-03	1.00E+00	2.09E-03	1.16E-02	1.16E-02	1	0.16	1.00	ND	0.0443	0.00
Endrin	0.1	0.02	0.01	0.1	2.25E-03	1.00E+00	2.25E-03	1.25E-02	1.25E-02	1	0.16	1.00	ND	0.0443	0.00
Endrin aldehyde	0.2	0.02	0.01	0.1	2.07E-03	1.00E+00	2.07E-03	1.15E-02	1.15E-02	1	0.16	1.00	ND	0.0443	0.00
gamma-Chlordane	0.0008	0.0002	2.14	10.7	1.98E-03	1.00E+00	1.98E-03	1.10E-02	1.10E-02	1	0.16	1.00	ND	0.0443	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	1.83E-03	1.00E+00	1.83E-03	1.01E-02	1.01E-02	1	0.16	1.00	ND	0.0443	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.16	0.00	ND	0.0443	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	8.97E-05	1.00E+00	8.97E-05	0.00E+00	ND	1	0.16	0.00	2.29E-03	0.0443	1.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	4.13E-02	1.00E+00	4.13E-02	2.29E-01	2.29E-01	1	0.16	0.99	4.83E-03	0.0443	0.01
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	4.34E-02	1.00E+00	4.34E-02	2.41E-01	2.41E-01	1	0.16	1.00	ND	0.0443	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	1.68E-04	1.00E+00	1.68E-04	0.00E+00	ND	1	0.16	0.00	3.83E-03	0.0443	1.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	4.13E-02	1.00E+00	4.13E-02	2.27E-01	2.27E-01	1	0.16	0.99	9.84E-03	0.0443	0.01
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	1.12E-04	1.00E+00	1.12E-04	0.00E+00	ND	1	0.16	0.00	2.62E-03	0.0443	1.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.16	0.00	ND	0.0443	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	3.08E-04	1.00E+00	3.08E-04	0.00E+00	ND	1	0.16	0.00	6.89E-03	0.0443	1.00
o-Cresol	Bench NA	Bench NA	NA	NA	4.00E-02	1.00E+00	4.00E-02	2.22E-01	2.22E-01	1	0.16	1.00	ND	0.0443	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.16	0.00	ND	0.0443	0.00
m,p-Cresol	Bench NA	Bench NA	NA	NA	1.74E-04	1.00E+00	1.74E-04	0.00E+00	ND	1	0.16	0.00	3.93E-03	0.0443	1.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.16	0.00	ND	0.0443	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	6.25E-04	1.00E+00	6.25E-04	0.00E+00	ND	1	0.16	0.00	1.41E-02	0.0443	1.00
bis(2-Ethylhexyl)phthalate	0.0001	Bench NA	1.1	NA	1.13E-04	1.00E+00	1.13E-04	0.00E+00	ND	1	0.16	0.00	2.56E-03	0.0443	1.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	6.32E-06	1.00E+00	6.32E-06	0.00E+00	ND	1	0.16	0.00	2.11E-03	0.0443	1.00
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.16	0.00	ND	0.0443	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	9.71E-04	1.00E+00	9.71E-04	0.00E+00	ND	1	0.16	0.00	2.20E-03	0.0443	1.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	2.30E-06	1.00E+00	2.30E-06	0.00E+00	ND	1	0.16	0.00	5.19E-04	0.0443	1.00
Phenol	Bench NA	Bench NA	NA	NA	1.72E-04	1.00E+00	1.72E-04	0.00E+00	ND	1	0.16	0.00	3.88E-03	0.0443	1.00
1,2-Dichloroethane	0.000002	0.000001	17.2	34.4	3.86E-06	1.00E+00	3.86E-06	0.00E+00	ND	1	0.16	0.00	8.72E-04	0.0443	1.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.16	0.00	ND	0.0443	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	1.73E-04	1.00E+00	1.73E-04	0.00E+00	ND	1	0.16	0.00	3.91E-03	0.0443	1.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.16	0.00	ND	0.0443	0.00
Benzene	Bench NA	Bench NA	NA	NA	5.18E-06	1.00E+00	5.18E-06	0.00E+00	ND	1	0.16	0.00	1.17E-03	0.0443	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.16	0.00	ND	0.0443	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	3.32E-04	1.00E+00	3.32E-04	0.00E+00	ND	1	0.16	0.00	7.56E-03	0.0443	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.16	0.00	ND	0.0443	0.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.16	0.00	ND	0.0443	0.00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.16	0.00	ND	0.0443	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	3.09E-06	1.00E+00	3.09E-06	0.00E+00	ND	1	0.16	0.00	6.99E-04	0.0443	1.00
p/m-Xylene	Bench NA	Bench NA	NA	NA	4.63E-06	1.00E+00	4.63E-06	0.00E+00	ND	1	0.16	0.00	1.05E-03	0.0443	1.00
Methylene chloride	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.16	0.00	ND	0.0443	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.16	0.00	ND	0.0443	0.00
Toluene	Bench NA	Bench NA	NA	NA	6.23E-06	1.00E+00	6.23E-06	0.00E+00	ND	1	0.16	0.00	1.19E-03	0.0443	1.00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.16	0.00	ND	0.0443	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	4.08E-06	1.00E+00	4.08E-06	0.00E+00	ND	1	0.16	0.00	9.22E-04	0.0443	1.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.16	0.00	ND	0.0443	0.00
Xylene (total)	Bench NA	Bench NA	NA	NA	8.09E-06	1.00E+00	8.09E-06	0.00E+00	ND	1	0.16	0.00	1.15E-03	0.0443	1.00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND= Not detected

	Samples Comprising Foraging Area
Fish Samples	3 PDA whole body composites (shad, drum, catfish)
Water Samples	All PDA samples

Food Chain Model Components:
Hazard Index Estimate = $\frac{\text{[Food Dose] + [Drinking Water Dose]}}{\text{Toxicological Benchmark}}$

Food and Water Ingestion Rate (Sample and Suter 1994)

As a piscivore, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample et al., 1994)

Table u-16
Food Chain Model For Chronic Exposures
Great Blue Heron Analysis
Ingestion of Fish
DOA (NO AUF)
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Exposure Dose mg/kg/day	Food: Total Conc in Food mg/kg wet	Food: Fish Tissue Concentration mg/kg wet	Food: Proportion Fish in Diet	Food: Ingestion Rate kg/kg/day	Food: Proportion of Dose	Water: Conc. in Water mg/l	Water: Ingestion Rate l/kg/day	Water: Proportion of Dose
Dioxin (TEQ)	0.00003	0.000003	0.014	0.14	3.81E-07	1.00E+00	3.81E-07	2.12E-06	2.12E-06	1	0.18	1.00	2.21E-11	0.0443	0.00
2,4,5-T	Bench NA	Bench NA	NA	NA	7.97E-12	1.00E+00	7.97E-12	0.00E+00	ND	1	0.18	0.00	1.80E-10	0.0443	1.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	8.98E-04	1.00E+00	8.98E-04	4.98E-03	4.98E-03	1	0.18	1.00	ND	0.0443	0.00
2,4-D	Bench NA	Bench NA	NA	NA	2.13E-06	1.00E+00	2.13E-06	0.00E+00	ND	1	0.18	0.00	4.80E-04	0.0443	1.00
Dicamba	#NUM!	#NUM!	800	1600	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Dichlorprop	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
MCPP	#NUM!	#NUM!	100	1000	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	2.87E-03	1.00E+00	2.87E-03	1.86E-02	1.86E-02	1	0.18	1.00	ND	0.0443	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	1.41E-03	1.00E+00	1.41E-03	1.34E-02	1.34E-02	1	0.18	1.00	ND	0.0443	0.00
4,4'-DDT	#NUM!	#NUM!	0.0028	0.028	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
alpha-BHC	#NUM!	#NUM!	0.56	2.25	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
alpha-Chlordane	0.001	0.0002	2.14	10.7	1.98E-03	1.00E+00	1.98E-03	1.08E-02	1.08E-02	1	0.18	1.00	ND	0.0443	0.00
Dieldrin	0.03	Bench NA	0.077	NA	2.50E-03	1.00E+00	2.50E-03	1.38E-02	1.38E-02	1	0.18	1.00	ND	0.0443	0.00
Endosulfan I	#NUM!	Bench NA	10	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Endrin	#NUM!	#NUM!	0.01	0.1	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Endrin aldehyde	0.3	0.03	0.01	0.1	2.54E-03	1.00E+00	2.54E-03	1.41E-02	1.41E-02	1	0.18	1.00	ND	0.0443	0.00
gamma-Chlordane	0.001	0.0002	2.14	10.7	2.47E-03	1.00E+00	2.47E-03	1.37E-02	1.37E-02	1	0.18	1.00	ND	0.0443	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	7.75E-05	1.00E+00	7.75E-05	0.00E+00	ND	1	0.18	0.00	1.79E-03	0.0443	1.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	6.33E-05	1.00E+00	6.33E-05	0.00E+00	ND	1	0.18	0.00	1.43E-03	0.0443	1.00
o-Cresol	Bench NA	Bench NA	NA	NA	5.71E-02	1.00E+00	5.71E-02	3.17E-01	3.17E-01	1	0.18	1.00	ND	0.0443	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
m,p-Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	1.46E-04	1.00E+00	1.46E-04	0.00E+00	ND	1	0.18	0.00	3.30E-03	0.0443	1.00
bis(2-Ethylhexyl)phthalate	#NUM!	Bench NA	1.1	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,2-Dichloroethane	#NUM!	#NUM!	17.2	34.4	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Benzene	Bench NA	Bench NA	NA	NA	8.64E-06	1.00E+00	8.64E-06	0.00E+00	ND	1	0.18	0.00	1.95E-04	0.0443	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	7.75E-05	1.00E+00	7.75E-05	0.00E+00	ND	1	0.18	0.00	1.79E-03	0.0443	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
p/m-Xylene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Methylene chloride	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Tetrachloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Toluene	Bench NA	Bench NA	NA	NA	3.10E-05	1.00E+00	3.10E-05	0.00E+00	ND	1	0.18	0.00	7.00E-04	0.0443	1.00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Xylene (total)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND= Not detected
$NUM! = Not calculated because contaminant was not detected in any media. It is retained here for completeness

Samples Comprising Foraging Area	
Fish Samples	1 DOA whole body composite (shad, drum, catfish)
Water Samples	All DOA samples

Food Chain Model Components:
Hazard Index Estimate = $\frac{\text{[Food Dose] + [Drinking Water Dose]}}{\text{Toxicological Benchmark}}$

Food and Water Ingestion Rate (Sample and Suter 1994)

As a piscivore, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample et al., 1994)

Table D-17
Food Chain Model For Chronic Exposures
Great Blue Heron Analysis
Ingestion of Fish
UDA (NO AUF)
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Exposure Dose mg/kg/day	Feed: Total Conc. in Food mg/kg wet	Feed: Fish Tissue Concentration mg/kg wet	Feed: Proportion Fish in Diet	Feed: Ingestion Rate kg/kg/day	Feed: Proportion of Dose	Water: Conc. in Water mg/l	Water: Ingestion Rate l/kg/day	Water: Proportion of Dose
Dioxin (TEQ)	0.00004	0.000004	0.014	0.14	5.29E-07	1.00E+00	5.29E-07	2.94E-08	2.94E-08	1	0.18	1.00	1.67E-11	0.0443	0.00
2,4,5-T	Bench NA	Bench NA	NA	NA	9.23E-04	1.00E+00	9.23E-04	5.13E-03	5.13E-03	1	0.18	1.00	ND	0.0443	0.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	9.49E-04	1.00E+00	9.49E-04	5.27E-03	5.27E-03	1	0.18	1.00	ND	0.0443	0.00
2,4-D	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Dicamba	0.000057	0.0000058	880	1600	1.30E-03	1.00E+00	1.30E-03	7.23E-03	7.23E-03	1	0.18	1.00	ND	0.0443	0.00
Dichlorprop	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
MCPP	#NUM!	#NUM!	180	1000	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	3.79E-03	1.00E+00	3.79E-03	2.10E-02	2.10E-02	1	0.18	1.00	ND	0.0443	0.00
4,4'-DDT	1.8	0.10	0.0528	0.528	2.70E-03	1.00E+00	2.70E-03	1.86E-02	1.86E-02	1	0.18	1.00	ND	0.0443	0.00
alpha-BHC	#NUM!	#NUM!	0.68	2.25	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
alpha-Chlordane	#NUM!	#NUM!	2.14	10.7	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Dieldrin	0.06	Bench NA	0.077	NA	3.83E-03	1.00E+00	3.83E-03	2.12E-02	2.12E-02	1	0.18	1.00	ND	0.0443	0.00
Endosulfan I	0.0062	Bench NA	10	NA	2.43E-03	1.00E+00	2.43E-03	1.35E-02	1.35E-02	1	0.18	1.00	ND	0.0443	0.00
Endrin	#NUM!	#NUM!	0.61	0.1	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Endrin aldehyde	0.2	0.02	0.01	0.1	2.29E-03	1.00E+00	2.29E-03	1.29E-02	1.29E-02	1	0.18	1.00	ND	0.0443	0.00
gamma-Chlordane	0.001	0.0003	2.14	10.7	2.59E-03	1.00E+00	2.59E-03	1.44E-02	1.44E-02	1	0.18	1.00	ND	0.0443	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2,4,5-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
o-Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
m,p-Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
bis(2-Ethylhexyl)phthalate	#NUM!	Bench NA	1.1	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,2-Dichloroethane	#NUM!	#NUM!	17.2	34.4	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	3.10E-04	1.00E+00	3.10E-04	0.00E+00	ND	1	0.18	0.00	7.00E-03	0.0443	1.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Benzene	Bench NA	Bench NA	NA	NA	3.80E-06	1.00E+00	3.80E-06	0.00E+00	ND	1	0.18	0.00	8.83E-04	0.0443	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	3.80E-06	1.00E+00	3.80E-06	0.00E+00	ND	1	0.18	0.00	8.83E-04	0.0443	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
p/m-Xylene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Methylene chloride	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Toluene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	3.71E-06	1.00E+00	3.71E-06	0.00E+00	ND	1	0.18	0.00	8.62E-04	0.0443	1.00
Xylene (total)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND= Not detected
$NUM! = Not calculated because contaminant was not detected in any media. It is retained here for completeness

Samples Comprising Foraging Area	
Fish Samples:	1 UDA whole body composite (shad, drum, catfish)
Water Samples:	All UDA samples

Food Chain Model Components:
Hazard Index Estimate = [Food Dose] + [Drinking Water Dose]
Toxicological Benchmark

Food and Water Ingestion Rate (Sample and Suter 1994)

As a piscivore, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample et al., 1994)

Table U-18
Food Chain Model For Chronic Exposures
Great Blue Heron Analysis
Ingestion of Fish
Site-Potential Maximum Exposure
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Foraging Area acres	Site Area acres	Exposure Dose mg/kg/day	Food: Total Conc. in Food mg/kg wet	Food: Fish Tissue Concentration mg/kg wet	Food: Proportion Fish in Diet	Food: Ingestion Rate kg/kg/day	Food: Proportion of Dose	Water: Conc. in Water mg/l	Water: Ingestion Rate l/kg/day	Water: Proportion of Dose
Dioxin (TEQ)	0.0001	0.00001	0.014	0.14	1.49E-06	9.62E-01	20.8	20	1.75E-06	9.70E-06	9.70E-06	1	0.18	1.00	2.44E-10	0.0443	0.00
2,4,5-Y	Bench NA	Bench NA	NA	NA	2.25E-03	9.62E-01	20.8	20	2.34E-03	1.30E-02	1.30E-02	1	0.18	1.00	ND	0.0443	0.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	1.51E-03	9.62E-01	20.8	20	1.57E-03	8.70E-03	8.70E-03	1	0.18	1.00	1.40E-04	0.0443	0.00
2,4-D	Bench NA	Bench NA	NA	NA	4.29E-04	9.62E-01	20.8	20	4.43E-04	0.00E+00	ND	1	0.18	0.00	1.00E-02	0.0443	1.00
Dicamba	8.0E-06	3.0E-06	800	1600	4.86E-08	9.62E-01	20.8	20	4.87E-08	0.00E+00	ND	1	0.18	0.00	1.10E-04	0.0443	1.00
Dichlorprop	Bench NA	Bench NA	NA	NA	7.88E-05	9.62E-01	20.8	20	8.20E-05	0.00E+00	ND	1	0.18	0.00	1.85E-03	0.0443	1.00
MCPP	0.01	0.001	100	1000	1.49E+00	9.62E-01	20.8	20	1.55E+00	8.60E+00	8.60E+00	1	0.18	1.00	ND	0.0443	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	1.16E-03	9.62E-01	20.8	20	1.21E-03	6.70E-03	6.70E-03	1	0.18	1.00	ND	0.0443	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	1.04E-02	9.62E-02	20.8	20	1.08E-02	6.00E-02	6.00E-02	1	0.18	1.00	ND	0.0443	0.00
4,4'-DDT	0.8	0.08	0.0028	0.028	2.25E-03	9.62E-01	20.8	20	2.34E-03	1.30E-02	1.30E-02	1	0.18	1.00	ND	0.0443	0.00
alpha-BHC	0.0008	0.0002	0.56	2.25	4.50E-04	9.62E-01	20.8	20	4.68E-04	2.60E-03	2.60E-03	1	0.18	1.00	ND	0.0443	0.00
alpha-Chlordane	0.001	0.0002	2.14	10.7	2.42E-03	9.62E-01	20.8	20	2.52E-03	1.40E-02	1.40E-02	1	0.18	1.00	ND	0.0443	0.00
Dieldrin	0.1	Bench NA	0.077	NA	1.11E-02	9.62E-01	20.8	20	1.15E-02	6.40E-02	6.40E-02	1	0.18	1.00	ND	0.0443	0.00
Endosulfan I	0.00007	Bench NA	10	NA	7.44E-04	9.62E-01	20.8	20	7.74E-04	4.30E-03	4.30E-03	1	0.18	1.00	ND	0.0443	0.00
Endrin	0.3	0.03	0.01	0.1	2.69E-03	9.62E-01	20.8	20	2.79E-03	1.50E-02	1.50E-02	1	0.18	1.00	ND	0.0443	0.00
Endrin aldehyde	0.2	0.02	0.01	0.1	1.73E-03	9.62E-01	20.8	20	1.80E-03	1.00E-02	1.00E-02	1	0.18	1.00	ND	0.0443	0.00
gamma-Chlordane	0.0007	0.0001	2.14	10.7	1.49E-03	9.62E-01	20.8	20	1.55E-03	8.10E-03	8.10E-03	1	0.18	1.00	ND	0.0443	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	8.17E-04	9.62E-01	20.8	20	8.54E-04	5.30E-03	5.30E-03	1	0.18	1.00	ND	0.0443	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	8.90E-05	9.62E-01	20.8	20	8.78E-05	0.00E+00	ND	1	0.18	0.00	1.53E-03	0.0443	1.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	4.21E-02	9.62E-01	20.8	20	4.38E-02	2.40E-01	2.40E-01	1	0.18	0.99	1.33E-02	0.0443	0.01
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	2.26E-02	9.62E-01	20.8	20	2.34E-02	1.30E-01	1.30E-01	1	0.18	1.00	ND	0.0443	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	3.41E-04	9.62E-01	20.8	20	3.54E-04	0.00E+00	ND	1	0.18	0.00	8.00E-03	0.0443	1.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	3.42E-02	9.62E-01	20.8	20	3.58E-02	1.90E-01	1.90E-01	1	0.18	0.98	3.10E-02	0.0443	0.04
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	1.66E-04	9.62E-01	20.8	20	1.64E-04	0.00E+00	ND	1	0.18	0.00	3.70E-03	0.0443	1.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	8.53E-04	9.62E-01	20.8	20	8.86E-04	0.00E+00	ND	1	0.18	0.00	2.00E-02	0.0443	1.00
o-Cresol	Bench NA	Bench NA	NA	NA	3.81E-02	9.62E-01	20.8	20	3.96E-02	2.20E-01	2.20E-01	1	0.18	1.00	ND	0.0443	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
m&p-Cresol	Bench NA	Bench NA	NA	NA	4.69E-04	9.62E-01	20.8	20	4.87E-04	0.00E+00	ND	1	0.18	0.00	1.10E-02	0.0443	1.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	1.82E-03	9.62E-01	20.8	20	1.89E-03	0.00E+00	ND	1	0.18	0.00	4.60E-02	0.0443	1.00
bis(2-Ethylhexyl)phthalate	0.00009	Bench NA	1.1	NA	9.37E-06	9.62E-01	20.8	20	9.75E-06	0.00E+00	ND	1	0.18	0.00	2.20E-03	0.0443	1.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	1.45E-05	9.62E-01	20.8	20	1.51E-05	0.00E+00	ND	1	0.18	0.00	3.40E-04	0.0443	1.00
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	3.96E-05	9.62E-01	20.8	20	4.12E-05	0.00E+00	ND	1	0.18	0.00	9.30E-04	0.0443	1.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	3.71E-05	9.62E-01	20.8	20	1.86E-05	0.00E+00	ND	1	0.18	0.00	8.70E-04	0.0443	1.00
Phenol	Bench NA	Bench NA	NA	NA	6.36E-04	9.62E-01	20.8	20	6.60E-04	0.00E+00	ND	1	0.18	0.00	1.60E-03	0.0443	1.00
1,2-Dichloroethane	0.000002	0.000001	17.2	34.4	3.30E-05	9.62E-01	20.8	20	3.43E-05	0.00E+00	ND	1	0.18	0.00	7.75E-04	0.0443	1.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	9.37E-05	9.62E-01	20.8	20	9.75E-05	0.00E+00	ND	1	0.18	0.00	2.20E-03	0.0443	1.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Benzene	Bench NA	Bench NA	NA	NA	7.67E-05	9.62E-01	20.8	20	7.97E-05	0.00E+00	ND	1	0.18	0.00	1.80E-03	0.0443	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	1.02E-03	9.62E-01	20.8	20	1.06E-03	0.00E+00	ND	1	0.18	0.00	2.40E-02	0.0443	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	1.63E-05	9.62E-01	20.8	20	1.68E-05	0.00E+00	ND	1	0.18	0.00	3.80E-04	0.0443	1.00
o/m-Xylene	Bench NA	Bench NA	NA	NA	1.02E-04	9.62E-01	20.8	20	1.06E-04	0.00E+00	ND	1	0.18	0.00	2.40E-03	0.0443	1.00
Methylene chloride (Dichloromethane)	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	1.0443	0.00
Toluene	Bench NA	Bench NA	NA	NA	3.34E-03	9.62E-01	20.8	20	3.46E-03	0.00E+00	ND	1	0.18	0.00	1.70E-03	2.0443	1.00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	3.0443	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	1.17E-03	9.62E-01	20.8	20	1.21E-03	0.00E+00	ND	1	0.18	0.00	3.00E-04	4.0443	1.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	5.0443	0.00
Xylene (total)	Bench NA	Bench NA	NA	NA	1.87E-02	9.62E-01	20.8	20	1.93E-02	0.00E+00	ND	1	0.18	0.00	2.70E-03	6.0443	1.00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND = Not detected

Samples Comprising Foraging Area	
Fish Samples	3 PDA whole body composites (shad, drum, catfish)
Water Samples	All PDA samples

Food Chain Model Components:
Hazard Index Estimate = (Food Dose) + (Drinking Water Dose) / Toxicological Benchmark

Food and Water Ingestion Rate (Sample and Suter 1994)

As a piscivore, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample et al., 1994)

Table D-19
Food Chain Model For Chronic Exposure
Great Blue Heron Analysis
Ingestion of Fish
DOA Potential Maximum Exposure
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

										Food					Water		
Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Foraging Area acres	Site Area acres	Exposure Dose mg/kg/day	Total Conc in Food mg/kg wet	Fish Tissue Concentration mg/kg wet	Proportion Fish In Diet	Ingestion Rate kg/kg/day	Proportion of Dose	Conc in Water mg/l	Ingestion Rate l/kg/day	Proportion of Dose
Dioxin (TEQ)	0.00006	0.000006	0.014	0.14	7.78E-07	9.62E-01	20.8	20	8.08E-07	4.49E-06	4.49E-06	1	0.18	1.00	2.22E-11	0.0443	0.00
2,4,5-T	Bench NA	Bench NA	NA	NA	4.68E-12	9.62E-01	20.8	20	4.87E-12	0.00E+00	ND	1	0.18	0.00	1.10E-10	0.0443	1.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	1.19E-03	9.62E-01	20.8	20	1.24E-03	6.90E-03	6.90E-03	1	0.18	1.00	ND	0.0443	0.00
2,4-D	Bench NA	Bench NA	NA	NA	2.68E-06	9.62E-01	20.8	20	2.79E-06	0.00E+00	ND	1	0.18	0.00	6.30E-04	0.0443	1.00
Dicamba	#NUM!	#NUM!	800	1600	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Dichloroprop	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
MCPP	#NUM!	#NUM!	100	1000	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	2.08E-03	9.62E-01	20.8	20	2.16E-03	1.20E-02	1.20E-02	1	0.18	1.00	ND	0.0443	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	3.29E-03	9.62E-01	20.8	20	3.42E-03	1.90E-02	1.90E-02	1	0.18	1.00	ND	0.0443	0.00
4,4'-DDT	#NUM!	#NUM!	0.0028	0.028	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
alpha-BHC	#NUM!	#NUM!	0.56	2.25	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
alpha-Chlordane	0.0006	0.0001	2.14	10.7	1.33E-03	9.62E-01	20.8	20	1.38E-03	7.70E-03	7.70E-03	1	0.18	1.00	ND	0.0443	0.00
Dieldrin	0.04	Bench NA	0.077	NA	3.29E-03	9.62E-01	20.8	20	3.42E-03	1.90E-02	1.90E-02	1	0.18	1.00	ND	0.0443	0.00
Endosulfan I	#NUM!	Bench NA	10	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Endrin	#NUM!	#NUM!	0.01	0.1	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Endrin aldehyde	0.08	0.008	0.01	0.1	8.48E-04	9.62E-01	20.8	20	8.82E-04	4.90E-03	4.90E-03	1	0.18	1.00	ND	0.0443	0.00
gamma-Chlordane	0.0003	0.00006	2.14	10.7	6.06E-04	9.62E-01	20.8	20	6.30E-04	3.50E-03	3.50E-03	1	0.18	1.00	ND	0.0443	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	4.26E-06	9.62E-01	20.8	20	4.43E-06	0.00E+00	ND	1	0.18	0.00	1.80E-03	0.0443	1.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	1.53E-06	9.62E-01	20.8	20	1.59E-06	0.00E+00	ND	1	0.18	0.00	3.60E-04	0.0443	1.00
o-Cresol	Bench NA	Bench NA	NA	NA	5.89E-02	9.62E-01	20.8	20	6.12E-02	3.40E-01	3.40E-01	1	0.18	1.00	ND	0.0443	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
m &p -Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	7.66E-06	9.62E-01	20.8	20	7.96E-06	0.00E+00	ND	1	0.18	0.00	1.80E-03	0.0443	1.00
bis(2-Ethylhexyl)phthalate	#NUM!	Bench NA	1.1	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,2-Dichloroethane	#NUM!	#NUM!	17.2	34.4	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Benzene	Bench NA	Bench NA	NA	NA	1.02E-05	9.62E-01	20.8	20	1.06E-05	0.00E+00	ND	1	0.18	0.00	2.40E-04	0.0443	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	9.80E-05	9.62E-01	20.8	20	1.02E-04	0.00E+00	ND	1	0.18	0.00	2.30E-03	0.0443	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
p/m-Xylene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Methylene chloride (Dichloromethane)	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Tetrachloroethene			NA	NA					0.00E+00		ND			0.00	ND		0.00
Toluene	Bench NA	Bench NA	NA	NA	1.70E-05	9.62E-01	20.8	20	1.77E-05	0.00E+00	ND	1	0.18	0.00	4.00E-04	0.0443	1.00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Xylene (total)	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND = Not detected
#NUM! = Not calculated because contaminant was not detected in any media. It is retained here for completeness.

Samples Comprising Foraging Area	
Fish Samples:	1 DOA whole body composite (shad, drum, catfish)
Water Samples:	All DOA samples

Food Chain Model Components:
Hazard Index Estimate = [Food Dose] + [Drinking Water Dose] / Toxicological Benchmark

Food and Water Ingestion Rate (Sample and Suter 1994)

As a piscivore, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample et al., 1994).

Table U-20
Food Chain Model For Chronic Exposures
Great Blue Heron Analysis
Ingestion of Fish
UOA-Potential Maximum Exposure
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Foraging Area acres	Site Area acres	Exposure Dose mg/kg/day	Food: Total Conc. in Food mg/kg wet	Food: Fish Tissue Concentration mg/kg wet	Food: Proportion Fish in Diet	Food: Ingestion Rate kg/kg/day	Food: Proportion of Dose	Water: Conc. in Water mg/l	Water: Ingestion Rate l/kg/day	Water: Proportion of Dose
Dioxin (TEQ)	0.00007	0.000007	0.014	0.14	9.89E-07	9.62E-01	20.8	20	1.01E-06	6.60E-06	6.60E-06	1	0.15	1.00	1.95E-11	0.0443	0.00
2,4,5-T	Bench NA	Bench NA	NA	NA	1.23E-03	9.62E-01	20.8	20	1.28E-03	7.10E-03	7.10E-03	1	0.15	1.00	ND	0.0443	0.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	1.30E-03	9.62E-01	20.8	20	1.35E-03	7.50E-03	7.50E-03	1	0.15	1.00	ND	0.0443	0.00
2,4-D	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
Dicamba	0.000001	0.0000007	600	1800	1.13E-03	9.62E-01	20.8	20	1.17E-03	6.50E-03	6.50E-03	1	0.15	1.00	ND	0.0443	0.00
Dichlorprop	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
MCPP	#NUM!	#NUM!	100	1000	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	4.33E-03	9.62E-01	20.8	20	4.50E-03	2.50E-02	2.50E-02	1	0.15	1.00	ND	0.0443	0.00
4,4'-DDT	0.5	0.05	0.0028	0.028	1.32E-03	9.62E-01	20.8	20	1.37E-03	7.60E-03	7.60E-03	1	0.15	1.00	ND	0.0443	0.00
alpha-BHC	#NUM!	#NUM!	0.56	2.26	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
alpha-Chlordane	#NUM!	#NUM!	2.14	10.7	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
Dieldrin	0.07	Bench NA	0.077	NA	5.54E-03	9.62E-01	20.8	20	5.75E-03	3.20E-02	3.20E-02	1	0.15	1.00	ND	0.0443	0.00
Endosulfan I	0.00005	Bench NA	10	NA	5.19E-04	9.62E-01	20.8	20	5.40E-04	3.00E-03	3.00E-03	1	0.15	1.00	ND	0.0443	0.00
Endrin	#NUM!	#NUM!	0.01	0.1	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
Endrin aldehyde	0.1	0.01	0.01	0.1	1.28E-03	9.62E-01	20.8	20	1.33E-03	7.40E-03	7.40E-03	1	0.15	1.00	ND	0.0443	0.00
gamma-Chlordane	0.0005	0.00009	2.14	10.7	1.00E-03	9.62E-01	20.8	20	1.04E-03	5.80E-03	5.80E-03	1	0.15	1.00	ND	0.0443	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
2,4,5-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
o-Cresol	Bench NA	Bench NA	NA	NA	1.90E-02	9.62E-01	20.8	20	1.98E-02	1.10E-01	1.10E-01	1	0.15	1.00	ND	0.0443	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
m&p -Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
bis(2-Ethylhexyl)phthalate	#NUM!	Bench NA	1.1	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
1,2-Dichloroethane	#NUM!	#NUM!	17.2	34.4	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	3.83E-04	9.62E-01	20.8	20	3.98E-04	0.00E+00	ND	1	0.15	0.00	9.00E-03	0.0443	1.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
Benzene	Bench NA	Bench NA	NA	NA	3.34E-05	9.62E-01	20.8	20	3.48E-05	0.00E+00	ND	1	0.15	0.00	7.85E-04	0.0443	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	3.30E-05	9.62E-01	20.8	20	3.43E-05	0.00E+00	ND	1	0.15	0.00	7.75E-04	0.0443	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
p/m-Xylene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
Methylene chloride (Dichloromethane)	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
Tetrachloroethene			NA	NA					0.00E+00		ND			0.00	ND		0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
Toluene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	2.86E-05	9.62E-01	20.8	20	2.98E-05	0.00E+00	ND	1	0.15	0.00	6.75E-04	0.0443	1.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	0.00E+00	9.62E-01	20.8	20	0.00E+00	0.00E+00	ND	1	0.15	0.00	ND	0.0443	0.00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND = Not detected
$NUM! = Not calculated because contaminant was not detected in any media. It is retained here for completeness

	Samples Comprising Foraging Area
Fish Samples	1 UOA whole body composite (shad, drum, catfish)
Water Samples	All UOA samples

Food Chain Model Components:
Hazard Index Estimate = $\frac{\text{(Food Dose)} + \text{(Drinking Water Dose)}}{\text{Toxicological Benchmark}}$

Food and Water Ingestion Rate (Sample and Suter 1994)

As a piscivore, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample et al., 1994).

Table D-21
Food Chain Model For Chronic Exposures
Great Blue Heron Analysis
Ingestion of Fish
Site-Potential Maximum Exposure (NO AUF)
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

								Food						Water		
Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Exposure Dose mg/kg/day	Total Conc. in Food mg/kg wet	Fish Tissue Concentration mg/kg wet	Proportion Fish in Diet	Ingestion Rate kg/kg/day	Proportion of Dose	Conc. in Water mg/l	Ingestion Rate l/kg/day	Proportion of Dose
Dioxin (TEQ)	0.0001	0.00001	0.014	0.14	1.75E-08	1.00E+00	1.75E-08	9.70E-08	9.70E-08	1	0.18	1.00	2.44E-10	0.0443	0.00
2,4,5-T	Bench NA	Bench NA	NA	NA	2.34E-03	1.00E+00	2.34E-03	1.30E-02	1.30E-02	1	0.18	1.00	ND	0.0443	0.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	1.57E-03	1.00E+00	1.57E-03	8.70E-03	8.70E-03	1	0.18	1.00	1.40E-04	0.0443	0.00
2,4-D	Bench NA	Bench NA	NA	NA	4.43E-04	1.00E+00	4.43E-04	0.00E+00	ND	1	0.18	0.00	1.60E-02	0.0443	1.00
Dicamba	0.0E-00	1.0E-00	850	1850	4.87E-06	1.00E+00	4.87E-06	0.00E+00	ND	1	0.18	0.00	1.10E-04	0.0443	1.00
Dichlorprop	Bench NA	Bench NA	NA	NA	8.20E-06	1.00E+00	8.20E-06	0.00E+00	ND	1	0.18	0.00	1.85E-03	0.0443	1.00
MCPP	0.03	0.003	100	1000	1.05E+00	1.00E+00	1.05E+00	0.00E+00	0.00E+00	1	0.18	1.00	ND	0.0443	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	1.21E-03	1.00E+00	1.21E-03	4.70E-03	4.70E-03	1	0.18	1.00	ND	0.0443	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	1.06E-02	1.00E+00	1.06E-02	6.05E-02	6.05E-02	1	0.18	1.00	ND	0.0443	0.00
4,4'-DDT	0.8	0.08	0.0028	0.028	2.34E-03	1.00E+00	7.31E-03	1.30E-02	1.30E-02	1	0.18	1.00	ND	0.0443	0.00
alpha-BHC	0.0008	0.0002	0.56	2.25	4.86E-04	1.00E+00	4.86E-04	2.80E-03	2.80E-03	1	0.18	1.00	ND	0.0443	0.00
alpha-Chlordane	0.001	0.0003	2.14	10.7	2.63E-03	1.00E+00	2.63E-03	1.46E-02	1.46E-02	1	0.18	1.00	ND	0.0443	0.00
Dieldrin	0.1	Bench NA	0.077	NA	1.10E-02	1.00E+00	1.10E-02	6.40E-02	6.40E-02	1	0.18	1.00	ND	0.0443	0.00
Endosulfan I	0.00005	Bench NA	16	NA	7.74E-04	1.00E+00	7.74E-04	4.30E-03	4.30E-03	1	0.18	1.00	ND	0.0443	0.00
Endrin	0.3	0.03	0.01	0.1	2.70E-03	1.00E+00	2.70E-03	1.80E-02	1.80E-02	1	0.18	1.00	ND	0.0443	0.00
Endrin aldehyde	0.2	0.02	0.01	0.1	1.80E-03	1.00E+00	1.80E-03	1.00E-02	1.00E-02	1	0.18	1.00	ND	0.0443	0.00
gamma-Chlordane	0.0007	0.0001	2.14	10.7	1.46E-03	1.00E+00	1.46E-03	8.10E-03	8.10E-03	1	0.18	1.00	ND	0.0443	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	9.54E-04	1.00E+00	9.54E-04	5.30E-03	5.30E-03	1	0.18	1.00	ND	0.0443	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	8.78E-05	1.00E+00	8.78E-05	0.00E+00	ND	1	0.18	0.00	1.93E-03	0.0443	1.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	4.39E-03	1.00E+00	4.39E-03	2.40E-01	2.40E-01	1	0.18	0.00	1.30E-02	0.0443	0.01
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	2.52E-02	1.00E+00	2.52E-02	1.38E-01	1.38E-01	1	0.18	1.00	ND	0.0443	0.00
2,4,5-Trichlorophenol	Bench NA	Bench NA	NA	NA	1.54E-04	1.00E+00	1.54E-04	0.00E+00	ND	1	0.18	0.00	8.00E-03	0.0443	1.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	3.56E-02	1.00E+00	3.56E-02	1.90E-01	1.90E-01	1	0.18	0.00	3.10E-02	0.0443	0.04
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	1.84E-04	1.00E+00	1.84E-04	0.00E+00	ND	1	0.18	0.00	2.70E-03	0.0443	1.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	8.88E-04	1.00E+00	8.88E-04	0.00E+00	ND	1	0.18	0.00	2.60E-02	0.0443	1.00
o-Cresol	Bench NA	Bench NA	NA	NA	3.99E-02	1.00E+00	3.99E-02	2.20E-01	2.20E-01	1	0.18	1.00	ND	0.0443	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
m,p -Cresol	Bench NA	Bench NA	NA	NA	4.87E-04	1.00E+00	4.87E-04	0.00E+00	ND	1	0.18	0.00	1.10E-02	0.0443	1.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	1.99E-03	1.00E+00	1.99E-03	0.00E+00	ND	1	0.18	0.00	4.80E-02	0.0443	1.00
bis(2-Ethylhexyl)phthalate	0.00009	Bench NA	1.1	NA	9.75E-05	1.00E+00	9.75E-05	0.00E+00	ND	1	0.18	0.00	2.20E-03	0.0443	1.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	1.51E-06	1.00E+00	1.51E-06	0.00E+00	ND	1	0.18	0.00	3.40E-04	0.0443	1.00
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	4.12E-06	1.00E+00	4.12E-06	0.00E+00	ND	1	0.18	0.00	9.30E-04	0.0443	1.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	3.86E-05	1.00E+00	3.86E-05	0.00E+00	ND	1	0.18	0.00	8.70E-04	0.0443	1.00
Phenol	Bench NA	Bench NA	NA	NA	6.66E-04	1.00E+00	6.66E-04	0.00E+00	ND	1	0.18	0.00	1.50E-02	0.0443	1.00
1,2-Dichloroethane	0.0000002	0.000001	17.2	34.4	3.43E-06	1.00E+00	3.43E-06	0.00E+00	ND	1	0.18	0.00	7.75E-04	0.0443	1.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	8.78E-06	1.00E+00	8.78E-06	0.00E+00	ND	1	0.18	0.00	2.20E-03	0.0443	1.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Benzene	Bench NA	Bench NA	NA	NA	7.87E-06	1.00E+00	7.87E-06	0.00E+00	ND	1	0.18	0.00	1.80E-03	0.0443	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	1.06E-03	1.00E+00	1.06E-03	0.00E+00	ND	1	0.18	0.00	2.40E-02	0.0443	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	1.68E-05	1.00E+00	1.68E-05	0.00E+00	ND	1	0.18	0.00	3.80E-04	0.0443	1.00
p/m-Xylene	Bench NA	Bench NA	NA	NA	1.06E-04	1.00E+00	1.06E-04	0.00E+00	ND	1	0.18	0.00	2.40E-03	0.0443	1.00
Methylene chloride (Dichloromethane)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	1.8443	0.00
Toluene	Bench NA	Bench NA	NA	NA	3.46E-03	1.00E+00	3.46E-03	0.00E+00	ND	1	0.18	0.00	1.70E-03	2.0443	1.00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	3.0443	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	1.21E-03	1.00E+00	1.21E-03	0.00E+00	ND	1	0.18	0.00	3.60E-04	4.0443	1.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	5.0443	0.00
Xylene (total)	Bench NA	Bench NA	NA	NA	1.63E-02	1.00E+00	1.63E-02	0.00E+00	ND	1	0.18	0.00	2.70E-03	6.0443	1.00

Notes:
NA = Not available/applicable
ND = Not detected
Bench NA = Benchmark not available

Samples Comprising Foraging Area	
Fish Samples	3 PDA whole body composites (shad, drum, catfish)
Water Samples	All PDA samples

Food Chain Model Components:
Hazard Index Estimate = [Food Dose] + [Drinking Water Dose]
Toxicological Benchmark

Food and Water Ingestion Rate (Sample and Suter 1994)

As a piscivore, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample et al., 1994)

Table D-22
Food Chain Model For Chronic Exposures
Great Blue Heron Analysis
Ingestion of Fish
DDA-Potential Maximum Exposure (NO AUF)
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Exposure Dose mg/kg/day	Food					Water		
								Total Conc in Food mg/kg wet	Fish Tissue Concentration mg/kg wet	Proportion Fish in Diet	Ingestion Rate kg/kg/day	Proportion of Dose	Conc in Water mg/l	Ingestion Rate l/kg/day	Proportion of Dose
Dioxin (TEQ)	0.00006	0.000006	0.014	0.14	8.09E-07	1.00E+00	8.09E-07	4.49E-06	4.49E-06	1	0.18	1.00	2.22E-11	0.0443	0.00
2,4,5-T	Bench NA	Bench NA	NA	NA	4.87E-12	1.00E+00	4.87E-12	0.00E+00	ND	1	0.18	0.00	1.10E-10	0.0443	1.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	1.24E-03	1.00E+00	1.24E-03	6.90E-03	6.90E-03	1	0.18	1.00	ND	0.0443	0.00
2,4-D	Bench NA	Bench NA	NA	NA	2.79E-05	1.00E+00	2.79E-05	0.00E+00	ND	1	0.18	0.00	6.30E-04	0.0443	1.00
Dicamba	#NUM!	#NUM!	600	1600	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Dichloroprop	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
MCPP	#NUM!	#NUM!	100	1000	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	2.16E-03	1.00E+00	2.16E-03	1.39E-02	1.39E-02	1	0.18	1.00	ND	0.0443	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	3.42E-03	1.00E+00	3.42E-03	1.90E-02	1.90E-02	1	0.18	1.00	ND	0.0443	0.00
4,4'-DDT	#NUM!	#NUM!	0.0028	0.028	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
alpha-BHC	#NUM!	#NUM!	0.68	2.25	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
alpha-Chlordane	0.0008	0.0001	2.14	10.7	1.39E-03	1.00E+00	1.39E-03	7.70E-03	7.70E-03	1	0.18	1.00	ND	0.0443	0.00
Dieldrin	0.04	Bench NA	0.077	NA	3.42E-03	1.00E+00	3.42E-03	1.90E-02	1.90E-02	1	0.18	1.00	ND	0.0443	0.00
Endosulfan I	#NUM!	Bench NA	10	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Endrin	#NUM!	#NUM!	0.01	0.1	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Endrin aldehyde	0.09	0.009	0.01	0.1	8.62E-04	1.00E+00	8.62E-04	4.80E-03	4.80E-03	1	0.18	1.00	ND	0.0443	0.00
gamma-Chlordane	0.0003	0.00008	2.14	10.7	6.30E-04	1.00E+00	6.30E-04	3.50E-03	3.50E-03	1	0.18	1.00	ND	0.0443	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	4.43E-05	1.00E+00	4.43E-05	0.00E+00	ND	1	0.18	0.00	1.00E-03	0.0443	1.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	1.59E-05	1.00E+00	1.59E-05	0.00E+00	ND	1	0.18	0.00	3.60E-04	0.0443	1.00
o-Cresol	Bench NA	Bench NA	NA	NA	6.17E-02	1.00E+00	6.17E-02	3.40E-01	3.40E-01	1	0.18	1.00	ND	0.0443	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
m&p-Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	7.09E-05	1.00E+00	7.09E-05	0.00E+00	ND	1	0.18	0.00	1.60E-03	0.0443	1.00
bis(2-Ethylhexyl)phthalate	#NUM!	Bench NA	1.1	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
1,2-Dichloroethene	#NUM!	#NUM!	17.2	34.4	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Benzene	Bench NA	Bench NA	NA	NA	1.06E-05	1.00E+00	1.06E-05	0.00E+00	ND	1	0.18	0.00	2.40E-04	0.0443	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	1.62E-04	1.00E+00	1.62E-04	0.00E+00	ND	1	0.18	0.00	2.30E-03	0.0443	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
p/m-Xylene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Methylene chloride (Dichloromethane)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Tetrachloroethene			NA	NA		1.00E+00	0.00E+00		ND			0.00	ND		0.00
Toluene	Bench NA	Bench NA	NA	NA	1.77E-05	1.00E+00	1.77E-05	0.00E+00	ND	1	0.18	0.00	4.00E-04	0.0443	1.00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00
Xylene (total)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.18	0.00	ND	0.0443	0.00

Notes:
NA = Not available/applicable
ND = Not detected
Bench NA = Benchmark not available
$NUM! = Not calculated because contaminant was not detected in any media. It is retained here for completeness

Samples Comprising Foraging Area	
Fish Samples	1 DDA whole body composite (shad, drum, catfish)
Water Samples	All DDA samples

Food Chain Model Components:
Hazard Index Estimate = (Food Dose) + (Drinking Water Dose) / Toxicological Benchmark

Food and Water Ingestion Rate (Sample and Suter 1994)

As a piscivore, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample et al., 1994).

Table D-23
Food Chain Model For Chronic Exposure
Great Blue Heron Analysis
Ingestion of Fish
UDA-Potential Maximum Exposure (NO AUF)
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Exposure Dose mg/kg/day	Food: Total Conc. in Food mg/kg wet	Food: Fish Tissue Concentration mg/kg wet	Food: Proportion Fish in Diet	Food: Ingestion Rate kg/kg/day	Food: Proportion of Dose	Water: Conc. in Water mg/l	Water: Ingestion Rate l/kg/day	Water: Proportion of Dose
Dioxin (TEQ)	0.00007	0.000007	0.014	0.14	1.01E-08	1.00E+00	1.01E-08	6.65E-08	6.65E-08	1	0.10	1.00	1.89E-11	0.0443	0.00
2,4,5-T	Bench NA	Bench NA	NA	NA	1.39E-03	1.00E+00	1.39E-03	7.10E-03	7.10E-03	1	0.10	1.00	ND	0.0443	0.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	1.39E-03	1.00E+00	1.39E-03	7.10E-03	7.10E-03	1	0.10	1.00	ND	0.0443	0.00
2,4-D	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	ND	ND	1	0.10	0.00	ND	0.0443	0.00
Dicamba	0.000001	0.0000007	800	1600	1.17E-03	1.00E+00	1.17E-03	6.65E-03	6.65E-03	1	0.10	1.00	ND	0.0443	0.00
Dichloroprop	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	3.88E-06	ND	1	0.10	0.00	ND	0.0443	0.00
MCPP	#NUM!	#NUM!	100	1000	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	4.50E-03	1.00E+00	4.50E-03	2.56E-02	2.56E-02	1	0.10	1.00	ND	0.0443	0.00
4,4'-DDT	0.5	0.05	0.0028	0.028	1.37E-03	1.00E+00	1.37E-03	7.80E-03	7.80E-03	1	0.10	1.00	ND	0.0443	0.00
alpha-BHC	#NUM!	#NUM!	0.18	2.26	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
alpha-Chlordane	#NUM!	#NUM!	2.14	10.7	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
Dieldrin	0.07	Bench NA	0.077	NA	6.76E-03	1.00E+00	6.76E-03	3.85E-02	3.85E-02	1	0.10	1.00	ND	0.0443	0.00
Endosulfan I	0.00005	Bench NA	18	NA	6.40E-04	1.00E+00	6.40E-04	3.65E-03	3.65E-03	1	0.10	1.00	ND	0.0443	0.00
Endrin	#NUM!	#NUM!	0.91	9.1	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
Endrin aldehyde	0.1	0.01	0.91	9.1	1.32E-03	1.00E+00	1.32E-03	7.49E-03	7.49E-03	1	0.10	1.00	ND	0.0443	0.00
gamma-Chlordane	0.0005	0.00016	2.14	10.7	1.04E-03	1.00E+00	1.04E-03	5.92E-03	5.92E-03	1	0.10	1.00	ND	0.0443	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
o-Cresol	Bench NA	Bench NA	NA	NA	1.89E-01	1.00E+00	1.89E-01	1.10E-01	1.10E-01	1	0.10	1.00	ND	0.0443	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
m,p-Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
bis(2-Ethylhexyl)phthalate	#NUM!	Bench NA	1.1	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
1,3-Dichloroethene	#NUM!	#NUM!	17.2	34.4	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	1.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	3.88E-04	1.00E+00	3.88E-04	0.00E+00	ND	1	0.10	0.00	8.69E-05	0.0443	1.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
Benzene	Bench NA	Bench NA	NA	NA	3.48E-04	1.00E+00	3.48E-04	0.00E+00	ND	1	0.10	0.00	7.80E-04	0.0443	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	3.43E-04	1.00E+00	3.43E-04	0.00E+00	ND	1	0.10	0.00	7.70E-04	0.0443	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
p/m-Xylene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
Methylene chloride (Dichloromethane)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
Tetrachloroethene			NA	NA		1.00E+00	0.00E+00	ND				0.00	ND		0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
Toluene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	2.98E-04	1.00E+00	2.98E-04	0.00E+00	ND	1	0.10	0.00	6.70E-04	0.0443	1.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	0.00E+00	1.00E+00	0.00E+00	0.00E+00	ND	1	0.10	0.00	ND	0.0443	0.00

Notes:
NA = Not available/applicable
ND = Not detected
Bench NA = Benchmark not available
#NUM! = Not calculated because contaminant was not detected in any media. It is retained here for completeness.

Samples Comprising Foraging Area	
Fish Samples:	1 UDA whole body composite (shad, drum, catfish)
Water Samples:	All UDA samples

Food Chain Model Components:
Hazard Index Estimate = (Food Dose) + (Drinking Water Dose) / Toxicological Benchmark

Food and Water Ingestion Rate (Sample and Suter 1994)

As a piscivore, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample et al., 1994).

Table D-J4
Food Chain Model For Chronic Exposures
Osprey Analysis
Ingestion of Fish
Site
Ecological Risk Assessment for WOK Plant
Sauget, Illinois

Contaminant	Chronic NOAEL Hazard Quotient	Chronic LOAEL Hazard Quotient	Chronic NOAEL Benchmark Dose mg/kg/d	Chronic LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Foraging Area acres	Site Area acres	Exposure Dose mg/kg/day	Food: Total Conc in Food mg/kg wet	Food: Fish Tissue mg/kg wet	Food: Proportion Fish in Diet	Food: Ingestion Rate kg/kg/day	Food: Proportion of Dose	Water: Conc in Water mg/L	Water: Water Ing Rate L/kg/day	Water: Proportion of Dose
TEQ	0.00000001	0.000000001	0.014	0.14	1.66E-09	0.003	6888	20	5.81E-07	2.77E-06	2.77E-06	1	0.21	1.00	1.50E-10	0.051	0.00
2,4,5-T	Bench NA	Bench NA	NA	NA	3.41E-06	0.003	6888	20	1.21E-03	5.74E-03	5.74E-03	1	0.21	1.00	ND	0.051	0.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	2.99E-06	0.003	6888	20	1.06E-03	4.97E-03	4.97E-03	1	0.21	0.99	2.39E-04	0.051	0.01
2,4-D	Bench NA	Bench NA	NA	NA	4.80E-07	0.003	6888	20	1.67E-04	0.00E+00	ND	1	0.21	0.00	3.06E-03	0.051	1.00
Dicamba	0.0000000001	0.00000000005	800	1600	7.97E-08	0.003	6888	20	2.77E-05	0.00E+00	ND	1	0.21	0.00	5.08E-04	0.051	1.00
Dichlorprop	Bench NA	Bench NA	NA	NA	3.77E-07	0.003	6888	20	1.32E-04	0.00E+00	ND	1	0.21	0.00	2.56E-03	0.051	1.00
MCPP	0.00001	0.000001	100	1000	1.30E-03	0.003	6888	20	4.53E-01	2.30E+00	2.30E+00	1	0.21	1.00	ND	0.051	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	8.73E-06	0.003	6888	20	3.05E-03	1.13E-02	1.13E-02	1	0.21	1.00	ND	0.051	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	1.11E-05	0.003	6888	20	3.88E-03	1.84E-02	1.84E-02	1	0.21	1.00	ND	0.051	0.00
4,4'-DDT	0.003	0.0003	0.0028	0.028	7.56E-06	0.003	6888	20	2.66E-03	1.39E-02	1.39E-02	1	0.21	1.00	ND	0.051	0.00
alpha-BHC	0.00001	0.000003	0.56	2.25	6.53E-06	0.003	6888	20	2.29E-03	1.14E-02	1.14E-02	1	0.21	1.00	ND	0.051	0.00
alpha-Chlordane	0.000003	0.0000007	2.14	10.7	7.63E-06	0.003	6888	20	2.68E-03	1.17E-02	1.17E-02	1	0.21	1.00	ND	0.051	0.00
Dieldrin	0.0001	Bench NA	0.077	NA	3.58E-06	0.003	6888	20	3.13E-03	1.46E-02	1.46E-02	1	0.21	1.00	ND	0.051	0.00
Endosulfan I	0.0000007	Bench NA	10	NA	8.97E-06	0.003	6888	20	2.44E-03	1.14E-02	1.14E-02	1	0.21	1.00	ND	0.051	0.00
Endrin	0.0007	0.00007	0.61	6.1	7.33E-06	0.003	6888	20	2.86E-03	1.23E-02	1.23E-02	1	0.21	1.00	ND	0.051	0.00
Endrin aldehyde	0.0007	0.00007	0.61	6.1	6.81E-06	0.003	6888	20	2.42E-03	1.15E-02	1.15E-02	1	0.21	1.00	ND	0.051	0.00
gamma-Chlordane	0.000003	0.0000006	2.14	10.7	6.61E-06	0.003	6888	20	2.31E-03	1.10E-02	1.10E-02	1	0.21	1.00	ND	0.051	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	6.43E-06	0.003	6888	20	2.25E-03	1.07E-02	1.07E-02	1	0.21	1.00	ND	0.051	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	8.00E+00	0.003	6888	20	8.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	3.38E-07	0.003	6888	20	1.18E-04	0.00E+00	ND	1	0.21	0.00	2.26E-05	0.051	1.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	1.38E-04	0.003	6888	20	4.81E-02	2.28E-01	2.28E-01	1	0.21	0.99	4.62E-03	0.051	0.01
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	1.41E-04	0.003	6888	20	4.92E-02	2.41E-01	2.41E-01	1	0.21	1.00	ND	0.051	0.00
2,4,5-Trichlorophenol	Bench NA	Bench NA	NA	NA	5.14E-07	0.003	6888	20	1.80E-04	0.00E+00	ND	1	0.21	0.00	3.63E-03	0.051	1.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	1.36E-04	0.003	6888	20	4.82E-02	2.27E-01	2.27E-01	1	0.21	0.99	9.84E-03	0.051	0.01
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	3.66E-07	0.003	6888	20	1.28E-04	0.00E+00	ND	1	0.21	0.00	2.62E-03	0.051	1.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	8.00E+00	0.003	6888	20	8.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	1.61E-06	0.003	6888	20	5.62E-04	0.00E+00	ND	1	0.21	0.00	8.80E-05	0.051	1.00
o-Cresol	Bench NA	Bench NA	NA	NA	1.33E-04	0.003	6888	20	4.66E-02	2.22E-01	2.22E-01	1	0.21	1.00	ND	0.051	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	8.00E+00	0.003	6888	20	8.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
m,p-Cresol	Bench NA	Bench NA	NA	NA	5.74E-07	0.003	6888	20	2.00E-04	0.00E+00	ND	1	0.21	0.00	3.93E-03	0.051	1.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	8.00E+00	0.003	6888	20	8.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	2.00E-06	0.003	6888	20	7.16E-04	0.00E+00	ND	1	0.21	0.00	1.41E-02	0.051	1.00
bis(2-Ethylhexyl)phthalate	0.0000003	Bench NA	1.1	NA	3.74E-07	0.003	6888	20	1.31E-04	0.00E+00	ND	1	0.21	0.00	2.99E-03	0.051	1.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	3.00E-07	0.003	6888	20	1.06E-04	0.00E+00	ND	1	0.21	0.00	2.11E-03	0.051	1.00
Naphthalene	Bench NA	Bench NA	NA	NA	8.00E+00	0.003	6888	20	8.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	3.21E-07	0.003	6888	20	1.12E-04	0.00E+00	ND	1	0.21	0.00	2.30E-03	0.051	1.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	7.88E-08	0.003	6888	20	2.65E-05	0.00E+00	ND	1	0.21	0.00	5.16E-04	0.051	1.00
Phenol	Bench NA	Bench NA	NA	NA	5.68E-07	0.003	6888	20	1.86E-04	0.00E+00	ND	1	0.21	0.00	3.89E-03	0.051	1.00
1,2 Dichloroethane	0.0000000	0.0000000	17.2	34.4	1.27E-07	0.003	6888	20	4.45E-05	0.00E+00	ND	1	0.21	0.00	8.73E-04	0.051	1.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	8.00E+00	0.003	6888	20	8.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	5.71E-07	0.003	6888	20	1.99E-04	0.00E+00	ND	1	0.21	0.00	3.61E-03	0.051	1.00
Acetone	Bench NA	Bench NA	NA	NA	8.00E+00	0.003	6888	20	8.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Benzene	Bench NA	Bench NA	NA	NA	1.71E-07	0.003	6888	20	5.97E-05	0.00E+00	ND	1	0.21	0.00	1.17E-03	0.051	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	8.00E+00	0.003	6888	20	8.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	1.11E-06	0.003	6888	20	3.87E-04	0.00E+00	ND	1	0.21	0.00	7.84E-05	0.051	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	8.00E+00	0.003	6888	20	8.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Chloroform	Bench NA	Bench NA	NA	NA	8.00E+00	0.003	6888	20	8.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	8.00E+00	0.003	6888	20	8.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	1.05E-07	0.003	6888	20	3.51E-05	0.00E+00	ND	1	0.21	0.00	6.86E-04	0.051	1.00
m+p-Xylene	Bench NA	Bench NA	NA	NA	1.58E-07	0.003	6888	20	5.56E-05	0.00E+00	ND	1	0.21	0.00	1.08E-03	0.051	1.00
Methylene chloride	Bench NA	Bench NA	NA	NA	8.00E+00	0.003	6888	20	8.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	8.00E+00	0.003	6888	20	8.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Toluene	Bench NA	Bench NA	NA	NA	1.72E-07	0.003	6888	20	6.03E-05	0.00E+00	ND	1	0.21	0.00	1.18E-03	0.051	1.00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	8.00E+00	0.003	6888	20	8.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	1.33E-07	0.003	6888	20	4.70E-05	0.00E+00	ND	1	0.21	0.00	9.22E-04	0.051	1.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	8.00E+00	0.003	6888	20	8.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Xylene (total)	Bench NA	Bench NA	NA	NA	1.66E-07	0.003	6888	20	5.87E-05	0.00E+00	ND	1	0.21	0.00	1.15E-03	0.051	1.00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND = Not Detected or Determined

Samples Comprising Foraging Area	
Fish Samples:	3 POA whole body carnassius (shad, drum, catfish)
Water Samples	All POA samples

Food Chain Model Components:
Hazard Index Estimate = (Food Dose) + (Drinking Water Dose)
Toxicological Benchmark

Food and Water Ingestion Rate (Sample and Suter 1994)

As a piscivore, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample and Suter, 1994)

Table D-25
Food Chain Model For Chronic Exposures
Osprey Analysis
Ingestion of Fish
DDA
Ecological Risk Assessment for WQK Plant
Sauget, Illinois

Contaminant	Chronic NOAEL Hazard Quotient	Chronic LOAEL Hazard Quotient	Chronic NOAEL Benchmark Dose mg/kg/d	Chronic LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Forage Area acres	Site Area acres	Exposure Dose mg/kg/day	Food: Total Conc in Food mg/kg wet	Food: Fish Tissue mg/kg wet	Food: Proportion Fish in Diet	Food: Ingestion Rate kg/kg/day	Food: Proportion of Dose	Water: Conc in Water mg/L	Water: Water Ing. Rate L/kg/day	Water: Proportion of Dose
TEQ	0.000000008	assessment	0.014	0.14	1.27E-09	0.083	6888	29	4.44E-07	2.12E-08	2.12E-08	1	0.21	1.00	2.21E-11	0.051	0.00
2,4,5-T	Bench NA	Bench NA	NA	NA	2.60E-14	0.083	6888	29	9.18E-12	0.00E+00	ND	1	0.21	0.00	1.60E-10	0.051	1.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	2.60E-14	0.083	6888	29	1.09E-13	4.68E-15	4.68E-15	1	0.21	1.00	ND	0.051	0.00
2,4-D	Bench NA	Bench NA	NA	NA	7.51E-14	0.083	6888	29	3.14E-12	0.00E+00	ND	1	0.21	0.00	4.60E-04	0.051	1.00
Dicamba	#NUM!	#NUM!	600	1000	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Dichloroprop	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
MCPP	#NUM!	#NUM!	100	1000	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	9.51E-06	0.083	6888	29	3.47E-03	1.68E-02	1.68E-02	1	0.21	1.00	ND	0.051	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	8.04E-06	0.083	6888	29	2.81E-03	1.34E-02	1.34E-02	1	0.21	1.00	ND	0.051	0.00
4,4'-DDT	#NUM!	#NUM!	0.0038	0.038	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
alpha-BHC	#NUM!	#NUM!	0.98	2.25	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
alpha-Chlordane	0.000053	0.0000530	2.14	10.7	9.51E-06	0.083	6888	29	3.47E-03	1.68E-02	1.68E-02	1	0.21	1.00	ND	0.051	0.00
Dieldrin	0.0001	Bench NA	0.077	NA	1.30E-05	0.083	6888	29	4.72E-03	1.30E-04	1.30E-04	1	0.21	1.00	ND	0.051	0.00
Endosulfan I	#NUM!	Bench NA	18	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Endrin	#NUM!	#NUM!	0.51	0.1	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Endrin aldehyde	0.0000	0.00000	0.51	0.1	8.48E-06	0.083	6888	29	3.09E-03	1.41E-02	1.41E-02	1	0.21	1.00	ND	0.051	0.00
gamma-Chlordane	0.000053	0.0000530	2.14	10.7	9.51E-06	0.083	6888	29	3.47E-03	1.57E-02	1.57E-02	1	0.21	1.00	ND	0.051	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,2-Dichloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,4,5-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	2.60E-07	0.083	6888	29	9.18E-05	0.00E+00	ND	1	0.21	0.00	1.71E-03	0.051	1.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	2.60E-07	0.083	6888	29	9.18E-05	0.00E+00	ND	1	0.21	0.00	1.43E-03	0.051	1.00
o-Cresol	Bench NA	Bench NA	NA	NA	1.31E-01	0.083	6888	29	4.63E+01	2.17E-01	3.17E-01	1	0.21	1.00	ND	0.051	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
m,p-Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	4.62E-07	0.083	6888	29	1.63E-04	0.00E+00	ND	1	0.21	0.00	3.39E-03	0.051	1.00
bis(2-Ethylhexyl)phthalate	#NUM!	Bench NA	1.1	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,3-Dichlorobenzene	#NUM!	#NUM!	17.2	34.4	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Benzene	Bench NA	Bench NA	NA	NA	2.60E-08	0.083	6888	29	9.18E-06	0.00E+00	ND	1	0.21	0.00	1.60E-04	0.051	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	2.60E-07	0.083	6888	29	9.18E-05	0.00E+00	ND	1	0.21	0.00	1.71E-03	0.051	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
cis-1,3-Dichloropropene	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
p/m-Xylene	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Methylene chloride	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Toluene	Bench NA	Bench NA	NA	NA	1.62E-07	0.083	6888	29	5.71E-05	0.00E+00	ND	1	0.21	0.00	7.66E-04	0.051	1.00
trans-1,3-Dichloropropene	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Xylene (total)	Bench NA	Bench NA	NA	NA	0.00E+00	0.083	6888	29	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND = Not Detected or Determined
SNUM = Not calculated because contaminant was not detected in any media. It is retained here for completeness.

	Samples Comprising Foraging Area
Fish Samples	1 DDA whole body composite (shad, drum, catfish)
Water Samples	All DDA samples

Food Chain Model Components:
Hazard Index Estimate = (Food Dose + Drinking Water Dose) / Toxicological Benchmark

Food and Water Ingestion Rate (Sample and Suter 1994)

As a placeholder, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample and Suter, 1994)

Table D-28
Food Chain Model For Chronic Exposures
Osprey Analysis
Ingestion of Fish
DDA (NO AUF)
Ecological Risk Assessment for WQK Plant
Sauget, Illinois

Contaminant	Chronic NOAEL Hazard Quotient	Chronic LOAEL Hazard Quotient	Chronic NOAEL Benchmark Dose mg/kg/d	Chronic LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Exposure Dose mg/kg/day	Food					Water		
								Total Conc in Food mg/kg wet	Fish Tissue mg/kg wet	Proportion Fish in Diet	Ingestion Rate kg/kg/day	Proportion of Dose	Conc in Water mg/L	Water Ing. Rate L/kg/day	Proportion of Dose
TEQ	0.00003	0.000003	0.14	0.14	4.44E-07	1.00	4.44E-07	2.12E-06	2.12E-06	1	0.21	1.00	2.21E-11	0.051	0.00
2,4,5-T	Bench NA	Bench NA	NA	NA	8.18E-12	1.00	8.18E-12	0.00E+00	ND	1	0.21	0.00	1.80E-16	0.051	1.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	1.05E-03	1.00	1.05E-03	4.88E-03	4.88E-03	1	0.21	1.00	ND	0.051	0.00
2,4-D	Bench NA	Bench NA	NA	NA	2.45E-05	1.00	2.45E-05	0.00E+00	ND	1	0.21	0.00	4.80E-04	0.051	1.00
Dicamba	#NUM!	#NUM!	800	1600	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Dichlorprop	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
MCPP	#NUM!	#NUM!	100	1000	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	3.47E-03	1.00	3.47E-03	1.66E-02	1.66E-02	1	0.21	1.00	ND	0.051	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	2.61E-03	1.00	2.61E-03	1.34E-02	1.34E-02	1	0.21	1.00	ND	0.051	0.00
4,4'-DDT	#NUM!	#NUM!	0.0339	0.338	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
alpha-BHC	#NUM!	#NUM!	0.58	2.25	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
alpha-Chlordane	0.001	0.0002	2.14	10.7	2.39E-03	1.00	2.39E-03	1.66E-02	1.66E-02	1	0.21	1.00	ND	0.051	0.00
Dieldrin	0.04	Bench NA	0.077	NA	2.92E-03	1.00	2.92E-03	1.39E-02	1.39E-02	1	0.21	1.00	ND	0.051	0.00
Endosulfan I	#NUM!	Bench NA	10	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Endrin	#NUM!	#NUM!	0.01	0.1	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Endrin aldehyde	0.3	0.03	0.01	0.1	2.96E-03	1.00	2.96E-03	1.41E-02	1.41E-02	1	0.21	1.00	ND	0.051	0.00
gamma-Chlordane	0.001	0.0003	2.14	10.7	2.88E-03	1.00	2.88E-03	1.37E-02	1.37E-02	1	0.21	1.00	ND	0.051	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2,4,5-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	8.80E-06	1.00	8.80E-06	0.00E+00	ND	1	0.21	0.00	1.75E-03	0.051	1.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	7.38E-06	1.00	7.38E-06	0.00E+00	ND	1	0.21	0.00	1.43E-03	0.051	1.00
2-Cresol	Bench NA	Bench NA	NA	NA	6.88E-02	1.00	6.88E-02	3.17E-01	3.17E-01	1	0.21	1.00	ND	0.051	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
m&p-Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	1.68E-04	1.00	1.68E-04	0.00E+00	ND	1	0.21	0.00	3.36E-03	0.051	1.00
bis(2-Ethylhexyl)phthalate	#NUM!	Bench NA	1.1	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,3-Dichloroethene	#NUM!	#NUM!	17.2	34.4	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Benzene	Bench NA	Bench NA	NA	NA	8.95E-06	1.00	8.95E-06	0.00E+00	ND	1	0.21	0.00	1.99E-04	0.051	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	8.53E-06	1.00	8.53E-06	0.00E+00	ND	1	0.21	0.00	1.73E-03	0.051	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
p/m-Xylene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Methylene chloride	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Toluene	Bench NA	Bench NA	NA	NA	3.57E-06	1.00	3.57E-06	0.00E+00	ND	1	0.21	0.00	7.99E-04	0.051	1.00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Xylene (total)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND = Not Detected or Determined
#NUM! = Not calculated because contaminant was not detected in any media. It is retained here for completeness.

Samples Comprising Foraging Area	
Fish Samples	1 DDA whole body composite (shad, drum, catfish)
Water Samples	All DDA samples

Food Chain Model Components:
Hazard Index Estimate = [Food Dose] + [Drinking Water Dose]
Toxicological Benchmark

Food and Water Ingestion Rate (Sample and Suter 1994L

As a piscivore, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample and Suter, 1994)

Table D-39
Food Chain Model For Chronic Exposures
Osprey Analysis
Ingestion of Fish
UDA (NO AUF)
Ecological Risk Assessment for WOK Plant
Sauget, Illinois

Contaminant	Chronic NOAEL Hazard Quotient	Chronic LOAEL Hazard Quotient	Chronic NOAEL Benchmark Dose mg/kg/d	Chronic LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Exposure Dose mg/kg/day	Food					Water		
								Total Conc in Food mg/kg wet	Fish Tissue mg/kg wet	Proportion Fish in Diet	Ingestion Rate kg/kg/day	Proportion of Dose	Conc in Water mg/L	Water Ing. Rate L/kg/day	Proportion of Dose
TEQ	0.000001	0.000001	0.014	0.14	8.10E-07	1.00	8.10E-07	2.84E-05	2.84E-05	1	0.21	1.00	1.62E-11	0.051	0.00
2,4,5-T	Bench NA	Bench NA	NA	NA	1.00E-03	1.00	1.00E-03	3.13E-03	3.13E-03	1	0.21	1.00	ND	0.051	0.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	1.11E-03	1.00	1.11E-03	3.77E-03	3.77E-03	1	0.21	1.00	ND	0.051	0.00
2,4-D	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	ND	ND	1	0.21	1.00	ND	0.051	0.00
Dicamba	0.000002	0.00000029	839	1680	1.62E-03	1.00	1.62E-03	7.23E-03	7.23E-03	1	0.21	1.00	ND	0.051	0.00
Dichlorprop	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
MCPP	#N/AM	#N/AM	168	1680	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	4.11E-03	1.00	4.11E-03	2.06E-02	2.06E-02	1	0.21	1.00	ND	0.051	0.00
4,4'-DDT	1.0	0.1	0.0839	0.839	3.11E-03	1.00	3.11E-03	1.56E-02	1.56E-02	1	0.21	1.00	ND	0.051	0.00
alpha-BHC	#N/AM	#N/AM	0.56	2.25	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
alpha-Chlordane	#N/AM	#N/AM	2.14	16.7	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Dieldrin	0.56	Bench NA	0.077	NA	4.49E-03	1.00	4.49E-03	2.13E-02	2.13E-02	1	0.21	1.00	ND	0.051	0.00
Endosulfan I	0.0483	Bench NA	16	NA	2.84E-05	1.00	2.84E-05	1.39E-04	1.39E-04	1	0.21	1.00	ND	0.051	0.00
Endrin	#N/AM	#N/AM	0.01	0.1	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Endrin aldehyde	0.3	0.03	0.01	0.1	2.60E-03	1.00	2.60E-03	1.29E-02	1.29E-02	1	0.21	1.00	ND	0.051	0.00
gamma-Chlordane	0.001	0.0008	2.14	16.7	3.11E-03	1.00	3.11E-03	1.44E-02	1.44E-02	1	0.21	1.00	ND	0.051	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,2,3-Trichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2,4,5-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
m,p-Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
BNA3-															
Ethylhexylphthalate	#N/AM	Bench NA	1.1	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Octylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,2-Dichloroethane	#N/AM	#N/AM	17.2	34.4	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	3.57E-04	1.00	3.57E-04	0.00E+00	ND	1	0.21	0.00	7.80E-05	0.051	1.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Benzene	Bench NA	Bench NA	NA	NA	4.00E-04	1.00	4.00E-04	0.00E+00	ND	1	0.21	0.00	8.53E-04	0.051	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	4.13E-04	1.00	4.13E-04	0.00E+00	ND	1	0.21	0.00	8.84E-04	0.051	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
p/m-Xylene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Methylene chloride	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Toluene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
trans-1,3-Dichloropropene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	4.77E-04	1.00	4.77E-04	0.00E+00	ND	1	0.21	0.00	8.36E-04	0.051	1.00
Xylene (total)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND = Not Detected at Detection Limit
#N/AM = Not calculated because contaminant was not detected in any media. It is retained here for completeness

Samples Comprising Foraging Area	
Fish Samples:	1 UDA whole body composite (shad, drum, catfish)
Water Samples:	All UDA samples

Food Chain Model Components:
Hazard Index Estimate = (Food Dose + Drinking Water Dose) / Toxicological Benchmark

Food and Water Ingestion Rate (Sample and Suter 1994)

As a piscivore, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample and Suter, 1994).

Table D-26
Food Chain Model For Chronic Exposures
Osprey Analysis
Ingestion of Fish
UDA
Ecological Risk Assessment for WOK Plant
Sauget, Illinois

Contaminant	Chronic NOAEL Hazard Quotient	Chronic LOAEL Hazard Quotient	Chronic NOAEL Benchmark Dose mg/kg/d	Chronic LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Forage Area acres	Site Area acres	Exposure Dose mg/kg/day	Food				Water		
										Total Conc in Food mg/kg wet	Fish Tissue mg/kg wet	Proportion Fish in Diet	Ingestion Rate kg/kg/day	Proportion of Dose	Conc in Water mg/L	Water Ing Rate L/kg/day	Proportion of Dose
TEQ	0.00000001	0.00000001	0.014	0.14	1.77E-09	0.003	6666	20	0.10E-07	2.94E-06	2.94E-06	1	0.21	1.00	1.62E-11	0.051	0.00
2,4,5-T	Bench NA	Bench NA	NA	NA	3.08E-08	0.003	6666	20	1.04E-05	5.13E-03	5.13E-03	1	0.21	1.00	ND	0.051	0.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	3.17E-08	0.003	6666	20	1.11E-05	5.27E-03	5.27E-03	1	0.21	1.00	ND	0.051	0.00
2,4-D	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Dicamba	########	########	999	1999	4.33E-08	0.003	6666	20	1.52E-05	7.23E-03	7.23E-03	1	0.21	1.00	ND	0.051	0.00
Dichlorprop	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
MCPP	#NUM!	#NUM!	166	1660	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	1.26E-06	0.003	6666	20	4.41E-03	2.16E-02	2.16E-02	1	0.21	1.00	ND	0.051	0.00
4,4'-DDT	0.003	0.0003	0.0029	0.029	0.02E-06	0.003	6666	20	3.19E-03	1.56E-02	1.56E-02	1	0.21	1.00	ND	0.051	0.00
alpha-BHC	#NUM!	#NUM!	0.99	2.25	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
alpha-Chlordane	#NUM!	#NUM!	2.14	10.7	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Dieldrin	0.0002	0.0001	0.077	NA	1.77E-05	0.003	6666	20	4.45E-03	2.12E-02	2.12E-02	1	0.21	1.00	ND	0.051	0.00
Endosulfan I	0.0000008	Bench NA	16	NA	8.12E-08	0.003	6666	20	2.84E-05	1.35E-03	1.35E-03	1	0.21	1.00	ND	0.051	0.00
Endrin	#NUM!	#NUM!	0.61	0.1	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Endrin aldehyde	0.0006	0.00006	0.61	0.1	7.53E-06	0.003	6666	20	2.63E-03	1.25E-02	1.25E-02	1	0.21	1.00	ND	0.051	0.00
gamma-Chlordane	0.0000054	0.0000008	2.14	10.7	8.69E-08	0.003	6666	20	3.03E-03	1.44E-02	1.44E-02	1	0.21	1.00	ND	0.051	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
m,p-Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
bis(2-Ethylhexyl)phthalate	#NUM!	Bench NA	1.1	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,2-Dichloroethane	#NUM!	#NUM!	17.2	34.4	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	1.02E-06	0.003	6666	20	3.57E-04	0.00E+00	ND	1	0.21	0.00	7.00E-03	0.051	1.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Benzene	Bench NA	Bench NA	NA	NA	1.30E-07	0.003	6666	20	4.55E-05	0.00E+00	ND	1	0.21	0.00	8.93E-04	0.051	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	1.30E-07	0.003	6666	20	4.53E-05	0.00E+00	ND	1	0.21	0.00	8.88E-04	0.051	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
m,p-Xylene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Methylene chloride	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Toluene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
trans-1,3-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	1.23E-07	0.003	6666	20	4.27E-05	0.00E+00	ND	1	0.21	0.00	8.39E-04	0.051	1.00
Xylene (total)	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6666	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND = Not Detected or Determined
#NUM! = Not calculated because contaminant was not detected in any media. It is retained here for completeness.

Samples Comprising Foraging Area	
Fish Samples:	1 UDA whole body composite (shad, drum, catfish)
Water Samples:	All UDA samples

Food Chain Model Components:
Hazard Index Estimate = $\frac{\text{[Food Dose + Drinking Water Dose]}}{\text{Toxicological Benchmark}}$

Food and Water Ingestion Rate (Sample and Suter 1994)

As a shortcut, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample and Suter, 1994)

Table D-37
Food Chain Model For Chronic Exposures
Osprey Analysis
Ingestion of Fish
Site (NO AUF)
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Contaminant	Chronic NOAEL Hazard Quotient	Chronic LOAEL Hazard Quotient	Chronic NOAEL Benchmark Dose mg/kg/d	Chronic LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Exposure Dose mg/kg/day	Food					Water		
								Total Conc in Food mg/kg wet	Fish Tissue mg/kg wet	Proportion Fish in Diet	Ingestion Rate kg/kg/day	Proportion of Dose	Conc in Water mg/L	Water Ing. Rate L/kg/day	Proportion of Dose
TEQ	0.00064	0.000064	0.014	0.14	8.81E-07	1.00	8.81E-07	2.77E-06	2.77E-06	1	0.21	1.00	1.99E-10	0.051	0.00
2,4,5-T	Bench NA	Bench NA	NA	NA	1.71E-05	1.00	1.71E-05	5.74E-03	5.74E-03	1	0.21	1.00	ND	0.051	0.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	1.63E-05	1.00	1.63E-05	4.87E-03	4.87E-03	1	0.21	0.99	2.39E-04	0.051	0.01
2,4-D	Bench NA	Bench NA	NA	NA	1.57E-04	1.00	1.57E-04	0.00E+00	ND	1	0.21	0.00	3.84E-03	0.051	1.00
Dicamba	0.00000063	0.00000063	500	>500	2.77E-06	1.00	2.77E-06	0.00E+00	ND	1	0.21	0.00	6.48E-04	0.051	1.00
Dichlorprop	Bench NA	Bench NA	NA	NA	1.33E-04	1.00	1.33E-04	0.00E+00	ND	1	0.21	0.00	2.88E-03	0.051	1.00
MCPA	0.045	0.0004	0.68	>500	4.03E-01	1.00	4.03E-01	2.70E+00	2.70E+00	1	0.21	1.00	ND	0.051	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	3.29E-05	1.00	3.29E-05	1.10E-02	1.10E-02	1	0.21	1.00	ND	0.051	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	3.48E-05	1.00	3.48E-05	1.16E-02	1.16E-02	1	0.21	1.00	ND	0.051	0.00
4,4'-DDT	0.9	0.09	0.0028	0.028	2.68E-03	1.00	2.68E-03	1.80E+00	1.80E+00	1	0.21	1.00	ND	0.051	0.00
alpha-BHC	0.004	0.001	0.58	2.29	2.34E-03	1.00	2.34E-03	1.14E-02	1.14E-02	1	0.21	1.00	ND	0.051	0.00
alpha-Chlordane	0.001	0.0002	2.14	10.7	2.44E-05	1.00	2.44E-05	1.17E-02	1.17E-02	1	0.21	1.00	ND	0.051	0.00
Dieldrin	0.04	Bench NA	0.077	NA	3.13E-05	1.00	3.13E-05	1.56E-02	1.56E-02	1	0.21	1.00	ND	0.051	0.00
Endosulfan I	0.0002	Bench NA	10	NA	2.44E-05	1.00	2.44E-05	1.18E-02	1.18E-02	1	0.21	1.00	ND	0.051	0.00
Endrin	0.3	0.03	0.01	0.1	2.29E-05	1.00	2.29E-05	1.22E-02	1.22E-02	1	0.21	1.00	ND	0.051	0.00
Endrin aldehyde	0.3	0.03	0.01	0.1	2.12E-05	1.00	2.12E-05	1.11E-02	1.11E-02	1	0.21	1.00	ND	0.051	0.00
gamma-BHC	0.001	0.0002	2.14	10.7	2.31E-05	1.00	2.31E-05	1.16E-02	1.16E-02	1	0.21	1.00	ND	0.051	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	2.29E-05	1.00	2.29E-05	1.07E-02	1.07E-02	1	0.21	1.00	ND	0.051	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	1.19E-04	1.00	1.19E-04	0.00E+00	ND	1	0.21	0.00	2.79E-03	0.051	1.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	4.21E-03	1.00	4.21E-03	7.39E-01	7.39E-01	1	0.21	1.00	4.82E-03	0.051	0.01
1,3-Dichlorobenzene	Bench NA	Bench NA	NA	NA	6.04E-03	1.00	6.04E-03	2.41E-01	2.41E-01	1	0.21	1.00	ND	0.051	0.00
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	1.68E-04	1.00	1.68E-04	0.00E+00	ND	1	0.21	0.00	3.93E-03	0.051	1.00
2,4,5-Trichlorophenol	Bench NA	Bench NA	NA	NA	4.13E-03	1.00	4.13E-03	2.27E-01	2.27E-01	1	0.21	0.99	9.64E-03	0.051	0.01
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	1.20E-04	1.00	1.20E-04	0.00E+00	ND	1	0.21	0.00	2.81E-03	0.051	1.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	3.52E-04	1.00	3.52E-04	0.00E+00	ND	1	0.21	0.00	8.22E-03	0.051	1.00
o-Cresol	Bench NA	Bench NA	NA	NA	4.00E-03	1.00	4.00E-03	1.23E-01	2.23E-01	1	0.21	1.00	ND	0.051	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
m,p-Cresol	Bench NA	Bench NA	NA	NA	2.00E-04	1.00	2.00E-04	0.00E+00	ND	1	0.21	0.00	3.93E-03	0.051	1.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	7.16E-04	1.00	7.16E-04	0.00E+00	ND	1	0.21	0.00	1.41E-02	0.051	1.00
bis(2-Ethylhexyl)phthalate	0.0001	Bench NA	1.1	NA	1.31E-04	1.00	1.31E-04	0.00E+00	ND	1	0.21	0.00	2.90E-03	0.051	1.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	1.08E-03	1.00	1.08E-03	0.00E+00	ND	1	0.21	0.00	2.13E-03	0.051	1.00
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	1.12E-04	1.00	1.12E-04	0.00E+00	ND	1	0.21	0.00	2.38E-03	0.051	1.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	3.08E-06	1.00	3.08E-06	0.00E+00	ND	1	0.21	0.00	6.08E-04	0.051	1.00
Phenol	Bench NA	Bench NA	NA	NA	1.09E-04	1.00	1.09E-04	0.00E+00	ND	1	0.21	0.00	2.88E-03	0.051	1.00
1,2-Dichloroethane	0.000063	0.000007	17.2	34.4	4.08E-06	1.00	4.08E-06	0.00E+00	ND	1	0.21	0.00	8.72E-04	0.051	1.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	1.99E-04	1.00	1.99E-04	0.00E+00	ND	1	0.21	0.00	3.91E-03	0.051	1.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Benzene	Bench NA	Bench NA	NA	NA	5.97E-06	1.00	5.97E-06	0.00E+00	ND	1	0.21	0.00	1.17E-03	0.051	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	3.97E-04	1.00	3.97E-04	0.00E+00	ND	1	0.21	0.00	7.80E-03	0.051	1.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
cis-1,3-Dichloropropene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	3.51E-04	1.00	3.51E-04	0.00E+00	ND	1	0.21	0.00	6.88E-04	0.051	1.00
p/m-Xylene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	1.38E-03	0.051	1.00
Methylene chloride	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Toluene	Bench NA	Bench NA	NA	NA	6.02E-06	1.00	6.02E-06	0.00E+00	ND	1	0.21	0.00	1.18E-03	0.051	1.00
trans-1,3-Dichloropropene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	4.70E-06	1.00	4.70E-06	0.00E+00	ND	1	0.21	0.00	8.23E-04	0.051	1.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Xylene (total)	Bench NA	Bench NA	NA	NA	5.97E-06	1.00	5.97E-06	0.00E+00	ND	1	0.21	0.00	1.18E-03	0.051	1.00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND = Not Detected or Determined

Samples Comprising Foraging Area	
Fish Samples	3 PDA whole body composites (shad, drum, catfish)
Lambs Fish Samples	All PDA samples

Food Chain Model Components:
Hazard Index Estimate = [Food Dose] + [Drinking Water Dose] / Toxicological Benchmark

Food and Water Ingestion Rate (Sample and Suter 1994).

As a placeholder, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample and Suter 1994).

Table D-38
Food Chain Model For Chronic Exposures
Osprey Analysis
Ingestion of Fish
Site-Potential Maximum Exposure
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

										Food					Water		
Contaminant	Chronic NOAEL Hazard Quotient	Chronic LOAEL Hazard Quotient	Chronic NOAEL Benchmark Dose mg/kg/d	Chronic LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Foraging Area acres	Site Area acres	Exposure Dose mg/kg/day	Total Conc. In Food mg/kg wet	Fish Tissue mg/kg wet	Proportion Fish In Diet	Ingestion Rate kg/kg/day	Proportion of Dose	Conc. In Water mg/L	Water Ing. Rate L/kg/day	Proportion of Dose
TEQ	0.0000004	0.00000004	0.014	0.14	5.83E-09	0.003	[illegible]	20	2.04E-06	8.70E-06	8.70E-06	1	0.21	1.00	2.44E-10	0.051	0.00
2,4,5-T	Bench NA	Bench NA	NA	NA	7.82E-06	0.003	[illegible]	20	2.73E-03	1.30E-02	1.30E-02	1	0.21	1.00	ND	0.051	0.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	5.25E-06	0.003	[illegible]	20	1.83E-03	8.70E-03	8.70E-03	1	0.21	1.00	1.40E-04	0.051	0.00
2,4-D	Bench NA	Bench NA	NA	NA	1.46E-06	0.003	[illegible]	20	5.10E-04	0.00E+00	ND	1	0.21	0.00	1.00E-02	0.051	1.00
Dicamba	0.000000000002	0.0000000000001	800	1600	1.61E-08	0.003	[illegible]	20	5.61E-06	0.00E+00	ND	1	0.21	0.00	1.10E-04	0.051	1.00
Dichlorprop	Bench NA	Bench NA	NA	NA	2.70E-07	0.003	[illegible]	20	9.44E-05	0.00E+00	ND	1	0.21	0.00	1.85E-03	0.051	1.00
MCPP	0.00005	0.000005	100	1000	5.17E-03	0.003	[illegible]	20	1.81E+00	8.60E+00	8.60E+00	1	0.21	1.00	ND	0.051	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	4.03E-06	0.003	[illegible]	20	1.41E-03	6.70E-03	6.70E-03	1	0.21	1.00	ND	0.051	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	3.61E-05	0.003	[illegible]	20	1.26E-02	6.00E-02	6.00E-02	1	0.21	1.00	ND	0.051	0.00
4,4'-DDT	0.003	0.0003	0.0028	0.028	7.82E-06	0.003	[illegible]	20	2.73E-03	1.30E-02	1.30E-02	1	0.21	1.00	ND	0.051	0.00
alpha-BHC	0.000003	0.0000007	0.56	2.25	1.56E-06	0.003	[illegible]	20	5.46E-04	2.60E-03	2.60E-03	1	0.21	1.00	ND	0.051	0.00
alpha-Chlordane	0.000004	0.0000008	2.14	10.7	8.42E-06	0.003	[illegible]	20	2.94E-03	1.40E-02	1.40E-02	1	0.21	1.00	ND	0.051	0.00
Dieldrin	0.0005	Bench NA	0.077	NA	3.86E-05	0.003	[illegible]	20	1.34E-02	6.40E-02	6.40E-02	1	0.21	1.00	ND	0.051	0.00
Endosulfan I	0.0000003	Bench NA	10	NA	2.58E-06	0.003	[illegible]	20	9.03E-04	4.30E-03	4.30E-03	1	0.21	1.00	ND	0.051	0.00
Endrin	0.0009	0.00009	0.01	0.1	9.02E-06	0.003	[illegible]	20	3.15E-03	1.50E-02	1.50E-02	1	0.21	1.00	ND	0.051	0.00
Endrin aldehyde	0.0006	0.00006	0.01	0.1	6.01E-06	0.003	[illegible]	20	2.10E-03	1.00E-02	1.00E-02	1	0.21	1.00	ND	0.051	0.00
gamma-Chlordane	0.000002	0.0000005	2.14	10.7	4.87E-06	0.003	[illegible]	20	1.70E-03	8.10E-03	8.10E-03	1	0.21	1.00	ND	0.051	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	3.18E-06	0.003	[illegible]	20	1.11E-03	5.30E-03	5.30E-03	1	0.21	1.00	ND	0.051	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	[illegible]	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	2.23E-07	0.003	[illegible]	20	7.78E-05	0.00E+00	ND	1	0.21	0.00	1.53E-03	0.051	1.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	1.46E-04	0.003	[illegible]	20	5.11E-02	2.40E-01	2.40E-01	1	0.21	0.99	1.33E-02	0.051	0.01
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	7.82E-05	0.003	[illegible]	20	2.73E-02	1.30E-01	1.30E-01	1	0.21	1.00	ND	0.051	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	1.17E-06	0.003	[illegible]	20	4.08E-04	0.00E+00	ND	1	0.21	0.00	8.00E-03	0.051	1.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	1.18E-04	0.003	[illegible]	20	4.18E-02	1.90E-01	1.90E-01	1	0.21	0.96	3.10E-02	0.051	0.04
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	5.40E-07	0.003	[illegible]	20	1.89E-04	0.00E+00	ND	1	0.21	0.00	3.70E-03	0.051	1.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	[illegible]	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	2.92E-06	0.003	[illegible]	20	1.02E-03	0.00E+00	ND	1	0.21	0.00	2.00E-02	0.051	1.00
o-Cresol	Bench NA	Bench NA	NA	NA	1.32E-04	0.003	[illegible]	20	4.62E-02	2.20E-01	2.20E-01	1	0.21	1.00	ND	0.051	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	[illegible]	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
m&p-Cresol	Bench NA	Bench NA	NA	NA	1.61E-06	0.003	[illegible]	20	5.61E-04	0.00E+00	ND	1	0.21	0.00	1.10E-02	0.051	1.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	[illegible]	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	6.57E-06	0.003	[illegible]	20	2.30E-03	0.00E+00	ND	1	0.21	0.00	4.50E-02	0.051	1.00
bis(2-Ethylhexyl)phthalate	0.0000003	Bench NA	1.1	NA	3.21E-07	0.003	[illegible]	20	1.12E-04	0.00E+00	ND	1	0.21	0.00	2.20E-03	0.051	1.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	4.96E-08	0.003	[illegible]	20	1.73E-05	0.00E+00	ND	1	0.21	0.00	3.40E-04	0.051	1.00
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	[illegible]	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	1.36E-07	0.003	[illegible]	20	4.74E-05	0.00E+00	ND	1	0.21	0.00	9.30E-04	0.051	1.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	1.27E-07	0.003	[illegible]	20	4.44E-05	0.00E+00	ND	1	0.21	0.00	8.70E-04	0.051	1.00
Phenol	Bench NA	Bench NA	NA	NA	2.19E-06	0.003	[illegible]	20	7.65E-04	0.00E+00	ND	1	0.21	0.00	1.50E-02	0.051	1.00
1,2-Dichloroethane	0.00000007	0.000000003	17.2	34.4	1.13E-07	0.003	[illegible]	20	3.95E-05	0.00E+00	ND	1	0.21	0.00	7.75E-04	0.051	1.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	[illegible]	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	3.21E-07	0.003	[illegible]	20	1.12E-04	0.00E+00	ND	1	0.21	0.00	2.20E-03	0.051	1.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	[illegible]	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Benzene	Bench NA	Bench NA	NA	NA	2.63E-07	0.003	[illegible]	20	9.18E-05	0.00E+00	ND	1	0.21	0.00	1.80E-03	0.051	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	[illegible]	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	3.50E-06	0.003	[illegible]	20	1.22E-03	0.00E+00	ND	1	0.21	0.00	2.40E-02	0.051	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	[illegible]	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	[illegible]	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	[illegible]	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	5.55E-08	0.003	[illegible]	20	1.94E-05	0.00E+00	ND	1	0.21	0.00	3.80E-04	0.051	1.00
p/m-Xylene	Bench NA	Bench NA	NA	NA	3.50E-07	0.003	[illegible]	20	1.22E-04	0.00E+00	ND	1	0.21	0.00	2.40E-03	0.051	1.00
Methylene chloride	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	[illegible]	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	[illegible]	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Toluene	Bench NA	Bench NA	NA	NA	2.48E-07	0.003	[illegible]	20	8.67E-05	0.00E+00	ND	1	0.21	0.00	1.70E-03	0.051	1.00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	[illegible]	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	4.38E-08	0.003	[illegible]	20	1.53E-05	0.00E+00	ND	1	0.21	0.00	3.00E-04	0.051	1.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	[illegible]	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Xylene (total)	Bench NA	Bench NA	NA	NA	3.84E-07	0.003	[illegible]	20	1.35E-04	0.00E+00	ND	1	0.21	0.00	2.70E-03	0.051	1.00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND = Not Detected or Determined

Samples Comprising Foraging Area	
Fish Samples	3 PDA whole body composites (shad, drum, catfish)
Water Samples	All PDA samples

Food Chain Model Components:
Hazard Index Estimate = (Food Dose) + (Drinking Water Dose) / Toxicological Benchmark

Food and Water Ingestion Rate (Sample and Suter 1994).

As a piscivore, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample and Suter, 1994)

Table D-31
Food Chain Model For Chronic Exposures
Osprey Analysis
Ingestion of Fish
DDA-Potential Maximum Exposure
Ecological Risk Assessment for WQK Plant
Sauget, Illinois

Contaminant	Chronic NOAEL Hazard Quotient	Chronic LOAEL Hazard Quotient	Chronic NOAEL Benchmark Dose mg/kg/d	Chronic LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Foraging Area acres	Site Area acres	Exposure Dose mg/kg/day	Food				Water	
										Total Conc. in Food mg/kg wet	Fish Tissue mg/kg wet	Preportion Fish in Diet	Ingestion Rate kg/kg/day	Conc in Water mg/L	Water Ing. Rate L/kg/day
TEQ	0.00000012	0.00000012	0.014	0.14	2.70E-08	0.003	6998	20	8.44E-07	4.46E-06	4.46E-06	1	0.21	2.23E-11	0.051
2,4,5-T	Bench NA	Bench NA	NA	NA	1.61E-14	0.003	6998	20	5.03E-13	0.00E+00	ND	1	0.21	1.19E-16	0.051
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	4.15E-08	0.003	6998	20	1.48E-03	6.89E-03	6.89E-03	1	0.21	ND	0.051
2,4-D	Bench NA	Bench NA	NA	NA	9.39E-08	0.003	6998	20	3.71E-06	0.00E+00	ND	1	0.21	8.39E-04	0.051
Dicamba	#NUM!	#NUM!	686	1600	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
Dichlorprop	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
MCPP	#NUM!	#NUM!	686	6858	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
4,4'-DDD	Bench NA	Bench NA	NA	NA	7.73E-08	0.003	6998	20	2.73E-06	1.29E-03	1.29E-03	1	0.21	ND	0.051
4,4'-DDE	Bench NA	Bench NA	NA	NA	1.14E-06	0.003	6998	20	3.98E-05	1.89E-02	1.89E-02	1	0.21	ND	0.051
4,4'-DDT	#NUM!	#NUM!	0.0039	0.039	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
alpha-BHC	#NUM!	#NUM!	0.58	2.88	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
alpha-Chlordane	0.0000012	0.0000012	2.14	10.7	4.03E-08	0.003	6998	20	1.42E-06	7.79E-03	7.79E-03	1	0.21	ND	0.051
Dieldrin	0.0051	Bench NA	0.077	NA	1.14E-06	0.003	6998	20	3.98E-05	1.89E-02	1.89E-02	1	0.21	ND	0.051
Endosulfan I	#NUM!	#NUM!	18	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
Endrin	#NUM!	#NUM!	0.01	0.1	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
Endrin aldehyde	0.0005	0.00005	0.01	0.1	2.90E-06	0.003	6998	20	1.02E-04	4.85E-03	4.85E-03	1	0.21	ND	0.051
gamma-Chlordane	0.0000011	0.0000011	2.14	10.7	3.70E-08	0.003	6998	20	1.30E-06	3.56E-03	3.56E-03	1	0.21	ND	0.051
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
1,3-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
2,4,5-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	1.48E-07	0.003	6998	20	5.14E-06	0.00E+00	ND	1	0.21	1.60E-03	0.051
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
2,6-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
2-Chlorophenol	Bench NA	Bench NA	NA	NA	1.39E-08	0.003	6998	20	1.83E-07	0.00E+00	ND	1	0.21	3.85E-04	0.051
2-Cresol	Bench NA	Bench NA	NA	NA	2.04E-11	0.003	6998	20	7.11E-10	3.48E-11	3.48E-11	1	0.21	ND	0.051
2-Nitrophenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
m,p-Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
4-Chloroaniline	Bench NA	Bench NA	NA	NA	2.34E-07	0.003	6998	20	8.16E-06	0.00E+00	ND	1	0.21	1.60E-03	0.051
bis(2-Ethylhexyl)phthalate	#NUM!	Bench NA	1.1	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
Pentachlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
1,2-Dichloroethane	#NUM!	#NUM!	17.2	34.4	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
Benzene	Bench NA	Bench NA	NA	NA	1.93E-08	0.003	6998	20	1.13E-06	0.00E+00	ND	1	0.21	2.40E-04	0.051
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
Chlorobenzene	Bench NA	Bench NA	NA	NA	3.30E-07	0.003	6998	20	1.17E-04	0.00E+00	ND	1	0.21	7.30E-03	0.051
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
Chloromethane	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
Ethylbenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
m+p-Xylene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
Methylene chloride	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
Toluene	Bench NA	Bench NA	NA	NA	1.64E-08	0.003	6998	20	2.64E-06	0.00E+00	ND	1	0.21	4.80E-04	0.051
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
Trichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
Vinyl chloride	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051
Xylene (total)	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6998	20	0.00E+00	0.00E+00	ND	1	0.21	ND	0.051

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND = Not Detected or Determined
#NUM! = Not calculated because contaminant was not detected in any media. It is retained here for completeness.

Samples Comprising Foraging Area	
Fish Samples:	1 DDA whole body composite (shad, drum, catfish)
Water Samples:	All DDA samples

Food Chain Model Components:
Hazard Index Estimate = $\frac{\text{[Food Dose] + [Drinking Water Dose]}}{\text{Toxicological Benchmark}}$

Food and Water Ingestion Rate (Sample and Suter 1994)

As a proxy, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample and Suter, 1994)

Table D-32
Food Chain Model For Chronic Exposures
Osprey Analysis
Ingestion of Fish
UDA-Potential Maximum Exposure
Ecological Risk Assessment for WOK Plant
Sauget, Illinois

Contaminant	Chronic NOAEL Hazard Quotient	Chronic LOAEL Hazard Quotient	Chronic NOAEL Benchmark Dose mg/kg/d	Chronic LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Foraging Area acres	Site Area acres	Exposure Dose mg/kg/day	Food				Water		
										Total Conc. in Food mg/kg wet	Fish Tissue mg/kg wet	Preportion Fish in Diet	Ingestion Rate kg/kg/day	Preportion of Dose	Conc. in Water mg/L	Water Ing. Rate L/kg/day	Preportion of Dose
TEQ	0.0000002	0.00000002	0.014	0.14	3.37E-08	0.003	6888	20	1.18E-06	8.86E-06	8.86E-06	1	0.21	1.00	1.85E-11	0.061	0.00
2,4,5-T	Bench NA	Bench NA	NA	NA	4.27E-06	0.003	6888	20	1.49E-03	7.10E-03	7.10E-03	1	0.21	1.00	ND	0.061	0.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	4.31E-06	0.003	6888	20	1.50E-03	7.50E-03	7.50E-03	1	0.21	1.00	ND	0.061	0.00
2,4-D	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
Dicamba	0.000000095	0.000000002	850	1800	3.91E-08	0.003	6888	20	1.37E-03	6.85E-03	6.85E-03	1	0.21	1.00	ND	0.061	0.00
Dichlorprop	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
MCPP	#NUM!	#NUM!	100	1000	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	1.80E-06	0.003	6888	20	6.31E-03	3.16E-02	3.16E-02	1	0.21	1.00	ND	0.061	0.00
4,4'-DDT	0.002	0.0002	0.0038	0.038	4.57E-06	0.003	6888	20	1.60E-03	7.99E-03	7.99E-03	1	0.21	1.00	ND	0.061	0.00
alpha-BHC	#NUM!	#NUM!	0.56	2.25	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
alpha-Chlordane	#NUM!	#NUM!	2.14	10.7	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
Dieldrin	0.0002	Bench NA	0.077	NA	1.93E-05	0.003	6888	20	6.73E-03	3.36E-02	3.36E-02	1	0.21	1.00	ND	0.061	0.00
Endosulfan I	0.00000002	Bench NA	10	NA	1.80E-08	0.003	6888	20	6.30E-04	3.00E-03	3.00E-03	1	0.21	1.00	ND	0.061	0.00
Endrin	#NUM!	#NUM!	0.81	8.1	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
Endrin aldehyde	0.0004	0.00004	0.81	8.1	4.45E-06	0.003	6888	20	1.55E-03	7.46E-03	7.46E-03	1	0.21	1.00	ND	0.061	0.00
gamma-Chlordane	0.000002	0.0000002	2.14	10.7	3.44E-08	0.003	6888	20	1.20E-03	6.00E-03	6.00E-03	1	0.21	1.00	ND	0.061	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
o-Cresol	Bench NA	Bench NA	NA	NA	6.61E-06	0.003	6888	20	2.31E-02	1.16E-01	1.16E-01	1	0.21	1.00	ND	0.061	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	ND	ND	1	0.21	0.00	ND	0.061	0.00
o-Xylene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	ND	ND	1	0.21	0.00	ND	0.061	0.00
4-Bromophenyl-phenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
bis(2-Ethylhexyl)phthalate	#NUM!	Bench NA	1.1	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
1,1-Dichloroethene	#NUM!	#NUM!	17.2	34.4	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	1.31E-06	0.003	6888	20	4.58E-04	9.00E+00	ND	1	0.21	0.00	9.60E-09	0.061	1.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
Benzene	Bench NA	Bench NA	NA	NA	1.19E-07	0.003	6888	20	4.06E-05	0.00E+00	ND	1	0.21	0.00	7.88E-04	0.061	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	1.13E-07	0.003	6888	20	3.86E-05	0.00E+00	ND	1	0.21	0.00	7.71E-04	0.061	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
p/m-Xylene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
Methylene chloride	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
Toluene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	8.89E-08	0.003	6888	20	3.04E-05	0.00E+00	ND	1	0.21	0.00	6.71E-04	0.061	1.00
Xylene (total)	Bench NA	Bench NA	NA	NA	0.00E+00	0.003	6888	20	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.061	0.00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND = Not Detected or Determined
#NUM! = Not calculated because contaminant was not detected in any media. It is retained here for completeness

	Samples Comprising Foraging Area
Fish Samples:	1 UDA whole body composite (shad, drum, catfish)
Water Samples:	All UDA samples

Food Chain Model Components:
Hazard Index Estimate = (Food Dose) + (Drinking Water Dose)
Toxicological Benchmark

Food and Water Ingestion Rate (Sample and Suter 1994).

As a plachrore, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample and Suter 1994).

Table D-33
Food Chain Model For Chronic Exposures
Osprey Analysis
Ingestion of Fish
Site-Potential Maximum Exposure (MO AUF)
Ecological Risk Assessment for WOK Plant
Sauget, Illinois

Contaminant	Chronic NOAEL Hazard Quotient	Chronic LOAEL Hazard Quotient	Chronic NOAEL Benchmark Dose mg/kg/d	Chronic LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Exposure Dose mg/kg/day	Food				Water		
								Total Conc. in Food mg/kg wet	Fish Tissue mg/kg wet	Preparation Risk in Diet	Ingestion Rate kg/kg/day	Proportion of Dose	Conc. in Water mg/L	Water Ing. Rate L/kg/day	Proportion of Dose
TEQ	0.0001	0.00001	0.014	0.14	2.64E-06	1.00	2.64E-06	8.79E-06	8.79E-06	1	0.21	1.00	2.44E-10	0.051	0.00
2,4,5-T	Bench NA	Bench NA	NA	NA	2.73E-03	1.00	2.73E-03	1.30E-02	1.30E-02	1	0.21	1.00	ND	0.051	0.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	1.63E-03	1.00	1.63E-03	8.79E-03	8.79E-03	1	0.21	1.00	1.46E-04	0.051	1.00
2,4-D	Bench NA	Bench NA	NA	NA	5.16E-04	1.00	5.16E-04	0.00E+00	ND	1	0.21	0.00	1.05E-02	0.051	1.00
Dicamba	0.000000007	0.000000004	650	1300	5.81E-08	1.00	5.81E-08	0.00E+00	ND	1	0.21	0.00	1.16E-04	0.051	1.00
Dichlorprop	Bench NA	Bench NA	NA	NA	8.44E-06	1.00	8.44E-06	0.00E+00	ND	1	0.21	0.00	1.68E-03	0.051	1.00
MCPP	0.03	0.003	100	1000	1.01E+00	1.00	1.01E+00	6.80E+00	6.80E+00	1	0.21	1.00	ND	0.051	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	1.41E-03	1.00	1.41E-03	8.79E-03	8.79E-03	1	0.21	1.00	ND	0.051	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	1.38E-03	1.00	1.38E-03	8.68E-03	8.68E-03	1	0.21	1.00	ND	0.051	0.00
4,4-DDT	1.0	0.1	0.0028	0.028	2.73E-03	1.00	2.73E-03	1.30E-02	1.30E-02	1	0.21	1.00	ND	0.051	0.00
alpha-BHC	0.001	0.0002	0.56	2.8	5.46E-04	1.00	5.46E-04	2.08E-03	2.08E-03	1	0.21	1.00	ND	0.051	0.00
alpha-Chlordane	0.001	0.0001	3.14	16.7	2.64E-05	1.00	2.64E-05	1.44E-03	1.44E-03	1	0.21	1.00	ND	0.051	0.00
Dieldrin	0.2	Bench NA	0.077	NA	1.34E-02	1.00	1.34E-02	6.44E-02	6.44E-02	1	0.21	1.00	ND	0.051	0.00
Endosulfan I	0.0002000	Bench NA	18	NA	9.03E-04	1.00	9.03E-04	4.30E-03	4.30E-03	1	0.21	1.00	ND	0.051	0.00
Endrin	0.3	0.03	0.61	6.1	3.11E-03	1.00	3.11E-03	1.89E-02	1.89E-02	1	0.21	1.00	ND	0.051	0.00
Endrin aldehyde	0.3	0.03	0.61	6.1	2.16E-03	1.00	2.16E-03	1.89E-02	1.89E-02	1	0.21	1.00	ND	0.051	0.00
Gamma-Chlordane	0.0008	0.00002	3.14	157	1.76E-05	1.00	1.76E-05	8.19E-03	8.19E-03	1	0.21	1.00	ND	0.051	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	1.11E-03	1.00	1.11E-03	5.30E-03	5.30E-03	1	0.21	1.00	ND	0.051	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	7.76E-06	1.00	7.76E-06	0.00E+00	ND	1	0.21	0.00	1.63E-03	0.051	1.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	5.11E-07	1.00	5.11E-07	2.40E-01	2.40E-01	1	0.21	0.00	1.33E-02	0.051	0.01
1,2-Dichloroethane	Bench NA	Bench NA	NA	NA	2.73E-03	1.00	2.73E-03	1.30E-01	1.30E-01	1	0.21	1.00	ND	0.051	0.00
2,4,5-Trichlorophenol	Bench NA	Bench NA	NA	NA	4.68E-04	1.00	4.68E-04	ND	ND	1	0.21	0.00	8.05E-05	0.051	1.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	4.15E-07	1.00	4.15E-07	1.95E-01	1.95E-01	1	0.21	0.00	5.15E-02	0.051	0.92
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	1.68E-04	1.00	1.68E-04	0.00E+00	ND	1	0.21	0.00	3.76E-05	0.051	1.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	1.63E-03	1.00	1.63E-03	0.00E+00	ND	1	0.21	0.00	2.80E-02	0.051	1.00
2-Methylphenol	Bench NA	Bench NA	NA	NA	4.63E-07	1.00	4.63E-07	2.18E-01	2.18E-01	1	0.21	1.00	ND	0.051	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	ND	ND	1	0.21	0.00	ND	0.051	0.00
3+4-Cresol	Bench NA	Bench NA	NA	NA	9.81E-04	1.00	9.81E-04	0.00E+00	ND	1	0.21	0.00	1.16E-02	0.051	1.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	2.30E-03	1.00	2.30E-03	0.00E+00	ND	1	0.21	0.00	4.50F-02	0.051	1.00
bis(2-Ethylhexyl)phthalate	0.0001	Bench NA	1.1	NA	1.12E-04	1.00	1.12E-04	0.00E+00	ND	1	0.21	0.00	2.20E-03	0.051	1.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	1.73E-06	1.00	1.73E-06	0.00E+00	ND	1	0.21	0.00	3.40E-04	0.051	1.00
Hexachlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Hexachlorobutadiene	Bench NA	Bench NA	NA	NA	4.71E-06	1.00	4.71E-06	0.00E+00	ND	1	0.21	0.00	9.26E-04	0.051	1.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	4.44E-06	1.00	4.44E-06	0.00E+00	ND	1	0.21	0.00	8.73E-04	0.051	1.00
Phenol	Bench NA	Bench NA	NA	NA	7.88E-04	1.00	7.88E-04	0.00E+00	ND	1	0.21	0.00	1.55E-02	0.051	1.00
1,1-Dichloroethene	0.000001	0.000001	17.2	34.4	3.88E-06	1.00	3.88E-06	0.00E+00	ND	1	0.21	0.00	7.75E-04	0.051	1.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	1.12E-04	1.00	1.12E-04	0.00E+00	ND	1	0.21	0.00	2.20E-03	0.051	1.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Benzene	Bench NA	Bench NA	NA	NA	8.19E-06	1.00	8.19E-06	0.00E+00	ND	1	0.21	0.00	1.63E-03	0.051	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	1.23E-05	1.00	1.23E-05	0.00E+00	ND	1	0.21	0.00	2.48E-02	0.051	1.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Cumene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	1.94E-05	1.00	1.94E-05	0.00E+00	ND	1	0.21	0.00	3.90E-04	0.051	1.00
m/p-Xylene	Bench NA	Bench NA	NA	NA	1.23E-04	1.00	1.23E-04	0.00E+00	ND	1	0.21	0.00	2.48E-03	0.051	1.00
Methylene chloride	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Toluene	Bench NA	Bench NA	NA	NA	8.87E-06	1.00	8.87E-06	0.00E+00	ND	1	0.21	0.00	1.79E-03	0.051	1.00
trans-1,3-Dichloropropene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	1.63E-05	1.00	1.63E-05	0.00E+00	ND	1	0.21	0.00	3.30E-04	0.051	1.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Xylene (total)	Bench NA	Bench NA	NA	NA	1.36E-04	1.00	1.36E-04	0.00E+00	ND	1	0.21	0.00	2.75E-03	0.051	1.00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND = Not Detected or Determined

Samples Comprising Foraging Area	
Fish Samples:	3 POA whole body composites (shad, drum, catfish)
Water Samples:	All POA samples

Food Chain Model Components:
Hazard Index Estimate = [Food Dose] + [Drinking Water Dose]
Toxicological Benchmark

Food and Water Ingestion Rate (Sample and Suter 1994).

As a sediment, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample and Suter, 1994).

Table U-34
Food Chain Model For Chronic Exposures
Osprey Analysis
Ingestion of Fish
DDA-Potential Maximum Exposure (NO AUF)
Ecological Risk Assessment for WOK Plant
Sauget, Illinois

Contaminant	Chronic NOAEL Hazard Quotient	Chronic LOAEL Hazard Quotient	Chronic NOAEL Benchmark Dose mg/kg/d	Chronic LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Exposure Dose mg/kg/day	Food					Water		
								Total Conc. in Food mg/kg wet	Fish Tissue mg/kg wet	Proportion Fish in Diet	Ingestion Rate kg/kg/day	Proportion of Dose	Conc. in Water mg/L	Water Ing. Rate L/kg/day	Proportion of Dose
TEQ	0.00007	0.000007	0.14	0.14	6.44E-07	1.00	6.44E-07	4.48E-06	4.48E-06	1	0.21	1.00	2.23E-11	0.051	0.00
2,4,5-T	Bench NA	Bench NA	NA	NA	5.61E-13	1.00	5.61E-13	0.00E+00	ND	1	0.21	0.00	1.10E-10	0.051	1.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	1.45E-03	1.00	1.45E-03	6.80E-03	6.80E-03	1	0.21	1.00	ND	0.051	0.00
2,4-D	Bench NA	Bench NA	NA	NA	3.21E-06	1.00	3.21E-06	0.00E+00	ND	1	0.21	0.00	6.30E-04	0.051	1.00
Dicamba	#NUM!	#NUM!	800	1600	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Dichlorprop	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
MCPP	#NUM!	#NUM!	100	1000	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	3.53E-03	1.00	3.53E-03	1.39E-02	1.39E-02	1	0.21	1.00	ND	0.051	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	3.68E-03	1.00	3.68E-03	1.80E-02	1.80E-02	1	0.21	1.00	ND	0.051	0.00
4,4'-DDT	#NUM!	#NUM!	0.0025	0.025	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
alpha-BHC	#NUM!	#NUM!	0.88	2.25	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
alpha-Chlordane	0.0058	0.0052	2.14	10.7	1.62E-03	1.00	1.62E-03	7.76E-03	7.76E-03	1	0.21	1.00	ND	0.051	0.00
Dieldrin	0.05	Bench NA	0.877	NA	3.66E-03	1.00	3.66E-03	1.80E-02	1.80E-02	1	0.21	1.00	ND	0.051	0.00
Endosulfan I	#NUM!	Bench NA	16	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Endrin	#NUM!	#NUM!	0.81	0.1	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Endrin aldehyde	0.1	0.01	0.81	0.1	1.03E-03	1.00	1.03E-03	4.60E-03	4.60E-03	1	0.21	1.00	ND	0.051	0.00
gamma-Chlordane	0.0083	0.00007	2.14	10.7	7.39E-04	1.00	7.39E-04	3.30E-03	3.30E-03	1	0.21	1.00	ND	0.051	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	5.10E-06	1.00	5.10E-06	0.00E+00	ND	1	0.21	0.00	1.80E-03	0.051	1.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	1.64E-06	1.00	1.64E-06	0.00E+00	ND	1	0.21	0.00	3.60E-04	0.051	1.00
2-Cresol	Bench NA	Bench NA	NA	NA	7.14E-03	1.00	7.14E-03	3.40E-01	3.40E-01	1	0.21	1.00	ND	0.051	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Nitrophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Phenylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Picoline	Bench NA	Bench NA	NA	NA	8.16E-04	1.00	8.16E-04	0.00E+00	ND	1	0.21	0.00	1.80E-03	0.051	1.00
bis(2-Ethylhexyl)phthalate	#NUM!	Bench NA	1.1	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
1,2-Dichloroethane	#NUM!	#NUM!	17.2	34.4	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Benzene	Bench NA	Bench NA	NA	NA	1.23E-04	1.00	1.23E-04	0.00E+00	ND	1	0.21	0.00	2.40E-04	0.051	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	1.17E-04	1.00	1.17E-04	0.00E+00	ND	1	0.21	0.00	2.50E-03	0.051	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
p/m-Xylene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Methylene chloride	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Toluene	Bench NA	Bench NA	NA	NA	2.64E-04	1.00	2.64E-04	0.00E+00	ND	1	0.21	0.00	4.80E-04	0.051	1.00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00
Xylene (total)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.051	0.00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND = Not Detected or Determined
#NUM! = Not calculated because contaminant was not detected in any media. It is retained here for completeness.

Samples Comprising Foraging Area	
Fish Samples	1 DDA whole body composite (shad, drum, catfish)
Water Samples	All DDA samples

Food Chain Model Components:
Hazard Index Estimate = (Food Dose1 + Drinking Water Dose) / Toxicological Benchmark

Food and Water Ingestion Rate (Sample and Suter 1994)

As a piscivore, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample and Suter, 1994)

Table D-35
Food Chain Model For Chronic Exposures
Osprey Analysis
Ingestion of Fish
UDA-Potential Maximum Exposure (NO AUF)
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Contaminant	Chronic NOAEL Hazard Quotient	Chronic LOAEL Hazard Quotient	Chronic NOAEL Benchmark Dose mg/kg/d	Chronic LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Exposure Dose mg/kg/day	Food					Water		
								Total Conc. in Food mg/kg wet	Fish Tissue mg/kg wet	Proportion Fish in Diet	Ingestion Rate kg/kg/day	Proportion of Dose	Conc. in Water mg/L	Water Ing. Rate L/kg/day	Proportion of Dose
TEQ	0.000000	0.000000	0.014	0.14	1.16E-08	1.00	1.16E-08	8.69E-08	8.69E-08	1	0.21	1.00	1.69E-11	0.021	0.00
2,4,5-T	Bench NA	Bench NA	NA	NA	1.49E-03	1.00	1.49E-03	7.10E-03	7.10E-03	1	0.21	1.00	ND	0.021	0.00
2,4,5-TP (Silvex)	Bench NA	Bench NA	NA	NA	1.59E-03	1.00	1.59E-03	7.58E-03	7.58E-03	1	0.21	1.00	ND	0.021	0.00
2,4-D	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
Dieldrin	0.0000007	0.0000008	880	9000	1.37E-03	1.00	1.37E-03	8.69E-03	8.69E-03	1	0.21	1.00	ND	0.021	0.00
Dichlorprop	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
MCPP	#NUM!	#NUM!	160	1600	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
4,4'-DDE	Bench NA	Bench NA	NA	NA	1.23E-03	1.00	1.23E-03	7.80E-03	7.80E-03	1	0.21	1.00	ND	0.021	0.00
4,4'-DDT	0.0	0.00	0.0638	0.638	1.60E-03	1.00	1.60E-03	7.80E-03	7.80E-03	1	0.21	1.00	ND	0.021	0.00
alpha-BHC	#NUM!	#NUM!	0.00	2.25	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
alpha-Chlordane	#NUM!	#NUM!	2.14	10.7	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
Dieldrin	0.00	Bench NA	0.077	NA	0.73E-03	1.00	0.73E-03	3.39E-03	3.39E-03	1	0.21	1.00	ND	0.021	0.00
Endosulfan I	0.00000	Bench NA	10	NA	0.30E-04	1.00	0.30E-04	3.00E-03	3.00E-03	1	0.21	1.00	ND	0.021	0.00
Endrin	#NUM!	#NUM!	0.61	6.1	0.00E+00	1.00	0.00E+00	ND	ND	1	0.21	0.00	ND	0.021	0.00
Endrin aldehyde	0.0	0.00	0.61	6.1	1.50E-03	1.00	1.50E-03	7.49E-03	7.49E-03	1	0.21	1.00	ND	0.021	0.00
gamma-Chlordane	0.0000	0.0001	2.14	10.7	1.22E-03	1.00	1.22E-03	6.85E-03	6.85E-03	1	0.21	1.00	ND	0.021	0.00
Heptachlor epoxide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
Methoxychlor	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
1,2,4-Trichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
1,2-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
1,4-Dichlorobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
2,4,5-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
o-Cresol	Bench NA	Bench NA	NA	NA	2.31E-03	1.00	2.31E-03	1.16E-01	1.16E-01	1	0.21	1.00	ND	0.021	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
m,p-Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
4-Chloroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
bis(2-Ethylhexyl)phthalate	#NUM!	Bench NA	1.1	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
Naphthalene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
Pentachlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
1,2-Dichlorobenzene	#NUM!	#NUM!	17.3	34.4	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
2-Butanone (MEK)	Bench NA	Bench NA	NA	NA	4.59E-04	1.00	4.59E-04	0.00E+00	ND	1	0.21	0.00	8.05E-03	0.021	1.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
Acetone	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
Benzene	Bench NA	Bench NA	NA	NA	4.00E-04	1.00	4.00E-04	0.00E+00	ND	1	0.21	0.00	7.04E-04	0.021	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
Chlorobenzene	Bench NA	Bench NA	NA	NA	3.88E-04	1.00	3.88E-04	0.00E+00	ND	1	0.21	0.00	7.77E-04	0.021	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
Chloroform	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
cis-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
Ethylbenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
p/m-Xylene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
Methylene chloride	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
Toluene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00
Vinyl chloride	Bench NA	Bench NA	NA	NA	3.44E-04	1.00	3.44E-04	0.00E+00	ND	1	0.21	0.00	6.71E-04	0.021	1.00
Xylene (total)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.21	0.00	ND	0.021	0.00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND = Not Detected or Determined
#NUM! = Not calculated because contaminant was not detected in any media. It is retained here for completeness.

Samples Comprising Foraging Area	
Fish Samples:	1 UDA whole body composite (shad, drum, catfish)
Water Samples:	All UDA samples

Food Chain Model Components:
Hazard Index Estimate = [Food Dose] + [Drinking Water Dose] / Toxicological Benchmark

Food and Water Ingestion Rate (Sample and Suter 1994).

As a placeholder, the sediment/soil ingestion rate of this species is assumed to be negligible (Sample and Suter, 1994).

Table D-36
Food Chain Model For Chronic Exposures
River Otter Analysis
Ingestion of Fish
Site
Krummrich
Sauget, Illinois

Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Foraging Area acres	Site Area acres	Exposure Dose mg/kg/day	Feed: Total Conc in Food mg/kg wet	Feed: Fish Concentration mg/kg wet	Feed: Proportion Fish in Diet	Feed: Ingestion Rate kg/kg/day	Feed: Proportion of Dose	Sediment: RAF	Sediment: Conc in Sediment mg/kg dry	Sediment: Dry Sediment Ing Rate kg/kg/day	Sediment: Proportion of Dose	Water: Conc in Water mg/l	Water: Ingestion Rate l/kg/day	Water: Proportion of Dose
Dioxin (TEQ)	0 000006	0 0000006	0 0005	0 005	2 94E-08	0 02	988	20	1 45E-07	1 45E-08	1 45E-08	1	0 1	1 00	1	3 79E-07	0 0004	0 00	1 92E-10	0 082	0 00
2,4,5-T	0 000006	0 000003	1 3720	4 573	1 16E-06	0 02	988	20	5 74E-04	5 74E-03	5 74E-03	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
2,4,5-TP (Silvex)	0 00001	Bench NA	0 8680	NA	1 03E-05	0 02	988	20	5 07E-04	4 87E-03	4 87E-03	1	0 1	0 96	1	ND	0 0004	0 00	2 39E-04	0 082	0 04
2,4-D	0 00002	0 000003	0 4573	2 287	7 36E-06	0 02	988	20	3 63E-04	0 00E+00	ND	1	0 1	0 00	1	2 77E-01	0 0004	0 30	3 08E-03	0 082	0 70
Dicamba	0 000005	0 000001	0 1867	0 622	9 06E-07	0 02	988	20	4 48E-05	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	5 48E-04	0 082	1 00
Dichloroprop	Bench NA	Bench NA	NA	NA	5 84E-06	0 02	988	20	2 78E-04	0 00E+00	ND	1	0 1	0 00	1	1 65E-01	0 0004	0 24	2 56E-03	0 082	0 76
MCPP	0 004	0 001	1 3720	4 116	4 81E-03	0 02	988	20	2 38E-01	2 30E+00	2 30E+00	1	0 1	0 97	1	1 95E+01	0 0004	0 03	ND	0 082	0 00
4,4'-DDD	Bench NA	Bench NA	NA	NA	2 27E-05	0 02	988	20	1 12E-03	1 12E-02	1 12E-02	1	0 1	1 00	1	2 04E-03	0 0004	0 00	ND	0 082	0 00
4,4'-DDE	0 0001	0 00002	0 3659	1 829	3 72E-05	0 02	988	20	1 84E-03	1 84E-02	1 84E-02	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
4,4'-DDT	0 0001	0 00001	0 3659	1 829	2 55E-05	0 02	988	20	1 26E-03	1 26E-02	1 26E-02	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
alpha-BHC	0 003	0 0003	0 0083	0 083	2 31E-05	0 02	988	20	1 14E-03	1 14E-02	1 14E-02	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
alpha-Chlordane	0 00002	0 00001	1 1363	2 277	2 37E-05	0 02	988	20	1 17E-03	1 17E-02	1 17E-02	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
Dieldrin	0 003	0 0003	0 0091	0 091	3 02E-05	0 02	988	20	1 49E-03	1 49E-02	1 49E-02	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
Endosulfan I	0 0003	Bench NA	0 0668	NA	2 36E-06	0 02	988	20	1 16E-03	1 16E-02	1 16E-02	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
Endrin	0 001	0 0001	0 0228	0 228	2 47E-06	0 02	988	20	1 22E-03	1 22E-02	1 22E-02	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
Endrin aldehyde	0 001	0 0001	0 0228	0 228	2 33E-06	0 02	988	20	1 15E-03	1 15E-02	1 15E-02	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
gamma-Chlordane	0 00002	0 00001	1 1363	2 277	2 23E-05	0 02	988	20	1 10E-03	1 10E-02	1 10E-02	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
Heptachlor epoxide	0 0004	0 00004	0 0505	0 505	2 17E-05	0 02	988	20	1 07E-03	1 07E-02	1 07E-02	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
Methoxychlor	#VALUE!	#VALUE!	1 8294	3 659	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
1,2,4-Trichlorobenzene	0 0000008	0 0000002	0 7987	24 614	3 75E-06	0 02	988	20	1 85E-04	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	2 25E-03	0 082	1 00
1,2-Dichlorobenzene	0 00001	Bench NA	38 3317	NA	4 76E-04	0 02	988	20	2 32E-02	2 26E-01	2 26E-01	1	0 1	0 98	1	1 00E-01	0 0004	0 00	4 82E-03	0 082	0 02
1,4-Dichlorobenzene	0 00005	0 000005	9 8643	98 643	4 86E-04	0 02	988	20	2 41E-02	2 41E-01	2 41E-01	1	0 1	1 00	1	1 08E-01	0 0004	0 00	ND	0 082	0 00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	7 01E-06	0 02	988	20	3 46E-04	0 00E+00	ND	1	0 1	0 00	1	1 44E-01	0 0004	0 17	3 52E-03	0 082	0 83
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	4 78E-04	0 02	988	20	2 36E-02	2 27E-01	2 27E-01	1	0 1	0 96	1	2 08E-01	0 0004	0 00	9 84E-03	0 082	0 03
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	4 98E-06	0 02	988	20	2 48E-04	0 00E+00	ND	1	0 1	0 00	1	9 61E-02	0 0004	0 18	2 52E-03	0 082	0 84
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	1 58E-06	0 02	988	20	7 80E-05	0 00E+00	ND	1	0 1	0 00	1	1 95E-01	0 0004	1 00	ND	0 082	0 00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	1 26E-05	0 02	988	20	6 21E-04	0 00E+00	ND	1	0 1	0 00	1	1 37E-01	0 0004	0 09	6 90E-03	0 082	0 91
o-Cresol	0 000003	Bench NA	130 3371	NA	4 49E-04	0 02	988	20	2 22E-02	2 22E-01	2 22E-01	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	3 61E-06	0 02	988	20	1 66E-04	0 00E+00	ND	1	0 1	0 00	1	4 71E-01	0 0004	1 00	ND	0 082	0 00
m,p-Cresol	Bench NA	Bench NA	NA	NA	8 06E-06	0 02	988	20	3 99E-04	0 00E+00	ND	1	0 1	0 00	1	1 92E-01	0 0004	0 19	3 83E-03	0 082	0 81
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	8 74E-07	0 02	988	20	4 32E-05	0 00E+00	ND	1	0 1	0 00	1	1 08E-01	0 0004	1 00	ND	0 082	0 00
4-Chloroaniline	0 000007	Bench NA	4 5735	NA	3 21E-05	0 02	988	20	1 59E-03	0 00E+00	ND	1	0 1	0 00	1	1 08E+00	0 0004	0 27	1 41E-02	0 082	0 73
bis(2-Ethylhexyl)phthalate	0 0000009	0 00000009	4 5295	45 295	4 25E-06	0 02	988	20	2 10E-04	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	2 96E-03	0 082	1 00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	3 90E-06	0 02	988	20	1 75E-04	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	2 11E-03	0 082	1 00
Naphthalene	0 0000003	0 0000001	3 2472	6 493	9 56E-07	0 02	988	20	4 72E-05	0 00E+00	ND	1	0 1	0 00	1	1 18E-01	0 0004	1 00	ND	0 082	0 00
Nitrobenzene	Bench NA	Bench NA	NA	NA	3 65E-06	0 02	988	20	1 80E-04	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	2 20E-03	0 082	1 00
Pentachlorophenol	0 0000005	0 0000002	1 8294	5 945	9 72E-07	0 02	988	20	4 80E-05	0 00E+00	ND	1	0 1	0 00	1	1 37E-02	0 0004	0 11	8 15E-04	0 082	0 89
Phenol	Bench NA	Bench NA	NA	NA	1 23E-05	0 02	988	20	6 07E-04	0 00E+00	ND	1	0 1	0 00	1	7 19E-01	0 0004	0 47	3 89E-03	0 082	0 53
1,2-Dichloroethane	Bench NA	Bench NA	NA	NA	1 86E-06	0 02	988	20	9 19E-05	0 00E+00	ND	1	0 1	0 00	1	5 11E-02	0 0004	0 22	8 72E-04	0 082	0 78
2-Butanone (MEK)	0 0000000002	0 0000000001	809 9581	2080 527	1 51E-07	0 02	988	20	7 44E-06	0 00E+00	ND	1	0 1	0 00	1	1 88E-02	0 0004	1 00	ND	0 082	0 00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	6 78E-06	0 02	988	20	3 35E-04	0 00E+00	ND	1	0 1	0 00	1	3 52E-02	0 0004	0 04	3 91E-03	0 082	0 98
Acetone	0 0000007	0 0000001	4 5735	22 867	3 37E-06	0 02	988	20	1 66E-04	0 00E+00	ND	1	0 1	0 00	1	4 16E-01	0 0004	1 00	ND	0 082	0 00
Benzene	0 0000004	0 0000004	6 5231	65 231	2 74E-08	0 02	988	20	1 35E-04	0 00E+00	ND	1	0 1	0 00	1	9 63E-02	0 0004	0 29	1 17E-03	0 082	0 71
Carbon disulfide	Bench NA	Bench NA	NA	NA	6 58E-06	0 02	988	20	3 25E-07	0 00E+00	ND	1	0 1	0 00	1	8 13E-04	0 0004	1 00	ND	0 082	0 00
Chlorobenzene	0 0000010	Bench NA	31 2817	NA	2 84E-05	0 02	988	20	1 40E-03	0 00E+00	ND	1	0 1	0 00	1	1 95E+00	0 0004	0 56	7 58E-03	0 082	0 44
Chloroethane	Bench NA	Bench NA	NA	NA	5 80E-09	0 02	988	20	2 92E-07	0 00E+00	ND	1	0 1	0 00	1	7 29E-04	0 0004	1 00	ND	0 082	0 00
Chloroform	0 0000002	0 0000000007	6 8802	18 751	1 50E-08	0 02	988	20	8 40E-07	0 00E+00	ND	1	0 1	0 00	1	1 60E-03	0 0004	1 00	ND	0 082	0 00
cis-1,2-Dichloroethene	0 0000009	0 0000001	1 4636	13 263	1 34E-08	0 02	988	20	8 85E-07	0 00E+00	ND	1	0 1	0 00	1	1 65E-03	0 0004	1 00	ND	0 082	0 00
Ethylbenzene	0 0000002	0 0000001	82 1660	186 587	1 34E-06	0 02	988	20	8 63E-05	0 00E+00	ND	1	0 1	0 00	1	2 48E-02	0 0004	0 15	6 88E-04	0 082	0 85
p/m-Xylene	0 00005	0 000004	0 5197	0 843	2 80E-06	0 02	988	20	1 39E-04	0 00E+00	ND	1	0 1	0 00	1	1 22E-01	0 0004	0 35	1 09E-03	0 082	0 65
Methylene chloride	0 0000001	0 0000000	2 8755	22 867	2 69E-06	0 02	988	20	1 33E-06	0 00E+00	ND	1	0 1	0 00	1	3 13E-03	0 0004	1 00	ND	0 082	0 00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	4 15E-08	0 02	988	20	2 06E-06	0 00E+00	ND	1	0 1	0 00	1	5 13E-03	0 0004	1 00	ND	0 082	0 00
Toluene	0 000002	0 0000002	6 4340	64 340	1 00E-06	0 02	988	20	4 96E-04	0 00E+00	ND	1	0 1	0 00	1	9 88E-01	0 0004	0 80	1 18E-03	0 082	0 20
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	5 01E-09	0 02	988	20	2 48E-07	0 00E+00	ND	1	0 1	0 00	1	8 19E-04	0 0004	1 00	ND	0 082	0 00
Trichloroethene	Bench NA	Bench NA	NA	NA	1 58E-06	0 02	988	20	7 80E-05	0 00E+00	ND	1	0 1	0 00	1	5 94E-03	0 0004	0 03	9 22E-04	0 082	0 97
Vinyl chloride	0 0000001	0 0000000	0 0777	0 777	8 00E-09	0 02	988	20	3 96E-07	0 00E+00	ND	1	0 1	0 00	1	9 68E-04	0 0004	1 00	ND	0 082	0 00
Xylene (total)	0 000006	0 000005	0 5197	0 843	3 08E-06	0 02	988	20	1 51E-04	0 00E+00	ND	1	0 1	0 00	1	1 42E-01	0 0004	0 38	1 15E-03	0 082	0 62

Notes:
NA=Not available/applicable
Bench NA = Benchmark not available
ND = Not detected

	Samples Comprising Foraging Area
Sediment Samples	All PDA samples
Fish Samples	3 PDA whole body composites (shad, drum, catfish)
Water Samples	All PDA samples

Food Chain Model Components:
Hazard Index Estimate = [Food Dose] + [Sediment Dose] + [Drinking Water Dose]
Toxicological Benchmark

Food and Water Ingestion Rate (EPA 1993)

**For the soil component, we convert the food ingestion rate from wet weight to dry weight (plant moisture=70%) and then calculate a soil ingestion rate from the soil proportion in the diet (dry weight) estimated in Beyer et al (1994)

Table D-37
Food Chain Model For Chronic Exposures
River Otter Analysis
Ingestion of Fish
DDA
Krummrich
Seuget, Illinois

											Food					Sediment					Water			
Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Foraging Area acres	Site Area acres	Exposure Dose mg/kg/day	Total Conc in Food mg/kg wet	Fish Concentration mg/kg wet	Proportion Fish in Diet	Ingestion Rate kg/kg/day	Proportion of Dose	RAF	Conc in Sediment mg/kg dry	Dry Sediment Ing. Rate kg/kg/day	Proportion of Dose	Conc in Water mg/l	Ingestion Rate l/kg/day	Proportion of Dose
Dioxin (TEQ)	0.000007	0.0000007	0.0005	0.005	2.98E-09	0.02	988	20	1.47E-07	1.47E-06	1.47E-06	1	0.1	1.00	1	2.33E-07	0.0004	0.00	2.21E-11	0.082	0.00
2,4,5-T	2.00E-13	7.00E-14	1.3720	4.573	2.98E-13	0.02	988	20	1.48E-11	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	1.80E-10	0.082	1.00
2,4,5-TP (Silvex)	0.00001	0.00001	0.0860	NA	1.01E-06	0.02	988	20	4.98E-04	4.98E-03	4.98E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-D	2.00E-08	3.00E-07	0.4573	2.287	7.97E-07	0.02	988	20	3.94E-05	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	4.80E-04	0.082	1.00
Dicamba	#NUM!	#NUM!	0.1887	0.822	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Dichloroprop	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
MCPP	#NUM!	#NUM!	1.3720	4.116	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	3.34E-05	0.02	988	20	1.65E-03	1.65E-02	1.65E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDE	0.00007	0.00001	0.3658	1.829	2.71E-06	0.02	988	20	1.34E-03	1.34E-02	1.34E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDT	#NUM!	#NUM!	0.3658	1.829	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
alpha-BHC	#NUM!	#NUM!	0.0063	0.063	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
alpha-Chlordane	0.00002	0.00001	1.1363	2.277	2.21E-06	0.02	988	20	1.98E-03	1.98E-02	1.98E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Dieldrin	0.005	0.0005	0.0091	0.091	2.81E-06	0.02	988	20	1.39E-03	1.39E-02	1.39E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endosulfan I	#NUM!	Bench NA	0.0088	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endrin	#NUM!	#NUM!	0.0228	0.228	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endrin aldehyde	0.001	0.0001	0.0228	0.228	2.98E-06	0.02	988	20	1.41E-03	1.41E-02	1.41E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
gamma-Chlordane	0.00002	0.00001	1.1363	2.277	2.77E-06	0.02	988	20	1.37E-03	1.37E-02	1.37E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Heptachlor epoxide	#NUM!	#NUM!	0.0046	0.046	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Methoxychlor	#NUM!	#NUM!	1.8284	3.868	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2,4-Trichlorobenzene	#NUM!	#NUM!	0.7887	24.514	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2-Dichlorobenzene	#NUM!	Bench NA	38.3317	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,4-Dichlorobenzene	#NUM!	#NUM!	9.8043	98.043	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	2.80E-06	0.02	988	20	1.44E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	1.76E-03	0.082	1.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	2.37E-06	0.02	988	20	1.17E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	1.43E-03	0.082	1.00
o-Cresol	0.00005	Bench NA	130.3371	NA	8.42E-04	0.02	988	20	3.17E-02	3.17E-01	3.17E-01	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
m,p'-Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4-Chloroaniline	0.000001	Bench NA	4.5725	NA	6.48E-06	0.02	988	20	2.71E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	3.30E-03	0.082	1.00
bis(2-Ethylhexyl)phthalate	#NUM!	#NUM!	4.5295	45.295	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Naphthalene	#NUM!	#NUM!	3.3472	6.463	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Pentachlorophenol	0.00000003	0.00000001	1.8284	5.845	8.32E-08	0.02	988	20	3.12E-06	0.00E+00	ND	1	0.1	0.00	1	7.89E-03	0.0004	1.00	ND	0.082	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2-Dichloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Butanone (MEK)	#NUM!	#NUM!	866.9581	2040.527	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Acetone	0.00000004	0.00000001	4.5725	22.867	1.85E-07	0.02	988	20	9.19E-06	0.00E+00	ND	1	0.1	0.00	1	2.29E-02	0.0004	1.00	ND	0.082	0.00
Benzene	0.00000005	0.00000001	8.5231	85.231	3.34E-07	0.02	988	20	1.60E-06	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	1.80E-04	0.082	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Chlorobenzene	0.0000001	Bench NA	21.2917	NA	2.80E-06	0.02	988	20	1.44E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	1.76E-03	0.082	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Chloroform	#NUM!	#NUM!	0.8902	18.751	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
cis-1,2-Dichloroethene	#NUM!	#NUM!	1.4636	13.283	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Ethylbenzene	#NUM!	#NUM!	62.1980	188.597	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
p/m-Xylene	#NUM!	#NUM!	0.5187	0.843	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Methylene chloride	#NUM!	#NUM!	2.8756	22.867	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Toluene	0.0000002	0.00000002	8.4340	84.340	1.17E-06	0.02	988	20	5.76E-05	0.00E+00	ND	1	0.1	0.00	1	1.16E-03	0.0004	0.01	7.60E-04	0.082	0.99
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Vinyl chloride	#NUM!	#NUM!	0.0777	0.777	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Xylene (total)	#NUM!	#NUM!	0.5187	0.843	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00

Notes:
NA = Not available/applicable
Bench NA = Benchmark not available
ND = Not detected
$NUM! = Not calculated because contaminant was not detected in any media. It is retained here for completeness.

Samples Comprising Foraging Area	
Sediment Samples	All DDA samples
Fish Samples	1 DDA whole body composite (shad, drum, catfish)
Water Samples	All DDA samples

Food Chain Model Components:
Hazard Index Estimate = $\frac{\text{[Food Dose]} + \text{[Sediment Dose]} + \text{[Drinking Water Dose]}}{\text{Toxicological Benchmark}}$

Food and Water Ingestion Rate (EPA 1993)

**For the soil component, we convert the food ingestion rate from wet weight to dry weight (plant moisture=70%) and then calculate a soil ingestion rate from the soil proportion in the diet (dry weight) estimated in Beyer et al. (1994)

Table D-38
Food Chain Model For Chronic Exposures
River Otter Analysis
Ingestion of Fish
UDA
Krummrich
Sauget, Illinois

Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Foraging Area acres	Site Area acres	Exposure Dose mg/kg/day	Food: Total Conc in Food mg/kg wet	Food: Fish Concentration mg/kg wet	Food: Proportion Fish in Diet	Food: Ingestion Rate kg/kg/day	Food: Proportion of Dose	Sediment: RAF	Sediment: Conc in Sediment mg/kg dry	Sediment: Dry Sediment Ing. Rate kg/kg/day	Sediment: Proportion of Dose	Water: Conc in Water mg/l	Water: Ingestion Rate l/kg/day	Water: Proportion of Dose
Dioxin (TEQ)	0 000008	0 0000008	0 0005	0 005	3 57E-09	0 02	988	20	1 78E-07	1 78E-06	1 78E-06	1	0 1	1 00	1	1 46E-07	0 0004	0 00	1 82E-11	0 082	0 00
2,4,5-T	0 000008	0 000002	1 3720	4 573	1 04E-05	0 02	988	20	5 13E-04	5 13E-03	5 13E-03	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
2,4,5-TP (Silvex)	0 00001	Bench NA	0 6840	NA	1 07E-05	0 02	988	20	5 27E-04	5 27E-03	5 27E-03	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
2,4-D	#NUM!	#NUM!	0 4573	2 287	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
Dicamba	0 00008	0 00002	0 1867	0 622	1 46E-06	0 02	988	20	7 23E-04	7 23E-03	7 23E-03	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
Dichloroprop	Bench NA	Bench NA	NA	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
MCPP	#NUM!	#NUM!	1 3720	4 118	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
4,4'-DDD	Bench NA	Bench NA	NA	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
4,4'-DDE	0 0001	0 00002	0 3659	1 829	4 25E-05	0 02	988	20	2 10E-03	2 10E-02	2 10E-03	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
4,4'-DDT	0 00008	0 00002	0 3659	1 829	3 04E-05	0 02	988	20	1 50E-03	1 50E-02	1 50E-02	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
alpha-BHC	#NUM!	#NUM!	0 0083	0 083	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
alpha-Chlordane	#NUM!	#NUM!	1 1383	2 277	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
Dieldrin	0 005	0 0005	0 0091	0 091	4 26E-06	0 02	988	20	2 12E-03	2 12E-02	2 12E-02	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
Endosulfan I	0 0004	Bench NA	0 0686	NA	2 73E-06	0 02	988	20	1 36E-03	1 36E-02	1 36E-02	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
Endrin	#NUM!	#NUM!	0 0228	0 228	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
Endrin aldehyde	0 001	0 0001	0 0228	0 228	2 53E-05	0 02	988	20	1 25E-03	1 25E-02	1 25E-02	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
gamma-Chlordane	0 00003	0 00001	1 1383	2 277	2 81E-06	0 02	988	20	1 44E-03	1 44E-02	1 44E-02	1	0 1	1 00	1	ND	0 0004	0 00	ND	0 082	0 00
Heptachlor epoxide	#NUM!	#NUM!	0 0586	0 586	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
Methoxychlor	#NUM!	#NUM!	1 8294	3 659	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
1,2,4-Trichlorobenzene	#NUM!	#NUM!	0 7887	24 514	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
1,2-Dichlorobenzene	#NUM!	Bench NA	39 3317	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
1,4-Dichlorobenzene	#NUM!	#NUM!	8 8043	88 043	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
o-Cresol	#NUM!	Bench NA	130 3371	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
m &p -Cresol	Bench NA	Bench NA	NA	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
4-Chloroaniline	#NUM!	Bench NA	4 5735	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
bis(2-Ethylhexyl)phthalate	0 0000002	0 00000002	4 5265	46 286	8 83E-07	0 02	988	20	4 36E-06	0 00E+00	ND	1	0 1	0 00	1	1 09E-01	0 0004	1 00	ND	0 082	0 00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
Naphthalene	#NUM!	#NUM!	3 2472	6 403	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
Pentachlorophenol	0 00000004	0 00000001	1 8294	5 845	8 50E-08	0 02	988	20	3 21E-06	0 00E+00	ND	1	0 1	0 00	1	6 03E-03	0 0004	1 00	ND	0 082	0 00
Phenol	Bench NA	Bench NA	NA	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
1,2-Dichloroethane	Bench NA	Bench NA	NA	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
2-Butanone (MEK)	0 00000001	0 000000006	809 9581	2090 527	1 17E-05	0 02	988	20	5 79E-04	0 00E+00	ND	1	0 1	0 00	1	1 29E-02	0 0004	0 01	7 00E-03	0 082	0 99
4 Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
Acetone	0 0000001	0 00000002	4 5735	22 867	5 55E-07	0 02	988	20	2 74E-05	0 00E+00	ND	1	0 1	0 00	1	6 65E-02	0 0004	1 00	ND	0 082	0 00
Benzene	0 0000002	0 00000002	8 5231	85 231	1 48E-06	0 02	988	20	7 32E-05	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	8 83E-04	0 082	1 00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
Chlorobenzene	0 0000001	Bench NA	21 2817	NA	1 47E-06	0 02	988	20	7 28E-05	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	8 86E-04	0 082	1 00
Chloroethane	Bench NA	Bench NA	NA	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
Chloroform	#NUM!	#NUM!	6 8803	18 751	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
cis-1,2-Dichloroethene	#NUM!	#NUM!	1 4635	13 263	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
Ethylbenzene	#NUM!	#NUM!	82 1980	186 567	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
p/m-Xylene	#NUM!	#NUM!	0 5197	0 843	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
Methylene chloride	#NUM!	#NUM!	2 8755	22 867	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
Toluene	0 000000004	[redacted]	6 4340	64 340	2 49E-08	0 02	988	20	1 23E-06	0 00E+00	ND	1	0 1	0 00	1	3 08E-03	0 0004	1 00	ND	0 082	0 00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
Trichloroethene	Bench NA	Bench NA	NA	NA	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00
Vinyl chloride	0 00002	0 000002	0 0777	0 777	1 39E-08	0 02	988	20	6 87E-06	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	8 36E-04	0 082	1 00
Xylene (total)	#NUM!	#NUM!	0 5197	0 843	0 00E+00	0 02	988	20	0 00E+00	0 00E+00	ND	1	0 1	0 00	1	ND	0 0004	0 00	ND	0 082	0 00

Notes:
NA =Not available/applicable
Bench NA = Benchmark not available
ND = Not detected
$NUM! = Not calculated because contaminant was not detected in any media It is retained here for completeness

	Samples Comprising Foraging Area
Sediment Samples	All UDA samples
Fish Samples	1 UDA whole body composite (shad, drum, catfish)
Water Samples	All UDA samples

Food Chain Model Components:
Hazard Index Estimate = $\frac{\text{[Food Dose] + [Sediment Dose] + [Drinking Water Dose]}}{\text{Toxicological Benchmark}}$

Food and Water Ingestion Rate (EPA 1993)

**For the soil component, we convert the food ingestion rate from wet weight to dry weight (plant moisture=70%) and then calculate a soil ingestion rate from the soil proportion in the diet (dry weight) estimated in Beyer et al (1994)

Table D-36
Food Chain Model For Chronic Exposures
River Otter Analysis
Ingestion of Fish
Site (NO AUF)
Krummrich
Sauget, Illinois

								Food					Sediment					Water		
Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Exposure Dose mg/kg/day	Total Conc. in Food mg/kg wet	Fish Concentration mg/kg wet	Proportion Fish in Diet	Ingestion Rate kgfish/day	Proportion of Dose	RAF	Conc. in Sediment mg/kg dry	Dry Sediment Ing. Rate kg/kg/day	Proportion of Dose	Conc. in Water mg/l	Ingestion Rate l/kg/day	Proportion of Dose
Dioxin (TEQ)	0.0003	0.00003	0.0005	0.005	1.45E-07	1.00	1.45E-07	1.45E-06	1.45E-06	1	0.1	1.00	1	3.79E-07	0.0004	0.00	1.92E-10	0.062	0.00
2,4,5-T	0.0004	0.0001	1.373	4.573	5.71E-04	1.00	5.71E-04	5.71E-03	5.71E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.062	0.00
2,4,5-TP (Silvex)	0.0008	Bench NA	0.8890	NA	5.07E-04	1.00	5.07E-04	4.87E-03	4.87E-03	1	0.1	0.96	1	ND	0.0004	0.00	2.38E-04	0.062	0.04
2,4-D	0.0008	0.0002	0.4573	2.287	3.63E-04	1.00	3.63E-04	0.00E+00	ND	1	0.1	0.00	1	2.77E-01	0.0004	0.30	3.09E-03	0.062	0.70
Dicamba	0.0002	0.00007	0.1867	0.622	4.48E-05	1.00	4.48E-05	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	5.46E-04	0.062	1.00
Dichlorprop	Bench NA	Bench NA	NA	NA	2.78E-04	1.00	2.78E-04	0.00E+00	ND	1	0.1	0.00	1	1.85E-01	0.0004	0.24	2.56E-03	0.062	0.76
MCPP	0.2	0.08	1.3720	4.116	2.38E-01	1.00	2.38E-01	2.30E+00	2.30E+00	1	0.1	0.97	1	1.84E-01	0.0004	0.03	ND	0.062	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	1.12E-03	1.00	1.12E-03	1.12E-02	1.12E-02	1	0.1	1.00	1	2.04E-03	0.0004	0.00	ND	0.062	0.00
4,4'-DDE	0.005	0.001	0.3659	1.829	1.84E-03	1.00	1.84E-03	1.84E-02	1.84E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.062	0.00
4,4'-DDT	0.003	0.0007	0.3659	1.829	1.38E-03	1.00	1.38E-03	1.38E-02	1.38E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.062	0.00
alpha-BHC	0.1	0.01	0.0083	0.083	1.14E-03	1.00	1.14E-03	1.14E-03	1.14E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.062	0.00
alpha-Chlordane	0.001	0.0006	1.1383	2.277	1.17E-03	1.00	1.17E-03	1.17E-02	1.17E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.062	0.00
Dieldrin	0.2	0.02	0.0091	0.091	1.48E-03	1.00	1.48E-03	1.48E-02	1.48E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.062	0.00
Endosulfan I	0.02	Bench NA	0.0868	NA	1.14E-03	1.00	1.14E-03	1.14E-02	1.14E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.062	0.00
Endrin	0.06	0.006	0.0228	0.228	1.22E-03	1.00	1.22E-03	1.22E-02	1.22E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.062	0.00
Endrin aldehyde	0.06	0.006	0.0228	0.228	1.15E-03	1.00	1.15E-03	1.15E-02	1.15E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.062	0.00
gamma-Chlordane	0.001	0.0006	1.1383	2.277	1.10E-03	1.00	1.10E-03	1.10E-02	1.10E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.062	0.00
Heptachlor epoxide	0.02	0.002	0.0896	0.896	1.07E-03	1.00	1.07E-03	1.07E-02	1.07E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.062	0.00
Methoxychlor	#N/UM	#N/UM	1.8290	3.658	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.062	0.00
1,2,4-Trichlorobenzene	0.00003	0.000008	0.7887	24.114	1.85E-04	1.00	1.85E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	2.25E-03	0.062	1.00
1,2-Dichlorobenzene	0.0008	Bench NA	39.3317	NA	2.32E-02	1.00	2.32E-02	2.29E-01	2.29E-01	1	0.1	0.98	1	1.00E-01	0.0004	0.00	4.82E-03	0.062	0.02
1,4-Dichlorobenzene	0.003	0.0003	9.8043	98.043	2.41E-02	1.00	2.41E-02	2.41E-01	2.41E-01	1	0.1	1.00	1	1.04E-01	0.0004	0.00	ND	0.062	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	3.74E-04	1.00	3.74E-04	0.00E+00	ND	1	0.1	0.00	1	1.44E-01	0.0004	0.17	3.62E-03	0.062	0.83
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	2.38E-02	1.00	2.38E-02	2.27E-01	2.27E-01	1	0.1	0.98	1	2.08E-01	0.0004	0.00	8.84E-03	0.062	0.03
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	2.48E-04	1.00	2.48E-04	0.00E+00	ND	1	0.1	0.00	1	9.81E-02	0.0004	0.16	2.62E-03	0.062	0.84
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	7.80E-05	1.00	7.80E-05	0.00E+00	ND	1	0.1	0.00	1	1.98E-01	0.0004	1.00	ND	0.062	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	6.21E-04	1.00	6.21E-04	0.00E+00	ND	1	0.1	0.00	1	1.37E-01	0.0004	0.08	8.80E-03	0.062	0.91
o-Cresol	0.0002	Bench NA	139.3371	NA	2.22E-02	1.00	2.22E-02	2.22E-01	2.22E-01	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.062	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	1.88E-04	1.00	1.88E-04	0.00E+00	ND	1	0.1	0.00	1	4.71E-01	0.0004	1.00	ND	0.062	0.00
m&p-Cresol	Bench NA	Bench NA	NA	NA	3.88E-04	1.00	3.88E-04	0.00E+00	ND	1	0.1	0.00	1	1.82E-01	0.0004	0.19	3.93E-03	0.062	0.81
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	4.32E-05	1.00	4.32E-05	0.00E+00	ND	1	0.1	0.00	1	1.08E-01	0.0004	1.00	ND	0.062	0.00
4-Chloroaniline	0.0003	Bench NA	4.5736	NA	1.58E-03	1.00	1.58E-03	0.00E+00	ND	1	0.1	0.00	1	1.08E-00	0.0004	0.27	1.41E-02	0.062	0.73
bis(2-Ethylhexyl)phthalate	0.00005	0.000006	4.5286	45.286	2.10E-04	1.00	2.10E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	2.58E-03	0.062	1.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	1.73E-04	1.00	1.73E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	2.11E-03	0.062	1.00
Naphthalene	0.0000100	0.0000010	3.2472	6.495	4.72E-05	1.00	4.72E-05	0.00E+00	ND	1	0.1	0.00	1	1.18E-01	0.0004	1.00	ND	0.062	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	1.80E-04	1.00	1.80E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	2.20E-03	0.062	1.00
Pentachlorophenol	0.0000300	0.0000080	1.4294	5.946	4.80E-05	1.00	4.80E-05	0.00E+00	ND	1	0.1	0.00	1	1.37E-02	0.0004	0.11	5.19E-04	0.062	0.89
Phenol	Bench NA	Bench NA	NA	NA	8.07E-04	1.00	8.07E-04	0.00E+00	ND	1	0.1	0.00	1	7.19E-01	0.0004	0.47	3.88E-03	0.062	0.53
1,2-Dichloroethane	Bench NA	Bench NA	NA	NA	9.19E-05	1.00	9.19E-05	0.00E+00	ND	1	0.1	0.00	1	6.11E-02	0.0004	0.22	8.72E-04	0.062	0.78
2-Butanone (MEK)	0.000000008	0.000000004	806.8881	2680.527	7.44E-06	1.00	7.44E-06	0.00E+00	ND	1	0.1	0.00	1	1.84E-02	0.0004	1.00	ND	0.062	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	3.36E-04	1.00	3.36E-04	0.00E+00	ND	1	0.1	0.00	1	3.52E-02	0.0004	0.04	3.91E-03	0.062	0.96
Acetone	0.00004	0.000007	4.5735	22.867	1.68E-04	1.00	1.68E-04	0.00E+00	ND	1	0.1	0.00	1	4.16E-01	0.0004	1.00	ND	0.062	0.00
Benzene	0.00002	0.000002	8.5231	85.231	1.36E-04	1.00	1.36E-04	0.00E+00	ND	1	0.1	0.00	1	8.83E-02	0.0004	0.29	1.17E-03	0.062	0.71
Carbon disulfide	Bench NA	Bench NA	NA	NA	3.25E-07	1.00	3.25E-07	0.00E+00	ND	1	0.1	0.00	1	8.13E-04	0.0004	1.00	ND	0.062	0.00
Chlorobenzene	0.00007	Bench NA	21.2817	NA	1.40E-03	1.00	1.40E-03	0.00E+00	ND	1	0.1	0.00	1	1.86E+00	0.0004	0.58	7.58E-03	0.062	0.44
Chloroethane	Bench NA	Bench NA	NA	NA	2.92E-07	1.00	2.92E-07	0.00E+00	ND	1	0.1	0.00	1	7.28E-04	0.0004	1.00	ND	0.062	0.00
Chloroform	0.00005000	0.00000003	6.8802	18.751	6.40E-07	1.00	6.40E-07	0.00E+00	ND	1	0.1	0.00	1	1.80E-03	0.0004	1.00	ND	0.062	0.00
cis-1,2-Dichloroethene	0.0000005	0.00000006	1.4456	13.283	6.80E-07	1.00	6.80E-07	0.00E+00	ND	1	0.1	0.00	1	1.65E-03	0.0004	1.00	ND	0.062	0.00
Ethylbenzene	0.0000001	0.0000004	82.1990	188.997	6.63E-06	1.00	6.63E-06	0.00E+00	ND	1	0.1	0.00	1	2.48E-02	0.0004	0.15	6.68E-04	0.062	0.85
p/m-Xylene	0.0003	0.0002	0.5197	0.643	1.36E-04	1.00	1.36E-04	0.00E+00	ND	1	0.1	0.00	1	1.22E-01	0.0004	0.36	1.08E-03	0.062	0.66
Methylene chloride	0.0000006	0.00000058	2.0756	22.897	1.33E-06	1.00	1.33E-06	0.00E+00	ND	1	0.1	0.00	1	3.32E-03	0.0004	1.00	ND	0.062	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	2.07E-06	1.00	2.07E-06	0.00E+00	ND	1	0.1	0.00	1	6.13E-03	0.0004	1.00	ND	0.062	0.00
Toluene	0.00008	0.000008	6.4340	64.340	4.88E-04	1.00	4.88E-04	0.00E+00	ND	1	0.1	0.00	1	9.88E-01	0.0004	0.80	1.19E-03	0.062	0.20
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	2.48E-07	1.00	2.48E-07	0.00E+00	ND	1	0.1	0.00	1	6.18E-04	0.0004	1.00	ND	0.062	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	7.80E-06	1.00	7.80E-06	0.00E+00	ND	1	0.1	0.00	1	5.84E-03	0.0004	0.03	9.22E-04	0.062	0.97
Vinyl chloride	0.0000005	0.0000005	0.0777	0.777	3.95E-07	1.00	3.95E-07	0.00E+00	ND	1	0.1	0.00	1	9.88E-04	0.0004	1.00	ND	0.062	0.00
Xylene (total)	0.0003	0.0002	0.5197	0.643	1.51E-04	1.00	1.51E-04	0.00E+00	ND	1	0.1	0.00	1	1.42E-01	0.0004	0.38	1.15E-03	0.062	0.62

Notes:
NA=Not available/applicable
Bench NA = Benchmark not available
ND = Not detected

Samples Comprising Foraging Area	
Sediment Samples:	All PDA samples
Fish Samples	3 PDA whole body composites (shad, drum, catfish)
Water Samples	All PDA samples

Food Chain Model Components:
Hazard Index Estimate = $\frac{\text{(Food Dose)} + \text{(Sediment Dose)} + \text{(Drinking Water Dose)}}{\text{Toxicological Benchmark}}$

Food and Water Ingestion Rate (EPA 1993)

**For the soil component, we convert the food ingestion rate from wet weight to dry weight (plant moisture=70%) and then calculate a soil ingestion rate from the soil proportion in the diet (dry weight) estimated in Beyer et al. (1994)

Table U-40
Food Chain Model For Chronic Exposures
River Otter Analysis
Ingestion of Fish
DDA (NO AUF)
Krummrich
Sauget, Illinois

								Food						Sediment					Water		
Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Exposure Dose mg/kg/day	Total Conc in Food mg/kg wet	Fish Concentration mg/kg wet	Proportion Fish in Diet	Ingestion Rate kg/kg/day	Proportion of Dose	RAF	Conc in Sediment mg/kg dry	Dry Sediment Ing. Rate kg/kg/day	Proportion of Dose	Conc in Water mg/l	Ingestion Rate l/kg/day	Proportion of Dose
Dioxin (TEQ)	0.0003	0.00003	0.0005	0.005	1.47E-07	1.00	1.47E-07	1.47E-08	1.47E-08	1	0.1	1.00	1	2.33E-07	0.0004	0.00	2.21E-11	0.082	0.00
2,4,5-T	0.0000	0.00000	1.3720	4.573	1.44E-11	1.00	1.44E-11	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	1.80E-10	0.082	1.00
2,4,5-TP (Silvex)	0.0006	Bench NA	0.8660	NA	4.86E-04	1.00	4.86E-04	4.86E-03	4.86E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-D	0.000	0.0000	0.4871	2.287	3.84E-06	1.00	3.84E-06	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	4.80E-04	0.082	1.00
Dicamba	#NUM!	#NUM!	0.1867	0.622	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Dichloroprop	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
MCPP	#NUM!	#NUM!	1.3720	4.116	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	1.65E-03	1.00	1.65E-03	1.65E-02	1.65E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDE	0.004	0.0007	0.3468	1.829	1.34E-03	1.00	1.34E-03	1.34E-02	1.34E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDT	#NUM!	#NUM!	0.3468	1.829	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
alpha-BHC	#NUM!	#NUM!	0.0043	0.083	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
alpha-Chlordane	0.001	0.0005	1.1563	2.277	1.08E-03	1.00	1.08E-03	1.08E-02	1.08E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Dieldrin	0.2	0.02	0.0091	0.091	1.39E-03	1.00	1.39E-03	1.39E-02	1.39E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endosulfan I	#NUM!	Bench NA	0.0866	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endrin	#NUM!	#NUM!	0.0228	0.228	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endrin aldehyde	0.08	0.008	0.0228	0.228	1.41E-03	1.00	1.41E-03	1.41E-02	1.41E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
gamma-Chlordane	0.001	0.0005	1.1563	2.277	1.37E-03	1.00	1.37E-03	1.37E-02	1.37E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Heptachlor epoxide	#NUM!	#NUM!	0.0595	0.595	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Methoxychlor	#NUM!	#NUM!	1.8284	3.656	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2,4-Trichlorobenzene	#NUM!	#NUM!	0.7697	24.614	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2-Dichlorobenzene	#NUM!	Bench NA	39.3317	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,4-Dichlorobenzene	#NUM!	#NUM!	9.8043	98.043	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	1.44E-04	1.00	1.44E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	1.75E-03	0.082	1.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	1.17E-04	1.00	1.17E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	1.43E-03	0.082	1.00
o-Cresol	0.0002	Bench NA	130.3371	NA	3.17E-02	1.00	3.17E-02	3.17E-01	3.17E-01	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
m&p-Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4-Chloroaniline	0.00	Bench NA	4.5736	NA	2.71E-04	1.00	2.71E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	3.30E-03	0.082	1.00
bis(2-Ethylhexyl)phthalate	#NUM!	#NUM!	4.5295	45.295	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Naphthalene	#NUM!	#NUM!	3.2472	6.493	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Pentachlorophenol	0.03	0.00	1.8284	5.845	3.12E-06	1.00	3.12E-06	0.00E+00	ND	1	0.1	0.00	1	7.80E-03	0.0004	1.00	ND	0.082	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Butanone (MEK)	#NUM!	#NUM!	866.9891	2080.527	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Acetone	0.000002	0.0000004	4.5736	22.867	8.18E-06	1.00	8.18E-06	0.00E+00	ND	1	0.1	0.00	1	2.29E-02	0.0004	1.00	ND	0.082	0.00
Benzene	0.000002	0.0000002	6.5231	65.231	1.80E-05	1.00	1.80E-05	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	1.95E-04	0.082	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Chlorobenzene	0.000007	Bench NA	21.2817	NA	1.44E-04	1.00	1.44E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	1.75E-03	0.082	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Chloroform	#NUM!	#NUM!	6.8802	18.751	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
cis-1,2-Dichloroethene	#NUM!	#NUM!	1.4435	13.263	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Ethylbenzene	#NUM!	#NUM!	82.1990	166.587	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
p/m-Xylene	#NUM!	#NUM!	0.5197	0.643	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Methylene chloride	#NUM!	#NUM!	2.0756	22.867	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Toluene	0.000009	0.0000009	6.4346	64.340	6.78E-05	1.00	6.78E-05	0.00E+00	ND	1	0.1	0.00	1	1.10E-03	0.0004	0.01	7.00E-04	0.082	0.99
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Vinyl chloride	#NUM!	#NUM!	0.0777	0.777	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Xylene (total)	#NUM!	#NUM!	0.5197	0.643	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00

Notes:
NA=Not available/applicable
Bench NA = Benchmark not available
ND = Not detected
$NUM! = Not calculated because contaminant was not detected in any media. It is retained here for completeness

Samples Comprising Foraging Area	
Sediment Samples	All DDA samples
Fish Samples	1 DDA whole body composite (shad, drum, catfish)
Water Samples	All DDA samples

Food Chain Model Components:
Hazard Index Estimate = (Food Dose) ÷ Toxicological Benchmark

Food and Water Ingestion Rate (EPA 1993)

**For the soil component, we convert the food ingestion rate from wet weight to dry weight (plant moisture=70%) and then calculate a soil ingestion rate from the

Table D-41
Food Chain Model For Chronic Exposures
River Otter Analysis
Ingestion of Fish
UDA (NO AUF)
Krummrich
Sauget, Illinois

Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Exposure Dose mg/kg/day	Food: Total Conc in Food mg/kg wet	Food: Fish Concentration mg/kg wet	Food: Proportion Fish in Diet	Food: Ingestion Rate kg/kg/day	Food: Proportion of Dose	RAF	Sediment: Conc in Sediment mg/kg dry	Sediment: Dry Sediment Ing. Rate kg/kg/day	Sediment: Proportion of Dose	Water: Conc in Water mg/l	Water: Ingestion Rate l/kg/day	Water: Proportion of Dose
Dioxin (TEQ)	0.0004	0.00004	0.0006	0.005	1.76E-07	1.00	1.76E-07	1.76E-06	1.76E-06	1	0.1	1.00	1	1.46E-07	0.0004	0.00	1.82E-11	0.082	0.00
2,4,5-T	0.0004	0.0001	1.3720	4.573	6.13E-04	1.00	6.13E-04	6.13E-03	6.13E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4,5-TP (Silvex)	0.0008	Bench NA	0.6860	NA	6.27E-04	1.00	6.27E-04	6.27E-03	6.27E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-D	#NUM!	#NUM!	0.4573	2.287	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Dicamba	0.004	0.001	0.1887	0.622	7.23E-04	1.00	7.23E-04	7.23E-03	7.23E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Dichloroprop	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
MCPP	#NUM!	#NUM!	1.3720	4.116	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDE	0.006	0.001	0.3650	1.829	2.10E-03	1.00	2.10E-03	2.10E-02	2.10E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDT	0.004	0.0008	0.3660	1.829	1.80E-03	1.00	1.80E-03	1.80E-02	1.80E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
alpha-BHC	#NUM!	#NUM!	0.0083	0.083	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
alpha-Chlordane	#NUM!	#NUM!	1.1383	2.277	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Dieldrin	0.2	0.02	0.0081	0.081	2.12E-03	1.00	2.12E-03	2.12E-02	2.12E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endosulfan I	0.02	Bench NA	0.0686	NA	1.36E-03	1.00	1.36E-03	1.36E-02	1.36E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endrin	#NUM!	#NUM!	0.0228	0.228	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endrin aldehyde	0.05	0.005	0.0228	0.228	1.25E-03	1.00	1.25E-03	1.25E-02	1.25E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
gamma-Chlordane	0.001	0.0006	1.1383	2.277	1.44E-03	1.00	1.44E-03	1.44E-02	1.44E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Heptachlor epoxide	#NUM!	#NUM!	0.0606	0.606	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Methoxychlor	#NUM!	#NUM!	1.6294	3.666	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2,4-Trichlorobenzene	#NUM!	#NUM!	6.7667	24.614	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2-Dichlorobenzene	#NUM!	Bench NA	39.3317	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,4-Dichlorobenzene	#NUM!	#NUM!	9.6043	96.043	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
o-Cresol	#NUM!	Bench NA	130.3371	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
m&p-Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4-Chloroaniline	#NUM!	Bench NA	4.5736	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
bis(2-Ethylhexyl)phthalate	0.000	0.0000	4.5286	45.286	4.30E-06	1.00	4.30E-06	0.00E+00	ND	1	0.1	0.00	1	1.08E-01	0.0004	1.00	ND	0.082	0.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Naphthalene	#NUM!	#NUM!	3.2472	6.403	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Pentachlorophenol	0.00	0.00	1.8294	5.945	3.21E-06	1.00	3.21E-06	0.00E+00	ND	1	0.1	0.00	1	8.03E-03	0.0004	1.00	ND	0.082	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2-Dichloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Butanone (MEK)	0.0000007	0.0000003	809.9581	2080.627	6.79E-04	1.00	6.79E-04	0.00E+00	ND	1	0.1	0.00	1	1.29E-02	0.0004	0.01	7.00E-03	0.082	0.99
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Acetone	0.000006	0.000001	4.5736	22.867	2.74E-05	1.00	2.74E-05	0.00E+00	ND	1	0.1	0.00	1	6.85E-02	0.0004	1.00	ND	0.082	0.00
Benzene	0.00001	0.000001	8.6231	86.231	7.32E-06	1.00	7.32E-06	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	8.83E-04	0.082	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Chlorobenzene	0.0000030	Bench NA	21.2817	NA	7.28E-06	1.00	7.28E-06	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	8.88E-04	0.082	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Chloroform	#NUM!	#NUM!	6.8862	18.751	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
cis-1,2-Dichloroethene	#NUM!	#NUM!	1.4406	13.263	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Ethylbenzene	#NUM!	#NUM!	62.1990	186.597	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
p/m-Xylene	#NUM!	#NUM!	0.5197	0.643	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Methylene chloride	#NUM!	#NUM!	2.8736	22.867	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Toluene	0.0000002	0.00000002	8.4340	84.340	1.23E-06	1.00	1.23E-06	0.00E+00	ND	1	0.1	0.00	1	3.08E-03	0.0004	1.00	ND	0.082	0.00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Vinyl chloride	0.0009	0.00009	0.0777	0.777	6.87E-05	1.00	6.87E-05	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	8.38E-04	0.082	1.00
Xylene (total)	#NUM!	#NUM!	0.5197	0.843	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00

Notes:
NA=Not available/applicable
Bench NA = Benchmark not available
ND = Not detected
#NUM! = Not calculated because contaminant was not detected in any media. It is retained here for completeness

Samples Comprising Foraging Area	
Sediment Samples:	All UDA samples
Fish Samples:	1 UDA whole body composite (shad, drum, catfish)
Water Samples	All UDA samples

Food Chain Model Components:
Hazard Index Estimate = [Food Dose] : Toxicological Benchmark

Food and Water Ingestion Rate (EPA 1993)

**For the soil component, we convert the food ingestion rate from wet weight to dry weight (plant moisture=70%) and then calculate a soil ingestion rate from the

Table D-42
Food Chain Model For Chronic Exposures
River Otter Analysis
Ingestion of Fish
Site-Potential Maximum Exposure
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Foraging Area acres	Site Area acres	Exposure Dose mg/kg/day	Food: Total Conc in Food mg/kg wet	Food: Fish Concentration mg/kg wet	Food: Proportion Fish in Diet	Food: Ingestion Rate kg/kg/day	Food: Proportion of Dose	RAF	Sediment: Conc. in Sediment mg/kg dry	Sediment: Dry Sediment Ing. Rate kg/kg/day	Sediment: Proportion of Dose	Water: Conc in Water mg/l	Water: Ingestion Rate l/kg/day	Water: Proportion of Dose
Dioxin (TEQ)	0.00002	0.000002	0.0005	0.005	8.86E-09	0.02	988	20	4.42E-07	4.41E-06	4.41E-06	1	0.1	1.00	1	1.35E-08	0.0004	0.00	3.07E-10	0.082	0.00
2,4,5-T	0.00002	0.000006	1.3720	4.573	2.63E-05	0.02	988	20	1.30E-03	1.30E-02	1.30E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4,5-TP (Silvex)	0.00002	Bench NA	0.6860	NA	1.78E-05	0.02	988	20	8.81E-04	8.70E-03	8.70E-03	1	0.1	0.99	1	ND	0.0004	0.00	1.40E-04	0.082	0.01
2,4-D	0.0000800	0.00002	0.4573	2.287	3.52E-05	0.02	988	20	1.74E-03	0.00E+00	ND	1	0.1	0.00	1	2.30E+00	0.0004	0.53	1.00E-02	0.082	0.47
Dicamba	0.000001	0.0000003	0.1867	0.622	1.83E-07	0.02	988	20	9.02E-06	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	1.10E-04	0.082	1.00
Dichloroprop	Bench NA	Bench NA	NA	NA	1.20E-05	0.02	988	20	5.92E-04	0.00E+00	ND	1	0.1	0.00	1	1.10E+00	0.0004	0.74	1.86E-03	0.082	0.26
MCPP	0.01	0.005	1.3720	4.116	1.87E-02	0.02	988	20	9.24E-01	8.60E+00	8.60E+00	1	0.1	0.93	1	1.60E+02	0.0004	0.07	ND	0.082	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	1.36E-05	0.02	988	20	6.71E-04	6.70E-03	6.70E-03	1	0.1	1.00	1	1.60E-03	0.0004	0.00	ND	0.082	0.00
4,4'-DDE	0.0003	0.00007	0.3650	1.829	1.21E-04	0.02	988	20	6.00E-03	6.00E-02	6.00E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDT	0.00007	0.00001	0.3650	1.829	2.63E-05	0.02	988	20	1.30E-03	1.30E-02	1.30E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
alpha-BHC	0.0008	0.00008	0.0083	0.083	5.26E-06	0.02	988	20	2.60E-04	2.60E-03	2.60E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
alpha-Chlordane	0.00002	0.00001	1.1383	2.277	2.83E-05	0.02	988	20	1.40E-03	1.40E-02	1.40E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Dieldrin	0.01	0.001	0.0091	0.091	1.30E-04	0.02	988	20	6.40E-03	6.40E-02	6.40E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endosulfan I	0.0001	Bench NA	0.0686	NA	8.70E-06	0.02	988	20	4.30E-04	4.30E-03	4.30E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endrin	0.001	0.0001	0.0228	0.228	3.04E-05	0.02	988	20	1.50E-03	1.50E-02	1.50E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endrin aldehyde	0.0009	0.00009	0.0228	0.228	2.02E-05	0.02	988	20	1.00E-03	1.00E-02	1.00E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
gamma-Chlordane	0.00001	0.000007	1.1383	2.277	1.64E-05	0.02	988	20	8.10E-04	8.10E-03	8.10E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Heptachlor epoxide	0.0002	0.00002	0.0686	0.686	1.07E-05	0.02	988	20	5.30E-04	5.30E-03	5.30E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Methoxychlor	#NUM!	#NUM!	1.8294	3.660	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2,4-Trichlorobenzene	0.0000004	0.0000001	6.7087	24.514	2.53E-06	0.02	988	20	1.25E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	1.53E-03	0.082	1.00
1,2-Dichlorobenzene	0.00001	Bench NA	39.3317	NA	5.08E-04	0.02	988	20	2.51E-02	2.40E-01	2.40E-01	1	0.1	0.96	1	1.10E-01	0.0004	0.00	1.33E-02	0.082	0.04
1,4-Dichlorobenzene	0.00003	0.000003	9.8043	98.043	2.64E-04	0.02	988	20	1.30E-02	1.30E-01	1.30E-01	1	0.1	1.00	1	8.15E-02	0.0004	0.00	ND	0.082	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	1.71E-05	0.02	988	20	8.44E-04	0.00E+00	ND	1	0.1	0.00	1	4.70E-01	0.0004	0.22	8.00E-03	0.082	0.78
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	4.44E-04	0.02	988	20	2.19E-02	1.90E-01	1.90E-01	1	0.1	0.87	1	1.00E+00	0.0004	0.02	3.10E-02	0.082	0.12
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	6.79E-06	0.02	988	20	3.35E-04	0.00E+00	ND	1	0.1	0.00	1	8.00E-02	0.0004	0.10	3.70E-03	0.082	0.90
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	6.07E-06	0.02	988	20	3.00E-04	0.00E+00	ND	1	0.1	0.00	1	7.50E-01	0.0004	1.00	ND	0.082	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	3.61E-05	0.02	988	20	1.78E-03	0.00E+00	ND	1	0.1	0.00	1	3.60E-01	0.0004	0.08	2.00E-02	0.082	0.92
o-Cresol	0.000003	Bench NA	130.3371	NA	4.45E-04	0.02	988	20	2.20E-02	2.20E-01	2.20E-01	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	6.15E-07	0.02	988	20	3.04E-05	0.00E+00	ND	1	0.1	0.00	1	7.60E-02	0.0004	1.00	ND	0.082	0.00
m&*p*-Cresol	Bench NA	Bench NA	NA	NA	2.47E-05	0.02	988	20	1.22E-03	0.00E+00	ND	1	0.1	0.00	1	6.00E-01	0.0004	0.26	1.10E-02	0.082	0.74
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	7.81E-07	0.02	988	20	3.86E-05	0.00E+00	ND	1	0.1	0.00	1	9.65E-02	0.0004	1.00	ND	0.082	0.00
4-Chloroaniline	0.00002	Bench NA	4.5735	NA	1.14E-04	0.02	988	20	5.61E-03	0.00E+00	ND	1	0.1	0.00	1	4.80E+00	0.0004	0.34	4.50E-02	0.082	0.66
bis(2-Ethylhexyl)phthalate	0.0000008	0.0000001	4.5285	45.285	3.65E-06	0.02	988	20	1.80E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	2.20E-03	0.082	1.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	5.64E-07	0.02	988	20	2.79E-05	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	3.40E-04	0.082	1.00
Naphthalene	0.0000006	0.0000002	3.2472	6.403	1.54E-06	0.02	988	20	7.60E-06	0.00E+00	ND	1	0.1	0.00	1	1.90E-01	0.0004	1.00	ND	0.082	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	1.54E-06	0.02	988	20	7.63E-05	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	9.30E-04	0.082	1.00
Pentachlorophenol	0.000001	0.0000003	1.8294	5.945	1.81E-06	0.02	988	20	8.93E-05	0.00E+00	ND	1	0.1	0.00	1	4.50E-02	0.0004	0.20	8.70E-04	0.082	0.80
Phenol	Bench NA	Bench NA	NA	NA	7.02E-05	0.02	988	20	3.47E-03	0.00E+00	ND	1	0.1	0.00	1	5.60E+00	0.0004	0.65	1.50E-02	0.082	0.35
1,2-Dichloroethane	Bench NA	Bench NA	NA	NA	3.31E-06	0.02	988	20	1.64E-04	0.00E+00	ND	1	0.1	0.00	1	2.50E-01	0.0004	0.61	7.75E-04	0.082	0.39
2-Butanone (MEK)	0.000000001	0.0000000004	809.9591	2080.527	7.37E-07	0.02	988	20	3.64E-05	0.00E+00	ND	1	0.1	0.00	1	9.10E-02	0.0004	1.00	ND	0.082	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	4.87E-06	0.02	988	20	2.40E-04	0.00E+00	ND	1	0.1	0.00	1	1.60E-01	0.0004	0.25	2.20E-03	0.082	0.75
Acetone	0.000005	0.000001	4.5735	22.867	2.43E-05	0.02	988	20	1.20E-03	0.00E+00	ND	1	0.1	0.00	1	3.00E+00	0.0004	1.00	ND	0.082	0.00
Benzene	0.000001	0.0000001	6.5231	65.231	6.71E-06	0.02	988	20	3.32E-04	0.00E+00	ND	1	0.1	0.00	1	4.60E-01	0.0004	0.55	1.80E-03	0.082	0.45
Carbon disulfide	Bench NA	Bench NA	NA	NA	2.67E-08	0.02	988	20	1.32E-06	0.00E+00	ND	1	0.1	0.00	1	3.30E-03	0.0004	1.00	ND	0.082	0.00
Chlorobenzene	0.000005	Bench NA	21.2817	NA	9.81E-05	0.02	988	20	4.85E-03	0.00E+00	ND	1	0.1	0.00	1	7.20E+00	0.0004	0.59	2.40E-02	0.082	0.41
Chloroethane	Bench NA	Bench NA	NA	NA	1.54E-08	0.02	988	20	7.60E-07	0.00E+00	ND	1	0.1	0.00	1	1.90E-03	0.0004	1.00	ND	0.082	0.00
Chloroform	0.00000001	0.000000004	6.9802	18.751	7.85E-08	0.02	988	20	3.88E-06	0.00E+00	ND	1	0.1	0.00	1	9.70E-03	0.0004	1.00	ND	0.082	0.00
cis-1,2-Dichloroethene	0.00000003	0.000000004	1.4635	13.263	4.70E-08	0.02	988	20	2.32E-06	0.00E+00	ND	1	0.1	0.00	1	5.80E-03	0.0004	1.00	ND	0.082	0.00
Ethylbenzene	0.00000002	0.00000001	62.1900	186.507	1.29E-06	0.02	988	20	6.40E-05	0.00E+00	ND	1	0.1	0.00	1	8.20E-02	0.0004	0.51	3.80E-04	0.082	0.49
p/m-Xylene	0.00002	0.00001	0.5197	0.643	9.09E-06	0.02	988	20	4.49E-04	0.00E+00	ND	1	0.1	0.00	1	6.30E-01	0.0004	0.56	2.40E-03	0.082	0.44
Methylene chloride	0.0000001	0.00000001	2.6755	22.867	1.36E-07	0.02	988	20	6.80E-06	0.00E+00	ND	1	0.1	0.00	1	1.70E-02	0.0004	1.00	ND	0.082	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	1.94E-07	0.02	988	20	9.60E-06	0.00E+00	ND	1	0.1	0.00	1	2.40E-02	0.0004	1.00	ND	0.082	0.00
Toluene	0.00001	0.000001	6.4340	64.340	6.60E-05	0.02	988	20	3.26E-03	0.00E+00	ND	1	0.1	0.00	1	7.80E+00	0.0004	0.96	1.70E-03	0.082	0.04
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	7.37E-09	0.02	988	20	3.64E-07	0.00E+00	ND	1	0.1	0.00	1	9.10E-04	0.0004	1.00	ND	0.082	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	8.38E-07	0.02	988	20	4.14E-05	0.00E+00	ND	1	0.1	0.00	1	4.20E-02	0.0004	0.41	3.00E-04	0.082	0.59
Vinyl chloride	0.0000004	0.00000004	0.0777	0.777	3.24E-08	0.02	988	20	1.60E-06	0.00E+00	ND	1	0.1	0.00	1	4.00E-03	0.0004	1.00	ND	0.082	0.00
Xylene (total)	0.00002	0.00002	0.5197	0.643	1.02E-05	0.02	988	20	5.06E-04	0.00E+00	ND	1	0.1	0.00	1	7.10E-01	0.0004	0.56	2.70E-03	0.082	0.44

Notes:
NA=Not available/applicable
Bench NA = Benchmark not available
ND=Not Detected or Determined

Samples Comprising Foraging Area	
Sediment Samples:	All PDA samples
Fish Samples:	3 PDA whole body composites (shad, drum, catfish)
Water Samples:	All PDA samples

Food Chain Model Components:
Hazard Index Estimate = [Food Dose] + [Sediment Dose] + [Drinking Water Dose] / Toxicological Benchmark

Food and Water Ingestion Rate (EPA 1993)

**For the soil component, we convert the food ingestion rate from wet weight to dry weight (plant moisture=70%) and then calculate a soil ingestion rate from the soil proportion in the diet (dry weight) estimated in Beyer et al. (1994).

Table D-43
Food Chain Model For Chronic Exposures
River Otter Analysis
Ingestion of Fish
DOA-Potential Maximum Exposure
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Foraging Area acres	Site Area acres	Exposure Dose mg/kg/day	Food: Total Conc In Food mg/kg wet	Food: Fish Concentration mg/kg wet	Food: Proportion Fish In Diet	Food: Ingestion Rate kg/kg/day	Food: Proportion of Dose	RAF	Sediment: Conc. In Sediment mg/kg dry	Sediment: Dry Sediment Ing. Rate kg/kg/day	Sediment: Proportion of Dose	Water: Conc. In Water mg/l	Water: Ingestion Rate l/kg/day	Water: Proportion of Dose
Dioxin (TEQ)	0.00001	0.000001	0.0006	0.006	6.77E-09	0.02	988	20	3.34E-07	3.34E-06	3.34E-06	1	0.1	1.00	1	4.62E-07	0.0004	0.00	2.22E-11	0.082	0.00
2,4,5-T	1.00E-13	4.00E-14	1.3720	4.573	1.83E-13	0.02	988	20	9.02E-12	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	1.10E-10	0.082	1.00
2,4,5-TP (Silvex)	0.00002	Bench NA	0.6860	NA	1.40E-08	0.02	988	20	6.90E-04	6.90E-03	6.90E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-D	0.000002	0.0000006	0.4573	2.287	1.05E-06	0.02	988	20	5.17E-05	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	6.30E-04	0.082	1.00
Dicamba	#NUM!	#NUM!	0.1867	0.622	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Dichloroprop	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
MCPP	#NUM!	#NUM!	1.3720	4.116	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	2.43E-06	0.02	988	20	1.20E-03	1.20E-02	1.20E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDE	0.0001	0.00002	0.3866	1.829	3.86E-06	0.02	988	20	1.90E-03	1.90E-02	1.90E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDT	#NUM!	#NUM!	0.3866	1.829	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
alpha-BHC	#NUM!	#NUM!	0.0083	0.083	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
alpha-Chlordane	0.00001	0.000007	1.1383	2.277	1.56E-06	0.02	988	20	7.70E-04	7.70E-03	7.70E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Dieldrin	0.004	0.0004	0.0091	0.091	3.86E-06	0.02	988	20	1.90E-03	1.90E-02	1.90E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endosulfan I	#NUM!	Bench NA	0.0686	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endrin	#NUM!	#NUM!	0.0228	0.228	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endrin aldehyde	0.0004	0.00004	0.0228	0.228	9.92E-06	0.02	988	20	4.90E-04	4.90E-03	4.90E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
gamma-Chlordane	0.000006	0.000003	1.1383	2.277	7.68E-06	0.02	988	20	3.80E-04	3.80E-03	3.80E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Heptachlor epoxide	#NUM!	#NUM!	0.0686	0.686	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Methoxychlor	#NUM!	#NUM!	1.8294	3.659	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2,4-Trichlorobenzene	#NUM!	#NUM!	6.7867	24.614	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2-Dichlorobenzene	#NUM!	Bench NA	39.3317	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,4-Dichlorobenzene	#NUM!	#NUM!	9.6043	96.043	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	1.66E-08	0.02	988	20	8.20E-06	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	1.00E-03	0.082	1.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	5.88E-07	0.02	988	20	2.95E-05	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	3.60E-04	0.082	1.00
o-Cresol	0.000006	Bench NA	130.3371	NA	6.80E-04	0.02	988	20	3.40E-02	3.40E-01	3.40E-01	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
m &p -Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4-Chloroaniline	0.0000006	Bench NA	4.5735	NA	2.62E-06	0.02	988	20	1.31E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	1.60E-03	0.082	1.00
bis(2-Ethylhexyl)phthalate	#NUM!	#NUM!	4.5286	45.286	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Naphthalene	#NUM!	#NUM!	3.2472	6.403	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Pentachlorophenol	0.000000007	0.000000002	1.8294	5.945	1.30E-08	0.02	988	20	6.40E-07	0.00E+00	ND	1	0.1	0.00	1	1.60E-03	0.0004	1.00	ND	0.082	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2-Dichloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Butanone (MEK)	#NUM!	#NUM!	609.9591	2080.527	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Acetone	0.00000007	0.00000001	4.5735	22.867	3.32E-07	0.02	988	20	1.64E-05	0.00E+00	ND	1	0.1	0.00	1	4.10E-02	0.0004	1.00	ND	0.082	0.00
Benzene	0.00000008	0.000000008	6.6231	66.231	3.96E-07	0.02	988	20	1.97E-05	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	2.40E-04	0.082	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Chlorobenzene	0.0000002	Bench NA	21.2817	NA	3.62E-06	0.02	988	20	1.88E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	2.30E-03	0.082	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Chloroform	#NUM!	#NUM!	9.8802	18.751	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
cis-1,2-Dichloroethene	#NUM!	#NUM!	1.4635	13.283	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Ethylbenzene	#NUM!	#NUM!	62.1569	169.887	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
p/m-Xylene	#NUM!	#NUM!	0.5167	0.843	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Methylene chloride	#NUM!	#NUM!	2.6756	22.867	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Toluene	0.0000001	0.00000001	8.4340	84.340	6.79E-07	0.02	988	20	3.35E-05	0.00E+00	ND	1	0.1	0.00	1	1.60E-03	0.0004	0.02	4.00E-04	0.082	0.98
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Vinyl chloride	#NUM!	#NUM!	0.0777	0.777	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Xylene (total)	#NUM!	#NUM!	0.5167	0.843	0.00E+00	0.02	988	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00

Notes:
NA=Not available/applicable
Bench NA = Benchmark not available
ND=Not Detected or Determined
$NUM! = Not calculated because contaminant was not detected in any media. It is retained here for completeness

Samples Comprising Foraging Area	
Sediment Samples:	All DOA samples
Fish Samples:	1 DOA whole body composite (shad, drum, catfish)
Water Samples:	All DOA samples

Food Chain Model Components:
Hazard Index Estimate = [Food Dose] + [Sediment Dose] + [Drinking Water Dose] / Toxicological Benchmark

Food and Water Ingestion Rate (EPA 1993)

**For the soil component, we convert the food ingestion rate from wet weight to dry weight (plant moisture=70%) and then calculate a soil ingestion rate from the soil proportion in the diet (dry weight) estimated in Beyer et al (1994)

Table D-46
Food Chain Model For Chronic Exposures
River Otter Analysis
Ingestion of Fish
DOA-Potential Maximum Exposure (NO AUF)
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

								Food					Sediment						Water		
Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Exposure Dose mg/kg/day	Total Conc in Food mg/kg wet	Fish Concentration mg/kg wet	Proportion Fish in Diet	Ingestion Rate kg/kg/day	Proportion of Dose	RAF	Conc in Sediment mg/kg dry	Dry Sediment Ing. Rate kg/kg/day	Proportion of Dose	Conc in Water mg/l	Ingestion Rate l/kg/day	Proportion of Dose
Dioxin (TEQ)	0.00070	0.000070	0.0005	0.005	3.34E-07	1.00	3.34E-07	3.34E-08	3.34E-08	1	0.1	1.00	1	4.62E-07	0.0004	0.00	2.22E-11	0.082	0.00
2,4,5-T	7.00E-12	2.00E-12	1.3720	4.573	9.62E-12	1.00	9.62E-12	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	1.10E-10	0.082	1.00
2,4,5-TP (SAvex)	0.00080	Bench NA	0.8860	NA	6.95E-04	1.00	6.95E-04	6.95E-03	6.95E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-D	0.000100	0.0000200	0.4573	2.287	5.17E-05	1.00	5.17E-05	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	8.30E-04	0.082	1.00
Dicamba	#NUM!	#NUM!	0.1867	0.622	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Dichloroprop	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
MCPP	#NUM!	#NUM!	1.3720	4.116	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	1.20E-03	1.00	1.20E-03	1.20E-02	1.20E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDE	0.0050	0.00100	0.3958	1.829	1.60E-03	1.00	1.60E-03	1.60E-02	1.60E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDT	#NUM!	#NUM!	0.3958	1.829	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
alpha-BHC	#NUM!	#NUM!	0.0083	0.083	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
alpha-Chlordane	0.0007	0.0003	1.1383	2.277	7.70E-04	1.00	7.70E-04	7.70E-03	7.70E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Dieldrin	0.2	0.02	0.0991	0.991	1.90E-03	1.00	1.90E-03	1.90E-02	1.90E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endosulfan I	#NUM!	Bench NA	0.0886	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endrin	#NUM!	#NUM!	0.0228	0.228	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endrin aldehyde	0.02	0.002	0.0228	0.228	4.90E-04	1.00	4.90E-04	4.90E-03	4.90E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
gamma-Chlordane	0.0003	0.0002	1.1383	2.277	3.50E-04	1.00	3.50E-04	3.50E-03	3.50E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Heptachlor epoxide	#NUM!	#NUM!	0.0686	0.686	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Methoxychlor	#NUM!	#NUM!	1.8294	3.886	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2,4-Trichlorobenzene	#NUM!	#NUM!	0.7887	24.514	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2-Dichlorobenzene	#NUM!	Bench NA	39.3317	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,4-Dichlorobenzene	#NUM!	#NUM!	9.8043	98.043	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	8.20E-05	1.00	8.20E-05	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	1.60E-03	0.082	1.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	2.95E-05	1.00	2.95E-05	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	3.60E-04	0.082	1.00
o-Cresol	0.0003	Bench NA	130.3371	NA	3.40E-02	1.00	3.40E-02	3.40E-01	3.40E-01	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
m&p -Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4-Chloroaniline	0.00003	Bench NA	4.5736	NA	1.31E-04	1.00	1.31E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	1.60E-03	0.082	1.00
bis(2-Ethylhexyl)phthalate	#NUM!	#NUM!	4.5286	45.286	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Naphthalene	#NUM!	#NUM!	3.3472	6.483	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Pentachlorophenol	0.0000003	0.0000001	1.1384	5.848	6.40E-07	1.00	6.40E-07	0.00E+00	ND	1	0.1	0.00	1	1.80E-03	0.0004	1.00	ND	0.082	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,3-Dichloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Butanone (MEK)	#NUM!	#NUM!	809.9981	2080.527	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Acetone	0.000004	0.0000007	4.5736	22.687	1.84E-05	1.00	1.84E-05	0.00E+00	ND	1	0.1	0.00	1	4.10E-02	0.0004	1.00	ND	0.082	0.00
Benzene	0.000003	0.0000003	0.5231	66.231	1.97E-05	1.00	1.97E-05	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	2.40E-04	0.082	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Chlorobenzene	0.000009	Bench NA	21.2817	NA	1.88E-04	1.00	1.88E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	2.30E-03	0.082	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Chloroform	#NUM!	#NUM!	0.6852	18.761	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
cis-1,2-Dichloroethene	#NUM!	#NUM!	1.4636	13.383	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Ethylbenzene	#NUM!	#NUM!	82.1986	196.887	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
p/m-Xylene	#NUM!	#NUM!	0.5197	0.643	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Methylene chloride	#NUM!	#NUM!	2.8756	22.687	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Toluene	0.000005	0.0000005	0.4340	64.340	3.36E-06	1.00	3.36E-06	0.00E+00	ND	1	0.1	0.00	1	1.80E-03	0.0004	0.02	4.60E-04	0.082	0.98
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Vinyl chloride	#NUM!	#NUM!	0.0777	0.777	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Xylene (total)	#NUM!	#NUM!	0.5197	0.643	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00

Notes:
NA=Not available/applicable
Bench NA = Benchmark not available
ND=Not Detected or Determined
$NUM! = Not calculated because contaminant was not detected in any media. It is retained here for completeness

	Samples Comprising Foraging Area
Sediment Samples:	All DOA samples
Fish Samples:	1 DOA whole body composite (shad, drum, catfish)
Water Samples:	All DOA samples

Food Chain Model Components:
Hazard Index Estimate = (Food Dose) + (Sediment Dose) + (Drinking Water Dose)
Toxicological Benchmark

Food and Water Ingestion Rate (EPA 1993)

**For the soil component, we convert the food ingestion rate from wet weight to dry weight (plant moisture=70%) and then calculate a soil ingestion rate from the soil proportion in the diet (dry weight) estimated in Beyer et al. (1994).

Table D-47
Food Chain Model For Chronic Exposures
River Otter Analysis
Ingestion of Fish
UDA-Potential Maximum Exposure (NO AUF)
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Exposure Dose mg/kg/day	Food: Total Conc. In Food mg/kg wet	Food: Fish Concentration mg/kg wet	Food: Proportion Fish In Diet	Food: Ingestion Rate kg/kg/day	Food: Proportion of Dose	Sediment: RAF	Sediment: Conc. In Sediment mg/kg dry	Sediment: Dry Sediment Ing. Rate kg/kg/day	Sediment: Proportion of Dose	Water: Conc. In Water mg/l	Water: Ingestion Rate l/kg/day	Water: Proportion of Dose
Dioxin (TEQ)	0.0007	0.00007	0.0006	0.006	3.22E-07	1.00	3.22E-07	3.22E-06	3.22E-06	1	0.1	1.00	1	2.38E-07	0.0004	0.00	1.96E-11	0.082	0.00
2,4,5-T	0.0005	0.0002	1.3720	4.573	7.10E-04	1.00	7.10E-04	7.10E-03	7.10E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4,5-TP (Silvex)	0.0008	Bench NA	0.8660	NA	7.50E-04	1.00	7.50E-04	7.50E-03	7.50E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-D	#NUM!	#NUM!	0.4573	2.287	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Dicamba	0.003	0.001	0.1867	0.622	6.50E-04	1.00	6.50E-04	6.50E-03	6.50E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Dichloroprop	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
MCPP	#NUM!	#NUM!	1.3720	4.116	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDE	0.007	0.001	0.3660	1.829	2.50E-03	1.00	2.50E-03	2.50E-02	2.50E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDT	0.002	0.0004	0.3660	1.829	7.60E-04	1.00	7.60E-04	7.60E-03	7.60E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
alpha-BHC	#NUM!	#NUM!	0.0083	0.083	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
alpha-Chlordane	#NUM!	#NUM!	1.1383	2.277	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Dieldrin	0.3	0.03	0.0091	0.091	3.20E-03	1.00	3.20E-03	3.20E-02	3.20E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endosulfan I	0.004	Bench NA	0.0686	NA	3.00E-04	1.00	3.00E-04	3.00E-03	3.00E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endrin	#NUM!	#NUM!	0.0228	0.228	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endrin aldehyde	0.03	0.003	0.0228	0.228	7.40E-04	1.00	7.40E-04	7.40E-03	7.40E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
gamma-Chlordane	0.0006	0.0003	1.1383	2.277	6.80E-04	1.00	6.80E-04	6.80E-03	6.80E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Heptachlor epoxide	#NUM!	#NUM!	0.0586	0.586	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Methoxychlor	#NUM!	#NUM!	1.8294	3.659	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2,4-Trichlorobenzene	#NUM!	#NUM!	6.7697	24.514	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2-Dichlorobenzene	#NUM!	Bench NA	38.3317	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,4-Dichlorobenzene	#NUM!	#NUM!	6.6043	66.043	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
o-Cresol	0.00008	Bench NA	130.3371	NA	1.10E-02	1.00	1.10E-02	1.10E-01	1.10E-01	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
m&p-Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4-Chloroaniline	#NUM!	Bench NA	4.5736	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
bis(2-Ethylhexyl)phthalate	0.00	0.000	4.5286	45.286	4.40E-06	1.00	4.40E-06	0.00E+00	ND	1	0.1	0.00	1	1.10E-01	0.0004	1.00	ND	0.082	0.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Naphthalene	#NUM!	#NUM!	3.2472	6.403	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Pentachlorophenol	0.0000	0.0000	1.8294	5.945	6.20E-07	1.00	6.20E-07	0.00E+00	ND	1	0.1	0.00	1	1.86E-03	0.0004	1.00	ND	0.082	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2-Dichloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Butanone (MEK)	0.00000	0.000000	800.8691	2080.527	7.47E-04	1.00	7.47E-04	0.00E+00	ND	1	0.1	0.00	1	2.30E-02	0.0004	0.01	9.00E-03	0.082	0.99
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Acetone	0.00	0.000	4.5736	22.867	5.20E-05	1.00	5.20E-05	0.00E+00	ND	1	0.1	0.00	1	1.30E-01	0.0004	1.00	ND	0.082	0.00
Benzene	0.0000	0.00000	6.5231	65.231	6.44E-05	1.00	6.44E-05	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	7.86E-04	0.082	1.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Chlorobenzene	0.0000030	Bench NA	21.2817	NA	6.36E-05	1.00	6.36E-05	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	7.76E-04	0.082	1.00
Chloroethane	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Chloroform	#NUM!	#NUM!	6.8602	18.751	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
cis-1,2-Dichloroethene	#NUM!	#NUM!	1.4436	13.283	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Ethylbenzene	#NUM!	#NUM!	62.1888	186.887	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
p/m-Xylene	#NUM!	#NUM!	0.5187	0.843	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Methylene chloride	#NUM!	#NUM!	2.8786	22.867	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Toluene	0.0000	0.00000	6.4346	64.346	2.24E-06	1.00	2.24E-06	0.00E+00	ND	1	0.1	0.00	1	6.80E-03	0.0004	1.00	ND	0.082	0.00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Vinyl chloride	0.0007	0.00007	0.0777	0.777	5.54E-05	1.00	5.54E-05	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	6.75E-04	0.082	1.00
Xylene (total)	#NUM!	#NUM!	0.5187	0.843	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00

Notes:
NA=Not available/applicable
Bench NA = Benchmark not available
ND=Not Detected or Determined
$NUM! = Not calculated because contaminant was not detected in any media. It is retained here for completeness.

Samples Comprising Foraging Area	
Sediment Samples:	All UDA samples
Fish Samples:	1 UDA whole body composite (shad, drum, catfish)
Water Samples:	All UDA samples

Food Chain Model Components:
Hazard Index Estimate = [Food Dose] : Toxicological Benchmark

Food and Water Ingestion Rate (EPA 1993)

**For the soil component, we convert the food ingestion rate from wet weight to dry weight (plant moisture=70%) and then calculate a soil ingestion rate from the

Table D-44
Food Chain Model For Chronic Exposures
River Otter Analysis
Ingestion of Fish
UDA-Potential Maximum Exposure
Ecological Risk Assessment for WQK Plant
Sauget, Illinois

										Feed					Sediment				Water		
Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Foraging Area acres	Site Area acres	Exposure Dose mg/kg/day	Total Conc in Feed mg/kg wet	Fish Concentration mg/kg wet	Proportion Fish in Diet	Ingestion Rate kg/kg/day	Proportion of Dose	RAF	Conc in Sediment mg/kg dry	Dry Sediment Ing. Rate kg/kg/day	Proportion of Dose	Conc in Water mg/l	Ingestion Rate L/kg/day	Proportion of Dose
Dioxin (TEQ)	0.00001	0.000001	0.0005	0.005	6.52E-09	0.02	986	20	3.22E-07	3.22E-06	3.22E-06	1	0.1	1.00	1	2.38E-07	0.0004	0.00	1.95E-11	0.082	0.00
2,4,5-T	0.00001	0.000003	1.3720	4.573	1.44E-05	0.02	986	20	7.10E-04	7.10E-03	7.10E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4,5-TP (Silvex)	0.00002	Bench NA	0.8686	NA	1.62E-06	0.02	986	20	7.50E-04	7.50E-03	7.50E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-D	#NUM!	#NUM!	0.4573	2.287	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Dicamba	0.00007	0.00002	0.1867	0.622	1.32E-05	0.02	986	20	6.50E-04	6.50E-03	6.50E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Dichloroprop	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
MCPP	#NUM!	#NUM!	1.3720	4.116	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDE	0.0001	0.00003	0.3659	1.829	8.06E-06	0.02	986	20	2.50E-03	2.50E-02	2.50E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDT	0.00004	0.000008	0.3659	1.829	1.54E-05	0.02	986	20	7.80E-04	7.80E-03	7.80E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
alpha-BHC	#NUM!	#NUM!	0.0063	0.063	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
alpha-Chlordane	#NUM!	#NUM!	1.1363	2.277	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Dieldrin	0.007	0.0007	0.0091	0.091	6.48E-05	0.02	986	20	3.20E-03	3.20E-02	3.20E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endosulfan I	0.00008	Bench NA	0.0686	NA	0.07E-08	0.02	986	20	3.00E-04	3.00E-03	3.00E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endrin	#NUM!	#NUM!	0.0228	0.228	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endrin aldehyde	0.0007	0.00007	0.0228	0.228	1.80E-06	0.02	986	20	7.40E-04	7.40E-03	7.40E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
gamma-Chlordane	0.00001	0.000005	1.1363	2.277	1.17E-05	0.02	986	20	5.80E-04	5.80E-03	5.80E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Heptachlor epoxide	#NUM!	#NUM!	0.0585	0.585	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Methoxychlor	#NUM!	#NUM!	1.8294	3.658	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2,4-Trichlorobenzene	#NUM!	#NUM!	0.7887	24.514	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2-Dichlorobenzene	#NUM!	Bench NA	38.3317	NA	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,4-Dichlorobenzene	#NUM!	#NUM!	9.8043	98.043	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
o-Cresol	0.000002	Bench NA	130.3371	NA	2.23E-04	0.02	986	20	1.10E-02	1.10E-01	1.10E-01	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
m&p-Cresol	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
4-Chloroaniline	#NUM!	Bench NA	4.5736	NA	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
bis(2-Ethylhexyl)phthalate	0.0000	0.00000	4.5296	45.295	8.91E-07	0.02	986	20	4.40E-05	0.00E+00	ND	1	0.1	0.00	1	1.10E-01	0.0004	1.00	ND	0.082	0.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Naphthalene	#NUM!	#NUM!	3.2472	6.403	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Pentachlorophenol	0.000000	0.000000	1.8294	5.945	1.28E-08	0.02	986	20	6.20E-07	0.00E+00	ND	1	0.1	0.00	1	1.55E-03	0.0004	1.00	ND	0.082	0.00
Phenol	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	#REF!	0.02	986	20	#REF!	#REF!	#REF!	1	0.1	#REF!	1	ND	0.0004	0.00	#REF!	0.082	#REF!
2-Butanone (MEK)	0.0000000	0.00000000	809.9991	2080.527	1.88E-07	0.02	986	20	9.30E-08	0.00E+00	ND	1	0.1	0.00	1	2.30E-02	0.0004	1.00	ND	0.082	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	1.49E-06	0.02	986	20	7.38E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	9.00E-03	0.082	1.00
Acetone	0.0000	0.00000	4.5736	22.867	1.05E-06	0.02	986	20	5.20E-06	0.00E+00	ND	1	0.1	0.00	1	1.30E-01	0.0004	1.00	ND	0.082	0.00
Benzene	#NUM!	#NUM!	6.5231	65.231	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Carbon disulfide	Bench NA	Bench NA	NA	NA	1.30E-08	0.02	986	20	8.44E-06	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	7.85E-04	0.082	1.00
Chlorobenzene	#NUM!	Bench NA	21.2817	NA	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Chloroethane	Bench NA	Bench NA	NA	NA	1.29E-08	0.02	986	20	8.38E-06	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	7.75E-04	0.082	1.00
Chloroform	#NUM!	#NUM!	0.9802	10.751	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
cis-1,2-Dichloroethene	#NUM!	#NUM!	1.4636	13.363	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Ethylbenzene	#NUM!	#NUM!	82.1880	166.587	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
p/m-Xylene	#NUM!	#NUM!	0.5197	0.643	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Methylene chloride	#NUM!	#NUM!	2.8758	22.867	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Toluene	0.000000	0.0000000	8.4340	84.340	4.53E-06	0.02	986	20	2.24E-04	0.00E+00	ND	1	0.1	0.00	1	5.60E-03	0.0004	1.00	ND	0.082	0.00
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
Vinyl chloride	0.00001	0.000001	0.0777	0.777	1.12E-08	0.02	986	20	5.54E-06	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	6.75E-04	0.082	1.00
Xylene (total)	#NUM!	#NUM!	0.5197	0.643	0.00E+00	0.02	986	20	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00

Notes:
NA=Not available/applicable
Bench NA = Benchmark not available
ND=Not Detected or Determined
$NUM! = Not calculated because contaminant was not detected in any media. It is retained here for completeness

Samples Comprising Foraging Area	
Sediment Samples	All UDA samples
Fish Samples	1 UDA whole body composite (shad, drum, catfish)
Water Samples	All UDA samples

Food Chain Model Components:
Hazard Index Estimate = $\frac{\text{[Food Dose] + [Sediment Dose] + [Drinking Water Dose]}}{\text{Toxicological Benchmark}}$

Food and Water Ingestion Rate (EPA 1993)

**For the soil component, we convert the food ingestion rate from wet weight to dry weight (plant moisture=70%) and then calculate a soil ingestion rate from the soil proportion in the diet (dry weight) estimated in Beyer et al (1994)

Table D-45
Food Chain Model For Chronic Exposure
River Otter Analysis
Ingestion of Fish
Site-Potential Maximum Exposure (NO AUF)
Ecological Risk Assessment for WGK Plant
Sauget, Illinois

Contaminant	NOAEL Hazard Index	LOAEL Hazard Index	NOAEL Benchmark Dose mg/kg/d	LOAEL Benchmark Dose mg/kg/d	Forage Area Normalized Exposure Dose mg/kg/day	Site Area to Forage Area Ratio	Exposure Dose mg/kg/day	Food: Total Conc. In Food mg/kg wet	Food: Fish Concentration mg/kg wet	Food: Proportion Fish In Diet	Food: Ingestion Rate kg/kg/day	Food: Proportion of Dose	Sediment: RAF	Sediment: Conc. In Sediment mg/kg dry	Sediment: Dry Sediment Ing Rate kg/kg/day	Sediment: Proportion of Dose	Water: Conc. In Water mg/l	Water: Ingestion Rate l/kg/day	Water: Proportion of Dose
Dioxin (TEQ)	0.001	0.0001	0.0006	0.006	4.42E-07	1.00	4.42E-07	4.41E-06	4.41E-06	1	0.1	1.00	1	1.35E-06	0.0004	0.00	3.07E-10	0.082	0.00
2,4,5-T	0.0009	0.0003	1.3720	4.573	1.30E-03	1.00	1.30E-03	1.30E-02	1.30E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
2,4,5-TP (Silvex)	0.001	Bench NA	0.8800	NA	8.81E-04	1.00	8.81E-04	8.70E-03	8.70E-03	1	0.1	0.99	1	ND	0.0004	0.00	1.40E-04	0.082	0.01
2,4-D	0.004	0.0008	0.4573	2.287	1.74E-03	1.00	1.74E-03	0.00E+00	ND	1	0.1	0.00	1	2.30E+00	0.0004	0.53	1.00E-02	0.082	0.47
Dicamba	0.00005	0.00001	0.1867	0.622	9.02E-06	1.00	9.02E-06	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	1.10E-04	0.082	1.00
Dichloroprop	Bench NA	Bench NA	NA	NA	5.92E-04	1.00	5.92E-04	0.00E+00	ND	1	0.1	0.00	1	1.10E+00	0.0004	0.74	1.86E-03	0.082	0.26
MCPP	0.7	0.2	1.3720	4.116	9.24E-01	1.00	9.24E-01	8.60E+00	8.60E+00	1	0.1	0.93	1	1.60E+02	0.0004	0.07	ND	0.082	0.00
4,4'-DDD	Bench NA	Bench NA	NA	NA	6.71E-04	1.00	6.71E-04	6.70E-03	6.70E-03	1	0.1	1.00	1	1.60E-03	0.0004	0.00	ND	0.082	0.00
4,4'-DDE	0.02	0.003	0.3659	1.829	6.00E-03	1.00	6.00E-03	6.00E-02	6.00E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
4,4'-DDT	0.004	0.0007	0.3659	1.829	1.30E-03	1.00	1.30E-03	1.30E-02	1.30E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
alpha-BHC	0.03	0.003	0.0083	0.083	2.80E-04	1.00	2.80E-04	2.80E-03	2.80E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
alpha-Chlordane	0.001	0.0006	1.1383	2.277	1.40E-03	1.00	1.40E-03	1.40E-02	1.40E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Dieldrin	0.7	0.07	0.0091	0.091	6.40E-03	1.00	6.40E-03	6.40E-02	6.40E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endosulfan I	0.006	Bench NA	0.0686	NA	4.30E-04	1.00	4.30E-04	4.30E-03	4.30E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endrin	0.07	0.007	0.0228	0.228	1.60E-03	1.00	1.60E-03	1.60E-02	1.60E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Endrin aldehyde	0.04	0.004	0.0228	0.228	1.00E-03	1.00	1.00E-03	1.00E-02	1.00E-02	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
gamma-Chlordane	0.0007	0.0004	1.1383	2.277	8.10E-04	1.00	8.10E-04	8.10E-03	8.10E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Heptachlor epoxide	0.009	0.0009	0.0586	0.586	5.30E-04	1.00	5.30E-04	5.30E-03	5.30E-03	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
Methoxychlor	#NUM!	#NUM!	1.8294	3.669	0.00E+00	1.00	0.00E+00	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	ND	0.082	0.00
1,2,4-Trichlorobenzene	0.00002	0.000005	6.7667	24.614	1.25E-04	1.00	1.25E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	1.53E-03	0.082	1.00
1,2-Dichlorobenzene	0.0006	Bench NA	39.3317	NA	2.51E-02	1.00	2.51E-02	2.40E-01	2.40E-01	1	0.1	0.96	1	1.10E-01	0.0004	0.00	1.53E-02	0.082	0.04
1,4-Dichlorobenzene	0.001	0.0001	9.6043	96.043	1.30E-02	1.00	1.30E-02	1.30E-01	1.30E-01	1	0.1	1.00	1	8.15E-02	0.0004	0.00	ND	0.082	0.00
2,4,6-Trichlorophenol	Bench NA	Bench NA	NA	NA	8.44E-04	1.00	8.44E-04	0.00E+00	ND	1	0.1	0.00	1	4.70E-01	0.0004	0.22	6.00E-03	0.082	0.78
2,4-Dichlorophenol	Bench NA	Bench NA	NA	NA	2.10E-02	1.00	2.10E-02	1.90E-01	1.90E-01	1	0.1	0.87	1	1.00E+00	0.0004	0.02	3.10E-02	0.082	0.12
2,4-Dimethylphenol	Bench NA	Bench NA	NA	NA	3.38E-04	1.00	3.38E-04	0.00E+00	ND	1	0.1	0.00	1	8.00E-02	0.0004	0.10	3.70E-03	0.082	0.90
2,4-Dinitrotoluene	Bench NA	Bench NA	NA	NA	3.00E-04	1.00	3.00E-04	0.00E+00	ND	1	0.1	0.00	1	7.60E-01	0.0004	1.00	ND	0.082	0.00
2-Chlorophenol	Bench NA	Bench NA	NA	NA	1.70E-03	1.00	1.70E-03	0.00E+00	ND	1	0.1	0.00	1	3.60E-01	0.0004	0.08	2.00E-02	0.082	0.92
o-Cresol	0.000200	Bench NA	130.3371	NA	2.20E-02	1.00	2.20E-02	2.20E-01	2.20E-01	1	0.1	1.00	1	ND	0.0004	0.00	ND	0.082	0.00
2-Nitroaniline	Bench NA	Bench NA	NA	NA	3.04E-05	1.00	3.04E-05	0.00E+00	ND	1	0.1	0.00	1	7.60E-02	0.0004	1.00	ND	0.082	0.00
m &p-Cresol	Bench NA	Bench NA	NA	NA	1.22E-03	1.00	1.22E-03	0.00E+00	ND	1	0.1	0.00	1	8.00E-01	0.0004	0.26	1.10E-02	0.082	0.74
4-Bromophenylphenyl ether	Bench NA	Bench NA	NA	NA	3.88E-05	1.00	3.88E-05	0.00E+00	ND	1	0.1	0.00	1	9.69E-02	0.0004	1.00	ND	0.082	0.00
4-Chloroaniline	0.001	Bench NA	4.5736	NA	6.61E-03	1.00	6.61E-03	0.00E+00	ND	1	0.1	0.00	1	4.60E+00	0.0004	0.34	4.60E-02	0.082	0.66
bis(2-Ethylhexyl)phthalate	0.00004	0.000004	4.5286	45.286	1.80E-04	1.00	1.80E-04	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	2.20E-03	0.082	1.00
Di-n-butylphthalate	Bench NA	Bench NA	NA	NA	2.79E-06	1.00	2.79E-06	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	3.40E-04	0.082	1.00
Naphthalene	0.00002	0.00001	3.2472	6.403	7.60E-06	1.00	7.60E-06	0.00E+00	ND	1	0.1	0.00	1	1.90E-01	0.0004	1.00	ND	0.082	0.00
Nitrobenzene	Bench NA	Bench NA	NA	NA	7.63E-06	1.00	7.63E-06	0.00E+00	ND	1	0.1	0.00	1	ND	0.0004	0.00	9.30E-04	0.082	1.00
Pentachlorophenol	0.00005	0.00002	1.8294	5.945	8.83E-06	1.00	8.83E-06	0.00E+00	ND	1	0.1	0.00	1	4.80E-02	0.0004	0.20	8.70E-04	0.082	0.80
Phenol	Bench NA	Bench NA	NA	NA	3.47E-03	1.00	3.47E-03	0.00E+00	ND	1	0.1	0.00	1	6.60E+00	0.0004	0.66	1.80E-02	0.082	0.34
1,2-Dichloroethane	Bench NA	Bench NA	NA	NA	1.64E-04	1.00	1.64E-04	0.00E+00	ND	1	0.1	0.00	1	2.50E-01	0.0004	0.61	7.79E-04	0.082	0.39
2-Butanone (MEK)	0.00000004	0.00000002	800.9801	2080.527	3.64E-06	1.00	3.64E-06	0.00E+00	ND	1	0.1	0.00	1	9.10E-02	0.0004	1.00	ND	0.082	0.00
4-Methyl-2-pentanone (MIBK)	Bench NA	Bench NA	NA	NA	2.40E-04	1.00	2.40E-04	0.00E+00	ND	1	0.1	0.00	1	1.60E-01	0.0004	0.25	2.20E-03	0.082	0.75
Acetone	0.0003	0.00006	4.5736	22.867	1.20E-03	1.00	1.20E-03	0.00E+00	ND	1	0.1	0.00	1	3.00E+00	0.0004	1.00	ND	0.082	0.00
Benzene	0.00005	0.000005	6.5231	65.231	3.32E-04	1.00	3.32E-04	0.00E+00	ND	1	0.1	0.00	1	4.00E-01	0.0004	0.55	1.80E-03	0.082	0.45
Carbon disulfide	Bench NA	Bench NA	NA	NA	1.32E-06	1.00	1.32E-06	0.00E+00	ND	1	0.1	0.00	1	3.30E-03	0.0004	1.00	ND	0.082	0.00
Chlorobenzene	0.0002	Bench NA	21.2817	NA	4.85E-03	1.00	4.85E-03	0.00E+00	ND	1	0.1	0.00	1	7.20E+00	0.0004	0.59	2.40E-02	0.082	0.41
Chloroethane	Bench NA	Bench NA	NA	NA	7.60E-07	1.00	7.60E-07	0.00E+00	ND	1	0.1	0.00	1	1.90E-03	0.0004	1.00	ND	0.082	0.00
Chloroform	0.0000006	0.0000002	6.8802	16.751	3.88E-06	1.00	3.88E-06	0.00E+00	ND	1	0.1	0.00	1	9.70E-03	0.0004	1.00	ND	0.082	0.00
cis-1,2-Dichloroethene	0.000002	0.0000002	1.4636	13.283	2.32E-06	1.00	2.32E-06	0.00E+00	ND	1	0.1	0.00	1	5.80E-03	0.0004	1.00	ND	0.082	0.00
Ethylbenzene	0.000001	0.0000003	62.1980	186.887	6.40E-05	1.00	6.40E-05	0.00E+00	ND	1	0.1	0.00	1	6.30E-02	0.0004	0.51	3.80E-04	0.082	0.49
p/m-Xylene	0.0009	0.0007	0.5187	0.643	4.48E-04	1.00	4.48E-04	0.00E+00	ND	1	0.1	0.00	1	6.30E-01	0.0004	0.56	2.40E-03	0.082	0.44
Methylene chloride	0.000003	0.0000003	2.6756	22.867	6.80E-06	1.00	6.80E-06	0.00E+00	ND	1	0.1	0.00	1	1.70E-02	0.0004	1.00	ND	0.082	0.00
Tetrachloroethene	Bench NA	Bench NA	NA	NA	9.60E-06	1.00	9.60E-06	0.00E+00	ND	1	0.1	0.00	1	2.40E-02	0.0004	1.00	ND	0.082	0.00
Toluene	0.0005	0.00005	6.4340	64.340	3.20E-03	1.00	3.20E-03	0.00E+00	ND	1	0.1	0.00	1	7.80E+00	0.0004	0.96	1.70E-03	0.082	0.04
trans-1,2-Dichloroethene	Bench NA	Bench NA	NA	NA	3.64E-07	1.00	3.64E-07	0.00E+00	ND	1	0.1	0.00	1	9.10E-04	0.0004	1.00	ND	0.082	0.00
Trichloroethene	Bench NA	Bench NA	NA	NA	4.14E-05	1.00	4.14E-05	0.00E+00	ND	1	0.1	0.00	1	4.20E-02	0.0004	0.41	3.60E-04	0.082	0.59
Vinyl chloride	0.00002	0.000002	0.0777	0.777	1.60E-06	1.00	1.60E-06	0.00E+00	ND	1	0.1	0.00	1	4.00E-03	0.0004	1.00	ND	0.082	0.00
Xylene (total)	0.001	0.0008	0.5187	0.643	5.05E-04	1.00	5.05E-04	0.00E+00	ND	1	0.1	0.00	1	7.10E-01	0.0004	0.56	2.70E-03	0.082	0.44

Notes:
NA=Not available/applicable
Bench NA = Benchmark not available
ND=Not Detected or Determined

Samples Comprising Foraging Area	
Sediment Samples:	All PDA samples
Fish Samples:	3 PDA whole body composites (shad, drum, catfish)
Water Samples:	All PDA samples

Food Chain Model Components:
Hazard Index Estimate = [Food Dose] + [Sediment Dose] + [Drinking Water Dose] / Toxicological Benchmark

Food and Water Ingestion Rate (EPA 1993)

**For the soil component, we convert the food ingestion rate from wet weight to dry weight (plant moisture=70%) and then calculate a soil ingestion rate from the soil proportion in the diet (dry weight) estimated in Beyer et al. (1994)

APPENDIX E

BENTHIC MACROINVERTEBRATE REPORT

Aquatec Biological Sciences

Ecology | Environmental Toxicology | Natural Resource Assessments | Microbiology

February 15, 2001

Ted Wickwire
Menzie Cura & Associates
1 Courthouse Lane, Suite #2
Chelmsford, MA 01824

Dear Mr. Wickwire,

Enclosed please find the analytical report for benthic macroinvertebrate taxonomy for the twenty-one (21) Solutia/Sauget samples received at Aquatec Biological Sciences on October 28, 2000. All samples were picked in their entirety.

Quality Assurance repicks were performed on samples 18310 (SD-PDA-2-A) and 18858 (SD-DDA-13-B). The overall picking efficiency for both samples was 100%

If you have any questions or concerns, please contact me (ext. 20) or Dr. Phil Downey (ext. 16).

Sincerely,

Ryan H. Brown
Aquatic/Fisheries Biologist

273 Commerce Street, Williston, VT 05495 Tel: 802.860.1638 Fax: 802.658.3189

Aquatec Biological Sciences

Ecology | Environmental Toxicology | Natural Resource Assessments | Microbiology

Ted Wickwire
Menzie-Cura & Associates
1 Courthouse Lane
Chelmsford, MA 01824

Date : 2/15/2001
BTR No. : 04822
Project No. : 00049
No. of Samples : 21
Date Received : 10/28/2000

Reference: Sauget

Laboratory Sample ID : 18307
Client Sample ID : SD-DDA-1 - A
Remarks :

Date/Time Sample Collected : 10/27/2000 @ 10:30
Percent Sample Examined : 100
Sampling Depth (m) : Not Reported

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	Counted
Annelida	Oligochaeta	Tubificida	Naididae			*Dero digitata*	4
			Tubificidae			*Aulodrilus pigueti*	1
						Limnodrilus claparedianus	31
opoda	Insecta	Diptera	Ceratopogonidae			*Ceratopogon sp.*	?
						Probezzia sp.	
			Chironomidae	Chironominae	Chironomini	*Chironomus decorus*	20
				Tanypodinae	Tanypodini	*Tanypus neopunctipennis*	1
			Ephydridae			*Ephydra sp.*	1
						Sub-Total:	62
						Grand Total:	62

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Reference: Sauget

Date : 2/15/2001
BTR No. : 04822
Project No. : 00049
No. of Samples : 21
Date Received : 10/28/2000

Laboratory Sample ID : 18308
Client Sample ID : SD-DDA-1 - B
Remarks :

Date/Time Sample Collected : 10/27/2000 @ 10:30
Percent Sample Examined : 100
Sampling Depth (m) : Not Reported

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted
Annelida	Oligochaeta	Tubificida	Tubificidae			*Branchiura sowerbyi*	1
						Limnodrilus claparedianus	26
Arthropoda	Insecta	Diptera	Ceratopogonidae			*Ceratopogon sp.*	2
						Probezzia sp.	6
			Chironomidae	Chironominae	Chironomini	*Chironomus decorus*	18
		Ephemeroptera	Ephemeridae			*Hexagenia limbata*	1
						Sub-Total:	54
						Grand Total:	54

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Reference: Sauget

Date : 2/15/2001
BTR No. : 04822
Project No. : 00049
No. of Samples : 21
Date Received : 10/28/2000

Laboratory Sample ID : 18309
Client Sample ID : SD-DDA-1 - C
Remarks :

Date/Time Sample Collected : 10/27/2000 @ 10:30
Percent Sample Examined : 100
Sampling Depth (m) : Not Reported

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	Counted
Annelida	Oligochaeta	Tubificida	Naididae			*Dero digitata*	1
			Tubificidae			*Branchiura sowerbyi*	1
						Limnodrilus claparedianus	12
						Limnodrilus udekemianus	*
Arthropoda	Insecta	Diptera	Ceratopogonidae			*Ceratopogon sp.*	
			Chironomidae	Chironominae	Chironomini	*Chironomus decorus*	14
						Sub-Total:	32
						Grand Total:	32

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Date : 2/15/2001
BTR No. : 04822
Project No. : 00049
No. of Samples : 21
Date Received : 10/28/2000

Reference: Sauget

Laboratory Sample ID : 18310
Client Sample ID : SD-PDA-2 - A
Remarks :

Date/Time Sample Collected : 10/25/2000 @ 9:50:
Percent Sample Examined : 100
Sampling Depth (m) : Not Reported

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted
Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	Chironomini	*Cryptochironomus fulvus*	1
						Sub-Total:	1
QA Repick:							
No Organisms Found						*No Organisms Found*	0
						Sub-Total:	0
						Grand Total:	1

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Reference: Sauget

Date	: 2/15/2001
BTR No.	: 04822
Project No.	: 00049
No. of Samples	: 21
Date Received	: 10/28/2000

Laboratory Sample ID	: 18311	**Date/Time Sample Collected**	: 10/25/2000 @ 9:50:
Client Sample ID	: SD-PDA-2 - B	**Percent Sample Examined**	: 100
Remarks	:	**Sampling Depth (m)**	: Not Reported

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Cc
No Organisms Found						*No Organisms Found*	0
						Sub-Total:	0
						Grand Total:	0

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Reference: Sauget

Date : 2/15/2001
BTR No. : 04822
Project No. : 00049
No. of Samples : 21
Date Received : 10/28/2000

Laboratory Sample ID : 18312
Client Sample ID : SD-PDA-2 - C
Remarks :

Date/Time Sample Collected : 10/25/2000 @ 9:50:
Percent Sample Examined : 100
Sampling Depth (m) : Not Reported

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted
Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	Chironomini	*Cryptochironomus fulvus*	1
		Trichoptera	Hydropsychidae			*Potamyia flava*	5
						Sub-Total:	6
						Grand Total:	6

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Date : 2/15/2001
BTR No. : 04822
Project No. : 00049
No. of Samples : 21
Date Received : 10/28/2000

Reference: Sauget

Laboratory Sample ID : 18313
Client Sample ID : SD-PDA-7 - A
Remarks :

Date/Time Sample Collected : 10/24/2000 @ 9:35:
Percent Sample Examined : 100
Sampling Depth (m) : Not Reported

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	Co
Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	Chironomini	*Chernovskiia sp.*	1
						Paratendipes basidens	1
						Sub-Total:	2
						Grand Total:	2

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Date : 2/15/2001
BTR No. : 04822
Project No. : 00049
No. of Samples : 21
Date Received : 10/28/2000

Reference: Sauget

Laboratory Sample ID : 18846
Client Sample ID : SD-PDA-7 - B
Remarks :

Date/Time Sample Collected : 10/24/2000 @ 9:35:
Percent Sample Examined : 100
Sampling Depth (m) : Not Reported

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted
No Organisms Found						*No Organisms Found*	0
						Sub-Total:	0
						Grand Total:	0

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Reference: Sauget

Date : 2/15/2001
BTR No. : 04822
Project No. : 00049
No. of Samples : 21
Date Received : 10/28/2000

Laboratory Sample ID : 18847
Client Sample ID : SD-PDA-7 - C
Remarks :

Date/Time Sample Collected : 10/24/2000 @ 9:35:
Percent Sample Examined : 100
Sampling Depth (m) : Not Reported

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	Co
Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	Chironomini	*Paratendipes basidens*	1
						Sub-Total:	1
						Grand Total:	1

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Date : 2/15/2001
BTR No. : 04822
Project No. : 00049
No. of Samples : 21
Date Received : 10/28/2000

Reference: Sauget

Laboratory Sample ID : 18848
Client Sample ID : SD-PDA-8 - A
Remarks :

Date/Time Sample Collected : 10/26/2000 @ 10:35
Percent Sample Examined : 100
Sampling Depth (m) : Not Reported

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted
Mollusca	Pelecypoda	Prionodesmacea	Sphaeriidae			*Pisidium sp.*	1
						Sub-Total:	1
						Grand Total:	1

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Reference: Sauget

Date : 2/15/2001
BTR No. : 04822
Project No. : 00049
No. of Samples : 21
Date Received : 10/28/2000

Laboratory Sample ID : 18849
Client Sample ID : SD-PDA-8 - B
Remarks :

Date/Time Sample Collected : 10/26/2000 @ 10:35
Percent Sample Examined : 100
Sampling Depth (m) : Not Reported

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	Cd
Mollusca	Pelecypoda	Prionodesmacea	Sphaeriidae			*Pisidium sp.*	1
Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	Chironomini	*Paratendipes basidens*	1
						Sub-Total:	2
						Grand Total:	2

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Date	**: 2/15/2001**
BTR No.	**: 04822**
Project No.	**: 00049**
No. of Samples	**: 21**
Date Received	**: 10/28/2000**

Reference: Sauget

Laboratory Sample ID	: 18850	Date/Time Sample Collected	: 10/26/2000 @ 10:35
Client Sample ID	: SD-PDA-8 - C	Percent Sample Examined	: 100
Remarks	:	Sampling Depth (m)	: Not Reported

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted
No Organisms Found						*No Organisms Found*	0
						Sub-Total:	0
						Grand Total:	0

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Reference: Sauget

Date	**: 2/15/2001**
BTR No.	**: 04822**
Project No.	**: 00049**
No. of Samples	**: 21**
Date Received	**: 10/28/2000**

Laboratory Sample ID	**: 18851**	**Date/Time Sample Collected**	**: 10/23/2000 @ 3:40:**
Client Sample ID	**: SD-UDA-11 - A**	**Percent Sample Examined**	**: 100**
Remarks	**:**	***Sampling Depth (m)***	**: *Not Reported***

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	Count
No Organisms Found						*No Organisms Found*	0
						Sub-Total:	0
						Grand Total:	0

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Reference: Sauget

Date	**: 2/15/2001**
BTR No.	**: 04822**
Project No.	**: 00049**
No. of Samples	**: 21**
Date Received	**: 10/28/2000**

Laboratory Sample ID	: 18852	Date/Time Sample Collected	: 10/23/2000 @ 3:40:
Client Sample ID	: SD-UDA-11 - B	Percent Sample Examined	: 100
Remarks	:	Sampling Depth (m)	: Not Reported

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted
Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	Chironomini	*Paratendipes basidens*	8
						Sub-Total:	8
						Grand Total:	8

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Reference: Sauget

Date : 2/15/2001
BTR No. : 04822
Project No. : 00049
No. of Samples : 21
Date Received : 10/28/2000

Laboratory Sample ID	: 18853	Date/Time Sample Collected	: 10/23/2000 @ 3:40:
Client Sample ID	: *SD-UDA-11 - C*	*Percent Sample Examined*	: *100*
Remarks	:	Sampling Depth (m)	: Not Reported

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	Counted
Mollusca	Pelecypoda	Prionodesmacea	Sphaeriidae			*Pisidium sp.*	1
Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	Chironomini	*Paratendipes basidens*	6
						Sub-Total:	7
						Grand Total:	7

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Date : 2/15/2001
BTR No. : 04822
Project No. : 00049
No. of Samples : 21
Date Received : 10/28/2000

Reference: Sauget

Laboratory Sample ID : 18854
Client Sample ID : SD-UDA-12 - A
Remarks :

Date/Time Sample Collected : 10/26/2000 @ 3:05:
Percent Sample Examined : 100
Sampling Depth (m) : Not Reported

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted
Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	Chironomini	*Paratendipes basidens*	1
				Tanypodinae	Coelotanypodini	*Coelotanypus sp.*	1
		Ephemeroptera	Ephemeridae			*Hexagenia limbata*	2
						Sub-Total:	4
						Grand Total:	4

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Reference: Sauget

Date	**: 2/15/2001**
BTR No.	**: 04822**
Project No.	**: 00049**
No. of Samples	**: 21**
Date Received	**: 10/28/2000**

Laboratory Sample ID	**: 18855**	**Date/Time Sample Collected**	**: 10/26/2000 @ 3:05:**
Client Sample ID	**: SD-UDA-12 - B**	***Percent Sample Examined***	**: 100**
Remarks	:	**Sampling Depth (m)**	**: Not Reported**

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	C...ed
No Organisms Found						*No Organisms Found*	0
						Sub-Total:	0
						Grand Total:	0

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Reference: Sauget

Date : 2/15/2001
BTR No. : 04822
Project No. : 00049
No. of Samples : 21
Date Received : 10/28/2000

Laboratory Sample ID : *18856*
Client Sample ID : SD-UDA-12 - C
Remarks :

Date/Time Sample Collected : *10/26/2000 @ 3:05:*
Percent Sample Examined : 100
Sampling Depth (m) : Not Reported

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted
Annelida	Oligochaeta	Tubificida	Naididae			*Dero digitata*	1
			Tubificidae			*Limnodrilus claparedianus*	2
Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	Chironomini	*Cryptochironomus fulvus*	4
						Sub-Total:	7
						Grand Total:	7

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Date : 2/15/2001
BTR No. : 04822
Project No. : 00049
No. of Samples : 21
Date Received : 10/28/2000

Reference: Sauget

Laboratory Sample ID : 18857
Client Sample ID : SD-DDA-13 - A
Remarks :

Date/Time Sample Collected : 10/23/2000 @ 10:25
Percent Sample Examined : 100
Sampling Depth (m) : Not Reported

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	Count
Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	Chironomini	*Chernovskiia sp.*	1
						Sub-Total:	1
						Grand Total:	1

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Date : 2/15/2001
BTR No. : 04822
Project No. : 00049
No. of Samples : 21
Date Received : 10/28/2000

Reference: Sauget

Laboratory Sample ID : 18858
Client Sample ID : SD-DDA-13 - B
Remarks :

Date/Time Sample Collected : 10/23/2000 @ 10:25
Percent Sample Examined : 100
Sampling Depth (m) : Not Reported

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	# Counted
Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	Chironomini	*Paratendipes basidens*	6
		Trichoptera	Hydropsychidae			*Potamyia flava*	1
						Sub-Total:	7
Repick:							
Organisms Found						*No Organisms Found*	0
						Sub-Total:	0
						Grand Total:	7

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Reference: Sauget

Date	**: 2/15/2001**
BTR No.	**: 04822**
Project No.	**: 00049**
No. of Samples	**: 21**
Date Received	**: 10/28/2000**

Laboratory Sample ID	**: 18859**	**Date/Time Sample Collected**	**: 10/23/2000 @ 10:25**
Client Sample ID	**: SD-DDA-13 - C**	**Percent Sample Examined**	**: 100**
Remarks	**:**	**Sampling Depth (m)**	**: Not Reported**

Phylum	Class	Order	Family	Sub-Family	Tribe	Genus/Species/Variety	Counted
Mollusca	Pelecypoda	Prionodesmacea	Sphaeriidae			*Pisidium sp.*	1
Arthropoda	Insecta	Diptera	Chironomidae	Chironominae	Chironomini	*Paratendipes basidens*	9
						Sub-Total:	**10**
						Grand Total:	**10**

Submitted By: Philip C Downey

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APPENDIX F

FIELD DATA

Appendix F-1. USGS Gage and Flow Data for Year 2000
WGK Plant Ecological Risk Assessment
Sauget, Illinois

	Mean Gage Height (feet)	Mean Stream Flow (CFS)
Max	25.38	387,000.00
Min	-2.39	65,000.00
Avg	6.04	135,716.44

Date	Mean Gage Height	Mean Stream Flow (CFS)
01/01/2000	1.18	85,900
01/02/2000	2.25	95,100
01/03/2000	2.94	101,000
01/04/2000	3.13	103,000
01/05/2000	1.95	92,400
01/06/2000	1.72	90,400
01/07/2000	1.91	92,000
01/08/2000	0.71	82,100
01/09/2000	1.85	91,500
01/10/2000	2.48	97,000
01/11/2000	2.4	96,300
01/12/2000	1.56	88,900
01/13/2000	2.45	96,800
01/14/2000	2.29	95,300
01/15/2000	2.14	93,900
01/16/2000	1.14	85,500
01/17/2000	0.43	79,700
01/18/2000	0.82	82,900
01/19/2000	0.64	81,400
01/20/2000	1.62	89,400
01/21/2000	1.09	85,100
01/22/2000	0.53	80,500
01/23/2000	0.33	79,000
01/24/2000	0.24	78,200
01/25/2000	-0.01	76,100
01/26/2000	-0.77	70,100
01/27/2000	0.44	79,800
01/28/2000	1.67	89,700
01/29/2000	1.67	89,600
01/30/2000	1.34	86,900
01/31/2000	1.12	85,200
02/01/2000	0.41	79,500
02/02/2000	0.05	76,500
02/03/2000	0.9	83,400
02/04/2000	1.52	88,400
02/05/2000	0.72	82,000
02/06/2000	0.83	82,800
02/07/2000	1.44	87,700
02/08/2000	0.5	80,200
02/09/2000	0.24	78,100
02/10/2000	-0.2	74,500
02/11/2000	0.18	77,500
02/12/2000	-0.17	74,700
02/13/2000	0.47	79,800
02/14/2000	0.45	79,700
02/15/2000	0.08	76,700
02/16/2000	0.47	79,900
02/17/2000	0.24	78,000

Appendix F-1. USGS Gage and Flow Data for Year 2000
WGK Plant Ecological Risk Assessment
Sauget, Illinois

Date	Mean Gage Height	Mean Stream Flow (CFS)
02/18/2000	3.13	103,000
02/19/2000	4.27	113,000
02/20/2000	5.35	122,000
02/21/2000	4.13	111,000
02/22/2000	2.94	101,000
02/23/2000	1.81	90,600
02/24/2000	1.84	91,000
02/25/2000	1.8	90,500
02/26/2000	4.16	112,000
02/27/2000	7.14	140,000
02/28/2000	9.48	165,000
02/29/2000	10.04	171,000
03/01/2000	10.09	172,000
03/02/2000	9.03	160,000
03/03/2000	9.06	160,000
03/04/2000	10.25	174,000
03/05/2000	10.19	173,000
03/06/2000	10.07	172,000
03/07/2000	9.05	160,000
03/08/2000	8.73	157,000
03/09/2000	8.36	153,000
03/10/2000	7.73	146,000
03/11/2000	7.54	144,000
03/12/2000	7.73	147,000
03/13/2000	7.4	143,000
03/14/2000	6.44	133,000
03/15/2000	5.44	123,000
03/16/2000	5.18	121,000
03/17/2000	5.89	127,000
03/18/2000	5.94	128,000
03/19/2000	6.18	130,000
03/20/2000	7.12	140,000
03/21/2000	7.17	140,000
03/22/2000	6.17	130,000
03/23/2000	6.66	135,000
03/24/2000	6.9	137,000
03/25/2000	6.3	131,000
03/26/2000	6.05	129,000
03/27/2000	6.24	130,000
03/28/2000	4.87	118,000
03/29/2000	4.72	116,000
03/30/2000	5.75	126,000
03/31/2000	6.85	137,000
04/01/2000	7.04	139,000
04/02/2000	6.32	131,000
04/03/2000	5.64	125,000
04/04/2000	5.3	121,000
04/05/2000	4.12	111,000
04/06/2000	4.84	117,000
04/07/2000	4.72	116,000
04/08/2000	4.96	118,000
04/09/2000	4.13	111,000
04/10/2000	3.7	107,000

Appendix F-1. USGS Gage and Flow Data for Year 2000
WGK Plant Ecological Risk Assessment
Sauget, Illinois

Date	Mean Gage Height	Mean Stream Flow (CFS)
04/11/2000	3.31	104,000
04/12/2000	3.69	107,000
04/13/2000	3.67	107,000
04/14/2000	3.75	107,000
04/15/2000	2.86	99,500
04/16/2000	2.39	95,200
04/17/2000	3.03	101,000
04/18/2000	3.12	102,000
04/19/2000	2.28	94,200
04/20/2000	4.06	110,000
04/21/2000	4.83	117,000
04/22/2000	7.33	142,000
04/23/2000	10.2	173,000
04/24/2000	10.58	177,000
04/25/2000	9.17	161,000
04/26/2000	9.55	165,000
04/27/2000	8.44	153,000
04/28/2000	8.8	157,000
04/29/2000	8.79	157,000
04/30/2000	9.16	161,000
05/01/2000	9.25	162,000
05/02/2000	7.87	147,000
05/03/2000	7.69	145,000
05/04/2000	7.16	140,000
05/05/2000	6.31	131,000
05/06/2000	5.42	122,000
05/07/2000	6.98	138,000
05/08/2000	11.27	185,000
05/09/2000	7.61	144,000
05/10/2000	5.64	124,000
05/11/2000	4.34	112,000
05/12/2000	5.5	123,000
05/13/2000	6.06	128,000
05/14/2000	5.18	120,000
05/15/2000	5.56	123,000
05/16/2000	5.14	120,000
05/17/2000	5.53	123,000
05/18/2000	5.41	122,000
05/19/2000	5.5	123,000
05/20/2000	5.17	120,000
05/21/2000	6.19	130,000
05/22/2000	7.56	144,000
05/23/2000	8.98	158,000
05/24/2000	9.29	162,000
05/25/2000	9.7	166,000
05/26/2000	9.63	166,000
05/27/2000	11.22	184,000
05/28/2000	14.56	228,000
05/29/2000	14.84	232,000
05/30/2000	13.09	208,000
05/31/2000	12.04	194,000
06/01/2000	10.3	173,000
06/02/2000	10.53	176,000

Appendix F-1. USGS Gage and Flow Data for Year 2000
WGK Plant Ecological Risk Assessment
Sauget, Illinois

Date	Mean Gage Height	Mean Stream Flow (CFS)
06/03/2000	12.16	196,000
06/04/2000	12.07	195,000
06/05/2000	12.47	200,000
06/06/2000	13.43	212,000
06/07/2000	13.59	214,000
06/08/2000	13.55	214,000
06/09/2000	13.76	217,000
06/10/2000	13.99	220,000
06/11/2000	14.22	223,000
06/12/2000	14.8	231,000
06/13/2000	14.98	233,000
06/14/2000	14.86	232,000
06/15/2000	15.01	234,000
06/16/2000	15.64	243,000
06/17/2000	16.87	260,000
06/18/2000	17.88	274,000
06/19/2000	18.41	281,000
06/20/2000	18.65	285,000
06/21/2000	19.47	296,000
06/22/2000	20.14	305,000
06/23/2000	20.54	311,000
06/24/2000	22.8	344,000
06/25/2000	23.62	356,000
06/26/2000	22.96	346,000
06/27/2000	23.3	351,000
06/28/2000	24.88	378,000
06/29/2000	25.38	387,000
06/30/2000	25.14	382,000
07/01/2000	24.23	366,000
07/02/2000	23	347,000
07/03/2000	22.04	332,000
07/04/2000	21.03	318,000
07/05/2000	20.24	307,000
07/06/2000	19.34	294,000
07/07/2000	18.76	286,000
07/08/2000	18.95	289,000
07/09/2000	18.86	287,000
07/10/2000	18.13	277,000
07/11/2000	16.13	249,000
07/12/2000	15.44	239,000
07/13/2000	15.79	244,000
07/14/2000	15.58	241,000
07/15/2000	15.56	241,000
07/16/2000	15.72	243,000
07/17/2000	15.76	244,000
07/18/2000	15.64	242,000
07/19/2000	16.74	257,000
07/20/2000	16.98	261,000
07/21/2000	16.94	260,000
07/22/2000	16.32	252,000
07/23/2000	15.54	241,000
07/24/2000	14.58	227,000
07/25/2000	12.95	205,000

Appendix F-1. USGS Gage and Flow Data for Year 2000
WGK Plant Ecological Risk Assessment
Sauget, Illinois

Date	Mean Gage Height	Mean Stream Flow (CFS)
07/26/2000	11.16	183,000
07/27/2000	9.48	163,000
07/28/2000	8.42	152,000
07/29/2000	8.61	154,000
07/30/2000	6.93	136,000
07/31/2000	6.8	135,000
08/01/2000	6.95	136,000
08/02/2000	6.13	128,000
08/03/2000	6.61	133,000
08/04/2000	6.71	134,000
08/05/2000	6.4	131,000
08/06/2000	5.59	123,000
08/07/2000	4.53	113,000
08/08/2000	6.28	130,000
08/09/2000	7.84	146,000
08/10/2000	9.31	161,000
08/11/2000	8.19	149,000
08/12/2000	6.72	134,000
08/13/2000	5.99	126,000
08/14/2000	4.09	109,000
08/15/2000	2.28	93,000
08/16/2000	2.84	98,000
08/17/2000	3.83	107,000
08/18/2000	4.87	116,000
08/19/2000	4.97	117,000
08/20/2000	5.05	118,000
08/21/2000	4.7	115,000
08/22/2000	4.65	114,000
08/23/2000	4.81	116,000
08/24/2000	5.9	126,000
08/25/2000	7.83	145,000
08/26/2000	9.63	164,000
08/27/2000	8.15	149,000
08/28/2000	5.39	121,000
08/29/2000	4.13	110,000
08/30/2000	3.28	102,000
08/31/2000	2.57	95,500
09/01/2000	3.46	103,000
09/02/2000	3.74	106,000
09/03/2000	3.27	102,000
09/04/2000	3.04	99,600
09/05/2000	1.82	89,000
09/06/2000	0.57	78,800
09/07/2000	1.22	84,000
09/08/2000	0.35	77,000
09/09/2000	0.75	80,100
09/10/2000	1.55	86,600
09/11/2000	2.3	92,800
09/12/2000	2.3	92,900
09/13/2000	1.78	88,400
09/14/2000	3.27	102,000
09/15/2000	3.64	105,000
09/16/2000	4.22	110,000

Appendix F-1. USGS Gage and Flow Data for Year 2000
WGK Plant Ecological Risk Assessment
Sauget, Illinois

Date	Mean Gage Height	Mean Stream Flow (CFS)
09/17/2000	3.71	106,000
09/18/2000	4.76	115,000
09/19/2000	4.8	115,000
09/20/2000	4.1	109,000
09/21/2000	3.3	102,000
09/22/2000	3.2	101,000
09/23/2000	3.05	99,500
09/24/2000	2.02	90,400
09/25/2000	2.67	96,300
09/26/2000	4.52	113,000
09/27/2000	4.79	115,000
09/28/2000	3.72	106,000
09/29/2000	3.23	101,000
09/30/2000	3	99,000
10/01/2000	2.84	103,000
10/02/2000	2.5	99,800
10/03/2000	1.54	91,900
10/04/2000	1.33	90,000
10/05/2000	4.4	115,000
10/06/2000	4.65	117,000
10/07/2000	3.86	110,000
10/08/2000	3.96	111,000
10/09/2000	2.47	98,600
10/10/2000	1.27	89,500
10/11/2000	0.89	86,700
10/12/2000	1.19	88,900
10/13/2000	1.16	88,700
10/14/2000	1.39	90,400
10/15/2000	1.5	91,200
10/16/2000	3.08	103,000
10/17/2000	3.73	109,000
10/18/2000	3.41	106,000
10/19/2000	2.59	99,600
10/20/2000	1.47	90,900
10/21/2000	0.57	84,400
10/22/2000	0.08	80,900
10/23/2000	0.57	84,400
10/24/2000	2.03	95,200
10/25/2000	1.92	94,300
10/26/2000	1.41	90,500
10/27/2000	1.05	87,800
10/28/2000	1.42	90,600
10/29/2000	1.56	91,600
10/30/2000	2.21	96,500
10/31/2000	2.56	99,300
11/01/2000	1.67	92,600
11/02/2000	0.56	84,300
11/03/2000	0.42	83,400
11/04/2000	0.81	86,200
11/05/2000	1.28	89,500
11/06/2000	2.37	97,900
11/07/2000	4.39	114,000
11/08/2000	3.46	107,000

Appendix F-1. USGS Gage and Flow Data for Year 2000
WGK Plant Ecological Risk Assessment
Sauget, Illinois

Date	Mean Gage Height	Mean Stream Flow (CFS)
11/09/2000	4.2	113,000
11/10/2000	5.06	120,000
11/11/2000	6.37	132,000
11/12/2000	7.07	139,000
11/13/2000	8.02	149,000
11/14/2000	7.03	139,000
11/15/2000	5.83	127,000
11/16/2000	5.95	128,000
11/17/2000	6.04	129,000
11/18/2000	5.65	126,000
11/19/2000	5.95	128,000
11/20/2000	6.39	132,000
11/21/2000	5.12	121,000
11/22/2000	5.13	121,000
11/23/2000	4.18	113,000
11/24/2000	3.38	106,000
11/25/2000	2.8	101,000
11/26/2000	3.25	105,000
11/27/2000	3.46	107,000
11/28/2000	2.92	102,000
11/29/2000	3.19	104,000
11/30/2000	2.98	103,000
12/01/2000	2.85	102,000
12/02/2000	3.4	106,000
12/03/2000	2.86	102,000
12/04/2000	3.35	106,000
12/05/2000	3.2	104,000
12/06/2000	2.14	96,000
12/07/2000	0.99	87,500
12/08/2000	-0.39	77,800
12/09/2000	-0.97	73,900
12/10/2000	-1.35	71,400
12/11/2000	-1.14	72,800
12/12/2000	-0.59	76,500
12/13/2000	-2.26	65,800
12/14/2000	-2.39	65,000
12/15/2000	-2.23	66,000
12/16/2000	-1.92	67,900
12/17/2000	-0.73	75,500
12/18/2000	-0.56	76,700
12/19/2000	-0.66	76,000
12/20/2000	-1.07	73,200
12/21/2000	-1.23	72,200
12/22/2000	-0.78	75,200
12/23/2000	-0.12	79,600
12/24/2000	0.26	82,200
12/25/2000	-0.25	78,700
12/26/2000	-0.67	75,900
12/27/2000		
12/28/2000	-1.22	72,300
12/29/2000	-0.67	75,900
12/30/2000	-0.74	75,400
12/31/2000	-1.02	73,500

Table F-2. Summary of Grain Size and Total Organic Carbon Analaysis
W.G. Krummrich Plant Ecological Risk Assessment
Sauget, Illinois

Site ID		Sediment Description	%Clay	%Silt	%Fine Sand	%Medium Sand	%Coarse Sand	%Fine Gravel	TOC (mg/kg dw)	%TOC
Sand	SD-UDA-11	Fine Sand	0.65	0.45	93.35	4.85	0.5	0.2	438	0.0438
Soft	SD-UDA-12	Silt With Sand	24.2	56.7	18.8	0.3	0	0	11800	1.18
Northern Sand Transect	SD-PDA-10	Fine Sand	1	0.5	91.4	6.9	0.2	0	433	0.0433
	SD-PDA-9	Medium to Fine Sand	0	0.6	64.4	34.7	0.3	0	352	0.0352
	SD-PDA-8	Fine Sand	0	1.3	92.7	5.9	0.1	0	437	0.0437
Mid Sand Transect	SD-PDA-7	Medium to Fine Sand	1	0.1	69	28.8	1	0.1	536	0.0536
	SD-PDA-6	Medium to Fine Sand	0.5	0.2	44.5	49.9	4.9	0	324	0.0324
	SD-PDA-5	Medium to Fine Sand, Trace Gravel	0.8	1.1	80.2	11.6	2.2	4.1	700	0.07
Southern Soft Transect	SD-PDA-4	Clayey Medium to Fine Sand	8	4.6	42.4	40.1	4	0.9	4280	0.428
	SD-PDA-3	Clayey Medium to Fine Sand	5.85	3.4	41.15	40.85	4.5	4.25	2805	0.2805
	SD-PDA-2	Clayey Fine Sand	22.1	20.5	57	0.4	0	0	10200	1.02
Sand	SD-DDA-13	Fine Sand	1	0.4	94.8	3.7	0.1	0	311	0.0311
Soft	SD-DDA-1	Silt, Trace Sand	24.9	67.2	7.5	0.4	0	0	8170	0.817

Figure F-2. Grain Size Data. W.G. Krummrich Plant ERA. Sauget, Illinois

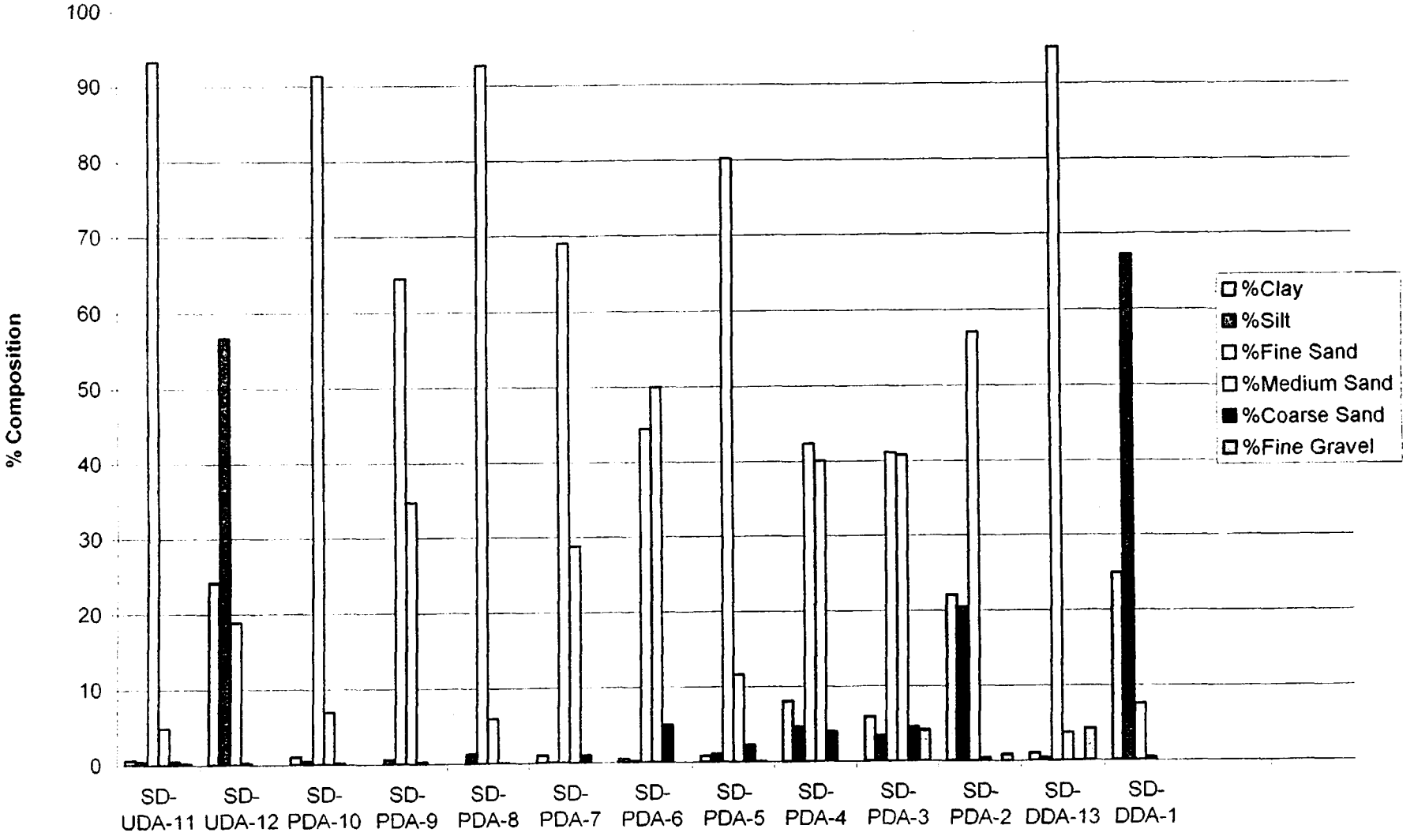

Table F-3. Water Quality Data
W.G. Krummrich Plant Ecological Risk Assessment
Suaget, Illinois

	Station ID	Depth (feet)	Temp (C)	DO (mg/L)	DO%	Conductivity (uS/cm)	SpCond (uS/cm @ 25 C)	pH	ORP (mV)	TDS (g/L)	Turb (ntu)
Sand	UDA-11	0.9	17.03	11.65	123.9	415	490	7.42	295	0.318	42.4
	UDA-11	7.5	16.99	10.78	112.7	415	488	7.36	296.8	0.317	42.6
	UDA-11	11.3	16.99	10.57	110.4	414	488	7.38	299.4	0.317	47.8
Soft	UDA-12	0	17.79	9.93	106.8	381	443	8.06	235.1	0.289	35
	UDA-12	3.9	17.79	9.89	104.4	382	445	8.06	229.1	0.29	40.3
	UDA-12	7.2	17.77	7.62	78.2	383	447	7.89	244.2	0.29	37.8
Northern Sand Transect	PDA-10	0.5	17.41	9.14	96.3	379	441	8.06	198.6	0.286	36.8
	PDA-10	6.2	17.4	9.17	95.3	376	439	8.04	198.1	0.286	37.9
	PDA-10	13.3	17.37	9.11	95	378	443	7.97	203.5	0.287	37
	PDA-9	0.1	17.5	9.44	99.5	393	463	8.11	136.8	0.302	34.3
	PDA-9	6	17.49	9.45	98.6	408	475	8.11	133.3	0.308	35
	PDA-9	13	17.48	9.51	99.4	411	482	7.99	141	0.313	36.3
	PDA-8	0.2	17.43	9.6	101	435	509	8.14	150	0.331	34.4
	PDA-8	5.1	17.44	9.65	99.4	442	515	8.14	146.3	0.334	36.2
	PDA-8	9	17.43	9.47	99.1	446	520	8.05	146.4	0.337	35.8
	PDA-8	10.3	17.45	8.64	92.8	454	530	8.11	145.1	0.344	39.2
Mid Sand Transect	PDA-7	1.1	17.3	9.37	99.7	399	472	7.82	169	0.307	38.1
	PDA-7	7.1	16.86	9.43	97.9	402	476	7.78	175.6	0.31	37.3
	PDA-7	11	16.86	9.32	96.1	401	478	7.76	177.2	0.31	37.1
	PDA-6	1.5	16.96	9.55	99.7	415	488	7.86	178.3	0.317	34.1
	PDA-6	4.6	16.95	9.62	100.4	412	487	7.84	176.6	0.318	35.4
	PDA-6	8.8	16.9	9.78	100.8	407	483	7.72	170.3	0.314	35.6
	PDA-5	0.4	17.38	8.98	93.8	417	486	8.02	171.2	0.316	35.5
	PDA-5	4.8	17.37	9.21	96.6	421	492	8	158.9	0.32	38.4
	PDA-5	9	17.33	8.79	91.5	417	490	7.67	304.7	0.318	36
Southern Soft Transect	PDA-4	0.5	17.55	9.42	101.4	442	516	7.98	184.6	0.336	32.2
	PDA-4	4.6	17.53	9.54	100.2	443	520	7.82	240.7	0.337	34.4
	PDA-3	0.4	17.34	9.55	102.5	442	515	7.97	82.9	0.335	47.6
	PDA-3	2.6	17.25	9.82	103.4	439	515	7.79	93.1	0.335	35
	PDA-2	0.3	17.17	9.35	102	440	516	7.94	97.3	0.335	29.1
	PDA-2	5.2	17.15	9	92.2	438	515	7.88	103.9	0.335	30.7
	PDA-2	9.2	17.14	9.27	95.6	446	521	7.69	170.5	0.339	35.5
Sand	DDA-13	1.25	16.6	9.36	93.6	435	517	7.81	193.4	0.336	46.9
	DDA-13	2.9	16.6	9.11	93.6	437	519	7.82	193.5	0.337	48
	DDA-13	6.8	16.6	9.08	93.4	434	518	7.83	192.8	0.336	50.2
Soft	DDA-1	0.8	17.34	8.11	85.3	463	541	7.65	193.6	0.352	42.9
	DDA-1	2.7	17.13	7.77	81.6	475	563	7.55	170.9	0.367	55.6

		Depth (feet)	Temp (C)	DO (mg/L)	DO%	Conductivity (uS/cm)	SpCond (uS/cm @ 25 C)	pH	ORP (mV)	TDS (g/L)	Turb (ntu)
All Sand Stations, Site and Reference	Minimum	0.1	16.6	8.64	91.5	376	439	7.36	133.3	0.286	34.1
	Maximum	13.3	17.5	11.65	123.9	454	530	8.14	304.7	0.344	50.2
	Average	5.71	17.16	9.51	99.22	414.52	487.56	7.87	190.07	0.32	38.73
All Soft Stations, Site and Reference	Minimum	0	17.13	7.62	78.2	381	443	7.55	82.9	0.289	29.1
	Maximum	9.2	17.79	9.93	106.8	475	563	8.06	244.2	0.367	55.6
	Average	3.12	17.41	9.11	96.13	431.17	504.75	7.86	170.49	0.33	38.01

Genus	Species	Family	Name	Feeding Group	Length Range (inches)	Weight Range (pounds)	Habitat	Food Base
Ictiobus	niger	Catostomidae	Black Buffalo	Omnivore/Bottom Feeder.	Slightly larger than Smallmouth Buffalo		Least abundant buffalo in MO. More common below mouth of the Missouri R. Prefers stronger currents than other buffalofishes. May be more of a bottom feeder than the bigmouth may prefer deeper water than smallmouth.	Small crustaceans and algae. Others???
Ictiobus	cyprinellus	Catostomidae	Bigmouth Buffalo	Benthic invertivore, high incidental sediment ingestion. Food fish	15 to 27 inches	2 to 14	Abundant in Mississippi River. Deeper pools, lowlands, artificial impoundments. Prefers standing water more than other species of buffalo fishes.	Young feed on midges (diptera larvae) and other benthic inverts. Older fish feed primarily on small crustaceans. May feed at water/sediment interface, if so ingesting any material (plant material, other benthic inverts)
Ictiobus	bubalus	Catostomidae	Smallmouth Buffalo	Omnivore/Bottom feeder. High incidental sediment ingestion.	15.3 to 30.8	2.2 to >17.6	Most abundant buffalofish in Mississippi River, prefer clearer water than bigmouth and found in less strong currents than the black buffalo.	Opportunist. Small crustaceans, algae, insect larvae, detritus, lots of ingested sand. Bottom feeder
Carpiodes	cyprinus	Catostomidae	Quillback	Omnivore	12 to 17	0.8 to 2.3	Widely distributed in MO. Fairly common in Mississippi River. Characteristic of moderately clear, highly productive streams with large pools and stable substrate composed of gravel and coarse material.	Probably feed on aquatic insects, snails, small clams, and algae along with large quantities of debris
Pomoxis	spp	Centarchidae	Crappie	Predator	up to 15	up to 2	Natural Lowland lakes, navigation pools of upper Mississippi River, large artificial impoundments. Avoids excessive turbidity.	Small fish, aquatic insects, microcrustaceans
Dorosoma	cepedianum	Clupeidae	Gizzard Shad	Planktivore/ Omnivore.	9 to 14	<3	One of the most common and widely distributed of MO fishes. Most abundant in Mississippi R. Prefers quiet water such as lowlands, artificial impoundments, pools, backwater areas. Also prefers low turbidity and highly productive areas.	Young feed on protozoa and zooplankton. Older individuals feed on free floating algae and small aquatic insect larvae, detritus, zooplankton.
Ctenpharyngodon	idella	Cyprinidae	Grass Carp	Omnivore/ Herbivore	up to 4 feet	up to 57.5	Introduced from Asia before 1971. Large rivers	Young feed on small crustaceans and other inverts. Adults greater than 8 inches prefer aquatic vegetation and "animal material". Voracious consumers, can consume more than its body weight in a day
Cyprinus	carpio	Cyprinidae	Common Carp	Omnivore/ Scavenger	12 to 25	1 to 8	Intro from Asia in 1879. Most abundant commercial fish in lbs in Mississippi R. Abundance declining. Prefer large streams, lakes, artificial impoundments. Deeper pools, piles of drift, logs, other cover. Prefer shallow waters. Migratory.	Feed mostly on bottom and suck on floating objects. Aquatic insects are major part of diet along with plant material. Found near cannery and slaughterhouse waste runoff. Eat fish eggs
Hiodon	alosoides	Hiodontidae	Gold Eye					
Ictalurus	furcatus	Ictalundae	Blue Catfish	Predator. Very important commercial food fish	20 to >40	3 to >40	Big river fish, prefers a good current, silt-free sand and gravel and rubble	fish, immature aquatic insects, crayfish, clams, mussels. Larger individuals consume fish and larger inverts
Ameiurus	catus	Ictalundae	White Catfish	Omnivore			Native to Atlantic coast from New York to Florida. In MO, found in large rivers and reservoirs	Aquatic invertebrates, fish, and plants
Pylodictis	olivaris	Ictalundae	Flathead Catfish	Predator. Important commercial and game fish	15 to 45	1 to >45	One of the most abundant and larger catfishes in the Mississippi River. Prefers large rivers. Avoids high gradients or intermittent flow. Adults prefer pools, submerged logs, piles of drift, and other cover. Territorial. Active at night.	Not a scavenger. Will rarely feed on anything dead or decaying. Feed mainly on fish and crayfish.
Ictalurus	punctatus	Ictalundae	Channel Catfish	Omnivore/Bottomfeeder/Scavenger. Very important commercial food fish and game fish.	12 to 32	0.8 to >15	Most abundant and distributed catfish in MO. Large, turbid streams with low or moderate gradients. Large pools, deep water, around submerged logs and other cover. Sedentary during the day, move into riffles and pools to feed at night.	Bottom feeder. fish, insects, crayfish, mollusks, plant material. A highly varied diet.
Morone	chrysops	Moronidae	White Bass	Piscivore. Game fish	9 to 15	0.25 to >1.25	Abundant in Mississippi River. Avoid turbidity, prefer firm sandy or rocky bottom.	Feeds in early morning and late evening, near surface. Consumes forage fish, crustaceans, emerging aquatic insects. Adults feed predominately on fish
Polyodon	spathula	Polyodontidae	Paddle Fish	Filter feeder	up to 7 feet	up to 160	Confined to Mississippi Valley, highly mobile, primarily open water.	Microcrustaceans and insect larvae
Aplodinotus	grunniens	Sciaenidae	Drum	Invertivore. Game fish	12 to 20	<1 to 5	Abundant in Mississippi River. Second most abundant commercial fish. Avoids strong currents but tolerant of high turbidity. Spends most of the time on or near the bottom.	Bottom feeder, adapted to feeding on molluscs. Also feed on fish, crayfish, and aquatic insect larvae
Alosa	chrysochloris	Clupeidae	Skipjack Herring	Piscivore	12 to 16		Abundant in Mississippi River. Highly migratory within large rivers. Open water fish, congregates in large numbers. Prefers swift currents such as below dams and at the ends of wing dams.	Mainly small fish
Scaphirhynchus	pl[illegible]thus	Acipenseridae	Shovelnose sturgeon		21	1.5	Most abundant sturgeon in Mississippi River. Open channels of large rivers, dwells on the bottom, often in swift currents and/or with sand or gravel bottom. Tolerant of high turbidity.	Bottom Feeder, mainly aquatic insect larvae (Ephemeroptera, Diptera, Trichoptera)

Table F-5. Summary of Fish Captured
W.G. Krummrich Plant Ecological Risk Assessment
Sauget, Illinois

Location ID	Fish Number	Sample ID	Genus	Species	Name	Length (Inches)	Weight (Grams)	Condition of Fish	Stomach Contents	Total Composite Weight	Fishing Gear Used
PDA-5	11	PDA Buffalo Fillet Comp#1	Ictiobus	cyprinellus	Bigmouth Buffalo	17	1155.4	good	Empty	3683.4	
PDA-5	12	PDA Buffalo Fillet Comp#1	Ictiobus	cyprinellus	Bigmouth Buffalo	19	1725	good	Empty	3683.4	
PDA-5	116	PDA Buffalo Fillet Comp#1	Ictiobus	cyprinellus	Bigmouth Buffalo	14.75	803	good		3683.4	
DDA-2	36	DDA DA-1 Buffalo Fillet	Ictiobus	cyprinellus	Bigmouth Buffalo	13.75	575.9	good		3631.9	
DDA-2	37	DDA DA-1 Buffalo Fillet	Ictiobus	cyprinellus	Bigmouth Buffalo	17	1094	good		3631.9	
DDA-2	38	DDA DA-1 Buffalo Fillet	Ictiobus	cyprinellus	Bigmouth Buffalo	19.25	1962	good		3631.9	
DDA-2	39		Ictiobus	cyprinellus	Bigmouth Buffalo	15	810.7	good			
DDA-5	91		Ictiobus	cyprinellus	Bigmouth Buffalo	22	3421	good			Trammel Net
DDA-5	92		Ictiobus	cyprinellus	Bigmouth Buffalo	19.5	2056.9	good			Trammel Net
PDA-4	82		Ictiobus	cyprinellus	Bigmouth Buffalo	15	839.6	good			Trammel Net
PDA-6	40	PDA Buffalo Fillet Comp#2	Ictiobus	cyprinellus	Bigmouth Buffalo	18	1639.7	good		3174.1	
PDA-6	41	PDA Buffalo Fillet Comp#2	Ictiobus	cyprinellus	Bigmouth Buffalo	18	1534.4	good		3174.1	
UDA-2	1	UDA Buffalo Fillet	Ictiobus	cyprinellus	Bigmouth Buffalo	23.5	3303	good	algae	8346	
UDA-2	3	UDA Buffalo Fillet	Ictiobus	cyprinellus	Bigmouth Buffalo	17.5	1334	good	algae	8346	
UDA-2	4	UDA Buffalo Fillet	Ictiobus	cyprinellus	Bigmouth Buffalo	15.25	725	good	algae	8346	
UDA-2	5	UDA Buffalo Fillet	Ictiobus	cyprinellus	Bigmouth Buffalo	17.75	1226	good		8346	
UDA-2	6	UDA Buffalo Fillet	Ictiobus	cyprinellus	Bigmouth Buffalo	18.75	1758	good		8346	
UDA-2	7		Ictiobus	cyprinellus	Bigmouth Buffalo	19	1749	good			
UDA-2	8		Ictiobus	cyprinellus	Bigmouth Buffalo	19	2039.6	good			
UDA-2	9		Ictiobus	cyprinellus	Bigmouth Buffalo	20	2280	good			
UDA-2	10		Ictiobus	cyprinellus	Bigmouth Buffalo	15.5	882.2	good			
PDA-5	113	PDA Buffalo Fillet Comp#3	Ictiobus	cyprinellus	Bigmouth Buffalo	19	1723.6	good		5250.1	
PDA-5	114	PDA Buffalo Fillet Comp#3	Ictiobus	cyprinellus	Bigmouth Buffalo	19.5	1910.5	good		5250.1	
PDA-5	115	PDA Buffalo Fillet Comp#3	Ictiobus	cyprinellus	Bigmouth Buffalo	16.25	1616	good		5250.1	
PDA-5	20		Ictiobus	bubalus	Smallmouth Buffalo	21.5	2292.9	good			
PDA-4	61	PDA-4 Shiner Comp 1	Carpiodes	cyprinus	Quillback	16.5	978.5	good		2786.8	Trammel Net
PDA-4	62	PDA-4 Shiner Comp 1	Carpiodes	cyprinus	Quillback	16.5	977.8	good		2786.8	Trammel Net
PDA-4	63	PDA-4 Shiner Comp 1	Carpiodes	cyprinus	Quillback	15.5	830.5	good		2786.8	Trammel Net
PDA-4	64	PDA-4 Shiner Comp 2	Carpiodes	cyprinus	Quillback	15.75	994.1	good		2692.8	Trammel Net
PDA-4	65	PDA-4 Shiner Comp 2	Carpiodes	cyprinus	Quillback	15.75	883	good		2692.8	Trammel Net
PDA-4	66	PDA-4 Shiner Comp 2	Carpiodes	cyprinus	Quillback	15.25	815.7	good		2692.8	Trammel Net
PDA-4	67	PDA-4 Shiner Comp 3	Carpiodes	cyprinus	Quillback	16	957.6	good		2696.5	Trammel Net
PDA-4	68	PDA-4 Shiner Comp 3	Carpiodes	cyprinus	Quillback	16.5	897.5	good		2696.5	Trammel Net
PDA-4	69	PDA-4 Shiner Comp 3	Carpiodes	cyprinus	Quillback	16.5	841.4	good		2696.5	Trammel Net
PDA-4	70		Carpiodes	cyprinus	Quillback	17	1155.2	good			Trammel Net
PDA-4	71		Carpiodes	cyprinus	Quillback	11.5	376.4	good			Trammel Net
PDA-4	72		Carpiodes	cyprinus	Quillback	12.25	480.5	good			Trammel Net
PDA-4	73		Carpiodes	cyprinus	Quillback	13.5	506.4	good			Trammel Net
UDA-2	104	UDA-2 Shiner Comp 1	Carpiodes	cyprinus	Quillback	17	1170	good		5074.5	
UDA-2	105	UDA-2 Shiner Comp 1	Carpiodes	cyprinus	Quillback	16.75	1075.3	good		5074.5	
UDA-2	106	UDA-2 Shiner Comp 1	Carpiodes	cyprinus	Quillback	17.75	1472	good		5074.5	
UDA-2	107	UDA-2 Shiner Comp 1	Carpiodes	cyprinus	Quillback	17	1357.2	good		5074.5	
PDA-6	42		Carpiodes	cyprinus	Quillback	18	1270.3	good			
DDA-1	23		Carpiodes	cyprinus	Quillback	18.5	1176.3	good			
DDA-1	24		Carpiodes	cyprinus	Quillback	18	1104.2	good			
DDA-1	25		Carpiodes	cyprinus	Quillback	16.75	901	good			
DDA-1	26		Carpiodes	cyprinus	Quillback	16.5	880.6	good			
DDA-1	27		Carpiodes	cyprinus	Quillback	17	882.5	good			
DDA-1	29		Carpiodes	cyprinus	Quillback	17.25	1086.9	good			
PDA-5	13		Carpiodes	cyprinus	Quillback	15.25	847.2	good			
PDA-5	14		Carpiodes	cyprinus	Quillback	16.75	1026.4	good			
PDA-5	15		Carpiodes	cyprinus	Quillback	16	815	good			
PDA-5	16		Carpiodes	cyprinus	Quillback	17	1075.3	good			
PDA-5	17		Carpiodes	cyprinus	Quillback	16.25	797.9	good			

Location ID	Fish Number	Sample ID	Genus	Species	Name	Length (Inches)	Weight (Grams)	Condition of Fish	Stomach Contents	Total Composite Weight	Fishing Gear Used
PDA-5	18		Carpiodes	cyprinus	Quillback	17.25	1019	good			
PDA-5	19		Carpiodes	cyprinus	Quillback	19	1564	good			
PDA-4	59		Pomoxis	spp.	Crappie	13	598.9	good			Trammel Net
UDA-2	90		Dorosoma	cepedianum	Gizzard Shad			good			Gill Net
DDA-1	22	DDA Comp Shad	Dorosoma	cepedianum	Gizzard Shad	13.5	328.4	good			
DDA-1	30	DDA Comp Shad	Dorosoma	cepedianum	Gizzard Shad	8.25	80.25	good			
DDA-1	31	DDA Comp Shad	Dorosoma	cepedianum	Gizzard Shad	5.75	27.71	good			
DDA-1	32	DDA Comp Shad	Dorosoma	cepedianum	Gizzard Shad	12	281.36	good			
PDA-2	98	PDA Comp#3 Shad	Dorosoma	cepedianum	Gizzard Shad	12.75	396.9	good		460.6	
PDA-2	99	PDA Comp#3 Shad	Dorosoma	cepedianum	Gizzard Shad	7.5	63.7	good		460.6	
PDA-4	75	PDA Comp#1 Shad	Dorosoma	cepedianum	Gizzard Shad	13	355.1	good		1310.1	Trammel Net
PDA-4	76	PDA Comp#1 Shad	Dorosoma	cepedianum	Gizzard Shad	12.75	388.6	good		1310.1	Trammel Net
PDA-4	77	PDA Comp#1 Shad	Dorosoma	cepedianum	Gizzard Shad	14	566.4	good		1310.1	Trammel Net
PDA-4	78	PDA Comp#2 Shad	Dorosoma	cepedianum	Gizzard Shad	12	290.4	good		1505.4	Trammel Net
PDA-4	79	PDA Comp#2 Shad	Dorosoma	cepedianum	Gizzard Shad	14.25	534.6	good		1505.4	Trammel Net
PDA-4	80	PDA Comp#2 Shad	Dorosoma	cepedianum	Gizzard Shad	12	332.1	good		1505.4	Trammel Net
PDA-4	81	PDA Comp#2 Shad	Dorosoma	cepedianum	Gizzard Shad	12.25	348.3	good		1505.4	Trammel Net
UDA-2	43	UDA-UE Comp Shad	Dorosoma	cepedianum	Gizzard Shad	5.75	30.85	good		306.62	
UDA-2	44	UDA-UE Comp Shad	Dorosoma	cepedianum	Gizzard Shad	4.75	16.67	good		306.62	
UDA-2	163	UDA-UE Comp Shad	Dorosoma	cepedianum	Gizzard Shad	6	29.83	good		306.62	
UDA-2	45	UDA-UE Comp Shad	Dorosoma	cepedianum	Gizzard Shad	5.5	27.15	good		306.62	
UDA-2	164	UDA-UE Comp Shad	Dorosoma	cepedianum	Gizzard Shad	4.5	13.24	good		306.62	
UDA-2	46	UDA-UE Comp Shad	Dorosoma	cepedianum	Gizzard Shad	5.25	20.51	good		306.62	
UDA-2	47	UDA-UE Comp Shad	Dorosoma	cepedianum	Gizzard Shad	4.75	16.86	good		306.62	
UDA-2	48	UDA-UE Comp Shad	Dorosoma	cepedianum	Gizzard Shad	5	17.78	good		306.62	
UDA-2	49	UDA-UE Comp Shad	Dorosoma	cepedianum	Gizzard Shad	4.75	17.89	good		306.62	
UDA-2	50	UDA-UE Comp Shad	Dorosoma	cepedianum	Gizzard Shad	5.75	31.93	good		306.62	
UDA-2	51	UDA-UE Comp Shad	Dorosoma	cepedianum	Gizzard Shad	6.5	43.4	good		306.62	
UDA-2	52	UDA-UE Comp Shad	Dorosoma	cepedianum	Gizzard Shad	5.25	27.25	good		306.62	
UDA-2	53	UDA-UE Comp Shad	Dorosoma	cepedianum	Gizzard Shad	4.5	13.26	good		306.62	
UDA-2	83		Dorosoma	cepedianum	Gizzard Shad	12.25	350.5	good			Gill Net
UDA-2	84	UDA-2 Shad Comp 2	Dorosoma	cepedianum	Gizzard Shad	7.75	65.6	good		231.1	Gill Net
UDA-2	85	UDA-2 Shad Comp 2	Dorosoma	cepedianum	Gizzard Shad	7.5	62	good		231.1	Gill Net
UDA-2	86	UDA-2 Shad Comp 2	Dorosoma	cepedianum	Gizzard Shad	6.75	51.7	good		231.1	Gill Net
UDA-2	87	UDA-2 Shad Comp 2	Dorosoma	cepedianum	Gizzard Shad	7	51.8	good		231.1	Gill Net
PDA-2	95		Hiodon	alosoides	Gold Eye	6	31.2	good			
PDA-2	96		Hiodon	alosoides	Gold Eye	6.75	39.24	good			
PDA-4	56		Hiodon	alosoides	Gold Eye	15.25	602.4	good			Trammel Net
PDA-4	58		Hiodon	alosoides	Gold Eye	10	136	good			Trammel Net
PDA-4	74		Hiodon	alosoides	Gold Eye	10.75	199.7	good			Trammel Net
PDA-1	159	PDA-1 Whitecat Comp X	Ameiurus	catus	White Catfish	13.5	292.5	good			Hoop Net
PDA-1	160	PDA-1 Whitecat Comp X	Ameiurus	catus	White Catfish	11.25	190.04	good			Hoop Net
PDA-1	161	PDA-1 Whitecat Comp X	Ameiurus	catus	White Catfish	10.5	144.3	good			Hoop Net
PDA-4	57		Ameiurus	catus	White Catfish	15.5	710	good			Trammel Net
PDA-4	144		Ameiurus	catus	White Catfish	13.5	325.1	good			Gill Net
UDA-3	54		Ameiurus	catus	White Catfish	15.5	574	good			
DDA-1	35		Pylodictis	olivaris	Flathead Catfish	20.75	1810	good	Empty		
PDA-1	129		Pylodictis	olivaris	Flathead Catfish	28	0	good	empty		Hoop Net
PDA-1	130		Pylodictis	olivaris	Flathead Catfish	12	283	good			Hoop Net
PDA-2	97		Pylodictis	olivaris	Flathead Catfish	7.5	52.96	good			
PDA-5	112		Pylodictis	olivaris	Flathead Catfish	19.5	1466.5	good			
UDA-2	2		Pylodictis	olivaris	Flathead Catfish	22	2025	good	Empty		
UDA-3	145		Pylodictis	olivaris	Flathead Catfish	28		good			Hoop Net
UDA-3	14		Pylodictis	olivaris	Flathead Catfish			good			Hoop Net

Location ID	Fish Number	Sample ID	Genus	Species	Name	Length (Inches)	Weight (Grams)	Condition of Fish	Stomach Contents	Total Composite Weight	Fishing Gear Used
DDA-1	33	DDA Channel Catfish-Comp#1	Ictalurus	punctatus	Channel Catfish	26.5	2848	good	Detritus, Invertebrates,Fish Bones	4934	
DDA-1	34	DDA Channel Catfish-Comp#1	Ictalurus	punctatus	Channel Catfish	21.5	2086	good	Grain (Bait), Removed to prevent contamination	4934	
DDA-2	55		Ictalurus	punctatus	Channel Catfish	16	630.84	good			
DDA-6	150		Ictalurus	punctatus	Channel Catfish	16	890.2	good			
DDA-6	151		Ictalurus	punctatus	Channel Catfish	14.75	440	good			
DDA-6	152		Ictalurus	punctatus	Channel Catfish	12	287.6	good			
DDA-6	153		Ictalurus	punctatus	Channel Catfish	17	824.1	good			
DDA-6	154		Ictalurus	punctatus	Channel Catfish	19.5	1149.6	good			
DDA-6	155		Ictalurus	punctatus	Channel Catfish	20	1431	good			
DDA-6	156		Ictalurus	punctatus	Channel Catfish	21	1917	good			
PDA-1	127	PDA Channel Catfish Comp 1	Ictalurus	punctatus	Channel Catfish	14	364.9	good	Empty	657.8	Hoop Net
PDA-1	128	PDA Channel Catfish Comp 1	Ictalurus	punctatus	Channel Catfish	12.5	292.9	good	filled with grain bait removed	657.8	Hoop Net
UDA-2	102	UDA Channel Catfish Comp#1	Ictalurus	punctatus	Channel Catfish	16	647.4	good		3706.6	
UDA-3	147	UDA Channel Catfish Comp#1	Ictalurus	punctatus	Channel Catfish	25.5	3059.2	good	Fish	3706.6	Hoop Net
DDA-1	21		Morone	chrysops	White Bass	13.75	599.6	good			
DDA-1	28		Morone	chrysops	White Bass	13.5	561	good			
DDA-1	108		Morone	chrysops	White Bass	17.5	1281	good			
DDA-1	109		Morone	chrysops	White Bass	16	973	good			
DDA-1	110		Morone	chrysops	White Bass	12.25	399.8	good			
PDA-1	157		Morone	chrysops	White Bass	14.25	654.3	good			Hoop Net
PDA-1	158		Morone	chrysops	White Bass	10.5	218.6				Hoop Net
UDA-2	103		Morone	chrysops	White Bass	17	1246.9	good			
DDA-1	111	DDA-1 Drum Comp#1	Aplodinotus	grunniens	Drum	11.75	256.1	good		1566.4	
DDA-1	131	DDA-1 Drum Comp#1	Aplodinotus	grunniens	Drum	13.75	485.9	good		1566.4	Trammel Net
PDA-1	117	PDA Drum Comp#1	Aplodinotus	grunniens	Drum	9.75	164.1	good		1566.4	Hoop Net
PDA-1	118	PDA Drum Comp#1	Aplodinotus	grunniens	Drum	10.5	193.2	good		1566.4	Hoop Net
PDA-1	119	PDA Drum Comp#1	Aplodinotus	grunniens	Drum	11.25	233.5	good		1566.4	Hoop Net
PDA-1	120	PDA Drum Comp#1	Aplodinotus	grunniens	Drum	11	233.6	good		1566.4	Hoop Net
PDA-1	121	PDA Drum Comp#2	Aplodinotus	grunniens	Drum	11.75	257.7	good		556.5	Hoop Net
PDA-1	122	PDA Drum Comp#2	Aplodinotus	grunniens	Drum	10.25	203.8	good		556.5	Hoop Net
PDA-1	123	PDA Drum Comp#2	Aplodinotus	grunniens	Drum	8.5	95	good		556.5	Hoop Net
PDA-1	124	PDA Drum Comp 3	Aplodinotus	grunniens	Drum	17.75	1082.2	good	sand - grinding? Benthic invertebrates	3183.2	Hoop Net
PDA-1	125	PDA Drum Comp 3	Aplodinotus	grunniens	Drum	16.75	1026	good	sand and dark detrital material	3183.2	Hoop Net
PDA-1	126	PDA Drum Comp 3	Aplodinotus	grunniens	Drum	17.75	1075	good	empty	3183.2	Hoop Net
PDA-1	162	PDA Drum Comp#4	Aplodinotus	grunniens	Drum	18.25	1447.2	good		3971.8	Hoop Net
PDA-2	148	PDA Drum Comp#4	Aplodinotus	grunniens	Drum	16.5	999.4	good		3971.8	
PDA-2	149	PDA Drum Comp#4	Aplodinotus	grunniens	Drum	19	1525.2	good		3971.8	
PDA-4	60		Aplodinotus	grunniens	Drum	9.5	163.5	good			Trammel Net
PDA-4	138		Aplodinotus	grunniens	Drum	3	5.09	good			Gill Net
PDA-4	139		Aplodinotus	grunniens	Drum	10.5	198.1	good			Gill Net
PDA-4	140		Aplodinotus	grunniens	Drum	12.5	477.12	good			Gill Net
PDA-4	141		Aplodinotus	grunniens	Drum	5.25	21.6	good			Gill Net
PDA-4	142		Aplodinotus	grunniens	Drum	3.5	8.1	good			Gill Net
PDA-4	143		Aplodinotus	grunniens	Drum	4	8.9	good			Gill Net
UDA-5	132	UDA Drum Comp	Aplodinotus	grunniens	Drum	19.5	1358	good	caddisfly	2991.9	

Table F-5. Summary of Fish Captured
W.G. Krummrich Plant Ecological Risk Assessment
Sauget, Illinois

Location ID	Fish Number	Sample ID	Genus	Species	Name	Length (Inches)	Weight (Grams)	Condition of Fish	Stomach Contents	Total Composite Weight	Fishing Gear Used
UDA-5	133	UDA Drum Comp	Aplodinotus	grunniens	Drum	15	741.3	good	mussel (zebra??)	2991.9	
UDA-5	134	UDA Drum Comp	Aplodinotus	grunniens	Drum	15.5	892.6	good		2991.9	
UDA-5	135		Aplodinotus	grunniens	Drum	19	1423.2	good			
UDA-5	136		Aplodinotus	grunniens	Drum	18.25	1746.9	good	empty		
UDA-5	137		Aplodinotus	grunniens	Drum	15.5	1036.4	good	broken shells		
PDA-2	93		Alosa	chrysochloris	Skipjack Herring	14	364.5	good			
PDA-2	94		Alosa	chrysochloris	Skipjack Herring	8.5	80.5	good			
UDA-2	88		Alosa	chrysochloris	Skipjack Herring	15	497.6	good			Gill Net
UDA-2	89		Alosa	chrysochloris	Skipjack Herring	14	550.8	good			Gill Net
UDA-2	100		Alosa	chrysochloris	Skipjack Herring	15.75	786.5	good	Empty		
UDA-2	101		Alosa	chrysochloris	Skipjack Herring	17	718	good			

Appendix F-8. Surface Water VOC Method Comparative Analysis
WGK Plant Ecological Risk Assessment
Sauget, Illinois

			SW-UDA-11	Pump	SW-UDA-11 FD	Pump	Sample vs FD	SW-PDA-2	Pump	SW-PDA-2 FD	Pump	Sample vs FD	SW-PDA-4	Pump	SW-PDA-4	Straw	Pump vs Straw
			10/23/2000	14:25	10/23/2000	15:15		10/25/2000	9:05	10/25/2000	9:05		10/25/2000	14:50	10/25/2000	14:50	
VOCs (ug/L)	Atomic Weight	Boiling Point (C)	Concentration	Qualifier	Concentration	Qualifier	RPD	Concentration	Qualifier	Concentration	Qualifier	RPD	Concentration	Qualifier	Concentration	Qualifier	RPD
2-Butanone (MEK)	72	79.6	8.8	J	9.2	J	4.44										
4-Methyl-2-pentanone (MIBK)	100	117.4						2.2	J	0.84	J	89					
Benzene	78	80.1						2.4		2	U	18					
Chlorobenzene	113	130						35	J	9.4	J	115	13		14		7
Chloromethane	50	-24.2															
Ethylbenzene	106	136.2						0.52	J	0.12	J	125					
m&p-Xylene	319	140						1.1	J	0.39	J	95	2.4		0.92	J	89
Methylene chloride (Dichloromethane)	85	39.8											5	U	6.4		51
Toluene	92	110.6						2.4		0.89	J	92	1.3	J	1.2	J	8
Xylenes, Total	319	140						1.5	J	0.39	J	117	2.7		0.92	J	99
RPD within QAPP Guidelines																	
RPD outside of QAPP Guidelines																	

Appendix F-8. Surface Water VOC Method Comparative Analysis
WGK Plant Ecological Risk Assessment
Sauget, Illinois

			SW-PDA-5	Pump	SW-PDA-5	Kemmerer	Pump vs Kemmerer
			10/24/2000	14:05	10/26/2000	9:05	
VOCs (ug/L)	Atomic Weight	Boiling Point (C)	Concentration	Qualifier	Concentration	Qualifier	RPD
2-Butanone (MEK)	72	79.6					
4-Methyl-2-pentanone (MIBK)	100	117.4					
Benzene	78	80.1					
Chlorobenzene	113	130	4.2		5.4		25
Chloromethane	50	-24.2					
Ethylbenzene	106	136.2					
m&p-Xylene	319	140					
Methylene chloride (Dichloromethane)	85	39.8					
Toluene	92	110.6					
Xylenes, Total	319	140					
RPD within QAPP Guidelines							
RPD outside of QAPP Guidelines							

Appendix F-6 Surface Water VOC Method Comparative Analysis
WGK Plant Ecological Risk Assessment
Saugeen Ojibway Nation

			SW-PDA-8	Pump	SW-PDA-8 FD	Pump	SW-PDA-8	Kemmerer	SW-PDA-8	Kemmerer FD	SW-PDA-8	Bottom	Pump vs Pump FD	Pump vs Kemmerer	Pump vs Kemmerer	Pump vs Bottom	Pump FD vs Kemmerer	Pump FD vs Kemmerer FD	Pump FD vs Bottom	Kemmerer vs Kemmerer FD	Kemmerer vs Bottom
			10/26/2000	9 25	10/26/2000	9 50	10/26/2000	9 25	10/26/2000	9 50	10/26/2000	9 25									
VOCs (ug/L)	Atomic Weight	Boiling Point (C)	Concentration	Qualifier	Concentration	Qualifier	Concentration	Qualifier	Concentration	Qualifier	Concentration	Qualifier	RPD	RPD	RPD	RPD	RPD	RPD	RPD	RPD	RPD
2-Butanone (MEK	72	79 6																			
4-Methyl-2-pentanone (MIBK	100	117 4																			
Benzene	78	80 1																			
Chlorobenzene	113	130	1 3	J	1 1	J	2	U	0 87	J	2 4		17		40	59		23	74		
Chloromethane	50	-24 2	2	U	2	U	2		2	U	2	U		0			0			0	0
Ethylbenzene	106	136 2																			
m&p-Xylene	319	140																			
Methylene chloride (Dichloromethane)	85	39 8																			
Toluene	92	110 6																			
Xylenes, Total	319	140																			
RPD within QAPP Guidelines																					
RPD outside of QAPP Guidelines																					

			Kemmerer FD vs Bottom
VOCs (ug/L)	Atomic Weight	Boiling Point (C)	RPD
2-Butanone (MEK)	72	79.6	
4-Methyl-2-pentanone (MIBK)	100	117.4	
Benzene	78	80.1	
Chlorobenzene	113	130	94
Chloromethane	50	-24.2	
Ethylbenzene	106	136.2	
m&p-Xylene	319	140	
Methylene chloride (Dichloromethane)	85	39.8	
Toluene	92	110.6	
Xylenes, Total	319	140	
RPD within QAPP Guidelines			
RPD outside of QAPP Guidelines			

Appendix F-8. Surface Water VOC Method Comparative Analysis
WGK Plant Ecological Risk Assessment
Sauget, Illinois

			SW-PDA-9	Pump	SW-PDA-9	Kemmerer			Pump vs Kemmerer
			10/26/2000	11.38	10/26/2000	11.38			
VOCs (ug/L)	Atomic Weight	Boiling Point (C)	Concentration	Qualifier	Concentration	Qualifier	V1 - V2	Avg	RPD
2-Butanone (MEK)	72	79.6							
4-Methyl-2-pentanone (MIBK)	100	117.4							
Benzene	78	80.1							
Chlorobenzene	113	130	0.7	J	0.67	J	0.03	0.685	4
Chloromethane	50	-24.2							
Ethylbenzene	106	136.2							
m&p-Xylene	319	140							
Methylene chloride (Dichloromethane)	85	39.8							
Toluene	92	110.6							
Xylenes, Total	319	140							
RPD within QAPP Guidelines									
RPD outside of QAPP Guidelines									