Attachments

Attachment 1

Cahokia Groundwater Use Ordinance

ORDINACE No. 981

AN ORDINANCE PROHIBITING THE USE OF GROUNDWATER AS A POTABLE WATER SUPPLY BY THE INSTALLATION OR USE OF POTABLE WATER SUPPLY WELLS OR BY ANY OTHER METHOD

WHEREAS, certain properties in the Village of Cahokia, Illinois, have been used over a period of time for commercial/industrial uses; and

WHEREAS, because of said use, concentrations of certain chemical constituents in the groundwater beneath the Village may exceed Class I groundwater quality standards for potable resource groundwater, as set forth in 35 Administrative Code Part 620, or Tier 1 residential remediation objectives, as set forth in 35 Ill. Admin. Code Part 742; and

WHEREAS, the Village of Cahokia desires to limit potential threats to human health from groundwater contamination while facilitating the redevelopment and productive use of properties that are the source of said chemical constituents;

NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE BOARD IN THE VILLAGE OF CAHOKIA, ILLINOIS:

Section One: Use of groundwater as a potable water supply prohibited.

The use or attempted use of groundwater from within the corporate limits of the Village as a potable water supply by the installation or drilling of wells or by any other method is hereby prohibited.

Section Two: Penalties.

Any person violating the provisions of this ordinance shall be subject to a fine of up to $1,000.00 for each violation.

Section Three: Definitions.

"Person" is any individual, partnership, co-partnership, firm, company, limited liability company, corporation, association, joint stock company, trust, estate, political subdivision, or any other legal entity, or their representatives, agents or assigns.

"Potable water" is any water used for human or domestic consumption, including, but not limited to, water used for drinking, bathing, swimming, washing dishes, garden or lawn watering, or preparing foods..

Section Four: Repealer.

All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed insofar as they are in conflict with this ordinance.

Section Five: Severability.

If any provision of this ordinance or its application to any person or under any circumstances is adjudged invalid, such adjudication shall not affect the validity of the ordinance as a whole or of any portion not adjudged invalid.

Section six: Effective Date.

This ordinance shall be in full force and effect from and after its passage, approval and publication, as required by law.

ADOPTED: 6-06-2000
(Date)

Xavier Brown
(Village Clerk)

ADOPTED: 6-06-2000
(Date)

Michael King
(Mayor)

Officially published this 21st day of June, 2000.

Attachment 2

Sauget Groundwater Use Ordinance

ORDINANCE NO. 99-5

AN ORDINANCE PROHIBITING THE USE OF GROUNDWATER AS A POTABLE WATER SUPPLY BY THE INSTALLATION OR USE OF POTABLE WATER SUPPLY WELLS OR BY ANY OTHER METHOD

WHEREAS, certain properties in the Village of Sauget, Illinois, have been used over a period of time for commercial/industrial purposes; and

WHEREAS, because of said use, concentrations of certain chemical constituents in the groundwater beneath the Village may exceed Class I groundwater quality standards for potable resource groundwater, as set forth in 35 Illinois Administrative Code Part 620, or Tier 1 residential remediation objectives, as set forth in 35 Ill. Adm. Code Part 742; and

WHEREAS, the Village of Sauget desires to limit potential threats to human health from groundwater contamination while facilitating the redevelopment and productive use of properties that are the source of said chemical constituents;

NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE COUNCIL IN THE VILLAGE OF SAUGET, ILLINOIS:

Section One: Use of groundwater as a potable water supply prohibited.

The use or attempted use of groundwater from within the corporate limits of the Village as a potable water supply by the installation or drilling of wells or by any other method is hereby prohibited.

Section Two: Penalties

Any person violating the provisions of this ordinance shall be subject to a fine of up to $100.00 for each violation.

Section Three: Definitions.

"Person" is any individual, partnership, co-partnership, firm, company, limited liability company, corporation, association, joint stock company, trust, estate, political subdivision, or any other legal entity, or their representatives, agents or assigns.

"Potable water" is any water used for human or domestic consumption, including, but not limited to, water used for drinking, bathing, swimming, washing dishes, or preparing foods.

Section Four: Repealer.

All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed insofar as they are in conflict with this ordinance.

Section Five: Severablity.

If any provision of this ordinance or its application to any person or under any circumstances is adjudged invalid, such adjudication shall not affect the validity of the ordinance as a whole or of any portion not adjudged invalid.

Section Six: Effective Date.

This ordinance shall be in full force and effect from and after its passage, approval and publication, as required by law.

INTRODUCED AND READ FOR THE FIRST TIME: October 12, 1999

READ FOR THE SECOND TIME:
(under suspension of rules): October 12, 1999

READ FOR THE THIRD TIME:
(under suspension of rules): October 12, 1999

ADOPTED AND ENACTED: October 12, 1999

ROLL CALL VOTE:
Ayes: Adele, McDaniel, Rich, Cates, Thornton, Saugat
Nays: NONE
Absent: NONE
Unfilled Vacancy:

APPROVED: October 12, 1999

APPROVED:

Paul Saugat
President (mayor) Pro Temore

ATTEST:

Betty Lou Wilson
Village Clerk

Attachment 3

Human Health Risk Assessment Work Plan

Solutia, Inc.
St. Louis, Missouri

DRAFT

RCRA Site Sampling Plan, Solutia W.G. Krummrich Facility Sauget, Illinois

Appendix 4

Human Health Risk Assessment Workplan

ENSR Corporation
June 2000
Document Number 6105-008-100a

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LIST OF ACRONYMS

AAF	Absorption Adjustment Factors
ANPR	Advanced Notice of Proposed Rulemaking
AOC	Administrative Order on Consent
ASTM	American Society for Testing and Materials
bgs	below ground surface
CADD	Chronic Average Daily Dose
CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
COC	Constituent of Concern
COPC	Constituent of Potential Concern
CSF	Cancer Slope Factor
CSM	Conceptual Site Model
DQL	Data Quality Level
EFH	Exposure Factors Handbook
ELCR	Excess Lifetime Cancer Risk
EPC	Exposure Point Concentration
HEAST	Health Effects Assessment Summary Tables
HHRA	Human Health Risk Assessment
HI	Hazard Index
HQ	Hazard Quotient
IEPA	Illinois Environmental Protection Agency
IRIS	Integrated Risk Information System
LADD	Lifetime Average Daily Dose
MCL	Maximum Contaminant Level
MLE	Most Likely Exposure
NCEA	National Center for Environmental Assessment
NCP	National Contingency Plan
NOAA	National Oceanographic and Atmospheric Administration
PQL	Practical Quantitation Limit
PRG	Preliminary Remediation Goal
QAPP	Quality Assurance Project Plan
RAGS	Risk Assessment Guidance for Superfund
RBC	Risk-Based Concentration
RBSL	Risk-Based Screening Level
RCRA	Resource Conservation and Recovery Act

RfC	Reference Concentration
RfD	Reference Dose
RG	Remedial Goal
RME	Reasonable Maximum Exposure
SSL	Soil Screening Level
SSP	Site Sampling Plan
SVOC	Semi-Volatile Organic Compound
SWMU	Solid Waste Management Unit
TACO	Tiered Approach to Corrective Action Objectives
UCL	Upper Confidence Limit
USEPA	U.S. Environmental Protection Agency
VOC	Volatile Organic Compound

1.0 INTRODUCTION

This document presents a workplan for evaluating potential human health risks using data collected as part of the Resource Conservation and Recovery Act (RCRA) Site Sampling Plan (SSP) for the Solutia W.R. Krummrich Facility located in Sauget, IL. This workplan has been developed to satisfy the human health risk assessment components of the objectives stipulated by the May 3, 2000 Administrative Order on Consent (AOC) entered into by the U.S. Environmental Protection Agency (USEPA) and Solutia Inc. (Solutia) (USEPA Docket Number R8H-5-00-003). Specifically, the order requires the following:

- "Perform an investigation to identify the nature and extent of any releases of hazardous waste and/or hazardous constituents at or from the Facility which may pose an unacceptable risk to human health and the environment and provide a report to USEPA. .... The report must also describe the nature and extent of any releases of hazardous waste and/or hazardous constituents at or from the Facility which do not pose an unacceptable risk to human health and the environment, and provide the basis for those conclusions, including an evaluation of risks."

- ".... [D]emonstrate by 1/1/2005 ... that all current human exposures to contamination at or from the Facility are under control. That is, for all media known or reasonably suspected to be contaminated with hazardous wastes or hazardous constituents above risk-based levels, for which there are complete pathways between contamination and human receptors, significant or unacceptable exposures to not exist."

- "Determine appropriate risk screening criteria under current use scenarios and provide the basis and justification for use of these criteria."

- "Determine any current unacceptable risks to human health and the environment and describe why other identified risks are acceptable."

An evaluation of human health risks will be conducted to satisfy the requirements of two regulatory programs: the USEPA RCRA program, and the State of Illinois Tiered Approach to Corrective Action Objectives (TACO) program administered by the Illinois Environmental Protection Agency (IEPA) (IEPA, 1998). Although the two programs are similar in fundamental approach, they differ in specific details and applications. Therefore, the data collected under the RCRA SSP will be evaluated to be consistent with USEPA guidance, and an additional evaluation will be conducted to satisfy the TACO program objectives. Each program and the organization of this workplan are discussed below.

USEPA RCRA Risk Assessment

A human health risk assessment (HHRA) will be conducted to address the aforementioned objectives and to comply with USEPA guidance for conducting a risk assessment including, but not limited to, the following:

- Risk Assessment Guidance for Superfund (RAGS): Volume 1 - Human Health Evaluation Manual (Parts A) (USEPA, 1989).
- Human Health Evaluation Manual Supplemental Guidance; Standard Default Exposure Factors. (USEPA, 1991a).
- Guidelines for Exposure Assessment (USEPA, 1992a)
- Supplemental Guidance to RAGS: Calculating the Concentration Term (USEPA, 1992b)
- Land Use in the CERCLA Remedy Selection Process (USEPA, 1995a).
- USEPA Soil Screening Guidance: User's Guide and the Technical Background Document (USEPA, 1996a,b);
- Corrective Action for Releases from Solid Waste Management Units at Hazardous Waste Management Facilities: Advanced Notice of Proposed Rulemaking (ANPR) (USEPA, 1996c);
- Exposure Factors Handbook (EFH) (USEPA, 1997a).
- USEPA Region 5 RCRA Quality Assurance Project Plan (QAPP) Instructions. Appendix D, Risk-Based Screening Levels. (USEPA, 1998a);
- Region 5 RCRA Subtitle C Corrective Action Risk Assessment Guidance. Letter from USEPA Region 5 to RCRA Corrective Action Facilities (USEPA, 1998b); and,
- USEPA Region 9 Preliminary Remediation Goals (PRGs) (USEPA, 1999)

The RCRA HHRA will evaluate potential human health effects using the four step paradigm as identified by the USEPA (USEPA, 1989). The steps are:

- Data Evaluation and Hazard Identification
- Toxicity Assessment
- Exposure Assessment
- Risk Characterization

The RCRA HHRA workplan is organized into the following sections:

- Site Characterization – Section 2.0 of this workplan discusses the site and its environs, and presents a conceptual site model describing source areas, potential migration pathways, and potentially impacted media.
- Hazard Identification – Section 3.0 of this workplan presents a discussion of how site data will be summarized, and a description of the process for the selection of constituents of potential concern (COPCs) to be evaluated quantitatively in the risk assessment.
- Dose-Response Assessment – Section 4.0 of this workplan presents a discussion of the dose-response assessment process. The dose-response assessment evaluates the relationship between the magnitude of exposure (dose) and the potential for occurrence of specific health effects (response) for each COPC. Both potential carcinogenic and noncarcinogenic effects will be considered. The most current USEPA verified dose-response values will be used when available.
- Exposure Assessment - Section 5.0 of this workplan presents a discussion of the exposure assessment process. The purpose of the exposure assessment is to provide a quantitative estimate of the magnitude and frequency of potential exposure to COPCs by a receptor. Potentially exposed individuals, and the pathways through which those individuals may be exposed to COPCs are identified based on the physical characteristics of the site, as well as the current and reasonably foreseeable future uses of the site and surrounding area. The extent of a receptor's exposure is estimated by constructing exposure scenarios that describe the potential pathways of exposure to COPCs and the activities and behaviors of individuals that might lead to contact with COPCs in the environment.
- Risk Characterization – Section 6.0 of this workplan presents a discussion of the risk characterization process and uncertainties associated with the risk assessment process. Risk characterization combines the results of the exposure assessment and the toxicity assessment to derive site-specific estimates of potentially carcinogenic and noncarcinogenic risks resulting from both current and reasonably foreseeable potential human exposures to COPCs. The results of the risk characterization will be used to identify constituents of concern (COCs), which are the subset of those COPCs whose risks result in an exceedance of the target risk range of 10^{-6} to 10^{-4} for potential carcinogens and a target Hazard Index of 1 for noncarcinogens (that act on the same target organ) (USEPA, 1990; 1991b).

  Within any of the steps of the risk assessment process described above, assumptions must be made due to a lack of absolute scientific knowledge. Some of the assumptions are supported by considerable scientific evidence, while others have less support. The assumptions that introduce the greatest amount of uncertainty in this risk evaluation will be discussed in the Risk Characterization section of the HHRA report.

TACO Evaluation

The TACO program regulations are found at 35 Illinois Administrative Code Part 742 (IEPA, 1998). The TACO program provides the following options to use in site evaluation:

- Exposure route evaluation and exclusion,
- Use of area background concentrations as screening tools or remediation objectives, and
- Three tiers for selecting or developing remediation objectives.

The three tiers are summarized below:

- Tier 1 provides a set of "look-up" tables that provide baseline remediation objectives for residential and commercial/industrial scenarios. The appropriate Tier 1 objectives are selected based on groundwater classification and intended land use at the site.
- Tier 2 provides a set of equations and default assumptions that can be used in conjunction with a limited number of site-specific soil and groundwater parameters to develop site-specific remediation objectives.
- Tier 3 allows for the use of detailed fate and transport and risk assessment models for the development of site-specific remediation objectives.

Site-specific risk assessments are conducted under Tier 3 to be consistent with USEPA risk assessment guidance; therefore, a TACO Tier 3 HHRA would be essentially the same as the RCRA HHRA as described above. Under the TACO program, one or a combination of tiers can be used at a site, and the tiers do not have to be employed sequentially. The main difference in the TACO Tier 3 HHRA and the RCRA HHRA is in the screening criteria used to identify the COPCs for quantitative assessment.

The TACO program evaluation is discussed in more detail in Section 7.0 of this workplan. Section 8.0 discusses the summary and conclusions section of the final report. References are provided in Section 9.0. Sections 2.0 through 6.0 have been written to address the RCRA HHRA, however, it should be noted that much of the information also applies to the TACO evaluation.

2.0 SITE CHARACTERIZATION

The site, as defined in the AOC, encompasses the W.R. Krummrich facility and the area between the facility and the Mississippi River defined by the groundwater plume(s) (see main text of the SSP for site location and features map). This workplan addresses the following media:

- The groundwater plumes as identified in the SSP,
- Surface and subsurface soil as identified in the SSP, and
- Game fish collected from the Mississippi River, as identified in the SSP.

To guide identification of appropriate exposure pathways for evaluation in the risk assessment, a conceptual site model (CSM) for human health has been developed. The purpose of the CSM is to identify sources, potential migration pathways of constituents from sources to media where exposure can occur, and to identify potential human receptors. Potential exposure pathways and potential receptors are discussed in Section 5.0.

Conceptual Site Model

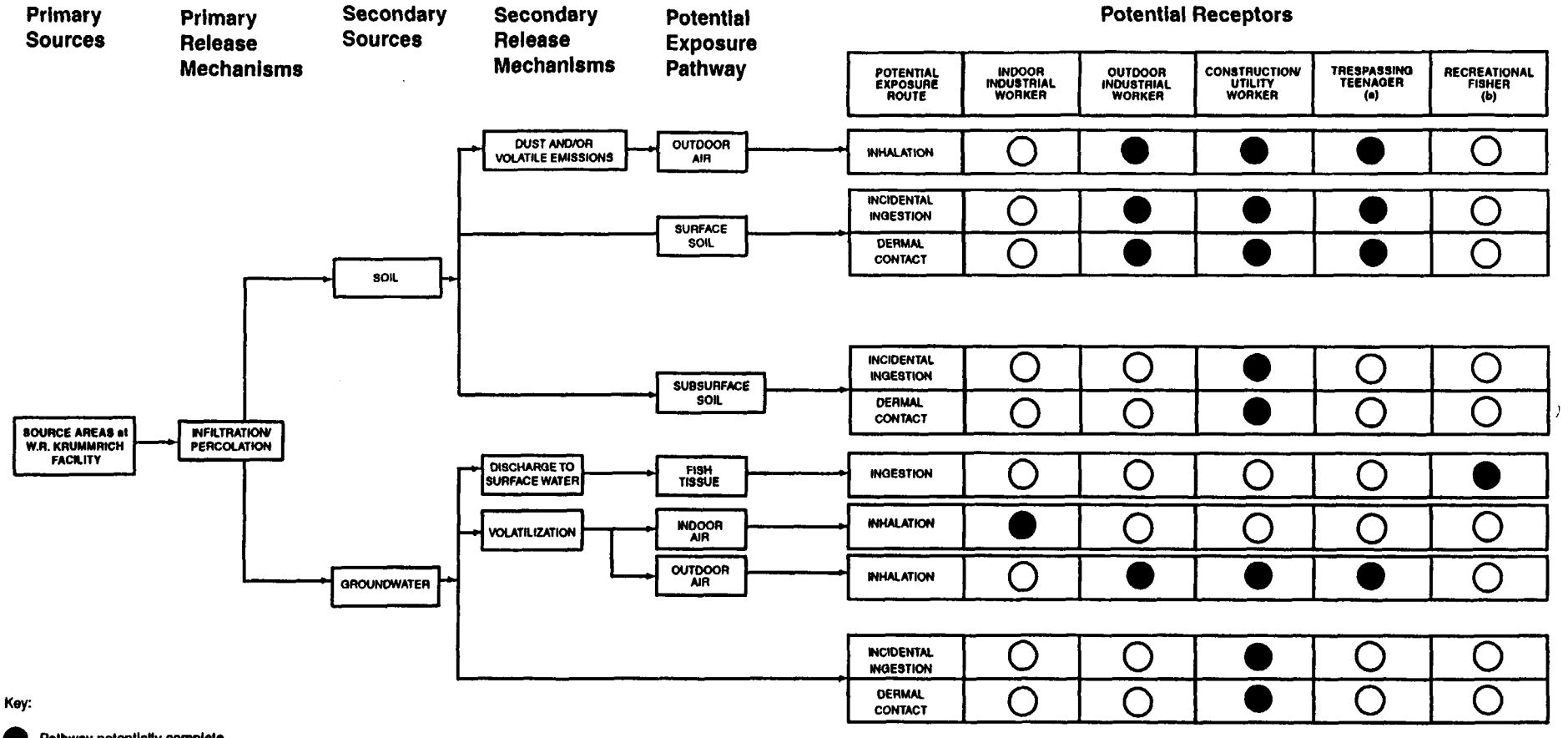
For the purposes of this workplan, the sources of constituents in the groundwater plume and potentially affected soils and game fish are assumed to be areas located within the W.R. Krummrich facility.

Constituents in the source areas may have discharged to soils and from there leached to underlying groundwater. Volatile organic compounds (VOCs) in groundwater may volatilize into outdoor air and may infiltrate into indoor air in overlying buildings. Constituents in groundwater may discharge to the Mississippi River. Game fish in the river may have accumulated constituents present in surface water and/or sediments. Figure 2-1 presents a CSM for the site. The CSM identifies sources, environmental release mechanisms, potential exposure pathways, potential exposure routes, and potential human receptors. Those potentially complete exposure pathways to be considered for further evaluation in the risk assessment are identified. Receptors and pathways are discussed in more detail in Section 5.0.

USEPA states that, "Sites that are surrounded by operating industrial facilities can be assumed to remain as industrial areas unless there is an indication that this is not appropriate" (USEPA, 1991b). This is consistent with the statement in the NCP that "... the assumption of future residential land use may not be justifiable if the probability that the site will support residential use in the future is small" (USEPA, 1990).

The area covered by the AOC has been used for industrial purposes for many years and use of these areas is expected to remain industrial. The area is zoned commercial/industrial and it is likely that the areas will continue to be used well into the reasonable foreseeable future for commercial/industrial purposes. Therefore, receptors have been identified in the CSM based on an industrial land use scenario.

The CSM is meant to be a "living" model that can be updated and modified as additional data become available. The exposure scenarios proposed for quantitative evaluation in the risk assessment (see Section 5.0) have been identified based on this current CSM. However, the CSM will be reviewed and modified as necessary once the analytical data from the SSP program have become available. Any substantial changes in the CSM and, subsequently, the pathways for quantitative evaluation, will be discussed with USEPA prior to conduct of the risk assessment.



Key:

● Pathway potentially complete, further evaluation recommended.

○ Pathway evaluated and found incomplete or insignificant, no further evaluation recommended.

(a) Only in areas not part of the Solutia W.R. Krummerich Facility proper.
(b) Mississippi River.

M990207a

FIGURE 2-1
Conceptual Site Model for Human Health Risk Assessment
W. R. Krummrich Facility RCRA SSP
Solutia, Inc.

DRAFT
ENSR

3.0 HAZARD IDENTIFICATION

The purpose of the hazard identification process is two-fold: 1) to evaluate the nature and extent of release of constituents present at the site; and 2) to select a subset of constituents identified as COPCs for quantitative evaluation in the risk assessment. This step of the risk assessment will involve compiling and summarizing RCRA SSP data for the risk assessment, and selecting COPCs based on a series of screening steps.

3.1 Data Compilation

The RCRA SSP has been developed to address the potential media and migration pathways identified in Section 2.0. Sampling to be conducted in support of the HHRA include the following:

- Shallow groundwater within the groundwater plume (the uppermost interval sampled from each well);
- Surface soil (0-3 feet below ground surface – bgs);
- Subsurface soil (unsaturated soil 3 feet bgs to not greater than 20 feet bgs); and
- Game fish fillet tissue.

The RCRA SSP identifies the suites of analytes for each medium. Groundwater and soil samples will be analyzed for VOCs and semi-volatile organic compounds (SVOCs). Game fish filet tissue will be analyzed for SVOCs.

All analytical data collected in support of the SSP will be compiled and tabulated in a database for statistical analysis. Summary statistics tables will be developed for each medium in each area, and will present for each constituent the minimum and maximum detected values, the arithmetic mean, the 95th percentile upper confidence limit (95% UCL) on the arithmetic mean (USEPA, 1992a), and the frequency of detection.

The following guidance documents will be used to calculate summary statistics and select exposure point concentrations (EPCs) for the COIs:

- Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual, Part A (USEPA, 1989);
- Supplemental Guidance to RAGS: Calculating the Concentration Term (USEPA, 1992b).

The EPC is defined as the 95% UCL or the maximum concentration, whichever is lower (USEPA, 1992b). Several statistics for the data must be calculated before the EPC can be determined. Section

3.1.1 describes how these summary statistics are calculated. Section 3.1.2 describes how this information is used to select EPCs for the risk assessment.

3.1.1 Summary Statistics

Summary statistics will be calculated based on the following. Constituents analyzed but never detected in a particular medium will not be included in the summary statistics for that medium. For constituents detected at least once in a particular medium, samples reported as "non-detect" by the laboratory will be assigned a value of one-half the sample quantitation limit in calculating summary statistics (USEPA, 1989). Duplicate sample results will be averaged and treated as a single sample result when compiling summary statistics.

The calculation of the 95% UCL for a dataset appropriate for a risk assessment is dependent on the distribution of the data (USEPA, 1992b). If the data are normally distributed, the 95% UCL is calculated using the t-statistic (USEPA, 1992b) as follows:

$$95\%UCL = \bar{x} + t\frac{SD}{\sqrt{n}}$$

where:

x = arithmetic mean of the untransformed data

t = the student-t statistic for n-1 degrees of freedom

n = the number of samples in the population

SD = the standard deviation of the untransformed data

However, if the data are lognormally distributed, the 95% UCL is calculated using the transformed data set and the H-statistic (USEPA, 1992b). The data are "transformed" by using the natural logarithmic function, i.e., by calculating ln(x) for each x value in the data set.

$$95\%UCL = e^{(\bar{x}+0.5SD^2+SD(H)/(\sqrt{n}-1)}$$

where:

e = base of the natural log, equal to 2.718

x = mean of the transformed data

SD = standard deviation of the transformed data

H = H-statistic

n = the number of samples in the population

The t-statistic and H-statistic values will be obtained from Gilbert (1987). There is currently a debate within USEPA on whether the H-statistic is an appropriate metric for environmental programs (USEPA, 1998c). The most current guidance available at the time of the conduct of the risk evaluation will be used.

The W-statistic test (Gilbert, 1987) is one test that can be used to determine whether a dataset is either more normally or lognormally distributed (USEPA, 1992b). The W-statistic will be calculated for each COPC in each medium for both the transformed and untransformed datasets. This information will be used as described below.

3.1.2 Selection of Exposure Point Concentrations

Because in many instances the W-statistic can not definitively describe the distribution as either normal or lognormal, and because there is no guidance as to how to choose an EPC when the dataset is neither normal nor lognormal, EPCs will be chosen using the following steps for each COPC in each medium:

- The maximum value, the 95% UCL (untransformed) and the 95% UCL (transformed) will be calculated;
- The W-test will be performed on the untransformed and the transformed data;
- The W-test values will be compared;
- If the untransformed data have the higher W-statistic, the lower of the 95% UCL (untransformed) and the maximum value will be chosen as the EPC; and,
- If the transformed data have the higher W-statistic, the lower of the 95% UCL (transformed) and the maximum value will be chosen as the EPC.

Tables presenting the EPC selection data for each medium will be presented in the report.

3.2 Selection of Constituents of Potential Concern

COPCs are a subset of the complete list of constituents detected in site media that are carried through the quantitative risk assessment process. Selection of COPCs focuses the analysis on the most likely risk "drivers." As stated in USEPA guidance (USEPA, 1993):

"Most risk assessments are dominated by a few compounds and a few routes of exposure. Inclusion of all detected compounds at a site in the risk assessment has minimal influence on the total risk. Moreover, quantitative risk calculations using data from environmental media that may contain compounds present at concentrations too low to adversely affect public health have no effect on the overall risk estimate for the site. The use of a toxicity screen allows the risk assessment to focus on the compounds and media that may make significant contributions to overall risk."

USEPA Region 5 (1998b) has stated:

"The ANPR provides that individual chemical constituents present at a facility undergoing corrective action may be eliminated from further consideration by comparison of each site-specific constituent concentration to a pre-determined screening level."

Moreover, USEPA Region 5 provides a discussion of the use of risk-based screening levels in Appendix D of its RCRA QAPP Instructions (USEPA, 1998a). The guidance states:

"The Human Health Risk-Based Screening Levels (RBSLs) contained in this Appendix are intended to support QAPP Element 3: Project Description. As explained in QAPP Element 3, the RBSLs have two essential purposes: 1) to assist in the selection of chemical constituent detection limits/reporting limits that will result in analytical data with appropriate sensitivity for entry into a risk assessment; and 2) to provide generic constituent screening concentrations (i.e., for soil and groundwater samples) which may be compared to the site-specific constituent concentration data obtained during the RFI. The purpose of the comparison is to support decisions for "no further action" or "no further investigation" for individual chemical constituents at a particular Solid Waste Management Unit (SWMU) or Area of Concern (AOC).

The rationale for the risk-based screening approach is explained in the following USEPA documents: 1) *Soil Screening Guidance: User's Guide* (USEPA, 1996a); 2) *Soil Screening Guidance: Technical Background Document* (USEPA, 1996b); and 3) *Corrective Action for Releases from Solid Waste Management Units at Hazardous Waste Management Facilities: Advanced Notice of Proposed Rulemaking* (USEPA, 1996c).

These guidance documents explain USEPA's intention to implement the risk-based screening approach for the Agency's major site remediation and corrective action programs (i.e., Superfund and RCRA). According to this approach, individual chemicals present at a facility undergoing corrective action may be eliminated from further investigation/action by comparison of each site-specific constituent concentration to a pre-determined screening concentration level."

Therefore, COPCs will be identified by comparing constituent-specific analytical data for environmental media to appropriate screening criteria and conducting a quantitative risk assessment for those constituents detected in an environmental medium in excess of the screening criteria.

Several factors are typically considered in selecting COPCs for a site, including natural background, frequency of detection, and toxicity, including essential nutrient status. Risk calculations will be conducted using the COPCs identified in this step.

COCs will be identified in the risk characterization of the HHRA as those constituents whose risks result in an exceedance of the target risk range of 10^{-6} to 10^{-4} for potential carcinogens and a target Hazard Index of 1 for noncarcinogens (that act on the same target organ), (USEPA, 1990, 1991b; IEPA, 1998). Remedial goals will be developed for COCs based on the exposure pathways evaluated in the risk assessment.

The steps to be used to identify COPCs are presented below.

3.2.1 Evaluation of Frequency of Detection and Essential Nutrient Status

A frequency of detection screen will be conducted on each medium (e.g., surface soil, subsurface soil, etc.). Constituents that are detected in fewer than 5% of samples, provided 20 samples are available, will not be included as COPCs. However, some of these constituents may be retained as COPCs based on professional judgment, considering factors such as the presence of a hotspot. In addition to the frequency of detection screen, essential nutrients (i.e., calcium, iron, magnesium, sodium and potassium) will not be included as COPCs (USEPA, 1989).

3.2.2 Comparison to Background

Groundwater and surface water samples collected in upgradient locations, if available, will provide site-specific background data for these media. Soil samples collected at appropriate off-site locations, if available, will provide site-specific background data for the soil media.

The procedure for determining whether a constituent concentration is consistent with background will follow that developed by USEPA Region 4 (USEPA, 1996d). Maximum detected concentrations of constituents in environmental media at the site will be compared against two times the arithmetic mean site-specific background concentration. USEPA Region 4 states that although RAGS (USEPA, 1989) allows the use of statistics in data evaluation, statistics may not be sufficiently conservative at this stage of the risk evaluation; and in most cases, there are not a sufficient number of samples for conducting a statistical analysis. Therefore, if maximum concentrations of constituents in an area are found to be less than two times the average background concentrations, then those constituents can be eliminated from quantitative evaluation in the risk assessment. Constituents whose concentrations

are found to be above typical local background levels will be retained for evaluation in the next step of the hazard identification process (Toxicity Screen).

3.2.3 Toxicity Screen

A toxicity screen will be performed in accordance with USEPA Region 5 guidance (USEPA, 1998b). USEPA Region 5 guidance identifies the following three sources as appropriate screening levels for soil, in order of preference:

1) Most recent generic soil screening levels (SSLs) developed and presented in Appendix A of the Soil Screening Guidance (USEPA, 1996b). The SSLs are based on ingestion and inhalation (direct contact) and soil-to-groundwater exposure pathways for a residential scenario.

2) Site-specific SSLs derived using the methodology outlined in the above reference.

3) Most recent USEPA Region 9 PRGs (USEPA, 1999).

USEPA Region 5 notes that the PRGs may be preferable in initial screening due to the long list of chemicals for which PRGs are provided, the availability of industrial exposure scenario PRGs, and the inclusion of the most common exposure pathways (ingestion, dermal and inhalation) in the PRG calculations. PRGs are provided for residential soil, industrial soil, air and tap water. The Region 5 RCRA RA Guidance (USEPA, 1998b) states that federal maximum contaminant levels (MCLs) (USEPA, 1996e) should be considered as applicable screening levels for groundwater, supplemented by PRGs for tap water where MCLs are not available.

As stated in Section 2, USEPA notes in guidance that industrial land use is appropriate to assume for industrial areas that are expected to remain industrial in the future (USEPA, 1990, 1991b). The area identified in the AOC and the RCRA SSP is industrial and will be evaluated using an industrial land use scenario. Therefore, PRGs for industrial soil will be used in the COPC toxicity screening.

3.2.3.1 Screening Criteria

For soil, PRGs based on industrial land used will be employed. For groundwater, MCLs (USEPA, 1996e) or PRGs for tapwater will be used for screening purposes.

PRGs are not available for fish tissue. Hence, fish tissue data will be compared to the USEPA Region 3 Risk-Based Concentrations (RBCs) for fish (USEPA, 2000a).

3.2.3.2 Cumulative Risk Screening Process

EPCs, i.e., the lower of the maximum and 95% UCL concentrations of detected constituents (USEPA, 1992b; 1999), will be compared to the identified screening criteria and to regional and site-specific natural and anthropogenic background concentrations to identify COPCs (i.e., those constituents whose concentrations exceed the criteria) from all of the constituents included in the RCRA SSP analytical program. Risk criteria will be based on a target hazard index of one and a target risk level of 10^{-6}.

The screening will be conducted on a cumulative risk basis (USEPA, 1999), i.e., the screens will be evaluated quantitatively for cumulative risk, following the methodology presented in the USEPA Region 9 PRG guidance (USEPA, 1999). Briefly, the ratio of the lower of the maximum detected and 95% UCL concentrations to the PRG will be calculated for each constituent. Any constituent whose ratio exceeds 1 will be identified as a COPC. In the evaluation of cumulative risk, potential carcinogens and noncarcinogens will be evaluated separately:

- For noncarcinogenic constituents, the ratio (as identified above) is equivalent to a hazard quotient or hazard index. The ratios for those noncarcinogenic constituents not already identified as COPCs will be summed. The ratio total will be compared to the target screening hazard index of one. If the ratio is less than one, no further evaluation is necessary. If the ratio is greater than one, ratios will be summed on a toxic endpoint-specific basis. If these ratios are less than or equal to one, no further evaluation is necessary. If a ratio is greater than one, constituents will be selected for inclusion as COPCs based on their ratio values such that the sum of the ratios of the remaining constituents (i.e., those not designated as COPCs) is less than one.

- The ratios (as identified above) for those potentially carcinogenic chemicals not already identified as COPCs will be summed and multiplied by 10^{-6}. This value will be compared to the screening target risk level of 10^{-6}. (Note: an unadjusted ratio total of 1 is equivalent to a total risk of 10^{-6}.) If the total risk is less than or equal to the target risk, no further evaluation is necessary. If the total risk is greater than the target risk, constituents will be selected for inclusion as COPCs based on their individual carcinogenic ratio values such that the risk sum of the remaining constituents is less than the target risk value (10^{-6}).

As stated in the Region 5 RCRA RA Guidance (USEPA, 1998b), special consideration will be given to MCLs in the cumulative risk screening process, because the MCLs do not always correspond to a target risk level of 10^{-6} or a target hazard quotient of one. Therefore, comparisons to MCLs will be conducted separately in the risk screening, and will not be included in the cumulative risk screen.

Tables presenting the results of each screening step will be presented in the risk assessment report. The final list of COPCs for inclusion in the risk assessment will be provided in the report, and these COPCs will be included in all subsequent risk calculations.

3.2.4 Data Quality Levels

The criteria identified in Section 3.2.3.1 have been used to develop the data quality levels (DQLs) to be used to identify appropriate practical quantitation limits (PQLs) for laboratory methods for the analytical program. The DQLs and PQLs are discussed in greater detail in the QAPP for the site (see Appendix 3 of the RCRA SSP). The DQLs for the HHRA are presented in Attachment A to this appendix.

It should be noted that the DQLs have also been developed based on the TACO Tier I values, as described in more detail in Section 7.0 of this workplan. The current TACO Tier I values are presented in Attachment B, the current USEPA Region 9 PRGs are presented in Attachment C, and the current USEPA Region 3 RBCs are presented in Attachment D. The PRGs and RBCs are periodically updated by USEPA. The most current criteria available will be used in the selection of COPCs.

4.0 DOSE-RESPONSE ASSESSMENT

The purpose of the dose-response assessment is to identify the types of adverse health effects a constituent may potentially cause, and to define the relationship between the dose of a constituent and the likelihood or magnitude of an adverse effect (response).

Adverse effects are defined by USEPA as potentially carcinogenic or noncarcinogenic (i.e., potential effects other than cancer). Dose-response relationships are defined by USEPA. The dose-response values for potentially carcinogenic effects are termed Cancer Slope Factors (CSFs) or Unit Risk Factors, and dose-response values for noncarcinogenic effects are termed Reference Doses (RfDs) or Reference Concentrations (RfCs). These values are available from USEPA sources, such as USEPA's Integrated Risk Information System (IRIS), an on-line computer database (USEPA, 2000b), and the Health Effects Assessment Summary Tables (HEAST) (USEPA, 1997b). Both sets of potential health effects will be evaluated in the risk assessment. The USEPA National Center for Environmental Assessment (NCEA) will be consulted if a constituent does not have a dose-response value in either IRIS or HEAST. Appropriate criteria may also be derived by qualified toxicologists using current USEPA-approved methodologies.

Dose-response values used in the risk assessment will be presented in tabular format. For each constituent the table will present the Chemical Abstracts Service (CAS) number, dose-response value, source, study animal, study method, and where appropriate, target organ, critical effect, uncertainty factors, and confidence level.

Dose-response values are available for inhalation and oral exposures. Oral dose-response values will be used to evaluate dermal exposures, provided appropriate dermal absorption values are available. COPCs will be evaluated quantitatively for the dermal exposure pathway. For inhalation pathways, reference concentrations (in units of mg/m^3) will be converted to reference doses (in units of mg/kg-day) for calculating risk for systemic toxicants. For direct acting toxicants, the oral, dermal, and inhalation pathways will be evaluated separately.

5.0 EXPOSURE ASSESSMENT

The purpose of the exposure assessment is to predict the magnitude and frequency of potential human exposure to each of the COPCs retained for quantitative evaluation in the HHRA. The first step in the exposure assessment process is the characterization of the setting of the site and surrounding area. Current and potential future site uses and potential receptors (i.e., people who may contact the impacted environmental media of interest) are then identified. Potential exposure scenarios appropriate to current and potential future site uses and receptors are then developed. Those potential exposure pathways for which COPCs are identified and are judged to be complete will be evaluated quantitatively in the risk assessment. Reasonable maximum exposure (RME) assumptions, and most likely exposure (MLE) assumptions based on appropriate USEPA guidance, will be employed in the quantitative risk assessment.

5.1 Identification of Potential Exposure Scenarios

Exposure scenarios are developed on the basis of the CSM for a site. The CSM for this study was presented in Section 2.0 (Figure 2-1). The CSM was used to develop the potential exposure scenarios identified below.

The area covered by the AOC has been used for industrial purposes for many years and use of these areas is expected to remain industrial. The area is zoned commercial/industrial and it is likely that the areas will continue to be used well into the reasonably foreseeable future for commercial/industrial purposes.

An on-site outdoor industrial worker will be evaluated for potential exposure to COPCs where identified in surface soil, and to COPCs that may volatilize into outdoor air from subsurface soil and underlying groundwater.

A construction/utility worker will be evaluated for potential exposure to constituents in surface and subsurface soils. Construction/utility work is assumed to occur only to a depth of 12 to 15 feet bgs. Where the water table surface lies within this interval, the construction worker will be evaluated for potential contact with COPCs in groundwater during excavation.

Due to the presence of a plume of VOCs in groundwater, an on-site indoor industrial worker will be evaluated for potential exposure to COPCs via inhalation of volatile constituents present in indoor air due to vapor intrusion from groundwater. Analytical data for shallow groundwater collected from SSP wells will be used in the risk assessment.

A trespassing teenager will be evaluated for potential exposure to COPCs where identified in surface soil, and to COPCs that may volatilize into outdoor air from subsurface soil and underlying

groundwater. Access to the W.G. Krummrich facility itself, Site R and Lot F, is controlled by fencing and surveillance and/or site security personnel. Therefore, the trespasser receptor will not be evaluated within these areas.

Ingestion of game fish will be evaluated for a recreational fisher receptor using data from fillets of game fish collected in the Mississippi River.

Groundwater is not used as a source of drinking water in the area. Surface water serves as the source of the municipal water supply, and groundwater use is prohibited by the Village of Sauget (see the information provided in Appendix 1 of the RCRA SSP). Therefore, groundwater will not be evaluated as a source of residential or industrial drinking water in the risk assessment.

Final receptor selection will be made once site analytical data have been evaluated and COPCs identified. If no COPCs are identified in a particular medium (e.g., fish), and/or the potential exposure pathway, upon further investigation, is judged to be incomplete (e.g., recreational fishing), then the exposure scenarios associated with that medium/pathway will not be quantitatively evaluated in the HHRA. The potential receptors and their associated exposure scenarios are discussed below and summarized in Table 5-1.

5.2 Receptor Identification

The following subsections discuss the parameters that will be used to evaluate each of the potential receptors in the HHRA. Both RME and MLE scenarios will be evaluated for each receptor. Exposure factors common to several of the receptors are discussed in Section 5.3.

5.2.1 Indoor Industrial Worker

Exposure assumptions for the indoor industrial worker under the RME and MLE scenarios are shown in Table 5-2. Where depth to groundwater is shallow (less than 25 to 30 feet bgs), it is possible an indoor industrial worker may be exposed indirectly to shallow groundwater via inhalation of volatile COPCs migrating from groundwater and the subsurface to indoor air of an industrial/commercial building.

5.2.2 Outdoor Industrial Worker

Exposure assumptions for the outdoor industrial worker under the RME and MLE scenarios are shown in Table 5-3. The outdoor industrial worker may contact COPCs in surface soil via incidental ingestion and dermal contact, and may inhale COPCs via volatilization from the surface and subsurface, and via particulate emissions from the surface. In addition, where depth to groundwater is shallow (less than 25 to 30 feet bgs), it is possible an outdoor industrial worker may be exposed indirectly to COPCs in

shallow groundwater via inhalation of volatile COPCs migrating from groundwater and the subsurface to outdoor air.

5.2.3 Construction/Utility Worker

Exposure assumptions for the construction/utility worker under the RME and MLE scenarios are shown in Table 5-4. Exposure media of interest in the evaluation of potential risk to a future construction/utility worker will potentially include surface soil and subsurface soil. Construction/utility work is assumed to occur only to a depth of 12 to 15 feet bgs. Where the water table surface lies within this interval, the construction worker will be evaluated for potential contact with COPCs in groundwater during excavation. Exposure could occur via incidental ingestion of and dermal contact with soil and shallow groundwater and via inhalation of fugitive dust and/or vapors from soil and groundwater. The soil ingestion rate listed in Table 5-4 for the construction worker under the MLE scenario is discussed in Section 5.3.

5.2.4 Trespassing Teenager

Exposure assumptions for the trespassing teenager under the RME and MLE scenarios are shown in Table 5-5. It is assumed that this receptor can be exposed to COPCs in surface soil located outside of the W.G. Krummrich facility proper and Site R and Lot F via incidental ingestion, dermal contact, and inhalation of volatiles and particulates, and can be exposed to COPCs in subsurface soil and/or groundwater via inhalation of volatiles.

5.2.5 Recreational Fisher

Recreational fishing takes place in the Mississippi River. As constituents in groundwater may discharge to the river, fish may contain COPCs in their tissues. Therefore, a recreational fisher has the potential to be exposed to site-related COPCs through ingestion of fish from the river. The configuration of the bank makes it unlikely that this receptor will contact surface water or sediment to a significant degree. The exposure assumptions for the recreational fish ingestion pathway for the RME and MLE receptors are summarized in Table 5-6.

5.3 Exposure Parameters

5.3.1 Soil Ingestion Rate – Adult Construction Worker

Incidental soil ingestion occurs at all ages as a result of hand-to-mouth activities. Currently, there are little or no reliable quantitative data available for estimating adult soil ingestion rates. USEPA risk assessment guidance suggests a soil ingestion rate of 50 mg/day for adults in an industrial scenario (USEPA, 1991a).

USEPA presented an estimate of a soil ingestion rate for adults doing yard work of 480 mg/day in their supporting evidence for the commercial/industrial soil ingestion rate of 50 mg/day in the "Standard Default Exposure Factors" Directive (USEPA, 1991a); the 480 mg/day value was not presented in the

table of default exposure factors. The Agency states: "For certain outdoor activities in the commercial/industrial setting (e.g., construction or landscaping), a soil ingestion rate of 480 mg/day may be used; however, this type of work is usually short-term and is often dictated by the weather. Thus, exposure duration would generally be less than one year and exposure frequency would vary according to site-specific construction/maintenance plans." However, some regions and state agencies have stipulated the use of this value to evaluate a construction worker exposure scenario. The Hawley (1985) study, which is the basis for the soil ingestion rate of 480 mg/day, was recently reviewed by the USEPA (USEPA, 1997a), which stated that, "Given the lack of supporting measurements, these estimates must be considered conjectural."

In the Hawley (1985) study, the author assumed that soil adheres to the surface area of the hands at a loading of 3.5 mg/cm^2. This value was based on a layer of soil on skin assumed to be 0.005 cm deep, a soil density of 1.5 g/cm^2, and 50% void space. Using the author's derived soil-to-skin adherence loading of 3.5 mg/cm^2 and assuming that the amount of soil covering a fraction of the hands (approximately 70 cm^2) is ingested twice a day, Hawley calculated a soil ingestion rate of 480 mg/day.

Hawley's 1985 analysis was one of the first published health risk assessments and was performed before any of the quantitative fecal tracer soil ingestion studies for either children or adults were conducted (Calabrese et al., 1989; Davis et al., 1990; Clausing et al., 1987; Calabrese et al., 1990). Thus, the estimate of 480 mg/day predates all of our current knowledge about soil ingestion among both children and adults, as well as recent published data on soil-to-skin adherence rates.

In 1993, USEPA sponsored a workshop to evaluate soil-to-skin adherence data. As a result, a study to determine a more accurate characterization of soil-to-skin adherence was sponsored by the USEPA and conducted by John C. Kissel and associates at the University of Washington (Kissel et al., 1996; Holmes et al., 1998). The intent of this study was to resolve uncertainties and develop more accurate measures of soil-to-skin loading rates for individuals involved in various occupational and recreational activities. As reported in the Exposure Factors Handbook (EFH) (USEPA ,1997a), soil loading on skin surfaces as a result of various occupational and recreational activities was directly measured. This study indicates that soil loadings vary with the type of activity and the body parts contacted. As one would expect, adherence appears to be greatest during outdoor activities such as farming and gardening, and more soil/dust tends to adhere to the hands and knees than to other areas of the body.

Average hand soil loading factors are as presented in the EFH (USEPA, 1997a) for the adult outdoor workers evaluated by Kissel and Holmes. In every case, soil adherence during occupational exposure was measured to be considerably lower than Hawley's estimate of 3.5 mg/cm^2. The range of soil adherence loadings measured by Kissel and Holmes falls within the USEPA range of 0.2 to 1.0 mg/cm^2 (USEPA, 1992c).

For this evaluation, the construction worker receptor is assumed to be exposed to COPCs in surface and subsurface soils during excavation activity. Based on this exposure scenario, the "farmer"

receptor provided in the EFH is considered to provide an upper-bound estimate of soil adherence. A soil ingestion rate can be calculated by substituting the soil adherence value for the receptor for the estimated value derived by Hawley (1985), as follows:

$$\frac{480\ mg/day}{3.5 mg/cm^2} = \frac{\text{ingestion rate } (mg/day)}{\text{soil adherence } (mg/cm^2)}$$

The soil to hand adherence value for the "farmer" is 0.47 mg/cm^2. The calculated soil ingestion value is 64 mg/day; therefore, a soil ingestion rate of 64 mg/day is used for the MLE construction worker receptor in this risk evaluation.

Additional support for this value comes from a new paper by Kissel and coworkers (Kissel et al., 1998) that presents the results of a study of the transfer of soil from hand to mouth by intentional licking. Soil was loaded onto the skin by pressing the hand onto soil, and the amount transferred to the mouth was measured. The thumb sucking, finger mouthing, and palm licking activities resulted in geometric mean soil mass transfers of 7.4 to 16 mg per event. The author concludes that "transfer of 10 mg or more of soil from a hand to the oral cavity in one event is possible, but requires moderate soil loading and more than incidental hand-to-mouth contact." However, "the fraction of soil transferred from hand to mouth that is subsequently swallowed is unknown but may be less than 100 percent." In addition, "the adult volunteers in this study reported that the presence of roughly 10 mg of soil in the mouth is readily detected (and unpleasant). Repeated unintentional ingestion of that mass of soil by adults therefore seems unlikely. In light of this observation, the 480 mg per day estimate [of Hawley, 1985] would require hundreds or perhaps thousands of hand-to-mouth contacts that resulted in soil transfer per day."

The 64 mg/day soil ingestion rate for the construction worker receptor recommended here is supported by this study, as 5 hand to mouth events during the course of a workday is more reasonable to assume than 48 or more.

Therefore, for the MLE scenario, a soil ingestion rate of 64 mg/day is used for the construction worker. For the RME scenario, a soil ingestion rate of 100 mg/day is assumed for the construction worker. This is the adult soil ingestion rate provided by USEPA (1991a).

5.3.2 Frequency of Exposure to COPCs in Soil

A meteorological factor is generally used to account for the fraction of the year during which exposure to constituents in soils may occur (Sheehan et al., 1991; USEPA, 1989). It is reasonable to assume that direct contact with soil or intrusive activities will not occur for residential receptors during inclement weather, i.e., when it is raining or snowing, when the ground is wet or frozen, or when snow or ice (32 degrees F) are covering the ground. Thus the frequency of contact with potentially impacted soil is adjusted for these site-specific meteorological conditions (USEPA, 1989).

There are only a few metrics that can be used to describe the fraction of the year when meteorological conditions are likely to limit exposure. These include temperature and the amount of precipitation per day and per year, which includes rain, snow and ice. While measures are collected hourly, the National Weather Service reports the number of days when precipitation is greater than 0.01 inches (one one-hundredth), greater than 0.1 inches (one tenth), and greater than 1 inch in their annual summary data. The number of days with precipitation greater than 0.1 inches is selected as the best representation of when exposure is likely to be limited by snow, rain, or ice. The National Oceanographic and Atmospheric Administration (NOAA) provides daily temperature data. It is assumed that exposure to soils is limited by temperatures less than 32 degrees F. Therefore, limiting the assumption of exposure to soils to those days with less than 0.1 inch of precipitation and temperatures above 32 degrees F is reasonable.

Based on ten years of meteorological data (1986-1995) provided by NOAA (1996), a meteorological factor is derived for use in the exposure equations. On the average, 66 days/year in this area receive 0.1 or greater inches of precipitation, and there are typically 27 days/year with a mean temperature of 32 degrees F or below. Accounting for days when both events occur (assumed to be 10% of the rain days or 6 days/year), the number of inclement days, 87, can be calculated (27 + 66 – 6 = 87). It is assumed that these days are evenly spaced throughout the course of the year. The meteorological factor is then calculated (87/365 = 24%). Thus it is assumed that exposure to soils will not occur for the "receptor" 24% of the assumed days of exposure (exposure frequency) due to weather restrictions.

The choice of a precipitation target of 0.1 inches is in keeping with guidance provided in the Compilation of Air Pollution Emission Factors, which assumes that soil suspension will not occur on days with more than 0.01 inches of precipitation (USEPA, 1995b). It is probable, however, that this metric both over- and under-estimates the potential exposure in some conditions. For, example, it is possible that some exposure to soils may occur on days when it rains just over 0.1 inches in the early morning and then the ground dries during the course of the day. Alternatively, significant rainfall, such as greater than 1 inch, is likely to saturate the soil for consecutive days, and several inches of snow (which may fall all on one day with one storm) may cover the ground and inhibit direct contact for several days. With both of these considerations in mind, it is likely that a meteorological factor based on inclement days defined as precipitation greater than 0.1 inches and average temperatures less than 32 degrees F is reasonable.

5.4 Quantification of Potential Exposures

To estimate the potential risk to human health that may be posed by the presence of COPCs at the site, it is first necessary to estimate the potential exposure dose of each COPC. The exposure dose is estimated for each constituent via each exposure pathway by which the receptor is assumed to be exposed. Exposure dose equations combine the estimates of constituent concentration in the environmental medium of interest with assumptions regarding the type and magnitude of each receptor's potential exposure to provide a numerical estimate of the exposure dose. The exposure

dose is defined as the amount of COPC taken into the receptor and is expressed in units of milligrams of COPC per kilogram of body weight per day (mg/kg-day).

Exposure doses are defined differently for potential carcinogenic and noncarcinogenic effects. The Chronic Average Daily Dose (CADD) is used to estimate a receptor's potential intake from exposure to a COPC with noncarcinogenic effects. According to USEPA (1989), the CADD should be calculated by averaging the dose over the period of time for which the receptor is assumed to be exposed. Therefore, the averaging period is the same as the exposure duration. For COPC with potential carcinogenic effects, however, the Lifetime Average Daily Dose (LADD) is employed to estimate potential exposures. In accordance with USEPA (1989) guidance, the LADD is calculated by averaging exposure over the receptor's assumed lifetime (70 years). Therefore, the averaging period is the same as the receptor's assumed lifetime. The standardized equations for estimating a receptor's average daily dose (both lifetime and chronic) are presented below, followed by descriptions of receptor-specific exposure parameters and constituent-specific parameters.

5.4.1 Estimating Potential Exposure to COPCs in Soil

Both incidental ingestion of, and dermal contact with, soil are assumed to occur for many of the receptors. The following equations are used to calculate the estimated exposure.

Average Daily Dose (Lifetime and Chronic) Following Incidental Ingestion of Soil (mg/kg-day):

$$ADD = \frac{CS \times SIR \times EF \times ED \times AAF_o \times CF}{BW \times AT}$$

where:

ADD	=	Average Daily Dose (mg/kg-day)
CS	=	Soil Concentration (mg/kg soil)
SIR	=	Soil Ingestion Rate (mg soil/day)
EF	=	Exposure Frequency (days/year)
ED	=	Exposure Duration (year)
AAF_o	=	Oral-Soil Absorption Adjustment Factor (AAF) (chemical-specific) (unitless)
CF	=	Unit Conversion Factor (kg soil/10^6 mg soil)
BW	=	Body Weight (kg)
AT	=	Averaging Time (days)

Average Daily Dose (Lifetime and Chronic) Following Dermal Contact with Soil (mg/kg-day):

$$ADD = \frac{CS \times SA \times AF \times EF \times ED \times AAF_d \times CF}{BW \times AT}$$

where:

ADD	=	Average Daily Dose (mg/kg-day)
CS	=	Soil Concentration (mg/kg soil)
SA	=	Exposed Skin Surface Area (cm^2/day)
AF	=	Soil to Skin Adherence Factor (mg soil/cm^2)
EF	=	Exposure Frequency (days/year)
ED	=	Exposure Duration (year)
AAF_d	=	Dermal-Soil AAF (chemical-specific) (unitless)
CF	=	Unit Conversion Factor (kg soil/10^6 mg soil)
BW	=	Body Weight (kg)
AT	=	Averaging Time (days)

5.4.2 Estimating Potential Exposure via Inhalation

Exposure to COPC migrating from soil to air is assumed to occur for many of the potential receptors. The equation used to estimate exposure to COPC via inhalation is as follows:

Average Daily Dose (Lifetime and Chronic) Following Inhalation of COPC (mg/kg-day):

$$ADD = \frac{CA \times IR \times AAF_i \times ET \times EF \times ED}{BW \times AT}$$

where:

ADD	=	Average Daily Dose (mg/kg-day)
CA	=	Air Concentration (mg/m^3)
IR	=	Inhalation Rate (m^3 /hr)
AAF_i	=	Inhalation AAF (chemical-specific) (unitless)
ET	=	Exposure Time (hours/day)
EF	=	Exposure Frequency (days/year)
ED	=	Exposure Duration (year)
BW	=	Body Weight (kg)
AT	=	Averaging Time (days)

5.4.3 Estimating Potential Exposure to COPCs from Groundwater

A potential construction worker may contact COPC in groundwater during soil excavation. The equation used to estimate a receptor's potential exposure via incidental ingestion of groundwater is:

Average Daily Dose (Lifetime and Chronic) Following Ingestion of Water (mg/kg-day):

$$ADD = \frac{CW \times IR \times EF \times ED \times AAF_o}{BW \times AT}$$

where:

ADD	=	Average Daily Dose (mg/kg-day)
CW	=	Water Concentration (mg/L)
IR	=	Water Ingestion Rate (L/day)
EF	=	Exposure Frequency (days/year)
ED	=	Exposure Duration (year)
AAF_o	=	Oral-Water AAF (chemical-specific) (unitless)
BW	=	Body Weight (kg)
AT	=	Averaging Time (days)

The equation used to estimate a receptor's potential exposure via dermal contact with groundwater is as follows:

Average Daily Dose (Lifetime and Chronic) Following Dermal Contact with Water (mg/kg-day):

$$ADD = \frac{CW \times SA \times PC \times ET \times EF \times ED \times AAF_d \times CF}{BW \times AT}$$

where:

ADD	=	Average Daily Dose (mg/kg-day)
CW	=	Water Concentration (mg/L)
SA	=	Exposed Skin Surface Area (cm^2)
PC	=	Dermal Permeability Constant (cm/hr) (chemical-specific)
ET	=	Exposure Time (hours/day)
EF	=	Exposure Frequency (days/year)
ED	=	Years Exposed (year)

AAF_d = Dermal-Water AAF (chemical-specific) (unitless)
CF = Unit Conversion Factor ($L/10^3cm^3$)
BW = Body Weight (kg)
AT = Averaging Time (days)

5.4.4 Estimating Potential Exposure From Food Consumption

A recreational fisher may be exposed to COPC through ingestion of fish obtained from the Mississippi River. The equation used to estimate a receptor's potential exposure via food consumption is:

Average Daily Dose (Lifetime and Chronic) Following Food Consumption (mg/kg-day):

$$ADD = \frac{CF \times IR \times AAF \times EF \times ED}{AT \times BW}$$

where:

ADD = Average Daily Dose (mg/kg-day)
CF = Concentration in Food (mg/kg)
IR = Ingestion Rate (kg/day)
AAF = Oral-diet AAF (chemical-specific) (unitless)
EF = Exposure Frequency (days/year)
ED = Exposure Duration (years)
AT = Averaging Time (days)
BW = Body Weight (kg)

5.4.5 Absorption Adjustment Factors

Absorption adjustment factors (AAFs) are used in risk assessment to account for absorption differences between humans exposed to substances in environmental situations and experimental animals in the studies used to derive dose-response values.

To estimate the potential risk to human health that may be posed by the presence of substances in various environmental media (such as soil or groundwater) it is first necessary to estimate the human exposure dose, of each compound. The exposure dose is then combined with an estimate of the toxicity of the substance to produce an estimate of risk posed to human health.

The estimate of toxicity of a substance, termed the dose-response value, can be derived from human epidemiological data, but it is most often derived from experiments with laboratory animals. The dose-response value can be calculated based on the administered dose of the substance (similar to the

human exposure dose) or, when data are available, based on the absorbed dose, or internal dose, of the substance.

In animals, as in humans, the administered dose of a substance is not necessarily completely absorbed. Moreover, differences in absorption exist between laboratory animals and humans, as well as between different media and routes of exposure. Therefore, it is not always appropriate to directly apply a dose-response value to the human exposure dose. In many cases, a correction factor in the calculation of risk is needed to account for differences between absorption in the dose-response study and absorption likely to occur upon human exposure to a substance. Without such a correction, the estimate of human health risk could be over- or under-estimated.

This correction factor is termed the absorption adjustment factor, or AAF. The AAF is used to adjust the human exposure dose so that it is expressed in the same terms as the doses used to generate the dose-response curve in the dose-response study. The AAF is the ratio between the estimated human absorption factor for the specific medium and route of exposure, and the known or estimated absorption factor for the laboratory study from which the dose-response value was derived.

$$AAF = \frac{\text{(fraction absorbed in humans for the environmental exposure)}}{\text{(fraction absorbed in the dose - response study)}}$$

The use of an AAF allows the risk assessor to make appropriate adjustments if the efficiency of absorption between environmental exposure and experimental exposure is known or expected to differ because of physiological effects and/or matrix or vehicle effects.

AAFs can have numerical values less than one or greater than one, depending on the particular circumstances at hand. When the dose-response curve is based on administered dose data, and if it is estimated that the fraction absorbed from the site-specific exposure is the same as the fraction absorbed in the laboratory study, then the AAF is 1.0. In the absence of detailed toxicological information on every compound of interest, it has been common practice for risk assessors to use a default AAF value of 1.0. This approach is not necessarily protective of public health, in some cases, because there are situations in which it is expected that the fraction absorbed from a site-related exposure would be higher than that in the laboratory study. There are also situations where the reverse could occur. Thus, use of AAFs in standard risk assessment calculations can provide more accurate and more realistic estimates of potential human health risk.

5.5 Calculation of Exposure Point Concentrations

Exposure points are located where potential receptors may contact COPCs at or from the site. The concentration of COPCs in the environmental medium that receptors may contact must be estimated in order to determine the magnitude of potential exposure.

Measured data will be available for surface soil, subsurface soil, groundwater, and fish tissue. Groundwater will be evaluated on a plume or well-by-well basis as appropriate. The exposure point concentration is defined as the lower of the maximum or 95th percentile UCL on the arithmetic mean concentrations (USEPA, 1992a) for the RME scenario and the arithmetic mean concentration for the MLE scenario.

Other pathways will require modeling to derive exposure point concentrations. These pathways include volatile chemicals in groundwater and the subsurface migrating upwards and infiltrating into indoor and outdoor air, and generation of fugitive dust and volatiles from undisturbed soils as well as during construction activities.

The model to be used to predict indoor air concentrations of VOCs will be the model of Johnson and Ettinger recommended by the USEPA (1996a and 1997c) to predict concentrations of COPCs migrating from groundwater or soil to indoor air of an overlying building. Concentrations of volatile COPCs in outdoor air due to migration from subsurface soil and/or groundwater will be estimated using the methodology recommended by the American Society for Testing and Materials (ASTM, 1995).

The calculation of concentrations of SVOC COPCs bound to soil in fugitive dust involves multiplying the soil exposure point concentrations by the concentration of dust in air as follows:

1) Ambient Air:

   COPC concentration in ambient air (mg/m^3) = Exposure point concentration in soil (mg/kg soil) x Dust concentration (kg soil/m^3)

   The dust concentration in air to be used in the evaluation of ambient outdoor air pathways in this risk evaluation is the inverse of the particulate emission factor derived in accordance with USEPA guidance (USEPA, 1996a).

2) Excavation Air (i.e., during construction activities):

   COPC concentration in excavation air (mg/m^3) = Exposure point concentration in soil (mg/kg soil) x Dust concentration (mg soil/m^3) x Unit correction factor (1 kg/10^6 mg)

   The dust concentration in air to be used in the evaluation of excavation air pathways in this risk evaluation is 60 mg/m^3. This value is the recommended concentration of respirable particulate with a mean diameter of 10 microns or less (PM10) for excavation activities (MADEP, 1995).

TABLE 5-1
POTENTIAL RECEPTORS, EXPOSURE MEDIA AND EXPOSURE PATHWAYS
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

Receptor	Medium	Pathway
On-Site Outdoor Worker		
	Surface Soil	Incidental Ingestion Inhalation of Particulates/Volatiles Dermal Contact
	Subsurface Soil	Incidental Ingestion Inhalation of Particulates/Volatiles Dermal Contact
	Groundwater	Inhalation of Volatiles in Outdoor Air
On-Site Indoor Worker		
	Groundwater	Inhalation of Volatiles in Indoor Air
Construction/Utility Worker		
	Surface Soil	Incidental Ingestion Inhalation of Particulates/Volatiles Dermal Contact
	Subsurface Soil	Incidental Ingestion Inhalation of Particulates/Volatiles Dermal Contact
	Groundwater	Incidental Ingestion Dermal Contact Inhalation of Volatiles in Outdoor Air
Trespassing Teenager		
	Surface Soil	Incidental Ingestion Inhalation of Particulates/Volatiles Dermal Contact
	Subsurface Soil	Incidental Ingestion Inhalation of Particulates/Volatiles Dermal Contact
	Groundwater	Inhalation of Volatiles in Outdoor Air
Recreational Fisher		
	Fish Fillets	Ingestion

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TABLE 5-2
SUMMARY OF POTENTIAL EXPOSURE ASSUMPTIONS - INDOOR INDUSTRIAL WORKER
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

Parameter	RME On-Site Indoor Worker		MLE On-Site Indoor Worker	
Parameters Used in the Indoor Air Pathway				
Exposure Time (hr/day)	8	(a)	8	(a)
Exposure Frequency (days/year)	250	(b)	250	(b)
Exposure Duration (yr)	25	(b)	7	(c)
Inhalation Rate (m^3/hour)	1.6	(d)	1.0	(e)
Body Weight (kg)	70	(b)	70	(b)

Notes:
MLE - Most Likely Exposure.
RME - Reasonable Maximum Exposure.
(a) - USEPA, 1997a. Exposure Factors Handbook. 50th percentile time spent at work, males and females, all ages. EFH Table 15-68.
(b) - USEPA, 1991a. Standard Default Exposure Factors.
(c) - USEPA, 1997a. Exposure Factors Handbook. Recommended value for occupational tenure listed in EFH Table 1-2.
(d) - USEPA, 1997a. Exposure Factors Handbook. Inhalation rate for moderate activity listed in EFH Table 5-23.
(e) - USEPA, 1997a. Exposure Factors Handbook. Inhalation rate for light activity listed in EFH Table 5-23.

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TABLE 5-3
SUMMARY OF POTENTIAL EXPOSURE ASSUMPTIONS - OUTDOOR INDUSTRIAL WORKER
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

Parameter	RME Future Outdoor Industrial Worker		MLE Future Outdoor Industrial Worker	
Parameters Used in the Outdoor Air Pathways				
Exposure Time (hr/day)	8	(a)	8	(a)
Exposure Frequency (days/year)	190	(i)	190	(i)
Exposure Duration (yr)	25	(b)	7	(c)
Inhalation Rate (m^3/hour)	1.6	(d)	1	(e)
Body Weight (kg)	70	(b)	70	(b)
Parameters Used in the Surface Soil Pathway				
Exposure Frequency (days/year)	190	(i)	190	(i)
Exposure Duration (yr)	25	(b)	7	(c)
Soil Ingestion Rate (mg/day)	50	(f)	30	(j)
Skin Contacting Medium (cm^2)	3339	(g)	3339	(g)
Soil on Skin (mg/cm^2)	0.02	(h)	0.02	(h)
Body Weight (kg)	70	(b)	70	(b)

Notes:
MLE - Most Likely Exposure.
RME - Reasonable Maximum Exposure.
(a) - USEPA, 1997a. Exposure Factors Handbook. 50th percentile time spent at work, males and females, all ages. EFH Table 15-68.
(b) - USEPA, 1991a. Standard Default Exposure Factors.
(c) - USEPA, 1997a. Exposure Factors Handbook. Recommended value for occupational tenure listed in EFH Table 1-2.
(d) - USEPA, 1997a. Exposure Factors Handbook. Inhalation rate for moderate activity listed in EFH Table 5-23.
(e) - USEPA, 1997a. Exposure Factors Handbook. Inhalation rate for light activity listed in EFH Table 5-23.
(f) - USEPA, 1997a. Exposure Factors Handbook. Average soil ingestion rates listed in EFH Table 1-2.
(g) - USEPA, 1997a. Exposure Factors Handbook. Represents 50th percentile values for males and females based on hands, forearms, and face listed in EFH Tables 6-2 and 6-3.
(h) - USEPA, 1997a. Exposure Factors Handbook. See Table 5-7 of this workplan for calculation.
(i) - Exposure frequency of 250 days (USEPA, 1991a) adjusted for percentage of days with inclement weather (24%), [250-(250*0.24) = 190]; see text.
(j) - Calabrese, E.J., et. al. 1990. Preliminary adult soil ingestion estimates; results of a pilot study. Regul. Toxicol. Pharmacol. 12:88-95. As cited in USEPA, 1997a. Exposure Factors Handbook. Low end of range.

TABLE 5-4
SUMMARY OF POTENTIAL EXPOSURE ASSUMPTIONS - CONSTRUCTION WORKER
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

Parameter	RME Future Construction/Utility Worker		MLE Future Construction/Utility Worker	
Parameters Used in the Surface Soil, Subsurface Soil and Groundwater Inhalation Pathway				
Exposure Time (hr/day)	8	(a)	8	(a)
Exposure Frequency (days/year)	40	(b)	20	(c)
Exposure Duration (yr)	1	(d)	1	(d)
Inhalation Rate (m^3/hour)	2.5	(e)	1.5	(f)
Body Weight (kg)	70	(g)	70	(g)
Parameters Used in the Surface and Subsurface Soil Pathway				
Exposure Frequency (days/year)	40	(b)	20	(c)
Exposure Duration (yr)	1	(d)	1	(d)
Soil Ingestion Rate (mg/day)	100	(g)	64	(h)
Skin Contacting Medium (cm^2)	3339	(i)	3339	(i)
Soil on Skin (mg/cm^2)	0.19	(j)	0.19	(j)
Body Weight (kg)	70	(g)	70	(g)
Parameters Used in the Groundwater Pathway				
Exposure Time (hr/event)	1	(k)	1	(k)
Exposure Frequency (days/year)	10	(k)	5	(k)
Exposure Duration (yr)	1	(d)	1	(d)
Water Ingestion Rate (l/event)	0.005	(l)	0.005	(l)
Skin Contacting Medium (cm^2)	3339	(i)	3339	(i)
Body Weight (kg)	70	(g)	70	(g)

Notes:
MLE - Most Likely Exposure.
RME - Reasonable Maximum Exposure.
(a) - USEPA, 1997a. Exposure Factors Handbook. 50th percentile time spent at work, males and females, all ages. EFH Table 15-68.
(b) - Exposure frequency is equivalent to 5 days per week for 2 months.
(c) - Exposure frequency is equivalent to 5 days per week for 1 month.
(d) - Construction activities are assumed to occur within a 1 year period.
(e) - USEPA, 1997a. Exposure Factors Handbook. Inhalation rate is the value for heavy activity for an outdoor worker listed in EFH Table 5-23.
(f) - USEPA, 1997a. Exposure Factors Handbook. Inhalation rate is the value for moderate activity for an outdoor worker listed in EFH Table 5-23.
(g) - USEPA, 1991a. Standard Default Exposure Factors.
(h) - ENSR-derived value; see text.
(i) - USEPA, 1997a. Exposure Factors Handbook. Represents 50th percentile values for males and females based on hands, forearms, and face listed listed in EFH Tables 6-2 and 6-3.
(j) - USEPA, 1997a. Exposure Factors Handbook. See Table 5-8 of this workplan for calculation.
(k) - Assumes that contact with water occurs only for a fraction of the total exposure duration and time.
(l) - USEPA, 1989a. Risk Assessment Guidance for Superfund, Volume I. Value is one-tenth of that assumed to occur during a swimming event.

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TABLE 5-5
SUMMARY OF POTENTIAL EXPOSURE ASSUMPTIONS - TRESPASSING TEENAGER
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

Parameter		RME Trespassing Teenager (7 to 18 yrs)		MLE Trespassing Teenager (7 to 18 yrs)	
Parameters Used in the Surface Soil Pathway					
	Exposure Frequency (days/year)	26	(a)	13	(b)
	Exposure Duration (yr)	11	(c)	11	(c)
	Soil Ingestion Rate (mg/day)	100	(d)	50	(e)
	Skin Contacting Medium (cm^2)	3677	(f)	3677	(f)
	Soil on Skin (mg/cm^2)	0.02	(g)	0.02	(g)
	Body Weight (kg)	47	(h)	47	(h)
Parameters Used in the Outdoor Air Pathway					
	Exposure Time (hr/day)	2	(i)	2	(i)
	Exposure Frequency (days/year)	26	(a)	13	(b)
	Exposure Duration (yr)	11	(c)	11	(c)
	Inhalation Rate (m^3/hour)	1.2	(j)	1	(k)
	Body Weight (kg)	47	(h)	47	(h)

Notes:
MLE - Most Likely Exposure.
RME - Reasonable Maximum Exposure.
(a) - 1 day per week for 26 weeks (6 months) of the year.
(b) - 1 day per 2 weeks for 26 weeks (6 months) of the year.
(c) - Trespassing teenager is assumed to range in age from 7 to 18. Therefore, total exposure duration is 11 years.
(d) - USEPA, 1991a. Standard Default Exposure Factors.
(e) - USEPA, 1997a. Exposure Factors Handbook. Average soil ingestion rate for an adult listed in EFH Table 1-2.
(f) - USEPA, 1997a. Exposure Factors Handbook. Average surface are of hands, forearms and lower legs of males and females aged 7 to 18. listed in EFH Tables 6-6 to 6-8
(g) - USEPA, 1997a. Exposure Factors Handbook. See Table 5-9 of this workplan for calculation.
(h) - USEPA, 1997a. Exposure Factors Handbook. Body weight is the average of males and females aged 7 to 18 listed in EFH Table 7-3
(i) - The trespassing teen is assumed to be on-site for two hours.
(j) - USEPA, 1997a. Exposure Factors Handbook. Inhalation rates is the value for moderate activity (children) listed in EFH Table 5-23.
(k) - USEPA, 1997a. Exposure Factors Handbook. Inhalation rates is the value for light activity (children) listed in EFH Table 5-23.

TABLE 5-6
SUMMARY OF POTENTIAL EXPOSURE ASSUMPTIONS - RECREATIONAL FISHER
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

Parameter	RME Adult Recreational Fisher		MLE Adult Recreational Fisher	
Parameters Used in the Fish Ingestion Pathway				
Exposure Frequency (days/year)	365	(a)	365	(a)
Exposure Duration (yr)	30	(b)	9	(c)
Fish Ingestion Rate (g/day)	8	(d)	1	(e)
Body Weight (kg)	70	(b)	70	(b)

Notes:
MLE - Most Likely Exposure.
RME - Reasonable Maximum Exposure.
(a) - Fish ingestion rates are based on 365 days per year.
(b) - USEPA, 1991a. Standard Default Exposure Factors.
(c) - USEPA, 1997a. Exposure Factors Handbook. Recommended average for time residing in a household. EFH Table 1-2.
(d) - USEPA, 1997a. Exposure Factors Handbook. 8 g/day is equivalent to approximately 22 fish meals of 129 g per year.
(e) - 1 g/day is equivalent to approximately three 129 g fish meals per year (equivalent to one fish meal per month in the three summer months).

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TABLE 5-7
SOIL ADHERANCE FACTORS- OUTDOOR INDUSTRIAL WORKER
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

	Outdoor Industrial Worker Scenario		
Body Part	**Surface Area 50th percentile (cm^2) (a)**	**Soil Loading Groundskeeper (mg/cm^2) (b)**	**Total Soil Mass (mg)**
Head	1,205	0.005	5.543
Hands	904	0.071	64.1485
Forearms	1,230	0.009	11.1438
Total	3,339		80.8
Area-Weighted Soil Adherence factor (mg/cm2) = Soil mass/Surface area =			0.02

Notes:
(a) - Data from U.S. EPA (1997a), Tables 6-2, 6-3. Average of 50th percentile values for men and women (1/2 arm used as proxy for female forearm).
(b) - Data from U.S. EPA (1997a), Table 6-12. Average of Groundskeeper Nos. 1,2,3,4, and 5.

TABLE 5-8
SOIL ADHERANCE FACTORS- CONSTRUCTION WORKER
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

	Construction Worker Scenario		
Body Part	**Surface Area 50th percentile (cm^2) (a)**	**Soil Loading Farmer (mg/cm^2) (a)**	**Total Soil Mass (mg)**
Head	1,205	0.041	49.405
Hands	904	0.47	424.645
Forearms	1,230	0.13	159.9
Total	3,339		634.0
Area-Weighted Soil Adherence factor (mg/cm2) = Soil mass/Surface area =			0.19

Notes:
(a) - Data from U.S. EPA (1997a), Tables 6-2, 6-3. Average of 50th percentile values for men and women (1/2 arm used as proxy for female forearm).
(b) - Data from U.S. EPA (1997a), Table 6-12. Average of Farmer Nos. 1 and 2.

TABLE 5-9
SOIL ADHERENCE FACTORS- TRESPASSING TEENAGER (7 TO 18 YEARS)
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

Body Part	Trespassing Teenager (7 to 18 years)		
	Surface Area 50th percentile (a) (cm^2)	Soil Loading Soccer Kids (mg/cm^2) (b)	Total Soil Mass (mg)
Hands	715	0.0547	39.09
Forearms	894	0.0061	5.42
Lower legs	2,068	0.0177	36.60
Total	3,677	--	
Area-Weighted Soil Adherence factor (mg/cm2) = Soil mass/Surface area =			0.02

Notes:
(a) - Data from U.S. EPA (1997a). Based on average of boys (EFH Table 6-6) and girls (EFH Table 6-7) total body surface area , and mean percentages of total surface area for individual body parts EFH Table 6-8).
(b) - Data from U.S. EPA (1997a) Table 6-12. Average of Soccer Kids Nos. 1, 2, and 3.

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6.0 RISK CHARACTERIZATION

The purpose of the risk characterization is to provide estimates of the potential risk to human health from exposure to COPCs at or from the site by receptors at or near the site. To accomplish this objective, this section will include quantitative estimates of potential carcinogenic and noncarcinogenic risk.

The results of the exposure assessment are combined with the results of the dose-response assessment to derive quantitative estimates of risk, or the probability of adverse health effects following assumed potential exposure to the COPCs. Using the exposure point concentrations derived in the exposure assessment, each exposure pathway for each receptor will be evaluated for both potential carcinogenic and noncarcinogenic effects.

6.1 Carcinogenic Risk Characterization

The purpose of carcinogenic risk characterization is to estimate the upper-bound likelihood, over and above the background cancer rate, that a receptor will develop cancer in his or her lifetime as a result of exposure to a constituent in environmental media at the site. This likelihood is a function of the dose of a constituent (described in the Exposure Assessment) and the Cancer Slope Factor (CSF) (described in the Toxicity Assessment) for that constituent. The Excess Lifetime Cancer Risk (ELCR) is the likelihood over and above the background cancer rate, which currently in the U.S. is between 1 in 3 and 1 in 4 (Landis et al., 1998), that an individual will contract cancer in his or her lifetime. The risk value is expressed as a probability (e.g., 10^{-6}, or one in one million). The relationship between the ELCR and the estimated Lifetime Average Daily Dose (LADD) of a chemical may be expressed as:

$$ELCR = 1-e^{-(CSF \times LADD)}$$

When the product of the CSF and the LADD is much greater than 1, the ELCR approaches 1 (i.e., 100 percent probability). When the product is less than 0.01 (one chance in 100), the equation can be closely approximated by:

$$ELCR = LADD\ (mg/kg\text{-}day) \times CSF\ (mg/kg\text{-}day)^{-1}$$

The product of the CSF and the LADD is unitless, and provides an upper-bound estimate of the potential carcinogenic risk associated with a receptor's exposure to that constituent via that pathway.

The potential carcinogenic risk for each exposure pathway will be calculated for each receptor. In current regulatory risk assessment, it is assumed that cancer risks are additive or cumulative. Pathway and area-specific risks will be summed to estimate the total site potential cancer risk for each

receptor. A summary of the total site cancer risks for each receptor group will be presented in this section.

The results will be compared to the USEPA's target risk range of 10^{-4} to 10^{-6}. USEPA has established target risk ranges under the National Contingency Plan (NCP) or Superfund program (USEPA, 1990). Target risk levels refer to levels of cancer risk or hazard indices that are deemed acceptable by the USEPA or other regulatory agencies. These are levels below which the potential for adverse effects to humans are assumed to be negligible or inconsequential. The NCP establishes a target cancer risk range of 10^{-4} to 10^{-6} and a target hazard index of less than or equal to one (USEPA, 1990). The USEPA subsequently clarified that, "Where the cumulative carcinogenic site risk to an individual based on reasonable maximum exposure for both current and future land use is less than 10^{-4}, and the non-carcinogenic hazard quotient is less than 1, action generally is not warranted, unless there are adverse environmental impacts" (USEPA, 1991b).

Both the NCP and the 1991 guidance relate directly to the Superfund program, which is often relied upon by the RCRA corrective action program. Recently, USEPA's RCRA closure program has indicated that "procedures and guidance generally used to develop protective, risk-based media cleanup standards for the RCRA corrective action and Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) cleanup programs are also appropriate to define the amount of hazardous chemicals that may remain in environmental media after clean closure" (USEPA, 1998d).

The Region 5 RCRA Risk Assessment Guidance (USEPA, 1998b) stipulates the use of a cumulative risk-based screen to consider potential additivity of health impacts. The guidance proposes the use of initial screening criteria based on a target cancer risk level of 10^{-6}, stating that "since the carcinogenic risk of multiple chemicals is [considered to be] additive, the 10^{-6} risk screening level for individual chemicals and pathways should lead to a cumulative cancer risk within the 10^{-6} to 10^{-4} range for the combination of chemicals usually found at RCRA sites."

Therefore, the screening criteria used to identify COPC are based on a 10^{-6} risk level, and a cumulative target risk level of 10^{-4} will be used to evaluate the risk assessment results.

Any COPC that causes an exceedance of the 10^{-4} risk level for a particular receptor will be designated a COC. Both RME and MLE results will be considered in the identification of COCs. Remedial goals (RGs) will be calculated for each COC, based on the scenarios used in the risk assessment.

6.2 Noncarcinogenic Risk Characterization

The potential for exposure to a constituent to result in adverse noncarcinogenic health effects is estimated for each receptor by comparing the Chronic Average Daily Dose (CADD) for each COPC

with the RfD for that COPC. The resulting ratio, which is unitless, is known as the Hazard Quotient (HQ) for that chemical. The HQ is calculated using the following equation:

$$HQ = \frac{CADD\,(mg/kg - day)}{RfD\,(mg/kg - day)}$$

The target HQ is defined as an HQ of less than or equal to one (USEPA, 1989). When the HQ is less than or equal to one, the RfD has not been exceeded, and no adverse noncarcinogenic effects are expected. If the HQ is greater than one, there may be a potential for adverse noncarcinogenic health effects to occur; however, the magnitude of the HQ cannot be directly equated to a probability or effect level.

The total Hazard Index (HI) is calculated for each exposure pathway by summing the HQs for each individual chemical. The total site HI will be calculated for each potential receptor by summing the HIs for each pathway associated with the receptor. If the total site HI is greater than one for any receptor, a more detailed evaluation of potential noncarcinogenic effects based on specific health endpoints will be performed (USEPA, 1989).

A summary of all HI for each receptor group will be presented in this section and compared to the USEPA's target hazard index of one. Any COPC that causes an exceedance of the Hazard Index of 1 for a particular receptor and target endpoint will be designated a COC. Both RME and MLE results will be considered in the identification of COCs. Remedial goals will be calculated for each COC, based on the scenarios used in the risk assessment.

6.3 Risk Assessment Refinement

The HHRA, as described, utilizes conservative exposure and toxicity parameters. The results of the HHRA will be reviewed and the risk drivers identified. Solutia may choose to refine the risk estimates by using, for example, the following: site-specific exposure data (e.g., creel census), site-specific bioavailability factors, or probabilistic (or Monte Carlo) analysis. Use of such refinements, such as a probabilistic risk assessment, will allow the public to put the risks in perspective and provide information that the risk manager needs to more accurately characterize risks on a site-specific basis and to communicate the nature of the risks to the public.

6.4 Cumulative Risk

The risk assessment will be conducted for all media, and total site risks will be calculated for each receptor. COCs for potentially carcinogenic and noncarcinogenic effects will be identified, and pathways that contribute significantly to target risk exceedances will be identified. RGs will be calculated for appropriate COCs in the appropriate medium.

7.0 TACO EVALUATION

The TACO program regulations are found at 35 Illinois Administrative Code Part 742 (IEPA, 1998). The TACO program provides the following options to use in site evaluation:

- Exposure route evaluation and exclusion;
- Use of area background concentrations as screening tools or remediation objectives; and
- Three tiers for selecting or developing remediation objectives.

Use of the tiered TACO program for the evaluation of the RCRA SSP data is discussed below. Although the program is comprised of three tiers of evaluation, the tiers do not need to be employed sequentially, and either Tier 1, 2, or 3 can be used for the evaluation of a specific constituent.

7.1 Tier 1

Tier 1 provides a set of "look-up" tables that provide baseline remediation objectives for residential and commercial/industrial scenarios. The TACO approach (IEPA, 1998) is very similar to that outlined in the Soil Screening Level (SSL) guidance (USEPA, 1996a) in that it provides Tier I criteria based on direct contact (ingestion and inhalation) and the soil-to-groundwater pathway. In fact, the TACO Tier I criteria have been developed based on the USEPA SSL guidance. However, the TACO Tier I criteria are more comprehensive because values are provided for a longer list of constituents, and Tier I criteria are available for both residential and industrial scenarios.

The appropriate Tier 1 objectives are selected based on groundwater classification and intended land use at the site. The values for commercial/industrial soils will be used to evaluate the RCRA SSP soil data. Groundwater will initially be screened using the Class II groundwater standards. Groundwater is not used as a source of drinking water in the area. Surface water serves as the source of the municipal water supply, and groundwater use is prohibited by the Village of Sauget (see the information provided in Appendix 1 of the SSP). Therefore, groundwater will not be evaluated as a source of residential or industrial drinking water in the risk assessment. The Tier 1 screening will be used to identify what constituents to evaluate in a Tier 2 or Tier 3 evaluation. Where IEPA TACO Tier I criteria (IEPA, 1998) are not available, USEPA Region 9 PRGs (1999) will be used.

For groundwater, following the TACO regulations (IEPA, 1998), the criteria for groundwater will be adjusted for cumulative effects for both potential carcinogens and noncarcinogens. Per the TACO regulations, Tier I criteria for soils are not adjusted for cumulative effects (IEPA, 1998).

IEPA TACO Tier I values are not available for fish tissue. Additionally, the USEPA Region 9 PRGs do not provide values for fish tissue. Hence, fish tissue data will be compared to the USEPA Region 3 Risk-Based Concentrations (RBCs) for fish (USEPA, 2000a).

The TACO Tier I criteria were used to develop the DQLs to be used to identify appropriate PQLs for laboratory methods for the analytical program. The DQLs and PQLs are discussed in greater detail in the QAPP for the site (see Appendix 3 of the RCRA SSP). The DQLs for the HHRA are presented in Attachment A to this appendix.

Tables presenting the results of the TACO Tier I screening step will be presented in the risk assessment report.

7.2 Tier 2

Tier 2 provides a set of equations and default assumptions that can be used in conjunction with a limited number of site-specific soil and groundwater parameters to develop site-specific remediation objectives. The equations are based on USEPA SSL equations (USEPA 1996a, 1996b) and the ASTM Risk Based Corrective Action equations (ASTM, 1995). The use of Tier 2 will be determined based on a review of the site-specific data.

7.3 Tier 3

Tier 3 allows for the use of detailed fate and transport and risk assessment models for the development of site-specific remediation objectives. Tier 3 is conducted following USEPA guidance for risk assessment. As stated previously, where there are exceedances of Tier I or Tier 2 TACO criteria, a Tier 3 risk assessment will be conducted following the methods described for the RCRA HHRA in Section 2.0 through 6.0.

8.0 SUMMARY AND CONCLUSIONS

A summary and conclusions section will contain discussions of the results of the risk assessment. The selection of final COC and the remedial goals for each COC will be presented.

9.0 REFERENCES

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ATTACHMENT A

DATA QUALITY LEVELS FOR HUMAN HEALTH RISK ASSESSMENT

ATTACHMENT A

DATA QUALITY LEVELS FOR HUMAN HEALTH RISK ASSESSMENT

Data Quality Levels (DQLs) are concentrations of constituents in environmental media that are used to determine whether laboratory analytical reporting limits of are sufficient sensitivity to allow for informed decision-making at a site. DQLs for human health risk assessment are generally risk-based concentrations that would be used in early screening of the environmental data prior to conduct of a risk assessment.

Data collected for the RCRA SSP for the W.R. Krummrich facility will be evaluated under two programs separately: the USEPA RCRA program and the IEPA TACO program. Therefore, DQLs were developed for soil, groundwater and fish tissue for each program.

The DQLs for the USEPA RCRA program are presented in Tables 1, 2, and 3 for soil, groundwater and fish tissue, respectively. Following USEPA Region 5 QAPP guidance (USEPA, 1998a), the DQLs are based on the USEPA Region 9 PRGs (USEPA, 1999). The PRGs for industrial soil are used for the DQLs for soil, and the PRGs for tap water are used for the DQLs for groundwater. There are no PRGs for fish tissue, therefore, the USEPA Region 3 RBCs (USEPA, 2000a) for fish tissue are used.

The DQLs for the IEPA TACO program are presented in Tables 4 and 5 for soil and groundwater, respectively. There are no TACO values for fish tissue, therefore, the USEPA Region 3 RBCs (USEPA, 2000a) for fish tissue presented in Table 3 are used under the TACO evaluation as well.

The DQLs are based on the TACO Tier 1 values. The TACO Tier 1 values for industrial-commercial property are used for the DQLs for soil. The DQLs for soil are selected as the lower of: 1) the ingestion and inhalation values for the industrial-commercial receptor and the construction worker receptor and, 2) the soil component of the groundwater ingestion exposure route values for Class II groundwater (Tables B and D of Appendix B of TACO, IEPA, 1998). The DQLs for groundwater are the TACO Tier 1 values for Class II groundwater (Table E of Appendix B of TACO, IEPA, 1998).

Table 6 provides the lower of the USEPA and TACO DQLs for soil, groundwater and fish tissue. These are the DQLs that the laboratory will use in determining the appropriate analytical methods for the RCRA SSP program.

TABLE 1
DATA QUALITY LEVELS (DQLs) FOR SOIL - USEPA PROGRAM
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

Constituent	CAS Number	Region IX Industrial PRG (a) (mg/kg)		Basis
TCL Volatiles				
1,1,1-Trichloroethane	71-55-6	1400.00		sat
1,1,2,2-Tetrachloroethane	79-34-5	0.90		ca
1,1,2-Trichloroethane	79-00-5	1.90		ca
1,1-Dichloroethane	75-34-3	2061.34		nc
1,1-Dichloroethylene	75-35-4	0.12		ca
1,2-Dichloroethane	107-06-2	0.76		ca
1,2-Dichloroethylene (total)	540-59-0	150.00	(b)	nc
1,2-Dichloropropane	78-87-5	0.77		ca
2-Butanone	78-93-3	27714.47		nc
2-Hexanone	591-78-6	NA		
4-Methyl-2-pentanone	108-10-1	2886.85		nc
Acetone	67-64-1	6219.62		nc
Benzene	71-43-2	1.46		ca
Bromodichloromethane	75-27-4	2.36		ca
Bromoform	75-25-2	312.25		ca
Bromomethane	74-83-9	13.14		nc
Carbon Disulfide	75-15-0	720.00		sat
Carbon Tetrachloride	56-23-5	0.53		ca
Chlorobenzene	108-90-7	542.93		nc
Chloroethane	75-00-3	6.51		ca
Chloroform	67-66-3	0.52		ca
Chloromethane	74-87-3	2.66		ca
cis-1,3-Dichloropropene	10061-01-5	0.18		ca
Dibromochloromethane	124-48-1	2.65		ca
Ethyl Benzene	100-41-4	230.00		sat
Methylene Chloride	75-09-2	20.53		ca
Styrene	100-42-5	1700.00		sat
Tetrachloroethene	127-18-4	18.67		ca
Toluene	108-88-3	520.00		sat
Total Xylenes	1330-20-7	210.00		sat
trans-1,3-Dichloropropene	10061-02-6	0.18		ca
Trichloroethene	79-01-6	6.12		ca
Vinyl Chloride	75-01-4	0.05		ca
TCL Semi-Volatiles				
1,2,4-Trichlorobenzene	120-82-1	3000.00		sat
1,2-Dichlorobenzene	95-50-1	370.00		sat
1,3-Dichlorobenzene	541-73-1	51.76		nc
1,4-Dichlorobenzene	106-46-7	8.13		ca
2,2'-oxybis(1-Chloropropane)	108-60-1	8.08		ca
2,4,5-Trichlorophenol	95-95-4	88091.91		nc
2,4,6-Trichlorophenol	88-06-2	224.23		ca
2,4-Dichlorophenol	120-83-2	2642.76		nc
2,4-Dimethylphenol	105-67-9	17618.38		nc
2,4-Dinitrophenol	51-28-5	1761.84		nc
2,4-Dinitrotoluene	121-14-2	1761.84		nc
2,6-Dinitrotoluene	606-20-2	880.92		nc
2-Chloronaphthalene	91-58-7	27284.28		nc
2-Chlorophenol	95-57-8	241.34		nc
2-Methylnaphthalene	91-57-6	190.00	(c)	nc
2-Methylphenol	95-48-7	44045.95		nc
2-Nitroaniline	88-74-4	50.34		nc
2-Nitrophenol	88-75-5	7000.00	(d)	nc
3,3'-Dichlorobenzidine	91-94-1	5.48		ca
3-Nitroaniline	99-09-2	50.00	(e)	nc
4,6-Dinitro-2-methylphenol	534-52-1	NA		
4-Bromophenyl Phenyl Ether	101-55-3	NA		
4-Chloraniline	106-47-8	3523.68		nc
4-Chloro-3-methylphenol	59-50-7	NA		
4-Chlorophenol Phenyl Ether	7005-72-3	NA		
4-Methylphenol	106-44-5	4404.60		nc

TABLE 1
DATA QUALITY LEVELS (DQLs) FOR SOIL - USEPA PROGRAM
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

Constituent	CAS Number	Region IX Industrial PRG (a) (mg/kg)		Basis
4-Nitroaniline	100-01-6	50.00	(e)	nc
4-Nitrophenol	100-02-7	7047.35		nc
Acenaphthene	83-32-9	38358.30		nc
Acenaphthylene	208-96-8	38358.30	(f)	nc
Anthracene	120-12-7	100000.00		max
Benzo[a]anthracene	56-55-3	2.89		ca
Benzo[a]pyrene	50-32-8	0.29		ca
Benzo[b]fluoranthene	205-99-2	2.89		ca
Benzo[g,h,i]perylene	191-24-2	54224.14	(g)	nc
Benzo[k]fluoranthene	207-08-9	28.86		ca
bis(2-Chloroethoxy)methane	111-91-1	NA		
bis(2-Chloroethyl)ether	111-44-4	0.62		ca
bis(2-Ethylhexyl)phthalate	117-81-7	176.18		ca
Butyl Benzyl Phthalate	85-68-7	100000.00		max
Carbazole	86-74-8	123.33		ca
Chrysene	218-01-9	288.65		ca
Dibenzo[a,h]anthracene	53-70-3	0.29		ca
Dibenzofuran	132-64-9	5062.81		nc
Diethyl Phthalate	84-66-2	100000.00		max
Dimethyl Phthalate	131-11-3	100000.00		max
Di-n-butyl Phthalate	84-74-2	88091.91		nc
Di-n-octyl Phthalate	117-84-0	10000.00		sat
Fluoranthene	206-44-0	30099.72		nc
Fluorene	86-73-7	33133.18		nc
Hexachlorobenzene	118-74-1	1.54		ca
Hexachlorobutadiene	87-68-3	31.62		ca
Hexachlorocyclopentadiene	77-47-4	5896.84		nc
Hexachloroethane	67-72-1	176.18		ca
Indeno[1,2,3-cd]pyrene	193-39-5	2.89		ca
Isophorone	78-59-1	2596.39		ca
Naphthalene	91-20-3	188.56		nc
Nitrobenzene	98-95-3	114.46		nc
N-Nitroso-di-n-propylamine	621-64-7	0.35		ca
N-Nitrosodiphenylamine	86-30-6	503.38		ca
Pentachlorophenol	87-86-5	11.09		ca
Phenanthrene	85-01-8	100000.00	(h)	max
Phenol	108-95-2	100000.00		max
Pyrene	129-00-0	54224.14		nc

Notes:
CAS = Chemical Abstracts Service.
DQL = Data Quality Level.
NA - Not Available.
PRG = Preliminary Remediation Goal
TCL = Target Compound List.
ca = potential carcinogenic effects
nc = noncarcinogenic effects.
sat = soil saturation limit.
max = maximum allowable concentration in soil.
(a) - USEPA Region IX Preliminary Remediation Goal Table. October 1, 1999. Values for industrial soil.
(b) - Value for cis-1,2-Dichloroethylene.
(c) - Due to structural similarities, the value for Naphthalene was used.
(d) - Due to structural similarities, the value for 4-Nitrophenol was used.
(e) - Due to structural similarities, the value for 2-Nitroaniline was used.
(f) - Due to structural similarities, the value for Acenaphthene was used.
(g) - Due to structural similarities, the value for Pyrene was used.
(h) - Due to structural similarities, the value for Anthracene was used.

TABLE 2
DATA QUALITY LEVELS (DQLs) FOR GROUNDWATER - USEPA PROGRAM
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

Constituent	CAS Number	Ground Water (a)	
		DQL (mg/L)	Basis
TCL Volatiles			
1,1,1-Trichloroethane	71-55-6	0.2	A
1,1,2,2-Tetrachloroethane	79-34-5	0.000055	B (ca)
1,1,2-Trichloroethane	79-00-5	0.005	A
1,1-Dichloroethane	75-34-3	0.81	B (nc)
1,1-Dichloroethylene	75-35-4	0.007	A
1,2-Dichloroethane	107-06-2	0.005	A
1,2-Dichloroethylene (total)	540-59-0	0.07 (b)	A
1,2-Dichloropropane	78-87-5	0.00016	B (ca)
2-Butanone	78-93-3	1.9	B (nc)
2-Hexanone	591-78-6	NA	
4-Methyl-2-pentanone	108-10-1	0.16	B (nc)
Acetone	67-64-1	0.61	B (nc)
Benzene	71-43-2	0.005	A
Bromodichloromethane	75-27-4	0.1	A
Bromoform	75-25-2	0.1	A
Bromomethane	74-83-9	0.0087	B (nc)
Carbon Disulfide	75-15-0	1	B (nc)
Carbon Tetrachloride	56-23-5	0.005	A
Chlorobenzene	108-90-7	0.11	B (nc)
Chloroethane	75-00-3	0.0046	B (ca)
Chloroform	67-66-3	0.1	A
Chloromethane	74-87-3	0.0015	B (ca)
cis-1,3-Dichloropropene	10061-01-5	0.000081	B (ca)
Dibromochloromethane	124-48-1	0.1	A
Ethyl Benzene	100-41-4	0.7	A
Methylene Chloride	75-09-2	0.005	A
Styrene	100-42-5	0.1	A
Tetrachloroethene	127-18-4	0.005	A
Toluene	108-88-3	1	A
Total Xylenes	1330-20-7	10	A
trans-1,3-Dichloropropene	10061-02-6	0.000081	B (ca)
Trichloroethene	79-01-6	0.005	A
Vinyl Chloride	75-01-4	0.002	A
TCL Semi-Volatiles			
1,2,4-Trichlorobenzene	120-82-1	0.07	A
1,2-Dichlorobenzene	95-50-1	0.6	A
1,3-Dichlorobenzene	541-73-1	0.0055	B (nc)
1,4-Dichlorobenzene	106-46-7	0.075	A
2,2'-oxybis(1-Chloropropane)	108-60-1	0.00027	B (ca)
2,4,5-Trichlorophenol	95-95-4	3.6	B (nc)
2,4,6-Trichlorophenol	88-06-2	0.0061	B (ca)
2,4-Dichlorophenol	120-83-2	0.11	B (nc)
2,4-Dimethylphenol	105-67-9	0.73	B (nc)
2,4-Dinitrophenol	51-28-5	0.073	B (nc)
2,4-Dinitrotoluene	121-14-2	0.073	B (nc)
2,6-Dinitrotoluene	606-20-2	0.036	B (nc)
2-Chloronaphthalene	91-58-7	0.49	B (nc)
2-Chlorophenol	95-57-8	0.03	B (nc)
2-Methylnaphthalene	91-57-6	0.0062 (c)	B (nc)
2-Methylphenol	95-48-7	1.8	B (nc)
2-Nitroaniline	88-74-4	0.0021	B (nc)
2-Nitrophenol	88-75-5	0.29 (d)	B (nc)
3,3'-Dichlorobenzidine	91-94-1	0.00015	B (ca)
3-Nitroaniline	99-09-2	0.0021 (e)	B (nc)
4,6-Dinitro-2-methylphenol	534-52-1	NA	
4-Bromophenyl Phenyl Ether	101-55-3	NA	
4-Chloraniline	106-47-8	0.15	B (nc)
4-Chloro-3-methylphenol	59-50-7	NA	
4-Chlorophenol Phenyl Ether	7005-72-3	NA	
4-Methylphenol	106-44-5	0.18	B (nc)

TABLE 2
DATA QUALITY LEVELS (DQLs) FOR GROUNDWATER - USEPA PROGRAM
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

Constituent	CAS Number	Ground Water (a) DQL (mg/L)		Basis
4-Nitroaniline	100-01-6	0.0021	(e)	B (nc)
4-Nitrophenol	100-02-7	0.29		B (nc)
Acenaphthene	83-32-9	0.37		B (nc)
Acenaphthylene	208-96-8	0.37	(f)	B (nc)
Anthracene	120-12-7	1.8		B (nc)
Benzo[a]anthracene	56-55-3	0.000092		B (ca)
Benzo[a]pyrene	50-32-8	0.0002		A
Benzo[b]fluoranthene	205-99-2	0.000092		B (ca)
Benzo[g,h,i]perylene	191-24-2	0.18	(g)	B (nc)
Benzo[k]fluoranthene	207-08-9	0.00092		B (ca)
bis(2-Chloroethoxy)methane	111-91-1	NA		
bis(2-Chloroethyl)ether	111-44-4	0.0000098		B (ca)
bis(2-Ethylhexyl)phthalate	117-81-7	0.006		A
Butyl Benzyl Phthalate	85-68-7	7.3		B (nc)
Carbazole	86-74-8	0.0034		B (ca)
Chrysene	218-01-9	0.0092		B (ca)
Dibenzo[a,h]anthracene	53-70-3	0.0000092		B (ca)
Dibenzofuran	132-64-9	0.024		B (nc)
Diethyl Phthalate	84-66-2	29		B (nc)
Dimethyl Phthalate	131-11-3	360		B (nc)
Di-n-butyl Phthalate	84-74-2	3.6		B (nc)
Di-n-octyl Phthalate	117-84-0	0.73		B (nc)
Fluoranthene	206-44-0	1.5		B (nc)
Fluorene	86-73-7	0.24		B (nc)
Hexachlorobenzene	118-74-1	0.001		A
Hexachlorobutadiene	87-68-3	0.00086		B (ca)
Hexachlorocyclopentadiene	77-47-4	0.05		A
Hexachloroethane	67-72-1	0.0048		B (ca)
Indeno[1,2,3-cd]pyrene	193-39-5	0.000092		B (ca)
Isophorone	78-59-1	0.071		B (ca)
Naphthalene	91-20-3	0.0062		B (nc)
Nitrobenzene	98-95-3	0.0034		B (nc)
N-Nitroso-di-n-propylamine	621-64-7	0.0000096		B (ca)
N-Nitrosodiphenylamine	86-30-6	0.014		B (ca)
Pentachlorophenol	87-86-5	0.001		A
Phenanthrene	85-01-8	1.8	(h)	B (nc)
Phenol	108-95-2	22		B (nc)
Pyrene	129-00-0	0.18		B (nc)

Notes:
CAS = Chemical Abstracts Service.
DQL = Data Quality Level.
MCL = Maximum Contaminant Level.
NA = Not available.
PRG = Preliminary Remediation Goal.
TCL = Target Compound List.
(a) - The following hierarchy was used to determine the appropriate DQL:
A. USEPA Maximum Contaminant Level (MCL). 1996.
B. For constituents with no MCL values, the USEPA Region IX Preliminary Remediation Goal Table (October 1, 1999) values for tapwater are used. (ca) = potential carcinogenic effects, (nc) = noncarcinogenic effects.
(b) - Value for cis-1,2-Dichloroethylene.
(c) - Due to structural similarities, the value for Naphthalene was used.
(d) - Due to structural similarities, the value for 4-Nitrophenol was used.
(e) - Due to structural similarities, the value for 2-Nitroaniline was used.
(f) - Due to structural similarities, the value for Acenaphthene was used.
(g) - Due to structural similarities, the value for Pyrene was used.
(h) - Due to structural similarities, the value for Anthracene was used.

TABLE 3
DATA QUALITY LEVELS (DQLs) FOR FISH TISSUE
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

Constituent	CAS Number	DQL (mg/kg) (e)	Basis
TCL Semi-Volatiles			
1,2,4-Trichlorobenzene	120-82-1	14	N
1,2-Dichlorobenzene	95-50-1	120	N
1,3-Dichlorobenzene	541-73-1	1.2	N
1,4-Dichlorobenzene	106-46-7	0.13	C
2,2'-oxybis(1-Chloropropane)	108-60-1	0.045	C
2,4,5-Trichlorophenol	95-95-4	140	N
2,4,6-Trichlorophenol	88-06-2	0.29	C
2,4-Dichlorophenol	120-83-2	4.1	N
2,4-Dimethylphenol	105-67-9	27	N
2,4-Dinitrophenol	51-28-5	2.7	N
2,4-Dinitrotoluene	121-14-2	2.7	N
2,6-Dinitrotoluene	606-20-2	1.4	N
2-Chloronaphthalene	91-58-7	110	N
2-Chlorophenol	95-57-8	6.8	N
2-Methylnaphthalene	91-57-6	27	N
2-Methylphenol	95-48-7	68	N
2-Nitroaniline	88-74-4	NA	O
2-Nitrophenol	88-75-5	11 (a)	N
3,3'-Dichlorobenzidine	91-94-1	0.007	C
3-Nitroaniline	99-09-2	NA	O
4,6-Dinitro-2-methylphenol	534-52-1	NA	D
4-Bromophenyl Phenyl Ether	101-55-3	NA	D
4-Chloraniline	106-47-8	5.4	N
4-Chloro-3-methylphenol	59-50-7	NA	D
4-Chlorophenol Phenyl Ether	7005-72-3	NA	D
4-Methylphenol	106-44-5	6.8	N
4-Nitroaniline	100-01-6	NA	O
4-Nitrophenol	100-02-7	11	N
Acenaphthene	83-32-9	81	N
Acenaphthylene	208-96-8	81 (b)	N
Anthracene	120-12-7	410	N
Benzo[a]anthracene	56-55-3	0.0043	C
Benzo[a]pyrene	50-32-8	0.00043	C
Benzo[b]fluoranthene	205-99-2	0.0043	C
Benzo[g,h,i]perylene	191-24-2	41 (c)	N
Benzo[k]fluoranthene	207-08-9	0.043	C
bis(2-Chloroethoxy)methane	111-91-1	NA	D
bis(2-Chloroethyl)ether	111-44-4	0.0029	C
bis(2-Ethylhexyl)phthalate	117-81-7	0.23	C
Butyl Benzyl Phthalate	85-68-7	270	N
Carbazole	86-74-8	0.16	C
Chrysene	218-01-9	0.43	C
Dibenzo[a,h]anthracene	53-70-3	0.00043	C
Dibenzofuran	132-64-9	5.4	N
Diethyl Phthalate	84-66-2	1100	N
Dimethyl Phthalate	131-11-3	14000	N
Di-n-butyl Phthalate	84-74-2	140	N
Di-n-octyl Phthalate	117-84-0	27	N
Fluoranthene	206-44-0	54	N
Fluorene	86-73-7	54	N
Hexachlorobenzene	118-74-1	0.002	C
Hexachlorobutadiene	87-68-3	0.04	C
Hexachlorocyclopentadiene	77-47-4	9.5	N
Hexachloroethane	67-72-1	0.23	C
Indeno[1,2,3-cd]pyrene	193-39-5	0.0043	C
Isophorone	78-59-1	3.3	C
Naphthalene	91-20-3	27	N
Nitrobenzene	98-95-3	0.68	N
N-Nitroso-di-n-propylamine	621-64-7	0.00045	C
N-Nitrosodiphenylamine	86-30-6	0.64	C
Pentachlorophenol	87-86-5	0.026	C

TABLE 3
DATA QUALITY LEVELS (DQLs) FOR FISH TISSUE
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

Constituent	CAS Number	DQL (mg/kg) (e)	Basis
Phenanthrene	85-01-8	410 (d)	N
Phenol	108-95-2	810	N
Pyrene	129-00-0	41	N

Notes:
C = USEPA, 2000, Based on carcinogenic USEPA Region 3 RBC value.
D = No toxicological value available, therefore, no DQL was developed.
N = USEPA, 2000, Based on non-carcinogenic USEPA Region 3 RBC value.
O = No RBC available; therefore, no DQL developed.
CAS = Chemical Abstracts Service.
DQL = Data Quality Level.
NA = Not Available.
RBC = USEPA Region 3 Risk Based Concentration (USEPA, 2000).
TCL = Target Compound List.
(a) Due to structural similarities, the value for 4-Nitrophenol was used.
(b) Due to structural similarities, the value for Acenaphthene was used.
(c) Due to structural similarities, the value for Pyrene was used.
(d) Due to structural similarities, the value for Anthracene was used.
(e) DQLs for Fish Tissue based on USEPA Region 3 RBCs (USEPA, 2000).

TABLE 4
DATA QUALITY LEVELS (DQLs) FOR SOIL - TACO PROGRAM (a)
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

Constituent	CAS Number	Direct Contact				Soil-to Groundwater Class II (mg/kg)		Lowest TACO Tier 1 Program Value (mg/kg)
		Industrial-Commercial (b) (mg/kg)		Construction Worker (b) (mg/kg)				
TCL Volatiles								
1,1,1-Trichloroethane	71-55-6	1200	N,S	1200	N,S	9.6		9.6
1,1,2,2-Tetrachloroethane	79-34-5	NA		NA		NA		NA
1,1,2-Trichloroethane	79-00-5	1800	N,S	1800	N,S	0.3		0.3
1,1-Dichloroethane	75-34-3	1700	N,S	130	N	110		110
1,1-Dichloroethylene	75-35-4	1500	N,S	1500	N,S	0.3		0.3
1,2-Dichloroethane	107-06-2	0.7	N	0.99	N	0.1		0.1
1,2-Dichloroethylene (total)	540-59-0	1200	N,S (j)	1200	N,S (j)	1.1	(j)	1.1
1,2-Dichloropropane	78-87-5	23	N	0.5	N	0.15		0.15
2-Butanone	78-93-3	NA		NA		NA		NA
2-Hexanone	591-78-6	NA		NA		NA		NA
4-Methyl-2-pentanone	108-10-1	NA		NA		NA		NA
Acetone	67-64-1	100000	N,S	100000	N,S	16		16
Benzene	71-43-2	1.5	N	2.1	N	0.17		0.17
Bromodichloromethane	75-27-4	92	G	2000	G	0.6		0.6
Bromoform	75-25-2	100	N	140	N	0.8		0.8
Bromomethane	74-83-9	15	N	3.9	N	1.2		1.2
Carbon Disulfide	75-15-0	720	N	9	N	160		9
Carbon Tetrachloride	56-23-5	0.64	N	0.9	N	0.33		0.33
Chlorobenzene	108-90-7	210	N	1.3	N	6.5		1.3
Chloroethane	75-00-3	NA		NA		NA		NA
Chloroform	67-66-3	0.54	N	0.76	N	2.9		0.54
Chloromethane	74-87-3	NA		NA		NA		NA
cis-1,3-Dichloropropene	10061-01-5	0.23	N	0.33	N	0.02		0.02
Dibromochloromethane	124-48-1	1300	N,S	1300	N,S	0.4		0.4
Ethyl Benzene	100-41-4	400	N,S	58	N	19		19
Methylene Chloride	75-09-2	24	N	34	N	0.2		0.2
Styrene	100-42-5	1500	N,S	430	N	18		18
Tetrachloroethene	127-18-4	20	N	28	N	0.3		0.3
Toluene	108-88-3	650	N,S	42	N	29		29
Total Xylenes	1330-20-7	410	N,S	410	N,S	150		150
trans-1,3-Dichloropropene	10061-02-6	0.23	N	0.33	N	0.02		0.02
Trichloroethene	79-01-6	8.9	N	12	N	0.3		0.3
Vinyl Chloride	75-01-4	0.06	N	0.08	N	0.07		0.06
TCL Semi-Volatiles								
1,2,4-Trichlorobenzene	120-82-1	3200	N,S	920	N	53		53
1,2-Dichlorobenzene	95-50-1	560	N,S	310	N	43		43
1,3-Dichlorobenzene	541-73-1	560	(c)	310	(c)	43	(c)	43
1,4-Dichlorobenzene	106-46-7	17000	N	340	N	11		11
2,2'-oxybis(1-Chloropropane)	108-60-1	NA		NA		NA		NA
2,4,5-Trichlorophenol	95-95-4	200000	G	200000	G	64	(d)	64
2,4,6-Trichlorophenol	88-06-2	390	N	540	N	0.07	(d)	0.07
2,4-Dichlorophenol	120-83-2	6100	G	610	G	0.69	(d)	0.69
2,4-Dimethylphenol	105-67-9	41000	G	41000	G	9		9
2,4-Dinitrophenol	51-28-5	4100	G	410	G	0.2		0.2
2,4-Dinitrotoluene	121-14-2	8.4	G	180	G	0.0008		0.0008
2,6-Dinitrotoluene	606-20-2	8.4	G	180	G	0.0007		0.0007
2-Chloronaphthalene	91-58-7	NA		NA		NA		NA
2-Chlorophenol	95-57-8	10000	G	10000	G	3.1	(d)	3.1
2-Methylnaphthalene	91-57-6	82000	(e)	8200	(e)	420	(e)	420
2-Methylphenol	95-48-7	100000	G	100000	G	15		15
2-Nitroaniline	88-74-4	NA		NA		NA		NA
2-Nitrophenol	88-75-5	NA		NA		NA		NA
3,3'-Dichlorobenzidine	91-94-1	13	G	280	G	0.033		0.033
3-Nitroaniline	99-09-2	NA		NA		NA		NA
4,6-Dinitro-2-methylphenol	534-52-1	NA		NA		NA		NA
4-Bromophenyl Phenyl Ether	101-55-3	NA		NA		NA		NA
4-Chloraniline	106-47-8	8200	G	820	G	0.7		0.7
4-Chloro-3-methylphenol	59-50-7	NA		NA		NA		NA

TABLE 4
DATA QUALITY LEVELS (DQLs) FOR SOIL - TACO PROGRAM (a)
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

Constituent	CAS Number	Direct Contact				Soil-to Groundwater Class II (mg/kg)		Lowest TACO Tier 1 Program Value (mg/kg)
		Industrial-Commercial (b) (mg/kg)		Construction Worker (b) (mg/kg)				
4-Chlorophenol Phenyl Ether	7005-72-3	NA		NA		NA		NA
4-Methylphenol	106-44-5	100000	(f)	100000	(f)	15	(f)	15
4-Nitroaniline	100-01-6	NA		NA		NA		NA
4-Nitrophenol	100-02-7	NA		NA		NA		NA
Acenaphthene	83-32-9	120000	G	120000	G	2900		2900
Acenaphthylene	208-96-8	120000	(g)	120000	(g)	2900	(g)	2900
Anthracene	120-12-7	610000	G	610000	G	59000		59000
Benzo[a]anthracene	56-55-3	8	G	170	G	8		8
Benzo[a]pyrene	50-32-8	0.8	G	17	G	82		0.8
Benzo[b]fluoranthene	205-99-2	8	G	170	G	25		8
Benzo[g,h,i]perylene	191-24-2	61000	(h)	61000	(h)	21000	(h)	21000
Benzo[k]fluoranthene	207-08-9	78	G	1700	G	250		78
bis(2-Chloroethoxy)methane	111-91-1	NA		NA		NA		NA
bis(2-Chloroethyl)ether	111-44-4	0.47	N	0.66	N	0.0004		0.0004
bis(2-Ethylhexyl)phthalate	117-81-7	410	G	4100	G	31000		410
Butyl Benzyl Phthalate	85-68-7	930	G	930	G	930		930
Carbazole	86-74-8	290	G	6200	G	2.8		2.8
Chrysene	218-01-9	780	G	17000	G	800		780
Dibenzo[a,h]anthracene	53-70-3	0.8	G	17	G	7.6		0.8
Dibenzofuran	132-64-9	NA		NA		NA		NA
Diethyl Phthalate	84-66-2	2000	N,S	2000	N,S	470		470
Dimethyl Phthalate	131-11-3	NA		NA		NA		NA
Di-n-butyl Phthalate	84-74-2	2300	N,S	2300	N,S	2300		2300
Di-n-octyl Phthalate	117-84-0	10000	N,S	10000	N,S	10000		10000
Fluoranthene	206-44-0	82000	G	82000	G	21000		21000
Fluorene	86-73-7	82000	G	82000	G	2800		2800
Hexachlorobenzene	118-74-1	1.8	N	2.6	N	11		1.8
Hexachlorobutadiene	87-68-3	NA		NA		NA		NA
Hexachlorocyclopentadiene	77-47-4	16	N	1.1	N	2200		1.1
Hexachloroethane	67-72-1	2000	G	2000	G	2.6		2.6
Indeno[1,2,3-cd]pyrene	193-39-5	8	G	170	G	69		8
Isophorone	78-59-1	4600	N,S	4600	N,S	8		8
Naphthalene	91-20-3	82000	G	8200	G	420		420
Nitrobenzene	98-95-3	140	N	9.4	N	0.1		0.1
N-Nitroso-di-n-propylamine	621-64-7	0.8	G	18	G	0.00005		0.00005
N-Nitrosodiphenylamine	86-30-6	1200	G	25000	G	5.6		5.6
Pentachlorophenol	87-86-5	24	G	520	G	0.02	(d)	0.02
Phenanthrene	85-01-8	610000	(i)	610000	(i)	59000	(i)	59000
Phenol	108-95-2	1000000	G	120000	G	100		100
Pyrene	129-00-0	61000	G	61000	G	21000		21000

Notes:
CAS = Chemical Abstracts Service.
DQL = Data Quality Level.
G = Value based on ingestion pathway.
N = Value based on inhalation pathway.
NA = Not Available.
S = Soil Saturation.
TCL = Target Compound List.
(a) - Illinois Tiered Approach to Corrective Action Objectives (TACO) Program Tier 1 values from Appendix B, Table B or Appendix B, Table C.
(b) - Lower of ingestion and inhalation values.
(c) - Due to structural similarities, the value for 1,2-Dichlorobenzene used.
(d) - Value for pH of 7.75 to 8 used (lowest value available).
(e) - Due to structural similarities, the value for Naphthalene was used.
(f) - Due to structural similarities, the value for 2-Methylphenol was used.
(g) - Due to structural similarities, the value for Acenaphthene was used.
(h) - Due to structural similarities, the value for Pyrene was used.
(i) - Due to structural similarities, the value for Anthracene was used.
(j) - Value based on cis-1,2-Dichloroethylene.

TABLE 5
DATA QUALITY LEVELS (DQLs) FOR GROUNDWATER - TACO PROGRAM
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

Constituent	CAS Number	Ground Water (a) DQL (mg/L)		Basis
TCL Volatiles				
1,1,1-Trichloroethane	71-55-6	1		A
1,1,2,2-Tetrachloroethane	79-34-5	0.000055		B (ca)
1,1,2-Trichloroethane	79-00-5	0.05		A
1,1-Dichloroethane	75-34-3	3.5		A
1,1-Dichloroethylene	75-35-4	0.035		A
1,2-Dichloroethane	107-06-2	0.025		A
1,2-Dichloroethylene (total)	540-59-0	0.2	(b)	A
1,2-Dichloropropane	78-87-5	0.025		A
2-Butanone	78-93-3	1.9		B (nc)
2-Hexanone	591-78-6	NA		
4-Methyl-2-pentanone	108-10-1	0.16		B (nc)
Acetone	67-64-1	0.7		A
Benzene	71-43-2	0.025		A
Bromodichloromethane	75-27-4	0.00002		A
Bromoform	75-25-2	0.0002		A
Bromomethane	74-83-9	0.049		A
Carbon Disulfide	75-15-0	3.5		A
Carbon Tetrachloride	56-23-5	0.025		A
Chlorobenzene	108-90-7	0.5		A
Chloroethane	75-00-3	0.0046		B (ca)
Chloroform	67-66-3	0.0001		A
Chloromethane	74-87-3	0.0015		B (ca)
cis-1,3-Dichloropropene	10061-01-5	0.005	(k)	A
Dibromochloromethane	124-48-1	0.14		A
Ethyl Benzene	100-41-4	1		A
Methylene Chloride	75-09-2	0.05		A
Styrene	100-42-5	0.5		A
Tetrachloroethene	127-18-4	0.025		A
Toluene	108-88-3	2.5		A
Total Xylenes	1330-20-7	10		A
trans-1,3-Dichloropropene	10061-02-6	0.005	(k)	A
Trichloroethene	79-01-6	0.025		A
Vinyl Chloride	75-01-4	0.01		A
TCL Semi-Volatiles				
1,2,4-Trichlorobenzene	120-82-1	0.7		A
1,2-Dichlorobenzene	95-50-1	1.5		A
1,3-Dichlorobenzene	541-73-1	0.375	(c)	A
1,4-Dichlorobenzene	106-46-7	0.375		A
2,2'-oxybis(1-Chloropropane)	108-60-1	0.00027		B (ca)
2,4,5-Trichlorophenol	95-95-4	3.5		A
2,4,6-Trichlorophenol	88-06-2	0.032		A
2,4-Dichlorophenol	120-83-2	0.021		A
2,4-Dimethylphenol	105-67-9	0.14		A
2,4-Dinitrophenol	51-28-5	0.014		A
2,4-Dinitrotoluene	121-14-2	0.00002		A
2,6-Dinitrotoluene	606-20-2	0.0001		A
2-Chloronaphthalene	91-58-7	0.49		B (nc)
2-Chlorophenol	95-57-8	0.175		A
2-Methylnaphthalene	91-57-6	0.039	(d)	A
2-Methylphenol	95-48-7	0.35		A
2-Nitroaniline	88-74-4	0.0021		B (nc)
2-Nitrophenol	88-75-5	0.29	(e)	B (nc)
3,3'-Dichlorobenzidine	91-94-1	0.1		A
3-Nitroaniline	99-09-2	0.0021	(f)	B (nc)
4,6-Dinitro-2-methylphenol	534-52-1	NA		
4-Bromophenyl Phenyl Ether	101-55-3	NA		
4-Chloraniline	106-47-8	0.028		A
4-Chloro-3-methylphenol	59-50-7	NA		
4-Chlorophenol Phenyl Ether	7005-72-3	NA		
4-Methylphenol	106-44-5	0.35	(g)	A
4-Nitroaniline	100-01-6	0.0021	(f)	B (nc)

TABLE 5
DATA QUALITY LEVELS (DQLs) FOR GROUNDWATER - TACO PROGRAM
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

Constituent	CAS Number	Ground Water (a) DQL (mg/L)	Basis
4-Nitrophenol	100-02-7	0.29	B (nc)
Acenaphthene	83-32-9	2.1	A
Acenaphthylene	208-96-8	2.1 (h)	A
Anthracene	120-12-7	10.5	A
Benzo[a]anthracene	56-55-3	0.00065	A
Benzo[a]pyrene	50-32-8	0.002	A
Benzo[b]fluoranthene	205-99-2	0.0009	A
Benzo[g,h,i]perylene	191-24-2	1.05 (i)	A
Benzo[k]fluoranthene	207-08-9	0.00085	A
bis(2-Chloroethoxy)methane	111-91-1	NA	
bis(2-Chloroethyl)ether	111-44-4	0.01	A
bis(2-Ethylhexyl)phthalate	117-81-7	0.06	A
Butyl Benzyl Phthalate	85-68-7	7	A
Carbazole	86-74-8	0.0034	B (ca)
Chrysene	218-01-9	0.0075	A
Dibenzo[a,h]anthracene	53-70-3	0.0015	A
Dibenzofuran	132-64-9	0.024	B (nc)
Diethyl Phthalate	84-66-2	5.6	A
Dimethyl Phthalate	131-11-3	360	B (nc)
Di-n-butyl Phthalate	84-74-2	3.5	A
Di-n-octyl Phthalate	117-84-0	0.7	A
Fluoranthene	206-44-0	1.4	A
Fluorene	86-73-7	1.4	A
Hexachlorobenzene	118-74-1	0.0003	A
Hexachlorobutadiene	87-68-3	0.00086	B (ca)
Hexachlorocyclopentadiene	77-47-4	0.5	A
Hexachloroethane	67-72-1	0.035	A
Indeno[1,2,3-cd]pyrene	193-39-5	0.00215	A
Isophorone	78-59-1	1.4	A
Naphthalene	91-20-3	0.039	A
Nitrobenzene	98-95-3	0.0035	A
N-Nitroso-di-n-propylamine	621-64-7	0.01	A
N-Nitrosodiphenylamine	86-30-6	0.05	A
Pentachlorophenol	87-86-5	0.005	A
Phenanthrene	85-01-8	10.5 (j)	A
Phenol	108-95-2	0.1	A
Pyrene	129-00-0	1.05	A

Notes:
CAS = Chemical Abstracts Service.
DQL = Data Quality Level.
NA = Not available.
PRG = USEPA Region 9 Preliminary Remediation Goal (USEPA, 1999).
TCL = Target Compound List.
(a) - The following hierarchy was used to determine the appropriate DQL:
A. Class II value from Appendix B Table H from the Illinois Tiered Approach to Corrective Action Objectives (TACO) Program (IEPA, 1998).
B. For constituents with no TACO values, the Region IX PRG for tap water was used (USEPA, 1999).
(ca) = potential carcinogenic effects, (nc) = noncarcinogenic effects.
(b) - Value for cis-1,2-Dichloroethylene.
(c) - Due to structural similarities, the value for 1,4-Dichlorobenzene was used.
(d) - Due to structural similarities, the value for Naphthalene was used.
(e) - Due to structural similarities, the value for 4-Nitrophenol was used.
(f) - Due to structural similarities, the value for 2-Nitroaniline was used.
(g) - Due to structural similarities, the value for 2-Methylphenol was used.
(h) - Due to structural similarities, the value for Acenaphthene was used.
(i) - Due to structural similarities, the value for Pyrene was used.
(j) - Due to structural similarities, the value for Anthracene was used.
(k) - Value for cis and trans 1,3-Dichloropropene.

TABLE 6
SELECTED DATA QUALITY LEVELS (DQLs) FOR SOIL, GROUNDWATER AND FISH TISSUE (a)
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

Constituent	CAS Number	Soil (b)		Ground Water (c)		Fish Tissue (d)	
		(mg/kg)	Program	(mg/L)	Program	(mg/kg)	Program
TCL Volatiles							
1,1,1-Trichloroethane	71-55-6	9.60	TACO	0.2	USEPA	ND	
1,1,2,2-Tetrachloroethane	79-34-5	0.90	USEPA	0.000055	USEPA	ND	
1,1,2-Trichloroethane	79-00-5	0.30	TACO	0.005	USEPA	ND	
1,1-Dichloroethane	75-34-3	110.00	TACO	0.81	USEPA	ND	
1,1-Dichloroethylene	75-35-4	0.12	USEPA	0.007	USEPA	ND	
1,2-Dichloroethane	107-06-2	0.10	TACO	0.005	USEPA	ND	
1,2-Dichloroethylene (total)	540-59-0	1.10	TACO	0.07	USEPA	ND	
1,2-Dichloropropane	78-87-5	0.15	TACO	0.00016	USEPA	ND	
2-Butanone	78-93-3	27714.47	USEPA	1.9	USEPA	ND	
2-Hexanone	591-78-6	NA		NA		ND	
4-Methyl-2-pentanone	108-10-1	2886.85	USEPA	0.16	USEPA	ND	
Acetone	67-64-1	16.00	TACO	0.61	USEPA	ND	
Benzene	71-43-2	0.17	TACO	0.005	USEPA	ND	
Bromodichloromethane	75-27-4	0.60	TACO	0.00002	TACO	ND	
Bromoform	75-25-2	0.80	TACO	0.0002	TACO	ND	
Bromomethane	74-83-9	1.20	TACO	0.0087	USEPA	ND	
Carbon Disulfide	75-15-0	9.00	TACO	1	USEPA	ND	
Carbon Tetrachloride	56-23-5	0.33	TACO	0.005	USEPA	ND	
Chlorobenzene	108-90-7	1.30	TACO	0.11	USEPA	ND	
Chloroethane	75-00-3	6.51	USEPA	0.0046	USEPA	ND	
Chloroform	67-66-3	0.52	USEPA	0.0001	TACO	ND	
Chloromethane	74-87-3	2.66	USEPA	0.0015	USEPA	ND	
cis-1,3-Dichloropropene	10061-01-5	0.02	TACO	0.000081	USEPA	ND	
Dibromochloromethane	124-48-1	0.40	TACO	0.1	USEPA	ND	
Ethyl Benzene	100-41-4	19.00	TACO	0.7	USEPA	ND	
Methylene Chloride	75-09-2	0.20	TACO	0.005	USEPA	ND	
Styrene	100-42-5	18.00	TACO	0.1	USEPA	ND	
Tetrachloroethene	127-18-4	0.30	TACO	0.005	USEPA	ND	
Toluene	108-88-3	29.00	TACO	1	USEPA	ND	
Total Xylenes	1330-20-7	150.00	TACO	10	TACO	ND	
trans-1,3-Dichloropropene	10061-02-6	0.02	TACO	0.000081	USEPA	ND	
Trichloroethene	79-01-6	0.30	TACO	0.005	USEPA	ND	
Vinyl Chloride	75-01-4	0.05	USEPA	0.002	USEPA	ND	
TCL Semi-Volatiles							
1,2,4-Trichlorobenzene	120-82-1	53.00	TACO	0.07	USEPA	14	USEPA
1,2-Dichlorobenzene	95-50-1	43.00	TACO	0.6	USEPA	120	USEPA
1,3-Dichlorobenzene	541-73-1	43.00	TACO	0.0055	USEPA	1.2	USEPA
1,4-Dichlorobenzene	106-46-7	8.13	USEPA	0.075	USEPA	0.13	USEPA
2,2'-oxybis(1-Chloropropane)	108-60-1	8.08	USEPA	0.00027	USEPA	0.045	USEPA
2,4,5-Trichlorophenol	95-95-4	64.00	TACO	3.5	TACO	140	USEPA
2,4,6-Trichlorophenol	88-06-2	0.07	TACO	0.0061	USEPA	0.29	USEPA
2,4-Dichlorophenol	120-83-2	0.69	TACO	0.021	TACO	4.1	USEPA
2,4-Dimethylphenol	105-67-9	9.00	TACO	0.14	TACO	27	USEPA
2,4-Dinitrophenol	51-28-5	0.20	TACO	0.014	TACO	2.7	USEPA
2,4-Dinitrotoluene	121-14-2	0.00	TACO	0.00002	TACO	2.7	USEPA
2,6-Dinitrotoluene	606-20-2	0.00	TACO	0.0001	TACO	1.4	USEPA
2-Chloronaphthalene	91-58-7	27284.28	USEPA	0.49	USEPA	110	USEPA
2-Chlorophenol	95-57-8	3.10	TACO	0.03	USEPA	6.8	USEPA
2-Methylnaphthalene	91-57-6	190.00	USEPA	0.0062	USEPA	27	USEPA
2-Methylphenol	95-48-7	15.00	TACO	0.35	TACO	68	USEPA
2-Nitroaniline	88-74-4	50.34	USEPA	0.0021	USEPA	NA	
2-Nitrophenol	88-75-5	7000.00	USEPA	0.29	USEPA	11	USEPA
3,3'-Dichlorobenzidine	91-94-1	0.03	TACO	0.00015	USEPA	0.007	USEPA
3-Nitroaniline	99-09-2	50.00	USEPA	0.0021	USEPA	NA	
4,6-Dinitro-2-methylphenol	534-52-1	NA		NA		NA	
4-Bromophenyl Phenyl Ether	101-55-3	NA		NA		NA	
4-Chloraniline	106-47-8	0.70	TACO	0.028	TACO	5.4	USEPA
4-Chloro-3-methylphenol	59-50-7	NA		NA		NA	
4-Chlorophenol Phenyl Ether	7005-72-3	NA		NA		NA	

TABLE 6
SELECTED DATA QUALITY LEVELS (DQLs) FOR SOIL, GROUNDWATER AND FISH TISSUE (a)
W.R. KRUMMRICH FACILITY RCRA SSP
SAUGET, IL
SOLUTIA, INC.

Constituent	CAS Number	Soil (b) (mg/kg)	Soil (b) Program	Ground Water (c) (mg/L)	Ground Water (c) Program	Fish Tissue (d) (mg/kg)	Fish Tissue (d) Program
4-Methylphenol	106-44-5	15.00	TACO	0.18	USEPA	6.8	USEPA
4-Nitroaniline	100-01-6	50.00	USEPA	0.0021	USEPA	NA	
4-Nitrophenol	100-02-7	7047.35	USEPA	0.29	USEPA	11	USEPA
Acenaphthene	83-32-9	2900.00	TACO	0.37	USEPA	81	USEPA
Acenaphthylene	208-96-8	2900.00	TACO	0.37	USEPA	81	USEPA
Anthracene	120-12-7	59000.00	TACO	1.8	USEPA	410	USEPA
Benzo[a]anthracene	56-55-3	2.89	USEPA	0.000092	USEPA	0.0043	USEPA
Benzo[a]pyrene	50-32-8	0.29	USEPA	0.0002	USEPA	0.00043	USEPA
Benzo[b]fluoranthene	205-99-2	2.89	USEPA	0.000092	USEPA	0.0043	USEPA
Benzo[g,h,i]perylene	191-24-2	21000.00	TACO	0.18	USEPA	41	USEPA
Benzo[k]fluoranthene	207-08-9	28.86	USEPA	0.00085	TACO	0.043	USEPA
bis(2-Chloroethoxy)methane	111-91-1	NA		NA		NA	
bis(2-Chloroethyl)ether	111-44-4	0.00	TACO	0.0000098	USEPA	0.0029	USEPA
bis(2-Ethylhexyl)phthalate	117-81-7	176.18	USEPA	0.006	USEPA	0.23	USEPA
Butyl Benzyl Phthalate	85-68-7	930.00	TACO	7	TACO	270	USEPA
Carbazole	86-74-8	2.80	TACO	0.0034	USEPA	0.16	USEPA
Chrysene	218-01-9	288.65	USEPA	0.0075	TACO	0.43	USEPA
Dibenzo[a,h]anthracene	53-70-3	0.29	USEPA	0.0000092	USEPA	0.00043	USEPA
Dibenzofuran	132-64-9	5062.81	USEPA	0.024	USEPA	5.4	USEPA
Diethyl Phthalate	84-66-2	470.00	TACO	5.6	TACO	1100	USEPA
Dimethyl Phthalate	131-11-3	100000.00	USEPA	360	USEPA	14000	USEPA
Di-n-butyl Phthalate	84-74-2	2300.00	TACO	3.5	TACO	140	USEPA
Di-n-octyl Phthalate	117-84-0	10000.00	TACO	0.7	TACO	27	USEPA
Fluoranthene	206-44-0	21000.00	TACO	1.4	TACO	54	USEPA
Fluorene	86-73-7	2800.00	TACO	0.24	USEPA	54	USEPA
Hexachlorobenzene	118-74-1	1.54	USEPA	0.0003	TACO	0.002	USEPA
Hexachlorobutadiene	87-68-3	31.62	USEPA	0.00086	USEPA	0.04	USEPA
Hexachlorocyclopentadiene	77-47-4	1.10	TACO	0.05	USEPA	9.5	USEPA
Hexachloroethane	67-72-1	2.60	TACO	0.0048	USEPA	0.23	USEPA
Indeno[1,2,3-cd]pyrene	193-39-5	2.89	USEPA	0.000092	USEPA	0.0043	USEPA
Isophorone	78-59-1	8.00	TACO	0.071	USEPA	3.3	USEPA
Naphthalene	91-20-3	188.56	USEPA	0.0062	USEPA	27	USEPA
Nitrobenzene	98-95-3	0.10	TACO	0.0034	USEPA	0.68	USEPA
N-Nitroso-di-n-propylamine	621-64-7	0.00	TACO	0.0000096	USEPA	0.00045	USEPA
N-Nitrosodiphenylamine	86-30-6	5.60	TACO	0.014	USEPA	0.64	USEPA
Pentachlorophenol	87-86-5	0.02	TACO	0.001	USEPA	0.026	USEPA
Phenanthrene	85-01-8	59000.00	TACO	1.8	USEPA	410	USEPA
Phenol	108-95-2	100.00	TACO	0.1	TACO	810	USEPA
Pyrene	129-00-0	21000.00	TACO	0.18	USEPA	41	USEPA

Notes:
CAS = Chemical Abstracts Service.
DQL = Data Quality Level.
MCL = Maximum Contaminant Level.
NA = Not Available.
ND = Not Determined. Fish tissue will not be analyzed for volatile organic compounds.
PRG = USEPA Region 9 (USEPA, 1999) Preliminary Remediation Goal
RBC = USEPA Region 3 Risk Based Concentration (USEPA, 2000).
TACO = Tiered Approach to Corrective Action Objectives (IEPA, 1998).
(a) - See Tables 1 through 5 for references and hierarchies.
(b) - Lowest of TACO selected value and Region IX PRG for industrial soil.
(c) - Lowest of TACO selected value, MCL, and Region IX PRG for tapwater.
(d) - USEPA Region III RBC.

ATTACHMENT B

TACO TIER I CRITERIA

Section 742.APPENDIX B: Tier 1 Tables and Illustrations

Section 742.TABLE A: Tier 1 Soil Remediation Objectives[a] for Residential Properties

		Exposure Route-Specific Values for Soils		Soil Component of the Groundwater Ingestion Exposure Route Values		
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
83-32-9	Acenaphthene	4,700[b]	---[c]	570[b]	2,900	*
67-64-1	Acetone	7,800[b]	100,000[d]	16[b]	16	*
15972-60-8	Alachlor[o]	8[e]	---[c]	0.04	0.2	NA
116-06-3	Aldicarb[o]	78[b]	---[c]	0.013	0.07	NA
309-00-2	Aldrin	0.04[e]	3[e]	0.5[e]	2.5	*
120-12-7	Anthracene	23,000[b]	---[c]	12,000[b]	59,000	*
1912-24-9	Atrazine[o]	2700[b]	---[c]	0.066	0.33	NA
71-43-2	Benzene	22[e]	0.8[e]	0.03	0.17	*
56-55-3	Benzo(*a*)anthracene	0.9[e]	---[c]	2	8	*
205-99-2	Benzo(*b*)fluoranthene	0.9[e]	---[c]	5	25	*

		Exposure Route-Specific Values for Soils		Soil Component of the Groundwater Ingestion Exposure Route Values		
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
207-08-9	Benzo(*k*)fluroanthene	9[e]	---[c]	49	250	*
50-32-8	Benzo(*a*)pyrene	0.09[e,f]	---[c]	8	82	*
111-44-4	Bis(2-chloroethyl)ether	0.6[e]	0.2[e,f]	0.0004[e,f]	0.0004	0.66
117-81-7	Bis(2-ethylhexyl)phthalate	46[e]	31,000[d]	3,600	31,000[d]	*
75-27-4	Bromodichloromethane (Dichlorobromomethane)	10[e]	3,000[d]	0.6	0.6	*
75-25-2	Bromoform	81[e]	53[e]	0.8	0.8	*
71-36-3	Butanol	7,800[b]	10,000[d]	17[b]	17	NA
85-68-7	Butyl benzyl phthalate	16,000[b]	930[d]	930[d]	930[d]	*
86-74-8	Carbazole	32[e]	---[c]	0.6[e]	2.8	NA
1563-66-2	Carbofuran[o]	390[b]	---[c]	0.22	1.1	NA
75-15-0	Carbon disulfide	7,800[b]	720[d]	32[b]	160	*

		Exposure Route-Specific Values for Soils		Soil Component of the Groundwater Ingestion Exposure Route Values		
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
56-23-5	Carbon tetrachloride	5[e]	0.3[e]	0.07	0.33	*
57-74-9	Chlordane	0.5[e]	20[e]	10	48	*
106-47-8	4-Chloroaniline (*p*-Chloroaniline)	310[b]	---[c]	0.7[b]	0.7	1.3
108-90-7	Chlorobenzene (Monochlorobenzene)	1,600[b]	130[b]	1	6.5	*
124-48-1	Chlorodibromomethane (Dibromochloromethane)	1,600[b]	1,300[d]	0.4	0.4	*
67-66-3	Chloroform	100[e]	0.3[e]	0.6	2.9	*
218-01-9	Chrysene	88[e]	---[c]	160	800	*
94-75-7	2,4-D	780[b]	---[c]	1.5	7.7	*
75-99-0	Dalapon	2,300[b]	---[c]	0.85	8.5	1.2
72-54-8	DDD	3[e]	---[c]	16[e]	80	*
72-55-9	DDE	2[e]	---[c]	54[e]	270	*

		Exposure Route-Specific Values for Soils		Soil Component of the Groundwater Ingestion Exposure Route Values		
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
50-29-3	DDT	2[e]	---[g]	32[e]	160	*
53-70-3	Dibenzo(*a,h*)anthracene	0.09[e,f]	---[c]	2	7.6	*
96-12-8	1,2-Dibromo-3-chloropropane	0.46[e]	11[b]	0.002	0.002	*
106-93-4	1,2-Dibromoethane (Ethylene dibromide)	0.0075[e]	0.17[e]	0.0004	0.004	0.005
84-74-2	Di-*n*-butyl phthalate	7,800[b]	2,300[d]	2,300[d]	2,300[d]	*
95-50-1	1,2-Dichlorobenzene (*o* - Dichlorobenzene)	7,000[b]	560[d]	17	43	*
106-46-7	1,4-Dichlorobenzene (*p* - Dichlorobenzene)	---[c]	---[g]	2	11	*
91-94-1	3,3'-Dichlorobenzidine	1[e]	---[c]	0.007[e,f]	0.033	1.3
75-34-3	1,1-Dichloroethane	7,800[b]	1,300[b]	23[b]	110	*

		Exposure Route-Specific Values for Soils		Soil Component of the Groundwater Ingestion Exposure Route Values		
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
107-06-2	1,2-Dichloroethane (Ethylene dichloride)	7[e]	0.4[e]	0.02	0.1	*
75-35-4	1,1-Dichloroethylene	700[b]	1,500[d]	0.06	0.3	*
156-59-2	*cis*-1,2-Dichloroethylene	780[b]	1,200[d]	0.4	1.1	*
156-60-5	*trans*-1,2-Dichloroethylene	1,600[b]	3,100[d]	0.7	3.4	*
78-87-5	1,2-Dichloropropane	9[e]	15[b]	0.03	0.15	*
542-75-6	1,3-Dichloropropene (1,3-Dichloropropylene, *cis* + *trans*)	4[e]	0.1[e]	0.004[e]	0.02	0.005
60-57-1	Dieldrin[n]	0.04[e]	1[e]	0.004[e]	0.02	*
84-66-2	Diethyl phthalate	63,000[b]	2,000[d]	470[b]	470	*
105-67-9	2,4-Dimethylphenol	1,600[b]	---[c]	9[b]	9	*
121-14-2	2,4-Dinitrotoluene	0.9[e]	---[c]	0.0008[e,f]	0.0008	0.013

		Exposure Route-Specific Values for Soils		Soil Component of the Groundwater Ingestion Exposure Route Values		
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
606-20-2	2,6-Dinitrotoluene	0.9[e]	---[c]	0.0007[e,f]	0.0007	0.0067
117-84-0	Di-*n*-octyl phthalate	1,600[b]	10,000[d]	10,000[d]	10,000[d]	*
115-29-7	Endosulfan	470[b]	---[c]	18[b]	90	*
145-73-3	Endothall[o]	1,600[b]	---[c]	0.4	0.4	NA
72-20-8	Endrin	23[b]	---[c]	1	5	*
100-41-4	Ethylbenzene	7,800[b]	400[d]	13	19	*
206-44-0	Fluoranthene	3,100[b]	---[c]	4,300[b]	21,000	*
86-73-7	Fluorene	3,100[b]	---[c]	560[b]	2,800	*
76-44-8	Heptachlor	0.1[e]	0.1[e]	23	110	*
1024-57-3	Heptachlor epoxide	0.07[e]	5[e]	0.7	3.3	*
118-74-1	Hexachlorobenzene	0.4[e]	1[e]	2	11	*
319-84-6	*alpha*-HCH (*alpha*-BHC)	0.1[e]	0.8[e]	0.0005[e,f]	0.003	0.002

		Exposure Route-Specific Values for Soils		Soil Component of the Groundwater Ingestion Exposure Route Values		
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
58-89-9	*gamma*-HCH (Lindane)[n]	0.5[e]	---[c]	0.009	0.047	*
77-47-4	Hexachlorocyclopentadiene	550[b]	10[b]	400	2,200[d]	*
67-72-1	Hexachloroethane	78[b]	---[c]	0.5[b]	2.6	*
193-39-5	Indeno(1,2,3-*c,d*)pyrene	0.9[e]	---[c]	14	69	*
78-59-1	Isophorone	15,600[b]	4,600[d]	8[b]	8	*
72-43-5	Methoxychlor	390[b]	---[c]	160	780	*
74-83-9	Methyl bromide (Bromomethane)	110[b]	10[b]	0.2[b]	1.2	*
75-09-2	Methylene chloride (Dichloromethane)	85[e]	13[e]	0.02[e]	0.2	*
95-48-7	2-Methylphenol (*o* - Cresol)	3,900[b]	---[c]	15[b]	15	*
91-20-3	Naphthalene	3,100[b]	---[c]	84[b]	420	*
98-95-3	Nitrobenzene	39[b]	92[b]	0.1[b,f]	0.1	0.26

		Exposure Route-Specific Values for Soils		Soil Component of the Groundwater Ingestion Exposure Route Values		
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
86-30-6	*N*-Nitrosodiphenylamine	130[f]	---[c]	1[e]	5.6	*
621-64-7	*N*-Nitrosodi-*n*-propylamine	0.09[e,f]	---[c]	0.00005[e,f]	0.00005	0.66
108-95-2	Phenol	47,000[b]	---[c]	100[b]	100	*
1918-02-1	Picloram[o]	5,500[b]	---[c]	2	20	NA
1336-36-3	Polychlorinated biphenyls (PCBs)[n]	1; 10[h]	---[c,h]	---[h]	---[h]	*
129-00-0	Pyrene	2,300[b]	---[c]	4,200[b]	21,000	*
122-34-9	Simazine[o]	390[b]	---[c]	0.04	0.37	NA
100-42-5	Styrene	16,000[b]	1,500[d]	4	18	*
127-18-4	Tetrachloroethylene (Perchloroethylene)	12[e]	11[e]	0.06	0.3	*
108-88-3	Toluene	16,000[b]	650[d]	12	29	*

		Exposure Route-Specific Values for Soils		Soil Component of the Groundwater Ingestion Exposure Route Values		
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
8001-35-2	Toxaphene[n]	0.6[e]	89[e]	31	150	*
120-82-1	1,2,4-Trichlorobenzene	780[b]	3,200[b]	5	53	*
71-55-6	1,1,1-Trichloroethane	---[c]	1,200[d]	2	9.6	*
79-00-5	1,1,2-Trichloroethane	310[b]	1,800[d]	0.02	0.3	*
79-01-6	Trichloroethylene	58[e]	5[e]	0.06	0.3	*
108-05-4	Vinyl acetate	78,000[b]	1,000[b]	170[b]	170	*
75-01-4	Vinyl chloride	0.3[e]	0.03[e]	0.01[f]	0.07	*
108-38-3	m-Xylene	160,000[b]	420[d]	210	210	*
95-47-6	o-Xylene	160,000[b]	410[d]	190	190	*
106-42-3	p-Xylene	160,000[b]	460[d]	200	200	*

		Exposure Route-Specific Values for Soils		Soil Component of the Groundwater Ingestion Exposure Route Values		
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
1330-20-7	Xylenes (total)	160,000[b]	410[d]	150	150	*
	Ionizable Organics					
65-85-0	Benzoic Acid	310,000[b]	---[c]	400[b,i]	400[i]	*
95-57-8	2-Chlorophenol	390[b]	53,000[d]	4[b,i]	4[i]	*
120-83-2	2,4-Dichlorophenol	230[b]	---[c]	1[b,i]	1[i]	*
51-28-5	2,4-Dinitrophenol	160[b]	---[c]	0.2[b,f]	0.2	3.3
88-85-7	Dinoseb[o]	78[b]	---[c]	0.34[b,i]	3.4[i]	*
87-86-5	Pentachlorophenol	3[e,j]	---[c]	0.03[f,i]	0.14[i]	2.4
93-72-1	2,4,5-TP (Silvex)	630[b]	---[c]	11[i]	55[i]	*
95-95-4	2,4,5-Trichlorophenol	7,800[b]	---[c]	270[b,i]	1,400[i]	*
88-06-2	2,4,6 Trichlorophenol	58[e]	200[e]	0.2[e,f,i]	0.77[i]	0.43

		Exposure Route-specific Values for Soils		Soil Component of the Groundwater Ingestion Exposure Route Values		
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/L)	Class II (mg/L)	ADL (mg/kg)
	Inorganics					
7440-36-0	Antimony	31[b]	---[c]	0.006[m]	0.024[m]	*
7440-38-2	Arsenic[l,n]	0.4[e,t]	750[e]	0.05[m]	0.2[m]	*
7440-39-3	Barium	5,500[b]	690,000[b]	2.0[m]	2.0[m]	*
7440-41-7	Beryllium	0.1[e,t]	1,300[e]	0.004[m]	0.5[m]	*
7440-42-8	Boron	7,000[b]	---[g]	2.0[m]	2.0[m]	*
7440-43-9	Cadmium[l,n]	78[b, r]	1,800[e]	0.005[m]	0.05[m]	*
16887-00-6	Chloride	---[c]	---[c]	200[m]	200[m]	*
7440-47-3	Chromium, total	390[b]	270[e]	0.1[m]	1.0[m]	*
16065-83-1	Chromium, ion, trivalent	78,000[b]	---[c]	---[g]	---[g]	*
18540-29-9	Chromium, ion, hexavalent	390[b]	270[e]	---	---	*
7440-48-4	Cobalt	4,700[b]	---[c]	1.0[m]	1.0[m]	*

		Exposure Route-specific Values for Soils		Soil Component of the Groundwater Ingestion Exposure Route Values		
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/L)	Class II (mg/L)	ADL (mg/kg)
7440-50-8	Copper[n]	2,900[b]	---[c]	0.65[m]	0.65[m]	*
57-12-5	Cyanide (amenable)	1,600[b]	---[c]	0.2[q]	0.6[q]	*
7782-41-4	Fluoride	4,700[b]	---[c]	4.0[m]	4.0[m]	*
15438-31-0	Iron	---[c]	---[c]	5.0[m]	5.0[m]	*
7439-92-1	Lead	400[k]	---[c]	0.0075[m]	0.1[m]	*
7439-96-5	Manganese	3,700[b]	69,000[b]	0.15[m]	10.0[m]	*
7439-97-6	Mercury[l,n]	23[b,s]	10[b,i]	0.002[m]	0.01[m]	*
7440-02-0	Nickel[l]	1,600[b]	13,000[e]	0.1[m]	2.0[m]	*
14797-55-8	Nitrate as N[p]	130,000[b]	---[c]	10.0[q]	100[q]	*
7782-49-2	Selenium[l,n]	390[b]	---[c]	0.05[m]	0.05[m]	*

		Exposure Route-specific Values for Soils		Soil Component of the Groundwater Ingestion Exposure Route Values		
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/L)	Class II (mg/L)	ADL (mg/kg)
7440-22-4	Silver	390[b]	---[c]	0.05[m]	---	*
14808-79-8	Sulfate	---[c]	---[c]	400[m]	400[m]	*
7440-28-0	Thallium	6.3[b,u]	---[c]	0.002[m]	0.02[m]	*
7440-62-2	Vanadium	550[b]	---[c]	0.049[m]	---	*
7440-66-6	Zinc[l]	23,000[b]	---[c]	5.0[m]	10[m]	*

"*" indicates that the ADL is less than or equal to the specified remediation objective.
NA means not available; no PQL or EQL available in USEPA analytical methods.

Chemical Name and Soil Remediation Objective Notations

[a] Soil remediation objectives based on human health criteria only.
[b] Calculated values correspond to a target hazard quotient of 1.
[c] No toxicity criteria available for the route of exposure.
[d] Soil saturation concentration ($C_{(sat)}$) = the concentration at which the absorptive limits of the soil particles, the solubility limits of the available soil moisture, and saturation of soil pore air have been reached. Above the soil saturation concentration, the assumptions regarding vapor transport to air and/or dissolved phase transport to groundwater (for chemicals which are liquid at ambient soil temperatures) have been violated, and alternative modeling approaches are required.
[e] Calculated values correspond to a cancer risk level of 1 in 1,000,000.
[f] Level is at or below Contract Laboratory Program required quantitation limit for Regular Analytical Services (RAS).
[g] Chemical-specific properties are such that this route is not of concern at any soil contaminant concentration.
[h] A preliminary goal of 1 ppm has been set for PCBs based on *Guidance on Remedial Actions for Superfund Sites with PCB Contamination*, EPA/540G-90/007, and on USEPA efforts to manage PCB contamination. See 40 CFR 761.120 - USEPA "PCB Spill Cleanup Policy." This regulation goes on to say that the remediation goal for an unrestricted area is 10 ppm and 25 ppm for a restricted area, provided both have at least 10 inches of clean cover.
[i] Soil remediation objective for pH of 6.8. If soil pH is other than 6.8, refer to Appendix B, Tables C and D of this Part.
[j] Ingestion soil remediation objective adjusted by a factor of 0.5 to account for dermal route.
[k] A preliminary remediation goal of 400 mg/kg has been set for lead based on *Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities*, OSWER Directive #9355.4-12.
[l] Potential for soil-plant-human exposure.
[m] The person conducting the remediation has the option to use: 1) TCLP or SPLP test results to compare with the remediation objectives listed in this Table; or 2) the total amount of contaminant in the soil sample results to compare with pH specific remediation objectives listed in Appendix B, Table C or D of this Part. (See Section 742.510.) If the person conducting the remediation wishes to calculate soil remediation objectives based on background concentrations, this should be done in accordance with Subpart D of this Part.
[n] The Agency reserves the right to evaluate the potential for remaining contaminant concentrations to pose significant threats to crops, livestock, or wildlife.
[o] For agrichemical facilities, remediation objectives for surficial soils which are based on field application rates may be more appropriate for currently registered pesticides. Consult the Agency for further information.
[p] For agrichemical facilities, soil remediation objectives based on site-specific background concentrations of Nitrate as N may be more appropriate. Such determinations shall be conducted in accordance with the procedures set forth in Subparts D and I of this Part.
[q] The TCLP extraction must be done using water at a pH of 7.0.
[r] Value based on dietary Reference Dose.
[s] Value based on Reference Dose for Mercuric chloride (CAS No. 7487-94-7).
[t] Note that Table value is likely to be less than background concentration for this chemical; screening or remediation concentrations using the procedures of Subpart D of this Part may be more appropriate.

[u] Value based on Reference Dose for thallium sulfate (CAS No. 7446-18-6).

Section 742.APPENDIX B: Tier 1 Tables and Illustrations

Section 742.Table B: Tier 1 Soil Remediation Objectives[a] for Industrial/Commercial Properties

		Exposure Route-Specific Values for Soils				Soil Component of the Groundwater Ingestion Exposure Route Values		
		Industrial-Commercial		Construction Worker				
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	ClassII (mg/kg)	ADL (mg/kg)
83-32-9	Acenaphthene	120,000[b]	-----[c]	120,000[b]	-----[c]	570[b]	2,900	*
67-64-1	Acetone	200,000[b]	100,000[d]	200,000[b]	100,000[d]	16[b]	16	*
15972-60-8	Alachlor[o]	72[e]	-----[c]	1,600[e]	-----[c]	0.04	0.2	NA
116-06-3	Aldicarb[o]	2,000[b]	-----[c]	200[b]	-----[c]	0.013	0.07	NA
309-00-2	Aldrin	0.3[e]	6.6[e]	6.1[b]	9.3[e]	0.5[e]	2.5	*
120-12-7	Anthracene	610,000[b]	-----[c]	610,000[b]	-----[c]	12,000[b]	59,000	*
1912-24-9	Atrazine[o]	72,000[b]	-----[c]	7,100[b]	-----[c]	0.066	0.33	NA
71-43-2	Benzene	200[e]	1.5[e]	4,300[e]	2.1[e]	0.03	0.17	*

		Exposure Route-Specific Values for Soils				Soil Component of the Groundwater Ingestion Exposure Route Values		
		Industrial-Commercial		Construction Worker				
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
56-55-3	Benzo(*a*)anthracene	8[e]	-----[c]	170[e]	-----[c]	2	8	*
205-99-2	Benzo(*b*)fluoranthene	8[e]	-----[c]	170[e]	-----[c]	5	25	*
207-08-9	Benzo(*k*)fluroanthene	78[e]	-----[c]	1,700[e]	-----[c]	49	250	*
50-32-8	Benzo(*a*)pyrene	0.8[e]	-----[c]	17[e]	-----[c]	8	82	*
111-44-4	Bis(2-chloroethyl)ether	5[e]	0.47[e]	75[e]	0.66[e]	0.0004[e,f]	0.0004	0.66
117-81-7	Bis(2-ethylhexyl)phthalate	410[e]	31,000[d]	4,100[b]	31,000[d]	3,600	31,000[d]	*
75-27-4	Bromodichloromethane (Dichlorobromomethane)	92[e]	3,000[d]	2,000[e]	3,000[d]	0.6	0.6	*
75-25-2	Bromoform	720[e]	100[e]	16,000[e]	140[e]	0.8	0.8	*
71-36-3	Butanol	200,000[b]	10,000[d]	200,000[b]	10,000[d]	17[b]	17	NA
85-68-7	Butyl benzyl phthalate	410,000[b]	930[d]	410,000[b]	930[d]	930[d]	930[d]	*
86-74-8	Carbazole	290[e]	-----[c]	6,200[e]	-----[c]	0.6[e]	2.8	NA

		Exposure Route-Specific Values for Soils				Soil Component of the Groundwater Ingestion Exposure Route Values		
		Industrial-Commercial		Construction Worker				
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
1563-66-2	Carbofuran[o]	10,000[b]	-----[c]	1,000[b]	-----[c]	0.22	1.1	NA
75-15-0	Carbon disulfide	200,000[b]	720[d]	20,000[b]	9.0[b]	32[b]	160	*
56-23-5	Carbon tetrachloride	44[e]	0.64[e]	410[b]	0.90[e]	0.07	0.33	*
57-74-9	Chlordane	4[e]	38[e]	12[b]	53[e]	10	48	*
106-47-8	4 - Chloroaniline (*p*-Chloroaniline)	8,200[b]	-----[c]	820[b]	-----[c]	0.7[b]	0.7	1.3
108-90-7	Chlorobenzene (Monochlorobenzene)	41,000[b]	210[b]	4,100[b]	1.3[b]	1	6.5	*
124-48-1	Chlorodibromomethane (Dibromochloromethane)	41,000[b]	1,300[d]	41,000[b]	1,300[d]	0.4	0.4	*
67-66-3	Chloroform	940[e]	0.54[e]	2,000[b]	0.76[e]	0.6	2.9	*
218-01-9	Chrysene	780[e]	-----[c]	17,000[e]	-----[e]	160	800	*
94-75-7	2,4-D	20,000[b]	-----[c]	2,000[b]	-----[c]	1.5	7.7	*

		Exposure Route-Specific Values for Soils				Soil Component of the Groundwater Ingestion Exposure Route Values		
		Industrial-Commercial		Construction Worker				
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
75-99-0	Dalapon	61,000[b]	-----[c]	6,100[b]	-----[c]	0.85	8.5	1.2
72-54-8	DDD	24[e]	-----[c]	520[e]	-----[c]	16[e]	80	*
72-55-9	DDE	17[e]	-----[c]	370[e]	-----[c]	54[e]	270	*
50-29-3	DDT	17[e]	1,500[e]	100[b]	2,100[e]	32[e]	160	*
53-70-3	Dibenzo(*a,h*)anthracene	0.8[e]	-----[c]	17[e]	-----[c]	2	7.6	*
96-12-8	1,2-Dibromo-3-chloropropane	4[e]	17[b]	89[e]	0.11[b]	0.002	0.002	*
106-93-4	1,2-Dibromoethane (Ethylene dibromide)	0.07[e]	0.32[e]	1.5[e]	0.45[e]	0.0004	0.004	0.005
84-74-2	Di-*n*-butyl phthalate	200,000[b]	2,300[d]	200,000[b]	2,300[d]	2,300[d]	2,300[d]	*
95-50-1	1,2-Dichlorobenzene (*o* - Dichlorobenzene)	180,000[b]	560[d]	18,000[b]	310[b]	17	43	*
106-46-7	1,4-Dichlorobenzene (*p* - Dichlorobenzene)	-----[c]	17,000[b]	-----[c]	340[b]	2	11	*

		Exposure Route-Specific Values for Soils				Soil Component of the Groundwater Ingestion Exposure Route Values		
		Industrial-Commercial		Construction Worker				
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
91-94-1	3,3'-Dichlorobenzidine	13[e]	-----[c]	280[e]	-----[c]	0.007[e,f]	0.033	1.3
75-34-3	1,1-Dichloroethane	200,000[b]	1,700[d]	200,000[b]	130[b]	23[b]	110	*
107-06-2	1,2-Dichloroethane (Ethylene dichloride)	63[e]	0.70[e]	1,400[e]	0.99[e]	0.02	0.1	*
75-35-4	1,1-Dichloroethylene	18,000[b]	1,500[d]	1,800[b]	1,500[d]	0.06	0.3	*
156-59-2	*cis*-1,2-Dichloroethylene	20,000[b]	1,200[d]	20,000[b]	1,200[d]	0.4	1.1	*
156-60-5	*trans*-1,2-Dichloroethylene	41,000[b]	3,100[d]	41,000[b]	3,100[d]	0.7	3.4	*
78-87-5	1,2-Dichloropropane	84[e]	23[b]	1,800[e]	0.50[b]	0.03	0.15	*
542-75-6	1,3-Dichloropropene (1,3-Dichloropropylene, *cis* + *trans*)	33[e]	0.23[e]	610[b]	0.33[e]	0.004[e]	0.02	0.005
60-57-1	Dieldrin[a]	0.4[e]	2.2[e]	7.8[e]	3.1[e]	0.004[e]	0.02	0.0013
84-66-2	Diethyl phthalate	1,000,000[b]	2,000[d]	1,000,000[b]	2,000[d]	470[b]	470	*

		Exposure Route-Specific Values for Soils				Soil Component of the Groundwater Ingestion Exposure Route Values		
		Industrial-Commercial		Construction Worker				
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
105-67-9	2,4-Dimethylphenol	41,000[b]	-----[c]	41,000[b]	-----[c]	9[b]	9	*
121-14-2	2,4-Dinitrotoluene	8.4[e]	-----[c]	180[e]	-----[c]	0.0008[e,f]	0.0008	0.013
606-20-2	2,6-Dinitrotoluene	8.4[e]	-----[c]	180[e]	-----[c]	0.0007[e,f]	0.0007	0.0067
117-84-0	Di-*n*-octyl phthalate	41,000[e]	10,000[d]	4,100[b]	10,000[d]	10,000[d]	10,000[d]	*
115-29-7	Endosulfan	12,000[b]	-----[c]	1,200[b]	-----[c]	18[b]	90	*
145-73-3	Endothall[o]	41,000[c]	-----[c]	4,100[b]	-----[c]	0.4	0.4	NA
72-20-8	Endrin	610[b]	-----[c]	61[b]	-----[c]	1	5	*
100-41-4	Ethylbenzene	200,000[b]	400[d]	20,000[b]	58[b]	13	19	*
206-44-0	Fluoranthene	82,000[b]	-----[c]	82,000[b]	-----[c]	4,300[b]	21,000	*
86-73-7	Fluorene	82,000[b]	-----[c]	82,000[b]	-----[c]	560[b]	2,800	*
76-44-8	Heptachlor	1[e]	11[e]	28[e]	16[e]	23	110	*

		Exposure Route-Specific Values for Soils				Soil Component of the Groundwater Ingestion Exposure Route Values		
		Industrial-Commercial		Construction Worker				
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
105-67-9	2,4-Dimethylphenol	41,000[b]	-----[c]	41,000[b]	-----[c]	9[b]	9	*
121-14-2	2,4-Dinitrotoluene	8.4[e]	-----[c]	180[e]	-----[c]	0.0008[e,f]	0.0008	0.013
606-20-2	2,6-Dinitrotoluene	8.4[e]	-----[c]	180[e]	-----[c]	0.0007[e,f]	0.0007	0.0067
117-84-0	Di-*n*-octyl phthalate	41,000[e]	10,000[d]	4,100[b]	10,000[d]	10,000[d]	10,000[d]	*
115-29-7	Endosulfan	12,000[b]	-----[c]	1,200[b]	-----[c]	18[b]	90	*
145-73-3	Endothall[o]	41,000[c]	-----[c]	4,100[b]	-----[c]	0.4	0.4	NA
72-20-8	Endrin	610[b]	-----[c]	61[b]	-----[c]	1	5	*
100-41-4	Ethylbenzene	200,000[b]	400[d]	20,000[b]	58[b]	13	19	*
206-44-0	Fluoranthene	82,000[b]	-----[c]	82,000[b]	-----[c]	4,300[b]	21,000	*
86-73-7	Fluorene	82,000[b]	-----[c]	82,000[b]	-----[c]	560[b]	2,800	*
76-44-8	Heptachlor	1[e]	11[e]	28[e]	16[e]	23	110	*

		Exposure Route-Specific Values for Soils				Soil Component of the Groundwater Ingestion Exposure Route Values		
		Industrial-Commercial		Construction Worker				
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
1024-57-3	Heptachlor epoxide	0.6[e]	9.2[e]	2.7[b]	13[e]	0.7	3.3	*
118-74-1	Hexachlorobenzene	4[e]	1.8[e]	78[e]	2.6[e]	2	11	*
319-84-6	*alpha*-HCH (*alpha*-BHC)	0.9[e]	1.5[e]	20[e]	2.1[e]	0.0005[e,f]	0.003	0.002
58-89-9	*gamma*-HCH (Lindane)[n]	4[e]	-----[c]	96[e]	-----[c]	0.009	0.047	*
77-47-4	Hexachlorocyclopentadiene	14,000[b]	16[b]	14,000[b]	1.1[b]	400	2,200[d]	*
67-72-1	Hexachloroethane	2,000[b]	-----[c]	2,000[b]	-----[c]	0.5[b]	2.6	*
193-39-5	Indeno(1,2,3-*c,d*)pyrene	8[e]	-----[c]	170[e]	-----[c]	14	69	*
78-59-1	Isophorone	410,000[b]	4,600[d]	410,000[b]	4,600[d]	8[b]	8	*
72-43-5	Methoxychlor	10,000[b]	-----[c]	1,000[b]	-----[c]	160	780	*
74-83-9	Methyl bromide (Bromomethane)	2,900[b]	15[b]	1,000[b]	3.9[b]	0.2[b]	1.2	*

		Exposure Route-Specific Values for Soils				Soil Component of the Groundwater Ingestion Exposure Route Values		
		Industrial-Commercial		Construction Worker				
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
75-09-2	Methylene chloride (Dichloromethane)	760[e]	24[e]	12,000[b]	34[e]	0.02[e]	0.2	*
95-48-7	2-Methylphenol (*o* - Cresol)	100,000[b]	-----[c]	100,000[b]	-----[c]	15[b]	15	*
86-30-6	*N*-Nitrosodiphenylamine	1,200[e]	-----[c]	25,000[e]	-----[c]	1[e]	5.6	0.66
621-64-7	*N*-Nitrosodi-*n*-propylamine	0.8[e]	-----[c]	18[e]	-----[c]	0.00005[e,f]	0.00005	0.66
91-20-3	Naphthalene	82,000[b]	-----[c]	8,200[b]	-----[c]	84[b]	420	*
98-95-3	Nitrobenzene	1,000[b]	140[b]	1,000[b]	9.4[b]	0.1[b,f]	0.1	0.26
108-95-2	Phenol	1,000,000[b]	-----[c]	120,000[b]	-----[c]	100[b]	100	*
1918-02-1	Picloram[o]	140,000[b]	-----[c]	14,000[b]	-----[c]	2	20	NA
1336-36-3	Polychlorinated biphenyls (PCBs)[n]	1; 10; 25[h]	-----[c,h]	1[h]	-----[c,h]	-----[h]	-----[h]	*
129-00-0	Pyrene	61,000[b]	-----[c]	61,000[b]	-----[c]	4,200[b]	21,000	*

		Exposure Route-Specific Values for Soils				Soil Component of the Groundwater Ingestion Exposure Route Values		
		Industrial-Commercial		Construction Worker				
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
122-34-9	Simazine[o]	10,000[b]	-----[c]	1,000[b]	-----[c]	0.04	0.37	NA
100-42-5	Styrene	410,000[b]	1,500[d]	41,000[b]	430[b]	4	18	*
127-18-4	Tetrachloroethylene (Perchloroethylene)	110[e]	20[e]	2,400[e]	28[e]	0.06	0.3	*
108-88-3	Toluene	410,000[b]	650[d]	410,000[b]	42[b]	12	29	*
8001-35-2	Toxaphene[n]	5.2[e]	170[e]	110[e]	240[e]	31	150	*
120-82-1	1,2,4-Trichlorobenzene	20,000[b]	3,200[d]	2,000[b]	920[b]	5	53	*
71-55-6	1,1,1-Trichloroethane	-----[c]	1,200[d]	-----[c]	1,200[d]	2	9.6	*
79-00-5	1,1,2-Trichloroethane	8,200[b]	1,800[d]	8,200[b]	1,800[d]	0.02	0.3	*
79-01-6	Trichloroethylene	520[e]	8.9[e]	1,200[b]	12[e]	0.06	0.3	*
108-05-4	Vinyl acetate	1,000,000[b]	1,600[b]	200,000[b]	10[b]	170[b]	170	*

		Exposure Route-Specific Values for Soils				Soil Component of the Groundwater Ingestion Exposure Route Values		
		Industrial-Commercial		Construction Worker				
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
75-01-4	Vinyl chloride	3[e]	0.06[e]	65[e]	0.08[e]	0.01[f]	0.07	*
108-38-3	m-Xylene	1,000,000	420[d]	410,000[b]	420[d]	210	210	*
95-47-6	o-Xylene	1,000,000	410[d]	410,000[b]	410[d]	190	190	*
106-42-3	p-Xylene	1,000,000	460[d]	410,000[b]	460[d]	200	200	*
1330-20-7	Xylenes (total)	1,000,000[b]	410[d]	410,000[b]	410[d]	150	150	*
	Ionizable Organics							
65-85-0	Benzoic Acid	1,000,000[b]	-----[c]	820,000[b]	-----[c]	400[b,j]	400[j]	*
95-57-8	2-Chlorophenol	10,000[b]	53,000[d]	10,000[b]	53,000[d]	4[b,j]	20[j]	*
120-83-2	2,4-Dichlorophenol	6,100[b]	-----[c]	610[b]	-----[c]	1[b,j]	1[j]	*
51-28-5	2,4-Dinitrophenol	4,100[b]	-----[c]	410[b]	-----[c]	0.2[b,f,j]	0.2[j]	3.3
88-85-7	Dinoseb[o]	2,000[b]	-----[c]	200[b]	-----[c]	0.34[b,j]	3.4[j]	*

		Exposure Route-Specific Values for Soils				Soil Component of the Groundwater Ingestion Exposure Route Values		
		Industrial-Commercial		Construction Worker				
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/kg)	Class II (mg/kg)	ADL (mg/kg)
87-86-5	Pentachlorophenol	24[e,j]	-----[c]	520[e,j]	-----[c]	0.03[f,i]	0.14[i]	2.4
93-72-1	2,4,5-TP (Silvex)	16,000[b]	-----[c]	1,600[b]	-----[c]	11[i]	55[i]	*
95-95-4	2,4,5-Trichlorophenol	200,000[b]	-----[c]	200,000[b]	-----[c]	270[b,i]	1,400[i]	*
88-06-2	2,4,6- Trichlorophenol	520[e]	390[e]	11,000[e]	540[e]	0.2[e,f,i]	0.77[i]	0.43

CAS No.	Chemical Name	Exposure Route-Specific Values for Soils				Soil Component of the Groundwater Ingestion Exposure Route Values		
		Industrial-Commercial		Construction Worker				
		Ingestion (mg/kg)	Inhalation (mg/kg)	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/L)	Class II (mg/L)	
	Inorganics							
7440-36-0	Antimony	820[b]	-----[c]	82[b]	-----[c]	0.006[m]	0.024[m]	*
7440-38-2	Arsenic[l,n]	3[e,t]	1,200[e]	61[b]	25,000[e]	0.05[m]	0.2[m]	
7440-39-3	Barium	140,000[b]	910,000[b]	14,000[b]	870,000[b]	2.0[m]	2.0[m]	*
7440-41-7	Beryllium	1[e,t]	2,100[e]	29[e]	44,000[e]	0.004[m]	0.5[m]	*
7440-42-8	Boron	180,000[b]	1,000,000	18,000[b]	1,000,000	2.0[m]	2.0[m]	*
7440-43-9	Cadmium[l,n]	2,000[b,r]	2,800[e]	200[b,r]	59,000[e]	0.005[m]	0.05[m]	*
16887-00-6	Chloride	-------[c]	-----[c]	-----[c]	-----[c]	200[m]	200[m]	*
7440-47-3	Chromium, total	10,000[b]	420[e]	4,100[b]	8,800[e]	0.1[m]	1.0[m]	*
16065-83-1	Chromium, ion, trivalent	1,000,000[b]	-----[c]	330,000[b]	-----[c]	-----[g]	-----[g]	*
18540-29-9	Chromium, ion, hexavalent	10,000[b]	420[e]	4,100[b]	8,800[e]	-----	-----	*

		Exposure Route-Specific Values for Soils				Soil Component of the Groundwater Ingestion Exposure Route Values		
		Industrial-Commercial		Construction Worker				
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/L)	Class II (mg/L)	
7440-48-4	Cobalt	120,000[b]	-----[c]	12,000[b]	-----[c]	1.0[m]	1.0[m]	*
7440-50-8	Copper[n]	82,000[b]	-----[c]	8,200[b]	-----[c]	0.65[m]	0.65[m]	*
57-12-5	Cyanide (amenable)	41,000[b]	-----[c]	4,100[b]	-----[c]	0.2[q]	0.6[q]	*
7782-41-4	Fluoride	120,000[b]	-----[c]	12,000[b]	-----[c]	4.0[m]	4.0[m]	*
15438-31-0	Iron	-----[c]	-----[c]	-----[c]	-----[c]	5.0[m]	5.0[m]	*
7439-92-1	Lead	400[k]	-----[c]	400[k]	-----[c]	0.0075[m]	0.1[m]	*
7439-96-5	Manganese	96,000[b]	91,000[b]	9,600[b]	8,700[b]	0.15[m]	10.0[m]	*
7439-97-6	Mercury[l,n]	610[b]	540,000[b]	61[b,s]	52,000[b]	0.002[m]	0.01[m]	*
7440-02-0	Nickel[l]	41,000[b]	21,000[e]	4,100[b]	440,000[e]	0.1[m]	2.0[m]	*
14797-55-8	Nitrate as N[p]	1,000,000[b]	-----[c]	330,000[b]	-----[c]	10.0[q]	100[q]	*
7782-49-2	Selenium[l,n]	10,000[b]	-----[c]	1,000[b]	-----[c]	0.05[m]	0.05[m]	*

		Exposure Route-Specific Values for Soils				Soil Component of the Groundwater Ingestion Exposure Route Values		
		Industrial-Commercial		Construction Worker				
CAS No.	Chemical Name	Ingestion (mg/kg)	Inhalation (mg/kg)	Ingestion (mg/kg)	Inhalation (mg/kg)	Class I (mg/L)	Class II (mg/L)	
7440-22-4	Silver	10,000[b]	-----[c]	1,000[b]	-----[c]	0.05[m]	-----	*
14808-79-8	Sulfate	-----[c]	-----[c]	-----[c]	-----[c]	400[m]	400[m]	*
7440-28-0	Thallium	160[b,u]	-----[c]	160[b,u]	-----[c]	0.002[m]	0.02[m]	*
7440-62-2	Vanadium	14,000[b]	-----[c]	1,400[b]	-----[c]	0.049[m]	-----	*
7440-66-6	Zinc[l]	610,000[b]	-----[c]	61,000[b]	-----[c]	5.0[m]	10[m]	*

"*" indicates that the ADL is less than or equal to the specified remediation objective.

NA means Not Available; no PQL or EQL available in USEPA analytical methods.

Chemical Name and Soil Remediation Objective Notations (2nd, 5th thru 8th Columns)

[a] Soil remediation objectives based on human health criteria only.
[b] Calculated values correspond to a target hazard quotient of 1.
[c] No toxicity criteria available for this route of exposure.
[d] Soil saturation concentration ($C_{[sat]}$) = the concentration at which the absorptive limits of the soil particles, the solubility limits of the available soil moisture, and saturation of soil pore air have been reached. Above the soil saturation concentration, the assumptions regarding vapor transport to air and/or dissolved phase transport to groundwater (for chemicals which are liquid at ambient soil temperatures) have been violated, and alternative modeling approaches are required.
[e] Calculated values correspond to a cancer risk level of 1 in 1,000,000.
[f] Level is at or below Contract Laboratory Program required quantitation limit for Regular Analytical Services (RAS).
[g] Chemical-specific properties are such that this route is not of concern at any soil contaminant concentration.
[h] A preliminary goal of 1 ppm has been set for PCBs based on *Guidance on Remedial Actions for Superfund Sites with PCB Contamination*, EPA/540G-90/007, and on USEPA efforts to manage PCB contamination. See 40 CFR 761.120 for USEPA "PCB Spill Cleanup Policy." This regulation goes on to say that the remediation goal for an unrestricted area is 10 ppm and 25 ppm for a restricted area, provided both have at least 10 inches of clean cover.
[i] Soil remediation objective for pH of 6.8. If soil pH is other than 6.8, refer to Appendix B, Tables C and D in this Part.
[j] Ingestion soil remediation objective adjusted by a factor of 0.5 to account for dermal route.
[k] A preliminary remediation goal of 400 mg/kg has been set for lead based on *Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities*, OSWER Directive #9355.4-12.
[l] Potential for soil-plant-human exposure.
[m] The person conducting the remediation has the option to use: (1) TCLP or SPLP test results to compare with the remediation objectives listed in this Table; or (2) the total amount of contaminant in the soil sample results to compare with pH specific remediation objectives listed in Appendix B, Table C or D of this Part. (See Section 742.510.) If the person conducting the remediation wishes to calculate soil remediation objectives based on background concentrations, this should be done in accordance with Subpart D of this Part.
[n] The Agency reserves the right to evaluate the potential for remaining contaminant concentrations to pose significant threats to crops, livestock, or wildlife.
[o] For agrichemical facilities, remediation objectives for surficial soils which are based on field application rates may be more appropriate for currently registered pesticides. Consult the Agency for further information.
[p] For agrichemical facilities, soil remediation objectives based on site-specific background concentrations of Nitrate as N may be more appropriate. Such determinations shall be conducted in accordance with the located in Subparts D and I of this Part.
[q] The TCLP extraction must be done using water at a pH of 7.0.
r Value based on dietary Reference Dose.
s Value based on Reference Dose for Mercuric chloride (CAS No. 7487-94-7).
t Note that Table value is likely to be less than background concentration for this chemical; screening or remediation concentrations using the procedures of Subpart D of this Part.

[u] Value based on Reference Dose for thallium sulfate (CAS No. 7446-18-6).

Section 742.APPENDIX B: Tier 1 Tables and Illustrations

Section 742.Table C: pH Specific Soil Remediation Objectives for Inorganics and Ionizing Organics for the Soil Component of the Groundwater Ingestion Route (Class I Groundwater)

Chemical (totals) (mg/kg)	pH 4.5 to 4.74	pH 4.75 to 5.24	pH 5.25 to 5.74	pH 5.75 to 6.24	pH 6.25 to 6.64	pH 6.65 to 6.89	pH 6.9 to 7.24	pH 7.25 to 7.74	pH 7.75 to 8.0
Inorganics									
Antimony	5	5	5	5	5	5	5	5	5
Arsenic	25	26	27	28	29	29	29	30	31
Barium	260	490	850	1,200	1,500	1,600	1,700	1,800	2,100
Beryllium	1.1	2.1	3.4	6.6	22	63	140	1,000	8,000
Cadmium	1.0	1.7	2.7	3.7	5.2	7.5	11	59	430
Chromium (+6)	70	62	54	46	40	38	36	32	28
Copper	330	580	2,100	11,000	59,000	130,000	200,000	330,000	330,000
Cyanide	40	40	40	40	40	40	40	40	40
Mercury	0.01	0.01	0.03	0.15	0.89	2.1	3.3	6.4	8.0
Nickel	20	36	56	76	100	130	180	700	3,800
Selenium	24	17	12	8.8	6.3	5.2	4.5	3.3	2.4
Silver	0.24	0.33	0.62	1.5	4.4	8.5	13	39	110

Chemical (totals) (mg/kg)	pH 4.5 to 4.74	pH 4.75 to 5.24	pH 5.25 to 5.74	pH 5.75 to 6.24	pH 6.25 to 6.64	pH 6.65 to 6.89	pH 6.9 to 7.24	pH 7.25 to 7.74	pH 7.75 to 8.0
Thallium	1.6	1.8	2.0	2.4	2.6	2.8	3.0	3.4	3.8
Vanadium	980	980	980	980	980	980	980	980	980
Zinc	1,000	1,800	2,600	3,600	5,100	6,200	7,500	16,000	53,000
Organics									
Benzoic Acid	440	420	410	400	400	400	400	400	400
2-Chlorophenol	4.0	4.0	4.0	4.0	3.9	3.9	3.9	3.6	3.1
2,4-Dichlorophenol	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.86	0.69
Dinoseb	8.4	4.5	1.9	0.82	0.43	0.34	0.31	0.27	0.25
Pentachlorophenol	0.54	0.32	0.15	0.07	0.04	0.03	0.02	0.02	0.02
2,4,5-TP (Silvex)	26	16	12	11	11	11	11	11	11
2,4,5-Trichlorophenol	400	390	390	370	320	270	230	130	64
2,4,6-Trichlorophenol	0.37	0.36	0.34	0.29	0.20	0.15	0.13	0.09	0.07

SOURCE: Amended at 22 Ill. Reg. 10874, effective June 8, 1998.

Section 742.APPENDIX B Tier I Tables and Illustrations

Section 742.Table D: pH Specific Soil Remediation Objectives for Inorganics and Ionizing Organics for the Soil Component of the Groundwater Ingestion Route (Class II Groundwater)

Chemical (totals) (mg/kg)	pH 4.5 to 4.74	pH 4.75 to 5.24	pH 5.25 to 5.74	pH 5.75 to 6.24	pH 6.25 to 6.64	pH 6.65 to 6.89	pH 6.9 to 7.24	pH 7.25 to 7.74	pH 7.75 to 8.0
Inorganics									
Antimony	20	20	20	20	20	20	20	20	20
Arsenic	100	100	100	110	110	120	120	120	120
Barium	260	490	850	1,200	1,500	1,600	1,700	1,800	2,100
Beryllium	140	260	420	820	2,800	7,900	17,000	130,000	1,000,000
Cadmium	10	17	27	37	52	75	110	590	4,300
Chromium (+6)	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
Copper	330	580	2,100	11,000	59,000	130,000	200,000	330,000	330,000
Cyanide	120	120	120	120	120	120	120	120	120
Mercury	0.05	0.06	0.14	0.75	4.4	10	16	32	40
Nickel	400	730	1,100	1,500	2,000	2,600	3,500	14,000	76,000
Selenium	24	17	12	8.8	6.3	5.2	4.5	3.3	2.4
Thallium	16	18	20	24	26	28	30	34	38
Zinc	2,000	3,600	5,200	7,200	10,000	12,000	15,000	32,000	110,000

Chemical (totals) (mg/kg)	pH 4.5 to 4.74	pH 4.75 to 5.24	pH 5.25 to 5.74	pH 5.75 to 6.24	pH 6.25 to 6.64	pH 6.65 to 6.89	pH 6.9 to 7.24	pH 7.25 to 7.74	pH 7.75 to 8.0
Organics									
Benzoic Acid	440	420	410	400	400	400	400	400	400
2-Chlorophenol	20	20	20	20	20	20	19	3.6	3.1
2,4-Dichlorophenol	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.86	0.69
Dinoseb	84	45	19	8.2	4.3	3.4	3.1	2.7	2.5
Pentachlorophenol	2.7	1.6	0.75	0.33	0.18	0.15	0.12	0.11	0.10
2,4,5-TP (Silvex)	130	79	62	57	55	55	55	55	55
2,4,5-Trichlorophenol	2,000	2,000	1,900	1,800	1,600	1,400	1,200	640	64
2,4,6-Trichlorophenol	1.9	1.8	1.7	1.4	1.0	0.77	0.13	0.09	0.07

SOURCE: Amended at 22 Ill. Reg. 10847, effective, June 8, 1998.

Section 742.APPENDIX B
Section 742.Table D: pH Specific Soil Remediation Objectives for Inorganics and Ionizing Organics for the Soil Component of the Groundwater Ingestion Route (Class II Groundwater)

Chemical (totals) (mg/kg)	pH 4.5 to 4.74	pH 4.75 to 5.24	pH 5.25 to 5.74	pH 5.75 to 6.24	pH 6.25 to 6.64	pH 6.65 to 6.89	pH 6.9 to 7.24	pH 7.25 to 7.74	pH 7.75 to 8.0
Inorganics									
Antimony	20	20	20	20	20	20	20	20	20
Arsenic	100	100	100	110	110	120	120	120	120
Barium	260	490	850	1,200	1,500	1,600	1,700	1,800	2,100
Beryllium	140	260	420	820	2,800	7,900	17,000	130,000	1,000,000

Cadmium	10	17	27	37	52	75	110	590	4,300
Chromium (+6)	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
Copper	330	580	2,100	11,000	59,000	130,000	200,000	330,000	330,000
Cyanide	120	120	120	120	120	120	120	120	120
Mercury	0.05	0.06	0.14	0.75	4.4	10	16	32	40
Nickel	400	730	1,100	1,500	2,000	2,600	3,500	14,000	76,000
Selenium	24	17	12	8.8	6.3	5.2	4.5	3.3	2.4
Thallium	16	18	20	24	26	28	30	34	38
Zinc	2,000	3,600	5,200	7,200	10,000	12,000	15,000	32,000	110,000

Chemical (totals) (mg/kg)	pH 4.5 to 4.74	pH 4.75 to 5.24	pH 5.25 to 5.74	pH 5.75 to 6.24	pH 6.25 to 6.64	pH 6.65 to 6.89	pH 6.9 to 7.24	pH 7.25 to 7.74	pH 7.75 to 8.0
Organics									
Benzoic Acid	440	420	410	400	400	400	400	400	400
2-Chlorophenol	20	20	20	20	20	20	19	3.6	3.1
2,4-Dichlorophenol	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.86	0.69
Dinoseb	84	45	19	8.2	4.3	3.4	3.1	2.7	2.5
Pentachlorophenol	2.7	1.6	0.75	0.33	0.18	0.15	0.12	0.11	0.10
2,4,5-TP (Silvex)	130	79	62	57	55	55	55	55	55
2,4,5-Trichlorophenol	2,000	2,000	1,900	1,800	1,600	1,400	1,200	640	64
2,4,6-Trichlorophenol	0.37	0.36	0.34	0.26	0.20	0.15	0.13	0.09	0.07

Section 742.APPENDIX B: Tier 1 Tables and Illustrations

Section 742.TABLE E: Tier 1 Groundwater Remediation Objectives for the Groundwater Component of the Groundwater Ingestion Route

		Groundwater Remediation Objective	
CAS No.	Chemical Name	Class I (mg/L)	Class II (mg/L)
83-32-9	Acenaphthene	0.42	2.1
67-64-1	Acetone	0.7	0.7
15972-60-8	Alachlor	0.002[c]	0.01[c]
116-06-3	Aldicarb	0.003[c]	0.015[c]
309-00-2	Aldrin	0.00004[a]	0.0002
120-12-7	Anthracene	2.1	10.5
1912-24-9	Atrazine	0.003[c]	0.015[c]
71-43-2	Benzene	0.005[c]	0.025[c]
56-55-3	Benzo(*a*)anthracene	0.00013[a]	0.00065
205-99-2	Benzo(*b*)fluoranthene	0.00018[a]	0.0009
207-08-9	Benzo(*k*)fluroanthene	0.00017[a]	0.00085
50-32-8	Benzo(*a*)pyrene	0.0002[a,c]	0.002[c]
111-44-4	Bis(2-chloroethyl)ether	0.01[a]	0.01
117-81-7	Bis(2-ethylhexyl)phthalate	0.006[a,c]	0.06[c]
75-27-4	Bromodichloromethane (Dichlorobromomethane)	0.00002[a]	0.00002
75-25-2	Bromoform	0.0002[a]	0.0002
71-36-3	Butanol	0.7	0.7
85-68-7	Butyl benzyl phthalate	1.4	7.0
86-74-8	Carbazole	---	---
1563-66-2	Carbofuran	0.04[c]	0.2[c]
75-15-0	Carbon disulfide	0.7	3.5
56-23-5	Carbon tetrachloride	0.005[c]	0.025[c]
57-74-9	Chlordane	0.002[c]	0.01[c]

		Groundwater Remediation Objective	
CAS No.	Chemical Name	Class I (mg/L)	Class II (mg/L)
108-90-7	Chlorobenzene (Monochlorobenzene)	0.1[c]	0.5[c]
124-48-1	Chlorodibromomethane (Dibromochloromethane)	0.14	0.14
67-66-3	Chloroform	0.00002[a]	0.0001
218-01-9	Chrysene	0.0015[a]	0.0075
94-75-7	2,4-D	0.07[c]	0.35[c]
75-99-0	Dalapon	0.2[c]	2.0[c]
72-54-8	DDD	0.00011[a]	0.00055
72-55-9	DDE	0.00004[a]	0.0002
50-29-3	DDT	0.00012[a]	0.0006
53-70-3	Dibenzo(*a,h*)anthracene	0.0003[a]	0.0015
96-12-8	1,2-Dibromo-3-chloropropane	0.0002[c]	0.0002[c]
106-93-4	1,2-Dibromoethane (Ethylene dibromide)	0.00005[a,c]	0.0005[c]
84-74-2	Di-*n*-butyl phthalate	0.7	3.5
95-50-1	1,2-Dichlorobenzene (*o* - Dichlorobenzene)	0.6[c]	1.5[c]
106-46-7	1,4-Dichlorobenzene (*p* - Dichlorobenzene)	0.075[c]	0.375[c]
91-94-1	3,3'-Dichlorobenzidine	0.02[a]	0.1
75-34-3	1,1-Dichloroethane	0.7	3.5
107-06-2	1,2-Dichloroethane (Ethylene dichloride)	0.005[c]	0.025[c]
75-35-4	1,1-Dichloroethylene[b]	0.007[c]	0.035[c]
156-59-2	*cis*-1,2-Dichloroethylene	0.07[c]	0.2[c]
156-60-5	*trans*-1,2-Dichloroethylene	0.1[c]	0.5[c]
78-87-5	1,2-Dichloropropane	0.005[c]	0.025[c]
542-75-6	1,3-Dichloropropene (1,3-Dichloropropylene, *cis* + *trans*)	0.001[a]	0.005

CAS No.	Chemical Name	Groundwater Remediation Objective	
		Class I (mg/L)	Class II (mg/L)
60-57-1	Dieldrin	0.00002[a]	0.0001
84-66-2	Diethyl phthalate	5.6	5.6
121-14-2	2,4-Dinitrotoluene[a]	0.00002	0.00002
606-20-2	2,6-Dinitrotoluene[a]	0.0001	0.0001
88-85-7	Dinoseb	0.007[c]	0.07[c]
117-84-0	Di-*n*-octyl phthalate	0.14	0.7
115-29-7	Endosulfan	0.042	0.21
145-73-3	Endothall	0.1[c]	0.1[c]
72-20-8	Endrin	0.002[c]	0.01[c]
100-41-4	Ethylbenzene	0.7[c]	1.0[c]
206-44-0	Fluoranthene	0.28	1.4
86-73-7	Fluorene	0.28	1.4
76-44-8	Heptachlor	0.0004[c]	0.002[c]
1024-57-3	Heptachlor epoxide	0.0002[c]	0.001[c]
118-74-1	Hexachlorobenzene	0.00006[a]	0.0003
319-84-6	*alpha*-HCH (*alpha*-BHC)	0.00003[a]	0.00015
58-89-9	*gamma*-HCH (Lindane)	0.0002[c]	0.001[c]
77-47-4	Hexachlorocyclopentadiene	0.05[c]	0.5[c]
67-72-1	Hexachloroethane	0.007	0.035
193-39-5	Indeno(1,2,3-*c,d*)pyrene	0.00043[a]	0.00215
78-59-1	Isophorone	1.4	1.4
72-43-5	Methoxychlor	0.04[c]	0.2[c]
74-83-9	Methyl bromide (Bromomethane)	0.0098	0.049
75-09-2	Methylene chloride (Dichloromethane)	0.005[c]	0.05[c]
91-20-3	Naphthalene[2]	0.025	0.039
98-95-3	Nitrobenzene[2]	0.0035	0.0035

CAS No.	Chemical Name	Groundwater Remediation Objective	
		Class I (mg/L)	Class II (mg/L)
1918-02-1	Picloram	0.5[c]	5.0[c]
1336-36-3	Polychlorinated biphenyls (PCBs)[n]	0.0005[c]	0.0025[c]
129-00-0	Pyrene	0.21	1.05
122-34-9	Simazine	0.004[c]	0.04[c]
100-42-5	Styrene	0.1[c]	0.5[c]
93-72-1	2,4,5-TP (Silvex)	0.05[c]	0.25[c]
127-18-4	Tetrachloroethylene (Perchloroethylene)	0.005[c]	0.025[c]
108-88-3	Toluene	1.0[c]	2.5[c]
8001-35-2	Toxaphene	0.003[c]	0.015[c]
120-82-1	1,2,4-Trichlorobenzene	0.07[c]	0.7[c]
71-55-6	1,1,1-Trichloroethane[2]	0.2[c]	1.0[c]
79-00-5	1,1,2-Trichloroethane	0.005[c]	0.05[c]
79-01-6	Trichloroethylene	0.005[c]	0.025[c]
108-05-4	Vinyl acetate	7.0	7.0
75-01-4	Vinyl chloride	0.002[c]	0.01[c]
1330-20-7	Xylenes (total)	10.0[c]	10.0[c]
	Ionizable Organics		
65-85-0	Benzoic Acid	28	28
106-47-8	4-Chloroaniline (*p*-Chloroaniline)	0.028	0.028
95-57-8	2-Chlorophenol	0.035	0.175
120-83-2	2,4-Dichlorophenol	0.021	0.021
105-67-9	2,4-Dimethylphenol	0.14	0.14
51-28-5	2,4-Dinitrophenol	0.014	0.014
95-48-7	2-Methylphenol (*o* - Cresol)	0.35	0.35
86-30-6	*N*-Nitrosodiphenylamine	0.01[a]	0.05

CAS No.	Chemical Name	Groundwater Remediation Objective	
		Class I (mg/L)	Class II (mg/L)
621-64-7	*N*-Nitrosodi-*n*-propylamine	0.01[a]	0.01
87-86-5	Pentachlorophenol	0.001[a,c]	0.005[c]
108-95-2	Phenol	0.1[c]	0.1[c]
95-95-4	2,4,5-Trichlorophenol	0.7	3.5
88-06-2	2,4,6 Trichlorophenol	0.0064[a]	0.032
	Inorganics		
7440-36-0	Antimony	0.006[c]	0.024[c]
7440-38-2	Arsenic	0.05[c]	0.2[c]
7440-39-3	Barium	2.0[c]	2.0[c]
7440-41-7	Beryllium	0.004[c]	0.5[c]
7440-42-8	Boron	2.0[c]	2.0[c]
7440-43-9	Cadmium	0.005[c]	0.05[c]
16887-00-6	Chloride	200[c]	200[c]
7440-47-3	Chromium, total	0.1[c]	1.0[c]
18540-29-9	Chromium, ion, hexavalent	---	---
7440-48-4	Cobalt	1.0[c]	1.0[c]
7440-50-8	Copper	0.65[c]	0.65[c]
57-12-5	Cyanide	0.2[c]	0.6[c]
7782-41-4	Fluoride	4.0[c]	4.0[c]
15438-31-0	Iron	5.0[c]	5.0[c]
7439-92-1	Lead	0.0075[c]	0.1[c]
7439-96-5	Manganese	0.15[c]	10.0[c]
7439-97-6	Mercury	0.002[c]	0.01[c]
7440-02-0	Nickel	0.1[c]	2.0[c]
14797-55-8	Nitrate as N	10.0[c]	100[c]
7782-49-2	Selenium	0.05[c]	0.05[c]
7440-22-4	Silver	0.05[c]	---
14808-79-8	Sulfate	400[c]	400[c]

CAS No.	Chemical Name	Groundwater Remediation Objective	
		Class I (mg/L)	Class II (mg/L)
7440-28-0	Thallium	0.002[c]	0.02[c]
7440-62-2	Vanadium[2]	0.049	---
7440-66-6	Zinc	5.0[c]	10[c]

Chemical Name and Groundwater Remediation Objective Notations

[a] The groundwater Health Advisory concentration is equal to ADL for carcinogens.

[b] Oral Reference Dose and/or Reference Concentration under review by USEPA. Listed values subject to change.

[c] Value listed is also the Groundwater Quality Standard for this chemical pursuant to 35 Ill. Adm. Code 620.410 for Class I Groundwater or 35 Ill. Adm. Code 620.420 for Class II Groundwater.

Section 742.APPENDIX B: Tier 1 Tables and Illustrations

Section 742.TABLE F: Values Used to Calculate the Tier 1 Soil Remediation Objectives for the Soil Component of the Groundwater Ingestion Route

		GW_{obj} Concentration used to Calculate Tier 1 Soil Rememdiation Objectives[a]	
CAS No.	Chemical Name	Class I (mg/L)	Class II (mg/L)
83-32-9	Acenaphthene	2.0[b]	10
67-64-1	Acetone	4.0[b]	4.0
15972-60-8	Alachlor	0.002[c]	0.01[c]
116-06-3	Aldicarb	0.003[c]	0.015[c]
309-00-2	Aldrin	5.0E-6[b]	2.5E-5
120-12-7	Anthracene	10[b]	50
1912-24-9	Atrazine	0.003[c]	0.015[c]
71-43-2	Benzene	0.005[c]	0.025[c]
56-55-3	Benzo(*a*)anthracene	0.0001[b]	0.0005
205-99-2	Benzo(*b*)fluoranthene	0.0001[b]	0.0005
207-08-9	Benzo(*k*)fluroanthene	0.001[b]	0.005
50-32-8	Benzo(*a*)pyrene	0.0002[a,c]	0.002[c]
111-44-4	Bis(2-chloroethyl)ether	8.0E-5[b]	8.0E-5
117-81-7	Bis(2-ethylhexyl)phthalate	0.006[a,c]	0.06[c]
75-27-4	Bromodichloromethane (Dichlorobromomethane)	0.1[b]	0.1
75-25-2	Bromoform	0.1[b]	0.01
71-36-3	Butanol	4.0[b]	4.0
85-68-7	Butyl benzyl phthalate	7.0[b]	35
86-74-8	Carbazole	0.004[b]	0.02
1563-66-2	Carbofuran	0.04[c]	0.2[c]
75-15-0	Carbon disulfide	4.0[b]	20
56-23-5	Carbon tetrachloride	0.005[c]	0.025[c]
57-74-9	Chlordane	0.002[c]	0.01[c]

CAS No.	Chemical Name	GW_{obj} Concentration used to Calculate Tier 1 Soil Rememdiation Objectives[a]	
		Class I (mg/L)	Class II (mg/L)
108-90-7	Chlorobenzene (Monochlorobenzene)	0.1[c]	0.5[c]
124-48-1	Chlorodibromomethane (Dibromochloromethane)	0.06[b]	0.06
67-66-3	Chloroform	0.1[b]	0.5
218-01-9	Chrysene	0.1[b]	0.05
94-75-7	2,4-D	0.07[c]	0.35[c]
75-99-0	Dalapon	0.2[c]	2.0[c]
72-54-8	DDD	0.0004[b]	0.002
72-55-9	DDE	0.0003[b]	0.0015
50-29-3	DDT	0.0003[b]	0.0015
53-70-3	Dibenzo(*a,h*)anthracene	1.0E-5[b]	5.0E-5
96-12-8	1,2-Dibromo-3-chloropropane	0.0002[c]	0.0002[c]
106-93-4	1,2-Dibromoethane (Ethylene dibromide)	0.00005[a,c]	0.0005[c]
84-74-2	Di-*n*-butyl phthalate	4.0[b]	20
95-50-1	1,2-Dichlorobenzene (*o* - Dichlorobenzene)	0.6[c]	1.5[c]
106-46-7	1,4-Dichlorobenzene (*p* - Dichlorobenzene)	0.075[c]	0.375[c]
91-94-1	3,3'-Dichlorobenzidine	0.0002[b]	0.001
75-34-3	1,1-Dichloroethane	4.0[b]	20
107-06-2	1,2-Dichloroethane (Ethylene dichloride)	0.005[c]	0.025[c]
75-35-4	1,1-Dichloroethylene	0.007[c]	0.035[c]
156-59-2	*cis*-1,2-Dichloroethylene	0.07[c]	0.2[c]
156-60-5	*trans*-1,2-Dichloroethylene	0.1[c]	0.5[c]
78-97-5	1,2-Dichloropropane	0.005[c]	0.025[c]
542-75-6	1,3-Dichloropropene (1,3-Dichloropropylene, *cis* + *trans*)	0.0005[b]	0.0025

CAS No.	Chemical Name	GW_{obj} Concentration used to Calculate Tier 1 Soil Rememdiation Objectives[a]	
		Class I (mg/L)	Class II (mg/L)
60-57-1	Dieldrin	5.0E-6[b]	2.5E-5
84-66-2	Diethyl phthalate	30[b]	30
121-14-2	2,4-Dinitrotoluene	0.0001[b]	0.0001
606-20-2	2,6-Dinitrotoluene	0.0001	0.0001
88-85-7	Dinoseb	0.007[c]	0.07[c]
117-84-0	Di-*n*-octyl phthalate	0.7[b]	3.5
115-29-7	Endosulfan	0.2[b]	1.0
145-73-3	Endothall	0.1[c]	0.1[c]
72-20-8	Endrin	0.002[c]	0.01[c]
100-41-4	Ethylbenzene	0.7[c]	1.0[c]
206-44-0	Fluoranthene	1.0[b]	5.0
86-73-7	Fluorene	1.0[b]	5.0
76-44-8	Heptachlor	0.0004[c]	0.002[c]
1024-57-3	Heptachlor epoxide	0.0002[c]	0.001[c]
118-74-1	Hexachlorobenzene	0.001[b]	0.005
319-84-6	*alpha*-HCH (*alpha*-BHC)	1.0E-5[b]	5.0E-5
58-89-9	*gamma*-HCH (Lindane)	0.0002[c]	0.001[c]
77-47-4	Hexachlorocyclopentadiene	0.05[c]	0.5[c]
67-72-1	Hexachloroethane	0.007	0.035
193-39-5	Indeno(1,2,3-*c,d*)pyrene	0.0001[b]	0.0005
78-59-1	Isophorone	1.4	1.4
72-43-5	Methoxychlor	0.04[c]	0.2[c]
74-83-9	Methyl bromide (Bromomethane)	0.05[b]	0.25
75-09-2	Methylene chloride (Dichloromethane)	0.005[c]	0.05[c]
91-20-3	Naphthalene	1.0[b]	5.0
98-95-3	Nitrobenzene	0.02[b]	0.02

CAS No.	Chemical Name	GW_{obj} Concentration used to Calculate Tier 1 Soil Rememdiation Objectives[a]	
		Class I (mg/L)	Class II (mg/L)
1918-02-1	Picloram	0.5[c]	5.0[c]
1336-36-3	Polychlorinated biphenyls (PCBs)	---	---
129-00-0	Pyrene	1.0[b]	5.0
122-34-9	Simazine	0.004[c]	0.04[c]
100-42-5	Styrene	0.1[c]	0.5[c]
93-72-1	2,4,5-TP (Silvex)	0.05[c]	0.25[c]
127-18-4	Tetrachloroethylene (Perchloroethylene)	0.005[c]	0.025[c]
108-88-3	Toluene	1.0[c]	2.5[c]
8001-35-2	Toxaphene	0.003[c]	0.015[c]
120-82-1	1,2,4-Trichlorobenzene	0.07[c]	0.7[c]
71-55-6	1,1,1-Trichloroethane[2]	0.2[c]	1.0[c]
79-00-5	1,1,2-Trichloroethane	0.005[c]	0.05[c]
79-01-6	Trichloroethylene	0.005[c]	0.025[c]
108-05-4	Vinyl acetate	40[b]	40
75-01-4	Vinyl chloride	0.002[c]	0.01[c]
1330-20-7	Xylenes (total)	10.0[c]	10.0[c]
	Ionizable Organics		
65-85-0	Benzoic Acid	100[b]	100
106-47-8	4-Chloroaniline (*p*-Chloroaniline)	0.1[b]	0.1
95-57-8	2-Chlorophenol	0.2[b]	1.0
120-83-2	2,4-Dichlorophenol	0.1[b]	0.1
105-67-9	2,4-Dimethylphenol	0.7[b]	0.7
51-28-5	2,4-Dinitrophenol	0.04[b]	0.04
95-48-7	2-Methylphenol (*o* - Cresol)	2.0[b]	2.0
86-30-6	*N*-Nitrosodiphenylamine	0.02[b]	0.1

CAS No.	Chemical Name	GW_{obj} Concentration used to Calculate Tier 1 Soil Rememdiation Objectives[a]	
		Class I (mg/L)	Class II (mg/L)
621-64-7	*N*-Nitrosodi-*n*-propylamine	1.0E-5[b]	1.0E-5
87-86-5	Pentachlorophenol	0.001[a,c]	0.005[c]
108-95-2	Phenol	0.1[c]	0.1[c]
95-95-4	2,4,5-Trichlorophenol	4.0[b]	20
88-06-2	2,4,6-Trichlorophenol	0.008[b]	0.04
	Inorganics		
7440-36-0	Antimony	0.006[c]	0.024[c]
7440-38-2	Arsenic	0.05[c]	0.2[c]
7440-39-3	Barium	2.0[c]	2.0[c]
7440-41-7	Beryllium	0.004[c]	0.5[c]
7440-42-8	Boron	2.0[c]	2.0[c]
7440-43-9	Cadmium	0.005[c]	0.05[c]
16887-00-6	Chloride	200[c]	200[c]
7440-47-3	Chromium, total	0.1[c]	1.0[c]
18540-29-9	Chromium, ion, hexavalent	---	---
7440-48-4	Cobalt	1.0[c]	1.0[c]
7440-50-8	Copper	0.65[c]	0.65[c]
57-12-5	Cyanide	0.2[c]	0.6[c]
7782-41-4	Fluoride	4.0[c]	4.0[c]
15438-31-0	Iron	5.0[c]	5.0[c]
7439-92-1	Lead	0.0075[c]	0.1[c]
7439-96-5	Manganese	0.15[c]	10.0[c]
7439-97-6	Mercury	0.002[c]	0.01[c]
7440-02-0	Nickel	0.1[c]	2.0[c]
14797-55-8	Nitrate as N	10.0[c]	100[c]
7782-49-2	Selenium	0.05[c]	0.05[c]
7440-22-4	Silver	0.05[c]	---
14808-79-8	Sulfate	400[c]	400[c]

CAS No.	Chemical Name	GW_{obj} Concentration used to Calculate Tier 1 Soil Rememdiation Objectives[a]	
		Class I (mg/L)	Class II (mg/L)
7440-28-0	Thallium	0.002[c]	0.02[c]
7440-62-2	Vanadium	0.049	---
7440-66-6	Zinc	5.0[c]	10[c]

Chemical Name and Groundwater Remediation Objective Notations

[a] The Equation S17 is used to calculate the Soil Remediation Objective for the Soil Component of the Groundwater Ingestion Route; this equation requires calculation of the Target Soil Leachate Concentration (C_w) from Equation S18: $C_w = DF \times GW_{obj}$.

[b] Value listed is the Water Health Based Limit (HBL) for this chemical from Soil Screening Guidance: User's Guide, incorporated by reference at Section 742.210; for carcinogens, the HBL is equal to a cancer risk of 1.0E-6, and for noncarcinogens is equal to a Hazard Quotient of 1.0. NOTE: These GW_{obj} concentrations are not equal to the Tier 1 Groundwater Remediation Objectives for the Direct Ingestion of Groundwater Component of the Groundwater Ingestion Route, listed in Section 742.Appendix B, Table E.

[c] Value listed is also the Groundwater Quality Standard for this chemical pursuant to 35 Ill. Adm. Code 620.410 for Class I Groundwater or 35 Ill. Adm. Code 620.420 for Class II Groundwater.

ATTACHMENT C

USEPA REGION 9 PRELIMINARY REMEDIATION GOALS

Key: i=IRIS n=NCEA h=HEAST x=WITHDRAWN o=Other EPA DOCUMENTS r=ROUTE EXTRAPOLATION ca=CANCER PRG nc=NONCANCER PRG sat=SOIL SATURATION max=CEILING LIMIT *(where: nc < 100X ca) **(where: nc < 10X ca)

FOR PLANNING PURPOSES

TOXICITY INFORMATION												CONTAMINANT	PRELIMINARY REMEDIATION GOALS (PRGs)								SOIL SCREENING LEVELS	
								V O C	skin abs. soils	CAS No.			Residential Soil (mg/kg)		Industrial Soil (mg/kg)		Ambient Air (ug/m^3)		Tap Water (ug/l)		Migration to Ground Water DAF 20 (mg/kg)	DAF 1 (mg/kg)
SFo 1/(mg/kg-d)		RfDo (mg/kg-d)		SFi 1/(mg/kg-d)		RfDi (mg/kg-d)																
8.7E-03	i	4.0E-03	i	8.7E-03	r	4.0E-03	r	0	0.10	30560-19-1	Acephate		5.6E+01	ca**	2.8E+02	ca*	7.7E-01	ca*	7.7E+00	ca*		
				7.7E-03	i	2.6E-03	i	1		75-07-0	Acetaldehyde		1.1E+01	ca**	2.3E+01	ca**	8.7E-01	ca*	1.7E+00	ca		
		2.0E-02	i			2.0E-02	r	0	0.10	34256-82-1	Acetochlor		1.2E+03	nc	1.8E+04	nc	7.3E+01	nc	7.3E+02	nc		
		1.0E-01	i			1.0E-01	r	1		67-64-1	Acetone		1.6E+03	nc	6.2E+03	nc	3.7E+02	nc	6.1E+02	nc	2E+01	8E-01
		8.0E-04	h			8.0E-04	r	0	0.10	75-86-5	Acetone cyanohydrin		4.9E+01	nc	7.0E+02	nc	2.9E+00	nc	2.9E+01	nc		
		6.0E-03	x			1.7E-02	i	1		75-05-8	**Acetonitrile**		2.7E+02	nc	1.7E+03	nc	6.2E+01	nc	7.9E+01	nc		
		1.0E-01	i			5.7E-06	x	1		98-86-2	Acetophenone		4.9E-01	nc	1.6E+00	nc	2.1E-02	nc	4.2E-02	nc		
1.1E-01	o	1.3E-02	i	1.1E-01	r	1.3E-02	r	0	0.10	50594-66-6	Acifluorfen		4.4E+00	ca	2.2E+01	ca	6.1E-02	ca	6.1E-01	ca		
		2.0E-02	h			5.7E-06	i	1		107-02-8	Acrolein		1.0E-01	nc	3.4E-01	nc	2.1E-02	nc	4.2E-02	nc		
4.6E+00	i	2.0E-04	i	4.6E+00	i	2.0E-04	r	0	0.10	79-06-1	Acrylamide		1.1E-01	ca	5.4E-01	ca	1.5E-03	ca	1.5E-02	ca		
		5.0E-01	i			2.9E-04	i	0	0.10	79-10-7	Acrylic acid		2.9E+04	nc	1.0E+05	max	1.0E+00	nc	1.8E+04	nc		
5.4E-01	i	1.0E-03	h	2.4E-01	i	5.7E-04	i	1		107-13-1	Acrylonitrile		2.1E-01	ca*	5.1E-01	ca*	2.8E-02	ca*	3.9E-02	ca*		
8.1E-02	h	1.0E-02	i	8.0E-02	r	1.0E-02	r	0	0.10	15972-60-8	Alachlor		6.0E+00	ca	3.1E+01	ca	8.4E-02	ca	8.4E-01	ca		
		1.5E-01	i			1.5E-01	r	0	0.10	1596-84-5	Alar		9.2E+03	nc	1.0E+05	max	5.5E+02	nc	5.5E+03	nc		
		1.0E-03	i			1.0E-03	r	0	0.10	116-06-3	Aldicarb		6.1E+01	nc	8.8E+02	nc	3.7E+00	nc	3.6E+01	nc		
		1.0E-03	i			1.0E-03	r	0	0.10	1646-88-4	Aldicarb sulfone		6.1E+01	nc	8.8E+02	nc	3.7E+00	nc	3.6E+01	nc		
1.7E+01	i	3.0E-05	i	1.7E+01	i	3.0E-05	r	0	0.10	309-00-2	Aldrin		2.9E-02	ca*	1.5E-01	ca	3.9E-04	ca	4.0E-03	ca	1.2E+04	6E+02
		2.5E-01	i			2.5E-01	r	0	0.10	5585-64-6	Ally		1.5E+04	nc	1.0E+05	max	9.1E+02	nc	9.1E+03	nc		
		5.0E-03	i			5.0E-03	r	0	0.10	107-18-6	Allyl alcohol		3.1E+02	nc	4.4E+03	nc	1.8E+01	nc	1.8E+02	nc		
		5.0E-02	h			2.9E-04	i	0	0.10	107-05-1	Allyl chloride		3.0E+03	nc	4.3E+04	nc	1.0E+00	nc	1.8E+03	nc		
		1.0E+00	n			1.4E-03	n	0		7429-90-5	**Aluminum**		7.6E+04	nc	1.0E+05	max	5.1E+00	nc	3.6E+04	nc		
		4.0E-04	i					0		20859-73-8	Aluminum phosphide		3.1E+01	nc	8.2E+02	nc			1.5E+01	nc		
		3.0E-04	i			3.0E-04	r	0	0.10	67485-29-4	Amdro		1.8E+01	nc	2.6E+02	nc	1.1E+00	nc	1.1E+01	nc		
		9.0E-03	i			9.0E-03	r	0	0.10	834-12-8	Ametryn		5.5E+02	nc	7.9E+03	nc	3.3E+01	nc	3.3E+02	nc		
		7.0E-02	h			7.0E-02	r	0	0.10	591-27-5	m-Aminophenol		4.3E+03	nc	6.2E+04	nc	2.6E+02	nc	2.6E+03	nc		
		2.0E-05	h			2.0E-05	r	0	0.10	504-24-5	4-Aminopyridine		1.2E+00	nc	1.8E+01	nc	7.3E-02	nc	7.3E-01	nc		
		2.5E-03	i			2.5E-03	r	0	0.10	33089-61-1	Amitraz		1.5E+02	nc	2.2E+03	nc	9.1E+00	nc	9.1E+01	nc		
						2.9E-02	i			7664-41-7	Ammonia						1.0E+02	nc				
		2.0E-01	i					0	0.10	7773-06-0	Ammonium sulfamate		1.2E+04	nc	1.0E+05	max			7.3E+03	nc		
5.7E-03	i	7.0E-03	n	5.7E-03	r	2.9E-04	i	0	0.10	62-53-3	Aniline		8.5E+01	ca**	4.3E+02	ca*	1.0E+00	nc	1.2E+01	ca*		
		4.0E-04	i					0		7440-36-0	Antimony and compounds		3.1E+01	nc	8.2E+02	nc			1.5E+01	nc	5.0E+00	3E-01
		5.0E-04	h					0		1314-60-9	Antimony pentoxide		3.9E+01	nc	1.0E+03	nc			1.8E+01	nc		
		9.0E-04	h					0		28300-74-5	Antimony potassium tartrate		7.0E+01	nc	1.8E+03	nc			3.3E+01	nc		
		4.0E-04	h					0		1332-81-6	Antimony tetroxide		3.1E+01	nc	8.2E+02	nc			1.5E+01	nc		
		4.0E-04	h			5.7E-05	i	0		1309-64-4	**Antimony trioxide**		3.1E+01	nc	8.2E+02	nc	2.1E-01	nc	1.5E+01	nc		
		1.3E-02	i			1.3E-02	r	0	0.10	74115-24-5	Apollo		7.9E+02	nc	1.1E+04	nc	4.7E+01	nc	4.7E+02	nc		
2.5E-02	i	5.0E-02	h	2.5E-02	i	5.0E-02	r	0	0.10	140-57-8	Aramite		1.9E+01	ca	9.9E+01	ca	2.7E-01	ca	2.7E+00	ca		
		3.0E-04	i					0	0.03	7440-38-2	Arsenic (noncancer endpoint)		2.2E+01	nc	4.4E+02	nc						
1.5E+00	i	3.0E-04	i	1.5E+01	i			0	0.03	7440-38-2	Arsenic (cancer endpoint)		3.9E-01	ca*	2.7E+00	ca	4.5E-04	ca	4.5E-02	ca	2.9E+01	1E+00
						1.4E-05	i			7784-42-1	Arsine (see arsenic for cancer endpoint)						5.2E-02	nc				
		9.0E-03	i			9.0E-03	r	0	0.10	78578-12-6	Assure		5.5E+02	nc	7.9E+03	nc	3.3E+01	nc	3.3E+02	nc		
		5.0E-02	i			5.0E-02	r	0	0.10	3337-71-1	Asulam		3.1E+03	nc	4.4E+04	nc	1.8E+02	nc	1.8E+03	nc		
2.2E-01	h	3.5E-02	h	2.2E-01	r	3.5E-02	r	0	0.10	1912-24-9	Atrazine		2.2E+00	ca	1.1E+01	ca	3.1E-02	ca	3.0E-01	ca		
		4.0E-04	i			4.0E-04	r	0	0.10	71751-41-2	Avermectin B1		2.4E+01	nc	3.5E+02	nc	1.5E+00	nc	1.5E+01	nc		
1.1E-01	i			1.1E-01	i			0	0.10	103-33-3	Azobenzene		4.4E+00	ca	2.2E+01	ca	6.2E-02	ca	6.1E-01	ca		
		7.0E-02	i			1.4E-04	h	0		7440-39-3	Barium and compounds		5.4E+03	nc	1.0E+05	max	5.2E-01	nc	2.6E+03	nc	1.6E+03	8E+01
		4.0E-03	i			4.0E-03	r	0	0.10	114-26-1	Baygon		2.4E+02	nc	3.5E+03	nc	1.5E+01	nc	1.5E+02	nc		
		3.0E-02	i			3.0E-02	r	0	0.10	43121-43-3	Bayleton		1.8E+03	nc	2.6E+04	nc	1.1E+02	nc	1.1E+03	nc		
		2.5E-02	i			2.5E-02	r	0	0.10	68359-37-5	Baythroid		1.5E+03	nc	2.2E+04	nc	9.1E+01	nc	9.1E+02	nc		
		3.0E-01	i			3.0E-01	r	0	0.10	1861-40-1	Benefin		1.8E+04	nc	1.0E+05	max	1.1E+03	nc	1.1E+04	nc		
		5.0E-02	i			5.0E-02	r	0	0.10	17804-35-2	Benomyl		3.1E+03	nc	4.4E+04	nc	1.8E+02	nc	1.8E+03	nc		
		3.0E-02	i			3.0E-02	r	0	0.10	25057-89-0	Bentazon		1.8E+03	nc	2.6E+04	nc	1.1E+02	nc	1.1E+03	nc		
		1.0E-01	i			1.0E-01	r	0	0.10	100-52-7	Benzaldehyde		6.1E+03	nc	8.8E+04	nc	3.7E+02	nc	3.6E+03	nc		
2.9E-02	i	3.0E-03	n	2.7E-02	i	1.7E-03	n	1		71-43-2	Benzene		6.7E-01	ca*	1.5E+00	ca*	2.5E-01	ca*	4.1E-01	ca*	3.0E-02	2E-03
2.3E+02	i	3.0E-03	i	2.3E+02	i	3.0E-03	r	0	0.10	92-87-5	Benzidine		2.1E-03	ca	1.1E-02	ca	2.9E-05	ca	2.9E-04	ca		
		4.0E+00	i			4.0E+00	r	0	0.10	65-85-0	Benzoic acid		1.0E+05	max	1.0E+05	max	1.5E+04	nc	1.5E+05	nc	4.0E+02	2E+01
1.3E+01	i			1.3E+01	r			0	0.10	98-07-7	Benzotrichloride		3.7E-02	ca	1.9E-01	ca	5.2E-04	ca	5.2E-03	ca		
		3.0E-01	h			3.0E-01	r	0	0.10	100-51-6	Benzyl alcohol		1.8E+04	nc	1.0E+05	max	1.1E+03	nc	1.1E+04	nc		

Key : i=IRIS n=NCEA h=HEAST x=WITHDRAWN o=Other EPA DOCUMENTS r=ROUTE EXTRAPOLATION ca=CANCER PRG nc=NONCANCER PRG sat=SOIL SATURATION max=CEILING LIMIT *(where: nc < 100X ca) **(where: nc < 10X ca)

FOR PLANNING PURPOSES

TOXICITY INFORMATION										CONTAMINANT	PRELIMINARY REMEDIATION GOALS (PRGs)								SOIL SCREENING LEVELS	
SFo 1/(mg/kg-d)		RfDo (mg/kg-d)		SFi 1/(mg/kg-d)		RfDi (mg/kg-d)		VOC soil	SOL soils	CAS NO.		Residential Soil (mg/kg)		Industrial Soil (mg/kg)		Ambient Air (ug/m^3)		Tap Water (ug/l)		Migration to Ground Water DAF 20 (mg/kg)	DAF 1 (mg/kg)
1.7E-01	i			1.7E-01	r			1		100-44-7	Benzyl chloride	8.9E-01	ca	2.3E+00	ca	4.0E-02	ca	6.6E-02	ca		
		2.0E-03	i	8.4E+00	i	5.7E-06	i	0		7440-41-7	Beryllium and compounds	1.5E+02	nc	2.2E+03	ca**	8.0E-04	ca*	7.3E+01	nc	6.3E+01	3E+00
		1.0E-04	i			1.0E-04	r	0	0.10	141-66-2	Bidrin	6.1E+00	nc	8.8E+01	nc	3.7E-01	nc	3.6E+00	nc		
		1.5E-02	i			1.5E-02	r	0	0.10	82657-04-3	Biphenthrin (Talstar)	9.2E+02	nc	1.3E+04	nc	5.5E+01	nc	5.5E+02	nc		
		5.0E-02	i			5.0E-02	r	1		92-52-4	1,1-Biphenyl	3.5E+02	sat	3.5E+02	sat	1.8E+02	nc	3.0E+02	nc		
1.1E+00	i			1.2E+00	i			1		111-44-4	Bis(2-chloroethyl)ether	2.1E-01	ca	6.2E-01	ca	5.8E-03	ca	9.8E-03	ca		
7.0E-02	h	4.0E-02	i	3.5E-02	h	4.0E-02	r	1		108-60-1	Bis(2-chloroisopropyl)ether	2.9E+00	ca	8.1E+00	ca	1.9E-01	ca	2.7E-01	ca	4.0E-04	2E-05
2.2E+02	i			2.2E+02	i			1		542-88-1	Bis(chloromethyl)ether	1.9E-04	ca	4.4E-04	ca	3.1E-05	ca	5.2E-05	ca		
7.0E-02	h			3.5E-02	h			0	0.10	108-60-1	Bis(2-chloro-1-methylethyl)ether	6.9E+00	ca	3.5E+01	ca	1.9E-01	ca	9.6E-01	ca		
1.4E-02	i	2.0E-02	i	1.4E-02	r	2.2E-02	r	0	0.10	117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)	3.5E+01	ca*	1.8E+02	ca	4.8E-01	ca	4.8E+00	ca		
		5.0E-02	i			5.0E-02	r	0	0.10	80-05-7	Bisphenol A	3.1E+03	nc	4.4E+04	nc	1.8E+02	nc	1.8E+03	nc		
		9.0E-02	i			5.7E-03	h	0	0.10	7440-42-8	Boron	5.5E+03	nc	7.9E+04	nc	2.1E+01	nc	3.3E+03	nc		
						2.0E-04	h	0	0.10	7637-07-2	Boron trifluoride					7.3E-01	nc				
		2.0E-02	n			2.9E-03	n	1		108-86-1	Bromobenzene	2.8E+01	nc	9.2E+01	nc	1.0E+01	nc	2.0E+01	nc		
6.2E-02	i	2.0E-02	i	6.2E-02	r	2.0E-02	r	1		75-27-4	Bromodichloromethane	1.0E+00	ca	2.4E+00	ca	1.1E-01	ca	1.8E-01	ca	6E-01	3E-02
7.9E-03	i	2.0E-02	i	3.9E-03	i	2.0E-02	r	0	0.10	75-25-2	Bromoform (tribromomethane)	6.2E+01	ca*	3.1E+02	ca*	1.7E+00	ca*	8.5E+00	ca*	8E-01	4E-02
		1.4E-03	i			1.4E-03	i	1		74-83-9	Bromomethane (Methyl bromide)	3.9E+00	nc	1.3E+01	nc	5.2E+00	nc	8.7E+00	nc	2E-01	1E-02
								0	0.10	101-55-3	4-Bromophenyl phenyl ether										
		5.0E-03	h			5.0E-03	r	0	0.10	2104-96-3	Bromophos	3.1E+02	nc	4.4E+03	nc	1.8E+01	nc	1.8E+02	nc		
		2.0E-02	i			2.0E-02	r	0	0.10	1689-84-5	Bromoxynil	1.2E+03	nc	1.8E+04	nc	7.3E+01	nc	7.3E+02	nc		
		2.0E-02	i			2.0E-02	r	0	0.10	1689-99-2	Bromoxynil octanoate	1.2E+03	nc	1.8E+04	nc	7.3E+01	nc	7.3E+02	nc		
1.8E+00	r			1.8E+00	i			1		106-99-0	1,3-Butadiene	3.5E-03	ca	7.6E-03	ca	3.7E-03	ca	6.2E-03	ca		
		1.0E-01	i			1.0E-01	r	0	0.10	71-36-3	1-Butanol	6.1E+03	nc	8.8E+04	nc	3.7E+02	nc	3.6E+03	nc	2E+01	9E-01
		5.0E-02	i			5.0E-02	r	0	0.10	2008-41-5	Butylate	3.1E+03	nc	4.4E+04	nc	1.8E+02	nc	1.8E+03	nc		
		1.0E-02	n			1.0E-02	r	1		104-51-8	n-Butylbenzene	1.4E+02	nc	2.4E+02	sat	3.7E+01	nc	6.1E+01	nc		
		1.0E-02	n			1.0E-02	r	1		135-9-88	sec-Butylbenzene	1.1E+02	nc	2.2E+02	sat	3.7E+01	nc	6.1E+01	nc		
		1.0E-02	n			1.0E-02	r	1		98-06-6	tert-Butylbenzene	1.3E+02	nc	3.9E+02	sat	3.7E+01	nc	6.1E+01	nc		
		2.0E-01	i			2.0E-01	r	0	0.10	85-68-7	Butyl benzyl phthalate	1.2E+04	nc	1.0E+05	max	7.3E+02	nc	7.3E+03	nc	9E+02	8E+02
		1.0E+00	i			1.0E+00	r	0	0.10	85-70-1	Butylphthalyl butylglycolate	6.1E+04	nc	1.0E+05	max	3.7E+03	nc	3.6E+04	nc		
		3.0E-03	h			3.0E-03	r	0	0.10	75-60-5	Cacodylic acid	1.8E+02	nc	2.6E+03	nc	1.1E+01	nc	1.1E+02	nc		
		5.0E-04	i	6.3E+00	i			0	0.001	7440-43-9	Cadmium and compounds	3.7E+01	nc	8.1E+02	nc	1.1E-03	ca	1.8E+01	nc	8E+00	4E-01
											"CAL-Modified PRG" (PEA, 1994)	9.0E+00									
		5.0E-01	i			5.0E-01	r	0	0.10	105-60-2	Caprolactam	3.1E+04	nc	1.0E+05	max	1.8E+03	nc	1.8E+04	nc		
8.6E-03	h	2.0E-03	i	8.6E-03	r	2.0E-03	r	0	0.10	2425-06-1	Captafol	5.7E+01	ca**	2.9E+02	ca**	7.8E-01	ca**	7.8E+00	ca**		
3.5E-03	h	1.3E-01	i	3.5E-03	r	1.3E-01	r	0	0.10	133-06-2	Captan	1.4E+02	ca*	7.0E+02	ca	1.9E+00	ca	1.9E+01	ca		
		1.0E-01	i			1.1E-01	r	0	0.10	63-25-2	Carbaryl	6.1E+03	nc	8.8E+04	nc	4.0E+02	nc	3.6E+03	nc		
2.0E-02	h			2.0E-02	r			0	0.10	86-74-8	Carbazole	2.4E+01	ca	1.2E+02	ca	3.4E-01	ca	3.4E+00	ca	6E-01	3E-02
		5.0E-03	i			5.0E-03	r	0	0.10	1563-66-2	Carbofuran	3.1E+02	nc	4.4E+03	nc	1.8E+01	nc	1.8E+02	nc		
		1.0E-01	i			2.0E-01	i	1		75-15-0	Carbon disulfide	3.6E+02	nc	7.2E+02	sat	7.3E+02	nc	1.0E+03	nc	3E+01	2E+00
1.3E-01	i	7.0E-04	i	5.3E-02	i	7.0E-04	r	1		56-23-5	Carbon tetrachloride	2.4E-01	ca**	5.3E-01	ca*	1.3E-01	ca*	1.7E-01	ca*	7E-02	3E-03
		1.0E-02	i			1.0E-02	r	0	0.10	55285-14-8	Carbosulfan	6.1E+02	nc	8.8E+03	nc	3.7E+01	nc	3.6E+02	nc		
		1.0E-01	i			1.0E-01	r	0	0.10	5234-68-4	Carboxin	6.1E+03	nc	8.8E+04	nc	3.7E+02	nc	3.6E+03	nc		
		2.0E-03	i			2.0E-03	r	0	0.10	302-17-0	Chloral	1.2E+02	nc	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc		
		1.5E-02	i			1.5E-02	r	0	0.10	133-90-4	Chloramben	9.2E+02	nc	1.3E+04	nc	5.5E+01	nc	5.5E+02	nc		
4.0E-01	h			4.0E-01	r			0	0.10	118-75-2	Chloranil	1.2E+00	ca	6.1E+00	ca	1.7E-02	ca	1.7E-01	ca		
3.5E-01	i	5.0E-04	i	3.5E-01	i	2.0E-04	i	0	0.04	12789-03-6	**Chlordane**	1.6E+00	ca*	1.1E+01	ca*	1.9E-02	ca*	1.9E-01	ca*	1E+01	5E-01
		2.0E-02	i			2.0E-02	r	0	0.10	90982-32-4	Chlorimuron-ethyl	1.2E+03	nc	1.8E+04	nc	7.3E+01	nc	7.3E+02	nc		
		1.0E-01	i							7782-50-5	Chlorine							3.6E+03	nc		
						5.7E-05	i			10049-04-4	Chlorine dioxide					2.1E-01	nc				
								1		107-20-0	Chloroacetaldehyde										
		2.0E-03	h			2.0E-03	r	0	0.10	79-11-8	Chloroacetic acid	1.2E+02	nc	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc		
		8.6E-06	r			8.6E-06	i	1		532-27-4	2-Chloroacetophenone	3.3E-02	nc	1.1E-01	nc	3.1E-02	nc	5.2E-02	nc		
		4.0E-03	i			4.0E-03	r	0	0.10	106-47-8	4-Chloroaniline	2.4E+02	nc	3.5E+03	nc	1.5E+01	nc	1.5E+02	nc	7E-01	3E-02
		2.0E-02	i			1.7E-02	n	1		108-90-7	**Chlorobenzene**	1.5E+02	nc	5.4E+02	nc	6.2E+01	nc	1.1E+02	nc	1E+00	7E-02
2.7E-01	h	2.0E-02	i	2.7E-01	h	2.0E-02	r	0	0.10	510-15-6	Chlorobenzilate	1.8E+00	ca	9.1E+00	ca	2.5E-02	ca	2.5E-01	ca		
		2.0E-01	h			2.0E-01	r	0	0.10	74-11-3	p-Chlorobenzoic acid	1.2E+04	nc	1.0E+05	max	7.3E+02	nc	7.3E+03	nc		
		2.0E-02	h			2.0E-02	r	0	0.10	98-56-6	4-Chlorobenzotrifluoride	1.2E+03	nc	1.8E+04	nc	7.3E+01	nc	7.3E+02	nc		
		2.0E-02	h			2.0E-03	h	1		126-99-8	2-Chloro-1,3-butadiene	3.6E+00	nc	1.2E+01	nc	7.3E+00	nc	1.4E+01	nc		

Key: i=IRIS n=NCEA h=HEAST x=WITHDRAWN o=Other EPA DOCUMENTS r=ROUTE EXTRAPOLATION ca=CANCER PRG nc=NONCANCER PRG sat=SOIL SATURATION max=CEILING LIMIT *(where: nc < 100X ca) **(where: nc < 10X ca)

FOR PLANNING PURPOSES

TOXICITY INFORMATION										CONTAMINANT	PRELIMINARY REMEDIATION GOALS (PRGs)								SOIL SCREENING LEVELS	
SFo 1/(mg/kg-d)		RfDo (mg/kg-d)		SFi 1/(mg/kg-d)		RfDi (mg/kg-d)		V O C	skin abs. soils	CAS No.		Residential Soil (mg/kg)		Industrial Soil (mg/kg)		Ambient Air (ug/m^3)		Tap Water (ug/l)		Migration to Ground Water DAF 20 (mg/kg)	DAF 1 (mg/kg)
		4.0E-01	h			4.0E-01	r	1		109-69-3	1-Chlorobutane	4.8E+02	sat	4.8E+02	sat	1.5E+03	nc	2.4E+03	nc		
		1.4E+01	r			1.4E+01	i	1		75-68-3	1-Chloro-1,1-difluoroethane (HCFC-142b)	3.4E+02	sat	3.4E+02	sat	5.2E+04	nc	8.7E+04	nc		
		1.4E+01	r			1.4E+01	i	1		75-45-6	Chlorodifluoromethane	3.4E+02	sat	3.4E+02	sat	5.1E+04	nc	8.5E+04	nc		
2.9E-03	n	4.0E-01	n	2.9E-03	r	2.9E+00	i	1		75-00-3	**Chloroethane**	3.0E+00	ca	6.5E+00	ca	2.3E+00	ca	4.6E+00	ca		
								1		110-75-8	2-Chloroethyl vinyl ether										
6.1E-03	i	1.0E-02	i	8.1E-02	i	8.6E-05	n	1		67-66-3	**Chloroform**	2.4E-01	ca**	5.2E-01	ca**	8.4E-02	ca**	1.6E-01	ca**	6E-01	3E-02
1.3E-02	h			6.3E-03	h	8.6E-02	n	1		74-87-3	**Chloromethane**	1.2E+00	ca	2.7E+00	ca	1.1E+00	ca	1.5E+00	ca		
5.8E-01	h			5.8E-01	r			0	0.10	95-69-2	4-Chloro-2-methylaniline	8.4E-01	ca	4.3E+00	ca	1.2E-02	ca	1.2E-01	ca		
4.6E-01	h			4.6E-01	r			0	0.10	3165-93-3	4-Chloro-2-methylaniline hydrochloride	1.1E+00	ca	5.4E+00	ca	1.5E-02	ca	1.5E-01	ca		
		6.0E-02	i			6.0E-02	r	1		91-58-7	beta-Chloronaphthalene	4.9E+03	nc	2.7E+04	nc	2.9E+02	nc	4.9E+02	nc		
2.5E-02	h			2.5E-02	r			r	1	88-73-3	**o-Chloronitrobenzene**	8.1E+00	ca	2.3E+01	ca	2.7E-01	ca	4.5E-01	ca		
1.8E-02	h			1.8E-02	r			r	1	100-00-5	**p-Chloronitrobenzene**	1.1E+01	ca	3.2E+01	ca	3.7E-01	ca	6.2E-01	ca		
		5.0E-03	i			5.0E-03	r	1		95-57-8	2-Chlorophenol	6.3E+01	nc	2.4E+02	nc	1.8E+01	nc	3.0E+01	nc	4E+00	2E-01
		2.9E-02	r			2.9E-02	h	1		75-29-6	2-Chloropropane	1.7E+02	nc	5.9E+02	nc	1.0E+02	nc	1.7E+02	nc		
1.1E-02	h	1.5E-02	i	1.1E-02	r	1.5E-02	r	0	0.10	1897-45-6	Chlorothalonil	4.4E+01	ca*	2.2E+02	ca*	6.1E-01	ca*	6.1E+00	ca*		
		2.0E-02	i			2.0E-02	r	1		95-49-8	o-Chlorotoluene	1.6E+02	nc	5.7E+02	nc	7.3E+01	nc	1.2E+02	nc		
		2.0E-01	i			2.0E-01	r	0	0.10	101-21-3	Chlorpropham	1.2E+04	nc	1.0E+05	max	7.3E+02	nc	7.3E+03	nc		
		3.0E-03	i			3.0E-03	r	0	0.10	2921-88-2	Chlorpyrifos	1.8E+02	nc	2.6E+03	nc	1.1E+01	nc	1.1E+02	nc		
		1.0E-02	h			1.0E-02	r	0	0.10	5598-13-0	Chlorpyrifos-methyl	6.1E+02	nc	8.8E+03	nc	3.7E+01	nc	3.6E+02	nc		
		5.0E-02	i			5.0E-02	r	0	0.10	64902-72-3	Chlorsulfuron	3.1E+03	nc	4.4E+04	nc	1.8E+02	nc	1.8E+03	nc		
		8.0E-04	h			8.0E-04	r	0	0.10	60238-56-4	Chlorthiophos	4.9E+01	nc	7.0E+02	nc	2.9E+00	nc	2.9E+01	nc		
				4.2E+01	i			0			Total Chromium (1:6 ratio Cr VI:Cr III)	2.1E+02	ca	4.5E+02	ca	1.6E-04	ca			4E+01	2E+00
		1.5E+00	i							16065-83-1	Chromium III	1.0E+05	max	1.0E+05	max			5.5E+04	nc		
		3.8E-03	i	2.9E+02	i			0		18540-29-9	**Chromium VI**	3.0E+01	ca**	6.4E+01	ca	2.3E-05	ca	1.1E+02	nc	4E+01	2E+00
											"CAL-Modified PRG" (PEA, 1994)	2.0E-01						2E-01			
		6.0E-02	n							7440-48-4	Cobalt	4.7E+03	nc	1.0E+05	max			2.2E+03	nc		
				2.2E+00	i			0		8007-45-2	Coke Oven Emissions					3.1E-03	ca				
		3.7E-02	h					0		7440-50-8	Copper and compounds	2.9E+03	nc	7.6E+04	nc			1.4E+03	nc		
1.9E+00	h			1.9E+00	r			1		123-73-9	Crotonaldehyde	5.3E-03	ca	1.1E-02	ca	3.5E-03	ca	5.9E-03	ca		
		1.0E-01	i			1.1E-01	i	1		98-82-8	Cumene (isopropylbenzene)	1.6E+02	nc	5.2E+02	nc	4.0E+02	nc	6.6E+02	nc		
8.4E-01	h	2.0E-03	h	8.4E-01	r	2.0E-03	r	0	0.10	21725-46-2	Cyanazine	5.8E-01	ca	2.9E+00	ca	8.0E-03	ca	8.0E-02	ca		
									n/a		Cyanides										
		1.0E-01	h					0	0.10	542-62-1	Barium cyanide	6.1E+03	nc	1.0E+05	max			3.6E+03	nc		
		4.0E-02	i					0	0.10	592-01-8	Calcium cyanide	2.4E+03	nc	3.5E+04	nc			1.5E+03	nc		
		5.0E-03	i					0	0.10	544-92-3	Copper cyanide	3.1E+02	nc	4.4E+03	nc			1.8E+02	nc		
		2.0E-02	i					0	0.10	57-12-5	Free cyanide	1.2E+03	nc	1.8E+04	nc			7.3E+02	nc	4E+01	2E+00
		2.0E-02	i			8.6E-04	i	1		74-90-8	Hydrogen cyanide	1.1E+01	nc	3.5E+01	nc	3.1E+00	nc	6.2E+00	nc		
		5.0E-02	i					0	0.10	151-50-8	Potassium cyanide	3.1E+03	nc	4.4E+04	nc			1.8E+03	nc		
		2.0E-01	i					0	0.10	506-61-6	Potassium silver cyanide	1.2E+04	nc	1.0E+05	max			7.3E+03	nc		
		1.0E-01	i					0	0.10	506-64-9	Silver cyanide	6.1E+03	nc	8.8E+04	nc			3.6E+03	nc		
		4.0E-02	i					0	0.10	143-33-9	Sodium cyanide	2.4E+03	nc	3.5E+04	nc			1.5E+03	nc		
		5.0E-02	i					0	0.10	557-21-1	Zinc cyanide	3.1E+03	nc	4.4E+04	nc			1.8E+03	nc		
		4.0E-02	i			4.0E-02	r	1		460-19-5	**Cyanogen**	1.3E+02	nc	4.3E+02	nc	1.5E+02	nc	2.4E+02	nc		
		9.0E-02	i			9.0E-02	r	1		506-68-3	**Cyanogen bromide**	2.9E+02	nc	9.7E+02	nc	3.3E+02	nc	5.5E+02	nc		
		5.0E-02	i			5.0E-02	r	1		506-77-4	**Cyanogen chloride**	1.6E+02	nc	5.4E+02	nc	1.8E+02	nc	3.0E+02	nc		
		5.0E+00	i			5.0E+00	r	0	0.10	108-94-1	Cyclohexanone	1.0E+05	max	1.0E+05	max	1.8E+04	nc	1.8E+05	nc		
		2.0E-01	i			2.0E-01	r	0	0.10	108-91-8	Cyclohexylamine	1.2E+04	nc	1.0E+05	max	7.3E+02	nc	7.3E+03	nc		
		5.0E-03	i			5.0E-03	r	0	0.10	68085-85-8	Cyhalothrin/Karate	3.1E+02	nc	4.4E+03	nc	1.8E+01	nc	1.8E+02	nc		
		1.0E-02	i			1.0E-02	r	0	0.10	52315-07-8	Cypermethrin	6.1E+02	nc	8.8E+03	nc	3.7E+01	nc	3.6E+02	nc		
		7.5E-03	i			7.5E-03	r	0	0.10	66215-27-8	Cyromazine	4.6E+02	nc	6.6E+03	nc	2.7E+01	nc	2.7E+02	nc		
		1.0E-02	i			1.0E-02	r	0	0.10	1861-32-1	Dacthal	6.1E+02	nc	8.8E+03	nc	3.7E+01	nc	3.6E+02	nc		
		3.0E-02	i			3.0E-02	r	0	0.10	75-99-0	Dalapon	1.8E+03	nc	2.6E+04	nc	1.1E+02	nc	1.1E+03	nc		
		2.5E-02	i			2.5E-02	r	0	0.10	39515-41-8	Danitol	1.5E+03	nc	2.2E+04	nc	9.1E+01	nc	9.1E+02	nc		
2.4E-01	i			2.4E-01	r			0	0.03	72-54-8	DDD	2.4E+00	ca	1.7E+01	ca	2.8E-02	ca	2.8E-01	ca	2E+01	8E-01
3.4E-01	i			3.4E-01	r			0	0.03	72-55-9	DDE	1.7E+00	ca	1.2E+01	ca	2.0E-02	ca	2.0E-01	ca	5E+01	3E+00
3.4E-01	i	5.0E-04	i	3.4E-01	i	5.0E-04	r	0	0.03	50-29-3	DDT	1.7E+00	ca*	1.2E+01	ca*	2.0E-02	ca*	2.0E-01	ca*	3E+01	2E+00
		1.0E-02	i			1.0E-02	r	0	0.10	1163-19-5	Decabromodiphenyl ether	6.1E+02	nc	8.8E+03	nc	3.7E+01	nc	3.6E+02	nc		
		4.0E-05	i			4.0E-05	r	0	0.10	8065-48-3	Demeton	2.4E+00	nc	3.5E+01	nc	1.5E-01	nc	1.5E+00	nc		

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FOR PLANNING PURPOSES

TOXICITY INFORMATION										CONTAMINANT	PRELIMINARY REMEDIATION GOALS (PRGs)								SOIL SCREENING LEVELS	
							V	skin			Residential		Industrial		Ambient Air		Tap Water		Migration to Ground Water	
SFo 1/(mg/kg-d)		RfDo (mg/kg-d)		SFi 1/(mg/kg-d)		RfDi (mg/kg-d)	O C	abs. soils	CAS No.		Soil (mg/kg)		Soil (mg/kg)		(ug/m^3)		(ug/l)		DAF 20 (mg/kg)	DAF 1 (mg/kg)
6.1E-02	h			6.1E-02	r		0	0.10	2303-16-4	Diallate	8.0E+00	ca	4.0E+01	ca	1.1E-01	ca	1.1E+00	ca		
		9.0E-04	h			9.0E-04	r 0	0.10	333-41-5	Diazinon	5.5E+01	nc	7.9E+02	nc	3.3E+00	nc	3.3E+01	nc		
		4.0E-03	x			4.0E-03	r 1		132-64-9	Dibenzofuran	2.9E+02	nc	5.1E+03	nc	1.5E+01	nc	2.4E+01	nc		
		1.0E-02	i			1.0E-02	r 0	0.10	106-37-6	1,4-Dibromobenzene	6.1E+02	nc	8.8E+03	nc	3.7E+01	nc	3.6E+02	nc		
8.4E-02	i	2.0E-02	i	8.4E-02	r	2.0E-02	r 1		124-48-1	**Dibromochloromethane**	1.1E+00	ca	2.7E+00	ca	8.0E-02	ca	1.3E-01	ca	4E-01	2E-02
1.4E+00	h	5.7E-05	r	2.4E-03	h	5.7E-05	i 1		96-12-8	**1,2-Dibromo-3-chloropropane**	4.5E-01	ca**	4.0E+00	ca**	2.1E-01	nc	4.8E-02	ca**		
										"CAL-Modified PRG" (PEA, 1994)	6.0E-02				9.6E-04		4.7E-03			
8.5E+01	i	5.7E-05	r	7.7E-01	i	5.7E-05	h 1		106-93-4	1,2-Dibromoethane	6.9E-03	ca	4.8E-02	ca*	8.7E-03	ca*	7.6E-04	ca		
		1.0E-01	i			1.0E-01	r 0	0.10	84-74-2	Dibutyl phthalate	6.1E+03	nc	8.8E+04	nc	3.7E+02	nc	3.6E+03	nc	2E+03	3E+02
		3.0E-02	i			3.0E-02	r 0	0.10	1918-00-9	Dicamba	1.8E+03	nc	2.6E+04	nc	1.1E+02	nc	1.1E+03	nc		
		9.0E-02	i			5.7E-02	h 1		95-50-1	1,2-Dichlorobenzene	3.7E+02	sat	3.7E+02	sat	2.1E+02	nc	3.7E+02	nc	2E+01	9E-01
		9.00E-04	n			9.00E-04	r 1		541-73-1	**1,3-Dichlorobenzene**	1.3E+01	nc	5.2E+01	nc	3.3E+00	nc	5.5E+00	nc		
2.4E-02	h	3.00E-02	n	2.2E-02	n	3.00E-02	i 1		106-46-7	**1,4-Dichlorobenzene**	3.4E+00	ca	8.1E+00	ca	3.1E-01	ca	5.0E-01	ca	2E+00	1E-01
4.5E-01	i			4.5E-01	r		0	0.10	91-94-1	3,3-Dichlorobenzidine	1.1E+00	ca	5.5E+00	ca	1.5E-02	ca	1.5E-01	ca	7E-03	3E-04
9.3E+00	r			9.3E+00	h		1		764-41-0	1,4-Dichloro-2-butene	7.9E-03	ca	1.8E-02	ca	7.2E-04	ca	1.2E-03	ca		
		2.0E-01	i			5.7E-02	h 1		75-71-8	Dichlorodifluoromethane	9.4E+01	nc	3.1E+02	nc	2.1E+02	nc	3.9E+02	nc		
		1.0E-01	h			1.4E-01	h 1		75-34-3	1,1-Dichloroethane	5.9E+02	nc	2.1E+03	nc	5.2E+02	nc	8.1E+02	nc	2E+01	1E+00
9.1E-02	i	3.0E-02	n	9.1E-02	i	1.4E-03	n 1		107-06-2	1,2-Dichloroethane (EDC)	3.5E-01	ca*	7.6E-01	ca*	7.4E-02	ca*	1.2E-01	ca*	2E-02	1E-03
6.0E-01	i	9.0E-03	i	1.8E-01	i	9.0E-03	r 1		75-35-4	1,1-Dichloroethylene	5.4E-02	ca	1.2E-01	ca	3.8E-02	ca	4.6E-02	ca	6E-02	3E-03
		1.0E-02	h			1.0E-02	r 1		156-59-2	1,2-Dichloroethylene (cis)	4.3E+01	nc	1.5E+02	nc	3.7E+01	nc	6.1E+01	nc	4E-01	2E-02
		2.0E-02	i			2.0E-02	r 1		156-60-5	1,2-Dichloroethylene (trans)	6.3E+01	nc	2.1E+02	nc	7.3E+01	nc	1.2E+02	nc	7E-01	3E-02
		3.0E-03	i			3.0E-03	r 0	0.10	120-83-2	2,4-Dichlorophenol	1.8E+02	nc	2.6E+03	nc	1.1E+01	nc	1.1E+02	nc	1E+00	5E-02
		8.0E-03	i			8.0E-03	r 0	0.10	94-82-6	4-(2,4-Dichlorophenoxy)butyric Acid (2,4-DB)	4.9E+02	nc	7.0E+03	nc	2.9E+01	nc	2.9E+02	nc		
		1.0E-02	i			1.0E-02	r 0	0.05	94-75-7	2,4-Dichlorophenoxyacetic Acid (2,4-D)	6.9E+02	nc	1.2E+04	nc	3.7E+01	nc	3.6E+02	nc		
6.8E-02	h	1.1E-03	r	6.8E-02	r	1.1E-03	i 1		78-87-5	1,2-Dichloropropane	3.5E-01	ca*	7.7E-01	ca*	9.9E-02	ca*	1.6E-01	ca*	3E-02	1E-03
1.8E-01	h	3.0E-04	i	1.3E-01	h	5.7E-03	i 1		542-75-6	1,3-Dichloropropene	8.2E-02	ca	1.8E-01	ca	5.2E-02	ca	8.1E-02	ca	4E-03	2E-04
		3.0E-03	i			3.0E-03	r 0	0.10	616-23-9	2,3-Dichloropropanol	1.8E+02	nc	2.6E+03	nc	1.1E+01	nc	1.1E+02	nc		
2.9E-01	i	5.0E-04	i	2.9E-01	r	1.4E-04	i 0	0.10	62-73-7	Dichlorvos	1.7E+00	ca*	8.5E+00	ca*	2.3E-02	ca*	2.3E-01	ca*		
4.4E-01	x			4.4E-01	r		0	0.10	115-32-2	Dicofol	1.1E+00	ca	5.6E+00	ca	1.5E-02	ca	1.5E-01	ca		
		3.0E-02	h			5.7E-05	h 1		77-73-6	Dicyclopentadiene	5.4E-01	nc	1.8E+00	nc	2.1E-01	nc	4.2E-01	nc		
1.6E+01	i	5.0E-05	i	1.6E+01	i	5.0E-05	r 0	0.10	60-57-1	Dieldrin	3.0E-02	ca	1.5E-01	ca	4.2E-04	ca	4.2E-03	ca	4E-03	2E-04
		5.7E-03	r			5.7E-03	h 0	0.10	112-34-5	Diethylene glycol, monobutyl ether	3.5E+02	nc	5.0E+03	nc	2.1E+01	nc	2.1E+02	nc		
		2.0E+00	h			2.0E+00	r 0	0.10	111-90-0	Diethylene glycol, monoethyl ether	1.0E+05	max	1.0E+05	max	7.3E+03	nc	7.3E+04	nc		
		1.1E-02	h			1.1E-02	r 0	0.10	617-84-5	Diethylformamide	6.7E+02	nc	9.7E+03	nc	4.0E+01	nc	4.0E+02	nc		
1.2E-03	i	6.0E-01	i	1.2E-03	r	6.0E-01	r 0	0.10	103-23-1	Di(2-ethylhexyl)adipate	4.1E+02	ca	2.1E+03	ca	5.6E+00	ca	5.6E+01	ca		
		8.0E-01	i			8.0E-01	r 0	0.10	84-66-2	Diethyl phthalate	4.9E+04	nc	1.0E+05	max	2.9E+03	nc	2.9E+04	nc		
4.7E+03	h			4.7E+03	r		0	0.10	56-53-1	Diethylstilbestrol	1.0E-04	ca	5.2E-04	ca	1.4E-06	ca	1.4E-05	ca		
		8.0E-02	i			8.0E-02	r 0	0.10	43222-48-6	Difenzoquat (Avenge)	4.9E+03	nc	7.0E+04	nc	2.9E+02	nc	2.9E+03	nc		
		2.0E-02	i			2.0E-02	r 0	0.10	35367-38-5	Diflubenzuron	1.2E+03	nc	1.8E+04	nc	7.3E+01	nc	7.3E+02	nc		
		1.1E+01	r			1.1E+01	i 1		75-37-6	1,1-Difluoroethane					4.2E+04	nc	6.9E+04	nc		
		8.0E-02	i			8.0E-02	r 0	0.10	1445-75-6	Diisopropyl methylphosphonate	4.9E+03	nc	7.0E+04	nc	2.9E+02	nc	2.9E+03	nc		
		2.0E-02	i			2.0E-02	r 0	0.10	55290-64-7	Dimethipin	1.2E+03	nc	1.8E+04	nc	7.3E+01	nc	7.3E+02	nc		
		2.0E-04	i			2.0E-04	r 0	0.10	60-51-5	Dimethoate	1.2E+01	nc	1.8E+02	nc	7.3E-01	nc	7.3E+00	nc		
1.4E-02	h			1.4E-02	r		0	0.10	119-90-4	3,3'-Dimethoxybenzidine	3.5E+01	ca	1.8E+02	ca	4.8E-01	ca	4.8E+00	ca		
		5.7E-06	r			5.7E-06	x 1		124-40-3	Dimethylamine	6.7E-02	nc	2.5E-01	nc	2.1E-02	nc	3.5E-02	nc		
		2.0E-03	i			2.0E-03	r 0	0.10	121-69-7	N-N-Dimethylaniline	1.2E+02	nc	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc		
7.5E-01	h			7.5E-01	r		0	0.10	95-68-1	2,4-Dimethylaniline	6.5E-01	ca	3.3E+00	ca	9.0E-03	ca	9.0E-02	ca		
5.8E-01	h			5.8E-01	r		0	0.10	21436-96-4	2,4-Dimethylaniline hydrochloride	8.4E-01	ca	4.3E+00	ca	1.2E-02	ca	1.2E-01	ca		
9.2E+00	h			9.2E+00	r		0	0.10	119-93-7	3,3'-Dimethylbenzidine	5.3E-02	ca	2.7E-01	ca	7.3E-04	ca	7.3E-03	ca		
2.6E+00	x			3.5E+00	x		0	0.10	57-14-7	1,1-Dimethylhydrazine	1.9E-01	ca	9.5E-01	ca	1.9E-03	ca	2.6E-02	ca		
3.7E+01	x			3.7E+01	x		0	0.10	540-73-8	1,2-Dimethylhydrazine	1.3E-02	ca	6.7E-02	ca	1.8E-04	ca	1.8E-03	ca		
		1.0E-01	h			8.6E-03	i 0	0.10	68-12-2	N,N-Dimethylformamide	6.1E+03	nc	8.8E+04	nc	3.1E+01	nc	3.6E+03	nc		
		1.0E-03	n			1.0E-03	r 0	0.10	122-09-8	Dimethylphenethylamine	6.1E+01	nc	8.8E+02	nc	3.7E+00	nc	3.6E+01	nc		
		2.0E-02	i			2.0E-02	r 0	0.10	105-67-9	2,4-Dimethylphenol	1.2E+03	nc	1.8E+04	nc	7.3E+01	nc	7.3E+02	nc	9E+00	4E-01
		6.0E-04	i			6.0E-04	r 0	0.10	576-26-1	2,6-Dimethylphenol	3.7E+01	nc	5.3E+02	nc	2.2E+00	nc	2.2E+01	nc		
		1.0E-03	i			1.0E-03	r 0	0.10	95-65-8	3,4-Dimethylphenol	6.1E+01	nc	8.8E+02	nc	3.7E+00	nc	3.6E+01	nc		
		1.0E+01	h			1.0E+01	r 0	0.10	131-11-3	Dimethyl phthalate	1.0E+05	max	1.0E+05	max	3.7E+04	nc	3.6E+05	nc		
		1.0E-01	i			1.0E-01	r 0	0.10	120-61-6	Dimethyl terephthalate	6.1E+03	nc	8.8E+04	nc	3.7E+02	nc	3.6E+03	nc		

Key: I=IRIS n=NCEA h=HEAST x=WITHDRAWN o=Other EPA DOCUMENTS r=ROUTE EXTRAPOLATION ca=CANCER PRG nc=NONCANCER PRG sat=SOIL SATURATION max=CEILING LIMIT *(where: nc < 100X ca) **(where: nc < 10X ca)

FOR PLANNING PURPOSES

TOXICITY INFORMATION									CONTAMINANT	PRELIMINARY REMEDIATION GOALS (PRGs)								SOIL SCREENING LEVELS	
SFo 1/(mg/kg-d)		RfDo (mg/kg-d)		SFI 1/(mg/kg-d)		RfDI (mg/kg-d)	V G C	skin abs. soils	CAS No.	Residential Soil (mg/kg)		Industrial Soil (mg/kg)		Ambient Air (ug/m^3)		Tap Water (ug/l)		Migration to Ground Water DAF 20 (mg/kg)	DAF 1 (mg/kg)
		2.0E-03	I			2.0E-03	r 0	0.10	131-89-5	4,6-Dinitro-o-cyclohexyl phenol	1.2E+02	nc	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc		
		4.0E-04	h			4.0E-04	r 0	0.10	528-29-0	1,2-Dinitrobenzene	2.4E+01	nc	3.5E+02	nc	1.5E+00	nc	1.5E+01	nc		
		1.0E-04	I			1.0E-04	r 0	0.10	99-65-0	1,3-Dinitrobenzene	6.1E+00	nc	8.8E+01	nc	3.7E-01	nc	3.6E+00	nc		
		4.0E-04	h			4.0E-04	r 0	0.10	100-25-4	1,4-Dinitrobenzene	2.4E+01	nc	3.5E+02	nc	1.5E+00	nc	1.5E+01	nc		
		2.0E-03	I			2.0E-03	r 0	0.10	51-28-5	2,4-Dinitrophenol	1.2E+02	nc	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc	3E-01	1E-02
6.8E-01	I			6.8E-01	r		0	0.10	25321-14-6	Dinitrotoluene mixture	7.2E-01	ca	3.6E+00	ca	9.9E-03	ca	9.9E-02	ca	8E-04	4E-05
		2.0E-03	I			2.0E-03	r 0	0.10	121-14-2	2,4-Dinitrotoluene (also see Dinitrotoluene mixture)	1.2E+02	nc	1.8E+03	nc	7.3E+01	nc	7.3E+01	nc	8E-04	4E-05
		1.0E-03	h			1.0E-03	r 0	0.10	606-20-2	2,6-Dinitrotoluene (also see Dinitrotoluene mixture)	6.1E+01	nc	8.8E+02	nc	3.7E+00	nc	3.6E+01	nc	7E-04	3E-05
		1.0E-03	I			1.0E-03	r 0	0.10	88-85-7	Dinoseb	6.1E+01	nc	8.8E+02	nc	3.7E+00	nc	3.6E+01	nc		
		2.0E-02	h			2.0E-02	r 0	0.10	117-84-0	di-n-Octyl phthalate	1.2E+03	nc	1.0E+04	sat	7.3E+01	nc	7.3E+02	nc	1E+04	1E+04
1.1E-02	I			1.1E-02	r		0	0.10	123-91-1	1,4-Dioxane	4.4E+01	ca	2.2E+02	ca	6.1E-01	ca	6.1E+00	ca		
1.5E+05	h			1.5E+05	h		0	0.03	1746-01-6	Dioxin (2,3,7,8-TCDD)	3.9E-06	ca	2.7E-05	ca	4.5E-08	ca	4.5E-07	ca		
		3.0E-02	I			3.0E-02	r 0	0.10	957-51-7	Diphenamid	1.8E+03	nc	2.6E+04	nc	1.1E+02	nc	1.1E+03	nc		
		2.5E-02	I			2.5E-02	r 0	0.10	122-39-4	Diphenylamine	1.5E+03	nc	2.2E+04	nc	9.1E+01	nc	9.1E+02	nc		
8.0E-01	I			7.7E-01	I		0	0.10	122-66-7	1,2-Diphenylhydrazine	6.1E-01	ca	3.1E+00	ca	8.7E-03	ca	8.4E-02	ca		
		9.0E-03	n			9.0E-03	r 0	0.10	127-63-9	Diphenyl sulfone	5.5E+02	nc	7.9E+03	nc	3.3E+01	nc	3.3E+02	nc		
		2.2E-03	I			2.2E-03	r 0	0.10	85-00-7	Diquat	1.3E+02	nc	1.9E+03	nc	8.0E+00	nc	8.0E+01	nc		
8.6E+00	h			8.6E+00	r		0	0.10	1937-37-7	Direct black 38	5.7E-02	ca	2.9E-01	ca	7.8E-04	ca	7.8E-03	ca		
8.1E+00	h			8.1E+00	r		0	0.10	2602-46-2	Direct blue 6	6.0E-02	ca	3.0E-01	ca	8.3E-04	ca	8.3E-03	ca		
9.3E+00	h			9.3E+00	r		0	0.10	16071-86-6	Direct brown 95	5.2E-02	ca	2.7E-01	ca	7.2E-04	ca	7.2E-03	ca		
		4.0E-05	I			4.0E-05	r 0	0.10	298-04-4	Disulfoton	2.4E+00	nc	3.5E+01	nc	1.5E-01	nc	1.5E+00	nc		
		1.0E-02	I			1.0E-02	r 0	0.10	505-29-3	1,4-Dithiane	6.1E+02	nc	8.8E+03	nc	3.7E+01	nc	3.6E+02	nc		
		2.0E-03	I			2.0E-03	r 0	0.10	330-54-1	Diuron	1.2E+02	nc	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc		
		4.0E-03	I			4.0E-03	r 0	0.10	2439-10-3	Dodine	2.4E+02	nc	3.5E+03	nc	1.5E+01	nc	1.5E+02	nc		
		6.0E-03	I			6.0E-03	r 0	0.10	115-29-7	Endosulfan	3.7E+02	nc	5.3E+03	nc	2.2E+01	nc	2.2E+02	nc	2E+01	9E-01
		2.0E-02	I			2.0E-02	r 0	0.10	145-73-3	Endothall	1.2E+03	nc	1.8E+04	nc	7.3E+01	nc	7.3E+02	nc		
		3.0E-04	I			3.0E-04	r 0	0.10	72-20-8	Endrin	1.8E+01	nc	2.6E+02	nc	1.1E+00	nc	1.1E+01	nc	1E+00	5E-02
9.9E-03	I	2.0E-03	h	4.2E-03	I	2.9E-04	I 1		106-89-8	Epichlorohydrin	7.6E+00	nc	2.6E+01	nc	1.0E+00	nc	2.0E+00	nc		
		5.7E-03	r			5.7E-03	I 0	0.10	106-88-7	1,2-Epoxybutane	3.5E+02	nc	5.0E+03	nc	2.1E+01	nc	2.1E+02	nc		
		2.5E-02	I			2.5E-02	r 0	0.10	759-94-4	EPTC (S-Ethyl dipropylthiocarbamate)	1.5E+03	nc	2.2E+04	nc	9.1E+01	nc	9.1E+02	nc		
		5.0E-03	I			5.0E-03	r 0	0.10	16672-87-0	Ethephon (2-chloroethyl phosphonic acid)	3.1E+02	nc	4.4E+03	nc	1.8E+01	nc	1.8E+02	nc		
		5.0E-04	I			5.0E-04	r 0	0.10	563-12-2	Ethion	3.1E+01	nc	4.4E+02	nc	1.8E+00	nc	1.8E+01	nc		
		4.0E-01	h			5.7E-02	I 0	0.10	110-80-5	2-Ethoxyethanol	2.4E+04	nc	1.0E+05	max	2.1E+02	nc	1.5E+04	nc		
		3.0E-01	h			3.0E-01	r 0	0.10	111-15-9	2-Ethoxyethanol acetate	1.8E+04	nc	1.0E+05	max	1.1E+03	nc	1.1E+04	nc		
		9.0E-01	I			9.0E-01	r 1		141-78-6	Ethyl acetate	1.9E+04	nc	3.7E+04	sat	3.3E+03	nc	5.5E+03	nc		
4.8E-02	h			4.8E-02	r		1		140-88-5	Ethyl acrylate	2.1E-01	ca	4.5E-01	ca	1.4E-01	ca	2.3E-01	ca		
		1.0E-01	I			2.9E-01	I 1		100-41-4	Ethylbenzene	2.3E+02	sat	2.3E+02	sat	1.1E+03	nc	1.3E+03	nc	1E+01	7E-01
2.9E-03	n	4.0E-01	n	2.9E-03	r	2.9E+00	I 1		75-00-3	**Ethyl chloride**	3.0E+00	ca	6.5E+00	ca	2.3E+00	ca	4.6E+00	ca		
		3.0E-01	h			3.0E-01	r 0	0.10	109-78-4	Ethylene cyanohydrin	1.8E+04	nc	1.0E+05	max	1.1E+03	nc	1.1E+04	nc		
		2.0E-02	h			2.0E-02	r 0	0.10	107-15-3	Ethylene diamine	1.2E+03	nc	1.8E+04	nc	7.3E+01	nc	7.3E+02	nc		
		2.0E+00	I			2.0E+00	r 0	0.10	107-21-1	Ethylene glycol	1.0E+05	max	1.0E+05	max	7.3E+03	nc	7.3E+04	nc		
		5.7E-03	r			5.7E-03	h 0	0.10	111-76-2	Ethylene glycol, monobutyl ether	3.5E+02	nc	5.0E+03	nc	2.1E+01	nc	2.1E+02	nc		
1.0E+00	h			3.5E-01	h		1		75-21-8	Ethylene oxide	1.4E-01	ca	3.6E-01	ca	1.9E-02	ca	2.4E-02	ca		
1.1E-01	h	8.0E-05	I	1.1E-01	r	8.0E-05	r 0	0.10	96-45-7	Ethylene thiourea (ETU)	4.4E+00	ca**	2.2E+01	ca**	6.1E-02	ca**	6.1E-01	ca**		
		2.0E-01	I			2.0E-01	r 1		60-29-7	Ethyl ether	1.8E+03	sat	1.8E+03	sat	7.3E+02	nc	1.2E+03	nc		
		9.0E-02	h			9.0E-02	r 1		97-63-2	Ethyl methacrylate	1.4E+02	sat	1.4E+02	sat	3.3E+02	nc	5.5E+02	nc		
		1.0E-05	I			1.0E-05	r 0	0.10	2104-64-5	Ethyl *p-nitrophenyl phenylphosphorothioate*	6.1E-01	nc	8.8E+00	nc	3.7E-02	nc	3.6E-01	nc		
		3.0E+00	I			3.0E+00	r 0	0.10	84-72-0	Ethylphthalyl ethyl glycolate	1.0E+05	max	1.0E+05	max	1.1E+04	nc	1.1E+05	nc		
		8.0E-03	I			8.0E-03	r 0	0.10	101200-48-0	Express	4.9E+02	nc	7.0E+03	nc	2.9E+01	nc	2.9E+02	nc		
		2.5E-04	I			2.5E-04	r 0	0.10	22224-92-6	Fenamiphos	1.5E+01	nc	2.2E+02	nc	9.1E-01	nc	9.1E+00	nc		
		1.3E-02	I			1.3E-02	r 0	0.10	2164-17-2	Fluometuron	7.9E+02	nc	1.1E+04	nc	4.7E+01	nc	4.7E+02	nc		
		6.0E-02	I				0	0.10	16984-48-8	Flouride	3.7E+03	nc	5.3E+04	nc			2.2E+03	nc		
		8.0E-02	I			8.0E-02	r 0	0.10	59756-60-4	Fluoridone	4.9E+03	nc	7.0E+04	nc	2.9E+02	nc	2.9E+03	nc		
		2.0E-02	I			2.0E-02	r 0	0.10	56425-91-3	Flurprimidol	1.2E+03	nc	1.8E+04	nc	7.3E+01	nc	7.3E+02	nc		
		6.0E-02	I			6.0E-02	r 0	0.10	66332-96-5	Flutolanil	3.7E+03	nc	5.3E+04	nc	2.2E+02	nc	2.2E+03	nc		
		1.0E-02	I			1.0E-02	r 0	0.10	69409-94-5	Fluvalinate	6.1E+02	nc	8.8E+03	nc	3.7E+01	nc	3.6E+02	nc		
3.5E-03	I	1.0E-01	I	3.5E-03	r	1.0E-01	r 0	0.10	133-07-3	Folpet	1.4E+02	ca*	7.0E+02	ca	1.9E+00	ca	1.9E+01	ca		
1.9E-01	I			1.9E-01	r		0	0.10	72178-02-0	Fomesafen	2.6E+00	ca	1.3E+01	ca	3.5E-02	ca	3.5E-01	ca		

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FOR PLANNING PURPOSES

TOXICITY INFORMATION									CONTAMINANT	PRELIMINARY REMEDIATION GOALS (PRGs)								SOIL SCREENING LEVELS	
						V	skin			Residential		Industrial		Ambient Air		Tap Water		Migration to Ground Water	
SFo 1/(mg/kg-d)		RfDo (mg/kg-d)		SFi 1/(mg/kg-d)		RfDi (mg/kg-d)	O C	abs. soils	CAS No.	Soil (mg/kg)		Soil (mg/kg)		(ug/m^3)		(ug/l)		DAF 20 (mg/kg)	DAF 1 (mg/kg)
		2.0E-03	i			2.0E-03	r 0	0.10	944-22-9	Fonofos	1.2E+02	nc	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc		
		1.5E-01	i	4.6E-02	i		0	0.10	50-00-0	Formaldehyde	9.2E+03	nc	1.0E+05	nc	1.5E-01	ca	5.5E+03	nc		
		2.0E+00	h			2.0E+00	r 0	0.10	64-18-6	Formic Acid	1.0E+05	max	1.0E+05	max	7.3E+03	nc	7.3E+04	nc		
		3.0E+00	i			3.0E+00	r 0	0.10	39148-24-8	Fosetyl-al	1.0E+05	max	1.0E+05	max	1.1E+04	nc	1.1E+05	nc		
		1.0E-03	i			1.0E-03	r 1		110-00-9	Furan	2.5E+00	nc	8.5E+00	nc	3.7E+00	nc	6.1E+00	nc		
3.8E+00	h			3.8E+00	r		0	0.10	67-45-8	Furazolidone	1.3E-01	ca	6.5E-01	ca	1.8E-03	ca	1.8E-02	ca		
		3.0E-03	i			1.4E-02	h 0	0.10	98-01-1	Furfural	1.8E+02	nc	2.6E+03	nc	5.2E+01	nc	1.1E+02	nc		
5.0E+01	h			5.0E+01	r		0	0.10	531-82-8	Furium	9.7E-03	ca	4.9E-02	ca	1.3E-04	ca	1.3E-03	ca		
3.0E-02	i			3.0E-02	r		0	0.10	60568-05-0	Furmecyclox	1.6E+01	ca	8.2E+01	ca	2.2E-01	ca	2.2E+00	ca		
		4.0E-04	i			4.0E-04	r 0	0.10	77182-82-2	Glufosinate-ammonium	2.4E+01	nc	3.5E+02	nc	1.5E+00	nc	1.5E+01	nc		
		4.0E-04	i			2.9E-04	h 0	0.10	765-34-4	Glycidaldehyde	2.4E+01	nc	3.5E+02	nc	1.0E+00	nc	1.5E+01	nc		
		1.0E-01	i			1.0E-01	r 0	0.10	1071-83-6	Glyphosate	6.1E+03	nc	8.8E+04	nc	3.7E+02	nc	3.6E+03	nc		
		5.0E-05	i			5.0E-05	r 0	0.10	69806-40-2	Haloxyfop-methyl	3.1E+00	nc	4.4E+01	nc	1.8E-01	nc	1.8E+00	nc		
		1.3E-02	i			1.3E-02	r 0	0.10	79277-27-3	Harmony	7.9E+02	nc	1.1E+04	nc	4.7E+01	nc	4.7E+02	nc		
4.5E+00	i	5.0E-04	i	4.6E+00	i	5.0E-04	r 0	0.10	76-44-8	Heptachlor	1.1E-01	ca	5.5E-01	ca	1.5E-03	ca	1.5E-02	ca	2E+01	1E+00
9.1E+00	i	1.3E-05	i	9.1E+00	i	1.3E-05	r 0	0.10	1024-57-3	Heptachlor epoxide	5.3E-02	ca*	2.7E-01	ca*	7.4E-04	ca*	7.4E-03	ca*	7E-01	3E-02
		2.0E-03	i			2.0E-03	r 0	0.10	87-82-1	Hexabromobenzene	1.2E+02	nc	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc		
1.6E+00	i	8.0E-04	i	1.6E+00	i	8.0E-04	r 0	0.10	118-74-1	Hexachlorobenzene	3.0E-01	ca	1.5E+00	ca	4.2E-03	ca	4.2E-02	ca	2E+00	1E-01
7.8E-02	i	2.0E-04	h	7.8E-02	i	2.0E-04	r 0	0.10	87-68-3	Hexachlorobutadiene	6.2E+00	ca**	3.2E+01	ca**	8.6E-02	ca**	8.6E-01	ca**	2E+00	1E-01
6.3E+00	i			6.3E+00	i		0	0.04	319-84-6	HCH (alpha)	9.0E-02	ca	5.9E-01	ca	1.1E-03	ca	1.1E-02	ca	5E-04	3E-05
1.8E+00	i			1.8E+00	i		0	0.04	319-85-7	HCH (beta)	3.2E-01	ca	2.1E+00	ca	3.7E-03	ca	3.7E-02	ca	3E-03	1E-04
1.3E+00	h	3.0E-04	i	1.3E+00	r	3.0E-04	r 0	0.04	58-89-9	HCH (gamma) Lindane	4.4E-01	ca*	2.9E+00	ca	5.2E-03	ca	5.2E-02	ca	9E-03	5E-04
1.8E+00	i			1.8E+00	i		0	0.04	608-73-1	HCH-technical	3.2E-01	ca	2.1E+00	ca	3.8E-03	ca	3.7E-02	ca	3E-03	1E-04
		7.0E-03	i			2.0E-05	h 0	0.10	77-47-4	Hexachlorocyclopentadiene	4.2E+02	nc	5.9E+03	nc	7.3E-02	nc	2.6E+02	nc	4E+02	2E+01
6.2E+03	i			4.6E+03	i		0	0.10	19408-74-3	Hexachlorodibenzo-p-dioxin mixture (HxCDD)	7.8E-05	ca	4.0E-04	ca	1.5E-06	ca	1.1E-05	ca		
1.4E-02	i	1.0E-03	i	1.4E-02	i	1.0E-03	r 0	0.10	67-72-1	Hexachloroethane	3.5E+01	ca**	1.8E+02	ca**	4.8E-01	ca**	4.8E+00	ca**	5E-01	2E-02
		3.0E-04	i			3.0E-04	r 0	0.10	70-30-4	Hexachlorophene	1.8E+01	nc	2.6E+02	nc	1.1E+00	nc	1.1E+01	nc		
1.1E-01	i	3.0E-03	i	1.1E-01	r	3.0E-03	r 0	0.10	121-82-4	Hexahydro-1,3,5-trinitro-1,3,5-triazine	4.4E+00	ca*	2.2E+01	ca	6.1E-02	ca	6.1E-01	ca		
		2.9E-06	r			2.9E-06	i 0	0.10	822-06-0	1,6-Hexamethylene diisocyanate	1.7E-01	nc	2.5E+00	nc	1.0E-02	nc	1.0E-01	nc		
		6.0E-02	h			5.7E-02	i 1		110-54-3	n-Hexane	1.1E+02	sat	1.1E+02	sat	2.1E+02	nc	3.5E+02	nc		
		3.3E-02	i			3.3E-02	r 0	0.10	51235-04-2	Hexazinone	2.0E+03	nc	2.9E+04	nc	1.2E+02	nc	1.2E+03	nc		
3.0E+00	i			1.7E+01	i		0	0.10	302-01-2	Hydrazine, hydrazine sulfate	1.6E-01	ca	8.2E-01	ca	3.9E-04	ca	2.2E-02	ca		
						5.7E-03	i		7647-01-0	Hydrogen chloride					2.1E+01	nc				
		3.0E-03	i			2.9E-04	i		7783-06-4	Hydrogen sulfide					1.0E+00	nc	1.1E+02	nc		
		4.0E-02	h			4.0E-02	r 0	0.10	123-31-9	p-Hydroquinone	2.4E+03	nc	3.5E+04	nc	1.5E+02	nc	1.5E+03	nc		
		1.3E-02	i			1.3E-02	r 0	0.10	35554-44-0	Imazalil	7.9E+02	nc	1.1E+04	nc	4.7E+01	nc	4.7E+02	nc		
		2.5E-01	i			2.5E-01	r 0	0.10	81335-37-7	Imazaquin	1.5E+04	nc	1.0E+05	max	9.1E+02	nc	9.1E+03	nc		
		4.0E-02	i			4.0E-02	r 0	0.10	36734-19-7	Iprodione	2.4E+03	nc	3.5E+04	nc	1.5E+02	nc	1.5E+03	nc		
		3.0E-01	n				0		7439-89-6	Iron	2.3E+04	nc	1.0E+05	max			1.1E+04	nc		
		3.0E-01	i			3.0E-01	r 1		78-83-1	Isobutanol	1.3E+04	nc	4.0E+04	sat	1.1E+03	nc	1.8E+03	nc		
9.5E-04	i	2.0E-01	i	9.5E-04	r	2.0E-01	r 0	0.10	78-59-1	Isophorone	5.1E+02	ca*	2.6E+03	ca*	7.1E+00	ca	7.1E+01	ca	5E-01	3E-02
		1.5E-02	i			1.5E-02	r 0	0.10	33820-53-0	Isopropalin	9.2E+02	nc	1.3E+04	nc	5.5E+01	nc	5.5E+02	nc		
		1.0E-01	i			1.1E-01	r 0	0.10	1832-54-8	Isopropyl methyl phosphonic acid	6.1E+03	nc	8.8E+04	nc	4.0E+02	nc	3.6E+03	nc		
		5.0E-02	i			5.0E-02	r 0	0.10	82558-50-7	Isoxaben	3.1E+03	nc	4.4E+04	nc	1.8E+02	nc	1.8E+03	nc		
1.8E+01	n			1.8E+01	r		0	0.10	143-50-0	Kepone	2.7E-02	ca	1.4E-01	ca	3.7E-04	ca	3.7E-03	ca		
		2.0E-03	i			2.0E-03	r 0	0.10	77501-63-4	Lactofen	1.2E+02	nc	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc		
PRGs Based on EPA Models, IEUBK (1994) and TRW (1996)									7439-92-1	Lead	4.0E+02	nc	1.0E+03	nc						
		1.0E-07	i				0	0.10	78-00-2	Lead (tetraethyl)	6.1E-03	nc	8.8E-02	nc			3.6E-03	nc		
		2.0E-03	i			2.0E-03	r 0	0.10	330-55-2	Linuron	1.2E+02	nc	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc		
		2.0E-02	x				0		7439-93-2	Lithium	1.6E+03	nc	4.1E+04	nc			7.3E+02	nc		
		2.0E-01	i			2.0E-01	r 0	0.10	83055-99-6	Londax	1.2E+04	nc	1.0E+05	max	7.3E+02	nc	7.3E+03	nc		
		2.0E-02	i			2.0E-02	r 0	0.10	121-75-5	Malathion	1.2E+03	nc	1.8E+04	nc	7.3E+01	nc	7.3E+02	nc		
		1.0E-01	i			1.0E-01	r 0	0.10	108-31-6	Maleic anhydride	6.1E+03	nc	8.8E+04	nc	3.7E+02	nc	3.6E+03	nc		
		5.0E-01	i			5.0E-01	r 1		123-33-1	Maleic hydrazide	1.7E+03	nc	2.4E+03	sat	1.8E+03	nc	3.0E+03	nc		
		2.0E-05	h			2.0E-05	r 0	0.10	109-77-3	Malononitrile	1.2E+00	nc	1.8E+01	nc	7.3E-02	nc	7.3E-01	nc		
		3.0E-02	h			3.0E-02	r 0	0.10	8018-01-7	Mancozeb	1.8E+03	nc	2.6E+04	nc	1.1E+02	nc	1.1E+03	nc		
6.0E-02	o	5.0E-03	i	6.0E-02	r	5.0E-03	r 0	0.10	12427-38-2	Maneb	8.1E+00	ca*	4.1E+01	ca	1.1E-01	ca	1.1E+00	ca		
		2.4E-02	i			1.4E-05	i 0		7439-96-5	**Manganese and compounds**	1.8E+03	nc	3.2E+04	nc	5.1E-02	nc	8.8E+02	nc		

Key : i=IRIS n=NCEA h=HEAST x=WITHDRAWN o=Other EPA DOCUMENTS r=ROUTE EXTRAPOLATION ca=CANCER PRG nc=NONCANCER PRG sat=SOIL SATURATION max=CEILING LIMIT *(where: nc < 100X ca) **(where: nc < 10X ca)

FOR PLANNING PURPOSES

TOXICITY INFORMATION												CONTAMINANT	PRELIMINARY REMEDIATION GOALS (PRGs)								SOIL SCREENING LEVELS	
SFo 1/(mg/kg-d)		RfDo (mg/kg-d)		SFi 1/(mg/kg-d)		RfDi (mg/kg-d)		V O C	skin abs. soils	CAS No.		Residential Soil (mg/kg)		Industrial Soil (mg/kg)		Ambient Air (ug/m^3)		Tap Water (ug/l)		Migration to Ground Water DAF 20 (mg/kg)	DAF 1 (mg/kg)
		9.0E-05	h			9.0E-05	r	0	0.10	950-10-7	Mephosfolan	5.5E+00	nc	7.9E+01	nc	3.3E-01	nc	3.3E+00	nc		
		3.0E-02	i			3.0E-02	r	0	0.10	24307-26-4	Mepiquat	1.8E+03	nc	2.6E+04	nc	1.1E+02	nc	1.1E+03	nc		
2.9E-02	n	1.0E-01	n	2.9E-02	r	1.0E-01	r	0	0.10	149-30-4	2-Mercaptobenzothiazole	1.7E+01	ca	8.5E+01	ca	2.3E-01	ca	2.3E+00	ca		
		3.0E-04	i					0		7487-94-7	Mercury and compounds	2.3E+01	nc	6.1E+02	nc			1.1E+01	nc		
						8.6E-05	i			7439-97-6	Mercury (elemental)					3.1E-01	nc				
		1.0E-04	i					0	0.10	22967-92-6	Mercury (methyl)	6.1E+00	nc	8.8E+01	nc			3.6E+00	nc		
		3.0E-05	i			3.0E-05	r	0	0.10	150-50-5	Merphos	1.8E+00	nc	2.6E+01	nc	1.1E-01	nc	1.1E+00	nc		
		3.0E-05	i			3.0E-05	r	0	0.10	78-48-8	Merphos oxide	1.8E+00	nc	2.6E+01	nc	1.1E-01	nc	1.1E+00	nc		
		6.0E-02	i			6.0E-02	r	0	0.10	57837-19-1	Metalaxyl	3.7E+03	nc	5.3E+04	nc	2.2E+02	nc	2.2E+03	nc		
		1.0E-04	i			2.0E-04	h	1		126-98-7	Methacrylonitrile	2.1E+00	nc	8.8E+00	nc	7.3E-01	nc	1.0E+00	nc		
		5.0E-05	i			5.0E-05	r	0	0.10	10265-92-6	Methamidophos	3.1E+00	nc	4.4E+01	nc	1.8E-01	nc	1.8E+00	nc		
		5.0E-01	i			5.0E-01	r	0	0.10	67-56-1	Methanol	3.1E+04	nc	1.0E+05	max	1.8E+03	nc	1.8E+04	nc		
		1.0E-03	i			1.0E-03	r	0	0.10	950-37-8	Methidathion	6.1E+01	nc	8.8E+02	nc	3.7E+00	nc	3.6E+01	nc		
		2.5E-02	i			2.5E-02	r	1		16752-77-5	Methomyl	4.4E+01	nc	1.5E+02	nc	9.1E+01	nc	1.5E+02	nc		
		5.0E-03	i			5.0E-03	r	0	0.10	72-43-5	Methoxychlor	3.1E+02	nc	4.4E+03	nc	1.8E+01	nc	1.8E+02	nc	2E+02	8E+00
		1.0E-03	h			5.7E-03	i	0	0.10	109-86-4	2-Methoxyethanol	6.1E+01	nc	8.8E+02	nc	2.1E+01	nc	3.6E+01	nc		
		2.0E-03	h			2.0E-03	r	0	0.10	110-49-6	2-Methoxyethanol acetate	1.2E+02	nc	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc		
4.6E-02	h			4.6E-02	r			0	0.10	99-59-2	2-Methoxy-5-nitroaniline	1.1E+01	ca	5.4E+01	ca	1.5E-01	ca	1.5E+00	ca		
		1.0E+00	h			1.0E+00	r	1		79-20-9	Methyl acetate	2.2E+04	nc	9.6E+04	nc	3.7E+03	nc	6.1E+03	nc		
		3.0E-02	h			3.0E-02	r	1		96-33-3	Methyl acrylate	7.0E+01	nc	2.3E+02	nc	1.1E+02	nc	1.8E+02	nc		
2.4E-01	h			2.4E-01	r			0	0.10	95-53-4	2-Methylaniline (o-toluidine)	2.0E+00	ca	1.0E+01	ca	2.8E-02	ca	2.8E-01	ca		
1.8E-01	h			1.8E-01	r			0	0.10	636-21-5	2-Methylaniline hydrochloride	2.7E+00	ca	1.4E+01	ca	3.7E-02	ca	3.7E-01	ca		
		1.0E+00	x			1.0E+00	r	0	0.10	79-22-1	Methyl chlorocarbonate	6.1E+04	nc	1.0E+05	max	3.7E+03	nc	3.6E+04	nc		
		5.0E-04	i			5.0E-04	r	0	0.10	94-74-6	2-Methyl-4-chlorophenoxyacetic acid	3.1E+01	nc	4.4E+02	nc	1.8E+00	nc	1.8E+01	nc		
		1.0E-02	i			1.0E-02	r	0	0.10	94-81-5	4-(2-Methyl-4-chlorophenoxy) butyric acid	6.1E+02	nc	8.8E+03	nc	3.7E+01	nc	3.6E+02	nc		
		1.0E-03	i			1.0E-03	r	0	0.10	93-65-2	2-(2-Methyl-4-chlorophenoxy) propionic acid	6.1E+01	nc	8.8E+02	nc	3.7E+00	nc	3.6E+01	nc		
		1.0E-03	i			1.0E-03	r	0	0.10	16484-77-8	2-(2-Methyl-1,4-chlorophenoxy) propionic acid	6.1E+01	nc	8.8E+02	nc	3.7E+00	nc	3.6E+01	nc		
		8.6E-01	r			8.6E-01	h	1		108-87-2	**Methylcyclohexane**	2.6E+03	nc	8.8E+03	nc	3.1E+03	nc	5.2E+03	nc		
2.5E-01	h			2.5E-01	r			0	0.10	101-77-9	4,4'-Methylenebisbenzeneamine	1.9E+00	ca	9.9E+00	ca	2.7E-02	ca	2.7E-01	ca		
1.3E-01	h	7.0E-04	h	1.3E-01	h	7.0E-04	r	0	0.10	101-14-4	4,4'-Methylene bis(2-chloroaniline)	3.7E+00	ca*	1.9E+01	ca*	5.2E-02	ca*	5.2E-01	ca*		
4.6E-02	i			4.6E-02	r			0	0.10	101-61-1	4,4'-Methylene bis(N,N'-dimethyl)aniline	1.1E+01	ca	5.4E+01	ca	1.5E-01	ca	1.5E+00	ca		
		1.0E-02	h			1.0E-02	r	1		74-95-3	**Methylene bromide**	6.7E+01	nc	2.4E+02	nc	3.7E+01	nc	6.1E+01	nc		
7.5E-03	i	6.0E-02	i	1.6E-03	i	8.6E-01	h	1		75-09-2	Methylene chloride	8.9E+00	ca	2.1E+01	ca	4.1E+00	ca	4.3E+00	ca	2E-02	1E-03
		1.7E-04	r			1.7E-04	i	0	0.10	101-68-8	4,4'-Methylene diphenyl diisocyanate	1.0E+01	nc	1.5E+02	nc	6.2E-01	nc	6.2E+00	nc		
		6.0E-01	i			2.9E-01	i	1		78-93-3	Methyl ethyl ketone	7.3E+03	nc	2.8E+04	nc	1.0E+03	nc	1.9E+03	nc		
1.1E+00	h			1.1E+00	r			0	0.10	60-34-4	Methyl hydrazine	4.4E-01	ca	2.2E+00	ca	6.1E-03	ca	6.1E-02	ca		
		8.0E-02	h			2.3E-02	h	1		108-10-1	Methyl isobutyl ketone	7.9E+02	nc	2.9E+03	nc	8.3E+01	nc	1.6E+02	nc		
		5.7E-04	r			5.7E-04	n	0	0.10	74-93-1	Methyl Mercaptan	3.5E+01	nc	5.0E+02	nc	2.1E+00	nc	2.1E+01	nc		
		1.4E+00	i			2.0E-01	i	1		80-62-6	Methyl methacrylate	2.2E+03	nc	2.7E+03	sat	7.3E+02	nc	1.4E+03	nc		
3.3E-02	h			3.3E-02	r			0	0.10	99-55-8	2-Methyl-5-nitroaniline	1.5E+01	ca	7.5E+01	ca	2.0E-01	ca	2.0E+00	ca		
		2.5E-04	i			2.5E-04	r	0	0.10	298-00-0	Methyl parathion	1.5E+01	nc	2.2E+02	nc	9.1E-01	nc	9.1E+00	nc		
		5.0E-02	i			5.0E-02	r	0	0.10	95-48-7	2-Methylphenol	3.1E+03	nc	4.4E+04	nc	1.8E+02	nc	1.8E+03	nc	2E+01	8E-01
		5.0E-02	i			5.0E-02	r	0	0.10	108-39-4	3-Methylphenol	3.1E+03	nc	4.4E+04	nc	1.8E+02	nc	1.8E+03	nc		
		5.0E-03	h			5.0E-03	r	0	0.10	106-44-5	4-Methylphenol	3.1E+02	nc	4.4E+03	nc	1.8E+01	nc	1.8E+02	nc		
		2.0E-02	n			2.0E-02	r	0	0.10	993-13-5	Methyl phosphonic acid	1.2E+03	nc	1.8E+04	nc	7.3E+01	nc	7.3E+02	nc		
		6.0E-03	h			1.1E-02	h	1		25013-15-4	Methyl styrene (mixture)	1.3E+02	nc	5.6E+02	nc	4.2E+01	nc	6.0E+01	nc		
		7.0E-02	h			7.0E-02	r	1		98-83-9	Methyl styrene (alpha)	6.8E+02	sat	6.8E+02	sat	2.6E+02	nc	4.3E+02	nc		
						8.6E-01	i	1		1634-04-4	Methyl tertbutyl ether (MTBE)					3.1E+03	nc	2.0E+01	nc/ca		
		1.5E-01	i			1.5E-01	r	0	0.10	51218-45-2	Metolaclor (Dual)	9.2E+03	nc	1.0E+05	max	5.5E+02	nc	5.5E+03	nc		
		2.5E-02	i			2.5E-02	r	0	0.10	21087-64-9	Metribuzin	1.5E+03	nc	2.2E+04	nc	9.1E+01	nc	9.1E+02	nc		
1.8E+00	x	2.0E-04	i	1.8E+00	r	2.0E-04	r	0	0.10	2385-85-5	Mirex	2.7E-01	ca*	1.4E+00	ca	3.7E-03	ca	3.7E-02	ca		
		2.0E-03	i			2.0E-03	r	0	0.10	2212-67-1	Molinate	1.2E+02	nc	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc		
		5.0E-03	h					0		7439-98-7	Molybdenum	3.9E+02	nc	1.0E+04	nc			1.8E+02	nc		
		1.0E-01	h			1.0E-01	h	0	0.10	10599-90-3	Monochloramine	6.1E+03	nc	8.8E+04	nc	3.7E+02	nc	3.6E+03	nc		
		2.0E-03	i			2.0E-03	r	0	0.10	300-76-5	Naled	1.2E+02	nc	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc		
		1.0E-01	i			1.0E-01	r	0	0.10	15299-99-7	Napropamide	6.1E+03	nc	8.8E+04	nc	3.7E+02	nc	3.6E+03	nc		
		2.0E-02	i					0		7440-02-0	Nickel (soluble salts)	1.6E+03	nc	4.1E+04	nc			7.3E+02	nc	1E+02	7E+00
											"CAL-Modified PRG" (PEA, 1994)	1.5E+02									

Key : i=IRIS n=NCEA h=HEAST x=WITHDRAWN o=Other EPA DOCUMENTS r=ROUTE EXTRAPOLATION ca=CANCER PRG nc=NONCANCER PRG sat=SOIL SATURATION max=CEILING LIMIT *(where: nc < 100X ca) **(where: nc < 10X ca)

[redacted] FOR PLANNING PURPOSES

TOXICITY INFORMATION													CONTAMINANT	PRELIMINARY REMEDIATION GOALS (PRGs)								SOIL SCREENING LEVELS	
SFo 1/(mg/kg-d)		RfDo (mg/kg-d)		SFi 1/(mg/kg-d)		RfDi (mg/kg-d)		GIABS	ABS	CSF soils	CAS NUMBER			Residential Soil (mg/kg)		Industrial Soil (mg/kg)		Ambient Air (ug/m^3)		Tap Water (ug/l)		Migration to Groundwater DAF 20 (mg/kg)	DAF 1 (mg/kg)
				8.4E-01	i				0				Nickel refinery dust					8.0E-03	ca				
				1.7E+00	i				0		12035-72-2		Nickel subsulfide			1.1E+04	ca	4.0E-03	ca				
		1.5E-03	x			1.5E-03	r	0	0.10		1929-82-4		Nitrapyrin	9.2E+01	nc	1.3E+03	nc	5.5E+00	nc	5.5E+01	nc		
Tap Water PRG Based on Infant NOAEL (see IRIS)											14797-55-8		Nitrate							1.0E+04	nc		
		1.0E-01	x								10102-43-9		Nitric Oxide	7.8E+03	nc	1.0E+05	max						
Tap Water PRG Based on Infant NOAEL (see IRIS)											14797-65-0		Nitrite							1.0E+03	nc		
		5.7E-05	r			5.7E-05	h	0	0.10		88-74-4		2-Nitroaniline	3.5E+00	nc	5.0E+01	nc	2.1E-01	nc	2.1E+00	nc		
		5.0E-04	i			5.7E-04	h	1			98-95-3		Nitrobenzene	2.0E+01	nc	1.1E+02	nc	2.1E+00	nc	3.4E+00	nc	1E-01	7E-03
		7.0E-02	h			7.0E-02	r	0	0.10		67-20-9		Nitrofurantoin	4.3E+03	nc	6.2E+04	nc	2.6E+02	nc	2.6E+03	nc		
1.5E+00	h			9.4E+00	h			0	0.10		59-87-0		Nitrofurazone	3.2E-01	ca	1.6E+00	ca	7.2E-04	ca	4.5E-02	ca		
1.4E-02	n			1.4E-02	r			0	0.10		55-63-0		Nitroglycerin	3.5E+01	ca	1.8E+02	ca	4.8E-01	ca	4.8E+00	ca		
		1.0E-01	i			1.0E-01	r	0	0.10		556-88-7		Nitroguanidine	6.1E+03	nc	8.8E+04	nc	3.7E+02	nc	3.6E+03	nc		
		8.0E-03	n			8.00E-03	r	0	0.10		100-02-7		4-Nitrophenol	4.9E+02	nc	7.0E+03	nc	2.9E+01	nc	2.9E+02	nc		
9.4E+00	r	5.7E-03	r	9.4E+00	h	5.7E-03	i	1			79-46-9		2-Nitropropane					7.2E-04	ca	1.2E-03	ca		
5.4E+00	i			5.6E+00	i			1			924-16-3		N-Nitrosodi-n-butylamine	2.4E-02	ca	6.1E-02	ca	1.2E-03	ca	2.0E-03	ca		
2.8E+00	i			2.8E+00	r			0	0.10		1116-54-7		N-Nitrosodiethanolamine	1.7E-01	ca	8.8E-01	ca	2.4E-03	ca	2.4E-02	ca		
1.5E+02	i			1.5E+02	i			0	0.10		55-18-5		N-Nitrosodiethylamine	3.2E-03	ca	1.6E-02	ca	4.5E-05	ca	4.5E-04	ca		
5.1E+01	i			4.9E+01	i			0	0.10		62-75-9		N-Nitrosodimethylamine	9.5E-03	ca	4.8E-02	ca	1.4E-04	ca	1.3E-03	ca		
4.9E-03	i			4.9E-03	r			0	0.10		86-30-6		N-Nitrosodiphenylamine	9.9E+01	ca	5.0E+02	ca	1.4E+00	ca	1.4E+01	ca	1E+00	6E-02
7.0E+00	i			7.0E+00	r			0	0.10		621-64-7		N-Nitroso di-n-propylamine	6.9E-02	ca	3.5E-01	ca	9.6E-04	ca	9.6E-03	ca	5E-05	2E-06
2.2E+01	i			2.2E+01	r			0	0.10		10595-95-6		N-Nitroso-N-methylethylamine	2.2E-02	ca	1.1E-01	ca	3.1E-04	ca	3.1E-03	ca		
2.1E+00	i			2.1E+00	i			0	0.10		930-55-2		N-Nitrosopyrrolidine	2.3E-01	ca	1.2E+00	ca	3.1E-03	ca	3.2E-02	ca		
		1.0E-02	h			1.0E-02	r	1			99-08-1		m-Nitrotoluene	3.7E+02	nc	1.00E+03	sat	3.7E+01	nc	6.1E+01	nc		
		1.0E-02	h			1.0E-02	r	1			99-08-1		o-Nitrotoluene	3.7E+02	nc	1.00E+03	sat	3.7E+01	nc	6.1E+01	nc		
		1.0E-02	h			1.0E-02	r	1			99-99-0		p-Nitrotoluene	3.7E+02	nc	1.00E+03	sat	3.7E+01	nc	6.1E+01	nc		
		4.0E-02	i			4.0E-02	r	0	0.10		27314-13-2		Norflurazon	2.4E+03	nc	3.5E+04	nc	1.5E+02	nc	1.5E+03	nc		
		7.0E-04	i			7.0E-04	r	0	0.10		85509-19-9		NuStar	4.3E+01	nc	6.2E+02	nc	2.6E+00	nc	2.6E+01	nc		
		3.0E-03	i			3.0E-03	r	0	0.10		32536-52-0		Octabromodiphenyl ether	1.8E+02	nc	2.6E+03	nc	1.1E+01	nc	1.1E+02	nc		
		5.0E-02	i			5.0E-02	r	0	0.10		2691-41-0		Octahydro-1357-tetranitro-1357- tetrazocine (HMX)	3.1E+03	nc	4.4E+04	nc	1.8E+02	nc	1.8E+03	nc		
		2.0E-03	h			2.0E-03	r	0	0.10		152-16-9		Octamethylpyrophosphoramide	1.2E+02	nc	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc		
		5.0E-02	i			5.0E-02	r	0	0.10		19044-88-3		Oryzalin	3.1E+03	nc	4.4E+04	nc	1.8E+02	nc	1.8E+03	nc		
		5.0E-03	i			5.0E-03	r	0	0.10		19666-30-9		Oxadiazon	3.1E+02	nc	4.4E+03	nc	1.8E+01	nc	1.8E+02	nc		
		2.5E-02	i			2.5E-02	r	0	0.10		23135-22-0		Oxamyl	1.5E+03	nc	2.2E+04	nc	9.1E+01	nc	9.1E+02	nc		
		3.0E-03	i			3.0E-03	r	0	0.10		42874-03-3		Oxyfluorfen	1.8E+02	nc	2.6E+03	nc	1.1E+01	nc	1.1E+02	nc		
		1.3E-02	i			1.3E-02	r	0	0.10		76738-62-0		Paclobutrazol	7.9E+02	nc	1.1E+04	nc	4.7E+01	nc	4.7E+02	nc		
		4.5E-03	i			4.5E-03	r	0	0.10		4685-14-7		Paraquat	2.7E+02	nc	4.0E+03	nc	1.6E+01	nc	1.6E+02	nc		
		6.0E-03	h			6.0E-03	r	0	0.10		56-38-2		Parathion	3.7E+02	nc	5.3E+03	nc	2.2E+01	nc	2.2E+02	nc		
		5.0E-02	h			5.0E-02	r	0	0.10		1114-71-2		Pebulate	3.1E+03	nc	4.4E+04	nc	1.8E+02	nc	1.8E+03	nc		
		4.0E-02	i			4.0E-02	r	0	0.10		40487-42-1		Pendimethalin	2.4E+03	nc	3.5E+04	nc	1.5E+02	nc	1.5E+03	nc		
2.3E-02	h			2.3E-02	r			0	0.10		87-84-3		Pentabromo-6-chloro cyclohexane	2.1E+01	ca	1.1E+02	ca	2.9E-01	ca	2.9E+00	ca		
		2.0E-03	i			2.0E-03	r	0	0.10		32534-81-9		Pentabromodiphenyl ether	1.2E+02	nc	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc		
		8.0E-04	i			8.0E-04	r	0	0.10		608-93-5		Pentachlorobenzene	4.9E+01	nc	7.0E+02	nc	2.9E+00	nc	2.9E+01	nc		
2.6E-01	h	3.0E-03	i	2.6E-01	r	3.0E-03	r	0	0.10		82-68-8		Pentachloronitrobenzene	1.9E+00	ca*	9.5E+00	ca	2.6E-02	ca	2.6E-01	ca		
1.2E-01	i	3.0E-02	i	1.2E-01	r	3.0E-02	r	0	0.25		87-86-5		Pentachlorophenol	3.0E+00	ca	1.1E+01	ca	5.6E-02	ca	5.6E-01	ca	3E-02	1E-03
		5.0E-04	x					0			7601-90-3		Perchlorate	3.9E+01	nc	1.0E+03	nc			1.8E+01	nc		
		5.0E-02	i			5.0E-02	r	0	0.10		52645-53-1		Permethrin	3.1E+03	nc	4.4E+04	nc	1.8E+02	nc	1.8E+03	nc		
		2.5E-01	i			2.5E-01	r	0	0.10		13684-63-4		Phenmedipham	1.5E+04	nc	1.0E+05	max	9.1E+02	nc	9.1E+03	nc		
		6.0E-01	i			6.0E-01	r	0	0.10		108-95-2		Phenol	3.7E+04	nc	1.0E+05	max	2.2E+03	nc	2.2E+04	nc	1E+02	5E+00
		2.0E-03	n			2.0E-03	r	0	0.10		92-84-2		Phenothiazine	1.2E+02	nc	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc		
		6.0E-03	i			6.0E-03	r	0	0.10		108-45-2		m-Phenylenediamine	3.7E+02	nc	5.3E+03	nc	2.2E+01	nc	2.2E+02	nc		
		1.9E-01	h			1.9E-01	r	0	0.10		108-50-3		p-Phenylenediamine	1.2E+04	nc	1.0E+05	max	6.9E+02	nc	6.9E+03	nc		
		8.0E-05	i			8.0E-05	r	0	0.10		62-38-4		Phenylmercuric acetate	4.9E+00	nc	7.0E+01	nc	2.9E-01	nc	2.9E+00	nc		
1.9E-03	h			1.9E-03	r			0	0.10		90-43-7		2-Phenylphenol	2.5E+02	ca	1.3E+03	ca	3.5E+00	ca	3.5E+01	ca		
		2.0E-04	h			2.0E-04	r	0	0.10		298-02-2		Phorate	1.2E+01	nc	1.8E+02	nc	7.3E-01	nc	7.3E+00	nc		
		2.0E-02	i			2.0E-02	r	0	0.10		732-11-6		Phosmet	1.2E+03	nc	1.8E+04	nc	7.3E+01	nc	7.3E+02	nc		
		3.0E-04	h			6.6E-05	i	0	0.10		7803-51-2		Phosphine	1.8E+01	nc	2.6E+02	nc	3.1E-01	nc	1.1E+01	nc		
						2.9E-03	i				7664-38-2		Phosphoric acid					1.0E+01	nc				
		2.0E-05	i					0			7723-14-0		Phosphorus (white)	1.6E+00	nc	4.1E+01	nc			7.3E-01	nc		

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FOR PLANNING PURPOSES

TOXICITY INFORMATION										CONTAMINANT	PRELIMINARY REMEDIATION GOALS (PRGs)								SOIL SCREENING LEVELS	
SFo 1/(mg/kg-d)		RfDo (mg/kg-d)		SFi 1/(mg/kg-d)		RfDi (mg/kg-d)		skin abs. fac. soils	CAS No.		Residential Soil (mg/kg)		Industrial Soil (mg/kg)		Ambient Air (ug/m^3)		Tap Water (ug/l)		Migration to Ground Water DAF 20 (mg/kg)	DAF 1 (mg/kg)
		1.0E+00	h			1.0E+00	r	0.10	100-21-0	p-Phthalic acid	6.1E+04	nc	1.0E+05	max	3.7E+03	nc	3.6E+04	nc		
		2.0E+00	i			3.4E-02	h	0.10	85-44-9	Phthalic anhydride	1.0E+05	max	1.0E+05	max	1.2E+02	nc	7.3E+04	nc		
		7.0E-02	i			7.0E-02	r	0.10	1918-02-1	Picloram	4.3E+03	nc	6.2E+04	nc	2.6E+02	nc	2.6E+03	nc		
		1.0E-02	i			1.0E-02	r	0.10	23505-41-1	Pirimiphos-methyl	6.1E+02	nc	8.8E+03	nc	3.7E+01	nc	3.6E+02	nc		
8.9E+00	h	7.0E-06	h	8.9E+00	r	7.0E-06	r	0.10		Polybrominated biphenyls	5.5E-02	ca**	2.8E-01	ca*	7.6E-04	ca*	7.6E-03	ca*		
2.0E+00	i			2.0E+00	i			0.14	1336-36-3	Polychlorinated biphenyls (PCBs)	2.2E-01	ca	1.0E+00	ca	3.4E-03	ca	3.4E-02	ca		
7.0E-02	i	7.0E-05	i	7.0E-02	i	7.0E-05	r	0.14	12674-11-2	**Aroclor 1016**	3.9E+00	nc	2.9E+01	ca**	9.6E-02	ca**	9.6E-01	ca**		
2.0E+00	i			2.0E+00	i			0.14	11104-28-2	**Aroclor 1221**	2.2E-01	ca	1.0E+00	ca	3.4E-03	ca	3.4E-02	ca		
2.0E+00	i			2.0E+00	i			0.14	11141-16-5	**Aroclor 1232**	2.2E-01	ca	1.0E+00	ca	3.4E-03	ca	3.4E-02	ca		
2.0E+00	i			2.0E+00	i			0.14	53469-21-9	**Aroclor 1242**	2.2E-01	ca	1.0E+00	ca	3.4E-03	ca	3.4E-02	ca		
2.0E+00	i			2.0E+00	i			0.14	12672-29-6	**Aroclor 1248**	2.2E-01	ca	1.0E+00	ca	3.4E-03	ca	3.4E-02	ca		
2.0E+00	i	2.0E-05	i	2.0E+00	i	2.0E-05	r	0.14	11097-69-1	**Aroclor 1254**	2.2E-01	ca**	1.0E+00	ca*	3.4E-03	ca*	3.4E-02	ca*		
2.0E+00	i			2.0E+00	i			0.14	11096-82-5	**Aroclor 1260**	2.2E-01	ca	1.0E+00	ca	3.4E-03	ca	3.4E-02	ca		
								0.13		Polynuclear aromatic hydrocarbons (PAHs)										
		6.0E-02	i			6.0E-02	r	1	83-32-9	Acenaphthene	3.7E+03	nc	3.8E+04	nc	2.2E+02	nc	3.7E+02	nc	6E+02	3E+01
		3.0E-01	i			3.0E-01	r	1	120-12-7	Anthracene	2.2E+04	nc	1.0E+05	max	1.1E+03	nc	1.8E+03	nc	1E+04	6E+02
7.3E-01	n			3.1E-01	n			0.13	56-55-3	Benz[a]anthracene	6.2E-01	ca	2.9E+00	ca	2.2E-02	ca	9.2E-02	ca	2E+00	8E-02
7.3E-01	n			3.1E-01	n			0.13	205-99-2	Benzo[b]fluoranthene	6.2E-01	ca	2.9E+00	ca	2.2E-02	ca	9.2E-02	ca	5E+00	2E-01
7.3E-02	n			3.1E-02	n			0.13	207-08-9	Benzo[k]fluoranthene	6.2E+00	ca	2.9E+01	ca	2.2E-01	ca	9.2E-01	ca	5E+01	2E+00
										"CAL-Modified PRG" (PEA, 1994)	6.1E-01									
7.3E+00	i			3.1E+00	n			0.13	50-32-8	Benzo[a]pyrene	6.2E-02	ca	2.9E-01	ca	2.2E-03	ca	9.2E-03	ca	8E+00	4E-01
										"CAL-Modified PRG" (PEA, 1994)							1.5E-03			
7.3E-03	n			3.1E-03	n			0.13	218-01-9	Chrysene	6.2E+01	ca	2.9E+02	ca	2.2E+00	ca	9.2E+00	ca	2E+02	8E+00
										"CAL-Modified PRG" (PEA, 1994)	6.1E+00									
7.3E+00	n			3.1E+00	n			0.13	53-70-3	Dibenz[ah]anthracene	6.2E-02	ca	2.9E-01	ca	2.2E-03	ca	9.2E-03	ca	2E+00	8E-02
		4.0E-02	i			4.0E-02	r	0.13	206-44-0	Fluoranthene	2.3E+03	nc	3.0E+04	nc	1.5E+02	nc	1.5E+03	nc	4E+03	2E+02
		4.0E-02	i			4.0E-02	r	1	86-73-7	Fluorene	2.6E+03	nc	3.3E+04	nc	1.5E+02	nc	2.4E+02	nc	6E+02	3E+01
7.3E-01	n			3.1E-01	n			0.13	193-39-5	Indeno[1,2,3-cd]pyrene	6.2E-01	ca	2.9E+00	ca	2.2E-02	ca	9.2E-02	ca	1E+01	7E-01
		2.0E-02	i			8.6E-04	i	1	91-20-3	Naphthalene	5.6E+01	nc	1.9E+02	nc	3.1E+00	nc	6.2E+00	nc	8E+01	4E+00
		3.0E-02	i			3.0E-02	r	1	129-00-0	Pyrene	2.3E+03	nc	5.4E+04	nc	1.1E+02	nc	1.8E+02	nc	4E+03	2E+02
1.5E-01	i	9.0E-03	i	1.5E-01	r	9.0E-03	r	0.10	67747-09-5	Prochloraz	3.2E+00	ca	1.6E+01	ca	4.5E-02	ca	4.5E-01	ca		
		6.0E-03	h			6.0E-03	r	0.10	26399-36-0	Profluralin	3.7E+02	nc	5.3E+03	nc	2.2E+01	nc	2.2E+02	nc		
		1.5E-02	i			1.5E-02	r	0.10	1610-18-0	Prometon	9.2E+02	nc	1.3E+04	nc	5.5E+01	nc	5.5E+02	nc		
		4.0E-03	i			4.0E-03	r	0.10	7287-19-6	Prometryn	2.4E+02	nc	3.5E+03	nc	1.5E+01	nc	1.5E+02	nc		
		7.5E-02	i			7.5E-02	r	0.10	23950-58-5	Pronamide	4.6E+03	nc	6.6E+04	nc	2.7E+02	nc	2.7E+03	nc		
		1.3E-02	i			1.3E-02	r	0.10	1918-16-7	Propachlor	7.9E+02	nc	1.1E+04	nc	4.7E+01	nc	4.7E+02	nc		
		5.0E-03	i			5.0E-03	r	0.10	709-98-8	Propanil	3.1E+02	nc	4.4E+03	nc	1.8E+01	nc	1.8E+02	nc		
		2.0E-02	i			2.0E-02	r	0.10	2312-35-8	Propargite	1.2E+03	nc	1.8E+04	nc	7.3E+01	nc	7.3E+02	nc		
		2.0E-03	i			2.0E-03	r	0.10	107-19-7	Propargyl alcohol	1.2E+02	nc	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc		
		2.0E-02	i			2.0E-02	r	0.10	139-40-2	Propazine	1.2E+03	nc	1.8E+04	nc	7.3E+01	nc	7.3E+02	nc		
		2.0E-02	i			2.0E-02	r	0.10	122-42-9	Propham	1.2E+03	nc	1.8E+04	nc	7.3E+01	nc	7.3E+02	nc		
		1.3E-02	i			1.3E-02	r	0.10	60207-90-1	Propiconazole	7.9E+02	nc	1.1E+04	nc	4.7E+01	nc	4.7E+02	nc		
		1.0E-01	i			1.1E-01	i	1	98-82-8	Isopropylbenzene (Cumene)	1.6E+02	nc	5.2E+02	nc	4.0E+02	nc	6.6E+02	nc		
		1.0E-02	n			1.0E-02	r	1	103-65-1	n-Propylbenzene	1.4E+02	nc	2.4E+02	sat	3.7E+01	nc	6.1E+01	nc		
		2.0E+01	h			2.0E+01	r	0.10	57-55-6	Propylene glycol	1.0E+05	max	1.0E+05	max	7.3E+04	nc	7.3E+05	nc		
		7.0E-01	h			7.0E-01	r	0.10	111-35-3	Propylene glycol, monoethyl ether	4.3E+04	nc	1.0E+05	max	2.6E+03	nc	2.6E+04	nc		
		7.0E-01	h			5.7E-01	i	0.10	107-98-2	Propylene glycol, monomethyl ether	4.3E+04	nc	1.0E+05	max	2.1E+03	nc	2.6E+04	nc		
2.4E-01	i	8.6E-03	r	1.3E-02	i	8.6E-03	i	1	75-56-9	Propylene oxide	1.9E+00	ca*	9.1E+00	ca*	5.2E-01	ca*	2.2E-01	ca		
		2.5E-01	i			2.5E-01	r	0.10	81335-77-5	Pursuit	1.5E+04	nc	1.0E+05	max	9.1E+02	nc	9.1E+03	nc		
		2.5E-02	i			2.5E-02	r	0.10	51630-58-1	Pydrin	1.5E+03	nc	2.2E+04	nc	9.1E+01	nc	9.1E+02	nc		
		1.0E-03	i			1.0E-03	r	0.10	110-86-1	Pyridine	6.1E+01	nc	8.8E+02	nc	3.7E+00	nc	3.6E+01	nc		
		5.0E-04	i			5.0E-04	r	0.10	13593-03-8	Quinalphos	3.1E+01	nc	4.4E+02	nc	1.8E+00	nc	1.8E+01	nc		
1.2E+01	h			1.2E+01	r			0.10	91-22-5	Quinoline	4.1E-02	ca	2.1E-01	ca	5.6E-04	ca	5.6E-03	ca		
1.1E-01	i	3.0E-03	i	1.1E-01	r	3.0E-03	r	0.10	121-82-4	RDX (Cyclonite)	4.4E+00	ca*	2.2E+01	ca	6.1E-02	ca	6.1E-01	ca		
		3.0E-02	i			3.0E-02	r	0.10	10453-86-8	Resmethrin	1.8E+03	nc	2.6E+04	nc	1.1E+02	nc	1.1E+03	nc		
		5.0E-02	h			5.0E-02	r	0.10	299-84-3	Ronnel	3.1E+03	nc	4.4E+04	nc	1.8E+02	nc	1.8E+03	nc		
		4.0E-03	i			4.0E-03	r	0.10	83-79-4	Rotenone	2.4E+02	nc	3.5E+03	nc	1.5E+01	nc	1.5E+02	nc		
		2.5E-02	i			2.5E-02	r	0.10	78587-05-0	Savey	1.5E+03	nc	2.2E+04	nc	9.1E+01	nc	9.1E+02	nc		

Key : i=IRIS n=NCEA h=HEAST x=WITHDRAWN o=Other EPA DOCUMENTS r=ROUTE EXTRAPOLATION ca=CANCER PRG nc=NONCANCER PRG sat=SOIL SATURATION max=CEILING LIMIT *(where: nc < 100X ca) **(where: nc < 10X ca)

FOR PLANNING PURPOSES

TOXICITY INFORMATION											CONTAMINANT	PRELIMINARY REMEDIATION GOALS (PRGs)								SOIL SCREENING LEVELS	
SFO 1/(mg/kg-d)		RfDO (mg/kg-d)		SFI 1/(mg/kg-d)		RfDI (mg/kg-d)		VO C	abs soils	CAS No.		Residential Soil (mg/kg)		Industrial Soil (mg/kg)		Ambient Air (ug/m^3)		Tap Water (ug/l)		Migration to Ground Water DAF 20 (mg/kg)	DAF 1 (mg/kg)
		5.0E-03	i					0	0.10	7783-00-8	Selenious Acid	3.1E+02	nc	4.4E+03	nc			1.8E+02	nc		
		5.0E-03	i					0		7782-49-2	Selenium	3.9E+02	nc	1.0E+04	nc			1.8E+02	nc	5E+00	3E-01
		5.0E-03	h					0	0.10	630-10-4	Selenourea	3.1E+02	nc	4.4E+03	nc			1.8E+02	nc		
		9.0E-02	i			9.0E-02	r	0	0.10	74051-80-2	Sethoxydim	5.5E+03	nc	7.9E+04	nc	3.3E+02	nc	3.3E+03	nc		
		5.0E-03	i					0		7440-22-4	Silver and compounds	3.9E+02	nc	1.0E+04	nc			1.8E+02	nc	3E+01	2E+00
1.2E-01	h	5.0E-03	i	1.2E-01	r	2.0E-03	r	0	0.10	122-34-9	Simazine	4.1E+00	ca*	2.1E+01	ca	5.6E-02	ca	5.6E-01	ca		
		4.0E-03	i			4.0E-03	r	0	0.10	26628-22-8	Sodium azide	2.4E+02	nc	3.5E+03	nc	1.5E+01	nc	1.5E+02	nc		
2.7E-01	h	3.0E-02	i	2.7E-01	r	3.0E-02	r	0	0.10	148-18-5	Sodium diethyldithiocarbamate	1.8E+00	ca	9.1E+00	ca	2.5E-02	ca	2.5E-01	ca		
		2.0E-05	i			2.0E-05	r	0	0.10	62-74-8	Sodium fluoroacetate	1.2E+00	nc	1.8E+01	nc	7.3E-02	nc	7.3E-01	nc		
		1.0E-03	h			1.0E-03	r	0	0.10	13718-26-8	Sodium metavanadate	6.1E+01	nc	8.8E+02	nc	3.7E+00	nc	3.6E+01	nc		
		6.0E-01	i					0		7440-24-6	Strontium, stable	4.7E+04	nc	1.0E+05	max			2.2E+04	nc		
		3.0E-04	i			3.0E-04	r	0	0.10	57-24-9	Strychnine	1.8E+01	nc	2.6E+02	nc	1.1E+00	nc	1.1E+01	nc		
		2.0E-01	i			2.9E-01	i	1		100-42-5	Styrene	1.7E+03	sat	1.7E+03	sat	1.1E+03	nc	1.6E+03	nc	4E+00	2E-01
		2.5E-02	i			2.5E-02	r	0	0.10	88671-89-0	Systhane	1.5E+03	nc	2.2E+04	nc	9.1E+01	nc	9.1E+02	nc		
1.5E+05	h			1.5E+05	h			0	0.03	1746-01-6	2,3,7,8-TCDD (dioxin)	3.9E-06	ca	2.7E-05	ca	4.5E-08	ca	4.5E-07	ca		
		7.0E-02	i			7.0E-02	r	0	0.10	34014-18-1	Tebuthiuron	4.3E+03	nc	6.2E+04	nc	2.6E+02	nc	2.6E+03	nc		
		2.0E-02	h			2.0E-02	r	0	0.10	3383-96-8	Temephos	1.2E+03	nc	1.8E+04	nc	7.3E+01	nc	7.3E+02	nc		
		1.3E-02	i			1.3E-02	r	0	0.10	5902-51-2	Terbacil	7.9E+02	nc	1.1E+04	nc	4.7E+01	nc	4.7E+02	nc		
		2.5E-05	h			2.5E-05	r	0	0.10	13071-79-9	Terbufos	1.5E+00	nc	2.2E+01	nc	9.1E-02	nc	9.1E-01	nc		
		1.0E-03	i			1.0E-03	r	0	0.10	886-50-0	Terbutryn	6.1E+01	nc	8.8E+02	nc	3.7E+00	nc	3.6E+01	nc		
		3.0E-04	i			3.0E-04	r	0	0.10	95-94-3	1,2,4,5-Tetrachlorobenzene	1.8E+01	nc	2.6E+02	nc	1.1E+00	nc	1.1E+01	nc		
2.6E-02	i	3.0E-02	i	2.6E-02	i	3.0E-02	r	1		630-20-6	1,1,1,2-Tetrachloroethane	3.0E+00	ca	7.0E+00	ca	2.6E-01	ca	4.3E-01	ca		
2.0E-01	i	6.00E-02	n	2.0E-01	i	6.00E-02	r	1		79-34-5	**1,1,2,2-Tetrachloroethane**	3.8E-01	ca	9.0E-01	ca	3.3E-02	ca	5.5E-02	ca	3E-03	2E-04
5.2E-02	n	1.0E-02	i	2.0E-03	n	1.1E-01	n	1		127-18-4	Tetrachloroethylene (PCE)	5.7E+00	ca*	1.9E+01	ca*	3.3E+00	ca	1.1E+00	ca	6E-02	3E-03
											"CAL-Modified PRG" (PEA, 1994)					3.2E-01					
		3.0E-02	i			3.0E-02	r	0	0.10	58-90-2	2,3,4,6-Tetrachlorophenol	1.8E+03	nc	2.6E+04	nc	1.1E+02	nc	1.1E+03	nc		
2.0E+01	h			2.0E+01	r			0	0.10	5216-25-1	p,a,a,a-Tetrachlorotoluene	2.4E-02	ca	1.2E-01	ca	3.4E-04	ca	3.4E-03	ca		
2.4E-02	h	3.0E-02	i	2.4E-02	r	3.0E-02	r	0	0.10	961-11-5	Tetrachlorovinphos	2.0E+01	ca*	1.0E+02	ca	2.8E-01	ca	2.8E+00	ca		
		5.0E-04	i			5.0E-04	r	0	0.10	3689-24-5	Tetraethyldithiopyrophosphate	3.1E+01	nc	4.4E+02	nc	1.8E+00	nc	1.8E+01	nc		
7.6E-03	n	2.1E-01	n	6.8E-03	n	8.6E-02	n	0	0.10	109-99-9	**Tetrahydrofuran**	6.4E+01	ca	3.2E+02	ca	9.9E-01	ca	8.8E+00	ca		
		7.0E-05	x					0		1314-32-5	Thallic oxide	5.5E+00	nc	1.4E+02	nc			2.6E+00	nc		
		9.0E-05	i					0		563-68-8	Thallium acetate	7.0E+00	nc	1.8E+02	nc			3.3E+00	nc	7E-01	4E-01
		8.0E-05	i					0		6533-73-9	Thallium carbonate	6.3E+00	nc	1.6E+02	nc			2.9E+00	nc	7E-01	4E-01
		8.0E-05	i					0		7791-12-0	Thallium chloride	6.3E+00	nc	1.6E+02	nc			2.9E+00	nc	7E-01	4E-01
		9.0E-05	i					0		10102-45-1	Thallium nitrate	7.0E+00	nc	1.8E+02	nc			3.3E+00	nc	7E-01	4E-01
		9.0E-05	x					0		12039-52-0	Thallium selenite	7.0E+00	nc	1.8E+02	nc			3.3E+00	nc	7E-01	4E-01
		8.0E-05	i					0		7446-18-6	Thallium sulfate	6.3E+00	nc	1.6E+02	nc			2.9E+00	nc	7E-01	4E-01
		1.0E-02	i			1.0E-02	r	0	0.10	28249-77-6	Thiobencarb	6.1E+02	nc	8.8E+03	nc	3.7E+01	nc	3.6E+02	nc		
		1.0E-01	n			1.0E-01	r	0	0.10	N/A	Thiocyanate	6.1E+03	nc	1.0E+05	max	3.7E+02	nc	3.6E+03	nc		
		3.0E-04	h			3.0E-04	r	0	0.10	39196-18-4	Thiofanox	1.8E+01	nc	2.6E+02	nc	1.1E+00	nc	1.1E+01	nc		
		8.0E-02	i			8.0E-02	r	0	0.10	23564-05-8	Thiophanate-methyl	4.9E+03	nc	7.0E+04	nc	2.9E+02	nc	2.9E+03	nc		
		5.0E-03	i			5.0E-03	r	0	0.10	137-26-8	Thiram	3.1E+02	nc	4.4E+03	nc	1.8E+01	nc	1.8E+02	nc		
		6.0E-01	h					0			Tin (inorganic, see tributyltin oxide for organic tin)	4.7E+04	nc	1.0E+05	max			2.2E+04	nc		
		2.0E-01	i			1.1E-01	h	1		108-88-3	Toluene	5.2E+02	sat	5.2E+02	sat	4.0E+02	nc	7.2E+02	nc	1E+01	6E-01
3.2E+00	h			3.2E+00	r			0	0.10	95-80-7	Toluene-2,4-diamine	1.5E-01	ca	7.7E-01	ca	2.1E-03	ca	2.1E-02	ca		
		6.0E-01	h			6.0E-01	r	0	0.10	95-70-5	Toluene-2,5-diamine	3.7E+04	nc	1.0E+05	max	2.2E+03	nc	2.2E+04	nc		
		2.0E-01	h			2.0E-01	r	0	0.10	823-40-5	Toluene-2,6-diamine	1.2E+04	nc	1.0E+05	max	7.3E+02	nc	7.3E+03	nc		
2E-01	i			2E-01	r			0	0.10	106-49-0	p-Toluidine	2.6E+00	ca	1.3E+01	ca	3.5E-02	ca	3.5E-01	ca		
1.1E+00	i			1.1E+00	i			0	0.10	8001-35-2	Toxaphene	4.4E-01	ca	2.2E+00	ca	6.0E-03	ca	6.1E-02	ca	3E+01	2E+00
		7.5E-03	i			7.5E-03	r	0	0.10	66841-25-6	Tralomethrin	4.6E+02	nc	6.6E+03	nc	2.7E+01	nc	2.7E+02	nc		
		1.3E-02	i			1.3E-02	r	0	0.10	2303-17-5	Triallate	7.9E+02	nc	1.1E+04	nc	4.7E+01	nc	4.7E+02	nc		
		1.0E-02	i			1.0E-02	r	0	0.10	82097-50-5	Triasulfuron	6.1E+02	nc	8.8E+03	nc	3.7E+01	nc	3.6E+02	nc		
		5.0E-03	i			5.0E-03	r	0	0.10	615-54-3	1,2,4-Tribromobenzene	3.1E+02	nc	4.4E+03	nc	1.8E+01	nc	1.8E+02	nc		
		3.0E-04	i					0	0.10	56-35-9	Tributyltin oxide (TBTO)	1.8E+01	nc	2.6E+02	nc			1.1E+01	nc		
3.4E-02	h			3.4E-02	r			0	0.10	634-93-5	2,4,6-Trichloroaniline	1.4E+01	ca	7.3E+01	ca	2.0E-01	ca	2.0E+00	ca		
2.9E-02	h			2.9E-02	r			0	0.10	33663-50-2	2,4,6-Trichloroaniline hydrochloride	1.7E+01	ca	8.5E+01	ca	2.3E-01	ca	2.3E+00	ca		
		1.0E-02	i			5.7E-02	h	1		120-82-1	1,2,4-Trichlorobenzene	6.5E+02	nc	3.00E+03	sat	2.1E+02	nc	1.9E+02	nc	5E+00	3E-01
		3.5E-02	n			2.9E-01	n	1		71-55-6	1,1,1-Trichloroethane	7.7E+02	nc	1.4E+03	sat	1.0E+03	nc	7.9E+02	nc	2E+00	7E-01

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FOR PLANNING PURPOSES

TOXICITY INFORMATION												CONTAMINANT	PRELIMINARY REMEDIATION GOALS (PRGs)								SOIL SCREENING LEVELS	
SFo 1/(mg/kg-d)		cRfDo (mg/kg-d)		SFi 1/(mg/kg-d)		RfDi (mg/kg-d)		V O C	skin abs. solids		CAS No.		Residential Soil (mg/kg)		Industrial Soil (mg/kg)		Ambient Air (ug/m^3)		Tap Water (ug/l)		Migration to Ground Water DAF 20 (mg/kg)	DAF 1 (mg/kg)
5.7E-02	i	4.0E-03	i	5.6E-02	i	4.0E-03	r	1			79-00-5	1,1,2-Trichloroethane	8.4E-01	ca*	1.9E+00	ca*	1.2E-01	ca	2.0E-01	ca	2E-02	9E-04
1.1E-02	n	6.0E-03	x	6.0E-03	n	6.0E-03	r	1			79-01-6	Trichloroethylene (TCE)	2.8E+00	ca**	6.1E+00	ca*	1.1E+00	ca*	1.6E+00	ca*	6E-02	3E-03
		3.0E-01	i			2.0E-01	h	1			75-69-4	Trichlorofluoromethane	3.9E+02	nc	2.00E+03	sat	7.3E+02	nc	1.3E+03	nc		
		1.0E-01	i			1.0E-01	r	0	0.10		95-95-4	2,4,5-Trichlorophenol	6.1E+03	nc	8.8E+04	nc	3.7E+02	nc	3.6E+03	nc	3E+02	1E+01
1.1E-02	i			1.1E-02	i			0	0.10		88-06-2	2,4,6-Trichlorophenol	4.4E+01	ca	2.2E+02	ca	6.2E-01	ca	6.1E+00	ca	2E-01	8E-03
		1.0E-02	i			1.0E-02	r	0	0.10		93-76-5	2,4,5-Trichlorophenoxyacetic Acid	6.1E+02	nc	8.8E+03	nc	3.7E+01	nc	3.6E+02	nc		
		8.0E-03	i			8.0E-03	r	0	0.10		93-72-1	2-(2,4,5-Trichlorophenoxy) propionic acid	4.9E+02	nc	7.0E+03	nc	2.9E+01	nc	2.9E+02	nc		
		5.0E-03	i			5.0E-03	r	1			598-77-6	1,1,2-Trichloropropane	1.5E+01	nc	5.1E+01	nc	1.8E+01	nc	3.0E+01	nc		
7.0E+00	h	6.0E-03	i	7.0E+00	r	5.0E-03	r	1			96-18-4	1,2,3-Trichloropropane	1.4E-03	ca	3.1E-03	ca	9.6E-04	ca	1.6E-03	ca		
		5.0E-03	h			5.0E-03	r	1			96-19-5	1,2,3-Trichloropropene	1.2E+01	nc	3.9E+01	nc	1.8E+01	nc	3.0E+01	nc		
		3.0E+01	i			8.6E+00	h	1			76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.6E+03	sat	5.6E+03	sat	3.1E+04	nc	5.9E+04	nc		
		3.0E-03	i			3.0E-03	r	0	0.10		58138-08-2	Tridiphane	1.8E+02	nc	2.6E+03	nc	1.1E+01	nc	1.1E+02	nc		
		2.0E-03	r			2.0E-03	i	1			121-44-8	Triethylamine	2.3E+01	nc	8.8E+01	nc	7.3E+00	nc	1.2E+01	nc		
7.7E-03	i	7.5E-03	i	7.7E-03	r	7.5E-03	r	0	0.10		1582-09-8	Trifluralin	6.3E+01	ca**	3.2E+02	ca*	8.7E-01	ca*	8.7E+00	ca*		
		5.0E-02	n			1.7E-03	n	1			95-63-6	1,2,4-Trimethylbenzene	5.7E+00	sat	5.7E+00	sat	6.2E+00	nc	1.2E+01	nc		
		5.0E-02	n			1.7E-03	n	1			108-67-8	1,3,5-Trimethylbenzene	2.1E+01	nc	7.0E+01	nc	6.2E+00	nc	1.2E+01	nc		
3.7E-02	h			3.7E-02	r			0	0.10		512-56-1	Trimethyl phosphate	1.3E+01	ca	6.7E+01	ca	1.8E-01	ca	1.8E+00	ca		
		3.0E-02	i			3.0E-02	r	0	0.10		99-35-4	1,3,5-Trinitrobenzene	1.8E+03	nc	2.6E+04	nc	1.1E+02	nc	1.1E+03	nc		
		1.0E-02	h			1.0E-02	r	0	0.10		479-45-8	Trinitrophenylmethylnitramine	6.1E+02	nc	8.8E+03	nc	3.7E+01	nc	3.6E+02	nc		
3E-02	i	5.0E-04	i	3E-02	r	5.0E-04	r	0	0.10		118-96-7	2,4,6-Trinitrotoluene	1.6E+01	ca**	8.2E+01	ca**	2.2E-01	ca**	2.2E+00	ca**		
		7.0E-03	h					0			7440-62-2	Vanadium	5.5E+02	nc	1.4E+04	nc			2.6E+02	nc	6E+03	3E+02
		9.0E-03	i					0			1314-62-1	Vanadium pentoxide	7.0E+02	nc	1.8E+04	nc			3.3E+02	nc	6E+03	3E+02
		2.0E-02	h					0			13701-70-7	Vanadium sulfate	1.6E+03	nc	4.1E+04	nc			7.3E+02	nc	6E+03	3E+02
		1.0E-03	i			1.0E-03	r	0	0.10		1929-77-7	Vernam	6.1E+01	nc	8.8E+02	nc	3.7E+00	nc	3.6E+01	nc		
		2.5E-02	i			2.5E-02	r	0	0.10		50471-44-8	Vinclozolin	1.5E+03	nc	2.2E+04	nc	9.1E+01	nc	9.1E+02	nc		
		1.0E+00	h			5.7E-02	i	1			108-05-4	Vinyl acetate	4.3E+02	nc	1.4E+03	nc	2.1E+02	nc	4.1E+02	nc	2E+02	8E+00
1.1E-01	r	8.6E-04	r	1.1E-01	h	8.6E-04	i	1			593-60-2	Vinyl bromide (bromoethene)	1.9E-01	ca*	4.2E-01	ca*	6.1E-02	ca*	1.0E-01	ca*		
1.9E+00	h			3.0E-01	h			1			75-01-4	Vinyl chloride	2.2E-02	ca	4.9E-02	ca	2.2E-02	ca	2.0E-02	ca	1E-02	7E-04
		3.0E-04	i			3.0E-04	r	0	0.10		81-81-2	Warfarin	1.8E+01	nc	2.6E+02	nc	1.1E+00	nc	1.1E+01	nc		
		2.0E+00	i			2.0E-01	x	1	0.10		1330-20-7	Xylenes	2.1E+02	sat	2.1E+02	sat	7.3E+02	nc	1.4E+03	nc	2E+02	1E+01
		3.0E-01	i					0			7440-66-6	Zinc	2.3E+04	nc	1.0E+05	max			1.1E+04	nc	1E+04	6E+02
		3.0E-04	i					0			1314-84-7	Zinc phosphide	2.3E+01	nc	6.1E+02	nc			1.1E+01	nc		
		5.0E-02	i			5.0E-02	r	0	0.10		12122-67-7	Zineb	3.1E+03	nc	4.4E+04	nc	1.8E+02	nc	1.8E+03	nc		

ATTACHMENT D

USEPA REGION 3 RISK-BASED CONCENTRATIONS

Sources: I = IRIS H = HEAST A = HEAST Alternate W = Withdrawn from IRIS or HEAST E = EPA-NCEA provisional value O = other							Basis: C = Carcinogenic effects N = Noncarcinogenic effects I = RBC at HI of 0.1 < RBC-c					Region III SSLs	
							Risk-based concentrations					Soil, for groundwater migration	
Chemical	CAS	RfDo mg/kg/d	CSFo 1/mg/kg/d	RfDi mg/kg/d	CSFi 1/mg/kg/d	VOC	Tap water ug/l	Ambient air ug/m3	Fish mg/kg	Soil Industrial mg/kg	Residential mg/kg	DAF 1 mg/kg	DAF 20 mg/kg
ACETALDEHYDE	75070			2.57E-003 I	7.7E-003 I	y	1.6E+000 C	8.1E-001 C				3.8E-004	7.7E-003 C
ACETOCHLOR	34256821	2E-002 I					7.3E+002 N	7.3E+001 N	2.7E+001 N	4.1E+004 N	1.6E+003 N		
ACETONE	67641	1.00E-001 I				y	6.1E+002 N	3.7E+002 N	1.4E+002 N	2.0E+005 N	7.8E+003 N	1.2E-001	2.5E+000 N
ACETONITRILE	75058			1.7E-002 I		y	1.2E+002 N	6.2E+001 N				2.9E-002	5.8E-001 N
ACETOPHENONE	98862	1.00E-001 I		5.70E-006 W		y	4.2E-002 N	2.1E-002 N	1.4E+002 N	2.0E+005 N	7.8E+003 N	1.1E-005	2.2E-004 N
ACROLEIN	107028	2.00E-002 H		5.70E-006 I		y	4.2E-002 N	2.1E-002 N	2.7E+001 N	4.1E+004 N	1.6E+003 N	1.0E-005	2.0E-004 N
ACRYLAMIDE	79061	2.00E-004 I	4.50E+000 I		4.50E+000 I		1.5E-002 C	1.4E-003 C	7.0E-004 C	1.3E+000 C	1.4E-001 C	3.7E-006	7.4E-005 C
ACRYLONITRILE	107131	1.00E-003 H	5.40E-001 I	5.70E-004 I	2.40E-001 I	y	3.7E-002 C	2.6E-002 C	5.8E-003 C	1.1E+001 C	1.2E+000 C	7.4E-006	1.5E-004 C
ALACHLOR	15972608	1.00E-002 I	8.00E-002 H				8.4E-001 C	7.8E-002 C	3.9E-002 C	7.2E+001 C	8.0E+000 C	3.5E-004	7.0E-003 C
ALAR	1596845	1.50E-001 I					5.5E+003 N	5.5E+002 N	2.0E+002 N	3.1E+005 N	1.2E+004 N		
ALDICARB	116063	1.00E-003 I					3.7E+001 N	3.7E+000 N	1.4E+000 N	2.0E+003 N	7.8E+001 N	1.0E-002	2.1E-001 N
ALDICARB SULFONE	1646884	1.00E-003 I					3.7E+001 N	3.7E+000 N	1.4E+000 N	2.0E+003 N	7.8E+001 N	7.5E-003	1.5E-001 N
ALDRIN	309002	3.00E-005 I	1.70E+001 I		1.70E+001 I		3.9E-003 C	3.7E-004 C	1.9E-004 C	3.4E-001 C	3.8E-002 C	3.8E-004	7.7E-003 C
ALUMINUM	7429905	1.00E+000 E		1.00E-003 E			3.7E+004 N	3.7E+000 N	1.4E+003 N	2.0E+006 N	7.8E+004 N		
AMINODINITROTOLUENES		6.00E-005 E					2.2E+000 N	2.2E-001 N	8.1E-002 N	1.2E+002 N	4.7E+000 N		
4-AMINOPYRIDINE	504245	2.00E-005 H					7.3E-001 N	7.3E-002 N	2.7E-002 N	4.1E+001 N	1.6E+000 N		
AMMONIA	7664417			2.86E-002 I		y	2.1E+002 N	1.0E+002 N					
ANILINE	62533	7.00E-003 E	5.70E-003 I	2.90E-004 I			1.2E+001 C	1.1E+000 N	5.5E-001 C	1.0E+003 C	1.1E+002 C I	8.8E-003	1.4E-001 C
ANTIMONY	7440360	4.00E-004 I					1.5E+001 N	1.5E+000 N	5.4E-001 N	8.2E+002 N	3.1E+001 N	6.6E-001	1.3E+001 N
ANTIMONY PENTOXIDE	1314609	5.00E-004 H					1.8E+001 N	1.8E+000 N	6.8E-001 N	1.0E+003 N	3.9E+001 N		
ANTIMONY TETROXIDE	1332816	4.00E-004 H					1.5E+001 N	1.5E+000 N	5.4E-001 N	8.2E+002 N	3.1E+001 N		
ANTIMONY TRIOXIDE	1309644	4.00E-004 H		5.70E-005 I			1.5E+001 N	2.1E-001 N	5.4E-001 N	8.2E+002 N	3.1E+001 N		
ARSENIC	7440382	3.00E-004 I	1.50E+000 I		1.51E+001 I		4.5E-002 C	4.1E-004 C	2.1E-003 C	3.8E+000 C	4.3E-001 C	1.3E-003	2.6E-002 C
ARSINE	7784421			1.40E-005 I		y	1.0E-001 N	5.1E-002 N					
ASSURE	76578148	9.00E-003 I					3.3E+002 N	3.3E+001 N	1.2E+001 N	1.8E+004 N	7.0E+002 N		
ATRAZINE	1912249	3.50E-002 I	2.20E-001 H				3.0E-001 C	2.8E-002 C	1.4E-002 C	2.8E+001 C	2.9E+000 C	4.4E-004	8.8E-003 C
AZOBENZENE	103333		1.10E-001 I		1.10E-001 I		6.1E-001 C	5.7E-002 C	2.9E-002 C	5.2E+001 C	5.8E+000 C	1.8E-003	3.5E-002 C
BARIUM	7440393	7.00E-002 I		1.40E-004 A			2.6E+003 N	5.1E-001 N	9.5E+001 N	1.4E+005 N	5.5E+003 N	1.1E+002	2.1E+003 N
BAYGON	114261	4.00E-003 I					1.5E+002 N	1.5E+001 N	5.4E+000 N	8.2E+003 N	3.1E+002 N		
BAYTHROID	68359375	2.50E-002 I					9.1E+002 N	9.1E+001 N	3.4E+001 N	5.1E+004 N	2.0E+003 N		
BENTAZON	25057890	3.00E-002 I					1.1E+003 N	1.1E+002 N	4.1E+001 N	6.1E+004 N	2.3E+003 N		
BENZALDEHYDE	100527	1.00E-001 I					3.7E+003 N	3.7E+002 N	1.4E+002 N	2.0E+005 N	7.8E+003 N		
BENZENE	71432	3.00E-003 E	5.5E-002 I	1.70E-003 E	2.90E-002 I	y	3.2E-001 C	2.2E-001 C	5.7E-002 C	1.0E+002 C	1.2E+001 C	9.0E-005	1.8E-003 C
BENZENETHIOL	108985	1.00E-005 H				y	6.1E-002 N	3.7E-002 N	1.4E-002 N	2.0E+001 N	7.8E-001 N		
BENZIDINE	92875	3.00E-003 I	2.30E+002 I		2.30E+002 I		2.9E-004 C	2.7E-005 C	1.4E-005 C	2.5E-002 C	2.8E-003 C		
BENZOIC ACID	65850	4.00E+000 I					1.5E+005 N	1.5E+004 N	5.4E+003 N	8.2E+006 N	3.1E+005 N		
BENZYL ALCOHOL	100516	3.00E-001 H					1.1E+004 N	1.1E+003 N	4.1E+002 N	6.1E+005 N	2.3E+004 N	4.4E+000	8.8E+001 N
BENZYL CHLORIDE	100447		0.17 I			y	6.2E-002 C	3.7E-002 C	1.9E-002 C	3.4E+001 C	3.8E+000 C	1.9E-005	3.7E-004 C
BERYLLIUM	7440417	2.00E-003 I		5.7E-006 I	8.40E+000 I		7.3E+001 N	7.5E-004 C	2.7E+000 N	4.1E+003 N	1.6E+002 N	5.8E+001	1.2E+003 N
BIPHENYL	92524	5.00E-002 I				y	3.0E+002 N	1.8E+002 N	6.8E+001 N	1.0E+005 N	3.9E+003 N	4.8E+000	9.8E+001 N
BIS(2-CHLOROETHYL)ETHER	111444		1.10E+000 I		1.10E+000 I	y	9.6E-003 C	5.7E-003 C	2.8E-003 C	5.2E+000 C	5.8E-001 C	2.2E-006	4.4E-005 C
BIS(2-CHLOROISOPROPYL)ETHER	108601	4.00E-002 I	7.00E-002 H		3.50E-002 H	y	2.6E-001 C	1.8E-001 C	4.5E-002 C	8.2E+001 C	9.1E+000 C	8.4E-005	1.7E-003 C
BIS(CHLOROMETHYL)ETHER	542881		2.20E+002 I		2.20E+002 I	y	4.8E-005 C	2.8E-005 C	1.4E-005 C	2.6E-002 C	2.9E-003 C	9.7E-009	1.9E-007 C
BIS(2-ETHYLHEXYL)PHTHALATE	117817	2.00E-002 I	1.40E-002 I		1.40E-002 E		4.8E+000 C	4.5E-001 C	2.3E-001 C	4.1E+002 C	4.6E+001 C	1.4E+002	2.9E+003 C
BORON	7440428	9.00E-002 I		5.70E-003 H			3.3E+003 N	2.1E+001 N	1.2E+002 N	1.8E+005 N	7.0E+003 N		

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Basis: C = Carcinogenic effects N = Noncarcinogenic effects I = RBC at HI of 0.1 < RBC-c

Chemical	CAS	RfDo mg/kg/d	CSFo 1/mg/kg/d	RfDi mg/kg/d	CSFi 1/mg/kg/d	VOC	Risk-based concentrations: Tap water ug/l	Ambient air ug/m3	Fish mg/kg	Soil Industrial mg/kg	Residential mg/kg	Region III SSLs: Soil, for groundwater migration DAF 1 mg/kg	DAF 20 mg/kg
BROMODICHLOROMETHANE	75274	2.00E-002 I	6.20E-002 I			y	1.7E-001 C	1.0E-001 C	5.1E-002 C	9.2E+001 C	1.0E+001 C	5.4E-005	1.1E-003 C
BROMOETHENE	593602			8.6E-004 I	1.10E-001 H	y	1.1E-001 C	5.7E-002 C				5.4E-005	1.1E-003 C
BROMOFORM	75252	2.00E-002 I	7.90E-003 I		3.90E-003 I		8.5E+000 C	1.6E+000 C	4.0E-001 C	7.2E+002 C	8.1E+001 C	2.0E-001	4.1E+000 C
BROMOMETHANE	74839	1.40E-003 I		1.40E-003 I		y	8.5E+000 N	5.1E+000 N	1.9E+000 N	2.9E+003 N	1.1E+002 N	2.1E-003	4.1E-002 N
BROMOPHOS	2104963	5.00E-003 H					1.8E+002 N	1.8E+001 N	6.8E+000 N	1.0E+004 N	3.9E+002 N		
1,3-BUTADIENE	106990				1.80E+000 H	y	7.0E-003 C	3.5E-003 C				3.9E-006	7.8E-005 C
1-BUTANOL	71363	1.00E-001 I					3.7E+003 N	3.7E+002 N	1.4E+002 N	2.0E+005 N	7.8E+003 N	7.8E-001	1.6E+001 N
BUTYLBENZYLPHTHALATE	85687	2.00E-001 I					7.3E+003 N	7.3E+002 N	2.7E+002 N	4.1E+005 N	1.6E+004 N	8.4E+002	1.7E+004 N
BUTYLATE	2008415	5.00E-002 I					1.8E+003 N	1.8E+002 N	6.8E+001 N	1.0E+005 N	3.9E+003 N		
**N-BUTYLBENZENE	104518	4.00E-002 E				y	2.4E+002 N	1.5E+002 N	5.4E+001 N	8.2E+004 N	3.1E+003 N		
**SEC-BUTYLBENZENE	135988	4.00E-002 E				y	2.4E+002 N	1.5E+002 N	5.4E+001 N	8.2E+004 N	3.1E+003 N		
**TERT-BUTYLBENZENE	98066	4.00E-002 E				y	2.4E+002 N	1.5E+002 N	5.4E+001 N	8.2E+004 N	3.1E+003 N		
CADMIUM-WATER	7440439	5.00E-004 I		5.7E-005 E	6.30E+000 I		1.8E+001 N	9.9E-004 C	6.8E-001 N	1.0E+003 N	3.9E+001 N	1.4E+000	2.7E+001 N
CADMIUM-FOOD	7440439	1.00E-003 I		5.7E-005 E	6.30E+000 I		3.7E+001 N	9.9E-004 C	1.4E+000 N	2.0E+003 N	7.8E+001 N	2.7E+000	5.5E+001 N
CAPROLACTAM	105602	5.00E-001 I					1.8E+004 N	1.8E+003 N	6.8E+002 N	1.0E+006 N	3.9E+004 N		
CARBARYL	63252	1.00E-001 I					3.7E+003 N	3.7E+002 N	1.4E+002 N	2.0E+005 N	7.8E+003 N	1.5E+000	3.0E+001 N
CARBON DISULFIDE	75150	1.00E-001 I		2.00E-001 I		y	1.0E+003 N	7.3E+002 N	1.4E+002 N	2.0E+005 N	7.8E+003 N	9.5E-001	1.9E+001 N
CARBON TETRACHLORIDE	56235	7.00E-004 I	1.30E-001 I	5.71E-004 E	5.30E-002 I	y	1.6E-001 C	1.2E-001 C	2.4E-002 C	4.4E+001 C	4.9E+000 C	1.1E-004	2.1E-003 C
CARBOSULFAN	55285148	1.00E-002 I					3.7E+002 N	3.7E+001 N	1.4E+001 N	2.0E+004 N	7.8E+002 N		
CHLORAL	75876	2.00E-003 I					7.3E+001 N	7.3E+000 N	2.7E+000 N	4.1E+003 N	1.6E+002 N		
CHLORANIL	118752		4.00E-001 H				1.7E-001 C	1.6E-002 C	7.9E-003 C	1.4E+001 C	1.6E+000 C		
CHLORDANE	57749	5.00E-004 I	3.5E-001 I	2.00E-004 I	3.5E-001 I		1.9E-001 C	1.8E-002 C	9.0E-003 C	1.6E+001 C	1.8E+000 C	4.6E-002	9.2E-001 C
CHLORINE	7782505	1.00E-001 I		5.7E-005 E		y	4.2E-001 N	2.1E-001 N	1.4E+002 N	2.0E+005 N	7.8E+003 N		
CHLORINE DIOXIDE	10049044			5.70E-005 I		y	4.2E-001 N	2.1E-001 N					
CHLOROACETIC ACID	79118	2.00E-003 H					7.3E+001 N	7.3E+000 N	2.7E+000 N	4.1E+003 N	1.6E+002 N		
4-CHLOROANILINE	106478	4.00E-003 I					1.5E+002 N	1.5E+001 N	5.4E+000 N	8.2E+003 N	3.1E+002 N	4.8E-002	9.7E-001 N
CHLOROBENZENE	108907	2.00E-002 I		1.7E-002 E		y	1.1E+002 N	6.2E+001 N	2.7E+001 N	4.1E+004 N	1.6E+003 N	4.0E-002	8.0E-001 N
CHLOROBENZILATE	510156	2.00E-002 I	2.70E-001 H		2.70E-001 H		2.5E-001 C	2.3E-002 C	1.2E-002 C	2.1E+001 C	2.4E+000 C	1.3E-003	2.7E-002 C
P-CHLOROBENZOIC ACID	74113	2.00E-001 H					7.3E+003 N	7.3E+002 N	2.7E+002 N	4.1E+005 N	1.6E+004 N		
2-CHLORO-1,3-BUTADIENE	126998	2.00E-002 A		2.00E-003 H		y	1.4E+001 N	7.3E+000 N	2.7E+001 N	4.1E+004 N	1.6E+003 N	6.0E-003	1.2E-001 N
1-CHLOROBUTANE	109693	4.00E-001 H				y	2.4E+003 N	1.5E+003 N	5.4E+002 N	8.2E+005 N	3.1E+004 N	1.0E+000	2.0E+001 N
1-CHLORO-1,1-DIFLUOROETHANE	75683			1.40E+001 I		y	1.0E+005 N	5.1E+004 N				7.0E+001	1.4E+003 N
CHLORODIFLUOROMETHANE	75456			1.40E+001 I		y	1.0E+005 N	5.1E+004 N				7.0E+001	1.4E+003 N
CHLOROETHANE	75003	4.00E-001 E	2.90E-003 E	2.90E+000 I		y	3.6E+000 C	2.2E+000 C	1.1E+000 C	2.0E+003 C	2.2E+002 C	9.6E-004	1.9E-002 C
CHLOROFORM	67663	1.00E-002 I	6.10E-003 I	8.6E-005 E	8.10E-002 I	y	1.5E-001 C I	7.7E-002 C I	5.2E-001 C	9.4E+002 C	1.0E+002 C I	4.5E-005	8.9E-004 C
CHLOROMETHANE	74873		1.30E-002 H	8.6E-002 E	3.5E-003 E	y	2.1E+000 C	1.8E+000 C	2.4E-001 C	4.4E+002 C	4.9E+001 C	5.2E-004	1.0E-002 C
4-CHLORO-2-METHYLANILINE	95692		5.80E-001 H				1.2E-001 C	1.1E-002 C	5.4E-003 C	9.9E+000 C	1.1E+000 C		
BETA-CHLORONAPHTHALENE	91587	8.00E-002 I				y	4.9E+002 N	2.9E+002 N	1.1E+002 N	1.6E+005 N	6.3E+003 N	1.6E+000	3.2E+001 N
O-CHLORONITROBENZENE	88733		2.50E-002 H			y	4.2E-001 C	2.5E-001 C	1.3E-001 C	2.3E+002 C	2.6E+001 C		
P-CHLORONITROBENZENE	100005		1.80E-002 H			y	5.9E-001 C	3.5E-001 C	1.8E-001 C	3.2E+002 C	3.5E+001 C		
2-CHLOROPHENOL	95578	5.00E-003 I				y	3.0E+001 N	1.8E+001 N	6.8E+000 N	1.0E+004 N	3.9E+002 N		
2-CHLOROPROPANE	75296			2.90E-002 H		y	2.1E+002 N	1.1E+002 N				6.6E-002	1.3E+000 N
O-CHLOROTOLUENE	95498	2.00E-002 I				y	1.2E+002 N	7.3E+001 N	2.7E+001 N	4.1E+004 N	1.6E+003 N	6.5E-002	1.3E+000 N
CHLORPYRIFOS	2921882	3.00E-003 I					1.1E+002 N	1.1E+001 N	4.1E+000 N	6.1E+003 N	2.3E+002 N	3.2E+000	6.3E+001 N
CHLORPYRIFOS-METHYL	5598130	1.00E-002 H					3.7E+002 N	3.7E+001 N	1.4E+001 N	2.0E+004 N	7.8E+002 N		

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							Risk-based concentrations					Soil, for groundwater migration	
Chemical	CAS	RfDo mg/kg/d	CSFo 1/mg/kg/d	RfDi mg/kg/d	CSFi 1/mg/kg/d	VOC	Tap water ug/l	Ambient air ug/m3	Fish mg/kg	Soil Industrial mg/kg	Residential mg/kg	DAF 1 mg/kg	DAF 20 mg/kg
CHROMIUM III	16065831	1.50E+000 I					5.5E+004 N	5.5E+003 N	2.0E+003 N	3.1E+006 N	1.2E+005 N	9.9E+007	2.0E+009 N
CHROMIUM VI	18540299	3.00E-003 I		3.00E-005 I	4.10E+001 H		1.1E+002 N	1.5E-004 C	4.1E+000 N	6.1E+003 N	2.3E+002 N	2.1E+000	4.2E+001 N
COBALT	7440484	6.00E-002 E					2.2E+003 N	2.2E+002 N	8.1E+001 N	1.2E+005 N	4.7E+003 N		
COKE OVEN EMISSIONS (COAL TAR)	8007452				2.2 I			2.8E-003 C					
COPPER	7440508	4.00E-002 H					1.5E+003 N	1.5E+002 N	5.4E+001 N	8.2E+004 N	3.1E+003 N	5.3E+002	1.1E+004 N
CROTONALDEHYDE	123739		1.90E+000 H			y	5.6E-003 C	3.3E-003 C	1.7E-003 C	3.0E+000 C	3.4E-001 C	1.5E-005	3.1E-004 C
CUMENE	98828	1.00E-001 I		1.10E-001 I		y	6.6E+002 N	4.0E+002 N	1.4E+002 N	2.0E+005 N	7.8E+003 N	3.2E+000	6.4E+001 N
CYANIDE (FREE)	57125	2.00E-002 I					7.3E+002 N	7.3E+001 N	2.7E+001 N	4.1E+004 N	1.6E+003 N	7.4E+000	1.5E+002 N
CALCIUM CYANIDE	592018	4E-002 I					1.5E+003 N	1.5E+002 N	5.4E+001 N	8.2E+004 N	3.1E+003 N		
COPPER CYANIDE	544923	5.00E-003 I					1.8E+002 N	1.8E+001 N	6.8E+000 N	1.0E+004 N	3.9E+002 N		
CYANAZINE	21725462	2.00E-003 H	8.40E-001 H				8.0E-002 C	7.5E-003 C	3.8E-003 C	6.8E+000 C	7.6E-001 C	2.6E-005	5.3E-004 C
CYANOGEN	460195	4.00E-002 I				y	2.4E+002 N	1.5E+002 N	5.4E+001 N	8.2E+004 N	3.1E+003 N		
CYANOGEN BROMIDE	506683	9.00E-002 I					3.3E+003 N	3.3E+002 N	1.2E+002 N	1.8E+005 N	7.0E+003 N		
CYANOGEN CHLORIDE	506774	5.00E-002 I					1.8E+003 N	1.8E+002 N	6.8E+001 N	1.0E+005 N	3.9E+003 N		
HYDROGEN CYANIDE	74908	2.00E-002 I		8.60E-004 I		y	6.2E+000 N	3.1E+000 N	2.7E+001 N	4.1E+004 N	1.6E+003 N	1.1E-001	2.2E+000 N
POTASSIUM CYANIDE	151508	5.00E-002 I					1.8E+003 N	1.8E+002 N	6.8E+001 N	1.0E+005 N	3.9E+003 N		
POTASSIUM SILVER CYANIDE	506616	2.00E-001 I					7.3E+003 N	7.3E+002 N	2.7E+002 N	4.1E+005 N	1.6E+004 N		
SILVER CYANIDE	506649	1.00E-001 I					3.7E+003 N	3.7E+002 N	1.4E+002 N	2.0E+005 N	7.8E+003 N	3.1E+001	6.2E+002 N
SODIUM CYANIDE	143339	4.00E-002 I					1.5E+003 N	1.5E+002 N	5.4E+001 N	8.2E+004 N	3.1E+003 N		
THIOCYANATE		5.00E-002 E					1.8E+003 N	1.8E+002 N	6.8E+001 N	1.0E+005 N	3.9E+003 N		
ZINC CYANIDE	557211	5.00E-002 I					1.8E+003 N	1.8E+002 N	6.8E+001 N	1.0E+005 N	3.9E+003 N	1.1E+002	2.3E+003 N
CYCLOHEXANONE	108941	5.00E+000 I					1.8E+005 N	1.8E+004 N	6.8E+003 N	1.0E+007 N	3.9E+005 N	6.1E+001	1.2E+003 N
CYHALOTHRIN/KARATE	68085858	5.00E-003 I					1.8E+002 N	1.8E+001 N	6.8E+000 N	1.0E+004 N	3.9E+002 N		
CYPERMETHRIN	52315078	1.00E-002 I					3.7E+002 N	3.7E+001 N	1.4E+001 N	2.0E+004 N	7.8E+002 N		
DACTHAL	1861321	1.00E-002 I					3.7E+002 N	3.7E+001 N	1.4E+001 N	2.0E+004 N	7.8E+002 N		
DALAPON	75990	3.00E-002 I					1.1E+003 N	1.1E+002 N	4.1E+001 N	6.1E+004 N	2.3E+003 N	3.5E-001	7.1E+000 N
DDD	72548		2.40E-001 I				2.8E-001 C	2.8E-002 C	1.3E-002 C	2.4E+001 C	2.7E+000 C	5.8E-001	1.1E+001 C
DDE	72559		3.40E-001 I				2.0E-001 C	1.8E-002 C	9.3E-003 C	1.7E+001 C	1.9E+000 C	1.8E+000	3.5E+001 C
DDT	50293	5.00E-004 I	3.40E-001 I		3.40E-001 I		2.0E-001 C	1.8E-002 C	9.3E-003 C	1.7E+001 C	1.9E+000 C	5.8E-002	1.2E+000 C
DIAZINON	333415	9.00E-004 H					3.3E+001 N	3.3E+000 N	1.2E+000 N	1.8E+003 N	7.0E+001 N	2.1E-002	4.3E-001 N
DIBENZOFURAN	132649	4.00E-003 E				y	2.4E+001 N	1.5E+001 N	5.4E+000 N	8.2E+003 N	3.1E+002 N	3.8E-001	7.7E+000 N
1,4-DIBROMOBENZENE	106376	1.00E-002 I					3.7E+002 N	3.7E+001 N	1.4E+001 N	2.0E+004 N	7.8E+002 N		
DIBROMOCHLOROMETHANE	124481	2.00E-002 I	8.40E-002 I			y	1.3E-001 C	7.5E-002 C	3.8E-002 C	6.8E+001 C	7.6E+000 C	4.1E-005	8.3E-004 C
1,2-DIBROMO-3-CHLOROPROPANE	96128		1.40E+000 H	5.70E-005 I	2.40E-003 H	y	4.7E-002 C I	2.1E-001 N	2.3E-003 C	4.1E+000 C	4.6E-001 C	4.4E-005	8.7E-004 C
1,2-DIBROMOETHANE	106934		8.50E+001 I	5.70E-005 H	7.60E-001 I	y	7.5E-004 C	8.2E-003 C	3.7E-005 C	6.7E-002 C	7.5E-003 C	4.3E-007	8.5E-006 C
DIBUTYLPHTHALATE	84742	1.00E-001 I					3.7E+003 N	3.7E+002 N	1.4E+002 N	2.0E+005 N	7.8E+003 N	2.5E+002	5.0E+003 N
DICAMBA	1918009	3.00E-002 I					1.1E+003 N	1.1E+002 N	4.1E+001 N	6.1E+004 N	2.3E+003 N	2.2E-001	4.5E+000 N
1,2-DICHLOROBENZENE	95501	9.00E-002 I				y	5.5E+002 N	3.3E+002 N	1.2E+002 N	1.8E+005 N	7.0E+003 N	4.8E-001	9.3E+000 N
1,3-DICHLOROBENZENE	541731	9.00E-004 E				y	5.5E+000 N	3.3E+000 N	1.2E+000 N	1.8E+003 N	7.0E+001 N	4.4E-003	8.7E-002 N
1,4-DICHLOROBENZENE	106467	3.00E-002 E	2.40E-002 H	2.29E-001 I	2.2E-002 E	y	4.7E-001 C	2.8E-001 C	1.3E-001 C	2.4E+002 C	2.7E+001 C	3.8E-004	7.1E-003 C
3,3'-DICHLOROBENZIDINE	91941		4.50E-001 I				1.5E-001 C	1.4E-002 C	7.0E-003 C	1.3E+001 C	1.4E+000 C	2.5E-004	4.9E-003 C
1,4-DICHLORO-2-BUTENE	764410				9.30E+000 H	y	1.3E-003 C	6.7E-004 C				4.0E-007	8.0E-006 C
DICHLORODIFLUOROMETHANE	75718	2.00E-001 I		5.00E-002 A		y	3.5E+002 N	1.8E+002 N	2.7E+002 N	4.1E+005 N	1.6E+004 N	5.5E-001	1.1E+001 N
1,1-DICHLOROETHANE	75343	1.00E-001 H		1.40E-001 A		y	8.0E+002 N	5.1E+002 N	1.4E+002 N	2.0E+005 N	7.8E+003 N	2.3E-001	4.5E+000 N
1,2-DICHLOROETHANE	107062	3.00E-002 E	9.10E-002 I	1.40E-003 E	9.10E-002 I	y	1.2E-001 C	6.9E-002 C	3.5E-002 C	6.3E+001 C	7.0E+000 C	5.2E-005	1.0E-003 C

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							Risk-based concentrations					Region III SSLs	
												Soil, for groundwater migration	
Chemical	CAS	RfDo mg/kg/d	CSFo 1/mg/kg/d	RfDi mg/kg/d	CSFi 1/mg/kg/d	VOC	Tap water ug/l	Ambient air ug/m3	Fish mg/kg	Soil Industrial mg/kg	Residential mg/kg	DAF 1 mg/kg	DAF 20 mg/kg
1,1-DICHLOROETHENE	75354	9.00E-003 I	6.00E-001 I		1.75E-001 I	y	4.4E-002 C	3.6E-002 C	5.3E-003 C	9.5E+000 C	1.1E+000 C	1.8E-005	3.6E-004 C
CIS-1,2-DICHLOROETHENE	156592	1.00E-002 H				y	6.1E+001 N	3.7E+001 N	1.4E+001 N	2.0E+004 N	7.8E+002 N	1.7E-002	3.5E-001 N
TRANS-1,2-DICHLOROETHENE	156605	2.00E-002 I				y	1.2E+002 N	7.3E+001 N	2.7E+001 N	4.1E+004 N	1.6E+003 N	4.1E-002	8.2E-001 N
TOTAL 1,2-DICHLOROETHENE	540590	9.00E-003 H				y	5.5E+001 N	3.3E+001 N	1.2E+001 N	1.8E+004 N	7.0E+002 N	1.9E-002	3.7E-001 N
2,4-DICHLOROPHENOL	120832	3.00E-003 I					1.1E+002 N	1.1E+001 N	4.1E+000 N	6.1E+003 N	2.3E+002 N	6.0E-002	1.2E+000 N
2,4-D	94757	1.00E-002 I					3.7E+002 N	3.7E+001 N	1.4E+001 N	2.0E+004 N	7.8E+002 N	4.5E-001	9.0E+000 N
4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	94826	8E-003 I					2.9E+002 N	2.9E+001 N	1.1E+001 N	1.6E+004 N	6.3E+002 N		
1,2-DICHLOROPROPANE	78875		6.80E-002 H	1.14E-003 I		y	1.8E-001 C	9.2E-002 C	4.6E-002 C	8.4E+001 C	9.4E+000 C	1.0E-004	2.1E-003 C
2,3-DICHLOROPROPANOL	616239	3.00E-003 I					1.1E+002 N	1.1E+001 N	4.1E+000 N	6.1E+003 N	2.3E+002 N		
1,3-DICHLOROPROPENE	542756	3.00E-004 I	1.80E-001 H	5.71E-003 I	1.30E-001 H	y	7.7E-002 C	4.8E-002 C	1.8E-002 C	3.2E+001 C	3.5E+000 C I	2.7E-005	5.5E-004 C
DICHLORVOS	62737	5E-004 I	0.29 I	1.43E-004 I			2.3E-001 C	2.2E-002 C	1.1E-002 C	2.0E+001 C	2.2E+000 C	5.5E-005	1.1E-003 C
DICOFOL	115322		4.4E-001 W				1.5E-001 C	1.4E-002 C	7.2E-003 C	1.3E+001 C	1.5E+000 C	9.3E-004	1.9E-002 C
DICYCLOPENTADIENE	77736	3E-002 H		6.00E-005 A		y	4.4E-001 N	2.2E-001 N	4.1E+001 N	6.1E+004 N	2.3E+003 N		
DIELDRIN	60571	5.00E-005 I	1.60E+001 I		1.60E+001 I		4.2E-003 C	3.9E-004 C	2.0E-004 C	3.6E-001 C	4.0E-002 C	1.1E-004	2.2E-003 C
DIESEL EMISSIONS				1.40E-003 I				5.1E+000 N					
DIETHYLPHTHALATE	84662	8.00E-001 I					2.9E+004 N	2.9E+003 N	1.1E+003 N	1.6E+006 N	6.3E+004 N	2.3E+001	4.5E+002 N
DIETHYLENE GLYCOL, MONOBUTYL ETHER	112345			5.70E-003 H				2.1E+001 N					
DIETHYLENE GLYCOL, MONOETHYL ETHER	111900	2.00E+000 H					7.3E+004 N	7.3E+003 N	2.7E+003 N	4.1E+006 N	1.6E+005 N		
DI(2-ETHYLHEXYL)ADIPATE	103231	6.00E-001 I	1.20E-003 I				5.6E+001 C	5.2E+000 C	2.6E+000 C	4.8E+003 C	5.3E+002 C		
DIETHYLSTILBESTROL	56531		4.70E+003 H				1.4E-005 C	1.3E-006 C	6.7E-007 C	1.2E-003 C	1.4E-004 C		
DIFENZOQUAT (AVENGE)	43222486	8.00E-002 I					2.9E+003 N	2.9E+002 N	1.1E+002 N	1.6E+005 N	6.3E+003 N		
1,1-DIFLUOROETHANE	75376			1.10E+001 I		y	8.0E+004 N	4.0E+004 N					
DIISOPROPYL METHYLPHOSPHONATE (DIMP)	1445756	8.00E-002 I					2.9E+003 N	2.9E+002 N	1.1E+002 N	1.6E+005 N	6.3E+003 N		
3,3'-DIMETHOXYBENZIDINE	119904		1.40E-002 H				4.8E+000 C	4.5E-001 C	2.3E-001 C	4.1E+002 C	4.6E+001 C		
DIMETHYLAMINE	124403			5.70E-006 W		y	4.2E-002 N	2.1E-002 N				8.5E-006	1.7E-004 N
2,4-DIMETHYLANILINE HYDROCHLORIDE	21436964		5.80E-001 H				1.2E-001 C	1.1E-002 C	5.4E-003 C	9.9E+000 C	1.1E+000 C		
2,4-DIMETHYLANILINE	95681		7.50E-001 H				8.9E-002 C	8.3E-003 C	4.2E-003 C	7.6E+000 C	8.5E-001 C		
N,N-DIMETHYLANILINE	121697	2.00E-003 I					7.3E+001 N	7.3E+000 N	2.7E+000 N	4.1E+003 N	1.6E+002 N		
3,3'-DIMETHYLBENZIDINE	119937		9.20E+000 H				7.3E-003 C	6.8E-004 C	3.4E-004 C	6.2E-001 C	6.9E-002 C		
1,1-DIMETHYLHYDRAZINE	57147		2.60E+000 W		3.50E+000 W		2.6E-002 C	1.8E-003 C	1.2E-003 C	2.2E+000 C	2.5E-001 C		
1,2-DIMETHYLHYDRAZINE	540738		3.70E+001 W		3.70E+001 W		1.8E-003 C	1.7E-004 C	8.5E-005 C	1.5E-001 C	1.7E-002 C		
2,4-DIMETHYLPHENOL	105679	2.00E-002 I					7.3E+002 N	7.3E+001 N	2.7E+001 N	4.1E+004 N	1.6E+003 N	3.4E-001	6.7E+000 N
2,6-DIMETHYLPHENOL	576261	6.00E-004 I					2.2E+001 N	2.2E+000 N	8.1E-001 N	1.2E+003 N	4.7E+001 N		
3,4-DIMETHYLPHENOL	95658	1.00E-003 I					3.7E+001 N	3.7E+000 N	1.4E+000 N	2.0E+003 N	7.8E+001 N		
DIMETHYLPHTHALATE	131113	1.00E+001 W					3.7E+005 N	3.7E+004 N	1.4E+004 N	2.0E+007 N	7.8E+005 N		
1,2-DINITROBENZENE	528290	4.00E-004 H					1.5E+001 N	1.5E+000 N	5.4E-001 N	8.2E+002 N	3.1E+001 N		
1,3-DINITROBENZENE	99650	1.00E-004 I					3.7E+000 N	3.7E-001 N	1.4E-001 N	2.0E+002 N	7.8E+000 N	1.8E-003	3.7E-002 N
1,4-DINITROBENZENE	100254	4.00E-004 H					1.5E+001 N	1.5E+000 N	5.4E-001 N	8.2E+002 N	3.1E+001 N		
4,6-DINITRO-O-CYCLOHEXYL PHENOL	131895	2.00E-003 I					7.3E+001 N	7.3E+000 N	2.7E+000 N	4.1E+003 N	1.6E+002 N		
4,6-DINITRO-2-METHYLPHENOL	534521	1.00E-004 E					3.7E+000 N	3.7E-001 N	1.4E-001 N	2.0E+002 N	7.8E+000 N		
2,4-DINITROPHENOL	51285	2.00E-003 I					7.3E+001 N	7.3E+000 N	2.7E+000 N	4.1E+003 N	1.6E+002 N		
DINITROTOLUENE MIX			6.80E-001 I				9.8E-002 C	9.2E-003 C	4.6E-003 C	8.4E+000 C	9.4E-001 C		
2,4-DINITROTOLUENE	121142	2.00E-003 I					7.3E+001 N	7.3E+000 N	2.7E+000 N	4.1E+003 N	1.6E+002 N	2.9E-002	5.7E-001 N
2,6-DINITROTOLUENE	606202	1.00E-003 H					3.7E+001 N	3.7E+000 N	1.4E+000 N	2.0E+003 N	7.8E+001 N	1.2E-002	2.5E-001 N
DINOSEB	88857	1.00E-003 I					3.7E+001 N	3.7E+000 N	1.4E+000 N	2.0E+003 N	7.8E+001 N	8.7E-003	1.7E-001 N

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Basis: C = Carcinogenic effects N = Noncarcinogenic effects I = RBC at HI of 0.1 < RBC-c

Chemical	CAS	RfDo mg/kg/d	CSFo 1/mg/kg/d	RfDi mg/kg/d	CSFi 1/mg/kg/d	VOC	Risk-based concentrations: Tap water ug/l	Ambient air ug/m3	Fish mg/kg	Soil Industrial mg/kg	Residential mg/kg	Region III SSLs: Soil, for groundwater migration DAF 1 mg/kg	DAF 20 mg/kg
DIOCTYLPHTHALATE	117840	2.00E-002 H					7.3E+002 N	7.3E+001 N	2.7E+001 N	4.1E+004 N	1.6E+003 N	1.2E+005	2.4E+006 N
1,4-DIOXANE	123911		1.10E-002 I				6.1E+000 C	5.7E-001 C	2.9E-001 C	5.2E+002 C	5.8E+001 C	1.3E-003	2.6E-002 C
DIPHENYLAMINE	122394	2.50E-002 I					9.1E+002 N	9.1E+001 N	3.4E+001 N	5.1E+004 N	2.0E+003 N	1.3E+000	2.5E+001 N
1,2-DIPHENYLHYDRAZINE	122667		8.00E-001 I		8.00E-001 I		8.4E-002 C	7.8E-003 C	3.9E-003 C	7.2E+000 C	8.0E-001 C	1.3E-004	2.5E-003 C
DIQUAT	85007	2.20E-003 I					8.0E+001 N	8.0E+000 N	3.0E+000 N	4.5E+003 N	1.7E+002 N	1.7E-002	3.3E-001 N
DISULFOTON	298044	4.00E-005 I					1.5E+000 N	1.5E-001 N	5.4E-002 N	8.2E+001 N	3.1E+000 N	3.2E-003	6.4E-002 N
1,4-DITHIANE	505293	1.00E-002 I					3.7E+002 N	3.7E+001 N	1.4E+001 N	2.0E+004 N	7.8E+002 N		
DIURON	330541	2.00E-003 I					7.3E+001 N	7.3E+000 N	2.7E+000 N	4.1E+003 N	1.6E+002 N	5.8E-002	1.2E+000 N
ENDOSULFAN	115297	6.00E-003 I					2.2E+002 N	2.2E+001 N	8.1E+000 N	1.2E+004 N	4.7E+002 N	9.8E-001	2.0E+001 N
ENDRIN	72208	3.00E-004 I					1.1E+001 N	1.1E+000 N	4.1E-001 N	6.1E+002 N	2.3E+001 N	2.7E-001	5.4E+000 N
**EPICHLOROHYDRIN	106898	2.00E-003 H	9.90E-003 I	2.86E-004 I	4.20E-003 I	y	2.0E+000 N	1.0E+000 N	3.2E-001 C I	5.8E+002 C I	6.5E+001 C I	4.2E-004	8.4E-003 N
ETHION	563122	5.00E-004 I					1.8E+001 N	1.8E+000 N	6.8E-001 N	1.0E+003 N	3.9E+001 N	3.2E-001	6.4E+000 N
2-ETHOXYETHANOL	110805	4.00E-001 H		5.70E-002 I			1.5E+004 N	2.1E+002 N	5.4E+002 N	8.2E+005 N	3.1E+004 N	3.3E+000	6.5E+001 N
ETHYL ACETATE	141786	9.00E-001 I				y	5.5E+003 N	3.3E+003 N	1.2E+003 N	1.8E+006 N	7.0E+004 N	1.7E+000	3.5E+001 N
ETHYLBENZENE	100414	1.00E-001 I		2.90E-001 I		y	1.3E+003 N	1.1E+003 N	1.4E+002 N	2.0E+005 N	7.8E+003 N	7.5E-001	1.5E+001 N
ETHYLENE DIAMINE	107153	2.00E-002 H					7.3E+002 N	7.3E+001 N	2.7E+001 N	4.1E+004 N	1.6E+003 N		
ETHYLENE GLYCOL	107211	2.00E+000 I					7.3E+004 N	7.3E+003 N	2.7E+003 N	4.1E+006 N	1.6E+005 N	1.5E+001	3.0E+002 N
**ETHYLENE GLYCOL, MONOBUTYL ETHER	111762	5.00E-001 I		3.70E+000 I			1.8E+004 N	1.4E+004 N	6.8E+002 N	1.0E+006 N	3.9E+004 N		
ETHYLENE OXIDE	75218		1.00E+000 H		3.50E-001 H	y	2.3E-002 C	1.8E-002 C	3.2E-003 C	5.7E+000 C	6.4E-001 C	4.8E-006	9.5E-005 C
ETHYLENE THIOUREA	96457	8.00E-005 I	1.1E-001 H				6.1E-001 C I	5.7E-002 C I	2.9E-002 C I	5.2E+001 C I	5.8E+000 C I		
ETHYL ETHER	60297	2.00E-001 I				y	1.2E+003 N	7.3E+002 N	2.7E+002 N	4.1E+005 N	1.6E+004 N	4.2E-001	8.5E+000 N
ETHYL METHACRYLATE	97632	9.00E-002 H				y	5.5E+002 N	3.3E+002 N	1.2E+002 N	1.8E+005 N	7.0E+003 N	1.0E+000	2.1E+001 N
FENAMIPHOS	22224926	2.50E-004 I					9.1E+000 N	9.1E-001 N	3.4E-001 N	5.1E+002 N	2.0E+001 N	7.8E-003	1.6E-001 N
FLUOMETURON	2164172	1.30E-002 I					4.7E+002 N	4.7E+001 N	1.8E+001 N	2.7E+004 N	1.0E+003 N		
FLUORINE	7782414	6.00E-002 I					2.2E+003 N	2.2E+002 N	8.1E+001 N	1.2E+005 N	4.7E+003 N		
FOMESAFEN	72178020		1.90E-001 I				3.5E-001 C	3.3E-002 C	1.7E-002 C	3.0E+001 C	3.4E+000 C		
FONOFOS	944229	2.00E-003 I					7.3E+001 N	7.3E+000 N	2.7E+000 N	4.1E+003 N	1.6E+002 N	1.8E-001	3.5E+000 N
FORMALDEHYDE	50000	2.00E-001 I			4.50E-002 I		7.3E+003 N	1.4E-001 C	2.7E+002 N	4.1E+005 N	1.6E+004 N	1.5E+000	3.0E+001 N
FORMIC ACID	64186	2.00E+000 H					7.3E+004 N	7.3E+003 N	2.7E+003 N	4.1E+006 N	1.6E+005 N		
FURAN	110009	1.00E-003 I				y	6.1E+000 N	3.7E+000 N	1.4E+000 N	2.0E+003 N	7.8E+001 N	1.5E-003	3.0E-002 N
FURAZOLIDONE	67458		3.80E+000 H				1.8E-002 C	1.6E-003 C	8.3E-004 C	1.5E+000 C	1.7E-001 C		
FURFURAL	98011	3.00E-003 I		1.00E-002 A			1.1E+002 N	3.7E+001 N	4.1E+000 N	6.1E+003 N	2.3E+002 N	2.3E-002	4.6E-001 N
GLYCIDALDEHYDE	765344	4.00E-004 I		2.90E-004 H			1.5E+001 N	1.1E+000 N	5.4E-001 N	8.2E+002 N	3.1E+001 N		
GLYPHOSATE	1071836	1.00E-001 I					3.7E+003 N	3.7E+002 N	1.4E+002 N	2.0E+005 N	7.8E+003 N	2.6E+001	5.3E+002 N
HEPTACHLOR	76448	5.00E-004 I	4.50E+000 I		4.50E+000 I		1.5E-002 C	1.4E-003 C	7.0E-004 C	1.3E+000 C	1.4E-001 C	4.2E-002	8.4E-001 C
HEPTACHLOR EPOXIDE	1024573	1.30E-005 I	9.10E+000 I		9.10E+000 I		7.4E-003 C	6.9E-004 C	3.5E-004 C	6.3E-001 C	7.0E-002 C	1.2E-003	2.5E-002 C
HEXABROMOBENZENE	87821	2.00E-003 I					7.3E+001 N	7.3E+000 N	2.7E+000 N	4.1E+003 N	1.6E+002 N		
HEXACHLOROBENZENE	118741	8.00E-004 I	1.60E+000 I		1.60E+000 I		4.2E-002 C	3.9E-003 C	2.0E-003 C	3.6E+000 C	4.0E-001 C	2.6E-003	5.2E-002 C
HEXACHLOROBUTADIENE	87683	2.00E-004 H	7.80E-002 I		7.80E-002 I		8.6E-001 C I	8.0E-002 C I	4.0E-002 C I	7.3E+001 C I	8.2E+000 C I	9.2E-002	1.8E+000 C
ALPHA-HCH	319846		6.30E+000 I		6.30E+000 I		1.1E-002 C	9.9E-004 C	5.0E-004 C	9.1E-001 C	1.0E-001 C	4.5E-005	8.9E-004 C
BETA-HCH	319857		1.80E+000 I		1.80E+000 I		3.7E-002 C	3.5E-003 C	1.8E-003 C	3.2E+000 C	3.5E-001 C	1.6E-004	3.1E-003 C
GAMMA-HCH (LINDANE)	58899	3.00E-004 I	1.30E+000 H				5.2E-002 C	4.8E-003 C	2.4E-003 C	4.4E+000 C	4.9E-001 C	2.2E-004	4.3E-003 C
TECHNICAL HCH	608731		1.80E+000 I		1.80E+000 I		3.7E-002 C	3.5E-003 C	1.8E-003 C	3.2E+000 C	3.5E-001 C		
HEXACHLOROCYCLOPENTADIENE	77474	7.00E-003 I		2.00E-005 H			2.6E+002 N	7.3E-002 N	9.5E+000 N	1.4E+004 N	5.5E+002 N	1.0E+002	2.0E+003 N
HEXACHLORODIBENZODIOXIN MIX	19408743		6.20E+003 I		4.55E+003 I		1.1E-005 C	1.4E-006 C	5.1E-007 C	9.2E-004 C	1.0E-004 C		

Sources: I = IRIS H = HEAST A = HEAST Alternate W = Withdrawn from IRIS or HEAST E = EPA-NCEA provisional value O = other							Basis: C = Carcinogenic effects N = Noncarcinogenic effects ! = RBC at HI of 0.1 < RBC-c						
							Risk-based concentrations					Region III SSLs	
												Soil, for groundwater migration	
Chemical	CAS	RfDo mg/kg/d	CSFo 1/mg/kg/d	RfDi mg/kg/d	CSFi 1/mg/kg/d	VOC	Tap water ug/l	Ambient air ug/m3	Fish mg/kg	Soil Industrial mg/kg	Residential mg/kg	DAF 1 mg/kg	DAF 20 mg/kg
HEXACHLOROETHANE	67721	1.00E-003 I	1.40E-002 I		1.40E-002 I		4.8E+000 C !	4.5E-001 C !	2.3E-001 C !	4.1E+002 C !	4.6E+001 C !	1.8E-002	3.6E-001 C
HEXACHLOROPHENE	70304	3.00E-004 I					1.1E+001 N	1.1E+000 N	4.1E-001 N	6.1E+002 N	2.3E+001 N	1.0E+002	2.0E+003 N
1,6-HEXAMETHYLENE DIISOCYANATE	822060			2.90E-006 I				1.1E-002 N					
HEXANE	110543	6.00E-002 H		5.71E-002 I		y	3.5E+002 N	2.1E+002 N	8.1E+001 N	1.2E+005 N	4.7E+003 N	6.9E-001	1.4E+001 N
2-HEXANONE	591786	4.00E-002 E		1.4E-003 E			1.5E+003 N	5.1E+000 N	5.4E+001 N	8.2E+004 N	3.1E+003 N		
HEXAZINONE	51235042	3.30E-002 I					1.2E+003 N	1.2E+002 N	4.5E+001 N	6.7E+004 N	2.6E+003 N		
HMX	2691410	5.00E-002 I					1.8E+003 N	1.8E+002 N	6.8E+001 N	1.0E+005 N	3.9E+003 N		
HYDRAZINE	302012		3.00E+000 I		1.70E+001 I		2.2E-002 C	3.7E-004 C	1.1E-003 C	1.9E+000 C	2.1E-001 C		
HYDROGEN CHLORIDE	7647010			5.70E-003 I				2.1E+001 N					
HYDROGEN SULFIDE	7783064	3.00E-003 I		2.85E-004 I			1.1E+002 N	1.0E+000 N	4.1E+000 N	6.1E+003 N	2.3E+002 N		
HYDROQUINONE	123319	4.00E-002 H					1.5E+003 N	1.5E+002 N	5.4E+001 N	8.2E+004 N	3.1E+003 N		
IRON	7439896	3.00E-001 E					1.1E+004 N	1.1E+003 N	4.1E+002 N	6.1E+005 N	2.3E+004 N		
ISOBUTANOL	78831	3.00E-001 I				y	1.8E+003 N	1.1E+003 N	4.1E+002 N	6.1E+005 N	2.3E+004 N	5.9E-001	1.2E+001 N
ISOPHORONE	78591	2.00E-001 I	9.50E-004 I				7.0E+001 C	6.6E+000 C	3.3E+000 C	6.0E+003 C	6.7E+002 C	2.1E-002	4.1E-001 C
ISOPROPALIN	33820530	1.50E-002 I					5.5E+002 N	5.5E+001 N	2.0E+001 N	3.1E+004 N	1.2E+003 N		
ISOPROPYL METHYL PHOSPHONIC ACID	1832548	1.00E-001 I					3.7E+003 N	3.7E+002 N	1.4E+002 N	2.0E+005 N	7.8E+003 N		
TETRAETHYLLEAD	78002	1.00E-007 I					3.7E-003 N	3.7E-004 N	1.4E-004 N	2.0E-001 N	7.8E-003 N	4.6E-005	9.2E-004 N
LITHIUM	7439932	2.00E-002 E					7.3E+002 N	7.3E+001 N	2.7E+001 N	4.1E+004 N	1.6E+003 N		
MALATHION	121755	2.00E-002 I					7.3E+002 N	7.3E+001 N	2.7E+001 N	4.1E+004 N	1.6E+003 N	4.0E-001	8.1E+000 N
MALEIC ANHYDRIDE	108316	1.00E-001 I					3.7E+003 N	3.7E+002 N	1.4E+002 N	2.0E+005 N	7.8E+003 N		
MANGANESE-NONFOOD	7439965	2.00E-002 I		1.43E-005 I			7.3E+002 N	5.2E-002 N	2.7E+001 N	4.1E+004 N	1.6E+003 N	4.8E+001	9.5E+002 N
MANGANESE-FOOD	7439965	1.40E-001 I		1.43E-005 I			5.1E+003 N	5.2E-002 N	1.9E+002 N	2.9E+005 N	1.1E+004 N	3.3E+002	6.7E+003 N
MEPHOSFOLAN	950107	9.00E-005 H					3.3E+000 N	3.3E-001 N	1.2E-001 N	1.8E+002 N	7.0E+000 N		
MEPIQUAT CHLORIDE	24307264	3.00E-002 I					1.1E+003 N	1.1E+002 N	4.1E+001 N	6.1E+004 N	2.3E+003 N		
MERCURIC CHLORIDE	7487947	3.00E-004 I					1.1E+001 N	1.1E+000 N	4.1E-001 N	6.1E+002 N	2.3E+001 N		
MERCURY (INORGANIC)	7439976			8.60E-005 I				3.1E-001 N					
METHYLMERCURY	22967926	1.00E-004 I					3.7E+000 N	3.7E-001 N	1.4E-001 N	2.0E+002 N	7.8E+000 N		
METHACRYLONITRILE	126987	1.00E-004 I		2.00E-004 A		y	1.0E+000 N	7.3E-001 N	1.4E-001 N	2.0E+002 N	7.8E+000 N	2.1E-004	4.2E-003 N
METHANOL	67561	5.00E-001 I					1.8E+004 N	1.8E+003 N	6.8E+002 N	1.0E+006 N	3.9E+004 N	3.8E+000	7.5E+001 N
METHIDATHION	950378	1.00E-003 I					3.7E+001 N	3.7E+000 N	1.4E+000 N	2.0E+003 N	7.8E+001 N		
METHOXYCHLOR	72435	5.00E-003 I					1.8E+002 N	1.8E+001 N	6.8E+000 N	1.0E+004 N	3.9E+002 N	1.5E+001	3.1E+002 N
METHYL ACETATE	79209	1.00E+000 H				y	6.1E+003 N	3.7E+003 N	1.4E+003 N	2.0E+006 N	7.8E+004 N	1.2E+000	2.5E+001 N
METHYL ACRYLATE	96333	3.00E-002 A				y	1.8E+002 N	1.1E+002 N	4.1E+001 N	6.1E+004 N	2.3E+003 N	5.0E-001	1.0E+001 N
2-METHYLANILINE	95534		2.40E-001 H				2.8E-001 C	2.8E-002 C	1.3E-002 C	2.4E+001 C	2.7E+000 C	2.8E-004	5.7E-003 C
4-(2-METHYL-4-CHLOROPHENOXY) BUTYRIC ACID	94815	1.00E-002 I					3.7E+002 N	3.7E+001 N	1.4E+001 N	2.0E+004 N	7.8E+002 N		
2-METHYL-4-CHLOROPHENOXYACETIC ACID (MCPA)	94746	5.00E-004 I					1.8E+001 N	1.8E+000 N	6.8E-001 N	1.0E+003 N	3.9E+001 N		
2-(2-METHYL-4-CHLOROPHENOXY)PROPIONIC ACID (MCPP)	93652	1.00E-003 I					3.7E+001 N	3.7E+000 N	1.4E+000 N	2.0E+003 N	7.8E+001 N		
METHYLCYCLOHEXANE	108872			8.60E-001 H		y	6.3E+003 N	3.1E+003 N					
METHYLENE BROMIDE	74953	1.00E-002 A				y	6.1E+001 N	3.7E+001 N	1.4E+001 N	2.0E+004 N	7.8E+002 N	1.5E-002	3.0E-001 N
METHYLENE CHLORIDE	75092	6.00E-002 I	7.50E-003 I	8.60E-001 H	1.65E-003 I	y	4.1E+000 C	3.8E+000 C	4.2E-001 C	7.6E+002 C	8.5E+001 C	9.5E-004	1.9E-002 C
4,4'-METHYLENE BIS(2-CHLOROANILINE)	101144	7.00E-004 H	1.30E-001 H		1.30E-001 H		5.2E-001 C	4.8E-002 C	2.4E-002 C	4.4E+001 C	4.9E+000 C		
4,4'-METHYLENE BIS(N,N'-DIMETHYL)ANILINE	101611		4.60E-002 I				1.5E+000 C	1.4E-001 C	6.9E-002 C	1.2E+002 C	1.4E+001 C		
4,4'-METHYLENEDIPHENYL ISOCYANATE	101688			1.7E-004 I				6.2E-001 N					
METHYL ETHYL KETONE (2-BUTANONE)	78933	6.00E-001 I		2.86E-001 I		y	1.9E+003 N	1.0E+003 N	8.1E+002 N	1.2E+006 N	4.7E+004 N	4.0E-001	7.9E+000 N
METHYL HYDRAZINE	60344		1.10E+000 W				6.1E-002 C	5.7E-003 C	2.9E-003 C	5.2E+000 C	5.8E-001 C		

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E = EPA-NCEA provisional value O = other

Basis: C = Carcinogenic effects N = Noncarcinogenic effects I = RBC at HI of 0.1 < RBC-c

Chemical	CAS	RfDo mg/kg/d	CSFo 1/mg/kg/d	RfDi mg/kg/d	CSFi 1/mg/kg/d	VOC	Risk-based concentrations: Tap water ug/l	Ambient air ug/m3	Fish mg/kg	Soil Industrial mg/kg	Residential mg/kg	Region III SSLs: Soil, for groundwater migration DAF 1 mg/kg	DAF 20 mg/kg
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	108101	8.00E-002 H		2.00E-002 A		y	1.4E+002 N	7.3E+001 N	1.1E+002 N	1.6E+005 N	6.3E+003 N	6.5E-002	1.3E+000 N
METHYL METHACRYLATE	80626	1.40E+000 I		2.00E-001 I		y	1.4E+003 N	7.3E+002 N	1.9E+003 N	2.9E+006 N	1.1E+005 N	3.2E-001	6.5E+000 N
2-METHYL-5-NITROANILINE	99558		3.30E-002 H				2.0E+000 C	1.9E-001 C	9.8E-002 C	1.7E+002 C	1.9E+001 C		
METHYL PARATHION	298000	2.50E-004 I					9.1E+000 N	9.1E-001 N	3.4E-001 N	5.1E+002 N	2.0E+001 N	4.3E-003	8.5E-002 N
2-METHYLPHENOL	95487	5.00E-002 I					1.8E+003 N	1.8E+002 N	6.8E+001 N	1.0E+005 N	3.9E+003 N		
3-METHYLPHENOL	108394	5.00E-002 I					1.8E+003 N	1.8E+002 N	6.8E+001 N	1.0E+005 N	3.9E+003 N		
4-METHYLPHENOL	106445	5.00E-003 H					1.8E+002 N	1.8E+001 N	6.8E+000 N	1.0E+004 N	3.9E+002 N		
METHYLSTYRENE MIX	25013154	6.00E-003 A		1.00E-002 A		y	5.5E+001 N	3.7E+001 N	8.1E+000 N	1.2E+004 N	4.7E+002 N	5.1E-002	1.0E+000 N
ALPHA-METHYLSTYRENE	98839	7.00E-002 A				y	4.3E+002 N	2.6E+002 N	9.5E+001 N	1.4E+005 N	5.5E+003 N	4.0E-001	7.9E+000 N
METHYL TERT-BUTYL ETHER	1634044			8.57E-001 I		y	6.3E+003 N	3.1E+003 N				1.4E+000	2.8E+001 N
METOLACHLOR (DUAL)	51218452	1.50E-001 I					5.5E+003 N	5.5E+002 N	2.0E+002 N	3.1E+005 N	1.2E+004 N		
MIREX	2385855	2.00E-004 I					7.3E+000 N	7.3E-001 N	2.7E-001 N	4.1E+002 N	1.6E+001 N		
MOLYBDENUM	7439987	5E-003 I					1.8E+002 N	1.8E+001 N	6.8E+000 N	1.0E+004 N	3.9E+002 N		
MONOCHLORAMINE	10599903	1E-001 I		1.00E-001 H			3.7E+003 N	3.7E+002 N	1.4E+002 N	2.0E+005 N	7.8E+003 N		
NALED	300765	2E-003 I					7.3E+001 N	7.3E+000 N	2.7E+000 N	4.1E+003 N	1.6E+002 N		
NICKEL REFINERY DUST					8.4E-001 I			7.5E-003 C					
NICKEL	7440020	2.00E-002 I					7.3E+002 N	7.3E+001 N	2.7E+001 N	4.1E+004 N	1.6E+003 N		
NITRATE	14797558	1.60E+000 I					5.8E+004 N	5.8E+003 N	2.2E+003 N	3.3E+006 N	1.3E+005 N		
NITRIC OXIDE	10102439	1.00E-001 W				y	6.1E+002 N	3.7E+002 N	1.4E+002 N	2.0E+005 N	7.8E+003 N		
NITRITE	14797650	1.00E-001 I					3.7E+003 N	3.7E+002 N	1.4E+002 N	2.0E+005 N	7.8E+003 N		
2-NITROANILINE	88744			5.70E-005 H				2.1E-001 N					
NITROBENZENE	98953	5.00E-004 I		8.00E-004 A		y	3.5E+000 N	2.2E+000 N	6.8E-001 N	1.0E+003 N	3.9E+001 N	1.2E-003	2.3E-002 N
NITROFURANTOIN	67209	7.00E-002 H					2.6E+003 N	2.6E+002 N	9.5E+001 N	1.4E+005 N	5.5E+003 N		
NITROFURAZONE	59870		1.50E+000 H				4.5E-002 C	4.2E-003 C	2.1E-003 C	3.6E+000 C	4.3E-001 C		
NITROGEN DIOXIDE	10102440	1.00E+000 W				y	6.1E+003 N	3.7E+003 N	1.4E+003 N	2.0E+006 N	7.8E+004 N		
NITROGLYCERIN	55630		1.4E-002 E				4.8E+000 C	4.5E-001 C	2.3E-001 C	4.1E+002 C	4.6E+001 C		
4-NITROPHENOL	100027	8.00E-003 E					2.9E+002 N	2.9E+001 N	1.1E+001 N	1.6E+004 N	6.3E+002 N	8.7E-002	1.7E+000 N
2-NITROPROPANE	79469			5.70E-003 I	9.40E+000 H	y	1.3E-003 C	6.7E-004 C				3.2E-007	6.4E-006 C
N-NITROSO-DI-N-BUTYLAMINE	924163		5.40E+000 I		5.60E+000 I	y	1.9E-003 C	1.1E-003 C	5.8E-004 C	1.1E+000 C	1.2E-001 C	1.4E-006	2.7E-005 C
N-NITROSODIETHANOLAMINE	1116547		2.80E+000 I				2.4E-002 C	2.2E-003 C	1.1E-003 C	2.0E+000 C	2.3E-001 C		
N-NITROSODIETHYLAMINE	55185		1.50E+002 I		1.50E+002 I		4.5E-004 C	4.2E-005 C	2.1E-005 C	3.8E-002 C	4.3E-003 C	1.1E-007	2.3E-006 C
N-NITROSODIMETHYLAMINE	62759		5.10E+001 I		5.10E+001 I		1.3E-003 C	1.2E-004 C	6.2E-005 C	1.1E-001 C	1.3E-002 C	2.8E-007	5.7E-006 C
N-NITROSODIPHENYLAMINE	86306		4.90E-003 I				1.4E+001 C	1.3E+000 C	6.4E-001 C	1.2E+003 C	1.3E+002 C	3.8E-002	7.6E-001 C
N-NITROSODIPROPYLAMINE	621647		7.00E+000 I				9.6E-003 C	8.9E-004 C	4.5E-004 C	8.2E-001 C	9.1E-002 C	2.4E-006	4.7E-005 C
N-NITROSO-N-ETHYLUREA	759739		1.40E+002 H				4.8E-004 C	4.5E-005 C	2.3E-005 C	4.1E-002 C	4.6E-003 C		
N-NITROSO-N-METHYLETHYLAMINE	10595956		2.20E+001 I				3.0E-003 C	2.8E-004 C	1.4E-004 C	2.6E-001 C	2.9E-002 C		
N-NITROSOPYRROLIDINE	930552		2.10E+000 I		2.10E+000 I		3.2E-002 C	3.0E-003 C	1.5E-003 C	2.7E+000 C	3.0E-001 C		
M-NITROTOLUENE	99081	2.00E-002 E				y	1.2E+002 N	7.3E+001 N	2.7E+001 N	4.1E+004 N	1.6E+003 N		
O-NITROTOLUENE	88722	1.00E-002 H				y	6.1E+001 N	3.7E+001 N	1.4E+001 N	2.0E+004 N	7.8E+002 N		
P-NITROTOLUENE	99990	1.00E-002 H				y	6.1E+001 N	3.7E+001 N	1.4E+001 N	2.0E+004 N	7.8E+002 N		
NUSTAR	85509199	7.00E-004 I					2.6E+001 N	2.6E+000 N	9.5E-001 N	1.4E+003 N	5.5E+001 N		
ORYZALIN	19044883	5.00E-002 I					1.8E+003 N	1.8E+002 N	6.8E+001 N	1.0E+005 N	3.9E+003 N		
OXADIAZON	19666309	5.00E-003 I					1.8E+002 N	1.8E+001 N	6.8E+000 N	1.0E+004 N	3.9E+002 N		
OXAMYL	23135220	2.50E-002 I					9.1E+002 N	9.1E+001 N	3.4E+001 N	5.1E+004 N	2.0E+003 N	1.9E-001	3.8E+000 N
OXYFLUORFEN	42874033	3.00E-003 I					1.1E+002 N	1.1E+001 N	4.1E+000 N	6.1E+003 N	2.3E+002 N		

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												Soil, for groundwater migration	
Chemical	CAS	RfDo mg/kg/d	CSFo 1/mg/kg/d	RfDi mg/kg/d	CSFi 1/mg/kg/d	VOC	Tap water ug/l	Ambient air ug/m3	Fish mg/kg	Soil Industrial mg/kg	Residential mg/kg	DAF 1 mg/kg	DAF 20 mg/kg
PARAQUAT DICHLORIDE	1910425	4.50E-003 I					1.6E+002 N	1.6E+001 N	8.1E+000 N	9.2E+003 N	3.5E+002 N		
PARATHION	56382	6.00E-003 H					2.2E+002 N	2.2E+001 N	8.1E+000 N	1.2E+004 N	4.7E+002 N	5.0E-001	1.0E+001 N
PENTACHLOROBENZENE	608935	8.00E-004 I					2.9E+001 N	2.9E+000 N	1.1E+000 N	1.6E+003 N	6.3E+001 N	1.0E+000	2.0E+001 N
PENTACHLORONITROBENZENE	82688	3.00E-003 I	2.60E-001 H				2.6E-001 C	2.4E-002 C	1.2E-002 C	2.2E+001 C	2.5E+000 C	4.1E-003	8.2E-002 C
PENTACHLOROPHENOL	87865	3.00E-002 I	1.20E-001 I				5.6E-001 C	5.2E-002 C	2.6E-002 C	4.8E+001 C	5.3E+000 C		
PERMETHRIN	52645531	5.00E-002 I					1.8E+003 N	1.8E+002 N	6.8E+001 N	1.0E+005 N	3.9E+003 N	1.2E+002	2.4E+003 N
PHENOL	108952	6.00E-001 I					2.2E+004 N	2.2E+003 N	8.1E+002 N	1.2E+006 N	4.7E+004 N	6.7E+000	1.3E+002 N
M-PHENYLENEDIAMINE	108452	6.00E-003 I					2.2E+002 N	2.2E+001 N	8.1E+000 N	1.2E+004 N	4.7E+002 N	4.9E-002	9.8E-001 N
O-PHENYLENEDIAMINE	95545		4.70E-002 H				1.4E+000 C	1.3E-001 C	6.7E-002 C	1.2E+002 C	1.4E+001 C		
P-PHENYLENEDIAMINE	106503	1.90E-001 H					6.9E+003 N	6.9E+002 N	2.6E+002 N	3.9E+005 N	1.5E+004 N		
2-PHENYLPHENOL	90437		1.90E-003 H				3.5E+001 C	3.3E+000 C	1.7E+000 C	3.0E+003 C	3.4E+002 C		
PHOSPHINE	7803512	3.00E-004 I		8.60E-005 I			1.1E+001 N	3.1E-001 N	4.1E-001 N	6.1E+002 N	2.3E+001 N		
PHOSPHORIC ACID	7664382			2.90E-003 I				1.1E+001 N					
PHOSPHORUS (WHITE)	7723140	2.00E-005 I					7.3E-001 N	7.3E-002 N	2.7E-002 N	4.1E+001 N	1.6E+000 N		
P-PHTHALIC ACID	100210	1.00E+000 H					3.7E+004 N	3.7E+003 N	1.4E+003 N	2.0E+006 N	7.8E+004 N		
PHTHALIC ANHYDRIDE	85449	2.00E+000 I		3.43E-002 H			7.3E+004 N	1.3E+002 N	2.7E+003 N	4.1E+006 N	1.6E+005 N	2.6E+001	5.2E+002 N
POLYBROMINATED BIPHENYLS		7.00E-006 H	8.90E+000 H				7.5E-003 C	7.0E-004 C	3.5E-004 C	6.4E-001 C	7.2E-002 C !		
POLYCHLORINATED BIPHENYLS	1336363		2.00E+000 I			2.00E+000 I	3.3E-002 C	3.1E-003 C	1.6E-003 C	2.9E+000 C	3.2E-001 C	2.1E-002	4.1E-001 C
AROCLOR-1016	12674112	7.00E-005 I	7.00E-002 I			7.00E-002 I	9.6E-001 C !	8.9E-002 C !	4.5E-002 C !	6.2E+001 C !	5.5E+000 N	2.1E-001	4.2E+000 C
AROCLOR-1221	11104282		2.00E+000 I			2.00E+000 I	3.3E-002 C	3.1E-003 C	1.6E-003 C	2.9E+000 C	3.2E-001 C		
AROCLOR-1232	11141165		2.00E+000 I			2.00E+000 I	3.3E-002 C	3.1E-003 C	1.6E-003 C	2.9E+000 C	3.2E-001 C		
AROCLOR-1242	53469219		2.00E+000 I			2.00E+000 I	3.3E-002 C	3.1E-003 C	1.6E-003 C	2.9E+000 C	3.2E-001 C		
AROCLOR-1248	12672296		2.00E+000 I			2.00E+000 I	3.3E-002 C	3.1E-003 C	1.6E-003 C	2.9E+000 C	3.2E-001 C		
AROCLOR-1254	11097691	2.00E-005 I	2.00E+000 I			2.00E+000 I	3.3E-002 C	3.1E-003 C	1.6E-003 C	2.9E+000 C	3.2E-001 C !	5.4E-002	1.1E+000 C
AROCLOR-1260	11096825		2.00E+000 I			2.00E+000 I	3.3E-002 C	3.1E-003 C	1.6E-003 C	2.9E+000 C	3.2E-001 C		
POLYCHLORINATED TERPHENYLS	61788338		4.50E+000 E				1.5E-002 C	1.4E-003 C	7.0E-004 C	1.3E+000 C	1.4E-001 C		
POLYNUCLEAR AROMATIC HYDROCARBONS:													
ACENAPHTHENE	83329	6.00E-002 I				y	3.7E+002 N	2.2E+002 N	8.1E+001 N	1.2E+005 N	4.7E+003 N	5.2E+000	1.0E+002 N
ANTHRACENE	120127	3.00E-001 I				y	1.8E+003 N	1.1E+003 N	4.1E+002 N	6.1E+005 N	2.3E+004 N	2.3E+001	4.7E+002 N
BENZ[A]ANTHRACENE	56553		7.30E-001 E				9.2E-002 C	8.6E-003 C	4.3E-003 C	7.8E+000 C	8.7E-001 C	7.3E-002	1.5E+000 C
BENZO[B]FLUORANTHENE	205992		7.30E-001 E				9.2E-002 C	8.6E-003 C	4.3E-003 C	7.8E+000 C	8.7E-001 C	2.3E-001	4.5E+000 C
BENZO[K]FLUORANTHENE	207089		7.30E-002 E				9.2E-001 C	8.6E-002 C	4.3E-002 C	7.8E+001 C	8.7E+000 C	2.3E+000	4.5E+001 C
BENZO[A]PYRENE	50328		7.30E+000 I		3.10E+000 E		9.2E-003 C	2.0E-003 C	4.3E-004 C	7.8E-001 C	8.7E-002 C	1.9E-002	3.7E-001 C
CARBAZOLE	86748		2.00E-002 H				3.3E+000 C	3.1E-001 C	1.6E-001 C	2.9E+002 C	3.2E+001 C	2.3E-002	4.7E-001 C
CHRYSENE	218019		7.30E-003 E				9.2E+000 C	8.6E-001 C	4.3E-001 C	7.8E+002 C	8.7E+001 C	7.3E+000	1.5E+002 C
DIBENZ[A,H]ANTHRACENE	53703		7.30E+000 E				9.2E-003 C	8.6E-004 C	4.3E-004 C	7.8E-001 C	8.7E-002 C	7.0E-002	1.4E+000 C
DIBENZOFURAN	132649	4.00E-003 E				y	2.4E+001 N	1.5E+001 N	5.4E+000 N	8.2E+003 N	3.1E+002 N	3.8E-001	7.7E+000 N
FLUORANTHENE	208440	4.00E-002 I					1.5E+003 N	1.5E+002 N	5.4E+001 N	8.2E+004 N	3.1E+003 N	3.1E+002	6.3E+003 N
FLUORENE	86737	4.00E-002 I				y	2.4E+002 N	1.5E+002 N	5.4E+001 N	8.2E+004 N	3.1E+003 N	6.8E+000	1.4E+002 N
INDENO(1,2,3-C,D)PYRENE	193395		7.30E-001 E				9.2E-002 C	8.6E-003 C	4.3E-003 C	7.8E+000 C	8.7E-001 C	6.4E-001	1.3E+001 C
2-METHYLNAPHTHALENE	91576	2.00E-002 E				y	1.2E+002 N	7.3E+001 N	2.7E+001 N	4.1E+004 N	1.6E+003 N	1.1E+000	2.2E+001 N
NAPHTHALENE	91203	2.00E-002 I		9.00E-004 I		y	6.5E+000 N	3.3E+000 N	2.7E+001 N	4.1E+004 N	1.6E+003 N	7.7E-003	1.5E-001 N
PYRENE	129000	3.00E-002 I				y	1.8E+002 N	1.1E+002 N	4.1E+001 N	6.1E+004 N	2.3E+003 N	3.4E+001	6.8E+002 N
PROMETON	1610180	1.50E-002 I					5.5E+002 N	5.5E+001 N	2.0E+001 N	3.1E+004 N	1.2E+003 N		
PROMETRYN	7287196	4.00E-003 I					1.5E+002 N	1.5E+001 N	5.4E+000 N	8.2E+003 N	3.1E+002 N		

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Chemical	CAS	RfDo mg/kg/d	CSFo 1/mg/kg/d	RfDi mg/kg/d	CSFi 1/mg/kg/d	VOC	Tap water ug/l	Ambient air ug/m3	Fish mg/kg	Soil Industrial mg/kg	Residential mg/kg	DAF 1 mg/kg	DAF 20 mg/kg
PROPACHLOR	1918167	1.30E-002 I					4.7E+002 N	4.7E+001 N	1.8E+001 N	2.7E+004 N	1.0E+003 N		
PROPANIL	709988	5.00E-003 I					1.8E+002 N	1.8E+001 N	6.8E+000 N	1.0E+004 N	3.9E+002 N		
PROPARGITE	2312358	2.00E-002 I					7.3E+002 N	7.3E+001 N	2.7E+001 N	4.1E+004 N	1.6E+003 N		
**N-PROPYLBENZENE	103651	4.00E-002 E				y	2.4E+002 N	1.5E+002 N	5.4E+001 N	8.2E+004 N	3.1E+003 N	1.4E+000	2.8E+001 N
PROPYLENE GLYCOL	57556	2.00E+001 H					7.3E+005 N	7.3E+004 N	2.7E+004 N	4.1E+007 N	1.6E+006 N		
PROPYLENE GLYCOL, MONOETHYL ETHER	52125538	7.00E-001 H					2.6E+004 N	2.6E+003 N	9.5E+002 N	1.4E+006 N	5.5E+004 N		
PROPYLENE GLYCOL, MONOMETHYL ETHER	107982	7.00E-001 H		5.70E-001 I			2.6E+004 N	2.1E+003 N	9.5E+002 N	1.4E+006 N	5.5E+004 N		
PURSUIT	81335775	2.50E-001 I					9.1E+003 N	9.1E+002 N	3.4E+002 N	5.1E+005 N	2.0E+004 N		
PYRIDINE	110861	1.00E-003 I					3.7E+001 N	3.7E+000 N	1.4E+000 N	2.0E+003 N	7.8E+001 N		
QUINOLINE	91225		1.20E+001 H				5.6E-003 C	5.2E-004 C	2.6E-004 C	4.8E-001 C	5.3E-002 C		
RDX	121824	3.00E-003 I	1.10E-001 I				6.1E-001 C	5.7E-002 C	2.9E-002 C	5.2E+001 C	5.8E+000 C		
RESMETHRIN	10453868	3.00E-002 I					1.1E+003 N	1.1E+002 N	4.1E+001 N	6.1E+004 N	2.3E+003 N		
RONNEL	299843	5.00E-002 H					1.8E+003 N	1.8E+002 N	6.8E+001 N	1.0E+005 N	3.9E+003 N		
ROTENONE	83794	4.00E-003 I					1.5E+002 N	1.5E+001 N	5.4E+000 N	8.2E+003 N	3.1E+002 N		
SELENIOUS ACID	7783008	5.00E-003 I					1.8E+002 N	1.8E+001 N	6.8E+000 N	1.0E+004 N	3.9E+002 N		
SELENIUM	7782492	5.00E-003 I					1.8E+002 N	1.8E+001 N	6.8E+000 N	1.0E+004 N	3.9E+002 N	9.5E-001	1.9E+001 N
SILVER	7440224	5.00E-003 I					1.8E+002 N	1.8E+001 N	6.8E+000 N	1.0E+004 N	3.9E+002 N	1.6E+000	3.1E+001 N
SIMAZINE	122349	5.00E-003 I	1.20E-001 H				5.6E-001 C	5.2E-002 C	2.6E-002 C	4.8E+001 C	5.3E+000 C	1.7E-004	3.3E-003 C
SODIUM AZIDE	26628228	4.00E-003 I					1.5E+002 N	1.5E+001 N	5.4E+000 N	8.2E+003 N	3.1E+002 N		
SODIUM DIETHYLDITHIOCARBAMATE	148185	3.00E-002 I	2.70E-001 H				2.5E-001 C	2.3E-002 C	1.2E-002 C	2.1E+001 C	2.4E+000 C		
STRONTIUM, STABLE	7440246	6.00E-001 I					2.2E+004 N	2.2E+003 N	8.1E+002 N	1.2E+006 N	4.7E+004 N	7.7E+002	1.5E+004 N
STRYCHNINE	57249	3.00E-004 I					1.1E+001 N	1.1E+000 N	4.1E-001 N	6.1E+002 N	2.3E+001 N	8.3E-003	1.7E-001 N
STYRENE	100425	2.00E-001 I		2.86E-001 I		y	1.6E+003 N	1.0E+003 N	2.7E+002 N	4.1E+005 N	1.6E+004 N	2.9E+000	5.7E+001 N
2,3,7,8-TETRACHLORODIBENZODIOXIN	1746016		1.50E+005 H		1.50E+005 H		4.5E-007 C	4.2E-008 C	2.1E-008 C	3.8E-005 C	4.3E-008 C	4.3E-007	8.6E-006 C
1,2,4,5-TETRACHLOROBENZENE	95943	3.00E-004 I					1.1E+001 N	1.1E+000 N	4.1E-001 N	6.1E+002 N	2.3E+001 N	3.3E-002	6.6E-001 N
1,1,1,2-TETRACHLOROETHANE	630206	3.00E-002 I	2.60E-002 I		2.60E-002 I	y	4.1E-001 C	2.4E-001 C	1.2E-001 C	2.2E+002 C	2.5E+001 C	2.0E-004	4.0E-003 C
1,1,2,2-TETRACHLOROETHANE	79345	6.00E-002 E	2.00E-001 I		2.00E-001 I	y	5.3E-002 C	3.1E-002 C	1.6E-002 C	2.9E+001 C	3.2E+000 C	3.4E-005	6.8E-004 C
TETRACHLOROETHENE	127184	1.00E-002 I	5.20E-002 E	1.4E-001 E	2.00E-003 E	y	1.1E+000 C	3.1E+000 C	6.1E-002 C	1.1E+002 C	1.2E+001 C	2.4E-003	4.8E-002 C
2,3,4,6-TETRACHLOROPHENOL	58902	3.00E-002 I					1.1E+003 N	1.1E+002 N	4.1E+001 N	6.1E+004 N	2.3E+003 N		
P,A,A,A-TETRACHLOROTOLUENE	5216251		2.00E+001 H				3.3E-003 C	3.1E-004 C	1.6E-004 C	2.9E-001 C	3.2E-002 C		
1,1,1,2-TETRAFLUOROETHANE	811972			2.29E+001 I		y	1.7E+005 N	8.4E+004 N					
TETRAHYDROFURAN	109999	2.00E-001 E	7.6E-003 E	8.6E-002 E	6.8E-003 E		8.8E+000 C	9.2E-001 C	4.2E-001 C	7.5E+002 C	8.4E+001 C		
TETRYL	479458	1.00E-002 H					3.7E+002 N	3.7E+001 N	1.4E+001 N	2.0E+004 N	7.8E+002 N		
THALLIC OXIDE	1314325	7.00E-005 W					2.6E+000 N	2.6E-001 N	9.5E-002 N	1.4E+002 N	5.5E+000 N		
THALLIUM	7440280	7.00E-005 O					2.6E+000 N	2.6E-001 N	9.5E-002 N	1.4E+002 N	5.5E+000 N	1.8E-001	3.6E+000 N
THALLIUM ACETATE	563688	9.00E-005 I					3.3E+000 N	3.3E-001 N	1.2E-001 N	1.8E+002 N	7.0E+000 N		
THALLIUM CARBONATE	6533739	6.00E-005 I					2.9E+000 N	2.9E-001 N	1.1E-001 N	1.6E+002 N	6.3E+000 N		
THALLIUM CHLORIDE	7791120	8.00E-005 I					2.9E+000 N	2.9E-001 N	1.1E-001 N	1.6E+002 N	6.3E+000 N		
THALLIUM NITRATE	10102451	9.00E-005 I					3.3E+000 N	3.3E-001 N	1.2E-001 N	1.8E+002 N	7.0E+000 N		
THALLIUM SULFATE (2:1)	7446186	8.00E-005 I					2.9E+000 N	2.9E-001 N	1.1E-001 N	1.6E+002 N	6.3E+000 N		
THIOBENCARB	28249776	1.00E-002 I					3.7E+002 N	3.7E+001 N	1.4E+001 N	2.0E+004 N	7.8E+002 N		
TIN	7440315	6.00E-001 H					2.2E+004 N	2.2E+003 N	8.1E+002 N	1.2E+006 N	4.7E+004 N		

Sources: I = IRIS H = HEAST A = HEAST Alternate W = Withdrawn from IRIS or HEAST E = EPA-NCEA provisional value O = other							Basis: C = Carcinogenic effects N = Noncarcinogenic effects ! = RBC at HI of 0.1 < RBC-c					Region III SSLs	
							Risk-based concentrations					Soil, for groundwater migration	
Chemical	CAS	RfDo mg/kg/d	CSFo 1/mg/kg/d	RfDi mg/kg/d	CSFi 1/mg/kg/d	VOC	Tap water ug/l	Ambient air ug/m3	Fish mg/kg	Soil Industrial mg/kg	Residential mg/kg	DAF 1 mg/kg	DAF 20 mg/kg
TITANIUM	7440326	4.00E+000 E		8.60E-003 E			1.5E+005 N	3.1E+001 N	5.4E+003 N	8.2E+006 N	3.1E+005 N		
TITANIUM DIOXIDE	13463677	4.00E+000 E		8.60E-003 E			1.5E+005 N	3.1E+001 N	5.4E+003 N	8.2E+006 N	3.1E+005 N		
TOLUENE	108883	2.00E-001 I		1.14E-001 I		y	7.5E+002 N	4.2E+002 N	2.7E+002 N	4.1E+005 N	1.6E+004 N	4.4E-001	8.8E+000 N
TOLUENE-2,4-DIAMINE	95807		3.20E+000 H				2.1E-002 C	2.0E-003 C	9.9E-004 C	1.8E+000 C	2.0E-001 C		
TOLUENE-2,5-DIAMINE	95705	8.00E-001 H					2.2E+004 N	2.2E+003 N	8.1E+002 N	1.2E+006 N	4.7E+004 N		
TOLUENE-2,6-DIAMINE	823405	2.00E-001 H					7.3E+003 N	7.3E+002 N	2.7E+002 N	4.1E+005 N	1.6E+004 N		
P-TOLUIDINE	106490		1.90E-001 H				3.5E-001 C	3.3E-002 C	1.7E-002 C	3.0E+001 C	3.4E+000 C	3.0E-004	5.9E-003 C
TOXAPHENE	8001352		1.10E+000 I		1.10E+000 I		6.1E-002 C	5.7E-003 C	2.9E-003 C	5.2E+000 C	5.8E-001 C	3.1E-002	6.3E-001 C
1,2,4-TRIBROMOBENZENE	615543	5.00E-003 I					1.8E+002 N	1.8E+001 N	6.8E+000 N	1.0E+004 N	3.9E+002 N		
TRIBUTYLTIN OXIDE	56359	3.00E-004 I					1.1E+001 N	1.1E+000 N	4.1E-001 N	6.1E+002 N	2.3E+001 N		
2,4,6-TRICHLOROANILINE	634935		3.40E-002 H				2.0E+000 C	1.8E-001 C	9.3E-002 C	1.7E+002 C	1.9E+001 C		
1,2,4-TRICHLOROBENZENE	120821	1.00E-002 I		5.70E-002 H		y	1.9E+002 N	2.1E+002 N	1.4E+001 N	2.0E+004 N	7.8E+002 N	3.8E-001	7.5E+000 N
**1,1,1-TRICHLOROETHANE	71556	2.80E-001 E		6.30E-001 E		y	3.2E+003 N	2.3E+003 N	3.8E+002 N	5.7E+005 N	2.2E+004 N	3.0E+000	6.0E+001 N
1,1,2-TRICHLOROETHANE	79005	4.00E-003 I	5.70E-002 I		5.60E-002 I	y	1.9E-001 C	1.1E-001 C	5.5E-002 C	1.0E+002 C	1.1E+001 C	3.9E-005	7.8E-004 C
TRICHLOROETHENE	79016	6.00E-003 E	1.10E-002 E		6.00E-003 E	y	1.6E+000 C	1.0E+000 C	2.9E-001 C	5.2E+002 C	5.8E+001 C !	7.7E-004	1.5E-002 C
TRICHLOROFLUOROMETHANE	75694	3.00E-001 I		2.00E-001 A		y	1.3E+003 N	7.3E+002 N	4.1E+002 N	6.1E+005 N	2.3E+004 N	1.1E+000	2.3E+001 N
2,4,5-TRICHLOROPHENOL	95954	1.00E-001 I					3.7E+003 N	3.7E+002 N	1.4E+002 N	2.0E+005 N	7.8E+003 N		
2,4,6-TRICHLOROPHENOL	88062		1.10E-002 I		1.00E-002 I		6.1E+000 C	6.3E-001 C	2.9E-001 C	5.2E+002 C	5.8E+001 C		
2,4,5-T	93765	1.00E-002 I					3.7E+002 N	3.7E+001 N	1.4E+001 N	2.0E+004 N	7.8E+002 N	9.8E-002	2.0E+000 N
2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	93721	8.00E-003 I					2.9E+002 N	2.9E+001 N	1.1E+001 N	1.6E+004 N	6.3E+002 N	1.1E+000	2.1E+001 N
1,1,2-TRICHLOROPROPANE	598776	5.00E-003 I				y	3.0E+001 N	1.8E+001 N	6.8E+000 N	1.0E+004 N	3.9E+002 N	1.2E-002	2.5E-001 N
**1,2,3-TRICHLOROPROPANE	96184	6.00E-003 I	2.00E+000 E	1.4E-003 E		y	5.3E-003 C	3.1E-003 C	1.6E-003 C	2.9E+000 C	3.2E-001 C	1.8E-006	3.6E-005 C
1,2,3-TRICHLOROPROPENE	96195	5.00E-003 H				y	3.0E+001 N	1.8E+001 N	6.8E+000 N	1.0E+004 N	3.9E+002 N	1.2E-002	2.5E-001 N
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	76131	3.00E+001 I		8.60E+000 H		y	5.9E+004 N	3.1E+004 N	4.1E+004 N	6.1E+007 N	2.3E+006 N	1.2E+002	2.3E+003 N
1,2,4-TRIMETHYLBENZENE	95636	5.00E-002 E		1.70E-003 E		y	1.2E+001 N	6.2E+000 N	6.8E+001 N	1.0E+005 N	3.9E+003 N		
1,3,5-TRIMETHYLBENZENE	108678	5.00E-002 E		1.70E-003 E		y	1.2E+001 N	6.2E+000 N	6.8E+001 N	1.0E+005 N	3.9E+003 N		
TRIMETHYL PHOSPHATE	512561		3.70E-002 H				1.8E+000 C	1.7E-001 C	8.5E-002 C	1.5E+002 C	1.7E+001 C		
1,3,5-TRINITROBENZENE	99354	3.00E-002 I					1.1E+003 N	1.1E+002 N	4.1E+001 N	6.1E+004 N	2.3E+003 N		
2,4,6-TRINITROTOLUENE	118967	5.00E-004 I	3.00E-002 I				2.2E+000 C !	2.1E-001 C !	1.1E-001 C !	1.9E+002 C !	2.1E+001 C !		
URANIUM (SOLUBLE SALTS)		3.00E-003 I					1.1E+002 N	1.1E+001 N	4.1E+000 N	6.1E+003 N	2.3E+002 N		
VANADIUM	7440622	7.00E-003 H					2.6E+002 N	2.6E+001 N	9.5E+000 N	1.4E+004 N	5.5E+002 N	2.6E+002	5.1E+003 N
VANADIUM PENTOXIDE	1314621	9.00E-003 I					3.3E+002 N	3.3E+001 N	1.2E+001 N	1.8E+004 N	7.0E+002 N		
VANADIUM SULFATE	16785812	2.00E-002 H					7.3E+002 N	7.3E+001 N	2.7E+001 N	4.1E+004 N	1.6E+003 N		
VINCLOZOLIN	50471448	2.50E-002 I					9.1E+002 N	9.1E+001 N	3.4E+001 N	5.1E+004 N	2.0E+003 N		
VINYL ACETATE	108054	1.00E+000 H		5.71E-002 I		y	4.1E+002 N	2.1E+002 N	1.4E+003 N	2.0E+006 N	7.8E+004 N	8.7E-002	1.7E+000 N
VINYL CHLORIDE	75014		1.90E+000 H		3.00E-001 H	y	1.9E-002 C	2.1E-002 C	1.7E-003 C	3.0E+000 C	3.4E-001 C	7.9E-006	1.6E-004 C
WARFARIN	81812	3.00E-004 I					1.1E+001 N	1.1E+000 N	4.1E-001 N	6.1E+002 N	2.3E+001 N	2.2E-002	4.4E-001 N
M-XYLENE	108383	2.00E+000 H				y	1.2E+004 N	7.3E+003 N	2.7E+003 N	4.1E+006 N	1.6E+005 N	1.3E+001	2.5E+002 N
O-XYLENE	95476	2.00E+000 H				y	1.2E+004 N	7.3E+003 N	2.7E+003 N	4.1E+006 N	1.6E+005 N	1.1E+001	2.3E+002 N
P-XYLENE	106423					y							
XYLENES	1330207	2.00E+000 I				y	1.2E+004 N	7.3E+003 N	2.7E+003 N	4.1E+006 N	1.6E+005 N	8.5E+000	1.7E+002 N
ZINC	7440666	3.00E-001 I					1.1E+004 N	1.1E+003 N	4.1E+002 N	6.1E+005 N	2.3E+004 N	6.8E+002	1.4E+004 N
ZINC PHOSPHIDE	1314847	3E-004 I					1.1E+001 N	1.1E+000 N	4.1E-001 N	6.1E+002 N	2.3E+001 N		
ZINEB	12122677	5E-002 I					1.8E+003 N	1.8E+002 N	6.8E+001 N	1.0E+005 N	3.9E+003 N		

Attachment 4

Ecological Risk Assessment Work Plan

DRAFT

ECOLOGICAL RISK ASSESSMENT WORK PLAN FOR W. G. KRUMMRICH FACILITY

SAUGET, ILLINOIS

July 28, 2000

Prepared for:

Solutia, Inc.
575 Maryville Centre Drive
St. Louis, Missouri 62141

Prepared by:

Menzie-Cura & Associates, Inc.
One Courthouse Lane, Suite Two
Chelmsford, Massachusetts 01824
Phone: (978) 453-4300

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1.0 INTRODUCTION

1.1 Goals and Objectives

This document is a workplan for a baseline ecological risk assessment at the W. G. Krummrich Facility (Krummrich), in Sauget, Illinois. The purpose of this plan is to "Determine any current unacceptable risks to ...the environment and describe why other identified risks are acceptable," (Administrative Order on Consent, AOC, May 3, 2000, USEPA Docket Number R8H-5-00-003). This Ecological Risk Assessment Work Plan (ERA) is submitted to address the site investigation and impact assessment requirements of the AOC to evaluate the risk to the environment resulting from migration or bioaccumulation of site-related constituents through media of ecological concern (surface water, sediment, and biota). It is contingent upon a planned field reconnaissance of the subject areas. In particular, this planned reconnaissance will help to finalize sampling locations, receptors, and the location of a reference area. Observations made during the reconnaissance may necessitate alterations in the workplan. We will communicate such proposed alterations in a technical amendment to the plan, should they occur.

The plan follows current United States Environmental Protection Agency (USEPA) guidance in:

> *Ecological Risk Assessment Guidance For Superfund: Process For Designing and Conducting Ecological Risk Assessments* (USEPA, 1997a);
>
> *Guidelines for Ecological Risk Assessment* (EPA/630/R-95/002F, April, 1998); and
>
> *Ecological Data Quality Levels* (EPA Region 5, October 4, 1999).

The USEPA 1997 guidance document provides an eight-step process. Steps 1 and 2 of this process are a screening-level assessment, and Steps 3 through 7 provide guidance for a baseline assessment. 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.

The groundwater plume data available for Krummrich indicates the potential for the presence of site-related constituents in ecologically important media. This groundwater information essentially provides the screening analyses required in Steps 1 and 2 of the guidance (USEPA, 1997b) to warrant further investigation. Therefore, this ERA workplan addresses the various elements of Steps 3 through 7 of USEPA guidance for designing a baseline ecological risk assessment at the River Terminal portion of the Krummrich Facility, in the Mississippi River adjacent to "Site R" as shown on Figure 5 of the Proposed RCRA Site Sampling Plan. The ERA workplan includes:

- Description of a Site Conceptual Model;
- Selection of Chemicals of Ecological Concern;
- Identification of Assessment Endpoints;
- Selection of Receptors;
- Selection of Measures of effects and their relation to assessment endpoints;
- Risk Characterization;
- Discussion of Uncertainties and Assumptions.

The ERA workplan explains how the baseline risk assessment will use data generated from the sampling and analysis activities described in the Proposed RCRA Site Sampling Plan that has been prepared and submitted separately. The details of the field sampling effort as well as the data analysis methods and data quality objectives (DQOs) in support of the data to be used in the baseline ecological risk assessment will be described in a subsequent document (Quality Assurance Project Plan, QAPP). The following investigations will be performed in support of data input for the ERA.

- conduct a field reconnaissance to evaluate wildlife habitat, confirm site locations, and choose reference locations;
- collect benthic organisms from sediment at site and reference locations for an evaluation of benthic community structure;
- collect forage fish, predator fish, bottom-feeder fish, and game fish from site and reference locations for chemical analysis of target analytes;
- collect sediments from site and reference locations for sediment toxicity (bioassay) testing;
- collect sediments from site and reference locations for chemical analysis of target analytes;
- collect surface water from site and reference locations for chemical analysis of target analytes; and
- collect surface water from site and reference locations for toxicity (bioassay) testing.
- conduct a bathymetric survey of the portion of the Mississippi River potentially impacted from Facility groundwater.

The Proposed RCRA Site Sampling Plan and the future QAPP will include specific procedures and methods to perform these tasks in support of the ERA. This ERA workplan relies on the procedures described in the associated site documents, including the Proposed RCRA Site Sampling Plan and the future site QAPP for details of field sampling, number of stations, and station locations, and analytical methods. A summary of the planned sampling and analysis program, in support of ERA activities, is presented in Table 1-1. How the data from these investigations will be used in the ERA is described in the following sections.

Table 1-1. Summary of Proposed Sampling and Analysis Program in Support of the ERA

Sampling Location	Sample Matrix	Field Parameters	Lab Parameters [1]	Investigated Samples	Field Duplicates[3]	Matrix Spikes[3]	Field Blanks [2,3]	Matrix Total
Plume Discharge Area 3 Locations	Surface Water	pH, temp., DO, conductivity	SVOCs	9	1	1	1	12
			VOCs	9	1	1	2	13
			TSS	9	1	NA	NA	9
			Bioassay	36	NA	NA	NA	36
	Sediment	none	SVOCs	3	1	1	1	6
			VOCs	3 (9 Encores)	1	1	2	7
			TOC	3	1	NA	NA	4
			Grain Size	3	1	NA	NA	4
			Bioassay	12	NA	NA	NA	12
			Benthic Community Evaluation	9 (3 locations x 3 replicates at each location)	NA	NA	NA	9
	Bottom Feeder Fish	weight, length, width	SVOCs	1 whole fish composite (3-5 fish)	NA	1	NA	2
	Forager Fish	weight, length, width	SVOCs	1 whole fish composite (3-5 fish)	NA	0	NA	1
	Predator Fish	weight, length, width	SVOCs	1 whole fish composite (3-5 fish)	NA	0	NA	1
	Game Fish	weight, length, width	SVOCs	1 fillet composite (3-5 fish)	NA	1	NA	2
Upstream of Plume Discharge 1 Location	Surface Water	pH, temp., DO, conductivity	SVOCs	3	1	0	1	5
			VOCs	3	1	0	2	6
			TSS	3	1	0	0	4
			Bioassay	12	NA	NA	NA	12
	Sediment	none	SVOCs	1	0	0	0	1
			VOCs	1 (3 Encores)	0	0	0	1
			TOC	1	0	NA	NA	1
			Grain Size	1	0	NA	NA	1
			Bioassay	4	NA	NA	NA	4
			Benthic Community Evaluation	3 (1 location x 3 replicates)	NA	NA	NA	3

Table 1-1. Summary of Proposed Sampling and Analysis Program in Support of the ERA

Sampling Location	Sample Matrix	Field Parameters	Lab Parameters [1]	Investigated Samples	Field Duplicates[3]	Matrix Spikes[3]	Field Blanks [2,3]	Matrix Total
Upstream of Plume Discharge 1 Location	Bottom Feeder Fish	weight, length, width	SVOCs	1 whole fish composite (3-5 fish)	NA	0	NA	1
	Forager Fish	weight, length, width	SVOCs	1 whole fish composite (3-5 fish)	NA	0	NA	1
	Predator Fish	weight, length, width	SVOCs	1 whole fish composite (3-5 fish)	NA	0	NA	1
	Game Fish	weight, length, width	SVOCs	1 fillet composite (3-5 fish)	NA	0	NA	1
Downstream of Plume Discharge 1 Location	Surface Water	pH, temp., DO, conductivity	SVOCs	3	0	0	0	3
			VOCs	3	0	0	0	3
			TSS	3	0	0	0	3
			Bioassay	12	NA	NA	NA	12
	Sediment	none	SVOCs	1	0	0	0	1
			VOCs	1 (3 Encores)	0	0	0	1
			TOC	1	0	NA	NA	1
			Grain Size	1	0	NA	NA	1
			Bioassay	4	NA	NA	NA	4
			Benthic Community Evaluation	3 (1 location x 3 replicates)	NA	NA	NA	3
	Bottom Feeder Fish	weight, length, width	SVOCs	1 whole fish composite (3-5 fish)	NA	0	NA	1
	Forager Fish	weight, length, width	SVOCs	1 whole fish composite (3-5 fish)	NA	0	NA	1
	Predator Fish	weight, length, width	SVOCs	1 whole fish composite (3-5 fish)	NA	0	NA	1
	Game Fish	weight, length, width	SVOCs	1 fillet composite (3-5 fish)	NA	0	NA	1

(1) USEPA SW-846 Methods 8260B and 8270C will be used for analysis of VOCs and SVOCs, respectively, and will be performed by Severn Trent Laboratory – Savannah. Bioassays and Benthic Community Evaluations to be performed by Aquatec Biological Sciences.
(2) Field Blanks include trip blanks for volatiles and equipment rinse blanks for semivolatiles and volatiles.
(3) Field QC (FD/Field Blanks) for VOC and SVOC will be performed at a minimum frequency of 1 set per 10 field samples of the same media. MS/MSD samples will be collected at a minimum frequency of 1 set per 20 field samples of the same media. Whole composite fish and fish fillets are considered two different media for the purposes of MS/MSD QC frequency.
NA = QC not applicable to this parameter based on data quality needs of RCRA investigation.

2.0 SITE CONCEPTUAL MODEL

2.1 Ecological Observations

We will conduct a Reconnaissance Survey to provide more details and more current information regarding ecological conditions at the planned sample locations in the Mississippi River. During the Reconnaissance Survey, we will evaluate potentially sensitive environments in the planned sampling locations where facility groundwater discharges to surface water. A wildlife habitat assessment will be made to evaluate wildlife species composition and habitat use (see further discussion in Section 4.3.2). In addition, we will contact or check information from federal/state agencies (for example, the Illinois Department of Natural Resources' Natural Heritage Inventory) and private conservation organizations concerning additional ecological information available about the area.

Habitat known to be used by Federal Designated Endangered or Threatened Species

For example, we may find records concerning federally endangered or threatened species in the study area such as the bald eagle (*Haliaeetus leucocephalus*). The Mississippi River can support large fish and provide enough open water for eagles to fish. We will survey the area during the reconnaissance for such sensitive species as the bald eagle.

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

It is also anticipated that a number of state-listed (Illinois endangered species) wading birds may be observed in the ecological study area such as the little blue heron (*Egretta caerulea*), snowy egret (*Egretta thula*), black-crowned night heron (*Nycticorax nycticorax*), and/or Great egret (*Casmerodius albus*).

During the Reconnaissance Survey, we will determine if any wading bird colonies are located within the study area. Wading birds forage on a wide range of aquatic organisms, such as fish, frogs, and crayfish, as well as some terrestrial species such as reptiles and insects. The USFWS study found that wading birds forage over a wide area around East St. Louis. 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 Monsanto plant near the Alton & Southern rail yards in Alorton. The second site is over 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 (*Bubulcus ibis*), great blue heron (*Ardea herodias*), and green-backed heron (*Butorides virescens*) nest in the colonies.

Wetlands

During the Reconnaissance Survey, we will look for the presence of bordering wetlands in the study areas. Their presence will be evaluated and described for within, upstream, and downstream of the expected groundwater discharge plume areas. Photographs may be taken of

the wetlands areas to assist in the documentation and evaluation of any evidence, or lack of evidence, of ecological stress in terms of chlorotic plants, nonspecific stands of vegetation, areas of dying or dead vegetation, observable presence of diverse pelagic communities in the stream, observed surface water sheens or sediment staining.

2.2 Site Conceptual Model

The foundation of an ERA work plan is the site conceptual model. It integrates information from the preliminary observations at the site (usually incorporated into the screening level risk assessment). According to EPA 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.

The site conceptual model will be generated during the ERA process using the historical data and knowledge of the area to date, the potential site-related contaminants observed historically in the Facility groundwater plume, and observations made during the Reconnaissance sampling event. The site conceptual model will illustrate the potential contaminant transport from the contaminated media through the potentially affected habitats to important ecological receptors. The primary contaminants of concern (COC), based on groundwater data, include the following 10 compounds: benzene, chlorobenzene, dichlorobenzene, trichlorobenzene, chloroaniline, phenol, chlorophenol, dichlorophenol, pentachlorophenol, and trichlorophenol.

Environmental Setting and Contaminants Known or Suspected to Exist at the Site

The environmental setting will be fully described upon completion of the site Reconnaissance Survey as described in Section 2.1, above. However, for the preliminary site model we have defined the environmental setting as an aquatic environment with bordering wetlands. The site-related chemicals of concern, based on existing groundwater plume data, include several volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs). For these reasons, the assessment of surface water impacts focuses on these groups of chemicals.

The eventual generation and execution of the site QAPP will analyze for a broad list (the Target Compound List) of these VOC and SVOC potential contaminants in sediments, surface water, and biota. We will evaluate those data within the baseline risk assessment and include contaminants in the baseline ERA, as appropriate, based on: frequency of occurrence within a particular media, likely bioavailabilty, evidence for bioaccumulation, toxicity to likely receptors, and comparison of concentrations to the chosen reference area(s). Obviously, the addition of more contaminants of concern may require changes in the conceptual model for the baseline risk assessment depending upon the fate, transport, and biological properties of these contaminants.

The EPA guidance recognizes and encourages this iterative process.

Contaminant Fate and Transport Mechanisms

In an aquatic system such as occurs in the Mississippi River at the proposed sample locations (groundwater discharge plume to surface water), various physical, chemical, and biological transport mechanisms will affect the fate of contaminants. SVOCs can adhere to particulate matter to varying degrees. Therefore, the conceptual model should address those mechanism affecting particle distribution in aquatic systems. These include:

particulate runoff from the watershed,

deposition in areas of sluggishly flowing waters, if identified

erosion in faster moving river segments, and

resuspension of particulates from the riverbed and over the floodplain.

Chemicals with lower particle affinities, such as VOCs, may be more subject to volatilization and dissolution in and transport by surface water. Increasing solubility generally correlates with increasing bioavailability; though, in general, the site-related chemicals of concern (VOCs and SVOCs) are not very soluble in water.

The major biological mechanisms affecting fate and transport are:

biological uptake directly from environmental media; and,

bioaccumulation through ingestion of prey or media;

biomagnification through the food chain.

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

The baseline risk assessment will describe each contaminant of concern in terms of the transport mechanisms most likely to affect it.

Mechanisms of Ecotoxicity and Likely Categories of Potentially Affected Receptors

The various site-related contaminants may affect the survival and reproductive capacity of the benthic community and fish. The baseline risk assessment will provide detailed ecotoxicity profiles for the final list of contaminants of concern. These will include summaries of the toxicity of these chemicals to receptors likely to occur in the site environment (insofar as these exist), and a selection of the most appropriate toxicity factors to use in the baseline risk assessment.

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., largemouth bass);

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

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

Complete Exposure Pathways

The USEPA guidance indicates that the risk assessment must identify complete exposure pathways before a quantitative evaluation of toxicity to allow the assessment to focus on those contaminants that can reach ecological receptors. The likely complete exposure pathways in the Mississippi River at the proposed site-related groundwater plume discharge locations are:

sediment and pore water to benthic invertebrates via direct contact and ingestion;

surface water to invertebrates and fish though direct contact and ingestion;

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

forage fish to piscivorous fish, mammals, or birds.

3.0 SELECTION OF CHEMICALS OF ECOLOGICAL CONCERN (COECs)

As indicated in Section 2.2, above, the proposed list of contaminants of ecological concern (COECs) includes classes of VOCs and SVOCs.

The COECs were developed based on the primary COCs detected in Facility plume groundwater. The Description of Current Conditions (DOCC, Solutia, July 2000) includes a table of the most commonly detected VOCs and SVOCs in the Facility groundwater plume. The full list of compounds to be analyzed as potential COECs include the primary COCs and other VOC and SVOC compounds that can be measured using the methods defined for chemical analysis (see QAPP, Section 7) and are tabulated in Tables 3-1 through 3-3. These tables also present the ecological risk-based concentrations derived from the EPA Region 5 Ecological Data Quality Levels (EDQLs, October 1999) and other applicable sources as listed in the table footnotes. The baseline risk assessment will re-evaluate the COEC list based on the results of the proposed sampling and analysis of surface water, sediment, and biota. The criteria for final selection include:

Comparison to Background – the baseline risk assessment will eliminate contaminants which occur below the maximum concentration measured at the local reference area for a given medium;

Frequency of Detection – the baseline risk assessment will retain a contaminant detected in more than 5% of samples for a particular media.

For those compounds that exceed background and/or are frequently detected in a particular medium, the baseline risk assessment will add them to the final list of COECs if they exhibit any of the following characteristics:

Toxic – exhibit potential toxicity (based on scientific literature) to the receptors likely to occur in and along the Mississippi River and adjacent habitats;

Bioaccumulative – are likely to bioconcentrate or biomagnify through the food chains represented in and along the Mississippi River and adjacent habitats;

Persistent – are likely to remain in environmental media over time frames that are long relative to the life spans or exposure periods of receptors likely to occur in and along the Mississippi River and adjacent habitats.

For the proposed workplan, we have developed preliminary toxicological information to set ecological risk-based concentration (RBC) levels of concern for the COECs of VOCs and SVOCs. These RBCs are presented in Tables 3-1 through 3-5. These risk-based levels were developed using the following sources:

- USEPA Region 5 Ecological Data Quality Levels (EDQLs), October 4, 1999
- ORNL: Toxicological Benchmarks for Wildlife (EPA, 1996), for receptor species of great blue heron and river otter
- Jarvinen and Ankley (1999) for aquatic organisms exposed to chemicals (whole body burdens)
- NOAA: Edward R. Long, Donald D. MacDonald, Sherri L. Smith, Fred D. Calder, 1995. "Incidence of Adverse Biological Effects within Ranges of Chemical Concentrations in Marine and Estuarine Sediments," Environmental Management 19(1):81-97.
- SQB: Sediment Quality Benchmarks by equilibrium partitioning. USEPA, 1995b.
- GLWQI: Great Lakes Water Quality Initiative, Tier II methodology values, as found in Ecotox Thresholds table (USEPA, 1998)

From these RBCs, the project reporting limits (RL) for the chemicals to be tested were developed, as presented in Tables 3-1 through 3-3 for VOC and SVOCs in various media.

The ERA will include a current review of toxicological information for all COECs on the final list. Where available, this information will include toxicity benchmarks that are applicable to water and sediments.

Table 3-1. Surface Water Ecological Risk-Based Concentrations and Project Reporting Limits for VOCs and SVOCs
Krummrich Facility
Sauget, Illinois

Target Compound List	Ecological Data Quality Levels - EDQLs (ug/L) [1]	Ecological Risk-Based Concentrations (ug/L)[a]	Source[b,c] of Ecological Risk-Based Concentrations	Project Reporting Limit (ug/L) [2]
VOCs				
Chloromethane	NA	NA		2
Bromomethane	NA	NA		2
Vinyl Chloride	9.2	NA		2
Chloroethane	230000	NA		2
Methylene Chloride	430	NA		2
Acetone	78000	NA		25
Carbon Disulfide	84.1	NA		2
1,1-Dichloroethene	78	NA		2
1,1-Dichloroethane	47	47	GLWQI	2
1,2-Dichloroethene (total)	310	NA		2
Chloroform	79	NA		2
1,2-Dichloroethane	190	159100	ORNL	2
2-Butanone	7100	NA		10
1,1,1-Trichloroethane	88	62	GLWQI	2
Carbon Tetrachloride	5.9	240	GLWQI	2
Bromodichloromethane	NA	NA		2
1,2-Dichloropropane	380	NA		2
cis-1,3-Dichloropropene	7.9	NA		2
Trichloroethene	75	350	GLWQI	2
Dibromochloromethane	6400	NA		2
1,1,2-Trichloroethane	650	NA		2
Benzene	114	46	GLWQI	2
trans-1,3-Dichloropropene	7.9	NA		2
Bromoform	466	320	GLWQI	2
4-Methyl-2-pentanone	3680	NA		10
2-Hexanone	1710	NA		10
Tetrachloroethene	8.9	120	GLWQI	2
Toluene	253	420	GLWQI	2
1,1,2,2-Tetrachloroethane	13	130	GLWQI	2
Chlorobenzene	10	130	GLWQI	2
Ethylbenzene	17.2	290	GLWQI	2
Styrene	56	NA		2
Xylenes (total)	117	NA		2
(m/p-Xylenes)	117	1.8	GLWQI	2
Target Compound List				
SVOCs				
Phenol	100	NA		5
bis(2-Chloroethyl)ether	1140	NA		5
2-Chlorophenol	8.8	NA		5
1,3-Dichlorobenzene	87	71	GLWQI	5
1,4-Dichlorobenzene	43	15	GLWQI	5
1,2-Dichlorobenzene	11	14	GLWQI	5
2-Methylphenol	NA	NA		5
2,2-oxybis(1-Chloropropane)	20	NA		5

Table 3-1. Surface Water Ecological Risk-Based Concentrations and Project Reporting Limits for VOCs and SVOCs
Krummrich Facility
Sauget, Illinois

Target Compound List	Ecological Data Quality Levels - EDQLs (ug/L) [1]	Ecological Risk-Based Concentrations (ug/L)[a]	Source[b,c] of Ecological Risk-Based Concentrations	Project Reporting Limit (ug/L) [2]
4-Methylphenol	NA	NA		5
N-Nitroso-di-n-propylamine	NA	NA		5
Hexachloroethane	30.5	12	GLWQI	5
Nitrobenzene	740	NA		5
Isophorone	900	NA		5
2-Nitrophenol	13.5	NA		5
2,4-Dimethylphenol	100.17	NA		5
bis(2-Chloroethoxy)methane	6400	NA		5
2,4-Dichlorophenol	18	NA		5
1,2,4-Trichlorobenzene	69.2	110	GLWQI	5
Naphthalene	44	24	GLWQI	5
4-Chloroaniline	231.97	NA		10
Hexachlorobutadiene	0.223	NA		5*
4-Chloro-3-methylphenol	34.79	NA		5
2-Methylnaphthalene	329.55	NA		5
Hexachlorocyclopentadiene	77.04	NA		5
2,4,6-Trichlorophenol	2	NA		5*
2,4,5-Trhichlorophenol	NA	NA		5
2-Chloronaphthalene	0.396	NA		5*
2-Nitroaniline	NA	NA		25
Dimethylphthalate	73	NA		5
Acenaphthylene	4840	NA		5
2,6-Dinitrotoluene	42	NA		5
3-Nitroaniline	NA	NA		25
Acenaphthene	9.9	NA		5
2,4-Dinitrophenol	4.07	NA		25*
4-Nitrophenol	35	NA		25
Dibenzofuran	20	20	GLWQI	5
2,4-Dinitrotoluene	230	NA		5
Diethylphthalate	3	220	GLWQI	5*
4-Chlorophenyl-phenylether	NA	NA		5
Fluorene	3.9	3.9	GLWQI	5*
4-Nitroanlinine	NA	NA		25
4,6-Dinitro-2-methylphenol	2.3	NA		25*
N-Nitrosodiphenylamine	13	NA		5
4-Bromophenyl-phenylether	1.5	1.5	GLWQI	5*
Hexachlorobenzene	0.00024	NA		5*
Pentachlorophenol	5.23	13	GLWQI	25*
Phenanthrene	2.1	NA		5*
Anthracene	0.029	NA		5*
Carbazole	NA	NA		5
Di-n-butylphthalate	3	33	GLWQI	5*
Fluoranthene	8.1	NA		5
Pyrene	0.3	NA		5*
Butylbenzylphthalate	49	19	GLWQI	5

Table 3-1. Surface Water Ecological Risk-Based Concentrations and Project Reporting Limits for VOCs and SVOCs
Krummrich Facility
Sauget, Illinois

Target Compound List	Ecological Data Quality Levels - EDQLs (ug/L) [1]	Ecological Risk-Based Concentrations (ug/L)[a]	Source[b,c] of Ecological Risk-Based Concentrations	Project Reporting Limit (ug/L) [2]
3,3'-Dichlorobenzidine	99.75	NA		10
Benzo(a)anthracene	0.839	NA		5*
Chrysene	0.033	NA		5*
bis(2-Ethylhexyl)phthalate	2.1	32	GLWQI	5*
Di-n-octylphthalate	30	NA		5
Benzo(b)fluoranthene	9.07	NA		5
Benzo(k)fluoranthene	0.0056	NA		5*
Benzo(a)pyrene	0.014	0.014	GLWQI	5*
Indeno(1,2,3-cd)pyrene	4.31	NA		5*
Dibenz(a,h)anthracene	0.0016	NA		5*
Benzo(g,h,i)perylene	7.64	NA		5

VOCs = Volatile Organic Compounds by USEPA Method 8260B.

SVOCs = Semivolatile Organic Compounds by USEPA Method 8270C.

(1) EPA Region 5 Ecological Data Quality Levels (EDQLs), October 4, 1999.

(2) Laboratory will report detected data between their MDL and the Reporting Limit as estimated results.

* The Reporting Limit is above the Ecological Data Quality Level; however, this is the lowest level of reporting possible for the method of analysis. As a conservative estimate of risk, one-half of the reporting limit will be used in the risk assessment for these compounds.

[a] The most conservative RBC was chosen.

[b] ORNL: Toxicological Benchmarks for Wildlife: 1996 Revision (Oak Ridge National Laboratory, 1996). Selected figures are for avian piscivore.

[c] GLWQI: Great Lakes Water Quality Initiative, Tier II methodology values, as found in Ecotox Thresholds table (USEPA, 1998)

NA = Indicates that Ecological RBCs are not available for this compound.

Table 3-2a. Sediment Ecological Risk-Based Concentrations and Project Reporting Limits for VOCs
Krummrich Facility, Sauget, Illinois

Target Compound List VOCs	Ecological Data Quality Levels - EDQLs (ug/Kg) [1]	Ecological Risk-Based Concentrations (ug/Kg)[a]	Source[b,c] of Ecological Risk-Based Concentrations	Project Reporting Limit (ug/Kg) [2]
Chloromethane	0.0785	NA		2*
Bromomethane	0.148	NA		2*
Vinyl Chloride	2	NA		2
Chloroethane	5860	NA		2
Methylene Chloride	1260	NA		5
Acetone	453.37	NA		25
Carbon Disulfide	133.97	NA		2
1,1-Dichloroethene	23.27	NA		2
1,1-Dichloroethane	0.575	NA		2*
1,2-Dichloroethene (total)	208.94	NA		2
Chloroform	27	NA		2
1,2-Dichloroethane	54.18	NA		2
2-Butanone	136.96	NA		10
1,1,1-Trichloroethane	246.85	1190	SQB	2
Carbon Tetrachloride	35.73	8400	SQB	2
Bromodichloromethane	1.13	NA		2*
1,2-Dichloropropane	351.61	NA		2
cis-1,3-Dichloropropene	2.96	NA		2
Trichloroethene	179.56	11200	SQB	2
Dibromochloromethane	267.61	NA		2
1,1,2-Trichloroethane	673.51	NA		2
Benzene	141.57	399	SQB	2
trans-1,3-Dichloropropene	2.96	NA		2
Bromoform	996.27	4550	SQB	2
4-Methyl-2-pentanone	544.37	NA		10
2-Hexanone	1010	NA		10
Tetrachloroethene	195.83	3710	SQB	2
Toluene	52500	4580	SQB	2
1,1,2,2-Tetrachloroethane	29.08	4670	SQB	2
Chlorobenzene	61.94	5740	SQB	2
Ethylbenzene	0.1	25200	SQB	2*
Styrene	444.96	NA		2
Xylenes (total)	1880	175	SQB	2

VOCs = Volatile Organic Compounds by USEPA Method 8260B. NA = RBCs not available.

(1) EPA Region 5 Ecological Data Quality Levels (EDQLs), October 4, 1999.

(2) The reporting limit for sediments is dependent upon the sample preservation technique and sample dry-weight. Low-level preservation results in ~ 2 - 5 ug/kg RL; high-level preservation (methanol) is 50x the low-level RL, USEPA Method 5035. Laboratory will report detected results between their MDL and the RL as estimated values.

* The Reporting Limit is above the Ecological Data Quality Level; however, this is the lowest level of reporting possible for the method of analysis. As a conservative estimate of risk, one-half of the reporting limit will be used in the risk assessment for these compounds.

[a] The most conservative RBC was chosen.

[b] NOAA: Edward R. Long, Donald D. MacDonald, Sherri L. Smith, Fred D. Calder, 1995. "Incidence of Adverse Biological Effects Within Ranges of Chemical Concentrations in Marine and Estuarine Sediments," Environmental Management. 19(1):81-97, 1995.

[d] SQB: Sediment quality benchmarks (SQBs) by equilibrium partitioning. Assumes 7 percent organic carbon (USEPA, 1995b)(modified).

[e] Lab will report both the "cis" and "trans" isomers of 1,2 Dichloroehtene and the "m" and "p" isomers of xylene. The RBCs are based on the "total" isomer concentrations for these compounds.

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Table 3-2b. Sediment Ecological Risk-Based Concentrations and Project Reporting Limits for SVOCs
Krummrich Facility
Sauget, Illinois

Target Compound List SVOCs	Ecological Data Quality Levels - EDQLs (ug/Kg) [1]	Ecological Risk-Based Concentrations (ug/Kg)[a]	Source[b,c] of Ecological Risk-Based Concentrations	Project Reporting Limit (ug/Kg) [2]
Phenol	27.26	NA		170*
bis(2-Chloroethyl)ether	211.96	NA		170
2-Chlorophenol	11.7	NA		170*
1,3-Dichlorobenzene	3010	11900	SQB	170
1,4-Dichlorobenzene	1450	2450	SQB	170
1,2-Dichlorobenzene	231.32	2380	SQB	170
2-Methylphenol	0.86	NA		170*
2,2-oxybis(1-Chloropropane)	68.78	NA		170*
4-Methylphenol	0.808	NA		170*
N-Nitroso-di-n-propylamine	0.217	NA		170*
Hexachloroethane	2230	7000	SQB	170
Nitrobenzene	487.6	NA		170
Isophorone	422.3	NA		170
2-Nitrophenol	7.77	NA		170*
2,4-Dimethylphenol	304.53	NA		170
bis(2-Chloroethoxy)methane	349.71	NA		170
2,4-Dichlorophenol	133.63	NA		170*
1,2,4-Trichlorobenzene	11700	64400	SQB	170
Naphthalene	34.6	160	NOAA	170*
4-Chloroaniline	146.08	NA		330*
Hexachlorobutadiene	1380	NA		170
4-Chloro-3-methylphenol	388.18	NA		170
2-Methylnaphthalene	20.2	70	NOAA	170*
Hexachlorocyclopentadiene	900.74	NA		170
2,4,6-Trichlorophenol	84.84	NA		170*
2,4,5-Trhichlorophenol	85.56	NA		170*
2-Chloronaphthalene	417.23	NA		170
2-Nitroaniline	0.222	NA		830*
Dimethylphthalate	24.95	NA		170*
Acenaphthylene	5.87	44	NOAA	170*
2,6-Dinitrotoluene	20.62	NA		170*
3-Nitroaniline	0.222	NA		830*
Acenaphthene	6.71	16	NOAA	170*
2,4-Dinitrophenol	1.33	NA		830*
4-Nitrophenol	7.78	NA		830*
Dibenzofuran	1520	14000	SQB	170
2,4-Dinitrotoluene	75.13	NA		170*
Diethylphthalate	8.04	4400	SQB	170*
4-Chlorophenyl-phenylether	656.12	NA		170
Fluorene	21.2	19	NOAA	170*
4-Nitroanlinine	0.222	NA		830*
4,6-Dinitro-2-methylphenol	10.38	NA		830*
N-Nitrosodiphenylamine	155.24	NA		170*
4-Bromophenyl-phenylether	1550	NA		170
Hexachlorobenzene	20	NA		170*

Table 3-2b. Sediment Ecological Risk-Based Concentrations and Project Reporting Limits for SVOCs
Krummrich Facility
Sauget, Illinois

Target Compound List SVOCs	Ecological Data Quality Levels - EDQLs (ug/Kg) [1]	Ecological Risk-Based Concentrations (ug/Kg)[a]	Source[b,c] of Ecological Risk-Based Concentrations	Project Reporting Limit (ug/Kg) [2]
Pentachlorophenol	3010	NA		830
Phenanthrene	41.9	240	NOAA	170*
Anthracene	46.9	85.3	NOAA	170*
Carbazole	NA	NA		170
Di-n-butylphthalate	110.5	77000	SQB	170*
Fluoranthene	111.3	600	NOAA	170*
Pyrene	53	665	NOAA	170*
Butylbenzylphthalate	4190	77000	SQB	170
3,3'-Dichlorobenzidine	28.22	NA		660*
Benzo(a)anthracene	31.7	261	NOAA	170*
Chrysene	57.1	384	NOAA	170*
bis(2-Ethylhexyl)phthalate	182	NA		170
Di-n-octylphthalate	40600	NA		170
Benzo(b)fluoranthene	10400	NA		170
Benzo(k)fluoranthene	240	NA		170
Benzo(a)pyrene	31.9	430	NOAA	170*
Indeno(1,2,3-cd)pyrene	200	NA		170
Dibenz(a,h)anthracene	6.22	6304	NOAA	170*
Benzo(g,h,i)perylene	170	NA		170

SVOCs = Semivolatile Organic Compounds by USEPA Method 8270C.

(1) EPA Region 5 Ecological Data Quality Levels (EDQLs), October 4, 1999.

(2) Laboratory will report estimated data between their MDL and the Reporting Limit

* The Reporting Limit is above the EDQL and/or the SQB or NOAA RBC; however, this is the lowest level of reporting possible for the method of analysis. As a conservative estimate of risk, one-half of the reporting limit will be used in the risk assessment for these compounds.

[a] The most conservative RBC was chosen.

[b] NOAA: Edward R. Long, Donald D. MacDonald, Sherri L. Smith, Fred D. Calder, 1995. "Incidence of Adverse Biological Effects Within Ranges of Chemical Concentrations in Marine and Estuarine Sediments," Environmental Management. 19(1):81-97, 1995.

[d] SQB: Sediment quality benchmarks (SQBs) by equilibrium partitioning. Assumes 7 percent organic carbon (USEPA, 1995b)(modified).

NA = Indicates that Ecological RBCs are not available for this compound.

Table 3-5
Human Health Risk-Based Concentrations for Fish Tissue Fillets
Krummrich Facility
Sauget, Illinois

Constituent	CAS Number	Human Health Risk Based Concentration (mg/kg)	(e)	Basis
Semivolatile Organic Analytes				
1,2,4-Trichlorobenzene	120-82-1	14		N
1,2-Dichlorobenzene	95-50-1	120		N
1,3-Dichlorobenzene	541-73-1	1.2		N
1,4-Dichlorobenzene	106-46-7	0.13		C
2,2'-oxybis(1-Chloropropane)	108-60-1	0.045		C
2,4,5-Trichlorophenol	95-95-4	140		N
2,4,6-Trichlorophenol	88-06-2	0.29		C
2,4-Dichlorophenol	120-83-2	4.1		N
2,4-Dimethylphenol	105-67-9	27		N
2,4-Dinitrophenol	51-28-5	2.7		N
2,4-Dinitrotoluene	121-14-2	2.7		N
2,6-Dinitrotoluene	606-20-2	1.4		N
2-Chloronaphthalene	91-58-7	110		N
2-Chlorophenol	95-57-8	6.8		N
2-Methylnaphthalene	91-57-6	27		N
2-Methylphenol	95-48-7	68		N
2-Nitroaniline	88-74-4	NA		O
2-Nitrophenol	88-75-5	11	(a)	N
3,3'-Dichlorobenzidine	91-94-1	0.007		C
3-Nitroaniline	99-09-2	NA		O
4,6-Dinitro-2-methylphenol	534-52-1	NA		D
4-Bromophenyl Phenyl Ether	101-55-3	NA		D
4-Chloraniline	106-47-8	5.4		N
4-Chloro-3-methylphenol	59-50-7	NA		D
4-Chlorophenol Phenyl Ether	7005-72-3	NA		D
4-Methylphenol	106-44-5	6.8		N
4-Nitroaniline	100-01-6	NA		O
4-Nitrophenol	100-02-7	11		N
Acenaphthene	83-32-9	81		N
Acenaphthylene	208-96-8	81	(b)	N
Anthracene	120-12-7	410		N
Benzo[a]anthracene	56-55-3	0.0043		C
Benzo[a]pyrene	50-32-8	0.00043		C
Benzo[b]fluoranthene	205-99-2	0.0043		C
Benzo[g,h,i]perylene	191-24-2	41	(c)	N
Benzo[k]fluoranthene	207-08-9	0.043		C
bis(2-Chloroethoxy)methane	111-91-1	NA		D
bis(2-Chloroethyl)ether	111-44-4	0.0029		C
bis(2-Ethylhexyl)phthalate	117-81-7	0.23		C
Butyl Benzyl Phthalate	85-68-7	270		N
Carbazole	86-74-8	0.16		C
Chrysene	218-01-9	0.43		C
Dibenzo[a,h]anthracene	53-70-3	0.00043		C
Dibenzofuran	132-64-9	5.4		N
Diethyl Phthalate	84-66-2	1100		N
Dimethyl Phthalate	131-11-3	14000		N
Di-n-butyl Phthalate	84-74-2	140		N
Di-n-octyl Phthalate	117-84-0	27		N
Fluoranthene	206-44-0	54		N
Fluorene	86-73-7	54		N
Hexachlorobenzene	118-74-1	0.002		C
Hexachlorobutadiene	87-68-3	0.04		C
Hexachlorocyclopentadiene	77-47-4	9.5		N
Hexachloroethane	67-72-1	0.23		C

Table 3-5
Human Health Risk-Based Concentrations for Fish Tissue Fillets
Krummrich Facility
Sauget, Illinois

Constituent	CAS Number	Human Health Risk Based Concentration (mg/kg) (e)	Basis
Indeno[1,2,3-cd]pyrene	193-39-5	0.0043	C
Isophorone	78-59-1	3.3	C
Naphthalene	91-20-3	27	N
Nitrobenzene	98-95-3	0.68	N
N-Nitroso-di-n-propylamine	621-64-7	0.00045	C
N-Nitrosodiphenylamine	86-30-6	0.64	C
Pentachlorophenol	87-86-5	0.026	C
Phenanthrene	85-01-8	410 (d)	N
Phenol	108-95-2	810	N
Pyrene	129-00-0	41	N

Notes:

C = USEPA, 2000, Based on carcinogenic USEPA Region 3 RBC value.
D = No toxicological value available, therefore, no DQL was developed.
N = USEPA, 2000, Based on non-carcinogenic USEPA Region 3 RBC value.
O = No RBC available; therefore, no DQL developed.
CAS = Chemical Abstracts Service.
NA = Not Available.
RBC = USEPA Region 3 Risk Based Concentration (USEPA, 2000).
(a) Due to structural similarities, the value for 4-Nitrophenol was used.
(b) Due to structural similarities, the value for Acenaphthene was used.
(c) Due to structural similarities, the value for Pyrene was used.
(d) Due to structural similarities, the value for Anthracene was used.
(e) Human Health Risk-Based Concentrations for Fish Tissue based on USEPA Region 3 RBCs (USEPA, 2000).

4.0 IDENTIFICATION OF RECEPTORS, ASSESSMENT ENDPOINTS, AND MEASURES OF EFFECT

4.1 Receptors

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

The selected receptors represent those types of organisms most likely to encounter the contaminants of concern at the site. 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 representative species approach for assessing exposures for wildlife is a common practice for assessing risk. 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 COECs (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 to all animals by considering the major feeding guilds found in a habitat. It is assumed that evaluation of the potential effects of COECs to the representative species will be indicative of the potential effects of COECs to individual member classes of organisms within each feeding guild.

The selected species represent the ecological community and its sensitivity to the contaminants of concern. They are: benthic invertebrates (in terms of benthic community evaluation), bottom feeder fish (channel catfish), predator fish (largemouth bass), game fish (may be channel catfish, largemouth bass, white crappy, or drum), fish-eating bird (great blue

heron), and a fish-eating mammal (river otter).

Benthic invertebrates

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

- have the greatest exposure to sediments;
- provide food for bottom-feeding fish species (in the river);
- 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 centrachids (large mouth bass), bottom feeding fish such as the channel catfish, and game fish such as the white crappy or drum are likely and abundant local residents with a limited foraging range. These organisms are potential receptor species representing local fish because they are:

- resident in this reach of the Mississippi;
- exposed to sediments as well as surface water;
- represent forage fish and higher order predators feeding on smaller fish and invertebrates.

Aquatic Birds

We have selected the great blue heron to represent aquatic birds feeding in the Mississippi River 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. 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). A food ingestion rate for adult breeding birds of 0.18 g food/g body weight/day has been reported.

Great blue heron tend to forage near nesting sites (USEPA, 1993). 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 1.5 acres, while the feeding territory in an estuarine area was 21 acres.

These birds are potential receptor species because they:

Consume near shore fish;

Have a foraging range about equal to the total of the upstream and downstream areas of the proposed sampling locations in the Mississippi River;

Are a higher trophic level predator in the Mississippi.

Great blue heron, therefore, represent piscivorous birds in this reach of the river.

Aquatic Mammals

This assessment assumes that the river otter represents the 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;
- Are a higher trophic level predator in the Mississippi.

River otters, therefore, represent higher trophic level aquatic mammals in this reach of the Mississippi River.

4.2 Assessment Endpoints

Assessment endpoints are expressions of the environmental value to be protected at a site. Assessment endpoints are often not directly measurable. Therefore, 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. This work plan proposes the following two assessment endpoints for the potentially affected aquatic receptors and their habitats:

1. Sustainability (survival, growth, and reproduction) of warm water fish species typical of those found in similar habitats (incorporates the assessment of benthic macroinvertebrates);

2. Survival, growth, and reproduction of local populations of aquatic wildlife represented by the great blue heron and the river otter (incorporates the assessment of benthic macroinvertebrates).

The ERA will evaluate risk relative to these assessment endpoints in the proposed sampling locations in the Mississippi River, collectively and individually, based on the Reconnaissance Survey and proposed sampling and analysis work (Proposed RCRA Site Sampling Plan).

4.3 Selection of 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 effects 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 QAPP will describe details of the sampling and analysis program that will provide information adequate for evaluating each selected measure. However, the risk assessment must evaluate the performance of the sampling and analysis effort and the variability and uncertainties associated with the results following

implementation. The risk characterization gives higher weight to measures of effect that are based on good quality data and are obtained using study designs that account for confounding variables.

There is considerable uncertainty associated with estimating risks, because ecological systems are complex and exhibit high natural variability. Measures of effects 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. This section describes the measures of effects and how the baseline risk assessment will use them to evaluate risks for each of the assessment endpoints. Table 4-1 summarizes the assessment endpoints and associated measures of effects.

TABLE 4-1. ASSESSMENT ENDPOINTS AND ASSOCIATED MEASURES OF EFFECTS

Assessment Endpoint 1: Sustainability of warm water fish in the Mississippi River proposed Sampling Locations

Measure of effect 1a: body burdens of COECs in selected fish species (bottom feeder such as the channel catfish, forager fish, predator fish such as bass, and game 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: COEC concentrations in surface waters as compared to applicable water quality criteria for protection of fish and wildlife.

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

Concentration of COECs (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 1d: 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 and river otter in proposed sampling locations in the Mississippi River

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

Measure of effect 2b: Toxicity of river water to fish as measured by a surface water toxicity test

Measure of effect 2c: Concentration of COECs (VOC and SVOC) in surface waters in comparison to wildlife benchmarks.

Measure of effect 2d: Concentration of COECs (SVOC) in forage fish and bottom fish for use in evaluating exposure via the food chain for great blue heron and river otter.

4.3.1 Measures of Effects for Assessment Endpoint 1, Sustainability of Warm Water Fish

The COECs may exert direct effects on warm water fish through exposure in the water, sediment, or prey, and indirectly by affecting their prey, the macroinvertebrate community. The proposed 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.

Measure of effect 1a: body burdens of COECs in selected fish species.

Purpose and Rationale. Fish exposed to bioaccumulative compounds in their diet or in water can accumulate these COECs in their tissues. Contaminants tend to accumulate in organs such as the liver and kidney to a greater degree than in the musculature. However, COEC levels in the muscle tissue and on a whole body basis are useful for evaluating risks to animals that eat fish. The assessment will use measurements of COECs in fish tissues to evaluate exposure and effects on the fish, and to provide data for use in other parts of the assessment.

Approach. The selected fish species include a bottom feeder fish, forager fish, predator fish, for the ERA and collection of a game fish in support of the human health risk assessment. Some species of fish found in the Mississippi River may represent more than one category of fish. For example, the channel catfish represents a bottom feeder fish and might also represent a game fish for human health consumption. The fish anticipated for collection at both the reference location and the proposed sampling locations that are potentially impacted by the groundwater plume in the Mississippi River include the channel catfish, large mouth bass, potentially white crappy or drum. Based on expected swift currents in the Mississippi River sampling locations, fish will be collected using experimental gill nets positioned parallel to the shoreline. Upon collection, we will note visual observations of pathological anomalies and record lengths and widths prior to packing the fish on ice for shipment to the analytical laboratory for chemical analysis.

The ERA will use this endpoint to evaluate exposure and effects. As a measure of exposure, it will compare body burdens of COECs in small forage fish, medium bottom-feeding fish, and large piscivorous fish to those same fish species in the reference area. Therefore, the comparisons of fish body will help to assess if fish in the Mississippi River are exposed to COECs in excess of those that occur in the reference area. The assessment will also use the body burden data as input to the food chain exposure models for the representative piscivores (the great blue heron and the river otter).

As a measure of effects, the assessment will compare measured body burdens to literature values at which effects have been reported. The Waterways Experiment Station (WES) of the Army Corps of Engineers provides an on-line database and The Society of Environmental Toxicology and Chemistry (Jarvinen and Ankley, 1999) provides a compilation of such residue effect levels. The assessment will query these databases. If body burdens exceed

levels at which effects have been reported in the databases, it will be presumed that the measure of effect indicates the potential for effects in the selected fish species found in the Mississippi River sampling locations. Preliminary ecological risk-based concentrations for screening measured levels of the COECs in fish tissue are presented in Tables 3-4 and 3-5.

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

Purpose and Rationale. Water concentrations provide a measure of exposure, and water quality criteria indicate levels above which effects may occur. This measure of effect will evaluate the potential for water concentrations of COECs (VOCs and SVOCs) in the Mississippi River to cause adverse effects.

Approach: Surface water samples will be collected using large-volume Nansen water samplers or collected directly into sample bottles. Surface water samples will be taken from the top, middle, and bottom for river locations > 10 feet depth; from the top and the bottom for locations with a depth of 5 to 10 feet; and from the middle for shallow areas with a depth of < 5 feet.

The assessment will compare measured concentrations of target compounds (COECs) on ecological risk-based concentrations developed for this project (see Table 3-1). Exposure of individual fish and the populations of fish in water will partly depend on the exposure field and the distribution and behavior of the fish. Thus, the area over which water quality criteria are exceeded becomes an important consideration when evaluating exposure. We will evaluate effects with respect to spatial extent and degree to which surface water concentrations exceed water quality criteria.

The USEPA has published an ECO-UPDATE entitled: "Ecotox Thresholds" that includes COEC-specific water quality benchmarks. If an Ecotox Threshold value is available for a COEC, the concentration of the COEC in water will be compared to its respective Ecotox Threshold value. Region 5 Ecological Data Quality Levels (EDQLs), (October 1999) will also be used as benchmark values. Table 3-1 includes the ecological risk-based concentrations against which the measured chemical data in surface water will be screened. When specific benchmarks are not available and when appropriate, USEPA has suggested using appropriate extrapolations between related species.

Measure of effect 1c: 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 will use the sediment triad approach as part of a weight-of-evidence analysis to evaluate the sustainability of benthic macroinvertebrate communities in these water bodies. The sediment triad approach evaluates three elements of a benthic community:

1. field assessment of benthic macroinvertebrates;
2. sediment chemistry measurements;
3. sediment toxicity testing using indicator benthic macroinvertebrates.

Assessment of the Benthic Macroinvertebrate community

At each planned sampling location, several modified ponar grab samples of sediment will be collected from the upper ~ 6 cm of sediment and composited. The composite samples will be sieved (0.5 mm mesh size) and the benthic invertebrates collected will be preserved in the field for transport to the analytical laboratory. If the Reconnaissance Survey indicates that the modified ponar is inadequate for sampling the river sediments (e.g., sediments are too course), an alternative sampling approach will be proposed.

Effects will be evaluated by comparing the composition and abundance of benthic macroinvertebrates within the sampling locations in the Mississippi River (plume discharge areas and Reference Areas) at different levels of concentrations of COECs in sediments (generally following EPA Rapid Bioassessment Level I Protocols). These comparisons will help to estimate if there is a level above which effects are evident. Data from the Reference Areas (upstream and downstream of the plume discharge area) will help to support the assessment because these reflect conditions in the river unaffected by site contaminants. If there are observable reductions in the abundance of benthic macroinvertebrates, we will assess the significance of this for the fish species that rely upon the macroinvertebrates for food as this is the basis for the assessment. This will be accomplished by relating the abundance and biomass of benthic macroinvertebrates to their production, and ultimately to the potential production of fish, using available production:biomass ratios from the literature.

Sediment chemical measurements

Sediments for chemical measurements will be collected from the upper ~ 6 cm of the sediment using a modified ponar grab sampler. Discrete samples will be collected for VOCs using Encore ™ hermetically-sealed samplers to ensure no loss of VOCs from sampling to analysis. Several samples will be collected at each location and composited for analysis of target SVOCs, total organic carbon (TOC), and grain size. VOCs and SVOCs in sediment will be compared to sediment benchmarks to judge whether adverse biological effects to benthic macroinvertebrates are plausible. The USEPA compares sediment chemical measurements to Effect Range-Low (ERL) values and Effect Range-Median (ERM) values (Long and Morgan, 1990). However, sediment concentrations which exceed ER-Ls and/or ER-Ms do not necessary indicate that adverse effects to benthic macroinvertebrates have

occurred. The USEPA's sediment triad approach uses multiple lines of evidence to assess if benthic macroinvertebrates are adversely affected by sediment-associated contaminants.

The USEPA has published an ECO-UPDATE entitled: "Ecotox Thresholds" that includes COEC-specific sediment benchmarks. The EPA Region 5 Ecological Data Quality Levels (EDQLs), October 1999, will also be used as benchmarks for sediment contaminants. If an Ecotox Threshold value is available for a COEC, the concentration of the COEC in sediment will be compared its respective Ecotox Threshold value. When specific benchmarks are not available and when appropriate, USEPA has suggested that appropriate extrapolations between related species can be used. Table 3-2 lists the ecological risk-based concentrations in sediment developed for the ERA to screen chemical results for VOCs and SVOCs.

Sediment toxicity testing

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

The assessment will use chronic and acute sediment bioassays conducted in the laboratory on sediments from the sampling locations in the Mississippi River and the reference area to evaluate the potential effects of whole sediment on representative benthic macroinvertebrates including *Hyallela* and *Chironoous*. The toxicity of the sediment will be compared to that of the standard control sediment used by the laboratory as part of the laboratory's standard operating procedures. Statistically significant decreases in survival and/or growth of these macroinvertebrate species relative to controls will be considered a COEC-related effect when they can be related to exposures associated with COECs in the sediments

Measure of effect 1d: Sustainability of planktonic invertebrate communities that comprise a prey base

Purpose and Rationale. The assessment will use laboratory surface water bioassays conducted on surface waters collected from the sampling locations in the plume discharge area of the Mississippi River and the Reference Area to evaluate the potential effects of the surface water on representative aquatic organisms (planktonic invertebrates). Toxicity test provide direct measures of the toxicity of water to the planktonic invertebrate species considered representative of those that would live in the Mississippi River. Laboratory toxicity tests provide a greater level of "control" than can be achieved from field studies.

Approach. Surface water will be collected using the same procedures described above for surface including Nansen samplers for deeper locations and direct collection in the sample container for shallow locations. The toxicity of the surface water to the representative planktonic invertebrate *Ceriodaphnia* will be compared, based on survival and growth measures, to that of the control water used by the laboratory as part of the laboratory's

standard operating procedures and the reference location water. Statistically significant decreases in survival and/or growth relative to controls will be considered a COEC-related effect when they can be related to exposures associated with COECs in the surface water.

4.3.2 Measures of Effects Associated with Assessment Endpoint 2

The measures of effects associated with assessment Endpoint 2 concern the survival, growth, and reproduction of local populations of aquatic wildlife populations represented by the great blue heron and river otter (incorporates the assessment of benthic macroinvertebrates)

The assessment will use three measures of effects (some species-specific) to evaluate risks to the wildlife assessment endpoint. Food-chain modeling will estimate exposure to the two wildlife species.

Wildlife either sighted during the Reconnaissance Survey or likely to occur based on the evaluation of habitats will be used to identify representative wildlife species. For this ERA workplan, we have anticipated the likely wildlife species and proposed the following representative species in the Table 4-2, below.

Table 4-2. Representative Aquatic Wildlife Species Proposed for Assessing Risks of COECs to Wildlife

Species	Feeding Guild	Primary Habitat	Use in ERA
Great Blue Heron	Eats fish and other small animals	Aquatic	Evaluate exposure to COECs in aquatic food webs
River Otter	Eats fish, other small animals and some macroinvertebrates	Aquatic	Evaluate exposures to COECs in fish and macroinvertebrates

The assessment will use exposure models to evaluate different routes of exposure including ingestion of water, sediment and food (fish). This subsection describes the measures of effects and the general model used to evaluate exposures.

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

Purpose and Rationale. The measure of effect directly examines the receptors – wildlife – to estimate if they are using the various locations that are planned for sampling in the Mississippi River. The assessment is a measure of the degree to which local and migratory wildlife use the habitat and the extent to which it supports their needs.

Approach: Information gathered during the Reconnaissance Survey will be incorporated into

this assessment of wildlife species composition and habitat use. The assessment will compare the composition and habitat use by wildlife to observations of species composition of wildlife and their use of a reference area. A wildlife biologist will make these observations. This type of survey is qualitative. The strength of the analysis is that it indicates whether the potentially impacted locations in the Mississippi River can support wildlife species comparable to unaffected Reference Areas. However, because of the qualitative nature of the observations and the high natural variability that can exist in wildlife populations, direct observations may not reveal effects.

Measure of effect 2b: Toxicity of river water to fish as measured by a surface water toxicity test

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.

Approach. Surface water will be collected, as described in Section 4.3.1 using Nansen samplers in deeper locations and direct collection into sample containers for shallow locations. Comparisons of the survival and growth of the representative fish specie, the Fathead Minnow (*Pimephales)*, in potentially impacted Mississippi River water locations will be made to control laboratory water via a standard embryo-larval toxicity test. Comparisons will also be made to survival and growth in the reference location surface water.

Measure of effect 2c: Concentration of COECs (VOC and SVOC) in surface waters in comparison to wildlife benchmarks.

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

Approach: Surface water will be collected, as described above, using Nansen samplers in deeper locations and direct collection into sample bottles in shallow locations. Samples will be collected from three depths for deeper locations > 10 feet; two depths for locations between 5 and 10 feet deep; and one sample at shallow locations < 5 feet.

This endpoint will be evaluated in multi-pathway exposure models for the great blue heron and river otter that considers sediment, water, and food. The assessment will compare exposures to these selected representative species within the Mississippi River sectors to: 1) appropriate NOAEL and LOAEL values, and 2) exposures that occur in Reference Areas (upstream and downstream of the plume discharge area).

Measure of effect 2d: Concentration of COECs (SVOC) in forage fish and bottom fish for use in evaluating exposure via the food chain for great blue heron and river otter.

Purpose and Rationale: Some wildlife species such as the great blue heron eat primarily fish. The presence of COECs in fish could be a source of exposure to this species. This measure of effect examines this potential route of exposure.

Approach. Fish will be collected and analyzed for COECs (SVOCs) as previously described using experimental gill nets positioned parallel to the shoreline. The COEC levels measured in fish will be used in the multi-pathway exposure model for the great blue heron that considers sediment, water, and food. Exposures to the great blue heron within the Mississippi River locations will be compared to: 1) appropriate NOAEL and LOAEL values, and 2) exposures that occur in Reference Areas.

Tissue chemical analysis of game fish fillet will used as input to the ingestion pathway in the Human Health risk assessment.

4.4 Structure of Wildlife Exposure Models

The general form of the wildlife exposure model is:

$$\text{Exposure Dose (oral)} = [Conc_{food} * Ingest_{food}] + [RAF * Conc_{soil} * Sediment_{diet} * Ingest_{food}]$$

Where:

Exposure Dose (oral) = dose of a COEC in ug/g-day

$Conc_{food}$ = concentration of the COEC (ug/g) in the food (measured or estimated); this is the average 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.

$Ingest_{food}$ = amount of food ingested per day normalized to body weight (g/g-day) and usually expressed in terms of wet weight/wet weight

RAF – relative availability factor for COECs in sediment via incidental ingestion of sediment

$Conc_{sediment}$ = concentration ug/g in the relevant exposure zone; this is estimated as an average concentration in the exposure zone for chronic exposure and effects, and as upper bound (e.g., maximum or hot spot concentrations) for evaluation of short-term or acute exposures. The average is the appropriate statistic because ecological receptors integrate exposure over their foraging areas.

$Sediment_{diet}$ = 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

Sediments that are collected within shallow water (< 3 feet deep) in open water areas of the Mississippi River will be used to assess incidental sediment ingestion. Sediments collected from the top 5 cm will be considered accessible to aquatic wildlife.

Because exposures to COECs associated with diet and sediment will be higher than surface water ingestion, this exposure pathway will not be estimated within the model. However, we will compare National Recommenced Water Quality Criteria for the protection of wildlife to surface water concentrations where such data and corresponding criteria are available.

Model Application

The model will be applied in several ways:

1. Acute exposure: The potential for acute exposure is considered without incorporating information on foraging area. The rationale for this is that an acute exposure involves a short-term feeding or exposure event that does not have to be averaged over the foraging area. When calculating the potential for acute exposure, maximum concentrations are used within the geographically defined local population or Threatened and Endangered species. Locations that exceed exposure concentrations that could result in acute toxic effects are identified.

2. Chronic exposure to individuals: The potential for chronic exposure to individuals is considered by determining both the maximum concentration and calculating an average concentration of food 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.

3. Chronic exposure to the population. The local population as defined above is made up of a number of individuals. Because the success of the local population is not dependent on the risk to any particular individual, a wildlife exposure model will also be used to estimate chronic exposures to individuals throughout the local population. These estimates take into account the spatial distribution of COECs, the foraging areas of the individuals within the species, and possible spatial distributions of these individuals within the area that defines the local population. Results are used to estimate risks as a percentage of the local population. The local population is confined to individual animals that use the Mississippi River and its associated wetlands.

5.0 RISK CHARACTERIZATION

Risk results will be presented as calculated Hazard Quotients as well as other measures (e.g., presence of toxicity). These results will be incorporated into the weight of evidence approach in the form of graphs and tables and will be explained in narratives. Graphs will be used to illustrate the four factors that contribute to the weight of evidence evaluation.

5.1 Use of Hazard Quotients

Because the Hazard Quotient will be one of the more common methods used to express results, it is explained below. The method simply involves comparisons of exposure concentrations for COECs to concentrations at which effects are judged:

$$\text{Hazard Quotient} = \frac{\text{Concentration}_{\text{exposure}}}{\text{Concentration}_{\text{effects}}}$$

where:

$\text{Concentration}_{\text{exposure}}$ = the concentration or dose to which an organism is exposed

$\text{Concentration}_{\text{effects}}$ = the concentration or dose at or above which effects may occur

If the Hazard Quotient exceeds "1", there is a potential for an effect. To some extent, the higher the number above "1", the more likely that an effect would occur. Calculations of Hazard Quotients need to take into account spatial and temporal factors inasmuch as these are related to the effect that might occur to populations of biota. The COECs may have additive effects on organisms, and these will be evaluated by summing across compounds grouped according to the specific toxicological effect they may have.

5.2 Toxicity Reference Values for Wildlife

TRVs used in the toxicity quotient's denominator represent chronic oral No Observed Adverse Effect Levels (NOAELs). A TRV will be expressed as mg of COEC / kg Body Wt. of the test animal / day. TRVs will be selected from published studies cited in the following sources:

1. United States Fish and Wildlife Service (USFWS) biological reports that review and summarize literature on the ecological and toxicological aspects of COECs with special reference to fish and wildlife.

2. Toxicological animal studies cited in: Sample, B.E., D. M. Opresko and G.W. Suter II,

1996, *Toxicological benchmarks for wildlife: 1997 revision*, Oak Ridge National Laboratory, Oak Ridge, Tennessee;

3. The Waterways Experimental Station on-line database;

4. The Society of Environmental Toxicology and Chemistry's recently published database of residual effect levels (Jarvinen and Ankley, 1999);

5. Region 5 Ecological Data Quality Levels (EPA, October 4, 1999)

6. Computer on-line data bases, such as Toxline, Biosis, Wildlife Fisheries Review, Pollution Abstracts, and Environmental Abstracts.

When reviewing the toxicological literature and selecting the most appropriate TRV, several factors will be considered including:

- Taxonomic relationship between the test animal and the indicator species;
- Use of laboratory or domesticated animals;
- Ecological relevance of the study endpoints—Studies with chronic toxicity endpoints, such as reproductive, growth, behavior and developmental endpoints, are targeted. Sensitive endpoints, such as reproductive or developmental toxicity, are preferentially selected because they are closely related to the selected assessment endpoints (*e.g.*, population declines);
- Toxicological studies in which the chemical was administered through the diet of the test species are preferred over studies using other oral dosing methods, such as gavage; and
- Long-term studies representing chronic exposure are preferentially selected.

Dietary concentrations (mg/kg diet) cited in the reference study will be converted to mg/kg BW/day. If the daily dose reported in the selected study is a Lowest Adverse Effect Level (LOAEL), then the LOAEL will be converted to a NOAEL using a factor of 10. Interspecies correlations will be considered.

If toxicological animal studies are not available for a particular COEC, then QSAR will be considered and a surrogate chemical will be selected when possible. If the COEC can not be assessed quantitatively, then the risk to the COEC will be qualitatively discussed.

Species specific toxicity factors may not be available for all COEC. In such cases, the assessment will apply the following sequential steps to develop a toxicity factor.

- Use a toxicity value or criterion for the protection of exposed organisms, if an appropriate state or federal agency has proposed it.

- If criteria are unavailable, but appropriate data are available on NOAELs for the receptor species, use the lowest NOAEL for the receptor species.

- If an appropriate NOAEL is unavailable for the receptor species, use a NOAEL for a species that is phylogenetically similar (within the same genera or family) and ecologically similar to the selected receptor species (e.g. from the same family of birds or mammals).

- If an appropriate NOAEL is unavailable for a phylogenetically similar species, extrapolate from an appropriate NOAEL value for other species (as closely related as possible) by dividing by 5 to account for extrapolations between families and by 10 to account for extrapolations between orders. Use the lowest appropriate NOAEL whenever several studies are available.

- In the absence of an appropriate NOAEL, if a LOAEL is available for a phylogenetically similar species, divide it by 10 to account for a LOAEL to NOAEL conversion. The LOAEL to NOAEL conversion is similar to EPA's derivation of human health RfD values, where LOAEL studies are adjusted by a factor of 10 to estimate NOAEL values.

- For calculating chronic toxicity values from data for sub-chronic tests, divide the resultant LOAEL or NOAEL by an additional factor of 10. This is consistent with the methodology used to derive human RfD values. EPA has no clear guidance on the dividing line between subchronic and chronic exposures. The present risk assessment follows recently developed guidance (Sample *et al.*, 1996) which considers 10 weeks to be the minimum time for chronic exposure of birds and 1 year for chronic exposure of mammals. In addition to duration of exposure, the time when exposure to contaminant occurs is critical.

- In cases where NOAELs are available as a dietary concentration (e.g., mg contaminant per kg food), calculate a daily dose for birds or mammals based on standard estimates of food intake rates and body weights (USEPA, 1993c).

6.0 DISCUSSION OF UNCERTAINTIES AND EXPOSURE ASSUMPTIONS

Sources of uncertainty and variability within the ERA will be identified. These may include uncertainties in the measured chemical results in surface water, sediment, and fish tissue as well as uncertainties in the toxicity bioassays and the models used in the ERA. The impact associated with these uncertainties will be quantitatively (through data validation review of chemical data) and qualitatively addressed. Sensitivity analyses will be conducted for the important exposure parameters that are used in the wildlife exposure models and for the TRVs that are used to determine risk to the representative wildlife species.

7.0 REFERENCES

Nagy, K.A., (1987). "Field Metabolic Rate and Food Requirement Scaling in Mammals and Birds". Ecological Monographs, 57(2), 1987, pp 111-128

US Environmental Protection Agency . (1993). Wildlife Exposure Factors Handbook Volume I. Washington D.C: Office of Research and Development; USEPA Report no. EPA/600/R-93/187a

Beyer, W.N., E.E. Connor, and S. Gerould. (1994). Estimates of soil ingestion by wildlife. J. Wildl. Manage. 58: 375-382.

Chapman, J.A., and G.A. Feldhamer. 1982. *Wild Mammals of North America*. Johns Hopkins University Press, Baltimore, MD and London.

Harris, C. J. (1968) Otters: a study of the recent Lutrinae. London, U.K.: Weidenfield & Nicolson.

Jarvinen, A.W. and G.T. Ankley, 1999. Linkage Effects to Tissue Residues: Development of a Comprehensive Database for Aquatic Organisms Exposed to Inorganic and Organic Chemicals. Pensacola FL, Society of Environmental Toxicology and Chemistry Press, 364pp.

Svihla, A.; Svihla, R. D. (1931) The Louisiana muskrat. J. Mammal. 12: 12 –28

U.S. Environmental Protection Agency. (1993). Wildlife Exposure Factors Handbook. U.S. EPA Office of research and Development. EPA/600/R-93/187a.

U.S. Environmental Protection Agency. (1999) Region 5 Ecological Data Quality Levels (EDQLs), October 4, 1999.

Appendices

Appendix 1

Administrative Order on Consent

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MAY 03 2000

REPLY TO THE ATTENTION OF:
DE-9J

CERTIFIED MAIL Z 164 840 008
RETURN RECEIPT REQUESTED

Ms. Robin Prokop
Plant Manager
Solutia Inc.
500 Monsanto Avenue
Sauget, Illinois 62206-1198

RE: RCRA 3008(h) Consent Order
Solutia Inc.
ILD 000 802 702

Dear Ms. Prokop:

This letter is to acknowledge receipt of the Section 3008(h) Administrative Order on Consent signed by Solutia Inc. A fully executed copy of the Consent Order is enclosed for your file.

Your cooperation in resolving this matter is appreciated.

Sincerely yours,

Joseph M. Boyle

Joseph M. Boyle, Chief
Enforcement and Compliance Assurance Branch
Waste, Pesticides and Toxics Division

Enclosure

cc: Linda Tape, Esq., Thompson Coburn
Alan Faust, Solutia
Jim Moore, IEPA

Recycled/Recyclable-Printed with Vegetable Oil Based Inks on 100% Recycled Paper (40% Postconsumer)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:	ADMINISTRATIVE ORDER ON CONSENT
SOLUTIA INC. 500 MONSANTO AVENUE SAUGET, ILLINOIS 62206-1198	U.S. EPA Docket No: R8H-5-00-003
EPA ID#: ILD 000 802 702	Proceeding under Section 3008(h) of the Resource Conservation and Recovery Act, as amended, 42 U.S.C. §6928(h).
RESPONDENT	

I. JURISDICTION

1. The United States Environmental Protection Agency ("U.S. EPA") is issuing this Administrative Order on Consent ("Order") pursuant to Section 3008(h) of the Solid Waste Disposal Act, commonly referred to as the Resource Conservation and Recovery Act of 1976 (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. §6928(h). The authority to issue orders under Section 3008(h) of RCRA in Region 5 has been duly delegated to the Chief, Enforcement and Compliance Assurance Branch; Waste, Pesticides and Toxics Division; U.S. EPA Region 5.

2. This Order is issued to Solutia Inc., the owner/operator of Solutia Inc., 500 Monsanto Avenue, Sauget, Illinois, 62206-1198, located in St. Clair County, Illinois, (the "Facility"). The Facility, as delineated on the map attached as Figure 1, lies just east of the Mississippi River within the incorporated boundary of Sauget, Illinois on approximately 314 acres of land. The Facility began operations in 1917 and manufactures chemical products, including industrial chemicals, chemical intermediates, agricultural intermediates, and rubber chemicals.

3. Solutia Inc. consents to and agrees not to contest U.S. EPA's jurisdiction to issue this Order or to enforce its terms. Further, Solutia Inc. must not contest U.S. EPA's jurisdiction to: compel compliance with this Order in any subsequent enforcement proceedings, either administrative or judicial; require Solutia Inc.'s full or interim compliance with the terms of this Order; or impose sanctions for violations of this Order.

4. Solutia Inc. waives any rights to request a hearing on this matter pursuant to Section 3008(b) of RCRA and 40 C.F.R. Part 24, and consents to the issuance of this Order without a hearing pursuant to Section 3008(b) of RCRA as a Consent Order issued pursuant to Section 3008(h) of RCRA.

II. DEFINITIONS

Unless otherwise expressly provided here, terms used in this Order which are defined in RCRA or in regulations promulgated under RCRA must have the definitions given to them in RCRA or in such regulations.

III. PARTIES BOUND

1. This Order applies to and binds U.S. EPA, Solutia Inc. and its agents, successors and assigns, heirs, trustees, receivers, and all persons, including but not limited to contractors and consultants, acting on behalf of Solutia Inc. Solutia Inc. must be responsible for and liable for any failure to carry out all activities required of Solutia Inc. by this Order, regardless of Solutia Inc.'s use of employees, agents, contractors, or consultants to perform any such tasks.

2. No change in ownership or corporate or partnership status relating to the facility must in any way alter Solutia Inc.'s responsibility under this Order. Any conveyance of title, easement, or other interest in the Facility, or a portion of the Facility, must not affect Solutia Inc.'s obligations under this Order. Solutia Inc. must give written notice of this Order to any successor in interest prior to transfer of ownership or operation of the Facility or a portion thereof and must notify U.S. EPA in writing within 30 days of the transfer. This written notice must describe how Solutia Inc. has assured that, despite the transfer, all institutional controls that are or may be required for the Facility must be implemented and maintained. This paragraph does not apply if EPA and Solutia Inc. agree that this Order has been terminated as to the Facility or any relevant portion of the Facility.

IV. DETERMINATIONS

After consideration of the Administrative Record, the Chief, Enforcement and Compliance Assurance Branch; Waste, Pesticides and Toxics Division; U.S. EPA Region 5 has made the following conclusions of law and determinations:

1. Solutia Inc. is a "person" within the meaning of Section 1004(15) of RCRA.

2. Solutia Inc. is the owner or operator of a facility that has operated under interim status subject to Section 3005(e) of RCRA.

3. Certain wastes and constituents found at the Facility are hazardous wastes and/or hazardous constituents pursuant to Sections 1004(5) and 3001 of RCRA and 40 C.F.R. Part 261.

4. There is or has been a release of hazardous wastes or hazardous constituents into the environment from the Facility.

5. The actions required by this Order are necessary to protect human health and/or the environment.

6. U.S. EPA has determined, in its sole discretion, that Solutia Inc. is a responsible entity with sufficient technical ability and resources (to be assured pursuant to Section XVI) to proceed on an expedited basis under an Order on Consent for the work described here.

V. PROJECT MANAGER

U.S. EPA and Solutia Inc. must each designate a Project Manager and must notify each other in writing of the Project Manager it has selected within 14 days of the effective date of this Order. Each Project Manager is responsible for overseeing the implementation of this Project. The parties must provide prompt written notice whenever they change Project Managers.

VI. WORK TO BE PERFORMED

Pursuant to Section 3008(h) of RCRA, Solutia Inc. agrees to and is hereby ordered to perform the actions specified in this section, in the manner and by the dates specified here. All work undertaken pursuant to this Order must be performed in compliance with RCRA and other applicable federal and state laws and their implementing regulations, and consistent with all relevant U.S. EPA guidance documents as appropriate to the Facility. Such guidance must include, but is not limited to, the Documentation of Environmental Indicator Determination Guidance (Interim Final, February 5, 1999), and relevant portions of the RCRA Corrective Action Plan (May 1994, OSWER Directive 9902.3-2A) and U.S. EPA's risk assessment guidance.

1. Solutia Inc. must complete activities necessary to identify and define the nature and extent of releases of hazardous waste and/or hazardous constituents at or from the Facility. These activities include:

   a. Provide to U.S. EPA, within 90 days of the effective date of this Order, a Description of Current Conditions (DOCC) Report which includes any recent sampling data from the Facility, which sampling was undertaken by Solutia, a summary of the historic operations, and physical setting of the Facility. The DOCC Report must describe, at a minimum, conditions at all locations specified in the Draft RCRA Hazardous Waste Management Part B permit dated September 1996 (RCRA Log No. B-69) and any other past or present locations at the Facility for which Solutia Inc. has knowledge of past treatment, storage or disposal of hazardous waste or hazardous constituents or past product or waste spills.

   b. Perform an investigation to identify the nature and extent of any releases of hazardous waste and/or hazardous constituents at or from the Facility which may pose an unacceptable risk to human health and the environment, and provide a report to U.S. EPA. Investigations shall be conducted, at a minimum, in those areas described in the Draft RCRA Hazardous Waste Management Part B permit dated September 1996 (RCRA Log No. B-69), at dismantled manufacturing areas, at surficial fill areas, and in the area of the pipeline(s) which historically ran from the Monsanto river terminal on the Mississippi River to the former and current on-site product storage areas at the Facility. The report must also describe the nature and extent of any releases of hazardous waste and/or

hazardous constituents at or from the Facility which do not pose an unacceptable risk to human health and the environment, and provide the basis for those conclusions, including an evaluation of the risks. The report may be prepared in phases in order to provide timely support for the demonstrations described in Sections VI.2, VI.3, and VI.4, below, and for the determinations and proposal described in Section VI.5, below.

c. Solutia Inc. may choose to proceed with remedial actions to limit site investigation or risk assessment activities in order to complete the work as defined in Sections VI.2, VI.3, VI.4 and VI.5 below.

2. Solutia Inc. must demonstrate by 1/1/2002, through submitting an Environmental Indicators Report and by performing any other necessary activities, consistent with this section, that migration of contaminated groundwater at or from the Facility is stabilized. That is, the migration of all groundwater known or reasonably suspected to be contaminated with hazardous wastes or hazardous constituents above acceptable levels is stabilized to remain within any existing areas of contamination as defined by monitoring locations designated at the time of the demonstration. In addition, by 1/1/2002 Solutia Inc. must show that any discharge of groundwater to surface water is either insignificant or shown to be currently acceptable according to an appropriate interim assessment. Solutia Inc. must collect monitoring and measurement data in the future as necessary to verify that migration of any contaminated groundwater is stabilized.

3. Solutia Inc. must demonstrate by 1/1/2004, through submitting an Environmental Indicators Report and by performing any other necessary activities, consistent with this section, that all current human exposures to contamination at or from the Facility are under control. That is, for all media known or reasonably suspected to be contaminated with hazardous wastes or hazardous constituents above risk-based levels, for which there are complete pathways between contamination and human receptors, significant or unacceptable exposures do not exist.

4. In order to prepare for and provide the demonstrations required by Sections VI.2 and VI.3, above, Solutia Inc. must:

   a. Determine appropriate risk screening criteria under current use scenarios and provide the basis and justification for the use of these criteria.

   b. Determine any current unacceptable risks to human health and the environment and describe why other identified risks are acceptable.

   c. Control any unacceptable current human exposures that are identified. This may include performing any corrective actions or other response measures ("corrective measures") necessary to control current human exposures to contamination to within acceptable risk levels.

   d. Stabilize the migration of contaminated groundwater.

e. Conduct groundwater monitoring to confirm that any contaminated groundwater remains within the original area of contamination.

f. Prepare a report, either prior to or as part of the Environmental Indicators Report, that describes and justifies any interim actions performed to meet the requirements of this section, including sampling documentation, construction completion documentation, and/or confirmatory sampling results.

5. Solutia Inc. must propose to U.S. EPA by 6/1/2004, final corrective measures necessary to protect human health and the environment from all current and future unacceptable risks due to releases of hazardous waste or hazardous constituents at or from the Facility (the "Final Corrective Measures Proposal"). The proposal must describe all corrective measures implemented at the Facility since the effective date of this Order. It must also include a description of all other final corrective measures evaluated by Solutia Inc., a detailed explanation of why Solutia Inc. preferred the proposed final corrective measures and cost estimates for the final corrective measures evaluated. The proposal must also include a detailed schedule for construction and implementation of the final corrective measures, and for submittal of a Final Remedy Construction Completion Report. This schedule must provide that Solutia Inc. will complete as much of the initial construction work as practicable within 1 year after U.S. EPA selects the final corrective measures and that Solutia Inc. must complete all final corrective measures within a reasonable period of time such that human health and the environment are protected.

   a. As part of the development of its proposal, Solutia Inc. must propose appropriate risk screening criteria, cleanup objectives, and points of compliance under current and reasonably expected future land use scenarios and provide the basis and justification for these decisions.

   b. U.S. EPA may request reasonable supplemental information from Solutia Inc. if U.S. EPA determines that the proposal and supporting information do not provide an adequate basis for selection of final corrective measures that must protect human health and the environment from the release of hazardous waste or hazardous consfituents at or from the Facility. Solutia Inc. must provide such supplemental information in a timely manner as directed in writing by U.S. EPA.

   c. U.S. EPA must provide the public with an opportunity to review and comment on its proposed final corrective measures, including a detailed description and justification for the proposal (the "Statement of Basis"). Following the public comment period, U.S. EPA must select the final corrective measures to be implemented by Solutia Inc., and provide notification of its decision and rationale in a "Final Decision and Response to Comments ("Final Decision").

   d. Upon notification by U.S. EPA, Solutia Inc. must implement the final corrective measures selected in U.S. EPA's Final Decision and in accordance with the schedule therein.

6. Reporting and other requirements:

   a. Solutia Inc. must establish a publicly accessible repository for information regarding site activities and conduct public outreach and involvement activities.

   b. Solutia Inc. must provide quarterly progress reports to U.S. EPA detailing work performed to date, data collected, problems encountered, project schedule, and percent project completed by the 15th day of each month following a quarter.

   c. The parties must communicate frequently and in good faith to assure successful completion of the requirements of this Order, and must meet on at least a semi-annual basis to discuss the work proposed and performed under this Order.

   d. Solutia Inc. must provide a Final Remedy Construction Completion Report documenting all work that Solutia Inc. has performed pursuant to the schedule in U.S. EPA's Final Decision selecting the final corrective measures.

   e. If ongoing monitoring or operation and maintenance is required after construction of the selected final corrective measures, Solutia Inc. must include an operations and maintenance plan in the Final Remedy Construction Completion Report. Solutia Inc. must revise and resubmit the report in response to U.S. EPA's written comments, if any, by the due dates specified by U.S. EPA. Upon U.S. EPA's written approval, Solutia Inc. must implement the approved operation and maintenance plan in accordance with the schedule and provisions contained therein. U.S. EPA will not unreasonably withhold its approval.

   f. Any risk assessments conducted by Solutia Inc. must estimate human health and ecological risk for both current and reasonably expected future land use scenarios. The Illinois EPA Tiered Approach to Corrective Action Objectives ("TACO") shall be the primary risk assessment method utilized under this Order. As necessary, U.S. EPA guidance and screening values, such as Risk Assessment Guidance for Superfund, U.S. EPA Region 9 Preliminary Remediation Goals, U.S. EPA Region 5 Ecological Screening Levels, and U.S. EPA Region 5 Risk Based Screening Levels, shall be used to supplement TACO.

   g. All sampling and analysis conducted pursuant to this Order must be performed in accordance with the Region 5 RCRA Quality Assurance Project Plan Policy (April 1998) as appropriate for the site, and be sufficient to identify and characterize the nature and extent of all releases as required by this Order. U.S. EPA reserves the right to audit laboratories selected by Solutia Inc. or require Solutia Inc. to purchase and have analyzed any performance evaluation samples selected by U.S. EPA which are compounds of concern. Solutia Inc. must notify U.S. EPA in writing at least 14 days prior to beginning each separate phase of field work performed under this Order. At the request of U.S. EPA, Solutia Inc. must provide or allow U.S. EPA or its authorized

representative to take split or duplicate samples of all samples collected by Solutia Inc. pursuant to this Order.

Project Managers can agree in writing to extend any deadline contained in this section. An extension of more than three months must also be approved by the Chief; Enforcement and Compliance Assurance Branch; Waste, Pesticides and Toxics Division.

VII. ACCESS

1. Upon reasonable notice, and at reasonable times, U.S. EPA, its contractors, employees, and/or any duly designated U.S. EPA representatives are authorized to enter and freely move about the Facility pursuant to this Order for the purposes of, inter alia: interviewing Facility personnel and contractors regarding issues relating to this Order; reviewing the progress of Solutia Inc. in carrying out the terms of this Order; conducting tests, sampling, or monitoring as U.S. EPA deems necessary; using a camera, sound recording, or other documentary type equipment; and verifying the reports and data submitted to U.S. EPA by Solutia Inc.. Solutia Inc. must permit such persons to inspect and copy all non-privileged records, files, photographs, documents, including all sampling and monitoring data, that pertain to work undertaken pursuant to this Order and that are within the possession or under the control of Solutia Inc. or its contractors or consultants.

2. To the extent that work performed pursuant to this Order must be done beyond the Facility property boundary, Solutia Inc. must use its best efforts to obtain access agreements necessary to complete work required by this Order from the present owner(s) of such property within 60 days of the date that the need for access becomes known to Solutia Inc.. Any such access agreement must provide for access by U.S. EPA and its representatives. Solutia Inc. must insure that U.S. EPA's Project Manager has a copy of any access agreement(s). In the event that agreements for access are not obtained within 60 days, Solutia Inc. must notify U.S. EPA in writing within 14 days thereafter of both the efforts undertaken to obtain access and the failure to obtain access agreements. EPA may, at its discretion, assist Solutia Inc. in obtaining access.

3. Nothing in this section limits or otherwise affects U.S. EPA's right of access and entry pursuant to applicable law, including RCRA and CERCLA.

VIII. RECORD PRESERVATION

1. Solutia Inc. must retain, during the pendency of this Order and for a minimum of six years after termination of the entire Order, all data and all final records and documents now in its possession or control or which come into its possession or control which relate in any way to this Order. Solutia Inc. must notify U.S. EPA in writing 90 days prior to the destruction of any such records, and provide U.S. EPA with the opportunity to take possession of any such non-privileged records. Such written notification must reference the effective date, caption, and docket number of this Order and must be addressed to:

Director
Waste, Pesticides and Toxics Division
U.S. EPA, Region 5
77 W. Jackson Blvd.
Chicago, IL 60604-3590

Solutia Inc. must also promptly provide a copy of any such notification to U.S. EPA's Project Manager.

2. Solutia Inc. further agrees that within 30 days of retaining or employing any agent, consultant, or contractor ("Agents") for the purpose of carrying out the terms of this Order, Solutia Inc. must enter into an agreement with any such Agents whereby such Agents must provide Solutia Inc. a copy of all data and final non-privileged documents produced pursuant to this Order.

3. Solutia Inc. agrees that it must not assert any privilege claim concerning any data developed to prepare any reports or conduct any investigations or other actions required by this Order.

IX. STIPULATED PENALTIES

Solutia Inc. is subject to the following stipulated penalties:

1. For failure to submit quarterly progress reports by the dates scheduled in Section VI.6: $1000 per day for the first 14 days and $2000 per day thereafter.

2. For failure to adequately demonstrate that groundwater migration is stabilized by 1/1/2002: $5000 per day.

3. For failure to adequately demonstrate that current human exposures are under control by 1/1/2004: $5000 per day.

4. For failure to submit the Final Corrective Measures Proposal in Section VI.5 by 6/1/2004: $2500 per day for the first 14 days and $5000 per day thereafter.

5. For failure to initiate the selected final corrective measures, as described in Section VI.5, in accordance with the approved schedule: $2500 per day for the first 14 days and $5000 per day thereafter.

6. For failure to submit the Final Remedy Construction Completion Report as scheduled in Section VI.5: $1000 per day for the first 14 days and $2000 per day thereafter.

7. For failure to submit the DOCC Report required in Section VI.1 within 90 days of the effective date of the Order: $1000 per day for the first 14 days and $2000 per day thereafter.

Whether or not Solutia Inc. has received notice of a violation, stipulated penalties begin to accrue on the day after the complete performance is due or the day a violation occurs, and continue to

accrue through the day of correction of the violation. For items 2 and 3 above, stipulated penalties will not accrue during the period, if any, beginning on the 31st day after the deadline for submission of the Environmental Indicators Report until the date that U.S. EPA notifies Solutia Inc. in writing of any deficiency in the required demonstration(s). Nothing herein prevents the simultaneous accrual of separate stipulated penalties for separate violations of this Order. Nothing in this paragraph shall limit the mitigation or reduction of a stipulated penalty based on a determination that Solutia Inc. was unaware of a violation.

All penalties owed to the United States under this section are due and payable within 60 days of Solutia Inc.'s receipt from U.S. EPA of a written demand for payment of the penalties, unless Solutia Inc. invokes the dispute resolution procedures under Section X: Dispute Resolution. Such a written demand must describe the violation and must indicate the amount of penalties due.

Interest begins to accrue on any unpaid stipulated penalty balance beginning on the thirty-first day after Solutia Inc.'s receipt of U.S. EPA's demand letter. Interest accrues at the current value of funds rate established by the Secretary of the Treasury. Pursuant to 31 U.S.C. § 3717, an additional penalty of 6% per annum on any unpaid principal is assessed for any stipulated penalty payment which is overdue for 90 or more days.

All penalties must be made by certified or cashier's check payable to the United States of America, or by wire transfer, and must be remitted to:

U.S. Department of the Treasury
Attention: U.S. EPA Region 5, Office of the Comptroller
P.O. Box 70753
Chicago, Illinois 60673.

All such checks must reference the name of the Facility, Solutia Inc.'s name and address, and the U.S. EPA docket number of this action. Copies of all such checks and letters forwarding the checks must be sent simultaneously to the U.S. EPA Project Manager.

Solutia Inc. may dispute U.S. EPA's assessment of stipulated penalties by invoking the dispute resolution procedures under Section X: Dispute Resolution. The stipulated penalties in dispute continue to accrue, but need not be paid, during the dispute resolution period. Solutia Inc. must pay stipulated penalties and interest, if any, in accordance with the dispute resolution decision and/or agreement. Solutia Inc. must submit such payment to U.S. EPA within 60 days of receipt of such resolution in accordance with the payment instructions of this section.

Neither the invocation of dispute resolution nor the payment of penalties alter in any way Solutia Inc.'s obligation to comply with the terms and conditions of this Order not directly in dispute.

The stipulated penalties set forth in this section do not preclude U.S. EPA from pursuing any other remedies or sanctions which may be available to U.S. EPA by reason of Solutia Inc.'s failure to comply with any of the terms and conditions of this Order. However, U.S. EPA must

not seek both a stipulated penalty under this section and a statutory penalty for the same violation.

X. DISPUTE RESOLUTION

1. The parties must use their best efforts to informally and in good faith resolve all disputes or differences of opinion.

2. If either party disagrees, in whole or in part, with any decision made or action taken pursuant to this Order, that party must notify the other party's Project Manager of the dispute. The Project Managers must attempt to resolve the dispute informally.

3. If the Project Managers cannot resolve the dispute informally, either party may pursue the matter formally by placing its objections in writing. A written objection must set forth the specific points of the dispute, the basis for that party's position, and any matters which it considers necessary for determination.

4. U.S. EPA and Solutia Inc. must in good faith attempt to resolve the dispute through formal negotiations within 21 days, or a longer period if agreed in writing by the parties. During formal negotiations, either party may request a conference with appropriate senior management to discuss the dispute.

5. If the parties are unable to reach an agreement through formal negotiations, within 14 business days after any formal negotiations have concluded, Solutia Inc. and U.S. EPA's Project Manager may submit additional written information to the Director of the Waste, Pesticides and Toxics Division, U.S. EPA Region 5. U.S. EPA must maintain a record of the dispute, which must contain all statements of position and any other documentation, submitted pursuant to this section. U.S. EPA must allow timely submission of relevant supplemental statements of position by the parties to the dispute. Based on the record, U.S. EPA must respond to Solutia Inc.'s arguments and evidence and provide Solutia Inc. its detailed written decision on the dispute signed by the Director of the Waste, Pesticides and Toxics Division, U.S. EPA Region 5 ("EPA Dispute Decision").

6. If U.S. EPA takes any enforcement action regarding an EPA Dispute Decision, Solutia Inc. reserves the right to assert all arguments or defenses available to it.

XI. FORCE MAJEURE AND EXCUSABLE DELAY

Force majeure, for purposes of this Order, is defined as any event arising from causes not foreseen and beyond the control of Solutia Inc. that delays or prevents the timely performance of any obligation under this Order despite its best efforts.

If any event occurs or has occurred that may delay the performance of any obligation under this Order, whether or not caused by a force majeure event, Solutia Inc. must notify U.S. EPA within 2 business days after discovering or obtaining knowledge that the event may cause a delay. If Solutia Inc. wishes to claim a force majeure event, within 15 business days thereafter Solutia Inc.

must provide to U.S. EPA in writing all relevant information relating to its claim, including its proposed revised schedule.

If U.S. EPA determines that a delay or anticipated delay is attributable to a force majeure event, the time for performance of such obligation under this Order that is affected by the force majeure event must be extended in writing for such time as U.S. EPA determines is necessary to complete such obligation or obligations. U.S. EPA will not unreasonably withhold its agreement that the delay or anticipated delay is attributable to a force majeure event.

XII. MODIFICATION

This Order may only be modified by mutual agreement of U.S. EPA and Solutia Inc., except as provided for in Section VI - Work to be Performed. Any agreed modifications must be in writing, be signed by both parties, must have as their effective date the date on which they are signed by U.S. EPA, and must be incorporated into this Order.

XIII. RESERVATION OF RIGHTS

1. U.S. EPA reserves all of its statutory and regulatory powers, authorities, rights, and remedies, both legal and equitable, which may pertain to Solutia Inc.'s failure to comply with any of the requirements of this Order, including without limitation the assessment of penalties under Section 3008(h)(2) of RCRA, 42 U.S.C. §6928(h)(2), filing an action to enforce this Order, or issuing an administrative order for performance of corrective actions or other response measures. This Order must not be construed as a covenant not to sue, release, waiver, or limitation of any rights, remedies, powers, and/or authorities, civil or criminal, which U.S. EPA has under RCRA, CERCLA, or any other statutory, regulatory, or common law authority of the United States.

2. U.S. EPA reserves all of its rights to perform any portion of the work consented to here or any additional site characterization, feasibility study, and remedial work as it deems necessary to protect human health and/or the environment.

3. If U.S. EPA determines that activities in compliance or noncompliance with this Order have caused or may cause a release of hazardous waste or hazardous constituent(s), or a threat to human health and/or the environment, or that Solutia Inc. is not capable of undertaking any of the work ordered, U.S. EPA may order Solutia Inc. to stop further implementation of this Order for such period of time as U.S. EPA determines may be needed to abate any such release or threat and/or to undertake any action which U.S. EPA determines is necessary to abate such release or threat.

4. While U.S. EPA may review and comment on documents not required by this Order and prepared by Solutia Inc., U.S. EPA has no obligation to do so and such comments must not relieve Solutia Inc. of its obligation to achieve the required cleanup or performance standards or to obtain any necessary permits.

5. Solutia Inc. does not admit any of the factual or legal determinations made by the U.S. EPA. Except as otherwise specifically provided herein, Solutia Inc. reserves all of its rights, remedies and defenses, both legal and equitable, without limitation, including all rights and defenses it may have: (a) to challenge U.S. EPA's performance of work; (b) to challenge U.S. EPA's stop work orders; (c) regarding liability or responsibility for conditions at the Facility; or (d) to challenge the decisions made by U.S. EPA pursuant to this Order, with the exception of its right to contest U.S. EPA's jurisdiction to issue or enforce this Order. Solutia Inc. has entered into this Order in good faith without trial or adjudication of any issue of fact or law. Solutia Inc. reserves its right to seek judicial review of U.S. EPA actions taken under this Order, including in the context of a proceeding brought by the United States to enforce the terms of this Order or to collect penalties for violations thereof.

6. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive or other appropriate relief relating to the Facility, Solutia Inc. shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been raised in the present matter.

XIV. OTHER CLAIMS

Nothing in this Order must constitute or be construed as a release from any claim, cause of action, demand, or defense in law or equity, against any person, firm, partnership, or corporation for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous constituents, hazardous substances, hazardous wastes, pollutants, or contaminants found at, taken to, or taken or migrating from the Facility. Solutia Inc. waives any claims or demands for compensation or payment under Sections 106(b), 111, and 112 of CERCLA against the United States or the Hazardous Substance Superfund established by 26 U.S.C. §9507 for, or arising out of, any activity performed or expense incurred pursuant to this Order. Additionally, this Order does not constitute any decision on preauthorization of funds under Section 111(a)(2) of CERCLA.

XV. INDEMNIFICATION OF THE UNITED STATES GOVERNMENT

Solutia Inc. agrees to indemnify and save and hold harmless the United States Government, its agencies, departments, agents, and employees, from any and all claims or causes of action arising from or on account of acts or omissions of Solutia Inc. or its officers, employees, agents, independent contractors, receivers, trustees, and assigns in carrying out activities required by this Order. This indemnification must not be construed in any way as affecting or limiting the rights or obligations of Solutia Inc. or the United States under their various contracts.

XVI. FINANCIAL ASSURANCE

Within 90 days of the effective date of this Order, Solutia Inc. must submit to U.S. EPA for review and approval a cost estimate to assure completion of corrective action activities at the Facility. Within 30 days of U.S. EPA's approval of the cost estimate, Solutia Inc. must provide

financial security, in the amount of the cost estimate, in one of the forms permitted under 40 C.F.R. § 264.145 (modified to replace the terms "post-closure" and "closure" with "corrective action" and referencing this Consent Order, as approved by EPA). Upon U.S. EPA's selection of the final corrective measures to be implemented by Solutia Inc., the amount of required financial assurance under this paragraph may be modified based on the anticipated costs for completion of the final corrective measures (including long term operation and maintenance costs).

XVII. SEVERABILITY

If any provision or authority of this Order or the application of this Order to any party or circumstances is held by any judicial or administrative authority to be invalid, the application of such provisions to other parties or circumstances and the remainder of the Order must remain in force and must not be affected thereby.

XVIII. TERMINATION AND SATISFACTION

Solutia Inc. may request that U.S. EPA issue a determination that the requirements of the Order have been met for all or a portion of the Facility. Solutia Inc. may also request that U.S. EPA issue a "No Further Interest" or "No Further Action" determination for all or a portion of the Facility.

The provisions of the Order must be satisfied upon Solutia Inc.'s and U.S. EPA's execution of an "Acknowledgment of Termination and Agreement on Record Preservation and Reservation of Rights", consistent with U.S. EPA's Model Consent Order.

Solutia Inc.'s execution of the Acknowledgment must affirm its continuing obligation to preserve all records as required by Section VIII, to maintain any necessary institutional controls or other long terms measures, and to recognize U.S. EPA's reservation of rights as required in Section XIII.

XIX. SURVIVABILITY/PERMIT INTEGRATION

Except as otherwise expressly provided in this section, this Order shall survive the issuance or denial of a RCRA permit for the Facility, and this Order shall continue in full force and effect after either the issuance or denial of such permit. Accordingly, Solutia Inc. shall continue to be liable for the performance of obligations under this Order notwithstanding the issuance or denial of such permit. If the Facility is issued a RCRA permit and that permit expressly incorporates part of the requirements of this Order, or expressly states that its requirements are intended to replace some of the requirements of this Order, Respondent may request a modification of this Order and shall, with EPA approval, be relieved of liability under this Order for those specific obligations. If the Facility is issued a RCRA permit and that permit expressly incorporates all of the requirements of this Order, or expressly states that its requirements are intended to replace all of the requirements of this Order, Respondent may request that this Order be terminated. U.S. EPA shall approve such a request if it finds that the permit incorporates all of the requirements of this Order. U.S. EPA shall not unreasonably withhold its approval to modify or terminate this Order.

XX. EFFECTIVE DATE

The effective date of this Order is the date U.S. EPA has signed the Order.

IT IS SO AGREED:

DATE: 4-26-00 BY: _____

Ms. Robin Prokop, Plant Manager
Solutia Inc.

IT IS SO ORDERED:

DATE: May 3, 2000 BY: _____

Joseph M. Boyle, Chief
Enforcement and Compliance Assurance Branch
Waste, Pesticides and Toxics Division
U.S. Environmental Protection Agency
Region 5

U.S. ENVIRONMENTAL
PROTECTION AGENCY

APR 2 8 2000

OFFICE OF REGIONAL
COUNSEL

SDMS US EPA REGION V

COLOR-RESOLUTION - 2

IMAGERY INSERT FORM

The following page(s) of this document include color or resolution variations. Unless otherwise noted, these pages are available in monochrome. The original document is available for viewing at the Superfund Records Center.

SITE NAME	SAUGET AREA 2
DOC ID #	157321
DESCRIPTION OF ITEM(S)	SITE MAPS
PRP	
DOCUMENT VARIATION	__X__ COLOR **OR** ____ RESOLUTION
DATE OF ITEM(S)	1937-1998
NO. OF ITEMS	MULTIPLE
PHASE	AR
OPERABLE UNITS	
PHASE (AR DOCUMENTS ONLY)	____ Remedial ____ Removal ____ Deletion Docket ____Original ____ Update # ____ Volume ____ of ____
COMMENT(S)	
APPENDIX 2 - HISTORICAL AERIAL PHOTOGRAPHS	

Appendix 2

Historical Aerial Photographs

N

Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date:	Figure #
09/19/37	1

N

200 0 200 400 Meters

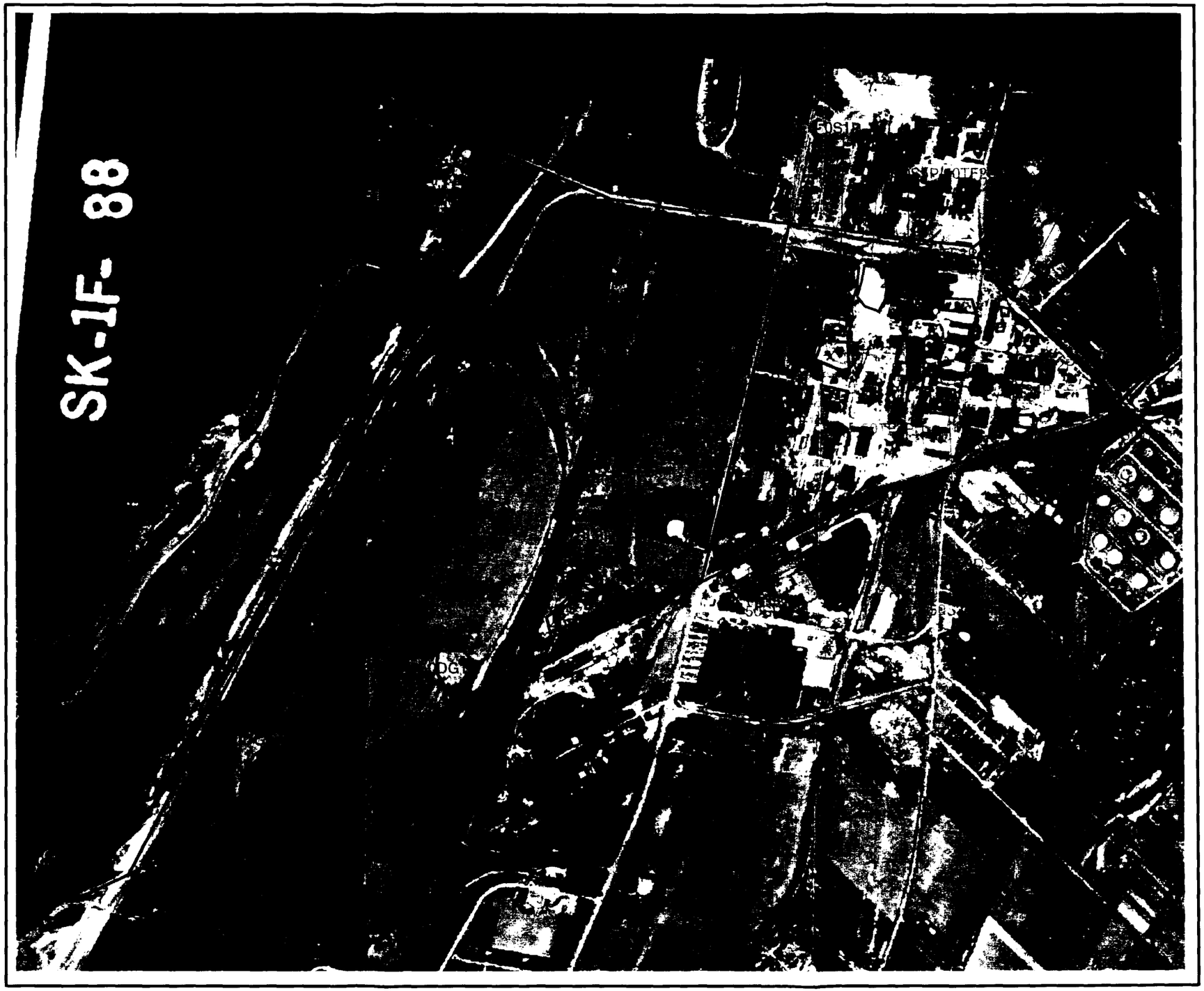
Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 07/04/40

Figure # 2



N

100 0 100 200 300 Meters

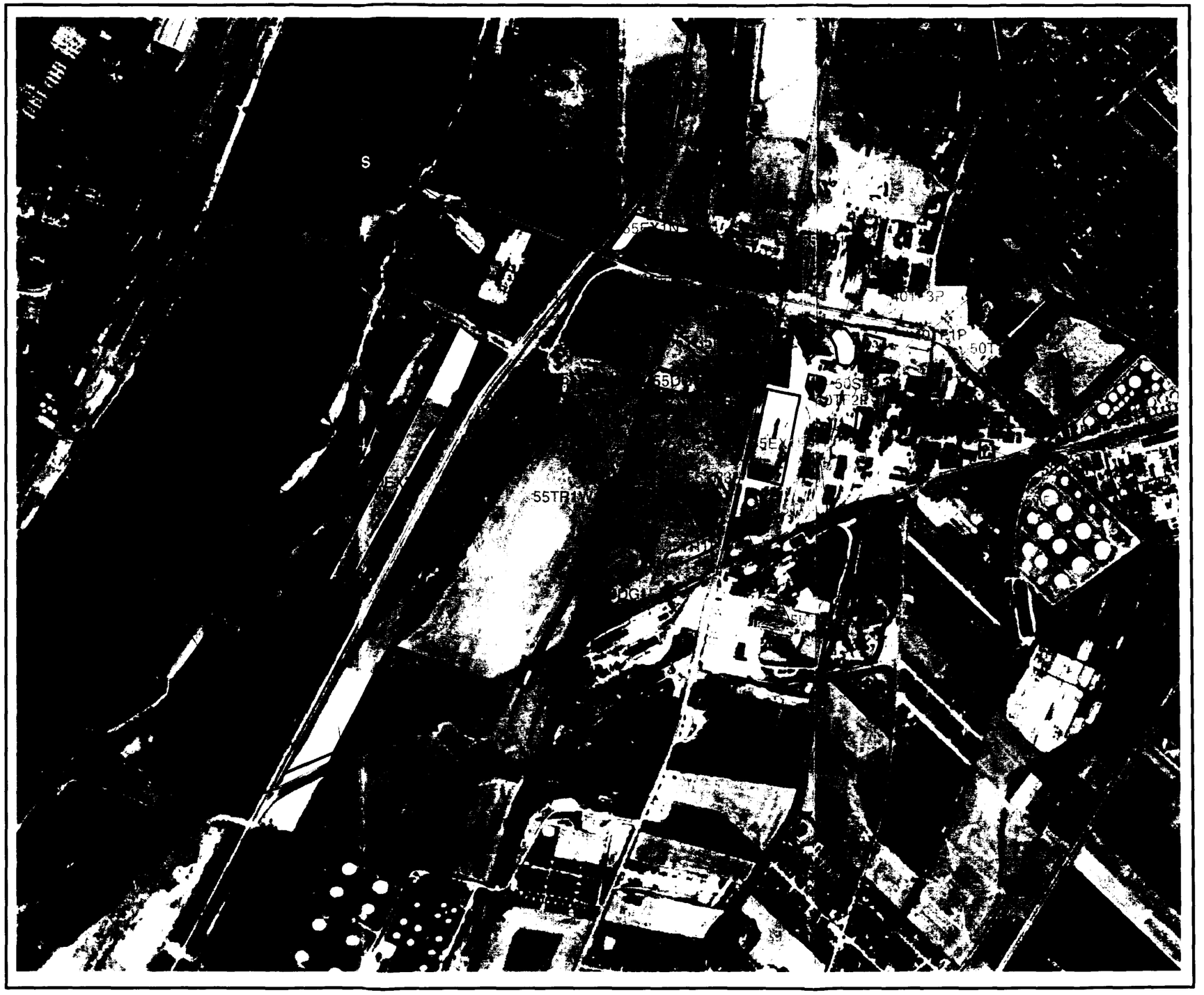
Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 06/27/50

Figure # 3



N

300 0 300 600 Meters

Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 07/12/55

Figure # 4

N

90 0 90 180 Meters

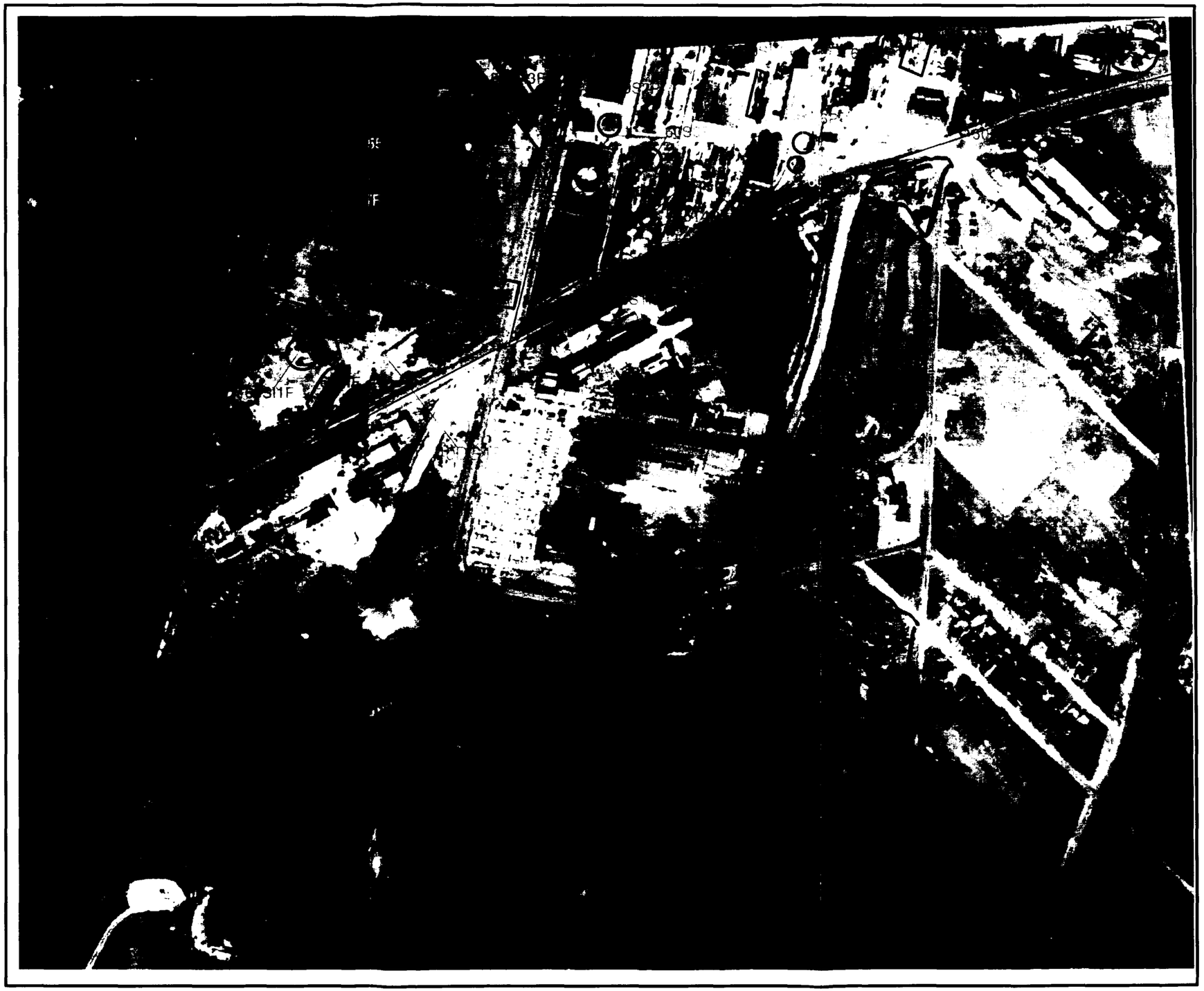
Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 01/08/60

Figure # 5



N

200 0 200 400 Meters

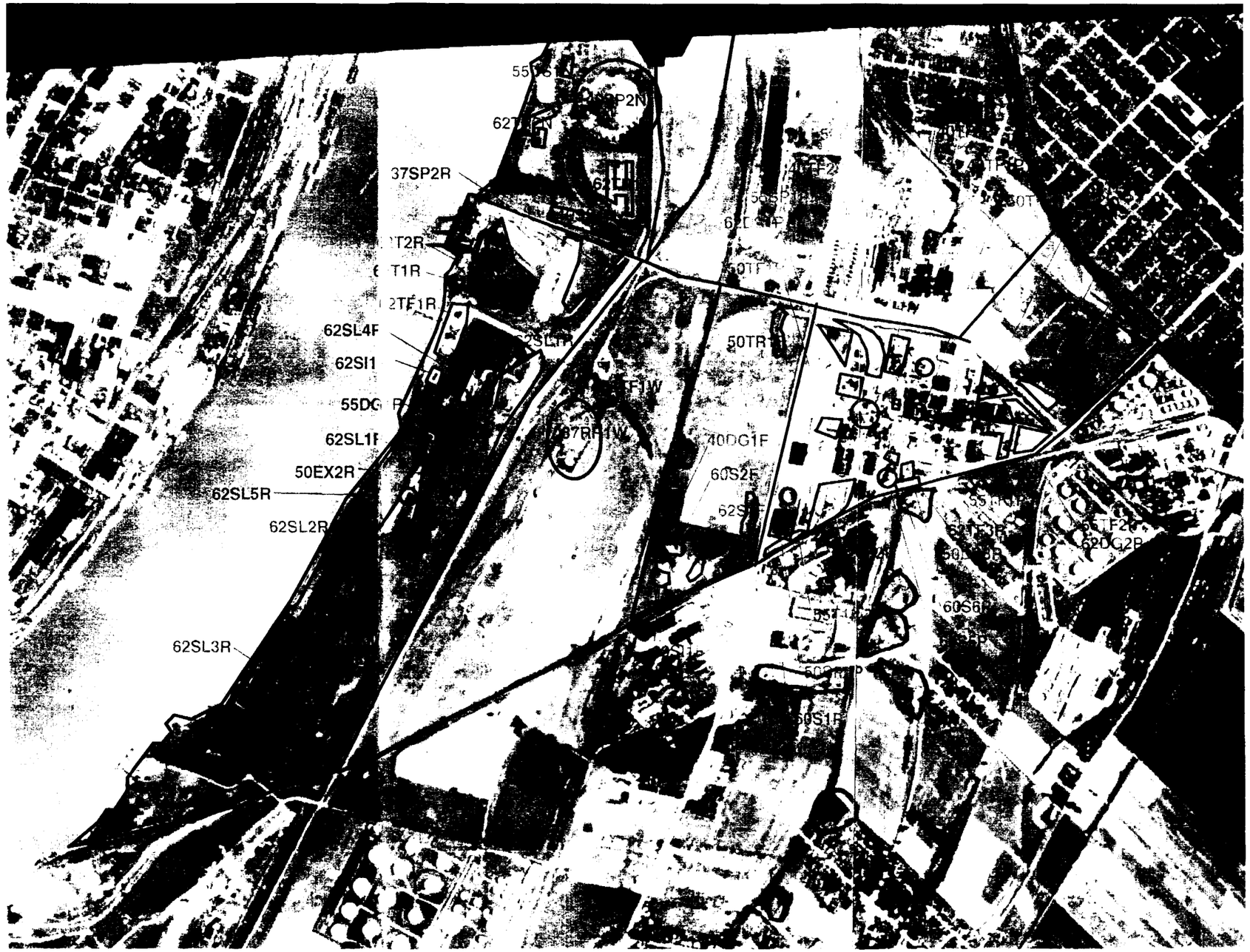
Legend

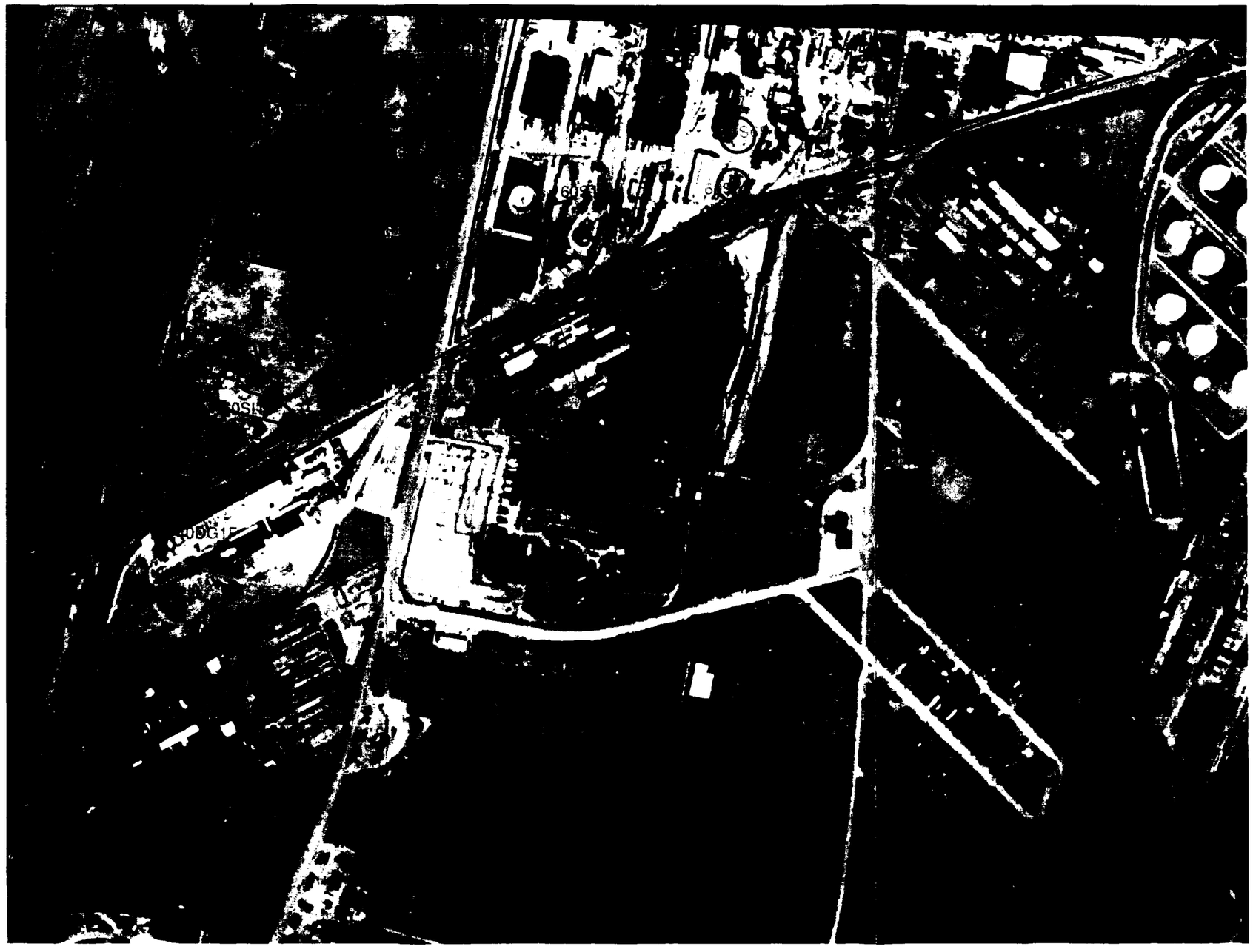
DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 07/09/62

Figure # 6





N

80 0 80 160 Meters

Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 02/29/64

Figure # 7

N

200 0 200 400 Meters

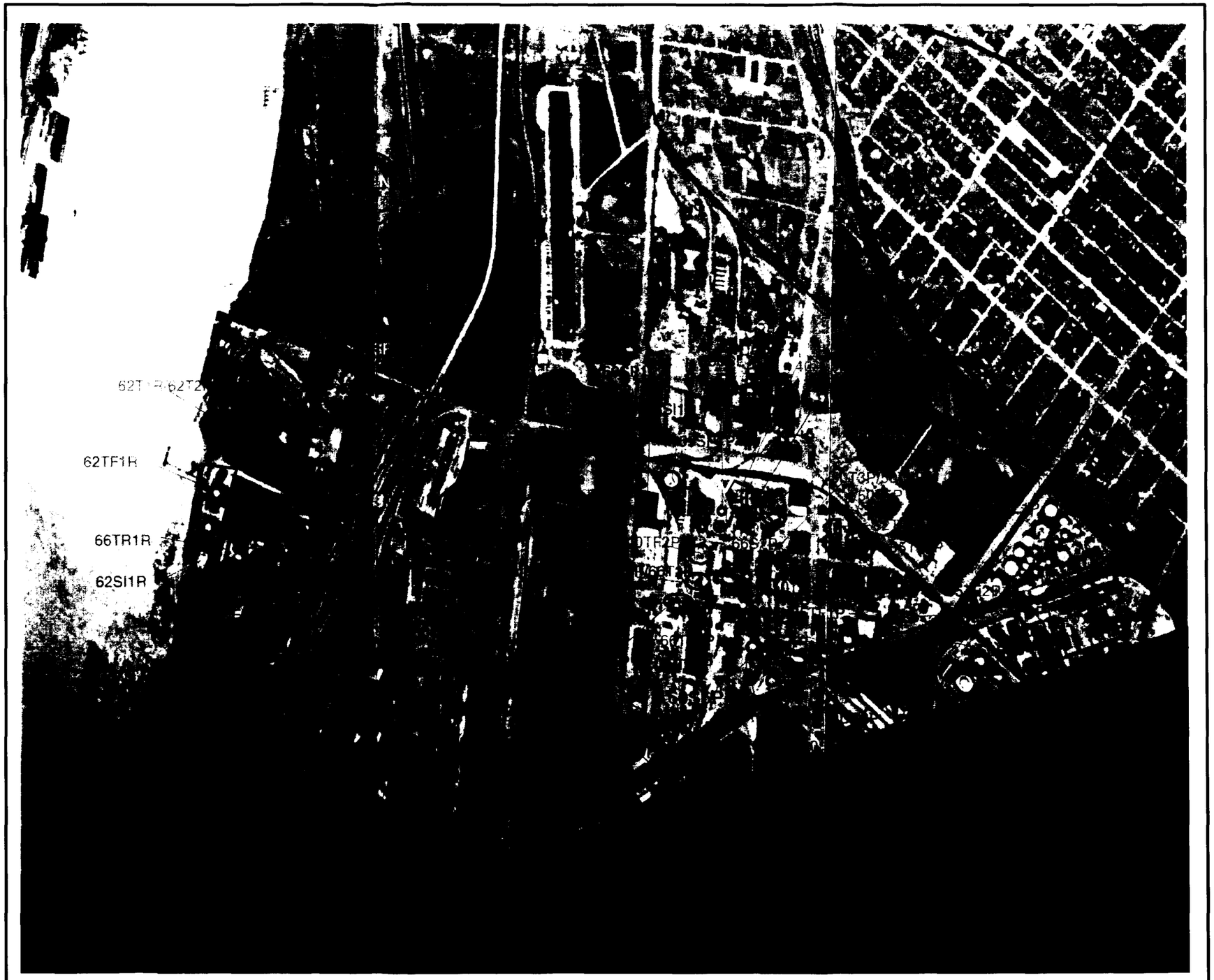
Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 05/18/66

Figure # 8



N

100 0 100 200 Meters

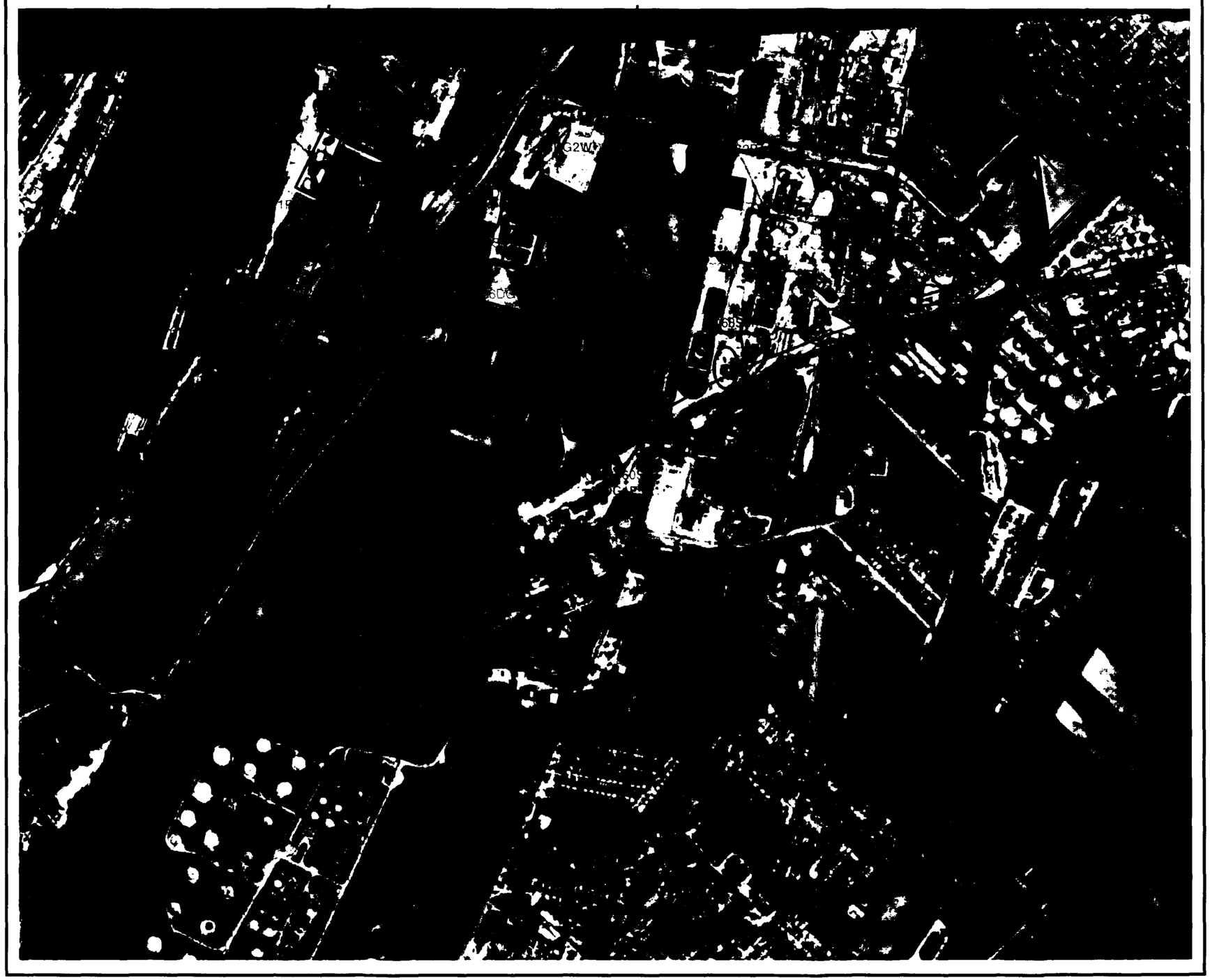
Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 04/22/67

Figure # 9



N

200 0 200 400 Meters

Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 03/03/68

Figure # 10

N

100 0 100 200 Meters

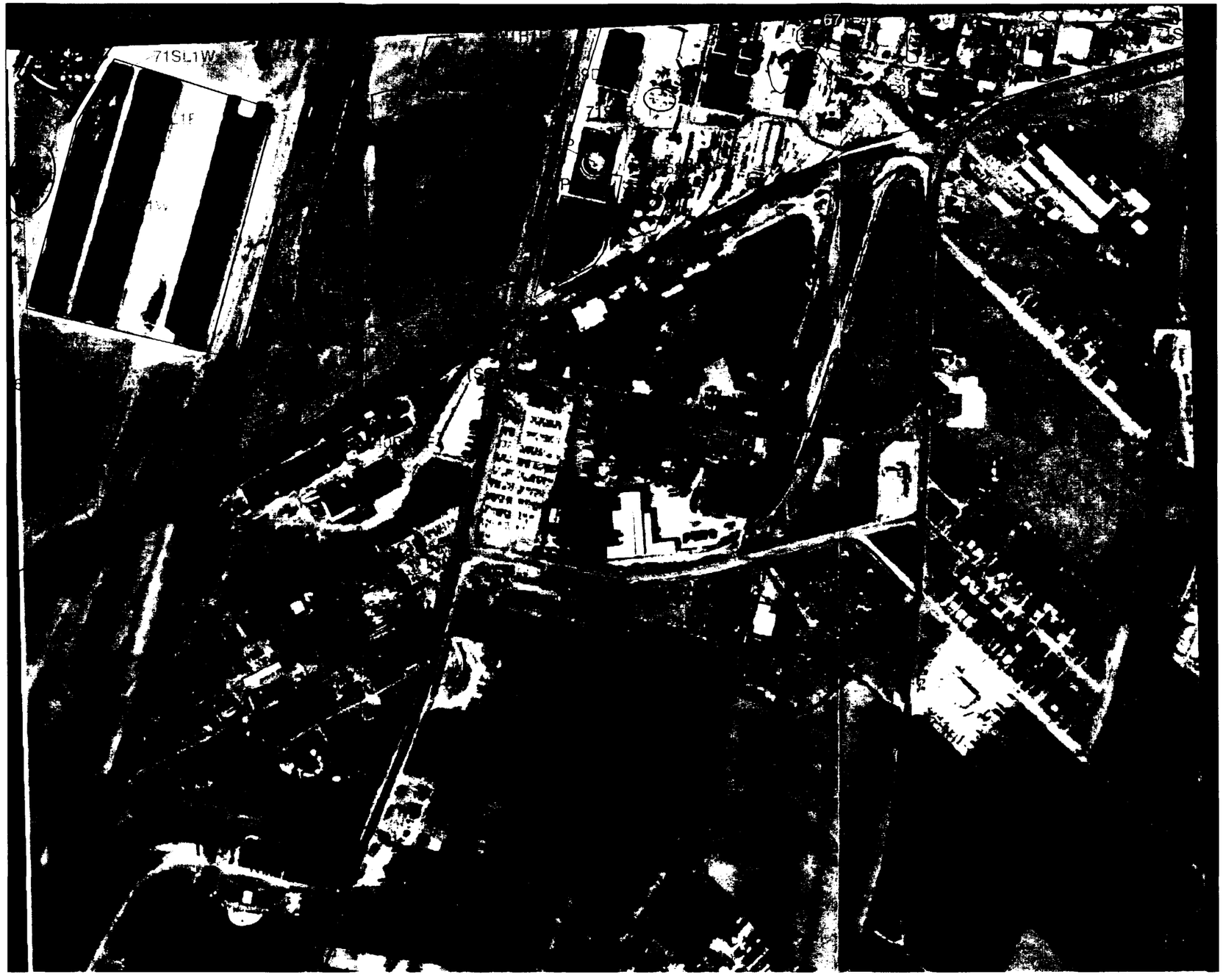
Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 04/20/69

Figure # 11



N

100 0 100 200 Meters

Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 03/29/71

Figure # 12

Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 05/04/73

Figure # 13

N

200 0 200 400 Meters

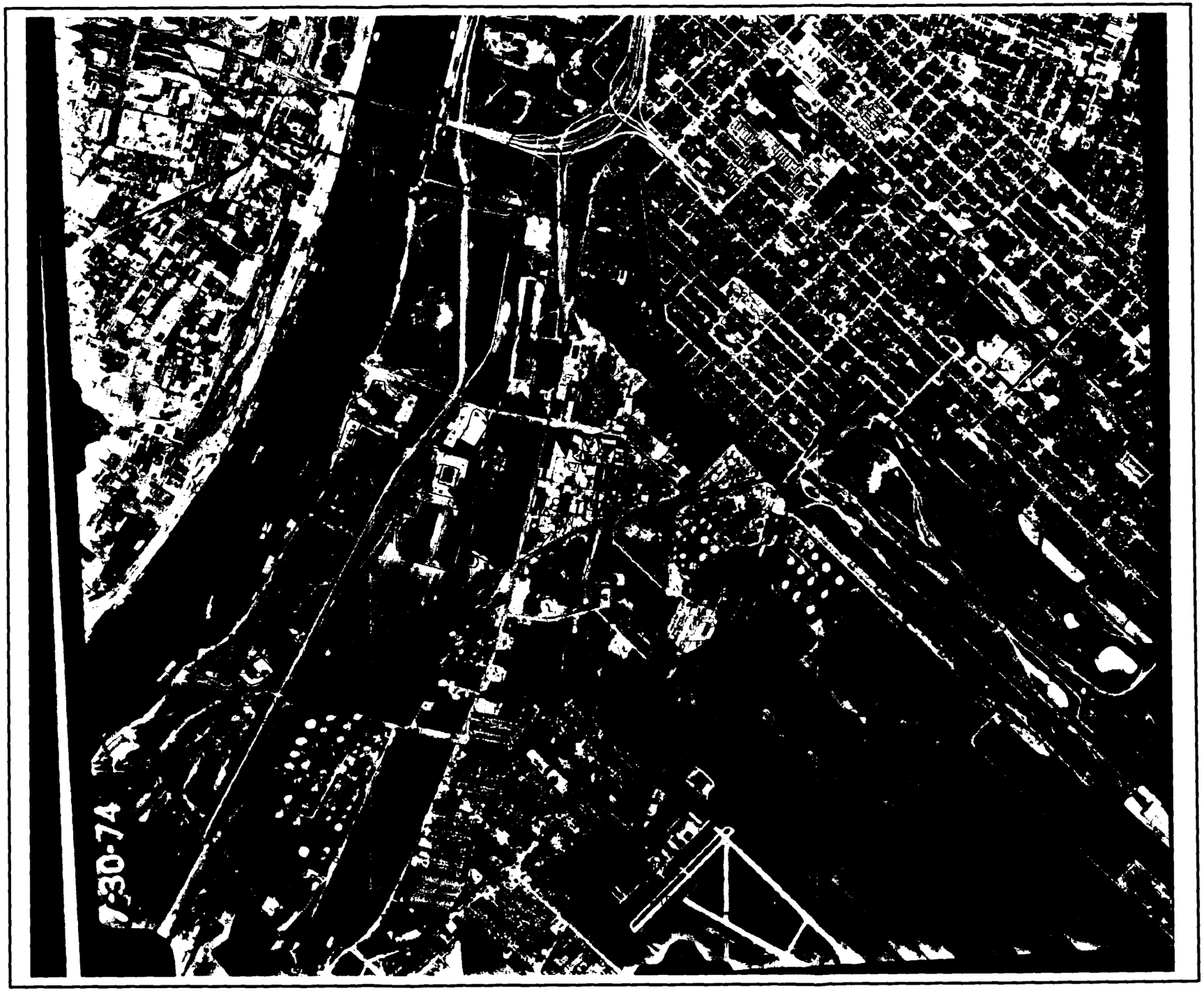
Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 07/30/74

Figure # 14



N

100 0 100 200 Meters

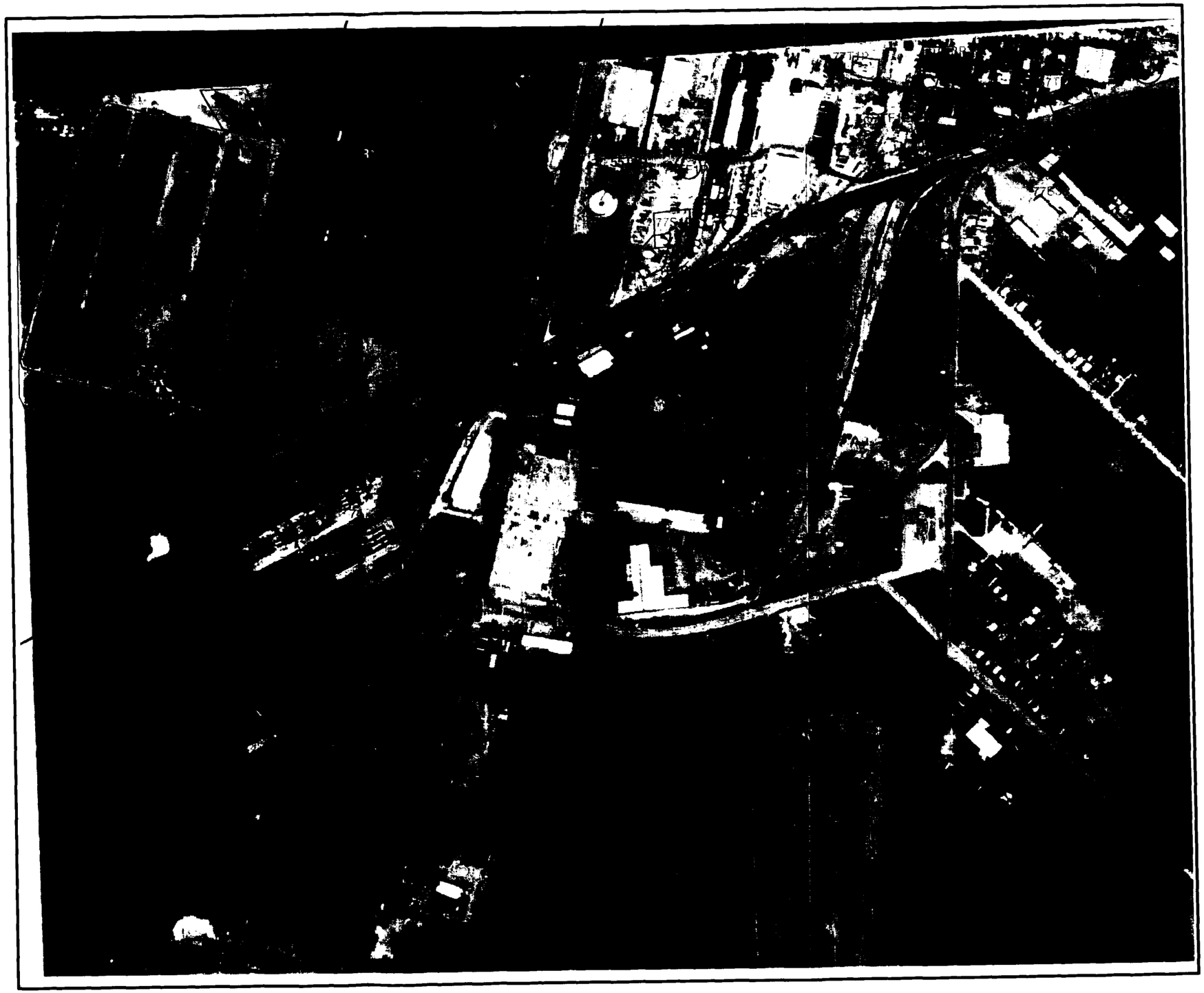
Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 04/06/75

Figure # 15



N

90 0 90 180 Meters

Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 04/09/77

Figure # 16

N

0.2 0 0.2 0.4 Miles

Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 06/10/78

Figure # 17

N

0.05 0 0.05 0.1 Miles

Legend

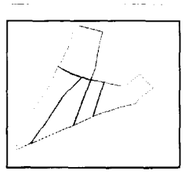
DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 12/19/79

Figure # 18

N



Not Rectified - Approximate Scale 1:10,000

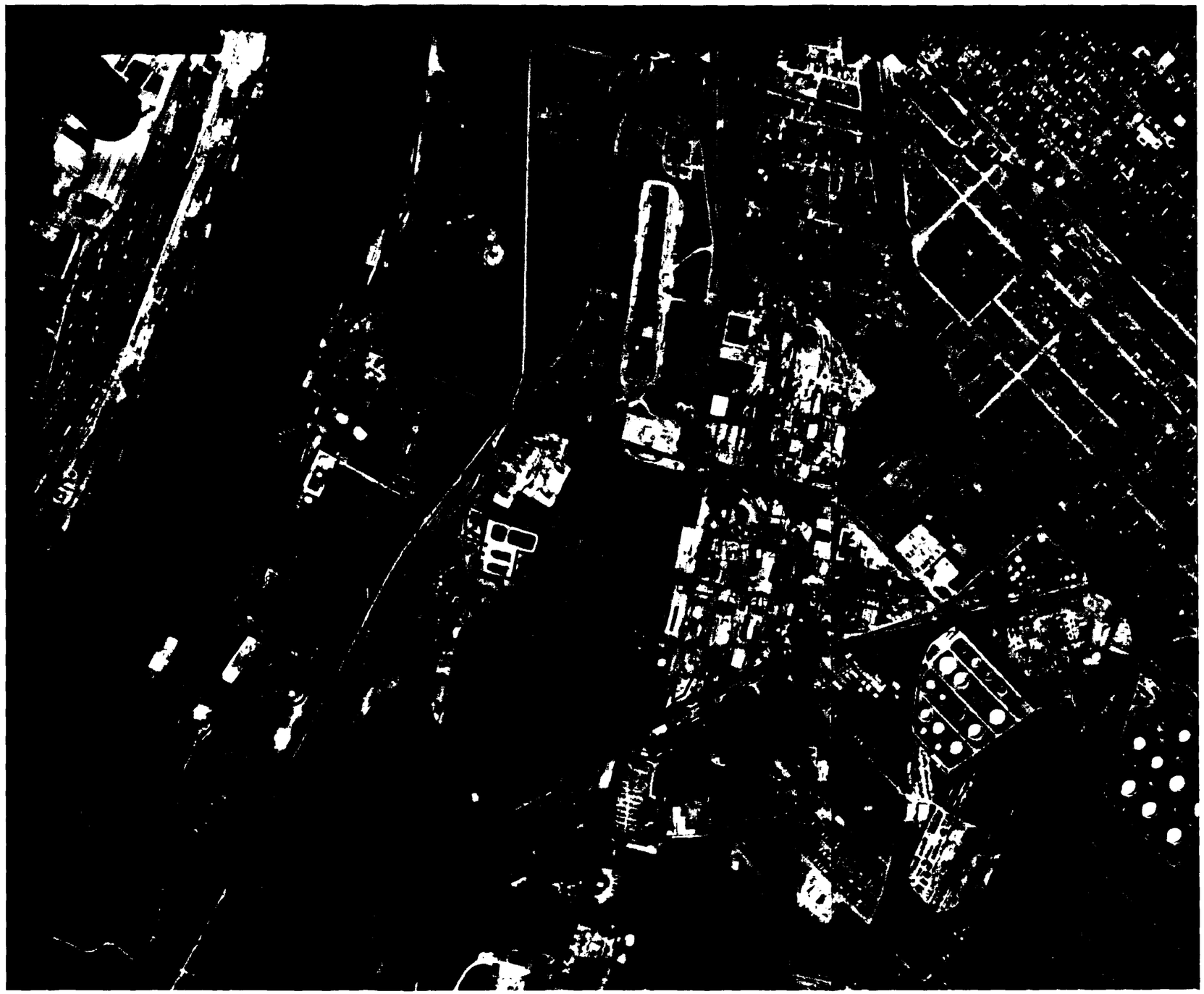
Legend

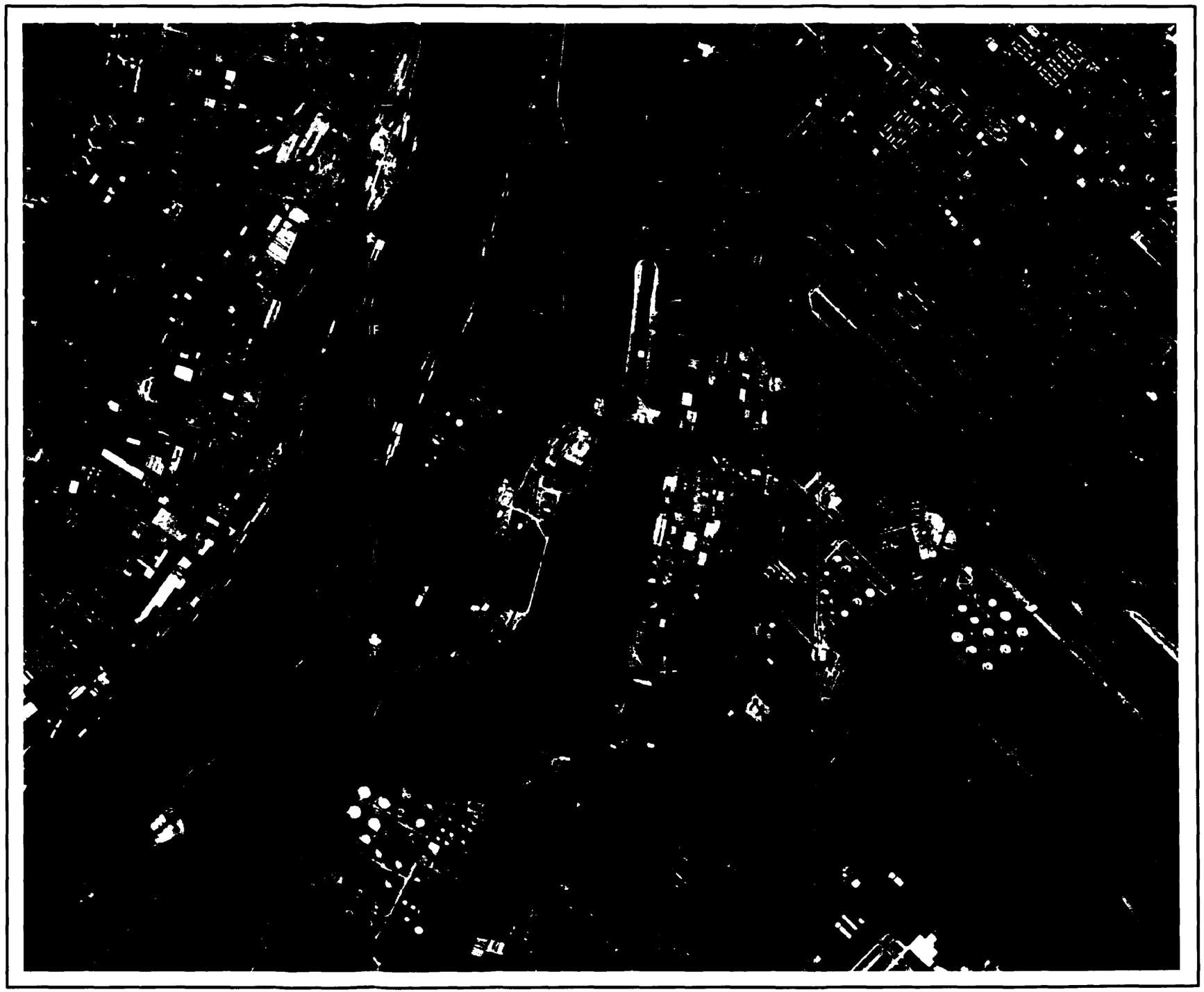
DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 03/12/81

Figure # 19





N

Not Rectified - Approximate Scale 1:10,000

Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date:	Figure #
03/18/85	20

N

Not Rectified - Approximate Scale 1:10,000

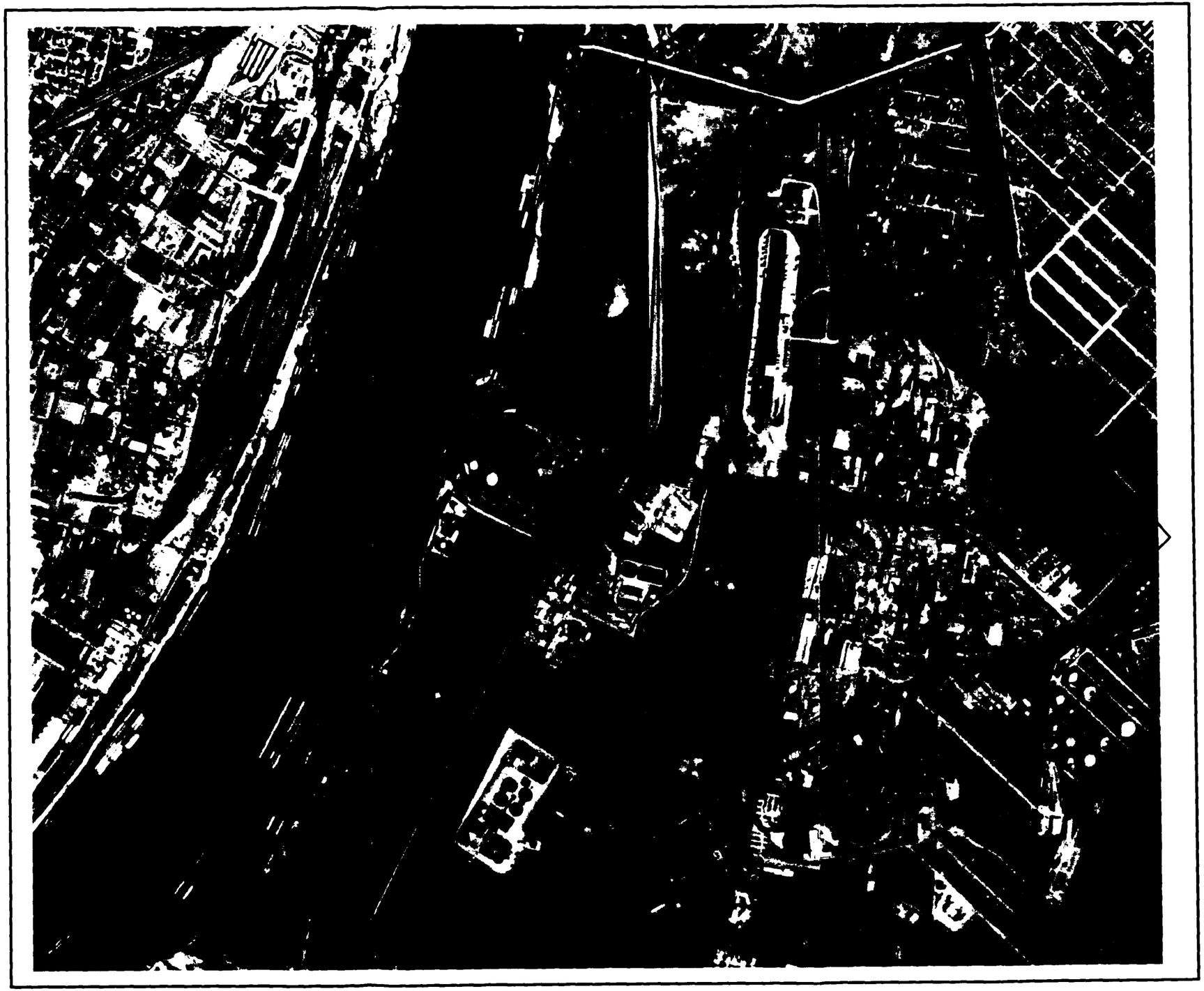
Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 02/09/87

Figure # 21



N

300 0 300 600 Meters

Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 04/07/88

Figure # 22

N

100 0 100 200 300 400 500 Meters

Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 04/19/89

Figure # 23

N

300 0 300 600 Meters

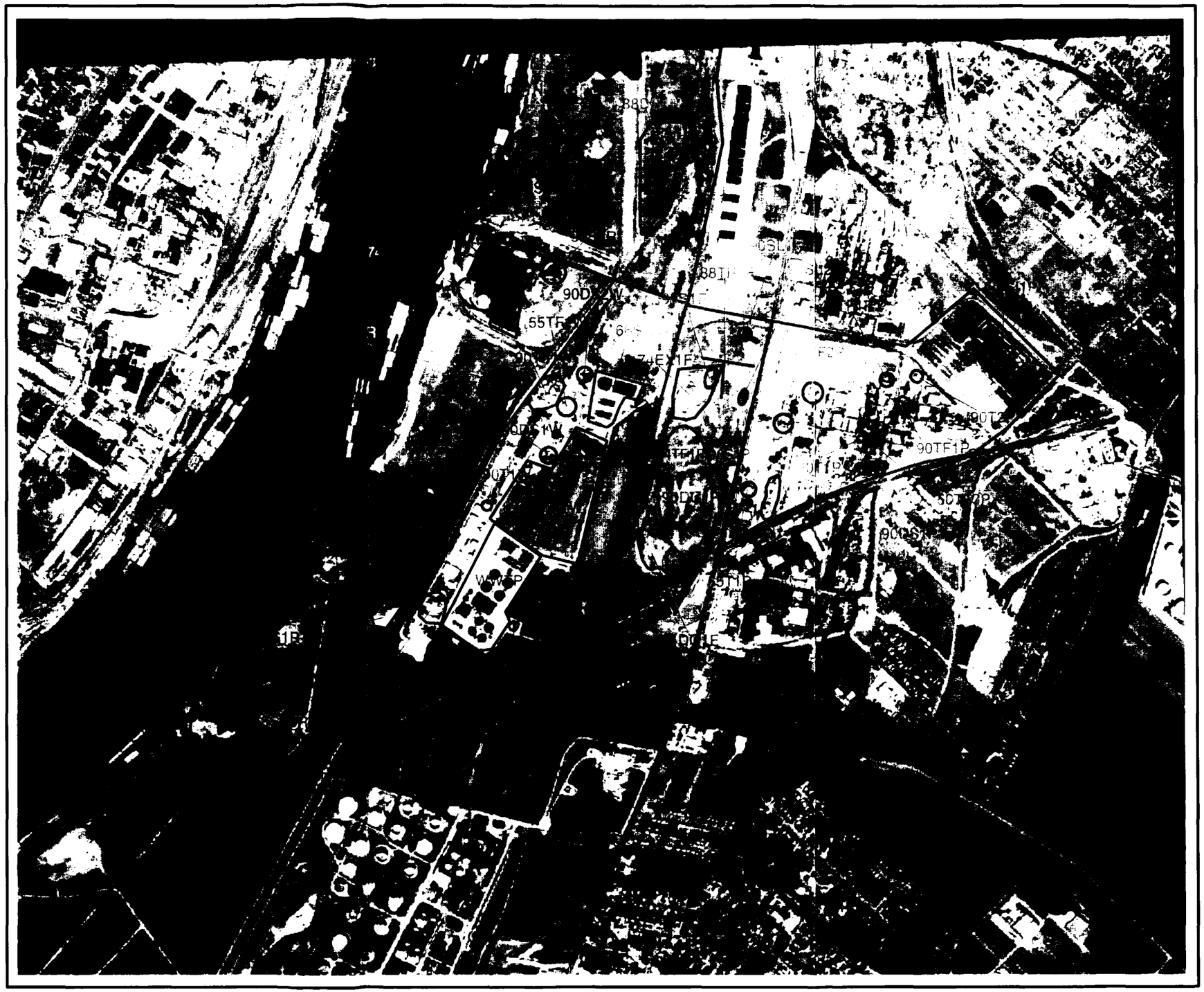
Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 02/19/90

Figure # 24



N

100 0 100 200 Meters

Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 04/24/91

Figure # 25

N

200 0 200 400 Meters

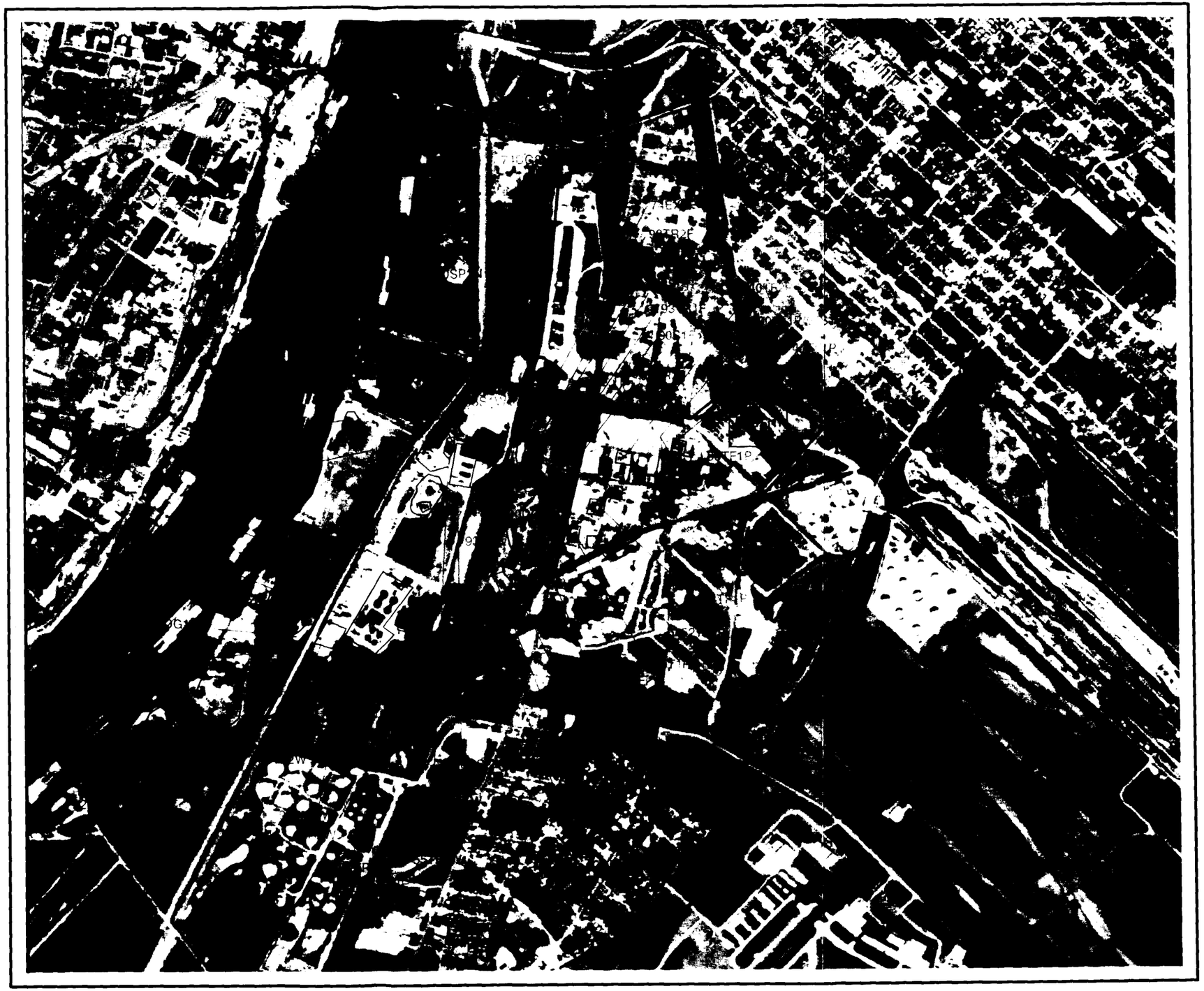
Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 01/21/92

Figure # 26



N

400 0 400 800 Meters

Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 3/11/93

Figure # 27

N

90 0 90 180 Meters

Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 03/09/94

Figure # 28

N

90 0 90 180 Meters

Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 03/21/96

Figure # 29

N

0.04 0 0.04 0.08 Miles

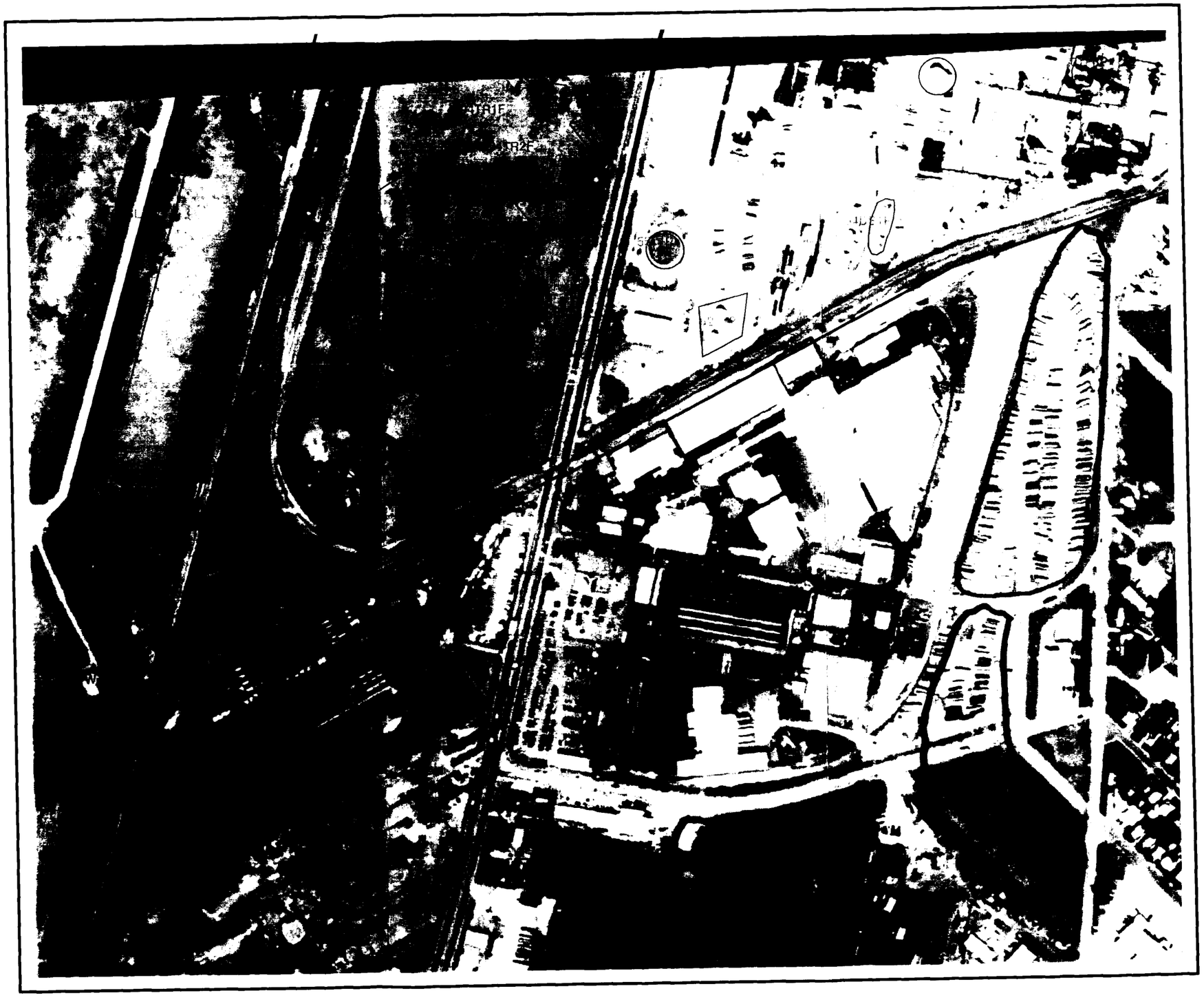
Legend

DG - Disturbed Ground
DS - Drum Storage Areas
EX - Excavations
S - Stains
SI - Surface Impoundment
SL - Standing Liquid Area
SP - Stock Pile
T - Tank
TF - Tank Farms
TR - Trench
WWTP - Waste Water Treatment Plant

F - Lot F Area
P - Plant Area
R - River Area
W - Waste Water Treatment Area

Fly Over Date: 04/20/98

Figure # 30



Appendix 3

Site Sampling Location Maps

N:\M00066Y\MG39Y\PRESENTATION\SH-PRE-BASE.DWG

Title:

WELL LOCATION MAP
SHALLOW HYDROGEOLOGIC UNIT

W.G. KRUMMRICH PLANT
SAUGET, ILLINOIS

Prepared For:
SOLUTIA, INC

ROUX
ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: D.C.	Date: 03MAY00	FIGURE
Prepared by: R.K.	Scale: AS SHOWN	
Project Mgr: D.C.	Office: NY	
File No: SH-PRE-BASE	Project: 06639Y	

GM-26B (DESTROYED)
GM-27B
P-13
B-22B
B-23B
P-12
B-21B
B-31C
P-11
P-10
P-9
TW-1
P-8
B-24B
B-24C
B-25B
P-5
P-4
B-26B
P-3
B-30B
GM-28B
P-2
B-28B
P-1
GM-66B (DESTROYED)
B-29B
GM-62B (DESTROYED)
GM-60B
GM-21B
GM-20B
GM-22B
GM-19B
GM-18B
GM-54B
GM-31B
GP-8B
MW-3B
GP-3B
GM-4B
GP-9B
GP-7B
GP-4B
GP-10B
MW-5B
GP-2B
GP-6B
GM-17B
GP-11B
MW-7B
GP-1B
GM-6B
GP-13B
GP-12B
GM-16B
GM-10B
GP-16B
GP-15B
GP-20B
GP-19B
GP-18B
GP-17B
GM-12B
GP-14B
GM-9B

FORMER CHLOR-ALKALI STORAGE PAD

N

LEGEND

GM-10B ● WELL OR WELL CLUSTER

GP-18B ⊗ GEOPROBE GROUNDWATER SAMPLING LOCATION

▲ GERAGHTY & MILLER TEST WELL

600' 0 600'

Title:

WELL LOCATION MAP
MIDDLE HYDROGEOLOGIC UNIT

W.G. KRUMMRICH PLANT
SAUGET, ILLINOIS

Prepared For:
SOLUTIA, INC

ROUX ASSOCIATES, INC. Environmental Consulting & Management	Compiled by: D.C.	Date: 03MAY00	FIGURE
	Prepared by: R.K.	Scale: AS SHOWN	
	Project Mgr: D.C.	Office: NY	
	File No: IZ-PRE-BASE	Project: 06639Y	

N:\M0066Y\M0039Y\PRESENTATION\IZ-PRE-BASE.DWG

N:\MO066Y\MO39Y\PRESENTATION\DZ-PRE-BASE.DWG

Title:

WELL LOCATION MAP
DEEP HYDROGEOLOGIC UNIT

W.G. KRUMMRICH PLANT
SAUGET, ILLINOIS

Prepared For:
SOLUTIA, INC

ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: D.C.	Date: 03MAY00	FIGURE
Prepared by: R.K.	Scale: AS SHOWN	
Project Mgr: D.C.	Office: NY	
File No: DZ-PRE-BASE	Project: 066Y39Y	

Appendix 4

Regulatory Data Base Search

The EDR-Radius Map
with GeoCheck®

WG Krummrich Plant
WG Krummrich Plant
Sauget, IL 62201

Inquiry Number: 392167.1s

July 19, 1999

Environmental Data Resources, Inc.
an edr company

The Source For Environmental Risk Management Data

3530 Post Road
Southport, Connecticut 06490

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

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APPENDICES

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EPA Waste Codes	A7
Government Records Searched / Data Currency Tracking Addendum	A9

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-97. Search distances are per ASTM standard or custom distances requested by the user.

The address of the subject property for which the search was intended is:

WG KRUMMRICH PLANT
SAUGET, IL 62201

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the subject property or within the ASTM E 1527-97 search radius around the subject property for the following Databases:

NPL:	National Priority List
Delisted NPL:	NPL Deletions
SWF/LF:	Available Disposal for Solid Wast in Illinois- Solid Waste Landfills Subject to State Surcharge
NPL Lien:	NPL Liens
MLTS:	Material Licensing Tracking System
Plan Comm:	Illinois Planning Comm.
CAT:	Category List
ROD:	ROD
CONSENT:	Superfund (CERCLA) Consent Decrees
Coal Gas:	Former Manufactured gas (Coal Gas) Sites.
MINES:	Mines Master Index File

Unmapped (orphan) sites are not considered in the foregoing analysis.

Search Results:

Search results for the subject property and the search radius, are listed below:

Subject Property:

The subject property was not listed in any of the databases searched by EDR.

EXECUTIVE SUMMARY

Surrounding Properties:

Elevations have been determined from the USGS 1 degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. EDR's definition of a site with an elevation equal to the subject property includes a tolerance of -10 feet. Sites with an elevation equal to or higher than the subject property have been differentiated below from sites with an elevation lower than the subject property (by more than 10 feet). Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

RCRIS: The Resource Conservation and Recovery Act database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act. The source of this database is the U.S. EPA.

A review of the RCRIS-TSD list, as provided by EDR, and dated 04/26/1999 has revealed that there are 3 RCRIS-TSD sites within approximately 0.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
MONSANTO CO WG KRUMMRICH PLT	***RTE 3***	***1/8 - 1/4 NNE***	***A22***	***13***
CLAYTON CHEMICAL CO	***1 MOBILE ST A***	***1/4 - 1/2 NW***	***B34***	***18***
TWI TRANSPORTATION INC	***7 MOBILE AVE SITE B***	***1/4 - 1/2 NW***	***B35***	***27***

SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Illinois Environmental Protection Agency's Category List.

A review of the SHWS list, as provided by EDR, has revealed that there are 3 SHWS sites within approximately 0.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
VILLAGE OF SAUGET (SITE O)	3101 MISSISSIPPI AVE	1/2 - 1 SSW	E61	38
EMPIRE CHEM REALITY, INC.	3101 MISSISSIPPI AVE	1/2 - 1 SSW	E62	38
SAUGET AREA 1 SITES	1200 QUEENY AVE	1/2 - 1 SSW	E64	38

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).
CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 04/21/1999 has revealed that there are 5 CERCLIS sites within approximately 0.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
ETHYL PETROLEUM ADDITIVES INC	***501 MONSANTO AVE***	***1/8 - 1/4 NNE***	***A3***	***9***
MONSANTO CO WG KRUMMRICH	***RTE 3***	***1/8 - 1/4 NNE***	***A26***	***15***
SAUGET WASTEWATER TRMT PLT	***ONE MOBILE AVE***	***1/4 - 1/2 NW***	***B31***	***17***
SAUGET AREA I - WAGGONER TRUCK	***1300 QUEENY AVENUE***	***1/2 - 1 SSE***	***59***	***37***

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
SAUGET AREA I - SAUGET MONSANT	*FALLING SPRINGS ROAD AT*	*1/2 - 1 SSE*	*70*	*40*

CERCLIS-NFRAP: As of February 1995. CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund Action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

A review of the CERC-NFRAP list, as provided by EDR, and dated 04/21/1999 has revealed that there are 6 CERC-NFRAP sites within approximately 0.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
KRUMMRICH W G PLT	ILLINOIS ROUTE 3 AT MON	1/4 - 1/2 NNW	28	16
STERLING STEEL FOUNDRY	*2300 FALLING SPRINGS RO*	*1/4 - 1/2 ESE*	*30*	*16*
A 1 OIL CORP	*1 MOBILE AVE*	*1/4 - 1/2 NW*	*B32*	*17*
CLAYTON CHEMICAL CO	*1 MOBILE ST A*	*1/4 - 1/2 NW*	*B34*	*18*
TRADE WASTE INCINERATORS	7 MOBILE ST	1/4 - 1/2 NW	B39	32
CAHOKIA PLT	ADJACENT TO #1 MONSANTO	1/4 - 1/2 NW	52	35

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 03/01/1999 has revealed that there are 3 CORRACTS sites within approximately 0.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
MONSANTO CO WG KRUMMRICH PLT	*RTE 3*	*1/8 - 1/4 NNE*	*A22*	*13*
CLAYTON CHEMICAL CO	*1 MOBILE ST A*	*1/4 - 1/2 NW*	*B34*	*18*
TWI TRANSPORTATION INC	*7 MOBILE AVE SITE B*	*1/4 - 1/2 NW*	*B35*	*27*

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Illinois Environmental Protection Agency's LUST Incident Report.

A review of the LUST list, as provided by EDR, and dated 03/01/1999 has revealed that there are 8 LUST sites within approximately 0.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
ETHYL PETROLEUM ADDITIVES INC.	501 MONSANTO AVE	1/8 - 1/4 NNE	A8	11
TRADE WASTE INCINERATION	7 MOBILE ST	1/4 - 1/2 NW	B40	32
TRADE WASTE INCINERATION	7 MOBILE ST	1/4 - 1/2 NW	B41	33
TRADE WASTE INCINERATION	7 MOBILE ST	1/4 - 1/2 NW	B42	33
CAHOKIA MARINE	2 MONSANTO AVE	1/4 - 1/2 NW	D56	36
MIDSTATES TDF	3101 MISSISSIPPI AVE	1/2 - 1 SSW	E60	37
FKG OIL CO.	3120 MISSISSIPPI AVE	1/2 - 1 SSW	E68	40

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
MOTO INC.	3120 MISSISSIPPI AVE	1/2 - 1 SSW	71	40

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Illinois State Fire Marshal's STC Facility List.

A review of the UST list, as provided by EDR, and dated 03/03/1998 has revealed that there are 7 UST sites within approximately 0.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
Not reported	RTE 3 & MONSANTO AVE	1/8 - 1/4 NNE	A4	10
Not reported	501 MONSANTO AVE	1/8 - 1/4 NNE	A15	12
Not reported	703 FALLING SPRINGS RD	1/4 - 1/2 NNE	36	32
Not reported	500 FALLING SPRINGS RD	1/4 - 1/2 NNE	53	35
Not reported	2 MONSANTO AVE	1/4 - 1/2 NW	D58	37
Not reported	3101 MISSISSIPPI AVE	1/2 - 1 SSW	E63	38
Not reported	3120 MISSISSIPPI AVE	1/2 - 1 SSW	E69	40

RAATS: The RCRA Administration Action Tracking System contains records based on enforcement actions issued under RCRA and pertaining to major violators. It includes administrative and civil actions brought by the United States Environmental Protection Agency. The source of this database is the U.S. EPA.

A review of the RAATS list, as provided by EDR, and dated 04/17/1995 has revealed that there are 2 RAATS sites within approximately 0.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
CLAYTON CHEMICAL CO	*1 MOBILE ST A*	*1/4 - 1/2 NW*	*B34*	*18*
TWI TRANSPORTATION INC	*7 MOBILE AVE SITE B*	*1/4 - 1/2 NW*	*B35*	*27*

RCRIS: The Resource Conservation and Recovery Act database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act. The source of this database is the U.S. EPA.

A review of the RCRIS-SQG list, as provided by EDR, and dated 04/26/1999 has revealed that there are 7 RCRIS-SQG sites within approximately 0.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
MONSANTO CO WG KRUMMRICH	*RTE 3*	*1/8 - 1/4 NNE*	*A26*	*15*
A 1 OIL CORP	*1 MOBILE AVE*	*1/4 - 1/2 NW*	*B32*	*17*
TPC INDUSTRIAL SERVICES	*2700 FALLING SPRINGS RD*	*1/4 - 1/2 ENE*	*51*	*34*
CAHOKIA MARINE SVCS	*2 MONSANTO AVE*	*1/4 - 1/2 NW*	*D57*	*36*
HOOVER HANES RUBBER CORP	*3101 MISSISSIPPI AVE*	*1/2 - 1 SSW*	*E65*	*38*
WIESE PLANNING AND ENGINEERING	*1200 QUEENY AVE*	*1/2 - 1 SSW*	*E66*	*39*
MIDWEST RUBBER RECLAIMING CO	*3101 MISSISSIPI AVE*	*1/2 - 1 SSW*	*E67*	*39*

EXECUTIVE SUMMARY

RCRIS: The Resource Conservation and Recovery Act database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act. The source of this database is the U.S. EPA.

A review of the RCRIS-LQG list, as provided by EDR, and dated 04/26/1999 has revealed that there are 7 RCRIS-LQG sites within approximately 0.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
ETHYL PETROLEUM ADDITIVES INC	*501 MONSANTO AVE*	*1/8 - 1/4 NNE*	*A3*	*9*
MONSANTO CO WG KRUMMRICH PLT	*RTE 3*	*1/8 - 1/4 NNE*	*A22*	*13*
SAUGET WASTEWATER TRMT PLT	*ONE MOBILE AVE*	*1/4 - 1/2 NW*	*B31*	*17*
CLAYTON CHEMICAL CO	*1 MOBILE ST A*	*1/4 - 1/2 NW*	*B34*	*18*
TWI TRANSPORTATION INC	*7 MOBILE AVE SITE B*	*1/4 - 1/2 NW*	*B35*	*27*
AMERICAN BOTTOMS REGIONAL WW T	*MOBILE AVE*	*1/4 - 1/2 NW*	*50*	*34*
CERRO COPPER PRODUCTS CO	*3000 MISSISSIPPI AVE*	*1/4 - 1/2 SSW*	*C55*	*35*

HMIRS: The Hazardous Materials Incident Report System contains hazardous material spill incidents reported to the Department of Transportation. The source of this database is the U.S. EPA.

A review of the HMIRS list, as provided by EDR, and dated 12/31/1997 has revealed that there are 2 HMIRS sites within approximately 0.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
Not reported	7 MOBILE AVENUE	1/4 - 1/2 NW	B37	32
Not reported	7 MOBILE AVENUE	1/4 - 1/2 NW	B43	33

PADS: The PCB Activity Database identifies generators, transporters, commercial storers and/or brokers and disposers of PCBs who are required to notify the United States Environmental Protection Agency of such activities. The source of this database is the U.S. EPA.

A review of the PADS list, as provided by EDR, and dated 09/22/1997 has revealed that there are 3 PADS sites within approximately 0.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
ETHYL PETROLEUM ADDITIVES INC	*501 MONSANTO AVE*	*1/8 - 1/4 NNE*	*A3*	*9*
MONSANTO CO WG KRUMMRICH PLT	*RTE 3*	*1/8 - 1/4 NNE*	*A22*	*13*
CERRO COPPER PRODUCTS CO	*3000 MISSISSIPPI AVE*	*1/4 - 1/2 SSW*	*C55*	*35*

ERNS: The Emergency Response Notification System records and stores information on reported releases of oil and hazardous substances. The source of this database is the U.S. EPA.

A review of the ERNS list, as provided by EDR, and dated 12/31/1998 has revealed that there are 26 ERNS sites within approximately 0.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
501 MONSANTO AVE	501 MONSANTO AVE	1/8 - 1/4 NNE	A5	10
501 MONSANTO AVE	501 MONSANTO AVE	1/8 - 1/4 NNE	A6	10
500 MONSANTO AVE	500 MONSANTO AVE	1/8 - 1/4 NNE	A7	11
500 MONSANTO AVE.	500 MONSANTO AVE.	1/8 - 1/4 NNE	A9	11
500 MONSANTO AVE	500 MONSANTO AVE	1/8 - 1/4 NNE	A10	11
501 MONSANTO AVE	501 MONSANTO AVE	1/8 - 1/4 NNE	A11	11
500 MONSANTO AVE	500 MONSANTO AVE	1/8 - 1/4 NNE	A12	11

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
500 MONSANTO AVE	500 MONSANTO AVE	1/8 - 1/4 NNE	A13	11
500 MONSANTO AVE	500 MONSANTO AVE	1/8 - 1/4 NNE	A14	11
500 MONSANTO AVE	500 MONSANTO AVE	1/8 - 1/4 NNE	A16	12
500 MONSANTO AVE.	500 MONSANTO AVE.	1/8 - 1/4 NNE	A18	12
500 MONSANTO AVE	500 MONSANTO AVE	1/8 - 1/4 NNE	A20	12
500 MONSANTO AVE.	500 MONSANTO AVE.	1/8 - 1/4 NNE	A21	12
500 MONSANTO AVE	500 MONSANTO AVE	1/8 - 1/4 NNE	A23	14
500 MONSANTO AVE	500 MONSANTO AVE	1/8 - 1/4 NNE	A24	15
500 MONSANTO AVE	500 MONSANTO AVE	1/8 - 1/4 NNE	A25	15
CORNER OF ROUTE 3 SOUTH AND MO	CORNER OF ROUTE 3 SOUTH	1/8 - 1/4 NNE	A27	16
1 MOBILE AVE	1 MOBILE AVE	1/4 - 1/2 NW	B33	18
7 MOBILE AVE	7 MOBILE AVE	1/4 - 1/2 NW	B38	32
7 MOBILE AVE	7 MOBILE AVE	1/4 - 1/2 NW	B44	33
7 MOBILE AVE	7 MOBILE AVE	1/4 - 1/2 NW	B45	33
7 MOBILE AVE	7 MOBILE AVE	1/4 - 1/2 NW	B46	33
7 MOBILE AVE	7 MOBILE AVE	1/4 - 1/2 NW	B47	33
7 MOBILE AVE	7 MOBILE AVE	1/4 - 1/2 NW	B48	33
7 MOBILE AVE	7 MOBILE AVE	1/4 - 1/2 NW	B49	34
2702 OGDEN AVE	2702 OGDEN AVE	1/2 - 1 SE	72	41

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 04/01/1999 has revealed that there are 20 FINDS sites within approximately 0.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
OCCIDENTAL CHEMICAL CORP	500 MONSANTO BLVD	1/8 - 1/4 NNE	A1	9
ETHYL PETROLEUM ADDITIVES INC	***501 MONSANTO AVE***	***1/8 - 1/4 NNE***	***A3***	***9***
FLEXSYS AMERICA L.P. KRUMMRICH	500 MONSANTO AVE.	1/8 - 1/4 NNE	A19	12
MONSANTO CO WG KRUMMRICH PLT	***RTE 3***	***1/8 - 1/4 NNE***	***A22***	***13***
MONSANTO CO WG KRUMMRICH	***RTE 3***	***1/8 - 1/4 NNE***	***A26***	***15***
STERLING STEEL FOUNDRY	***2300 FALLING SPRINGS RO***	***1/4 - 1/2 ESE***	***30***	***16***
SAUGET WASTEWATER TRMT PLT	***ONE MOBILE AVE***	***1/4 - 1/2 NW***	***B31***	***17***
A 1 OIL CORP	***1 MOBILE AVE***	***1/4 - 1/2 NW***	***B32***	***17***
CLAYTON CHEMICAL CO	***1 MOBILE ST A***	***1/4 - 1/2 NW***	***B34***	***18***
TWI TRANSPORTATION INC	***7 MOBILE AVE SITE B***	***1/4 - 1/2 NW***	***B35***	***27***
AMERICAN BOTTOMS REGIONAL WW T	***MOBILE AVE***	***1/4 - 1/2 NW***	***50***	***34***
TPC INDUSTRIAL SERVICES	***2700 FALLING SPRINGS RD***	***1/4 - 1/2 ENE***	***51***	***34***
CERRA COPPER PROD CO	3000 MISSISSIPPI AVE	1/4 - 1/2 SSW	C54	35
CERRO COPPER PRODUCTS CO	***3000 MISSISSIPPI AVE***	***1/4 - 1/2 SSW***	***C55***	***35***
CAHOKIA MARINE SVCS	***2 MONSANTO AVE***	***1/4 - 1/2 NW***	***D57***	***36***
SAUGET AREA I - WAGGONER TRUCK	***1300 QUEENY AVENUE***	***1/2 - 1 SSE***	***59***	***37***
HOOVER HANES RUBBER CORP	***3101 MISSISSIPPI AVE***	***1/2 - 1 SSW***	***E65***	***38***
WIESE PLANNING AND ENGINEERING	***1200 QUEENY AVE***	***1/2 - 1 SSW***	***E66***	***39***
MIDWEST RUBBER RECLAIMING CO	***3101 MISSISSIPI AVE***	***1/2 - 1 SSW***	***E67***	***39***
SAUGET AREA I - SAUGET MONSANT	***FALLING SPRINGS ROAD AT***	***1/2 - 1 SSE***	***70***	***40***

EXECUTIVE SUMMARY

TRIS: The Toxic Chemical Release Inventory System identifies facilities that release toxic chemicals to the air, water, and land in reportable quantities under SARA Title III, Section 313. The source of this database is the U.S. EPA.

A review of the TRIS list, as provided by EDR, and dated 12/31/1997 has revealed that there are 6 TRIS sites within approximately 0.75 miles of the subject property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
ETHYL PETROLEUM ADDITIVES INC	***501 MONSANTO AVE***	***1/8 - 1/4 NNE***	***A3***	***9***
FLEXSYS AMERICA L.P. KRUMMRICH	500 MONSANTO AVE.	1/8 - 1/4 NNE	A17	12
MONSANTO CO WG KRUMMRICH PLT	***RTE 3***	***1/8 - 1/4 NNE***	***A22***	***13***
OCCIDENTAL CHEMICAL CORP.	520 MONSANTO AVE.	1/4 - 1/2 NE	29	16
STERLING STEEL FOUNDRY	***2300 FALLING SPRINGS RO***	***1/4 - 1/2 ESE***	***30***	***16***
CERRO COPPER PRODUCTS CO	***3000 MISSISSIPPI AVE***	***1/4 - 1/2 SSW***	***C55***	***35***

TSCA: The Toxic Substances Control Act identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site. The United States Environmental Protection Agency has no current plan to update and/or re-issue this database.

A review of the TSCA list, as provided by EDR, and dated 12/31/1994 has revealed that there are 2 TSCA sites within approximately 0.75 miles of the subject property.

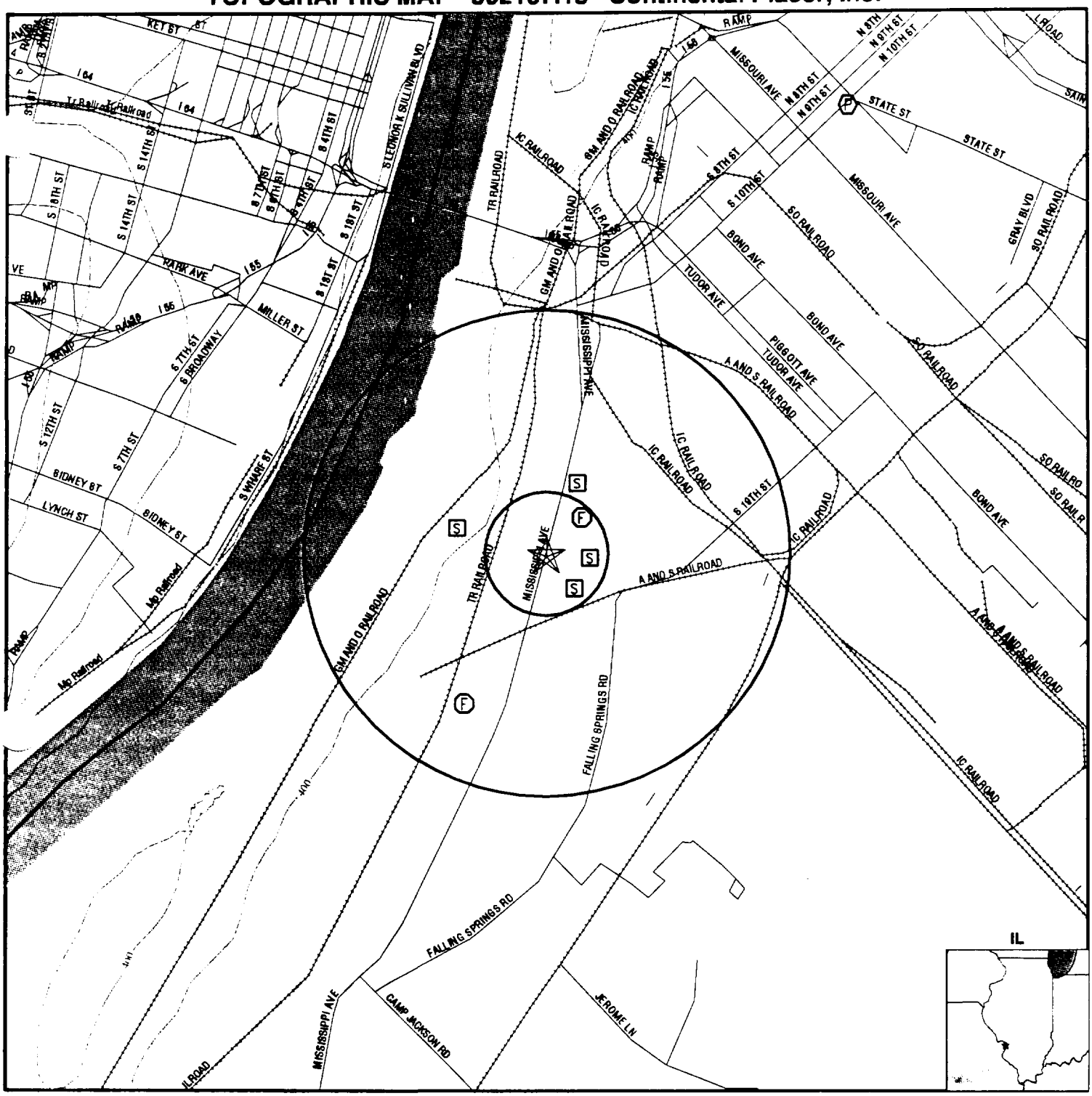
Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
MONSANTO CO - KRUMMRICH PLT	500 MONSANTO AVE	1/8 - 1/4 NNE	A2	9
ETHYL PETROLEUM ADDITIVES INC	***501 MONSANTO AVE***	***1/8 - 1/4 NNE***	***A3***	***9***

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
LANSON CHEMICAL	SHWS
SAUGET & COMPANY (SITE Q)	SHWS
MONSANTO LANDFILL (SITE R)	SHWS
RESOURCE RECOVERY GROUP	FINDS,SHWS
BOB'S SERVICE CTR.	LUST
COASTAL MART	LUST
RT 15	UST
RTE 157 NOVA PLAZA	UST
CARGILL RD & MISSISSIPPI RIVER	UST
E ST LOUIS TERMINAL	UST
699 HIGHWAY 203	UST
2900 MONSANTO AVE	UST
375 E 800 N	UST
IL RTE 3 AT A&S TRACKS	UST
ILDOT BRG 082 0008 AND 82 0009	RCRIS-SQG,FINDS
GROENDYKE TRUCKING	RCRIS-SQG
MOTO MART	FINDS,RCRIS-LQG
TERMINAL RAILROAD ASSOCIATION	FINDS,RCRIS-LQG
KRUMMRICH PLANT 500 MONSANTO AVE	ERNS
MONSANTO CO.	MLTS

TOPOGRAPHIC MAP - 392167.1s - Continental Placer, Inc.



- Major Roads
- Contour Lines
- Waterways
- Earthquake epicenter, Richter 5 or greater
- Closest Federal Well in quadrant
- Closest State Well in quadrant
- Closest Public Water Supply Well
- Closest Hydrogeological Data

TARGET PROPERTY:	WG Krummrich Plant	CUSTOMER:	Continental Placer, Inc.
ADDRESS:	WG Krummrich Plant	CONTACT:	Steve Bunsen
CITY/STATE/ZIP:	Sauget IL 62201	INQUIRY #:	392167.1s
LAT/LONG:	38.5975 / 90.1735	DATE:	July 19, 1999 7:33 am

GEOCHECK VERSION 2.1
SUMMARY

TARGET PROPERTY COORDINATES

Latitude (North):	38.597519 - 38° 35' 51.1"
Longitude (West):	90.173447 - 90° 10' 24.4"
Universal Transverse Mercator:	Zone 15
UTM X (Meters):	746165.1
UTM Y (Meters):	4275697.0

USGS TOPOGRAPHIC MAP ASSOCIATED WITH THIS SITE

Target Property:	2438090-E2 CAHOKIA, IL MO

GEOLOGIC AGE IDENTIFICATION†

Geologic Code:	M2
Era:	Paleozoic
System:	Mississippian
Series:	Meramecian Series

ROCK STRATIGRAPHIC UNIT†

Category:	Stratified Sequence

GROUNDWATER FLOW INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, including well data collected on nearby properties, regional groundwater flow information (from deep aquifers), or surface topography.‡

AQUIFLOW™** Search Radius: 2.000 Miles

MAP ID	DISTANCE FROM TP	DIRECTION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported			

General Topographic Gradient at Target Property: General WNW

General Hydrogeologic Gradient at Target Property: The hydrogeologic gradient for this report has been determined using the depth to water table information provided below. Where available, the closest well in each quadrant has been identified (up to a radius of 5 miles around the target property) and used in the gradient calculation. While an attempt has been made to segregate shallow from deep aquifers, this cannot always be assured. Groundwater flow in the aquifer associated with the wells appears generally to be to the West.

† Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec. Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map. USGS Digital Data Series DDS - 11 (1994)
‡ U.S. EPA Ground Water Handbook, Vol I: Ground Water and Contamination. Office of Research and development EPA/625/6-90/016a Chapter 4, page 78. September 1990
** EDR AQUIFLOW™ information System of hydrogeologically determined groundwater flow directions at specific locations. See the date pages at the end of this report for a complete description

GEOCHECK VERSION 2.1
SUMMARY

Site-Specific Hydrogeological Data*:
Search Radius: 2.0 miles
Status: Not found

FEDERAL DATABASE WELL INFORMATION

WELL QUADRANT	DISTANCE FROM TP	LITHOLOGY	DEPTH TO WATER TABLE
Northern	1/8 - 1/4 Mile	Not Reported	9 ft.
Eastern	>2 Miles	Not Reported	3 ft.
Southern	1/2 - 1 Mile	Not Reported	15 ft.
Western	>2 Miles	Limestone	63 ft.

STATE DATABASE WELL INFORMATION

WELL QUADRANT	DISTANCE FROM TP	DEPTH (FEET)	SOURCE
Northern	1/4 - 1/2 Mile	Not Reported	IL Geological Survey
Eastern	1/8 - 1/4 Mile	Not Reported	IL Geological Survey
Southern	1/8 - 1/4 Mile	Not Reported	IL Geological Survey
Western	1/4 - 1/2 Mile	Not Reported	IL Geological Survey

PUBLIC WATER SUPPLY SYSTEM INFORMATION

Searched by Nearest PWS.
NOTE: PWS System location is not always the same as well location.

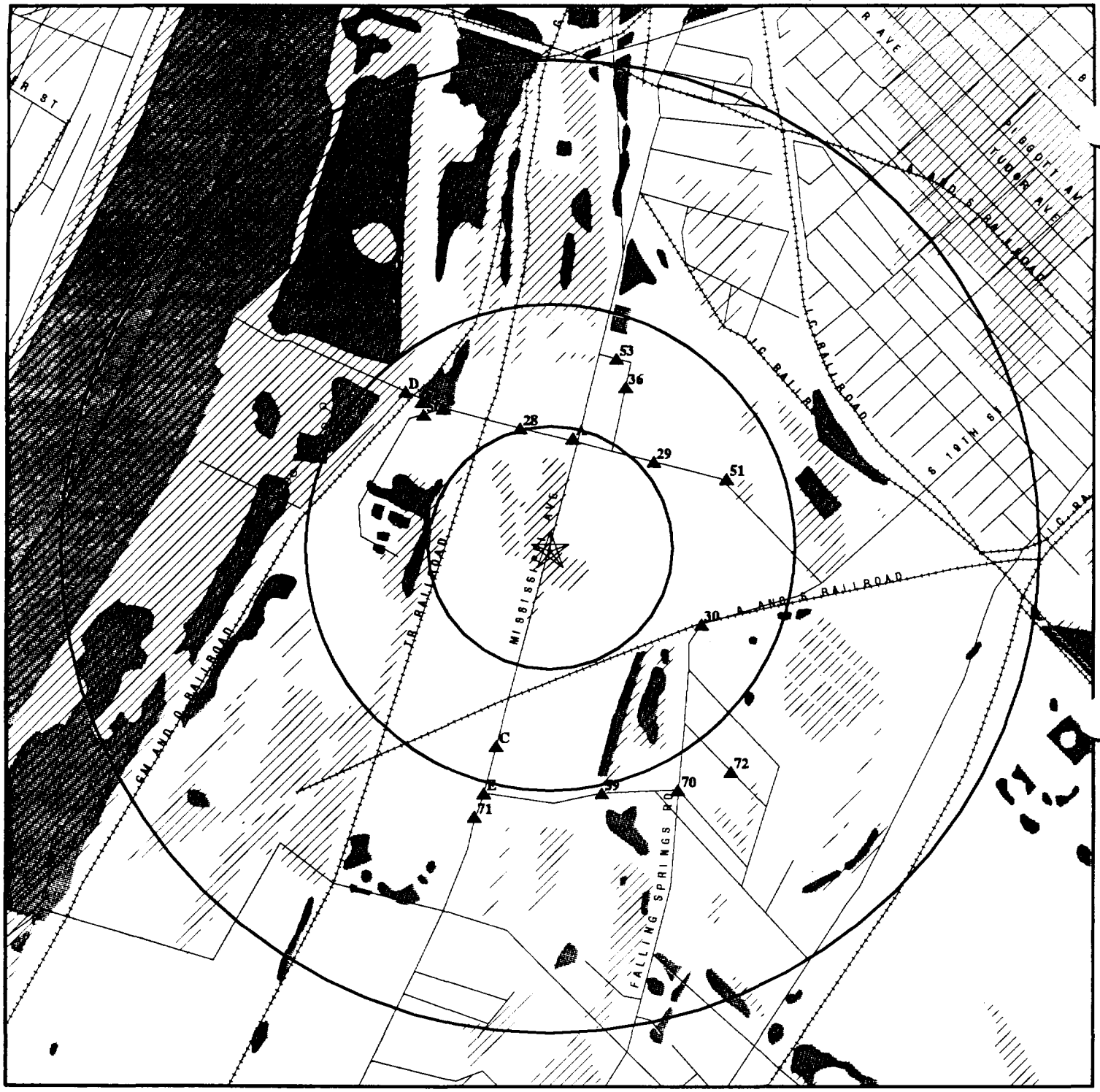
PWS Name: FALCON DRIVE-IN THEATER
7400 COLLINSVILLE RD
EAST ST LOUIS, IL 62201
Location Relative to TP: >2 Miles North
PWS currently has or has had major violation(s) or enforcement: No

AREA RADON INFORMATION

EPA Radon Zone for ST CLAIR County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.
Not Reported

OVERVIEW MAP - 392167.1s - Continental Placer, Inc.

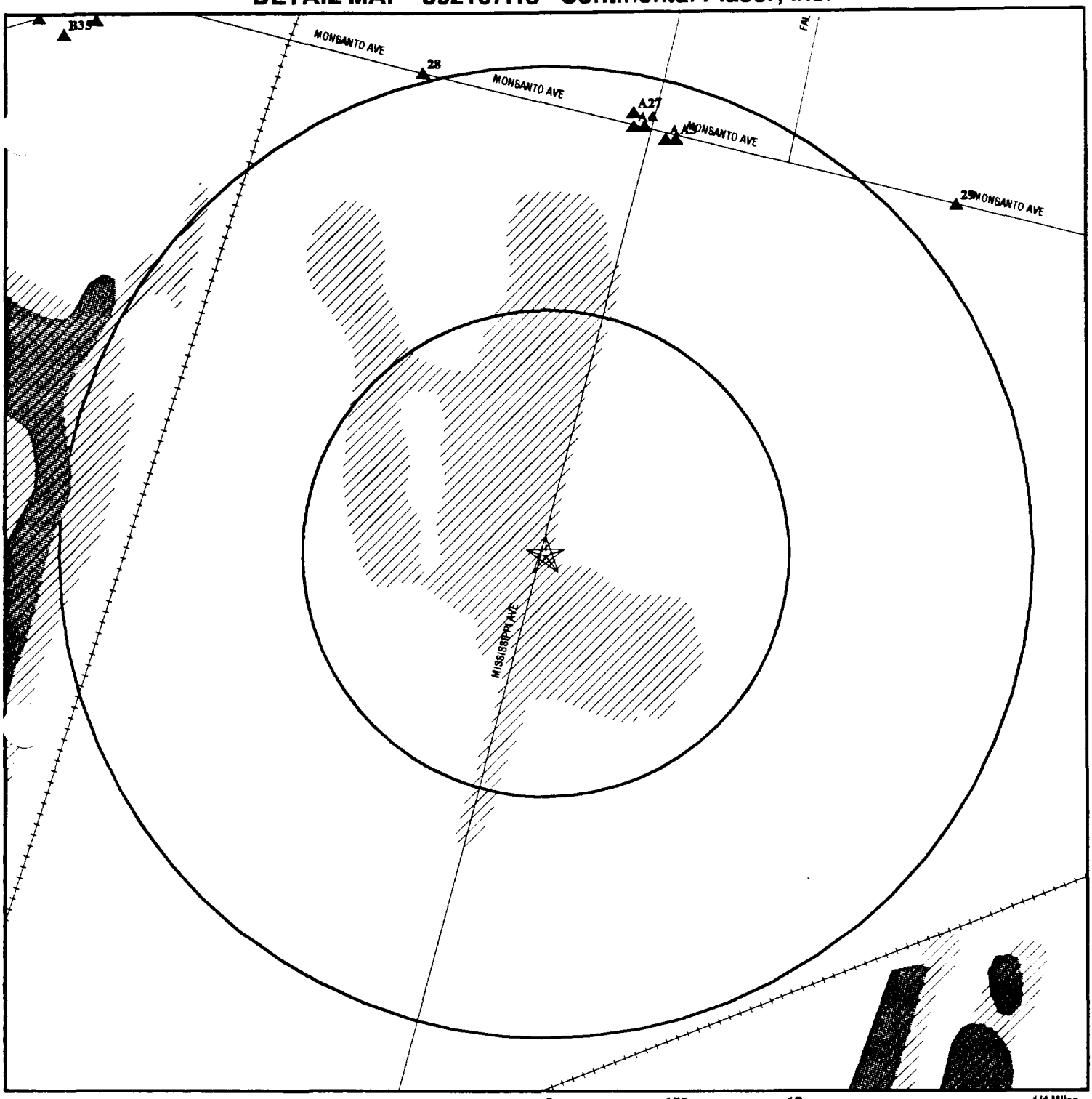


0 1/4 1/2 1 Miles

- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ♟ Coal Gasification Sites (if requested)
- National Priority List Sites
- Landfill Sites
- Power transmission lines
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- Wetlands per National Wetlands Inventory (1994)

TARGET PROPERTY:	WG Krummrich Plant	CUSTOMER:	Continental Placer, Inc.
ADDRESS:	WG Krummrich Plant	CONTACT:	Steve Bunsen
CITY/STATE/ZIP:	Sauget IL 62201	INQUIRY #:	392167.1s
LAT/LONG:	38.5975 / 90.1735	DATE:	July 19, 1999 7:30 am

DETAIL MAP - 392167.1s - Continental Placer, Inc.



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Coal Gasification Sites (if requested)
- Sensitive Receptors
- National Priority List Sites
- Landfill Sites
- Power transmission lines
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- Wetlands per National Wetlands Inventory (1994)

TARGET PROPERTY:	WG Krummrich Plant	CUSTOMER:	Continental Placer, Inc.
ADDRESS:	WG Krummrich Plant	CONTACT:	Steve Bunsen
CITY/STATE/ZIP:	Sauget IL 62201	INQUIRY #:	392167.1s
LAT/LONG:	38.5975 / 90.1735	DATE:	July 19, 1999 7:32 am

MAP FINDINGS SUMMARY SHOWING ALL SITES

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NPL		0.750	0	0	0	0	NR	0
Delisted NPL		0.750	0	0	0	0	NR	0
RCRIS-TSD		0.750	0	1	2	0	NR	3
State Haz. Waste		0.750	0	0	0	3	NR	3
CERCLIS		0.750	0	2	1	2	NR	5
CERC-NFRAP		0.750	0	0	6	0	NR	6
CORRACTS		0.750	0	1	2	0	NR	3
State Landfill		0.750	0	0	0	0	NR	0
LUST		0.750	0	1	4	3	NR	8
UST		0.750	0	2	3	2	NR	7
RAATS		0.750	0	0	2	0	NR	2
RCRIS Sm. Quan. Gen.		0.750	0	1	3	3	NR	7
RCRIS Lg. Quan. Gen.		0.750	0	2	5	0	NR	7
HMIRS		0.750	0	0	2	0	NR	2
PADS		0.750	0	2	1	0	NR	3
ERNS		0.750	0	17	8	1	NR	26
FINDS		0.750	0	5	10	5	NR	20
TRIS		0.750	0	3	3	0	NR	6
NPL Liens		0.750	0	0	0	0	NR	0
TSCA		0.750	0	2	0	0	NR	2
MLTS		0.750	0	0	0	0	NR	0
Illinois Planning Comm.		0.750	0	0	0	0	NR	0
CAT		0.750	0	0	0	0	NR	0
ROD		0.750	0	0	0	0	NR	0
CONSENT		0.750	0	0	0	0	NR	0
Coal Gas		0.750	0	0	0	0	NR	0
MINES		0.750	0	0	0	0	NR	0

TP = Target Property

NR = Not Requested at this Search Distance

* Sites may be listed in more than one database

MAP FINDINGS SUMMARY SHOWING ONLY SITES HIGHER THAN OR THE SAME ELEVATION AS TP

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NPL		0.750	0	0	0	0	NR	0
Delisted NPL		0.750	0	0	0	0	NR	0
RCRIS-TSD		0.750	0	1	2	0	NR	3
State Haz. Waste		0.750	0	0	0	3	NR	3
CERCLIS		0.750	0	2	1	2	NR	5
CERC-NFRAP		0.750	0	0	6	0	NR	6
CORRACTS		0.750	0	1	2	0	NR	3
State Landfill		0.750	0	0	0	0	NR	0
LUST		0.750	0	1	4	3	NR	8
UST		0.750	0	2	3	2	NR	7
RAATS		0.750	0	0	2	0	NR	2
RCRIS Sm. Quan. Gen.		0.750	0	1	3	3	NR	7
RCRIS Lg. Quan. Gen.		0.750	0	2	5	0	NR	7
HMIRS		0.750	0	0	2	0	NR	2
PADS		0.750	0	2	1	0	NR	3
ERNS		0.750	0	17	8	1	NR	26
FINDS		0.750	0	5	10	5	NR	20
TRIS		0.750	0	3	3	0	NR	6
NPL Liens		0.750	0	0	0	0	NR	0
TSCA		0.750	0	2	0	0	NR	2
MLTS		0.750	0	0	0	0	NR	0
Illinois Planning Comm.		0.750	0	0	0	0	NR	0
CAT		0.750	0	0	0	0	NR	0
ROD		0.750	0	0	0	0	NR	0
CONSENT		0.750	0	0	0	0	NR	0
Coal Gas		0.750	0	0	0	0	NR	0
MINES		0.750	0	0	0	0	NR	0

TP = Target Property

NR = Not Requested at this Search Distance

* Sites may be listed in more than one database

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

A1
NNE
1/8-1/4
1168
Higher

OCCIDENTAL CHEMICAL CORP
500 MONSANTO BLVD
SAUGET, IL 62206

FINDS **1000937896**
000935IL 001

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Section Seven Tracking System (SSTS)

A2
NNE
1/8-1/4
1168
Higher

MONSANTO CO - KRUMMRICH PLT
500 MONSANTO AVE
SAUGET, IL 62206

TSCA **1000995051**
N/A

A3
NNE
1/8-1/4
1176
Higher

ETHYL PETROLEUM ADDITIVES INC
501 MONSANTO AVE
SAUGET, IL 62201

PADS **1000441542**
CERCLIS **ILD055871370**
FINDS
RCRIS-LQG
TRIS
TSCA

CERCLIS Classification Data:

Site Incident Category:	Not reported	Federal Facility:	Not a Federal Facility
Ownership Status:	Other	NPL Status:	Not on the NPL
Contact:	GRACE CO	Contact Tel:	(312) 353-6779
Contact:	JANET PFUNDHELLER	Contact Tel:	(312) 353-5821

CERCLIS Assessment History:

Assessment:	DISCOVERY	Completed:	19800815
Assessment:	UNILATERAL ADMIN ORDER	Completed:	19840517
Assessment:	PRELIMINARY ASSESSMENT	Completed:	19870619
Assessment:	SITE INSPECTION	Completed:	19910326
Assessment:	PRP REMOVAL	Completed:	Not reported
Assessment:	PRP RI/FS	Completed:	Not reported

CERCLIS Site Status:
Not reported

CERCLIS Alias Name(s):
EDWIN COOPER
ETHYL PETROLEUM ADDITIVES INC
ETHYL CORP ETHYL PETROLEUM ADDITIVES DIV
ETHYL CORP ETHYL PETROLEUM ADDITIVES DIV

RCRIS:
Owner: ETHYL CORPORATION
(804) 788-5000
Contact: DF ADAMS
(618) 274-4000
Record Date: 08/15/1980
Classification: Large Quantity Generator

BIENNIAL REPORTS:
Last Biennial Reporting Year: 1997

Waste	Quantity (Lbs)	Waste	Quantity (Lbs)
D001	143308.00	D002	991443.00

ETHYL PETROLEUM ADDITIVES INC (Continued) **1000441542**

D003	11538.00	D005	79355.00
D009	1500.00	D018	174457.00
D021	6600.00	D022	24930.00
F002	31530.00	F003	24930.00
LABP	523.00	U189	399.00

Used Oil Recyc: No

Violation Status: Violation information exist

There are 6 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Compliance Evaluation Inspection (CEI)	Generator-All Requirements	01/20/1994
	Generator-All Requirements	01/20/1994
Compliance Evaluation Inspection (CEI)	Generator-All Requirements	06/20/1991
	Generator-All Requirements	06/20/1991
	Generator-All Requirements	06/20/1991
Compliance Schedule Evaluation (CSE)	Generator-All Requirements	09/03/1985

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)
National Compliance Database (NCDB)
PCB Handler Activity Data System (PADS)

A4
NNE
1/8-1/4
1181
Higher

RTE 3 & MONSANTO AVE **UST** **U003309151**
SAUGET, IL **N/A**

UST:
Facility ID: 6-015286
Status: CLOSED
Total Tanks: 0
Owner Name: AMAX ZINC CO INC
Contact: EHRHARD RAY
Phone #: (618) 274-5000

A5
NNE
1/8-1/4
1183
Higher

501 MONSANTO AVE **ERNS** **94397846**
501 MONSANTO AVE **N/A**
SAUGET, IL 62201

A6
NNE
1/8-1/4
1183
Higher

501 MONSANTO AVE **ERNS** **94394322**
501 MONSANTO AVE **N/A**
SAUGET, IL 62201

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
A7 NNE 1/8-1/4 1183 Higher	500 MONSANTO AVE 500 MONSANTO AVE SAUGET, IL 62206	ERNS	93335964 N/A
A8 NNE 1/8-1/4 1183 Higher	ETHYL PETROLEUM ADDITIVES INC. 501 MONSANTO AVE EAST SAINT LOUIS, IL LUST: IL EPA ID: 1631210013 Incident Number: 933017	LUST	S103235167 N/A
A9 NNE 1/8-1/4 1183 Higher	500 MONSANTO AVE. 500 MONSANTO AVE. SAUGET, IL	ERNS	90164423 N/A
A10 NNE 1/8-1/4 1183 Higher	500 MONSANTO AVE 500 MONSANTO AVE SAUGET, IL	ERNS	90166351 N/A
A11 NNE 1/8-1/4 1183 Higher	501 MONSANTO AVE 501 MONSANTO AVE SAUGET, IL 62201	ERNS	94394426 N/A
A12 NNE 1/8-1/4 1183 Higher	500 MONSANTO AVE 500 MONSANTO AVE SAUGET, IL	ERNS	90170385 N/A
A13 NNE 1/8-1/4 1183 Higher	500 MONSANTO AVE 500 MONSANTO AVE SAUGET, IL	ERNS	90161473 N/A
A14 NNE 1/8-1/4 1183 Higher	500 MONSANTO AVE 500 MONSANTO AVE SAUGET, IL 62201	ERNS	93325061 N/A

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
A15 **NNE** **1/8-1/4** **1183** **Higher**	**501 MONSANTO AVE** **EAST SAINT LOUIS, IL** UST: Facility ID: 6-008150 Status: ACTIVE Total Tanks: 5 Owner Name: ETHYL PETROLEUM ADDITIVES DIV Contact: STONEBERGER MICHAEL Phone #: (618) 583-1242	**UST**	**U003308873** **N/A**
A16 **NNE** **1/8-1/4** **1183** **Higher**	**500 MONSANTO AVE** **500 MONSANTO AVE** **SAUGEP, IL**	**ERNS**	**91231344** **N/A**
A17 **NNE** **1/8-1/4** **1183** **Higher**	**FLEXSYS AMERICA L.P. KRUMMRICH** **500 MONSANTO AVE.** **EAST SAINT LOUIS, IL 62206**	**TRIS**	**1001479650** **ILD000802702**
A18 **NNE** **1/8-1/4** **1183** **Higher**	**500 MONSANTO AVE.** **500 MONSANTO AVE.** **SAUGET, IL**	**ERNS**	**91233023** **N/A**
A19 **NNE** **1/8-1/4** **1183** **Higher**	**FLEXSYS AMERICA L.P. KRUMMRICH** **500 MONSANTO AVE.** **EAST SAINT LOUI, IL 62206**	**FINDS**	**1001290000** **62206FLXSY50**
A20 **NNE** **1/8-1/4** **1183** **Higher**	**500 MONSANTO AVE** **500 MONSANTO AVE** **SAUGET, IL 62206**	**ERNS**	**93311173** **N/A**
A21 **NNE** **1/8-1/4** **1183** **Higher**	**500 MONSANTO AVE.** **500 MONSANTO AVE.** **SAUGET, IL**	**ERNS**	**91229959** **N/A**

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
A22 **NNE** **1/8-1/4** **1183** **Higher**	**MONSANTO CO WG KRUMMRICH PLT** **RTE 3** **SAUGET, IL 62201**	**PADS** **FINDS** **RCRIS-LQG** **TRIS** **RCRIS-TSD** **CORRACTS**	**1000376860** **ILD000802702**

CORRACTS Data:

Prioritization: High

Status: RCRA Facility Assessment Completed, Determination of Need for a RCRA Facility Investigation

RCRIS:

Owner: SOLUTIA INC
(314) 674-1000

Contact: GARY JONES
(618) 271-5835

Record Date: 09/30/1997

Classification: Large Quantity Generator, TSDF

BIENNIAL REPORTS:

Last Biennial Reporting Year: 1997

Waste	Quantity (Lbs)	Waste	Quantity (Lbs)
D001	1067421.00	D003	3686.00
D007	629.00	D008	11577.00
D009	500.00	D018	391194.00
D021	443939.00	D022	4393.00
D027	148035.00	D035	568387.00
D036	85640.00	F002	593549.00
F003	592920.00	F005	593549.00
K085	244995.00	LABP	3010.00
P077	124746.00	U019	12067.00
U071	39397.00	U072	39397.00

Used Oil Recyc: No

TSDF Activities: Not reported

Violation Status: Violation information exist

MONSANTO CO WG KRUMMRICH PLT (Continued) **1000376860**

There are 39 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Other Evaluation	Generator-All Requirements	01/05/1999
	Generator-All Requirements	01/05/1999
Other Evaluation	TSD-Other Requirements	02/26/1998
	TSD-Other Requirements	09/23/1998
Compliance Evaluation Inspection (CEI)	Generator-All Requirements	12/10/1997
	TSD-Other Requirements	12/10/1997
	TSD-Other Requirements	02/26/1998
	TSD-Other Requirements	12/10/1997
	TSD-Other Requirements	12/10/1997
	TSD-Other Requirements	12/10/1997
	TSD-Other Requirements	12/10/1997
	TSD-Other Requirements	02/26/1998
	TSD-Other Requirements	12/10/1997
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	02/04/1997
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	01/06/1995
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	01/04/1994
	TSD-Land Ban Requirements	01/04/1994
	TSD-Other Requirements	01/04/1994
	TSD-Other Requirements	01/04/1994
	TSD-Other Requirements	01/04/1994
	TSD-Other Requirements	01/04/1994
	TSD-Other Requirements	11/03/1993
Financial Record Review (FRR)	TSD-Financial Responsibility Requirements	12/11/1992
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	01/04/1994
	TSD-Other Requirements	12/09/1992
	Generator-Land Ban Requirements	12/09/1992
	TSD-Land Ban Requirements	01/04/1994
Financial Record Review (FRR)	TSD-Financial Responsibility Requirements	10/29/1992
	TSD-Financial Responsibility Requirements	10/29/1992
Compliance Evaluation Inspection (CEI)	Generator-All Requirements	04/25/1991
	TSD-Other Requirements	04/25/1991
	TSD-Other Requirements	04/25/1991
	TSD-Closure/Post Closure Requirements	04/25/1991
	TSD-Other Requirements	04/25/1991
	TSD-Land Ban Requirements	04/25/1991
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	02/07/1991
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	02/07/1991
	TSD-Other Requirements	03/03/1989
	TSD-Other Requirements	03/03/1989
Non-Financial Record Review	TSD-Closure/Post Closure Requirements	09/23/1988
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	02/07/1991
	TSD-Other Requirements	04/04/1988
Financial Record Review (FRR)	TSD-Financial Responsibility Requirements	01/08/1988
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	02/07/1991
	TSD-Closure/Post Closure Requirements	01/31/1990

A23 **500 MONSANTO AVE** **ERNS** **98430095**
NNE **500 MONSANTO AVE** **N/A**
1/8-1/4 **SAUGET, IL 62206**
1183
Higher

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
A24 **NNE** **1/8-1/4** **1183** **Higher**	**500 MONSANTO AVE** **500 MONSANTO AVE** **SAUGET, IL 62206**	**ERNS**	**92290750** **N/A**
A25 **NNE** **1/8-1/4** **1183** **Higher**	**500 MONSANTO AVE** **500 MONSANTO AVE** **SAUGET, IL 62206**	**ERNS**	**92283338** **N/A**
A26 **NNE** **1/8-1/4** **1188** **Higher**	**MONSANTO CO WG KRUMMRICH** **RTE 3** **SAUGET, IL 62201**	**CERCLIS** **RCRIS-SQG** **FINDS**	**1000376859** **ILD000722074**

CERCLIS Classification Data:

Site Incident Category:	Not reported	Federal Facility:	Not a Federal Facility
Ownership Status:	Other	NPL Status:	Not on the NPL
Contact:	SALLY AVERILL	Contact Tel:	(312) 886-4439
Contact:	GRACE CO	Contact Tel:	(312) 353-6779
Contact:	LINDA HOWARD	Contact Tel:	(312) 886-0810
Contact:	JON PETERSON	Contact Tel:	(312) 353-1264
Contact:	JANET PFUNDHELLER	Contact Tel:	(312) 353-5821
Contact:	Paul Takacs	Contact Tel:	(217) 785-3912

CERCLIS Assessment History:

Assessment:	DISCOVERY	Completed:	19790401
Assessment:	PRELIMINARY ASSESSMENT	Completed:	19830601
Assessment:	PRELIMINARY ASSESSMENT	Completed:	19901026
Assessment:	SITE INSPECTION	Completed:	19920930

CERCLIS Site Status:
High

CERCLIS Alias Name(s):
MONSANTO CO
MONSANTO LDFL
KRUMMRICH W G INCIN
W G K LDFL
MONSANTO CO W G KRUMMRICH

RCRIS:
Owner: MONSANTO COMPANY
(618) 271-5835

Contact: RICHARD SINISE
(618) 271-5835

Record Date: 08/18/1980

Classification: Not reported

Used Oil Recyc: No

Violation Status: No violations found

MONSANTO CO WG KRUMMRICH (Continued) — **1000376859**

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)
Enforcement Docket System (DOCKET)
National Compliance Database (NCDB)
PCB Handler Activity Data System (PADS)
Section Seven Tracking System (SSTS)

A27
NNE
1/8-1/4
1218
Higher

CORNER OF ROUTE 3 SOUTH AND MONSANTO
CORNER OF ROUTE 3 SOUTH AND MONSANTO
SAUGET, IL

Database(s): **ERNS** — **8869558** / **N/A**

28
NNW
1/4-1/2
1344
Higher

KRUMMRICH W G PLT
ILLINOIS ROUTE 3 AT MONSANTO AVENUE
SAUGET, IL 62201

Database(s): **CERC-NFRAP** — **1000300935** / **ILD980498059**

CERCLIS-NFRAP Classification Data:
Site Incident Category: Not reported
Ownership Status: Other
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
CERCLIS-NFRAP Assessment History:
Assessment: DISCOVERY — Completed: 19790401
Assessment: PRELIMINARY ASSESSMENT — Completed: 19830101
Assessment: SITE INSPECTION — Completed: 19911125
CERCLIS-NFRAP Alias Name(s):
KRUMMRICH W T PLT
KRUMMRICH W G LDFL
SAUGET TOXIC DUMP
KRUMMRICH W G PLT

29
NE
1/4-1/2
1460
Higher

OCCIDENTAL CHEMICAL CORP.
520 MONSANTO AVE.
CAHOKIA, IL 62206

Database(s): **TRIS** — **1001479649** / **ILD000802702**

30
ESE
1/4-1/2
1835
Higher

STERLING STEEL FOUNDRY
2300 FALLING SPRINGS ROAD
SAUGET, IL 62206

Database(s): **FINDS**, **TRIS**, **CERC-NFRAP** — **1000745074** / **NA**

CERCLIS-NFRAP Classification Data:
Site Incident Category: Not reported
Ownership Status: Unknown
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
CERCLIS-NFRAP Assessment History:
Assessment: DISCOVERY — Completed: 19871218
Assessment: PRELIMINARY ASSESSMENT — Completed: 19881216
Assessment: SITE INSPECTION — Completed: 19950113

STERLING STEEL FOUNDRY (Continued) **1000745074**

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)
National Compliance Database (NCDB)

B31
NW
1/4-1/2
1890
Higher

SAUGET WASTEWATER TRMT PLT
ONE MOBILE AVE
SAUGET, IL 62201

CERCLIS **1000234295**
FINDS **ILD000672329**
RCRIS-LQG

CERCLIS Classification Data:

Site Incident Category:	Not reported	Federal Facility:	Not a Federal Facility
Ownership Status:	Other	NPL Status:	Not on the NPL
Contact:	GRACE CO	Contact Tel:	(312) 353-6779
Contact:	JANET PFUNDHELLER	Contact Tel:	(312) 353-5821

CERCLIS Assessment History:

Assessment:	DISCOVERY	Completed:	19810601
Assessment:	PRELIMINARY ASSESSMENT	Completed:	19830601
Assessment:	SITE INSPECTION	Completed:	19911125
Assessment:	EXPANDED SITE INSPECTION	Completed:	19951130

CERCLIS Site Status:
Recommended for HRS Scoring

RCRIS:
Owner: VILLAGE OF SAUGET
(312) 555-1212

Contact: CARL MARCIANTE
(618) 271-4085

Record Date: 08/18/1980

Classification: Large Quantity Generator

BIENNIAL REPORTS:
Last Biennial Reporting Year: 1997

Waste	Quantity (Lbs)
D039	9064.75

Used Oil Recyc: No

Violation Status: Violation information exist

There are 2 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Compliance Evaluation Inspection (CEI)	Generator-All Requirements	03/03/1999
	Generator-All Requirements	03/03/1999

B32
NW
1/4-1/2
1910
Higher

A 1 OIL CORP
1 MOBILE AVE
SAUGET, IL 62201

RCRIS-SQG **1000386084**
FINDS **ILD000665836**
CERC-NFRAP

A 1 OIL CORP (Continued) **1000386084**

CERCLIS-NFRAP Classification Data:
Site Incident Category: Not reported
Ownership Status: Other
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL

CERCLIS-NFRAP Assessment History:

Assessment:	DISCOVERY	Completed:	19850331
Assessment:	PRELIMINARY ASSESSMENT	Completed:	19850516
Assessment:	SITE INSPECTION	Completed:	19911125

CERCLIS-NFRAP Alias Name(s):
BLISS JERRY RUSSEL INC
BLISS WASTE OIL

RCRIS:
Owner: A 1 OIL CORP
(314) 726-6320
Contact: JERRY BLISS
(314) 394-6671
Record Date: 08/18/1980
Classification: Not reported
Used Oil Recyc: No
Violation Status: No violations found

B33
NW
1/4-1/2
1910
Higher

1 MOBILE AVE
1 MOBILE AVE
SAUGET, IL 62201

ERNS **93303335**
N/A

B34
NW
1/4-1/2
1910
Higher

CLAYTON CHEMICAL CO
1 MOBILE ST A
SAUGET, IL 62201

FINDS **1000442479**
RCRIS-LQG **ILD066918327**
RCRIS-TSD
RAATS
CORRACTS
CERC-NFRAP

CERCLIS-NFRAP Classification Data:
Site Incident Category: Not reported
Ownership Status: Other
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL

CERCLIS-NFRAP Assessment History:

Assessment:	DISCOVERY	Completed:	19800601
Assessment:	PRELIMINARY ASSESSMENT	Completed:	19850516
Assessment:	PRELIMINARY ASSESSMENT	Completed:	19910201

CERCLIS-NFRAP Alias Name(s):
STILL BOTTON DISPOSAL PIT
SITE S

CORRACTS Data:
Prioritization: Low
Status: RCRA Facility Assessment Completed, Determination of Need for a RCRA Facility Investigation, RFI Imposition

CLAYTON CHEMICAL CO (Continued) **1000442479**

RCRIS Corrective Action Summary:
Effective Date: 05/08/1996
Legal Authority: RCRA 3004(u) or equivalent

RCRIS:
Owner: EMERALD ENVIRONMENTAL LLC
(602) 995-9100

Contact: DAVID WIETIES
(618) 271-0467

Record Date: 04/20/1992

Classification: Large Quantity Generator, TSDF, Hazardous Waste Transporter

BIENNIAL REPORTS:
Last Biennial Reporting Year: 1997

Waste	Quantity (Lbs)	Waste	Quantity (Lbs)
D001	2542197.33	D008	512925.76
F001	708157.32	F002	1034883.08
F003	2769596.72	F005	3041816.18

Used Oil Recyc: Yes

TSDF Activities: burning and/or blending of hazardous waste, marketing to burners of hazardous waste fuel activities, hazardous waste fuel marketing activities, other than generator marketing to a burner, marketing of off-specification used oil, accepts waste from off-site

Violation Status: Violation information exist

CLAYTON CHEMICAL CO (Continued) **1000442479**

There are 123 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	Generator-All Requirements	
	TSD-Other Requirements	
Other Evaluation	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	Generator-All Requirements	
	TSD-Other Requirements	
Financial Record Review (FRR)	TSD-Financial Responsibility Requirements	
	TSD-Financial Responsibility Requirements	
	TSD-Other Requirements	
	TSD-Financial Responsibility Requirements	
	TSD-Financial Responsibility Requirements	
	TSD-Financial Responsibility Requirements	
Other Evaluation	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
Financial Record Review (FRR)	TSD-Other Requirements	
	TSD-Financial Responsibility Requirements	
	TSD-Financial Responsibility Requirements	
A Significant Non-Complier (SNC)	TSD-Financial Responsibility Requirements	
	TSD-Financial Responsibility Requirements	08/12/1998
	TSD-Financial Responsibility Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	03/20/1998
	TSD-Other Requirements	03/20/1998
	TSD-Other Requirements	03/20/1998
	TSD-Other Requirements	03/20/1998
	TSD-Other Requirements	03/20/1998
	TSD-Other Requirements	03/20/1998
	TSD-Other Requirements	08/12/1998
	TSD-Other Requirements	
	TSD-Other Requirements	03/20/1998
	TSD-Other Requirements	03/20/1998
	TSD-Other Requirements	03/20/1998
	TSD-Other Requirements	03/20/1998
	TSD-Other Requirements	03/20/1998
	TSD-Other Requirements	03/20/1998
	TSD-Other Requirements	03/20/1998
	TSD-Other Requirements	03/20/1998
	TSD-Other Requirements	03/20/1998
	TSD-Other Requirements	03/20/1998

CLAYTON CHEMICAL CO (Continued)			**1000442479**
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	
		Generator-Land Ban Requirements	03/20/1998
		TSD-Land Ban Requirements	03/20/1998
		TSD-Other Requirements	
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	
		TSD-Other Requirements	09/21/1998
		TSD-Other Requirements	03/20/1998
		TSD-Land Ban Requirements	03/20/1998
	Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	08/12/1998
		TSD-Other Requirements	
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	
		Generator-Land Ban Requirements	03/20/1998
		TSD-Land Ban Requirements	03/20/1998
		TSD-Other Requirements	
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	03/20/1998
		TSD-Other Requirements	
		TSD-Other Requirements	09/21/1998
		TSD-Other Requirements	03/20/1998
		TSD-Land Ban Requirements	03/20/1998
	Detailed Multimedia Inspection	TSD-Financial Responsibility Requirements	
	A Significant Non-Complier (SNC)	TSD-Financial Responsibility Requirements	
	Financial Record Review (FRR)	TSD-Financial Responsibility Requirements	
	Other Evaluation	TSD-Other Requirements	05/31/1995
		TSD-Other Requirements	05/31/1995
	Financial Record Review (FRR)	TSD-Financial Responsibility Requirements	
		TSD-Financial Responsibility Requirements	08/12/1998
		TSD-Financial Responsibility Requirements	

Site	Database(s)	
CLAYTON CHEMICAL CO (Continued)		**1000442479**
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	05/31/1995
	TSD-Other Requirements	05/31/1995
	Generator-Land Ban Requirements	02/03/1995
Other Evaluation	TSD-Other Requirements	05/31/1995
	TSD-Other Requirements	05/31/1995
	TSD-Other Requirements	06/20/1994
	Generator-Land Ban Requirements	06/20/1994
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	05/31/1995
	TSD-Other Requirements	05/31/1995
	TSD-Other Requirements	06/20/1994
	Generator-Land Ban Requirements	06/20/1994
Compliance Evaluation Inspection (CEI)	TSD-Closure/Post Closure Requirements	05/26/1994
	TSD-Other Requirements	05/31/1995
	TSD-Other Requirements	05/26/1994
	TSD-Other Requirements	05/26/1994
	TSD-Other Requirements	05/31/1995
	Generator-All Requirements	05/26/1994
Other Evaluation	TSD-Closure/Post Closure Requirements	05/26/1994
	TSD-Other Requirements	05/31/1995
	TSD-Other Requirements	05/26/1994
	TSD-Other Requirements	05/26/1994
	TSD-Other Requirements	05/31/1995
	Generator-All Requirements	05/26/1994
Non-Financial Record Review	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	Transporter-All Requirements	
	Transporter-All Requirements	
Other Evaluation	TSD-Other Requirements	12/28/1993
	TSD-Closure/Post Closure Requirements	05/26/1994
	TSD-Other Requirements	05/31/1995
	TSD-Other Requirements	05/26/1994
	Generator-Land Ban Requirements	12/28/1993
	TSD-Other Requirements	05/26/1994
	TSD-Other Requirements	05/31/1995
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	12/28/1993
	TSD-Closure/Post Closure Requirements	05/26/1994
	TSD-Other Requirements	05/31/1995
	TSD-Other Requirements	05/26/1994
	Generator-Land Ban Requirements	12/28/1993
	TSD-Other Requirements	05/26/1994
	TSD-Other Requirements	05/31/1995
Non-Financial Record Review	TSD-Other Requirements	12/28/1993
	TSD-Closure/Post Closure Requirements	05/26/1994
	TSD-Other Requirements	05/31/1995
	TSD-Other Requirements	05/26/1994
	Generator-All Requirements	05/28/1993
	Generator-All Requirements	05/28/1993
	TSD-Other Requirements	05/28/1993
	TSD-Other Requirements	05/28/1993
	TSD-Other Requirements	05/28/1993
	Generator-Land Ban Requirements	12/28/1993
	TSD-Other Requirements	05/26/1994

	CLAYTON CHEMICAL CO (Continued)			**1000442479**
			TSD-Other Requirements	05/31/1995
			TSD-Other Requirements	05/28/1993
			TSD-Other Requirements	05/28/1993
			TSD-Other Requirements	05/28/1993
			TSD-Other Requirements	05/28/1993
			TSD-Other Requirements	05/28/1993
			TSD-Other Requirements	05/28/1993
			Generator-Land Ban Requirements	05/28/1993
			TSD-Land Ban Requirements	05/28/1993
			TSD-Land Ban Requirements	05/28/1993
			TSD-Other Requirements	05/28/1993
			TSD-Other Requirements	05/31/1995
			TSD-Land Ban Requirements	05/28/1993
			Generator-Land Ban Requirements	12/28/1993
			Generator-All Requirements	05/28/1993
			TSD-Closure/Post Closure Requirements	05/26/1994
		Other Evaluation	TSD-Other Requirements	12/28/1993
			TSD-Closure/Post Closure Requirements	05/26/1994
			TSD-Other Requirements	05/31/1995
			TSD-Other Requirements	05/26/1994
			Generator-All Requirements	05/28/1993
			Generator-All Requirements	05/28/1993
			TSD-Other Requirements	05/28/1993
			TSD-Other Requirements	05/28/1993
			TSD-Other Requirements	05/28/1993
			Generator-Land Ban Requirements	12/28/1993
			TSD-Other Requirements	05/26/1994
			TSD-Other Requirements	05/31/1995
			TSD-Other Requirements	05/28/1993
			TSD-Other Requirements	05/28/1993
			TSD-Other Requirements	05/28/1993
			TSD-Other Requirements	05/28/1993
			TSD-Other Requirements	05/28/1993
			TSD-Other Requirements	05/28/1993
			Generator-Land Ban Requirements	05/28/1993
			TSD-Land Ban Requirements	05/28/1993
			TSD-Land Ban Requirements	05/28/1993
			TSD-Other Requirements	05/28/1993
		Non-Financial Record Review	TSD-Other Requirements	12/28/1993
			TSD-Closure/Post Closure Requirements	05/26/1994
			TSD-Other Requirements	05/31/1995
			TSD-Other Requirements	05/26/1994
			Generator-All Requirements	05/28/1993
			Generator-All Requirements	05/28/1993
			TSD-Other Requirements	05/28/1993
			TSD-Other Requirements	05/28/1993
			TSD-Other Requirements	05/28/1993
			Generator-Land Ban Requirements	12/28/1993
			TSD-Other Requirements	05/26/1994
			TSD-Other Requirements	05/31/1995
			Generator-All Requirements	03/03/1993
			Generator-All Requirements	03/03/1993
			TSD-Other Requirements	05/28/1993

	CLAYTON CHEMICAL CO *(Continued)*		**1000442479**
		TSD-Other Requirements	02/02/1993
		TSD-Other Requirements	03/03/1993
		TSD-Other Requirements	05/28/1993
		TSD-Other Requirements	05/28/1993
		TSD-Other Requirements	05/28/1993
		TSD-Other Requirements	05/28/1993
		TSD-Other Requirements	02/02/1993
		TSD-Other Requirements	03/03/1993
		TSD-Other Requirements	05/28/1993
		Generator-Land Ban Requirements	05/28/1993
		TSD-Land Ban Requirements	05/28/1993
		TSD-Land Ban Requirements	05/28/1993
		TSD-Land Ban Requirements	05/28/1993
		Generator-Land Ban Requirements	12/28/1993
		TSD-Other Requirements	05/31/1995
		Generator-All Requirements	05/28/1993
		TSD-Closure/Post Closure Requirements	05/26/1994
	Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	12/28/1993
		TSD-Closure/Post Closure Requirements	05/26/1994
		TSD-Other Requirements	05/31/1995
		TSD-Other Requirements	05/26/1994
		Generator-All Requirements	05/28/1993
		Generator-All Requirements	05/28/1993
		TSD-Other Requirements	05/28/1993
		TSD-Other Requirements	05/28/1993
		TSD-Other Requirements	05/28/1993
		Generator-Land Ban Requirements	12/28/1993
		TSD-Other Requirements	05/26/1994
		TSD-Other Requirements	05/31/1995
		Generator-All Requirements	03/03/1993
		Generator-All Requirements	03/03/1993
		TSD-Other Requirements	05/28/1993
		TSD-Other Requirements	02/02/1993
		TSD-Other Requirements	03/03/1993
		TSD-Other Requirements	05/28/1993
		TSD-Other Requirements	05/28/1993
		TSD-Other Requirements	05/28/1993
		TSD-Other Requirements	05/28/1993
		TSD-Other Requirements	02/02/1993
		TSD-Other Requirements	03/03/1993
		TSD-Other Requirements	05/28/1993
		Generator-Land Ban Requirements	05/28/1993
		TSD-Land Ban Requirements	05/28/1993
		TSD-Land Ban Requirements	05/28/1993
	Non-Financial Record Review	TSD-Other Requirements	12/28/1993
		TSD-Closure/Post Closure Requirements	05/26/1994
		TSD-Other Requirements	05/31/1995
		TSD-Other Requirements	05/26/1994
		Generator-All Requirements	05/28/1993
		Generator-All Requirements	05/28/1993
		TSD-Other Requirements	05/28/1993
		TSD-Other Requirements	05/28/1993
		TSD-Other Requirements	05/28/1993

CLAYTON CHEMICAL CO (Continued)			**1000442479**
		Generator-Land Ban Requirements	12/28/1993
		TSD-Other Requirements	05/26/1994
		Generator-All Requirements	05/28/1993
		Generator-Land Ban Requirements	12/28/1993
		TSD-Other Requirements	05/31/1995
		TSD-Closure/Post Closure Requirements	05/26/1994
	Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	12/28/1993
		TSD-Other Requirements	01/30/1992
		TSD-Closure/Post Closure Requirements	05/26/1994
		TSD-Other Requirements	05/31/1995
		TSD-Other Requirements	05/26/1994
		Generator-All Requirements	05/28/1993
		Generator-All Requirements	05/28/1993
		TSD-Other Requirements	05/28/1993
		TSD-Other Requirements	05/28/1993
		TSD-Other Requirements	05/28/1993
		Generator-Land Ban Requirements	12/28/1993
		TSD-Other Requirements	05/26/1994
	Other Evaluation	TSD-Other Requirements	12/28/1993
		TSD-Other Requirements	01/30/1992
		TSD-Closure/Post Closure Requirements	05/26/1994
		TSD-Other Requirements	05/31/1995
		TSD-Other Requirements	05/26/1994
		Generator-All Requirements	05/28/1993
		Generator-All Requirements	05/28/1993
		TSD-Other Requirements	05/28/1993
		TSD-Other Requirements	05/28/1993
		TSD-Other Requirements	05/28/1993
		Generator-Land Ban Requirements	12/28/1993
		TSD-Other Requirements	05/26/1994
	Compliance Evaluation Inspection (CEI)	Generator-All Requirements	01/30/1992
		TSD-Other Requirements	01/30/1992
		Generator-Land Ban Requirements	01/30/1992
	Compliance Schedule Evaluation (CSE)	TSD-Other Requirements	12/28/1993
		TSD-Other Requirements	01/30/1992
		TSD-Closure/Post Closure Requirements	05/26/1994
		TSD-Other Requirements	05/31/1995
		TSD-Other Requirements	05/26/1994
		TSD-Other Requirements	05/12/1992
	Non-Financial Record Review	TSD-Other Requirements	12/28/1993
		TSD-Other Requirements	01/30/1992
		TSD-Closure/Post Closure Requirements	05/26/1994
		TSD-Other Requirements	05/31/1995
		TSD-Other Requirements	05/26/1994
		Generator-All Requirements	09/11/1991
		TSD-Other Requirements	06/27/1991
		TSD-Other Requirements	06/27/1991
		TSD-Other Requirements	06/27/1991
		TSD-Other Requirements	05/12/1992
		Generator-Land Ban Requirements	09/11/1991
		Generator-Land Ban Requirements	09/11/1991
		Generator-Land Ban Requirements	06/27/1991
		TSD-Land Ban Requirements	09/11/1991

CLAYTON CHEMICAL CO (Continued) **1000442479**

	TSD-Land Ban Requirements	09/11/1991
	Generator-Land Ban Requirements	09/11/1991
	TSD-Other Requirements	05/31/1995
	TSD-Closure/Post Closure Requirements	05/26/1994
	Generator-All Requirements	09/11/1991
Compliance Evaluation Inspection (CEI)	TSD-Closure/Post Closure Requirements	05/26/1994
	TSD-Other Requirements	05/31/1995
	TSD-Other Requirements	05/26/1994
	Generator-All Requirements	09/11/1991
	TSD-Other Requirements	06/27/1991
	TSD-Other Requirements	06/27/1991
	TSD-Other Requirements	06/27/1991
	TSD-Other Requirements	05/12/1992
	Generator-Land Ban Requirements	09/11/1991
	Generator-Land Ban Requirements	09/11/1991
	Generator-Land Ban Requirements	06/27/1991
	TSD-Land Ban Requirements	09/11/1991
Compliance Schedule Evaluation (CSE)	Generator-All Requirements	01/18/1991
Financial Record Review (FRR)	TSD-Financial Responsibility Requirements	12/31/1990
	TSD-Financial Responsibility Requirements	12/31/1990
Compliance Evaluation Inspection (CEI)	Generator-All Requirements	01/18/1991
	Generator-All Requirements	01/18/1991
	Generator-All Requirements	01/18/1991
	TSD-Other Requirements	01/18/1991
	Generator-Land Ban Requirements	01/18/1991
Compliance Schedule Evaluation (CSE)	TSD-Other Requirements	12/28/1993
	TSD-Other Requirements	01/30/1992
	TSD-Closure/Post Closure Requirements	05/26/1994
	TSD-Other Requirements	05/31/1995
	TSD-Other Requirements	05/26/1994
Non-Financial Record Review	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	Transporter-All Requirements	
	Transporter-All Requirements	
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	07/20/1990
Financial Record Review (FRR)	TSD-Financial Responsibility Requirements	03/12/1990
Financial Record Review (FRR)	TSD-Financial Responsibility Requirements	03/12/1990
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	12/28/1993
	TSD-Other Requirements	01/30/1992
	TSD-Closure/Post Closure Requirements	05/26/1994
	TSD-Other Requirements	05/31/1995
	TSD-Other Requirements	05/26/1994
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	01/30/1992
	TSD-Other Requirements	08/25/1989
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	12/28/1993
Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	05/18/1988

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)
Enforcement Docket System (DOCKET)
National Compliance Database (NCDB)

B35
NW
1/4-1/2
1920
Higher

TWI TRANSPORTATION INC
7 MOBILE AVE SITE B
SAUGET, IL 62201

FINDS
RCRIS-LQG
RCRIS-TSD
RAATS
CORRACTS

1000299308
ILD098642424

CORRACTS Data:
Prioritization: Medium
Status: RCRA Facility Assessment Completed, Determination of Need for a RCRA Facility Investigation, RFI Imposition, RFI Workplan Approved

RCRIS Corrective Action Summary:
Effective Date: 03/31/1988
Legal Authority: RCRA 3004(u) or equivalent

RCRIS:
Owner: CHEMICAL WASTE MANAGEMENT INC
(618) 271-2804

Contact: JAMES GARY
(618) 271-2804

Record Date: 07/18/1980

Classification: Large Quantity Generator, TSDF, Hazardous Waste Transporter

Used Oil Recyc: No

TSDF Activities: burning and/or blending of hazardous waste, hazardous waste fuel marketing activities, other than generator marketing to a burner, accepts waste from off-site

Violation Status: Violation information exist

TWI TRANSPORTATION INC (Continued) **1000299308**

There are 59 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Compliance Evaluation Inspection (CEI)	TSD-Incineration Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Incineration Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Incineration Requirements	
	TSD-Incineration Requirements	
	TSD-Incineration Requirements	
	TSD-Incineration Requirements	
	TSD-Incineration Requirements	
	TSD-Incineration Requirements	
	TSD-Incineration Requirements	
	TSD-Incineration Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
Compliance Evaluation Inspection (CEI)	TSD-Incineration Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Incineration Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Incineration Requirements	
	TSD-Incineration Requirements	
	TSD-Other Requirements	
	TSD-Incineration Requirements	
	TSD-Incineration Requirements	
	TSD-Incineration Requirements	
	TSD-Incineration Requirements	
	TSD-Incineration Requirements	
	TSD-Incineration Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
A Significant Non-Complier (SNC)	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Other Requirements	
	TSD-Incineration Requirements	
Non-Financial Record Review	TSD-Other Requirements	

TWI TRANSPORTATION INC (Continued) **1000299308**

		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Incineration Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Incineration Requirements	
		TSD-Other Requirements	
		TSD-Incineration Requirements	
		TSD-Incineration Requirements	
		TSD-Incineration Requirements	
	Non-Financial Record Review	TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Incineration Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Incineration Requirements	
		TSD-Other Requirements	
		TSD-Incineration Requirements	
	Compliance Evaluation Inspection (CEI)	TSD-Incineration Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Incineration Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Incineration Requirements	
		TSD-Other Requirements	
	Non-Financial Record Review	TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Incineration Requirements	
	Non-Financial Record Review	TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
	Non-Financial Record Review	TSD-Incineration Requirements	
		TSD-Incineration Requirements	
		TSD-Incineration Requirements	
		TSD-Incineration Requirements	
		TSD-Incineration Requirements	
		TSD-Other Requirements	
	A Significant Non-Complier (SNC)	TSD-Other Requirements	09/05/1990
		TSD-Incineration Requirements	01/31/1992
		TSD-Incineration Requirements	
		TSD-Other Requirements	
	Other Evaluation	TSD-Other Requirements	01/31/1992
		TSD-Other Requirements	09/05/1990
		TSD-Incineration Requirements	01/31/1992
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Incineration Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	

TWI TRANSPORTATION INC (Continued)			**1000299308**
		TSD-Other Requirements	
		TSD-Incineration Requirements	
		TSD-Other Requirements	
	Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Incineration Requirements	
		TSD-Incineration Requirements	
		TSD-Other Requirements	
	Other Evaluation	TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
	Non-Financial Record Review	TSD-Other Requirements	05/04/1995
	Other Evaluation	TSD-Other Requirements	
	Non-Financial Record Review	TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
	Financial Record Review (FRR)	TSD-Financial Responsibility Requirements	06/02/1993
	Other Evaluation	TSD-Other Requirements	01/31/1992
		TSD-Other Requirements	01/31/1992
		TSD-Other Requirements	01/31/1992
		TSD-Land Ban Requirements	
		TSD-Land Ban Requirements	
		TSD-Incineration Requirements	01/31/1992
		TSD-Other Requirements	
		TSD-Other Requirements	
		Generator-Land Ban Requirements	
		TSD-Incineration Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
	Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	01/31/1992
		TSD-Other Requirements	01/31/1992

TWI TRANSPORTATION INC (Continued)			**1000299308**
		TSD-Other Requirements	01/31/1992
		TSD-Land Ban Requirements	
		TSD-Land Ban Requirements	
		TSD-Incineration Requirements	01/31/1992
		TSD-Other Requirements	
		TSD-Other Requirements	
		Generator-Land Ban Requirements	
		TSD-Incineration Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
		TSD-Other Requirements	
	Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	01/31/1992
		TSD-Other Requirements	01/31/1992
		TSD-Other Requirements	01/31/1992
		TSD-Land Ban Requirements	
		TSD-Land Ban Requirements	
		TSD-Incineration Requirements	01/31/1992
		TSD-Other Requirements	
		TSD-Other Requirements	
		Generator-Land Ban Requirements	
		TSD-Incineration Requirements	
		TSD-Other Requirements	
	Other Evaluation	TSD-Incineration Requirements	
		TSD-Other Requirements	
	Compliance Schedule Evaluation (CSE)	TSD-Other Requirements	01/31/1992
		TSD-Other Requirements	01/31/1992
		TSD-Other Requirements	01/31/1992
		TSD-Incineration Requirements	01/31/1992
	Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	01/31/1992
		TSD-Other Requirements	01/31/1992
		TSD-Other Requirements	01/31/1992
		Generator-All Requirements	09/14/1990
		TSD-Incineration Requirements	01/31/1992
		TSD-Land Ban Requirements	10/18/1990
	Compliance Evaluation Inspection (CEI)	TSD-Other Requirements	01/31/1992
		TSD-Other Requirements	01/31/1992
		TSD-Other Requirements	09/05/1990
		TSD-Other Requirements	01/31/1992
		TSD-Other Requirements	04/16/1990
		TSD-Other Requirements	04/16/1990
	Other Evaluation	TSD-Other Requirements	01/31/1992
		TSD-Other Requirements	01/31/1992
		TSD-Other Requirements	09/05/1990
		TSD-Other Requirements	01/31/1992
	Compliance Evaluation Inspection (CEI)	Generator-All Requirements	10/31/1989

NY MANIFEST
Additional detail is available in NY MANIFEST. Please contact your EDR Account Executive for more information.

TWI TRANSPORTATION INC (Continued) **1000299308**

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)
National Compliance Database (NCDB)
Permit Compliance System (PCS)

36
NNE
1/4-1/2
1929
Higher

703 FALLING SPRINGS RD **UST** **U003309527**
CAHOKIA, IL **N/A**

UST:
Facility ID: 6-028802
Status: EXEMPT
Total Tanks: 0
Owner Name: ROYAL GERLAND L
Contact: Not reported
Phone #: Not reported

B37
NW
1/4-1/2
1952
Higher

7 MOBILE AVENUE **HMIRS** **97091220**
SAUGET, IL **N/A**

B38
NW
1/4-1/2
1952
Higher

7 MOBILE AVE **ERNS** **92251967**
7 MOBILE AVE **N/A**
SAUGET, IL

B39
NW
1/4-1/2
1952
Higher

TRADE WASTE INCINERATORS **CERC-NFRAP** **1000185688**
7 MOBILE ST **ILD981089774**
SAUGET, IL 62201

CERCLIS-NFRAP Classification Data:
Site Incident Category: Not reported
Ownership Status: Other
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
CERCLIS-NFRAP Assessment History:
Assessment: DISCOVERY Completed: 19850516
Assessment: PRELIMINARY ASSESSMENT Completed: 19850516

B40
NW
1/4-1/2
1952
Higher

TRADE WASTE INCINERATION **LUST** **S103694968**
7 MOBILE ST **N/A**
SAUGET, IL

LUST:
IL EPA ID: 1631210009
Incident Number: 932546

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
B41 NW 1/4-1/2 1952 Higher	**TRADE WASTE INCINERATION** **7 MOBILE ST** **SAUGET, IL** LUST: IL EPA ID: 1631210009 Incident Number: 922725	**LUST**	**S103694966** **N/A**
B42 NW 1/4-1/2 1952 Higher	**TRADE WASTE INCINERATION** **7 MOBILE ST** **SAUGET, IL** LUST: IL EPA ID: 1631210009 Incident Number: 930088	**LUST**	**S103694967** **N/A**
B43 NW 1/4-1/2 1952 Higher	**7 MOBILE AVENUE** **SAUGET, IL**	**HMIRS**	**97090067** **N/A**
B44 NW 1/4-1/2 1952 Higher	**7 MOBILE AVE** **7 MOBILE AVE** **SAUGET, IL 62201**	**ERNS**	**93323860** **N/A**
B45 NW 1/4-1/2 1952 Higher	**7 MOBILE AVE** **7 MOBILE AVE** **SAUGET, IL 62201**	**ERNS**	**93327039** **N/A**
B46 NW 1/4-1/2 1952 Higher	**7 MOBILE AVE** **7 MOBILE AVE** **SAUGET, IL**	**ERNS**	**91241014** **N/A**
B47 NW 1/4-1/2 1952 Higher	**7 MOBILE AVE** **7 MOBILE AVE** **SAUGET, IL**	**ERNS**	**91233557** **N/A**
B48 NW 1/4-1/2 1952 Higher	**7 MOBILE AVE** **7 MOBILE AVE** **SAUGET, IL**	**ERNS**	**91239534** **N/A**

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
B49	**7 MOBILE AVE**	**ERNS**	**91233559**
NW	**7 MOBILE AVE**		**N/A**
1/4-1/2	**SAUGET, IL**		
1952			
Higher			

50	**AMERICAN BOTTOMS REGIONAL WW TRMNT ASSOC**	**FINDS**	**1000359787**
NW	**MOBILE AVE**	**RCRIS-LQG**	**ILD000672337**
1/4-1/2	**SAUGET, IL 62201**		
1999			
Higher			

RCRIS:
Owner: VILLAGE OF SAUGET
(312) 555-1212
Contact: FRANK BASILE
(618) 337-7060
Record Date: 08/18/1980
Classification: *Large Quantity Generator*
Used Oil Recyc: No
Violation Status: Violation information exist

There are 1 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Compliance Evaluation Inspection (CEI)	Generator-All Requirements	01/02/1990

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)

51	**TPC INDUSTRIAL SERVICES**	**RCRIS-SQG**	**1000979116**
ENE	**2700 FALLING SPRINGS RD**	**FINDS**	**IL0000980912**
1/4-1/2	**SAUGET, IL 62201**		
2046			
Higher			

RCRIS:
Owner: BOOTH CHARLES
(618) 337-9010
Contact: CHARLES BOOTH
(618) 337-9010
Record Date: 04/07/1997
Classification: Small Quantity Generator
Used Oil Recyc: No
Violation Status: Violation information exist

There are 1 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Other Evaluation	Generator-All Requirements	07/02/1997

TPC INDUSTRIAL SERVICES (Continued) — **1000979116**

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52 **NW** **1/4-1/2** **2111** **Higher**

CAHOKIA PLT — CERC-NFRAP — 1000333111
ADJACENT TO #1 MONSANTO AVE — ILD980268114
SAUGET, IL 62202

CERCLIS-NFRAP Classification Data:
Site Incident Category: Not reported
Ownership Status: Other
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
CERCLIS-NFRAP Assessment History:
Assessment: DISCOVERY — Completed: 19810601
Assessment: PRELIMINARY ASSESSMENT — Completed: 19870619
Assessment: PRELIMINARY ASSESSMENT — Completed: 19901026
CERCLIS-NFRAP Alias Name(s):
CAHOKIA VENICE ROXFORD TRANS LINE R/O/W
UNION ELECTRIC CO
CAHOKIA PLT

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53 **NNE** **1/4-1/2** **2178** **Higher**

500 FALLING SPRINGS RD — UST — U003309006
CAHOKIA, IL — N/A

UST:
Facility ID: 6-010929
Status: EXEMPT
Total Tanks: 0
Owner Name: PARKS COLLEGE OF ST LOUIS UNIV
Contact: GOUDMAN D
Phone #: (618) 337-7575

C54 **SSW** **1/4-1/2** **2231** **Higher**

CERRA COPPER PROD CO — FINDS — 1000936565
3000 MISSISSIPPI AVE — I05#19920403
SAUGET, IL 62202

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)
National Compliance Database (NCDB)

C55 **SSW** **1/4-1/2** **2237** **Higher**

CERRO COPPER PRODUCTS CO — PADS — 1000365723
3000 MISSISSIPPI AVE — FINDS — ILD080018914
SAUGET, IL 62206 — RCRIS-LQG
TRIS

CERRO COPPER PRODUCTS CO (Continued) **1000365723**

RCRIS:
Owner: CERRO COPPER PRODUCTS CO
(618) 337-6000
Contact: PAUL TANDLER
(618) 337-6000
Record Date: 08/18/1980
Classification: Large Quantity Generator

BIENNIAL REPORTS:
Last Biennial Reporting Year: 1997

Waste	Quantity (Lbs)	Waste	Quantity (Lbs)
D001	33821.95	D002	4620.16
D005	33821.95	D008	47361.95
D040	35802.02	F001	77352.58

Used Oil Recyc: No

Violation Status: Violation information exist

There are 5 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Other Evaluation	Generator-All Requirements	07/10/1995
Compliance Evaluation Inspection (CEI)	Generator-All Requirements	07/10/1995
	Generator-All Requirements	07/10/1995
Other Evaluation	Generator-All Requirements	04/06/1993
Compliance Evaluation Inspection (CEI)	Generator-All Requirements	04/06/1993
	Generator-Land Ban Requirements	12/31/1992
Compliance Evaluation Inspection (CEI)	Generator-All Requirements	10/15/1986

FINDS:
Other Pertinent Environmental Activity Identified at Site:
Enforcement Docket System (DOCKET)
PCB Handler Activity Data System (PADS)

D56 **CAHOKIA MARINE** LUST **S103694961**
NW **2 MONSANTO AVE** **N/A**
1/4-1/2 **SAUGET, IL**
2310
Same

LUST:
IL EPA ID: 1631210023
Incident Number: 941258

D57 **CAHOKIA MARINE SVCS** RCRIS-SQG **1000440863**
NW **2 MONSANTO AVE** FINDS **ILD984774406**
1/4-1/2 **SAUGET, IL 62201**
2310
Same

CAHOKIA MARINE SVCS (Continued) **1000440863**

RCRIS:
Owner: S I ENTERPRISES LP
(314) 647-7529
Contact: RICHARD WILLIAMS
(618) 274-8146
Record Date: 04/11/1989
Classification: Not reported
Used Oil Recyc: No
Violation Status: No violations found

D58 **UST** **U003309415**
NW **2 MONSANTO AVE** **N/A**
1/4-1/2 **SAUGET, IL**
2310
Same

UST:
Facility ID: 6-024475
Status: CLOSED
Total Tanks: 0
Owner Name: G J LEASING CO INC
Contact: ROBINSON TERRY
Phone #: (314) 647-7529

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59 **SAUGET AREA I - WAGGONER TRUCKING COMAPNY** **CERCLIS** **1000476461**
SSE **1300 QUEENY AVENUE** **FINDS** **ILD984809269**
1/2-1 **SAUGET, IL 62201**
2726
Higher

CERCLIS Classification Data:

Site Incident Category:	Not reported	Federal Facility:	Not a Federal Facility
Ownership Status:	Unknown	NPL Status:	Site is Part of NPL Site
Contact:	SALLY AVERILL	Contact Tel:	(312) 886-4439
Contact:	GRACE CO	Contact Tel:	(312) 353-6779
Contact:	MICHAEL MCATEER	Contact Tel:	(312) 886-4663
Contact:	JANET PFUNDHELLER	Contact Tel:	(312) 353-5821

CERCLIS Assessment History:

Assessment:	DISCOVERY	Completed:	19901026
Assessment:	PRELIMINARY ASSESSMENT	Completed:	19910905
Assessment:	SITE INSPECTION	Completed:	19920930

CERCLIS Site Status:
Addressed as part of an existing NPL site
CERCLIS Alias Name(s):
WAGGONER TRUCKING COMPANY
SAUGET AREA I - WAGGONER TRUCKING CO.
SAUGET AREA I-WAGGONER TRUCKING COMAPNY

E60 **MIDSTATES TDF** **LUST** **S100240513**
SSW **3101 MISSISSIPPI AVE** **N/A**
1/2-1 **EAST SAINT LOUIS, IL**
2762
Higher

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
	MIDSTATES TDF (Continued)		**S100240513**
	LUST: IL EPA ID: 1631210017 Incident Number: 900115 IL EPA ID: 1631210017 Incident Number: 900154		
E61 **SSW** **1/2-1** **2762** **Higher**	**VILLAGE OF SAUGET (SITE O)** **3101 MISSISSIPPI AVE** **EAST SAINT LOUIS, IL 62206**	**SHWS**	**S103823870** **N/A**
	SHWS: Facility ID: 1631210020		
E62 **SSW** **1/2-1** **2762** **Higher**	**EMPIRE CHEM REALITY, INC.** **3101 MISSISSIPPI AVE** **EAST SAINT LOUIS, IL 62206**	**SHWS**	**S103428155** **N/A**
	SHWS: Facility ID: 1631210017		
E63 **SSW** **1/2-1** **2762** **Higher**	**3101 MISSISSIPPI AVE** **EAST SAINT LOUIS, IL**	**UST**	**U003308814** **N/A**
	UST: Facility ID: 6-006712 Status: CLOSED Total Tanks: 0 Owner Name: MIDWEST RUBBER RECLAIMING CO Contact: BAGARINAO JOVENCIO Phone #: (618) 337-6400		
E64 **SSW** **1/2-1** **2762** **Higher**	**SAUGET AREA 1 SITES** **1200 QUEENY AVE** **EAST SAINT LOUIS, IL 62206**	**SHWS**	**S103428004** **N/A**
	SHWS: Facility ID: 1631210005		
E65 **SSW** **1/2-1** **2762** **Higher**	**HOOVER HANES RUBBER CORP** **3101 MISSISSIPPI AVE** **EAST ST LOUIS, IL 62202**	**RCRIS-SQG** **FINDS**	**1000430826** **ILD059984203**

HOOVER HANES RUBBER CORP (Continued) **1000430826**

RCRIS:
Owner: GIT INDUSTRIES INC
(312) 555-1212
Contact: ROBERT REINHARDT
(618) 337-6400
Record Date: 08/18/1980
Classification: Not reported
Used Oil Recyc: No
Violation Status: No violations found

E66
SSW
1/2-1
2762
Higher

WIESE PLANNING AND ENGINEERING
1200 QUEENY AVE
SAUGET, IL 62206

RCRIS-SQG
FINDS

1001077047
ILR000013672

RCRIS:
Owner: WIESE PLANNING AND ENGINEERING
(618) 337-6070
Contact: GLEN WHEELER
(618) 337-6070
Record Date: 11/28/1995
Classification: Small Quantity Generator
Used Oil Recyc: No
Violation Status: No violations found

E67
SSW
1/2-1
2802
Higher

MIDWEST RUBBER RECLAIMING CO
3101 MISSISSIPI AVE
SAUGET, IL 62202

RCRIS-SQG
FINDS

1000436562
ILD006286686

RCRIS:
Owner: GIT INDUSTRIES INC
(312) 555-1212
Contact: ROBERT REINHARDT
(618) 337-6400
Record Date: 08/18/1980
Classification: Not reported
Used Oil Recyc: No
Violation Status: No violations found

MIDWEST RUBBER RECLAIMING CO (Continued) **1000436562**

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AIRS Facility System (AIRS/AFS)

E68
SSW
1/2-1
2839
Higher

FKG OIL CO. **LUST** **S103694866**
3120 MISSISSIPPI AVE **N/A**
EAST SAINT LOUIS, IL

LUST:
IL EPA ID: 1630455137
Incident Number: 961644

E69
SSW
1/2-1
2839
Higher

UST **U003309015**
N/A

3120 MISSISSIPPI AVE
EAST SAINT LOUIS, IL

UST:
Facility ID: 6-011109
Status: ACTIVE
Total Tanks: 3
Owner Name: MOTO INC
Contact: HOWARD GLENN
Phone #: (618) 332-8634

70
SSE
1/2-1
2974
Higher

SAUGET AREA I - SAUGET MONSANTO ILLINOIS LANDFILL **CERCLIS** **1000234299**
FALLING SPRINGS ROAD AT QUEENY AVENUE **FINDS** **ILD980614176**
SAUGET, IL 62201

CERCLIS Classification Data:

Site Incident Category:	Not reported	Federal Facility:	Not a Federal Facility
Ownership Status:	Other	NPL Status:	Site is Part of NPL Site
Contact:	SALLY AVERILL	Contact Tel:	(312) 886-4439
Contact:	GRACE CO	Contact Tel:	(312) 353-6779
Contact:	MICHAEL MCATEER	Contact Tel:	(312) 886-4663
Contact:	JANET PFUNDHELLER	Contact Tel:	(312) 353-5821

CERCLIS Assessment History:

Assessment:	DISCOVERY	Completed:	19790401
Assessment:	SITE INSPECTION	Completed:	19920930
Assessment:	PRELIMINARY ASSESSMENT	Completed:	19941027

CERCLIS Site Status:
Low
CERCLIS Alias Name(s):
PT'S SHOW CLUB (ILD984092293)
SAUGET MONSANTO ILLINOIS LDFL
SAUGET AREA I - SAUGET MONSANTO IL LDFL

71
SSW
1/2-1
3034
Higher

MOTO INC. **LUST** **S102946864**
3120 MISSISSIPPI AVE **N/A**
EAST SAINT LOUIS, IL

Map ID / Direction / Distance / Distance (ft.) / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
	MOTO INC. (Continued)		**S102946864**
	LUST: IL EPA ID: 1630455137 Incident Number: 971801		
72 **SE** **1/2-1** **3121** **Higher**	**2702 OGDEN AVE** **2702 OGDEN AVE** **SAUGET, IL**	**ERNS**	**92272865** **N/A**

City	EDR ID	Site Name	Site Address	Zip	Database(s)	Facility ID
ALORTON	U003309368		RT 15	62207	UST	6-022611
CAHOKIA	U003309611		RTE 157 NOVA PLAZA	62206	UST	6-032385
CAHOKIA	S103694828	BOB'S SERVICE CTR.	532 HIGHWAY 3	62206	LUST	
CAHOKIA	S103694832	COASTAL MART	526 HIGHWAY 3	62206	LUST	
CAHOKIA	U003309459		CARGILL RD & MISSISSIPPI RIVER	62206	UST	6-026478
CAHOKIA	U003309480		E ST LOUIS TERMINAL	62206	UST	6-027434
EAST SAINT LOUIS	U003308696		699 HIGHWAY 203	62201	UST	6-000762
EAST SAINT LOUIS	U003308776		2900 MONSANTO AVE	62206	UST	6-005542
EAST ST LOUIS	1000861579	ILDOT BRG 082 0008 AND 82 0009	RTE 70 OVER 4TH ST	62201	RCRIS-SQG, FINDS	
EAST ST LOUIS	1001024773	MOTO MART	ILLINOIS RT 3	62206	FINDS, RCRIS-LQG	
EAST ST. LOUIS	S103428022	LANSON CHEMICAL	31ST STREET / TUDOR AVENUE	62207	SHWS	1630300009
FAIRMONT	U003307732		375 E 800 N	62201	UST	4-031697
SAUGET	93340054	KRUMMRICH PLANT 500 MONSANTO AVE	KRUMMRICH PLANT 500 MONSANTO AVE	62206	ERNS	
SAUGET	S103428094	SAUGET & COMPANY (SITE Q)	1.24 MILE FROM HWY 3	62206	SHWS	1631210001
SAUGET	S103823869	MONSANTO LANDFILL (SITE R)	1/4 MILE NORTH OF MONSANTO AVE	62201	SHWS	1631210002
SAUGET	1001469211	RESOURCE RECOVERY GROUP	#1 MOBILE AVENUE	62201	FINDS, SHWS	2222222222
SAUGET	1001209253	MONSANTO CO.	MONSANTO AVENUE	62201	MLTS	
SAUGET	1001218705	TERMINAL RAILROAD ASSOCIATION	MONSANTO AVE AND FALLING SPRIN	62201	FINDS, RCRIS-LQG	
SAUGET	1001459907	GROENDYKE TRUCKING	2 MONSANTO AVE-SITE B	62201	RCRIS-SQG	
SAUGET	U003309177		IL RTE 3 AT A&S TRACKS	62201	UST	6-016290

GEOCHECK VERSION 2.1 ADDENDUM
FEDERAL DATABASE WELL INFORMATION

Well Closest to Target Property (Northern Quadrant)

BASIC WELL DATA

Site ID:	383559090101501	Distance from TP:	1/8 - 1/4 Mile
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	St. Clair
Altitude:	Not Reported	State:	Illinios
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	9.43 ft.	Prim. Use of Site:	Withdrawal of water
Date Measured:	10051982	Prim. Use of Water:	Industrial

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Not Reported

GEOCHECK VERSION 2.1
FEDERAL DATABASE WELL INFORMATION

Well Closest to Target Property (Eastern Quadrant)

BASIC WELL DATA

Site ID:	383552090073501	Distance from TP:	>2 Miles
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	St. Clair
Altitude:	Not Reported	State:	Illinios
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	2.69 ft.	Prim. Use of Site:	Withdrawal of water
Date Measured:	09301982	Prim. Use of Water:	Industrial

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Not Reported

GEOCHECK VERSION 2.1
FEDERAL DATABASE WELL INFORMATION

Well Closest to Target Property (Southern Quadrant)

BASIC WELL DATA

Site ID:	383519090104701	Distance from TP:	1/2 - 1 Mile
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	St. Clair
Altitude:	Not Reported	State:	Illinios
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	15.40 ft.	Prim. Use of Site:	Withdrawal of water
Date Measured:	10051982	Prim. Use of Water:	Industrial

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Not Reported

GEOCHECK VERSION 2.1
FEDERAL DATABASE WELL INFORMATION

Well Closest to Target Property (Western Quadrant)

BASIC WELL DATA

Site ID:	383737090134801	Distance from TP:	>2 Miles
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1942	County:	Not Reported
Altitude:	460.00 ft.	State:	Missouri
Well Depth:	400.00 ft.	Topographic Setting:	Undulating
Depth to Water Table:	63.00 ft.	Prim. Use of Site:	Withdrawal of water
Date Measured:	06011942	Prim. Use of Water:	Unused

LITHOLOGIC DATA

Geologic Age ID (Era/System/Series):	Mississippian-Lower-Osagean
Principal Lithology of Unit:	Limestone
Further Description:	SHALY

WATER LEVEL VARIABILITY

Not Reported

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Water Wells Information:

Well Within 1/4 - 1/2 Mile of Target Property (Northern Quadrant)

Info Source:	IL Geological Survey		
API ID:	121630360500	Group Number:	31
Well Type:	WATER	Boring:	0
X Coord:	2809191	Y Coord:	2032756

Well Within 1/8 - 1/4 Mile of Target Property (Eastern Quadrant)

Info Source:	IL Geological Survey		
API ID:	121630194600	Group Number:	31
Well Type:	WATER	Boring:	0
X Coord:	2809451	Y Coord:	2031136

Well Within 1/8 - 1/4 Mile of Target Property (Southern Quadrant)

Info Source:	IL Geological Survey		
API ID:	121630194900	Group Number:	31
Well Type:	WATER	Boring:	0
X Coord:	2809114	Y Coord:	2030485

Well Within 1/4 - 1/2 Mile of Target Property (Western Quadrant)

Info Source:	IL Geological Survey		
API ID:	121630320800	Group Number:	31
Well Type:	WATER	Boring:	0
X Coord:	2806590	Y Coord:	2031809

GEOCHECK VERSION 2.1
PUBLIC WATER SUPPLY SYSTEM INFORMATION

Searched by Nearest PWS.

PWS SUMMARY:

PWS ID:	IL3009290	PWS Status:	Active	Distance from TP:	>2 Miles
Date Initiated:	June / 1977	Date Deactivated:	Not Reported	Dir relative to TP:	North
PWS Name:	FALCON DRIVE-IN THEATER 7400 COLLINSVILLE RD EAST ST LOUIS, IL 62201				
Addressee / Facility:	Not Reported				
Facility Latitude:	38 37 27		Facility Longitude:	090 09 02	
City Served:	Not Reported				
Treatment Class:	Untreated		Population Served:	101 - 500 Persons	

PWS currently has or has had major violation(s) or enforcement: No

EPA Waste Codes Addendum

Code	Description
D001	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
D002	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
D003	A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
D005	BARIUM
D007	CHROMIUM
D008	LEAD
D009	MERCURY
D018	BENZENE
D021	CHLOROBENZENE
D022	CHLOROFORM
D027	1,4-DICHLOROBENZENE
D035	METHYL ETHYL KETONE
D036	NITROBENZENE
D039	TETRACHLOROETHYLENE
D040	TRICHLOROETHYLENE
F001	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT

EPA Waste Codes Addendum

Code	Description
	MIXTURES.
F002	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F003	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F005	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
K085	DISTILLATION OR FRACTIONATION COLUMN BOTTOMS FROM THE PRODUCTION OF CHLOROBENZENES
P077	BENZENAMINE, 4-NITRO-
P077	P-NITROANILINE
U019	BENZENE (I,T)
U071	BENZENE, 1,3-DICHLORO-
U071	M-DICHLOROBENZENE
U072	BENZENE, 1,4-DICHLORO-
U072	P-DICHLOROBENZENE
U189	PHOSPHORUS SULFIDE (R)
U189	SULFUR PHOSPHIDE (R)

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

FEDERAL ASTM RECORDS:

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
Source: EPA
Telephone: 703-413-0223
CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/21/99
Date Made Active at EDR: 06/09/99
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 05/14/99
Elapsed ASTM days: 26
Date of Last EDR Contact: 05/14/99

ERNS: Emergency Response Notification System
Source: EPA/NTIS
Telephone: 202-260-2342
Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/98
Date Made Active at EDR: 01/18/99
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 01/13/99
Elapsed ASTM days: 5
Date of Last EDR Contact: 05/12/99

NPL: National Priority List
Source: EPA
Telephone: N/A
National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC).

Date of Government Version: 05/10/99
Date Made Active at EDR: 06/09/99
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 05/12/99
Elapsed ASTM days: 28
Date of Last EDR Contact: 05/12/99

RCRIS: Resource Conservation and Recovery Information System
Source: EPA/NTIS
Telephone: 800-424-9346
Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Date of Government Version: 04/26/99
Date Made Active at EDR: 06/09/99
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 05/14/99
Elapsed ASTM days: 26
Date of Last EDR Contact: 05/14/99

CORRACTS: Corrective Action Report
Source: EPA
Telephone: 800-424-9346
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/01/99
Date Made Active at EDR: 04/16/99
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 03/17/99
Elapsed ASTM days: 30
Date of Last EDR Contact: 06/21/99

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FEDERAL NON-ASTM RECORDS:

BRS: Biennial Reporting System
Source: EPA/NTIS
Telephone: 800-424-9346
The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/95
Database Release Frequency: Biennially
Date of Last EDR Contact: 03/25/99
Date of Next Scheduled EDR Contact: 06/21/99

CONSENT: Superfund (CERCLA) Consent Decrees
Source: EPA Regional Offices
Telephone: Varies
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: Varies
Database Release Frequency: Varies
Date of Last EDR Contact: Varies
Date of Next Scheduled EDR Contact: N/A

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report
Source: EPA
Telephone: N/A
Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/01/99
Database Release Frequency: Quarterly
Date of Last EDR Contact: 04/16/99
Date of Next Scheduled EDR Contact: 07/12/99

HMIRS: Hazardous Materials Information Reporting System
Source: U.S. Department of Transportation
Telephone: 202-366-4526
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/97
Database Release Frequency: Annually
Date of Last EDR Contact: 03/24/99
Date of Next Scheduled EDR Contact: 07/26/99

MLTS: Material Licensing Tracking System
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 12/08/98
Database Release Frequency: Quarterly
Date of Last EDR Contact: 04/13/99
Date of Next Scheduled EDR Contact: 07/12/99

NPL LIENS: Federal Superfund Liens
Source: EPA
Telephone: 205-564-4267
Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 05/28/98
Date of Next Scheduled EDR Contact: 08/23/99

PADS: PCB Activity Database System
Source: EPA
Telephone: 202-260-3936
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 09/22/97
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 05/27/99
Date of Next Scheduled EDR Contact: 08/16/99

RAATS: RCRA Administrative Action Tracking System
Source: EPA
Telephone: 202-564-4104
RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 06/14/99
Date of Next Scheduled EDR Contact: 09/13/99

ROD: Records Of Decision
Source: NTIS
Telephone: 703-416-0223
Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/31/99
Database Release Frequency: Annually
Date of Last EDR Contact: 05/25/99
Date of Next Scheduled EDR Contact: 07/19/99

TRIS: Toxic Chemical Release Inventory System
Source: EPA
Telephone: 202-260-1531
Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/97
Database Release Frequency: Annually
Date of Last EDR Contact: 05/07/99
Date of Next Scheduled EDR Contact: 06/28/99

TSCA: Toxic Substances Control Act
Source: EPA
Telephone: 202-260-1444
Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/94
Database Release Frequency: Every 4 Years
Date of Last EDR Contact: 04/26/99
Date of Next Scheduled EDR Contact: 07/26/99

MINES: Mines Master Index File
Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959

Date of Government Version: 08/01/98
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 04/08/99
Date of Next Scheduled EDR Contact: 07/05/99

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STATE OF ILLINOIS ASTM RECORDS:

LUST: Leaking Underground Storage Tank Sites
Source: Illinois Environmental Protection Agency
Telephone: 217-782-6760
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 03/01/99
Date Made Active at EDR: 04/21/99
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 03/22/99
Elapsed ASTM days: 30
Date of Last EDR Contact: 06/01/99

SHWS: State Oversight List
Source: Illinois Environmental Protection Agency
Telephone: 217-524-4863
State Hazardous Waste Sites. *State hazardous waste site records are the states' equivalent to CERCLIS. These sites* may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 06/01/99
Date Made Active at EDR: 07/01/99
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 06/17/99
Elapsed ASTM days: 14
Date of Last EDR Contact: 06/01/99

LF: Available Disposal for Solid Waste in Illinois - Solid Waste Landfills Subject to State Surcharge
Source: Illinois Environmental Protection Agency
Telephone: 217-785-8604
Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/01/98
Date Made Active at EDR: 03/25/99
Database Release Frequency: Annually
Date of Data Arrival at EDR: 02/26/99
Elapsed ASTM days: 27
Date of Last EDR Contact: 06/02/99

UST: STC (State, Town, County) Facility List
Source: Illinois State Fire Marshal
Telephone: 217-785-0969
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 03/03/98
Date Made Active at EDR: 08/21/98
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 07/23/98
Elapsed ASTM days: 29
Date of Last EDR Contact: 06/07/99

STATE OF ILLINOIS NON-ASTM RECORDS:

NIPC: Solid Waste Landfill Inventory
Source: Northeastern Illinois Planning Commission
Telephone: 312-454-0400
Solid Waste Landfill Inventory. NIPC is an inventory of active and inactive solid waste disposal sites, based on state, local government and historical archive data. Included are numerous sites which previously had never been identified largely because there was no obligation to register such sites prior to 1971.

Date of Government Version: 08/01/88
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 06/11/97
Date of Next Scheduled EDR Contact: N/A

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CAT: Category List
Source: Illinois EPA
Telephone: N/A
Sites on this list are: Notice of Response Action, NPL, Pre/ osed NPL, Completed Remedial Action, Site Remediaton Program, Federal Facilities, and Cleanup St d and/or Completed Sites.

Date of Government Version: 06/01/97
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 06/01/99
Date of Next Scheduled EDR Contact: 08/30/99

Historical and Other Database(s)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

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The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

DELISTED NPL: NPL Deletions
Source: EPA
Telephone: N/A
The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/23/99
Date Made Active at EDR: 06/09/99
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/12/99
Elapsed ASTM days: 28
Date of Last EDR Contact: 02/08/99

NFRAP: No Further Remedial Action Planned
Source: EPA
Telephone: 703-413-0223
As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 04/21/99
Date Made Active at EDR: 06/09/99
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 05/14/99
Elapsed ASTM days: 26
Date of Last EDR Contact: 05/14/99

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-260-2805
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-260-2805
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SWDIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

Area Radon Information: The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones: Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

Oil/Gas Pipelines/Electrical Transmission Lines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines and electrical transmission lines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

USGS Water Wells: In November 1971 the United States Geological Survey (USGS) implemented a national water resource information tracking system. This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on more than 900,000 wells, springs, and other sources of groundwater.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in March 1997 from the U.S. Fish and Wildlife Service.

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Water Dams: National Inventory of Dams
Source: Federal Emergency Management Agency
Telephone: 202-646-2801
National computer database of more than 74,000 dams maintained by the Federal Emergency Management Agency.

County Well Data in Illinois: Cook and DuPage Counties
Source: Illinois State Geological Survey
Telephone: 217-244-2387

Illinois Private Well Database and PICS (Public, Industrial, Commercial Survey)
Source: Illinois State Water Survey
Telephone: 217-333-9043

Illinois State Geological Survey Water Wells
Source: Illinois State Geological Survey
Telephone: 217-333-5102
Point data set that shows locations, well type, and well ID for wells in Illinois. Data comes from driller's logs.

EDR-Site Report™

MOBIL OIL CORP SAUGET TERMINAL
2000 S 20TH ST
SAUGET, IL 62206

Inquiry Number:

July 28, 1999

Environmental Data Resources, Inc.
an edr company

The Source For Environmental Risk Management Data

3530 Post Road
Southport, Connecticut 06490

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

TABLE OF CONTENTS

The EDR-Site Report™ is a comprehensive presentation of government filings on a facility identified in a search of over 4 million government records from more than 600 federal, state and local environmental databases. The report is divided into three sections:

Section 1: Facility Summary ..... **Page 3**

Summary of facility filings including a review of the following areas: waste management, waste disposal, multi-media issues, and Superfund liability.

Section 2: Facility Detail Reports ..... **Page 4**

All available detailed information from databases where sites are identified.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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SECTION 1: FACILITY SUMMARY

FACILITY AREA	FACILITY 1 MOBIL OIL CORP SAUGET TERMINAL 2000 S 20TH ST SAUGET, IL 62206 EDR ID #1000253521 EPA #ILD075905299
WASTE MANAGEMENT Facility generates hazardous waste (RCRIS)	YES - p4
Facility treats, stores, or disposes of hazardous waste on-site (RCRIS/TSDF)	NO
Facility has received Notices of Violations (RCRIS/VIOL)	YES - p5
Facility has been subject to RCRA administrative actions (RAATS)	NO
Facility has been subject to corrective actions (CORRACTS)	NO
Facility handles PCBs (PADS)	NO
Facility uses radioactive materials (MLTS)	NO
Facility manages registered aboveground storage tanks (AST)	NO
Facility manages registered underground storage tanks (UST)	NO
Facility has reported leaking underground storage tank incidents (LUST)	NO
Facility has reported emergency releases to the soil (ERNS)	NO
Facility has reported hazardous material incidents to DOT (HMIRS)	NO
WASTE DISPOSAL Facility is a Superfund Site (NPL)	NO
Facility is not a Superfund Site but has a known or suspect abandoned, inactive or uncontrolled hazardous waste site (CERCLIS)	YES - p6 (NFRAP)
Facility has a reported Superfund Lien on it (LIENS)	NO
Facility is listed as a state hazardous waste site (SHWS)	NO
Facility has disposed of solid waste on-site (SWF/LF)	NO
MULTIMEDIA Facility uses toxic chemicals and has notified EPA under SARA Title III, Section 313 (TRIS)	NO
Facility manufactures or imports toxic chemicals on the TSCA list (TSCA)	NO
Facility has enforcement actions under FIFRA, TSCA or EPCRA (FTTS)	NO
Facility is listed in EPA's index system (FINDS)	YES - p7
Facility is listed in a county/local unique database (LOCAL)	NO
POTENTIAL SUPERFUND LIABILITY Facility has a list of potentially responsible parties PRP	NO
TOTAL (YES)	4

WASTE MANAGEMENT

Facility generates hazardous waste

DATABASE: Resource Conservation and Recovery Information System (RCRIS)

MOBIL OIL CORP SAUGET TERMINAL
2000 S 20TH ST
SAUGET, IL 62206
EDR ID #1000253521

Facility Name:	MOBIL OIL CORP SAUGET TERMINAL 2000 S 20TH ST SAUGET, IL 62206
Contact:	BEN KEMPER, TERMINALS MGR (618) 271-3155
EPA-ID:	ILD075905299
Record Date:	08/18/1980
Classification:	Not reported
Description:	
Legal Status:	Private
Owner:	NAME NOT REPORTED ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998 (312) 555-1212
Operator:	NAME NOT REPORTED ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998 (312) 555-1212

WASTE MANAGEMENT

Facility Has Received Notices of Violations

DATABASE: Resource Conservation and Recovery Information System (RCRIS)

MOBIL OIL CORP SAUGET TERMINAL
2000 S 20TH ST
SAUGET, IL 62206
EDR ID #1000253521

Violation information:

COMPLIANCE AND ENFORCEMENT SUMMARY

COMPLIANCE EVALUATION INSPECTION (CEI) Evaluation Date: 02/02/1993

COMPLIANCE EVALUATION INSPECTION (CEI) Evaluation Date: 11/02/1984

Area of Violation: Generator-All Requirements
Responsible Agency: State

Regulation Violated:	Not reported
Date Violation Determined:	11/02/1984
Priority of Violation:	Low
Schedule Date to Achieve Compliance:	11/28/1984
Actual Date Achieved Compliance:	11/19/1984

Enforcement Action:	Written Informal
Enforcement Action Date:	11/13/1984
Proposed Monetary Penalty:	Not reported
Final Monetary Penalty:	Not reported

SECTION 2: FACILITY DETAIL REPORTS

...Continued...

WASTE DISPOSAL

Facility is not a Superfund Site but has a known or suspect abandoned, inactive, or uncontrolled hazardous waste site

DATABASE: No Further Remedial Action Planned (CERCLIS/NFRAP)

MOBIL OIL CORP SAUGET TERMINAL
2000 S 20TH ST
SAUGET, IL 62206
EDR ID #1000253521

CERC-NFRAP Name: MOBIL OIL TERMINAL
2000 SOUTH 20TH STREET
EAST ST LOUIS, IL 62202
ST CLAIR County

Congressional Dist:	23	RCRA Facility:	Not reported
IFMS ID:	Not reported	SMSA Num:	7040
USGS Hydro Unit:	07140101	Federal Facility:	Not a Federal Facility
NPL Update Num:	Not Reported	Federal Register Date:	Not Reported
Fed Haz Waste:	No	Site Incident:	Not reported
EPA-ID:	ILD075905299		
EPA Region:	Region 5 77 West Jackson Blvd. Chicago, IL 60604-3507		
Region IP Address:	204.46.177.40	Region URL:	r5cerc01.r05tok.epa.gov
NPL Status:	Not on the NPL	Ownership Status:	Other
Classification:	Not Reported		
Site Description:	Not Reported		

ENFORCEMENT ACTIVITY

Action Type: DISCOVERY
Action Anomaly: Not reported
Planning Status: Not reported
Priority Level: Not reported
Operable Unit: SITEWIDE
Urgency: Not reported
Actual Start Date: Not reported
Actual Complete Date: 19810601
Primary Responsibility: EPA Fund-Financed

Action Type: PRELIMINARY ASSESSMENT
Action Anomaly: Not reported
Planning Status: Not reported
Priority Level: Low
Operable Unit: SITEWIDE
Urgency: Not reported
Actual Start Date: Not reported
Actual Complete Date: 19870619
Primary Responsibility: State, Fund Financed

Action Type: PRELIMINARY ASSESSMENT
Action Anomaly: Not reported
Planning Status: Not reported
Priority Level: NFRAP (No Futher Remedial Action Planned
Operable Unit: SITEWIDE
Urgency: Not reported
Actual Start Date: Not reported
Actual Complete Date: 19900207
Primary Responsibility: State, Fund Financed

This site is also known under one or more aliases as follows:

MOBIL OIL TERM
2000 S 20TH ST
EAST ST LOUIS, IL 62202

SECTION 2: FACILITY DETAIL REPORTS

...Continued...

MULTIMEDIA

Facility is listed in EPA's index system

DATABASE: Facility Index System (FINDS)

MOBIL OIL CORP SAUGET TERMINAL
2000 S 20TH ST
SAUGET, IL 62206
EDR ID #1000253521

This site is listed in the Federal FINDS database. The FINDS database may contain references to records from government databases included elsewhere in the report. Please note: the FINDS database may also contain references to out of date records formerly associated with the site.

EPA-ID:	ILD0-7590-5299
EPA Records Indicate Facility Is Listed In:	AIRS Facility System
System ID:	IL0033265
Facility Name:	MOBIL OIL CORP. - SAUGET TERMI
Facility Address:	2000 SOUTH 20TH STREET SAUGET, IL 62202

EPA-ID:	ILD0-7590-5299
EPA Records Indicate Facility Is Listed In:	Enforcement Docket System
System ID:	05-79-0071-0001
Facility Name:	MOBIL OIL CORP SAUGET TERMINAL
Facility Address:	2000 S 20TH ST SAUGET, IL 62206

EPA-ID:	ILD0-7590-5299
EPA Records Indicate Facility Is Listed In:	Enforcement Docket System
System ID:	05-80-0024-0001
Facility Name:	MOBIL OIL CORP SAUGET TERMINAL
Facility Address:	2000 S 20TH ST SAUGET, IL 62206

EPA-ID:	ILD0-7590-5299
EPA Records Indicate Facility Is Listed In:	National Compliance Database
System ID:	I05#19910321IL003
Facility Name:	MOBIL OIL CORP
Facility Address:	2000 S 20TH SAUGET, IL 62207

EPA-ID:	ILD0-7590-5299
EPA Records Indicate Facility Is Listed In:	Resource Conservation Recovery Act Information System
System ID:	ILD075905299
Facility Name:	MOBIL OIL CORP SAUGET TERMINAL
Facility Address:	2000 S 20TH ST SAUGET, IL 62206

Appendix 5

Big River Zinc
Soil and/or Groundwater Data

Big River Zinc

Amax 12/88 Soil Sample Results ug/g

(4/10/92 IDPH Environmental Miscellaneous Sample Form)

	#1 Air Station	#2 Wilford & P48	#3 Monsanto Blvd east of plant	#4 8th St rail overpass	#5 Rt 3 across from plant
Lead	86	187.7	73.89	671.97	257.71
Arsenic	6	13.78	8.99	21	12.39
Cadmium	5.4	5.03	13.402	129.59	67.12
Chromium	19.48	38.66	13.42	24.08	19.90
Zinc	420	894.54	1509.77	9359.63	4854.47
Nickel	16	27.95	13.97	50	19.97

Appendix 6

Cerro Copper
Soil and/or Groundwater Data

Table 4

CS - A

PCB Analysis (ppb)

Parameters :			Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-12
Sample I.D.		Date							
A10	6-7	07/13	ND	ND	ND	ND	ND	ND	ND
A10	9-10	07/13	ND	ND	ND	ND	ND	ND	ND
A10	15-17		ND	ND	ND	ND	ND	480	ND
A10	20-22	07/13	ND	ND	ND	ND	ND	1400	ND
A10	24-29	07/13	ND	10000	ND	ND	ND	4300	ND
A10	37-38	07/13	ND	3200	ND	ND	ND	880	ND
A11A	8-13	07/19	ND	ND	ND	ND	ND	0.00	ND
A11A	13-18	07/19	ND	ND	ND	ND	ND	ND	ND
A11B	4-8		ND	ND	ND	ND	ND	530	ND
A11B	8.1-10.6	07/18	ND	ND	ND	ND	ND	210	ND
A11B	12-17	07/18	ND	ND	ND	ND	ND	920	ND
A11C	2-6.5		ND	ND	45000	ND	ND	10000	ND
A11C	6.5-10.5	07/18	ND	ND	ND	ND	ND	13000	ND
A11C	12.5-16.5	7/18	ND	ND	ND	ND	ND	1300	ND
A11D	8-10	07/18	ND	ND	ND	ND	ND	ND	ND
A11D	18.5-23.5	7/18	ND	ND	ND	ND	ND	ND	38000
A12A	8-11	07/19	ND	ND	ND	ND	ND	ND	ND
A12A	11-20.5	07/19	ND	ND	ND	ND	ND	67	ND
A12B	3-7		ND	ND	32000	ND	ND	ND	ND
A12B	9-12	07/13	ND	13000	ND	ND	ND	830	ND
A12B	14-17	07/13	ND	ND	ND	ND	ND	ND	ND
A12B	17-19	07/13	ND	ND	ND	ND	ND	270	ND
A12C	4-9		ND	ND	ND	ND	ND	ND	ND
A12C	10-13	07/12	ND	ND	ND	ND	ND	ND	ND
A12C	14-16	07/12	ND	ND	ND	ND	ND	ND	ND
A12D	6-13	07/18	ND	ND	ND	ND	ND	530000	ND
A12D	17-20	07/18	ND	ND	ND	ND	29000	ND	72000
A12D	20-25	07/18	ND	ND	ND	ND	6700	ND	9100
A13A	9-14	07/20	ND	ND	ND	ND	ND	ND	ND
A13A	14-19	07/20	ND	ND	ND	ND	ND	ND	ND
A13A	19-20.5	07/20	ND	ND	ND	ND	ND	ND	ND
A13B	4.5-6		ND	ND	340000	ND	ND	100000	ND
A13B	6-9.5	07/11	ND	ND	32000	ND	ND	18000	ND
A13B	9.5-12	07/11	ND	1900	ND	ND	ND	350	ND
A13C	4-8.5	07/12	ND	780000	ND	ND	ND	130000	ND
A13C	6-13	07/12	ND	20000	ND	ND	ND	5500	ND
A13C	13-16	07/12	ND	ND	ND	ND	ND	ND	ND
A13D	18-23	07/19	ND	ND	ND	ND	ND	670	630
A14A	4-9	07/20	ND	ND	ND	ND	ND	99	ND
A14A	13.5-23.5	7/20	ND	ND	ND	ND	ND	62	ND
A14A	23.5-28.5	7/20	ND	ND	ND	ND	ND	ND	ND
A14B	4-8.5	07/11	ND	100000	ND	ND	ND	14000	ND
A14B	8.5-13	07/11	ND	5200	ND	ND	ND	1100	ND
A14C	4-8.5	07/11	ND	190000	ND	ND	ND	350000	ND
A14C	8.5-10.5		ND	ND	1700	ND	ND	520	ND
A14C	13.5-16.5	07/11	ND	5200	ND	ND	ND	1000	ND
A14D	10-14	07/12	ND	ND	ND	ND	ND	ND	ND
A14D	15-19	07/12	ND	ND	ND	ND	ND	ND	ND
A14D	24-29	07/12	ND	ND	ND	ND	ND	ND	ND

J0053994

Table 4
(Cont.)

Sample I.D.		Date	Parameters :	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-126
A15B	6-9			ND	ND	3700	ND	ND	ND	ND
A15B	13-16	07/07		ND	ND	7200	ND	ND	1800	ND
A15B	16-19	07/07		ND	ND	ND	ND	ND	ND	ND
A15C	4.5-9			ND	ND	300000	ND	ND	68000	ND
A15C	9.5-14.5	07/10		ND	1500	ND	ND	ND	160	ND
A15C	14.5-17.5	07/10		ND	15000	ND	ND	ND	2300	ND
A15D	4-9	07/12		ND	ND	ND	ND	ND	ND	ND
A15D	12-14	07/12		ND	ND	ND	ND	ND	ND	ND
A15D	19-24	07/12		ND	ND	ND	ND	ND	ND	ND
A15D	24-29	07/12		ND	ND	ND	ND	ND	ND	ND
A16A	9-14	07/20		ND	ND	ND	ND	ND	ND	ND
A16A	14-19	07/20		ND	ND	ND	ND	ND	2100	860
A16A	24-29	07/20		ND	ND	ND	ND	ND	ND	ND
A16B	9-12			ND	ND	1600000	ND	ND	ND	ND
A16B	14-19	07/18		ND	ND	ND	5400	ND	ND	ND
A16C	2-5			ND	ND	ND	ND	BDL	ND	ND
A16C	7-12	07/18		ND	ND	ND	13000	ND	ND	ND
A16C	12-17	07/18		ND	ND	ND	1100	ND	450	ND
A16D	13-18	07/20		ND	ND	ND	ND	ND	ND	ND
A16D	18-23	07/20		ND	ND	ND	ND	ND	90	ND
A16D	23-31	07/20		ND	ND	ND	ND	ND	ND	ND
A16E	13-18	07/20		ND	ND	ND	ND	520	290	ND
A16E	18-23	07/20		ND	ND	ND	ND	1300	690	ND
A16E	25.5-28	07/20		ND	ND	ND	ND	550	400	ND
A21B	1-6	07/17		ND	ND	ND	ND	ND	ND	27000
A21B	6-10	07/17		ND	ND	ND	ND	ND	200	ND
A21B	10-13	07/17		ND	ND	ND	ND	ND	ND	ND
A21C	4-8			ND	ND	ND	ND	ND	ND	30000
A21C	8-11	07/14		ND	ND	ND	ND	ND	ND	ND
A21C	13-14.5	07/14		ND	ND	ND	ND	ND	ND	ND
A21D	4-9	07/10		ND	ND	ND	ND	ND	90	ND
A21D	9-14	07/10		ND	ND	ND	ND	ND	150	ND
A21D	14-19	07/10		ND	ND	ND	ND	ND	ND	ND
A22A	9-14	07/11		ND	ND	ND	ND	ND	ND	ND
A22A	19-22	07/11		ND	ND	ND	ND	ND	ND	ND
A22A	24-28	07/11		ND	ND	ND	ND	ND	ND	ND
A22B	0-7			ND	ND	ND	ND	120000	ND	ND
A22B	7-13	07/17		ND	ND	ND	ND	ND	ND	ND
A22C	3-9	07/17		ND	ND	ND	ND	ND	19000	ND
A22C	10-15	07/17		ND	ND	ND	ND	ND	ND	ND
A22D	4-9	07/11		ND	ND	ND	ND	ND	ND	12000
A22D	9-14	07/11		ND	ND	ND	ND	ND	ND	ND
A22D	24-27	07/11		ND	ND	ND	ND	ND	ND	ND
A23A	12-13	07/14		ND	ND	ND	ND	3300	ND	690
A23A	13-19	07/14		ND	ND	ND	ND	5700	ND	1200
A23A	19-20			ND	ND	ND	ND	150000	ND	ND
A23A	21-23	07/14		ND	ND	ND	ND	1600	ND	ND

** units : ug/kg **

J005995

Table 5

CS - A

PCB Precursor Concentrations

Sample:	A11b	A11b	A11b	A11c	A11c	A11c	A11d	A12a	A12d	A12d	A12d	A16a	A16b	A16b	A16c	A16c	A16d	A16d	A16e	A16e	A16e
Depth:	4-8	8.1-10.6	12-17	2-6.5	6.5-10.5	12.5-16.5	18.5-23.5	18-23	6-13	17-20	20-25	14-19	9-12	14-19	2-5	7-12	18-23	23-31	13-18	18-23	25.5-28
Compounds:																					
Biphenyl	6.6 J	1.5 J	0.2	5.2 J	BDL	BDL	BDL	BDL	BDL	0.3	0.04	BDL	8.3 J	1.0 J	24.0 J	1.2 J	0.02	BDL	BDL	BDL	BDL
Chlorobiphenyl	BDL	BDL	BDL	0.9 J	BDL	BDL	BDL	0.04	3.6 J	0.03	0.04	BDL	1.8 J	0.3 J	6.0 J	0.4 J	BDL	BDL	BDL	BDL	BDL
Dichlorobiphenyl	BDL	BDL	BDL	1.5 J	BDL	BDL	BDL	BDL	35.0 J	0.3	0.06	BDL	5.3 J	0.7 J	26.0 J	0.8 J	0.03	BDL	BDL	BDL	BDL
Trichlorobiphenyl	BDL	BDL	BDL	0.2 J	BDL	BDL	BDL	BDL	60.0 J	0.7	0.2	0.01	3.8 J	0.5 J	24.0 J	0.7 J	0.04	BDL	BDL	0.02	0.0
Tetrachlorobiphenyl	BDL	BDL	0.01	0.1 J	0.3 J	BDL	0.5	0.01	75.0 J	1.0	0.3	0.06	4.3 J	0.3 J	21.0 J	0.4 J	0.06	0.02	0.04	0.09	0.10
Pentachlorobiphenyl	BDL	BDL	0.04	0.1 J	0.9 J	0.03	1.3	0.02	69.0 J	1.0	0.3	0.13	BDL	0.2 J	8.6 J	BDL	0.10	0.02	BDL	0.05	0.03
Hexachlorobiphenyl	BDL	BDL	0.04	BDL	BDL	0.07	3.8	0.05	210.0 J	2.3	0.7	0.12	BDL	0.08 J	BDL	BDL	0.23	BDL	BDL	BDL	BDL
Decachlorobiphenyl	BDL	BDL	BDL	BDL	BDL	BDL	3.0	BDL	BDL	BDL	BDL	0.09	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

Units: Mg/Kg

J = Indicates a positive identification of the compound, however the concentration is an estimated value.

BDL = Below detection limits

** The following samples showed BDL readings for all precursor parameters:

A10 6-7; A10 9-10; A10 15-17; A11a 13-18; A11a 8-13; A11d 8-10; A12a 8-11; A12a 11-20.5; A12a 18-23; A12b 3-7
A12b 9-12; A12b 14-17; A12b 17-19; A13a 9-14; A13a 14-19; A13a 19-20.5; A14a 4-9; A14a 13.5-23.5; A14a 23.5-28.5
A15a 9-14; A15a 14-19; A15a 19-24; A16a 9-14; A16a 24-29; A16c 12-17; A16d 13-18; A16d 18-23; A16e 25.5-28;
A21b 6-10; A21b 10-13; A21c 4-8; A21c 8-11; A21c 13-14.5; A22b 7-13; A22c 10-15

J0059999

Table 6

CS - A

EPTOX Analyses

Sample ID	A10 15-17	A11A 8-13	A11B 4-8	A11C 2-6.5	A11D 8-10	A11D 18.5-23.5	A12A 8-11	A12B 3-7	A12C 4-9	A12C 10-13	A12C 14-16	A12D 17-20	A13B 4.5-6	A13C 4-8.5	A13C 6-13	A13C 13-16	A13D 18-23	A14B 4-8.5	A14C 4-8.5	A14D 10-14	A15B 6-9	A15B 13-16	A15C 4.5-9	A15D 4-9	A16A 9-14	A16B 9-12	A16C 2-5	A16B 13-18	A21B 1-6	A21C 4-8	A21D 14-19	A22A 9-14	A22B 0-7	A22C 3-9	A22D 4-9	A23A 19-20	Maximum Allowable Concentrations
Parameters																																				
Silver	ND	ND	ND	0.024	0.037	0.028	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.032	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.024	5.0
Arsenic	ND	ND	ND	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.018	ND	ND	0.35	ND	ND	ND	ND	ND	ND	ND	5.0
Barium	1.3	ND	1.8	1.2	2.6	1.0	1.4	ND	1.0	ND	ND	2.0	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	1.1	ND	ND	ND	1.5	3.3	ND	ND	3.9	1.7	ND	ND	100.0
Cadmium	ND	0.069	ND	0.047	0.018	ND	4	0.057	1.0	0.048	0.32	0.010	2.6	4.0	1.9	ND	0.017	0.47	1.2	ND	0.018	ND	0.74	ND	ND	1.0	0.64	ND	3.4	3.9	ND	ND	0.10	0.011	0.045	0.012	1.0
Chromium	0.024	0.030	ND	ND	0.030	0.022	0.025	ND	ND	ND	ND	ND	ND	ND	0.028	ND	0.025	ND	ND	ND	0.027	ND	ND	0.038	0.044	ND	ND	0.030	0.13	ND	ND	ND	0.60	ND	ND	0.033	5.0
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2
Lead	0.11	0.069	0.076	0.23	0.33	0.092	0.096	8.4	0.62	ND	ND	0.086	14.6	0.85	ND	ND	0.074	0.31	5.5	0.13	0.14	0.061	0.32	0.13	0.15	4.2	1.8	0.085	35.4	15.6	0.061	0.16	0.68	0.10	0.12	0.17	5.0
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.0

** units : mg/L **

77

J006003

Table 7

CS - A

Total Metals

Sample	A10	A11A	A11B	A11C	A11D	A12A	A12B	A12C	A12D	A13B	A13C	A13D	A14A	A14B	A14C	A14C	A14D	A15B	A15B	A15C	A15D	A16B	A16C	A21B	A21C	A21D	A22B	A22C	A23A
Date:	15-17	8-13	4-8	2-6.5	8-10	8-11	3-7	4-9	17-20	4.5-6	4-8.5	18-23	4-9	4-8.5	4-8.5	8.5-10.	10-14	6-9	13-16	4.5-9	4-9	9-12	2-5	1-6	4-8	14-19	0-7	3-9	19-20
Parameters																													
Silver	ND	ND	ND	8.0	ND	ND	328	93.0	ND	154	73.5	ND	ND	44.1	141	ND	ND	ND	ND	63.8	ND	55.8	91.9	132	348	ND	2.4	11.9	ND
Aluminum	5150	7380	5870	5430	10300	6270	8050	3780	3170	5460	4350	5930	5450	3740	4970	7200	4550	7180	1520	4540	4980	1980	1400	2800	5120	4550	3110	2970	5590
Arsenic	3.4	13	4.7	23.1	4.4	3.9	ND	194	3.0	78.0	145	4.6	2.9	99.5	122	7.6	5.5	11.9	2.4	105	6.4	10.8	7.5	7.6	25.3	ND	6.9	18.5	5.6
Barium	252	240	212	182	2450	197	516	500	244	1960	2180	219	201	5200	1560	250	191	242	57.9	2180	170	712	473	529	1050	148	241	414	198
Beryllium	ND	ND	ND	ND	ND	ND	44.1	1.9	ND	9.1	3.4	ND	ND	ND	25.2	ND	ND	1.6	ND	27.8	ND	3.1	2.5	2.9	36.0	ND	ND	ND	ND
Calcium	17700	3940	20100	8090	11700	15900	ND	5330	9130	14600	12600	15000	15700	12600	5260	22700	14500	21900	6270	7350	13500	9030	7270	17000	12100	12600	12700	12000	26200
Cadmium	ND	5.2	ND	4.9	ND	ND	393	47.0	ND	529	226	ND	ND	49.7	316	2.7	ND	7.3	ND	532	ND	52.5	49.4	135	470	ND	2.6	29.2	ND
Cobalt	ND	ND	15.7	15.3	38.4	ND	ND	ND	ND	ND	31.4	ND	ND	23.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23.0
Chromium	10.7	222	11.7	27.2	94.2	12.6	553	695	10.0	561	452	15.4	10.8	329	402	17.0	9.8	22.9	4.9	333	11.3	128	119	434	397	12.4	28.7	62.0	15.6
Copper	19.9	1130	117	3330	2100	103	77700	34800	298	42600	25900	151	48.1	15600	41300	338	41.4	722	28.4	17800	25.0	26000	16600	29400	91800	24.7	1160	3510	591
Iron	9990	13800	13800	16700	13100	12100	312000	68100	7310	118000	83100	12100	11800	78100	172000	19800	11200	21200	4240	254000	10600	52300	69900	45700	199000	11300	10100	12600	13500
Mercury	ND	ND	ND	3.1	3.3	ND	27	5.3	ND	17.7	2.3	ND	ND	28.7	12.8	0.16	ND	ND	ND	61.2	ND	124	93.0	8.2	16.3	ND	0.17	ND	ND
Potassium	ND	1870	1490	1090	ND	1420	ND	ND	ND	ND	ND	1220	1250	ND	ND	1720	ND	1630	ND	ND	1060	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	6700	2660	6690	4130	2500	7330	ND	ND	3840	ND	ND	6400	6580	2710	ND	5980	5180	5880	2100	ND	5350	1560	ND	1600	ND	4320	4220	2740	5160
Manganese	236	56.0	440	197	160	150	41.6	139	101	379	305	249	173	265	163	671	351	622	116	230	379	47.7	40.1	228	235	167	194	133	318
Sodium	ND	ND	ND	ND	4540	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1310	ND	ND	ND	ND	ND	ND	ND
Nickel	27.5	303	23	301	6940	133	1530	959	47.7	1420	2230	27.4	27.7	1220	1240	47.7	14.2	73.4	ND	1820	15.0	705	716	562	6410	47.7	95.2	317	56.3
Lead	10.8	72.0	12.9	278	718	7.6	32400	2380	29.7	15700	4160	30.2	13.6	1640	20800	88.5	10.6	250	ND	5860	9.5	3760	2910	10000	30400	12.9	145	749	24.0
Antimony	ND	ND	ND	ND	ND	ND	356	86.1	ND	98.0	46.0	ND	ND	22.6	175	ND	ND	ND	ND	136	ND	117	114	51.8	305	ND	ND	ND	ND
Selenium	ND	ND	1.3	1.0	0.60	2.5	38.9	28.8	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	10.9	5.3	8.8	41.6	ND	0.73	2.0	ND
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	16.5	21.0	19.4	17.0	33.5	19.4	ND	27.4	12.9	41.5	35.4	19.4	17.4	34.8	ND	25.0	15.9	24.8	ND	43.0	15.2	ND	ND	ND	ND	20.3	10.3	11.9	17.4
Zinc	82.5	1410	68.5	1200	655	333	26800	4020	172	21300	11500	209	69.6	6080	15000	167	47.9	337	28.1	13700	52.1	2290	2120	9300	26700	270	373	1510	237

Units: Mg/Kg
ppm

* No value found in natural soils

J0060144

Table 8

CS - A

Volatile Organic Analysis

SAMPLE I.D. :	A10	A11B	A11C	A12B	A12C	A13B	A14C	A15B	A15C	A16B	A16C	A21C	A22B	
DEPTH (ft) :	15-17	4-8	2-6.5	3-7	4-9	4.5-6	8.5-10	6-9	4.5-9	9-12	2-5	4-8	0-7	1
PARAMETERS														
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Bromomethane	ND	ND	ND	ND	ND	580 J	ND	ND	ND	ND	ND	ND	ND	
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Methylene Chloride	1600 B	1500 B	1700 B	25000 B	5400 B	4400 B	2500 B	2300 B	3800 B	20000 B	30000 B	5800 B	3100 B	21
Acetone	ND	1000 JB	690 JB	22600 JB	4500 JB	2400 JB	1300 JB	2300 B	6300 B	16000 B	23000 JB	4100 JB	2000 JB	24
Carbon Disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	1600	ND	6400 J	ND	200 J	
1,2-Dichloroethene (total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	15000	ND	ND	1400	
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1600 J	ND	
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Trichloroethene	740 J	ND	ND	ND	ND	ND	ND	ND	870 J	100000	14000 J	ND	690 J	2
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	440 J	2600 J	8800 J	ND	ND	
Trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Tetrachloroethene	ND	ND	ND	ND	ND	380 J	680 J	ND	ND	4600 J	11000 J	ND	ND	
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	330 J	ND	ND	ND	ND	
Toluene	ND	ND	170 J	ND	690 J	ND	ND	ND	ND	7200 J	ND	ND	ND	57
Chlorobenzene	650	240 J	530 J	5200 J	4600	2100	590 J	420 J	1100 J	31000	24000	6100	620 J	180
Ethylbenzene	1100	2900	ND	3600 J	ND	1400 J	ND	ND	1400 J	80000	50000	ND	560 J	330
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Xylene(total)	ND	360	3800	ND	ND	460 J	ND	ND	5200	500000	240000	ND	ND	
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Acrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	170 J	ND	ND	ND	ND	ND	ND	
Dichlorodifluoromethane	ND	ND	ND	ND	ND	6900	ND	ND	ND	ND	ND	ND	ND	
Acetonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Iodomethane	460 J	630 J	ND	ND	1700 J	1800 J	1300 J	1000 J	ND	ND	ND	3000 J	1000 J	
Propionitrile (Ethyl Cyanide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
3-Chloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

J006041

Table 8
(Cont.)

Volatile Organic Analysis

SAMPLE I.D. :	A10	A11B	A11C	A12B	A12C	A13B	A14C	A15B	A15C	A16B	A16C	A21C	A22B	A23
DEPTH (ft) :	15-17	4-8	2-6.5	3-7	4-9	4.5-6	8.5-10	6-9	4.5-9	9-12	2-5	4-8	0-7	19-2
PARAMETERS														
Methacrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isobutyl alcohol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachlorethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloro-1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

J006042

Table 9

CS - A

Semivolatile Organic Analysis

SAMPLE I.D. :	A10	A11B	A11C	A12B	A12C	A13B	A14C	A15B	A15C	A16B	A16C	A21C	A22B	A2
DEPTH (ft) :	15-17	4-8	2-6.5	3-7	4-9	4.5-6	8.5-10	6-8	4.5-9	9-12	2-5	4-8	0-7	19
PARAMETERS														
Phenol	ND	720 JB	ND	ND	ND	1300 J	ND	ND	ND	610000 B	21000 JB	ND	ND	38(
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI
1,3-Dichlorobenzene	ND	ND	ND	3200 JB	ND	5100	ND	120 J	4900 J	32000 J	23000 J	ND	ND	NI
1,4-Dichlorobenzene	210 J	ND	3600 J	58000	18000 J	39000	730	1100	64000	390000 B	260000 B	13000 J	34000 J	290(
Benzyl Alcohol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	82(
1,2-Dichlorobenzene	58 J	ND	840 J	6100 JB	ND	12000	210 J	1100	74000	650000 B	360000 B	ND	ND	61(
2-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	60(
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12(
N-Nitroso-Di-n-propylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	1600 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	550
Benzoic Acid	ND	ND	ND	ND	ND	ND	ND	BDL	ND	ND	ND	ND	ND	2800
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	8800	12000 J	31000 J	47000	ND	490	46000	160000 B	12000 JB	6000 J	ND	950
Naphthalene	130 J	ND	850 J	ND	ND	ND	ND	ND	ND	ND	5600 J	ND	ND	1500
4-Chloroaniline	140 J	17000	9400	13000 J	ND	ND	ND	ND	ND	ND	14000 J	ND	ND	730
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	600 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl methacrylate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyridine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl methacrylate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Picoline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosomethylethylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl methanesulfonate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiethylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl methanesulfonate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3600
Pentachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1200
N-Nitrosopyrrolidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetophenone	150 J	ND	1300 JB	ND	ND	24000	320 J	140 J	8100 J	ND	4300 JB	ND	ND	2900
N-Nitrosomorpholine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Toluidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrosopiperidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
a,a-Dimethylphenethylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

J006043

Table 9
(Cont.)

Semivolatile Organic Analysis

SAMPLE I.D. :	A10	A11B	A11C	A12B	A12C	A13B	A14C	A15B	A15C	A16B	A16C	A21C	A22B	A.
DEPTH (ft) :	15-17	4-8	2-6.5	3-7	4-9	4.5-6	8.5-10	6-9	4.5-9	9-12	2-5	4-8	0-7	1
PARAMETERS														
Hexachloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
p-Phenylenediamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
N-Nitroso-di-n-butylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Safrole	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
1,2,4,5-Tetrachlorobenzene	ND	ND	19000	3100 J	8000 J	28000	ND	140 J	10000 J	19000 J	ND	ND	ND	N
Isosafrole	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
1,4-Naphthoquinone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
1,3-Dinitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Pentachlorobenzene	ND	ND	13000	4400 J	18000 J	19000	260 J	380 J	28000	37000 J	ND	ND	ND	N
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
2-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Dimethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
3-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Dibenzofuran	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
4-Chlorophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Fluorene	ND	ND	ND	ND	ND	800 J	ND	ND	ND	ND	ND	ND	ND	N
4-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
N-Nitrosodiphenylamine (1)	110 J	ND	ND	ND	ND	ND	ND	49 J	2500 J	ND	4200 J	ND	ND	N
4-Bromophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Hexachlorobenzene	ND	ND	1700 J	ND	ND	ND	ND	59 J	4300 J	ND	ND	ND	ND	N
Pentachlorophenol	800 J	ND	ND	ND	ND	ND	ND	88 J	ND	ND	ND	ND	ND	N
Phenanthrene	66 J	ND	670 J	3000 J	ND	1800 J	ND	ND	1800 J	ND	5400 J	4900 J	14000 J	790
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Di-n-Butylphthalate	55 JB	1100 JB	1100 JB	ND	4400 J	ND	ND	56 J	ND	ND	ND	ND	ND	2900
Fluoranthene	ND	ND	540 J	3900 J	6700 J	1400 J	ND	ND	ND	ND	3600 J	8100 J	ND	N
Pyrene	ND	ND	540 J	4900 J	ND	1500 J	ND	ND	ND	ND	4200 J	8300 J	10000 J	N
Butylbenzylphthalate	ND	ND	ND	ND	ND	1100 J	ND	160 J	11000 J	70000 JB	100000 B	ND	ND	620
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5700 J	4800 J	ND	1000
bis(2-Ethylhexyl)phthalate	75 J	ND	ND	3400 J	8600 J	6200 B	190 JB	240 JB	11000 JB	26000 JB	ND	6700 J	ND	2000
Di-n-octyl phthalate	ND	ND	ND	ND	3800 J	ND	ND	ND	ND	ND	18000 JB	7300 J	ND	N
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N

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Table 9
(Cont.)

Semivolatile Organic Analysis

SAMPLE I.D. :	A10	A11B	A11C	A12B	A12C	A13B	A14C	A15B	A15C	A16B	A16C	A21C	A22B	A23A
DEPTH (ft) :	15-17	4-8	2-6.5	3-7	4-9	4.5-6	8.5-10	6-9	4.5-9	9-12	2-5	4-8	0-7	19-2
PARAMETERS														
1,4-Dioxane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Naphthylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Naphthylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	10000 J	ND	ND	ND	ND
1,3,5-Trinitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diallate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenacetin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diphenylamine	110 J	ND	ND	ND	ND	ND	ND	42 J	2500 J	ND	4200 J	ND	ND	ND
5-Nitro-o-toluidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Aminobiphenyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pronamide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-sec-Butyl-4,6-dinityophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachloronitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroquinoline-1-oxide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methapyrilene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aramite	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzilate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylaminoazobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dimethylbenzidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Aacetylaminofluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7,12-Dimethylbenzidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorophene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Methylcholanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

** Units: Ug/Kg **

J006045

Table 10

CS - A

Characteristics of Hazardous Waste

Sample I.D.		Date	Ash (%)	Solids (%)	Alkalinity (%)	Cyanide Reactive (mg/kg)	Cyanide Total (mg/kg)	Flash Point (deg F)	pH	Sulfide (mg/kg)	Sulfide Reactive (mg/kg)	Total PCBs	Observed Creek Sediment
A10	6-7	08/22		85.9								0	
A10	9-10	08/22		64.4								0	
A10	15-17	08/22	96.8	76.3	0.87	ND	ND	>200	7.9	ND	ND	.48	
A10	20-22	08/22		70.6								1.4	
A10	24-29	08/22		79.2								14.3	
A10	37-38	08/22		81.0								3.88	
A11A	8-13	07/19		71.9								0	
A11A	13-18	07/19		65.8								0	
A11B	4-8	07/18	96.8	72.6	0.12	ND	ND	>200	7.7	86.0	ND	.53	
A11B	8.1-10.6	07/18		57.3								.21	
A11B	12-17	07/18		76.9								.92	
A11C	2-6.5	07/18	99.7	72.6	ND	ND	ND	>200	7.6	ND	ND	55	
A11C	6.5-10.5	07/18		78.0								13	
A11C	12.5-16.5	07/18		83.7								1.3	
A11D	8-10	07/18	80.8	72.9	0.13	ND	2.5	>200	8.8	ND	ND	0	
A11D	18.5-23.5	07/18	98.5	82.2	0.13	ND	ND	>200	8.0	ND	ND	38	
A12A	8-11	07/19		74.2								0	
A12A	11-20.5	07/19		79.4								.067	
A12B	3-7	08/22	89.0	12.2	6.3	ND	1.6	>200	6.9	ND	ND	32	*
A12B	9-12	08/22		75.3								13.83	
A12B	14-17	08/22		80.6								0	
A12B	17-19	08/22		78.6								.27	
A12C	4-9	07/12	91.7	55.8	1.0	ND	ND	>200	6.2	ND	ND	0	*
A12C	10-13	07/12		78.5								0	
A12C	14-16	07/12		82.8								0	
A12D	6-13	07/18		76.2								530	
A12D	17-20	07/18	98.6	74.1	0.17	ND	ND	>200	7.9	ND	ND	101	
A12D	20-25	07/18		81.3								15.8	
A13A	9-14	07/20										0	
A13A	14-19	07/20										0	
A13A	19-20.5	07/20										0	
A13B	4.5-6	07/11	86.1	32.9	2.2	ND	5.8	>180	6.6	ND	ND	440	*
A13B	6-9.5	07/11		74.9								50	
A13B	9.5-12	07/11		81.6								2.25	
A13C	4-8.5	07/12	91.3	41.0	1.5	ND	ND	98	6.2	ND	ND	910	*
A13C	6-13	07/12		77.5								25.5	
A13C	13-16	07/12		83.1								0	
A13D	18-23	07/19	99.2	76.0	0.14	ND	ND	>200	7.7	ND	ND	1.3	
A14A	4-9	07/20										.099	
A14A	13.5-23.5	07/20										.062	
A14A	23.5-28.5	07/20										0	
A14B	4-8.5	07/11	94.3	59.9	1.1	ND	ND	>200	6.6	ND	ND	114	*
A14B	8.5-13	07/11		84.1								6.3	
A14C	4-8.5	07/11	87.2	23.1	2.7	ND	2.9	>180	6.0	ND	ND	540	*
A14C	8.5-10.5	07/11		59.1								2.22	
A14C	13.5-16.5	07/11		84.0								6.2	
A14D	10-14	07/12	95.8	79.9	0.68	ND	ND	>200	8.0	ND	ND	0	
A14D	15-19	07/12		77.1								0	
A14D	24-29	07/12		84.5								0	

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Table 10
(Cont.)

Characteristics of Hazardous Waste

Sample I.D.		Date	Ash (%)	Solids (%)	Alkalinity (%)	Cyanide Reactive (mg/kg)	Cyanide Total (mg/kg)	Flash Point (deg F)	pH	Sulfide (mg/kg)	Sulfide Reactive (mg/kg)	Total PCBs	Obser. Creek Sedim.
A15A	9-14	07/20										0	
A15A	14-19	07/20										0	
A15A	19-24	07/20										0	
A15B	6-9	07/07	95.1	59.0	1.1	ND	ND	>200	7.9	ND	ND	3.7	
A15B	13-16	07/07		83.8								9	
A15B	16-19	07/07		79.6								0	
A15C	4.5-9	07/10	85.4	26.0	0.97	ND	1.8	>200	7.4	ND	ND	980	*
A15C	9.5-14.5	07/10		79.9								1.66	
A15C	14.5-17.5	07/10		82.3								17.3	
A15D	4-9	07/12	96.6	83.0	0.64	ND	ND	>200	8.5	ND	ND	0	
A15D	12-14	07/12		85.9								0	
A15D	19-24	07/12		81.2								0	
A15D	24-29	07/12		75.0								0	
A16A	9-14	07/20										0	
A16A	14-19	07/20										2.96	
A16A	24-29	07/20										0	
A16B	9-12	07/18	75.3	23.5	0.56	ND	19.2	>200	6.8	ND	ND	1600	*
A16B	14-19	07/18		74.7								5.4	
A16C	2-5	07/18	84.6	20.2	0.14	ND	5.8	>200	6.8	ND	ND	0	*
A16C	7-12	07/18		69.2								13	
A16C	12-17	07/18		79.7								1.55	
A16D	13-18	07/20										0	
A16D	18-23	07/20										.09	
A16D	23-31	07/20										0	
A16E	13-18	07/20										.81	
A16E	18-23	07/20										1.99	
A16E	25.5-28	07/20										.95	
A21B	1-6	08/22	80.6	40.3	2.1	ND	6.0	>200	7.0	1.7	ND	27	*
A21B	6-10	08/22		54.4								.2	
A21B	10-13	08/22		79.4								0	
A21C	4-8	07/14	87.7	23.2	4.2	ND	5.0	>200	7.2	ND	ND	30	*
A21C	8-11	07/14		72.9								0	
A21C	13-14.5	07/14		85.8								0	
A21D	4-9	07/10		82.8								.09	
A21D	9-14	07/10		78.1								.15	
A21D	14-19	07/10		69.6								0	
A22A	9-14	07/11		71.4								0	
A22A	19-22	07/11		79.4								0	
A22A	24-28	07/11		77.4								0	
A22B	0-7	08/22	97.4	72.9	0.88	ND	ND	>200	7.8	ND	ND	120	*
A22B	7-13	08/22		77.2								0	
A22C	3-9	08/22	94.9	70.4	1.1	ND	ND	>200	7.9	41.7	6.6	19	*
A22C	10-15	08/22		79.8								0	
A22D	4-9	07/11		80.7								12	
A22D	9-14	07/11		74.1								0	
A22D	24-27	07/11		84.8								0	
A23A	12-13	07/14		87.6								3.99	
A23A	13-19	07/14		74.0								6.9	
A23A	19-20	07/14	94.7	66.1	1.3	ND	ND	>200	8.6	9.4	ND	150	
A23A	21-23	07/14		83.8								1.6	

J006047

Table 12

CS - A

PCB Concentrations

SAMPLE IDENTIFICATION	PCB	CONCENTRATION(PPM)
A10B 24 - 29	AROCLOR 1221	10
A11B 4 - 8	AROCLOR 1254	.53
A11C 2 - 6.5	AROCLOR 1232	45
A12B 3 - 7	AROCLOR 1232	32
A12C (ALL)	AROCLOR (ALL)	ND
A13B 4.5 - 6	AROCLOR 1232	340
A13C 4 - 8.5	AROCLOR 1221	780
A14B 4 - 8.5	AROCLOR 1221	100
A14C 4 - 8.5	AROCLOR 1254	350
A14D (ALL)	AROCLOR (ALL)	ND
A15B 13 - 16	AROCLOR 1232	7.2
A15C 4.5 - 9	AROCLOR 1232	300
A15D (ALL)	AROCLOR (ALL)	ND
A16B 9 - 12	AROCLOR 1232	1600
A16C 2 - 5	AROCLOR (ALL)	ND
A21C 4 - 8	AROCLOR 1260	30
A21D (ALL)	AROCLOR (ALL)	ND
A22A (ALL)	AROCLOR (ALL)	ND
A22B 0 - 7	AROCLOR 1248	120
A22D 4 - 9	AROCLOR 1260	12
A23B 19 - 20	AROCLOR 1248	150

J006051

TABLE 13
CS - A
Biphenyl Concentrations

SAMPLE IDENTIFICATION	CONCENTRATION(mg/kg)	
A11B 4 - 8	6.6	J
A11C 2 - 6.5	5.2	J
A12B 9 - 12	0.08	J
A16B 9 - 12	8.3	J
A16C 2 - 5	24.0	J
A21B 1 - 6	0.1	J
A22B 0 - 7	0.3	J
A22C 3 - 9	0.3	J
A23C 21 - 23	2.9	J

» 'J' Indicates an estimated value for or an analyte that meets the identification criteria but the result is less than the specified detection limit.

J006055

Appendix 7

Ethyl Corporation
Soil and/or Groundwater Data

Ethyl Petroleum Additives Screening Site Inspection (SSI) Report
5/17/90 Soil Sample Results ug/kg

	S1	S2	S3	S4
acetone			81J	33J
xylenes				4J
di-n-butylphthalate				69J
fluoranthene		520J		92J
pyrene		580J		120J
benzo(a)anthracene		300J		84J
chrysene		480J		130J
benzo(a)fluoranthene		470J		170J
benzo(k)fluoranthene		520J		150J
benzo(a)pyrene		290J		
indeno(1,2,3-cd) pyrene		470J		120J
benzo(g,h,i)perylene		510J		140J
delta BHC				42J
Heptachlor epoxide				380J
4,4'-DDE		130		400J
4,4'-DDD		430		220J
4,4'-DDT		1,700	190J	1,500J
alpha Chlordane		26J		
Aroclor 1248				5,300J
benzenamine, 2,4,6-truchloro		2,300J		890J
tricosane		2,600J		
octadecane			20,000J	
mitotane				490J
aluminum	14,000	9,770	1,710	4,500
antimony		10.1B		
arsenic	7.5N	30.4JN	5.3JN	13.4JN
barium	193	294	156	154
beryllium	.62B	.35B		
cadmium		76.4	54.8	25.9
calcium	7,050	81,800	184,000	96,100
chromium	17	25.9	19.8	8.9
cobalt	15.9	11.6B	4.2B	5B
copper	31.6JE	321JE	68.7JE	90.1JE
iron	22,600	15,600	3,670	8,090
lead	28.9	480	152	149
magnesium	5,290	14,300	10,300	10,100
manganese	748JN	494JN	117JN	237JN
mercury		.62	.12	.20
nickel	25.2	32.3	8.2B	15.9
potassium	2,510	2,050	522B	823B
selenium		1.9J+	.55B	.85J+B
silver	.83JNB	6.4JN	3.7JN	3.3JN
sodium	104B	204B	491B	186B
vanadium	29.9	26.9	9.4B	13,2
zinc	125JE	6,920JE	4,330JE	2,240JE

Compound Qualifier
J = estimated value

Analyte Qualifiers
E = estimated or not reported due to interference
N = matrix problem
+ = may be biased
B = value real but above instrument DL and below CRDL
J = value above CRDL and is estimated value because of QC protocol

Ethyl Petroleum Additives Screening Site Inspection (SSI) Report
5/17/90 Soil Sample Results ug/kg

	E-01	E-02	E-03	E-04	E-05
PCDD			44.9	101.8	123.5
2,3,7,8 TCCD	502.1J	78.3J	4,884.5J	116.9J	
TCCD	502.1J	459.2J	5,170.4J	224.5J	87.8J
HxCDD	219.1J	123.7J	145.5J	322.7J	24.1J
HpCDD	1,486J	1,145J	707J	1,652J	154J
OCDD	8,409J	6,919J	3,914J	11,861J	949J
2,3,7,8 TCDF	32J	477.7J	147.6J	162J	7.3J
TCDF	68.9J	667.5J	315.8J	270.6J	7.3J
PCDF	206.4	638.6J	429.3	127.3	
HxCDF	299.5J	132.5J	70.6J	367.5J	20.4J
HpCDF	667J	464J	290J	945J	83J
OCDF	1,137	539J	344	1,453	115

Compound Qualifier
J = estimated value

(5/23/91 Screening Site Inspection (SSI) Report)

Appendix 8

Mobil
Soil and/or Groundwater Data

SOCONY MO OIL COMPANY, INC.

East St. Louis Refinery

No.	Location	Date Drilled	Date Retired	Diam.	Depth	Screen Diam.	Screen Length	Screen Slot No.	Screen Material	Refer. Elev.	Installed Pump GPM	Test Rate GPM	Remarks
1													Abandoned
2				10						415.42			Abandoned
3		1937		16	113	16	21						Abandoned
4		1937	1942	16	113	16	21'7"	40	Brass	411.12			Abandoned
5		1939	1950	16	115	16	21'8 1/2"	40	Brass	411.12	-	-	Abandoned
6		1940	1953	16	115	16	30	50-40 70-90	Everdur	411.12	-	-	Abandoned (Static Level taken in 1940)
7		1942	1944	16 16	102	16	30	12-24 50	-	411.12	-	-	Abandoned
8		1955	-	16	95	16	31'5"	40	Brass	411.12	750	450	Old Well #8 was redrille & gravel packed by Watson 7/7/55
9		1943	1956	16	116	16	27'7"	-	-	411.12	750	196	Abandoned (Pumping dat taken 1956)
10		1944	-	16	95	16	31'6"	40	Everdur	411.12	750	230	Watson (Screen from Old #7 Well
11		1946	-	16	103	16	30	-	[illegible]	411.12	750	102	Watson
12		1949	-		107		47		Por. con.	410.0	750	200	Thorpe (Wells 12 & 13 pumped oil after comple tion & upper sections of screen were sealed off)
13		1952	-	30	106	30	46		Por. con.	411.12	750	570	Thorpe (Wells 12 & 13 pumped oil after comple tion & upper sections of screen were sealed off)
14		1953	-	30	115	30	55		Por. con.	411.12	750	413	Thorpe
15		1955	-	16	112	16	38'4"	50	Everdur	411.12	750	550	Watson (Gravel packed)
16		1956	-	16	114'9"	16	38'2"	1/4"	Wood	411.12	750	550	Luhr (Gravel packed)

WELL NO.	DATE DRILLED	DATE RETIRED	DIAM.	DEPTH	DIAM.	LENGTH	SLOT NO.	MATL.	REFR. ELEV.	NOV. 19 NON-PUM. LEVEL	ORIGINAL NON-PUM. LEVEL	PUMP RATE G.P.M.	NOV. 19 MEAS. RATE G.P.M.	NOV. 19 DRAWD. OBSERV.	NOV. 19 SP. CAP.	NOV. 19 TOTAL HARDNESS PPM	NOV. 19 ALKALINITY M.O. PPM	NOV. 19 T.D. PPM	PROBLEMS, ADDL. CONST. DETAILS, ETC. SUCH AS INSTALLED AIRLINE, ACCESS PLATE FOR TAPE LINE ETC.
1																			ABANDONED
2			10"						415.42										ABANDONED
3	1937		16"	113'	16"	21'													ABANDONED
4	1937	1942	16"	113'	16"	21'7"	40	BRASS	411.12'		24'								ABANDONED
5	1939	1950	16"	115'	16"	21'8½"	40	BRASS	411.12'		23'8"	—	—	—	—				ABANDONED
6	1940	1953	16"	115'	16"	30'	50-40 10-50	EVERDUR	411.12'		28'6"	—	—	—	—				ABANDONED (STATIC LEVEL TAKEN IN 1940)
7	1942	1944	16"	102'	16"	30'	n-24-50	—	411.12'		—	—	—	—	—				ABANDONED
8	1955	1957	16"	95'	16"	31'5"	40	BRASS	411.12'	45	42'	750	450	11.1	40.4	580	278	637	OLD WELL No 8 WAS REDRILLED AND GRAVEL PACKED BY WATSON 1/7/55 ABANDONED 1957
9	1943	1956	16"	116'	16"	27'7"	—	—	411.12'	49	26'9	750	196	14.5	13.2	555	298	794	ABANDONED (PUMPING DATA TAKEN 1956)
10	1944	—	16"	95'	16"	31'6"	40	EVERDUR	411.12'	46	27'	750	230	21	11	650	318	1111	WATSON (SCREEN FROM OLD #7 WELL)
11	1946	—	16"	103'	16"	30'	—	—	411.12'	47	30'	750	102	9.4	10.9	590	254	1057	WATSON
12	1949	—		107'		47'	POROUS	CONCR	410.0	44.5	30'	750	200	17	11.8	410	330	535	THORPE ①
13	1952	—	30"ID	106'	30"ID	46'	POROUS	CONCR	411.12'	48.5	41'	750	570	17.2	33	490	352	688	THORPE ①
14	1953	—	30"ID	115'	30"ID	55'	POROUS	CONCR	411.12'	45	42'	750	413	15.4	26.6	520	294	811	THORPE
15	1955	1957	16"	112'	16"	38'4"	50	EVERDUR	411.12'	47	42'	750	550	18	31	560	350	821	WATSON (GRAVEL PACKED) ABANDONED 1957
16	1956	—	16"	114'3"	16"	38'2"	¼"x3"	WOOD	411.12'	47	49'7"	750	550	8.5	66	510	304	767	LUHR (GRAVEL PACKED)
17	1957	—	16"	109'	16"	30.65	¼"x3"	WOOD	411.12'		50'	750	TESTED AT 1	650 GPM	SP CAP 65.6			4/14/57	" " "
18	1957	1959	16"	112'6"	16"	30.75	¼"x3"	WOOD	411.12'		53.2'	750	TESTED AT 1	500 GPM	SP CAP 48.5			4/11/57	" " "
19	1959	—	16"	114'6"	16"	36'8"	80	EVERDUR	411.12'	43	—	750	TESTED AT 1450 G.P.M., SP. CAP 93.5					10/9/59	" " "
20	1961	—	24"	107'	24"	35'	60%100	"	"	35	35		"	2500		112			" " "

NOTE: FOR WELL DATA AS OF 6-1-58 SEE TECH. REPORT 58.258TM

ELM No 20

NOTES:

- FOR WATER WELL LOCATION SEE DWG. C-492
- WATER LEVELS TAKEN INSIDE OF WELL CASING BY PRESSURE METHOD USING AIR LINES.
- RECENT MAX. PUMPING RATES FOR EACH WELL (NOT MAX. CAPACITY) MONTH OF SEPT. 1956. AVERAGE TOTAL PUMPING RATE WAS 1720 G.P.M. FROM ALL WELLS
- ① WELLS 12 & 13 PUMPED OIL AFTER COMPLETION & UPPER SECTIONS OF SCREEN WERE SEALED OFF

114
36
11.8
11.4

CODE: 445.958
445.970

SOCONY MOBIL OIL CO., INC. EAST ST. LOUIS REFINERY				WATER WELL SURVEY DATA REFINERY WATER WELLS
CERTIFIED FOR CONSTRUCTION HFK DATE 11/19/56				
DWG. BY: W.L.	APP. BY:	DATE: 11/19/56	SCALE: NONE	DWG. NO. B-1014 REISSUE II 9/13/60

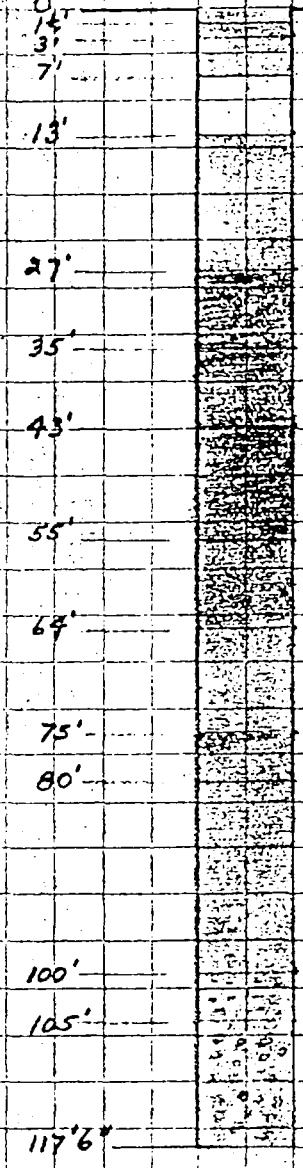
SERVICE BLUE PRINT CO., ST. LOUIS, MO

SKETCH SHEET

SOCONY-VACUUM OIL CO.
EAST ST. LOUIS REFINERY

REFERENCE
PAGE 1
DATE 10-2-52
BY W.F.P.

SUBJECT LAYNE-WESTERN TEST
WELL 4



0'	CINDERS + DIRT FILL
1½'	CLAY FILL
3'	BLACK GUMMY OIL CINDERS + SAND
7'	BLUE + BROWN CLAY OIL SHOWING
13'	
27'	BLUE CLAY
35'	MED FINE GRAY SAND, CLAY SHOWING
43'	GRAY SAND, SOME GRAVEL
55'	FINE GRAY SAND, BLUE CLAY
64'	FINE GRAY SAND
75'	MED. TO COARSE SAND + GRAVEL
80'	MED. COARSE GRAVEL
100'	COARSE SAND + GRAVEL
105'	MED COARSE SAND + GRAVEL, TRACE OF BLU CLAY
117'6"	COARSE SAND, GRAVEL + BOULDERS

LOCATION - 10' WEST OF SAFETY SIGN BOARD
DEPTH OF WELL - 117'6"
STATIC WATER LEVEL - 38'8"
DIAMETER OF HOLE - 4 5/8"
TYPE - ROTARY DRILLING WITH WATER

SKETCH SHEET

SOCONY-VACUUM OIL CO.
EAST ST. LOUIS REFINERY

SUBJECT LABORATORY ANALYSIS OF WATER FROM L. W. TEST WELL TEST WELL #4

REFERENCE
PAGE 2
DATE 10-2-52
BY W. F. P.

-774 A

	110' DEPTH	90' DEPTH
FE.	6.4	6.4
PH	7.1	7.3
ALK	322.0	328.0
MG.	145.0	111.0
CA	385.0	319.0
TOTAL HARDNESS	530.0 PPM	430.0 PPM

SAFETY DEPT. FOUND HOLE TO BE EXPLOSIVE AT DEPTH OF 20'

MUD LOSS IN DRILLING WELL

45' - 50'	-	1½"
50' - 55'	-	2"
55' - 60'	-	3"
60' - 65'	-	4"
65' - 70'	-	4"
70' - 75'	-	2"
75' - 80'	-	4"
80' - 85'	-	4"
85' - 90'	-	3"
90' - 95'	-	4"
95' - 100'	-	4"
100' - 105'	-	4"
105' - 110'	-	4"
110' - 117'	-	8"

(AREA OF PIT 2½' X 5' APPROX. 5 BAGS OF BENTONITE USED)

Mobil Oil 1981 Groundwater Analyses mg/l

	Well 3	Well 5	Well 10	Well 17
Bicarbonate	603.24	501.66	508.57	767.53
Carbonate	.34	.47	.64	.56
Chloride	6.20	9.90	19.00	8.40
Floride	1.00	1.30	1.90	.82
Hydroxide	0.00	0.00	0.00	0.00
Nitrate	0.00	28.35	.75	1.11
Phosphate	.46	.34	.34	.37
Sulfate	127.00	255.00	87.00	105.00
Silicate	.04	.06	.09	.05
Ammonia nitrogen as N	<.005	<.005	108.4	<.005
C.O.D.	137	73	214	84
Sulfide	.64	.48	.24	.32
Phenol	.004	.01	.07	.02
total dissolved solids	1,042	1,127	848	1,184
Alkalinity as CaCO3	495	412	418	630
Hardness as CaCO3	682	646	450	685
pH	6.70	6.90	7.10	6.80
Conductivity	1,143	1,125	873	1,197
Calcium	176	173	93	220
Iron	14.6	1.18	.92	2.4
Magnesium	59	52	53	33
Manganese	3.2	.10	.16	3
Potassium	5.9	6.2	6.2	6.3
Sodium	19	71	58	18
Arsenic	.03	<0.01	<0.01	<0.01
Barium	.32	.16	<0.01	.16
Cadmium	<0.01	<0.01	<0.01	<0.01
Chromium, total	<0.05	<0.05	<0.05	<0.05
Chromium, hexavalent	<0.01	<0.01	<0.01	<0.01
Lead	<0.01	<0.01	<0.01	<0.01
Mercury	<0.0005	<0.0005	<0.0005	<0.0005
Selenium	<0.01	<0.01	<0.01	<0.01
Silver	<0.01	<0.01	<0.01	<0.01
Vanadium	<0.5	<0.5	<0.5	<0.5
Benzene			.012	
Ethylbenzene			<.001	
Methylene Chloride			.011	
Tetrachloroethylene			<.001	
Toluene			.004	
1,1,1-Trichloroethane			.007	
Phenol			.001	
Anthracene/phenanthrene			.031	
Benzo(a)anthracene/Chrysene			.005	
3,4-Benzofluoranthene			.001	
2-Chloronaphthalene			.003	
Di-n-butyl phthalate			.001	
2,4-dinitrotoluene			.002	
Di-n-octyl phthalate			ND	
Fluoranthene			.002	
Fluorene			.014	
Naphthalene			.008	
Pyrene			.007	

TABLE 1

DEPTH AND WATER LEVELS IN TEMPORARY WELLS
MOBIL OIL TERMINAL, SAUGET, ILLINOIS

Well Designation	Depth of Well * (feet)	Depth to Water * (feet)
1	9.6	8.2
2	10.0	9.0
3	10.0	7.5
4	4.6	dry
5	10.2	8.7
6	10.0	dry
7	could not be located	
8	10.0	dry
9	could not be located	
10	10.0	5.3
11	10.0	3.5
12	10.0	9.5
13	10.0	dry
14	could not be located	
15	10.0	dry
16	10.0	5.6
17	10.0	8.5
18	9.6	5.9
19	10.0	9.9
20	10.0	dry
21	7.8	3.4

* Depth measured from top of pvc well casing. Average casing extends approximately 8 to 12 inches above grade.

Mobil Oil 1981 Soil Analyses ppm

	B-2	B-2	B-6	B-6	B-8	B-8
Oil & Grease	240	33,000	490	ND	4.4	19,000
Vanadium	40	29	34	35	30	29
Arsenic	4.6	8.8	5.0	4.2	1.6	5.4
Barium	180	115	220	300	230	180
Cadmium	.06	.43	.76	.26	.25	.13
Chromium	20	17	19	22	21	14
Lead	160	19	25	11	9.4	14
Mercury	.083	.017	.038	.020	.022	.016
Selenium	.42	.078	.43	.25	.15	.11
Silver	.08	.036	.038	.056	.058	.055

	B-11	B-11	B-12	B-12	B-14	B-14
Oil & Grease	21,000	2,700	7,000	1,000	2,000	59
Vanadium	33	23	34	32	30	20
Arsenic	4.0	4.0	4.3	3.3	6.3	3.3
Barium	120	62	205	180	165	135
Cadmium	1.7	.17	.95	.13	.37	.18
Chromium	26	8.7	33	19	18	14
Lead	130	4.0	140	7.5	25	7.3
Mercury	.38	.058	NR	.014	.039	ND
Selenium	.32	.46	.76	.33	.21	.09
Silver	.15	.62	.15	.06	.096	.037

Mobil Oil 11/3/94 & 11/16/94 Tank Excavation
Soil Sample Results range ppm

	Tank 1 Tank Farm	Tank 2 Tank Farm	Tank 3 Tank Farm	Tank 4 Tank Farm	Tank 5 Terminal	Tank 6 Terminal
Benzene	ND - .29	.39 - 130	ND - .62	.089 - 22	2.4 - 17	.14 - 10
Toluene	ND - .32	1.8 - 27	.012- .02	.052 - 23	.25 - 5.7	.14 - 2.2
Ethylbenzene	ND - .7	.73 - 70	ND - .15	.11 - 17	5.4 - 63	.73 - 9.1
Xylenes	ND - .86	1.8 - 160	ND - .42	.35 - 46	4.9 - 81	.32 - 34
Naphthalene	ND	ND - 5			1.4 - 9.1	ND - 3.1
Acenaphthylene	ND	ND - .6			ND	ND
Acenaphthene	ND	ND - .42			ND	ND
Fluorene	ND - .4	ND			.26 - 1.3	.26 - 1.3
Phenanthrene	ND	ND - .35			1 - 3.8	1 - 3.8
Anthracene	ND	ND - .46			ND - .78	ND - .78
Fluoranthene	ND	ND - .68			1.4 - 5.1	1.4 - 5.1
Pyrene	ND	ND - .6			1.4 - 4.8	1.4 - 4.5
Benzo(a)anthracene	ND	ND - .47			.49 - 4.8	1.9 - 4.8
Chrysene	ND	ND				ND - .17
Benzo(b)fluoranthene	ND	ND				.026-.051
Benzo(k)fluoranthene	ND	ND				ND - .026
Benzo(a)pyrene	ND	ND				ND
Dibenzo(a,h)anthracene	ND	ND				ND
Benzo(ghi)perylene	ND	ND				ND
Indeno(1,2,3-cd)pyrene	ND	ND				ND

Appendix 9

Rivers Edge Landfill
Soil and/or Groundwater Data

Table 5-8. Summary of Target Compound List Volatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location:	SB-1	SB-1	SB-1	SB-2	SB-2	SB-2
	Sample Depth:	12-14 ft	26-28 ft	32-34 ft	12-14 ft	14-16 ft	28-30 ft
	Sample Date:	4/9/92	4/9/92	4/9/92	4/10/92	4/10/92	4/13/92
	Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Methylene chloride		–	–	–	–	250 J	–
Acetone		–	9800	11000	81000	5300 J	9000 J
1,1-Dichloroethene		–	–	–	–	–	–
1,2-Dichloroethene (total)		–	–	–	–	–	–
Chloroform		–	–	–	–	670 J	–
1,2-Dichloroethane		220000	–	–	–	–	–
2-Butanone (MEK)		–	–	–	–	–	–
1,1,1-Trichloroethane		–	–	–	–	–	–
Bromodichloroethane		–	–	–	–	–	–
Trichloroethene		–	–	–	–	–	–
Dibromochloroethane		–	–	–	–	–	–
Benzene		210000	1400 J	1700	26000 J	200000 D	3900 J
4-Methyl-2-pentanone		–	–	–	–	–	–
Tetrachloroethene		3700 J	–	–	–	1800 J	–
Toluene		16000 J	880 J	1100 J	38000 J	74000 J	830 J
Chlorobenzene		890000	18000	9200	650000	2400000 D	33000
Ethylbenzene		43000 J	760 J	750 J	–	680 J	–
Xylenes		110000	2200 J	1500 J	–	2600 J	350 J
Total VOCs		1492700	33040	25250	795000	2685300	47080

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
–	Not detected.
E	Concentration is above the calibration range of the instrument.
J	Estimated value.
B	Compound detected in blank.
D	Concentration determined at a secondary dilution factor.
VOCs	Volatile organic compounds.

Only those compounds detected are listed.

Table 5-8. Summary of Target Compound List Volatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location:	SB-3	SB-3	SB-3	SB-4	SB-4	SB-4
	Sample Depth:	12 - 14 ft	14 - 16 ft	32 - 24 ft	10-12 ft	12-14 ft	30-32 ft
	Sample Date:	4/16/92	4/16/92	4/16/92	4/14/92	4/14/92	4/14/92
	Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Methylene chloride		–	–	–	–	–	–
Acetone		500000	320000	–	17000	2500	34000 J
1,1-Dichloroethene		–	–	–	–	–	–
1,2-Dichloroethene (total)		–	–	–	–	–	–
Chloroform		–	–	–	–	150 J	–
1,2-Dichloroethane		–	–	–	–	–	–
2-Butanone (MEK)		–	–	–	–	2400	–
1,1,1-Trichloroethane		–	–	–	–	190 J	–
Bromodichloroethane		–	–	–	–	–	–
Trichloroethene		–	–	–	–	–	–
Dibromochloroethane		–	–	–	–	–	–
Benzene		–	–	6300 J	–	7700	31000 J
4-Methyl-2-pentanone		–	–	–	–	–	–
Tetrachloroethene		90000	6600 J	2600 J	660 J	–	–
Toluene		450000	160000	14000 J	43000	24000	110000
Chlorobenzene		420000	160000	120000	29000	14000	350000
Ethylbenzene		970000	63000	–	3800 J	6800	38000 J
Xylenes		1500000	100000	9200 J	25000	43000 J	160000
Total VOCs		3930000	809600	152100	118460	100740	723000

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
–	Not detected.
E	Concentration is above the calibration range of the instrument.
J	Estimated value.
B	Compound detected in blank.
D	Concentration determined at a secondary dilution factor.
VOCs	Volatile organic compounds.

Only those compounds detected are listed.

Table 5-8. Summary of Target Compound List Volatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	SB-7	SB-7	SB-7	SB-8	SB-9	SB-9
Sample Depth:	16-18 ft	20-22 ft	24-26 ft	6-8 ft	18-20 ft	20-22 ft
Sample Date:	5/7/92	5/7/92	5/7/92	5/8/92	5/13/92	5/13/92
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Parameter						
Methylene chloride	–	–	–	–	–	–
Acetone	–	–	–	–	–	150000 EJ
1,1-Dichloroethene	–	–	–	–	–	–
1,2-Dichloroethene (total)	–	–	–	–	–	–
Chloroform	5400 J	–	–	–	–	–
1,2-Dichloroethane	–	–	–	3000 J	–	–
2-Butanone (MEK)	–	–	–	–	8600 J	8600
1,1,1-Trichloroethane	–	–	–	–	–	–
Bromodichloroethane	–	–	–	–	–	–
Trichloroethene	–	–	–	2000 J	–	–
Dibromochloroethane	–	–	–	–	–	–
Benzene	3900 J	–	2900 J	20000	1600 J	–
4-Methyl-2-pentanone	77000 J	22000 J	67000 J	–	–	–
Tetrachloroethene	–	–	–	–	8300	–
Toluene	3200 J	14000 J	22000	5900 J	–	–
Chlorobenzene	190000 J	100000	110000	5500 J	6000 J	12000
Ethylbenzene	–	–	–	–	7600 J	1700 J
Xylenes	–	–	–	3900 J	26000 J	9200
Total VOCs	279500	136000	201900	40300	58100	181500

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
–	Not detected.
E	Concentration is above the calibration range of the instrument.
J	Estimated value.
B	Compound detected in blank.
D	Concentration determined at a secondary dilution factor.
VOCs	Volatile organic compounds.

Only those compounds detected are listed.

Table 5-8. Summary of Target Compound List Volatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location:	SB-9	SB-9	SB-10	SB-10	SB-10	SB-11
	Sample Depth:	28-30 ft	30-32 ft	6-8 ft	18-20 ft	24-26 ft	14-16 ft
	Sample Date:	5/13/92	5/13/92	5/14/92	5/14/92	5/14/92	5/19/92
	Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Methylene chloride		1400 J	13000 J	27000 J	–	1100 J	–
Acetone		–	–	–	–	19000 J	8000
1,1-Dichloroethene		–	–	–	–	–	–
1,2-Dichloroethene (total)		–	–	59000 J	–	–	–
Chloroform		–	–	38000 J	–	–	–
1,2-Dichloroethane		–	–	130000 J	–	3200 J	–
2-Butanone (MEK)		10000 J	–	–	–	10000 J	–
1,1,1-Trichloroethane		–	–	–	–	–	–
Bromodichloroethane		–	–	–	–	–	–
Trichloroethene		–	–	750000	480000	33000 J	–
Dibromochloroethane		–	–	–	–	–	–
Benzene		6400 J	47000 J	97000 J	30000 J	1500 J	–
4-Methyl-2-pentanone		29000 J	110000 J	–	–	–	–
Tetrachloroethene		7500 J	37000 J	–	–	–	–
Toluene		–	240000	3800000	1200000	60000 J	1800
Chlorobenzene		110000	620000	370000	180000	17000 J	220 J
Ethylbenzene		6000 J	28000 J	–	–	–	–
Xylenes		39000	180000	100000 J	50000 J	3500 J	–
Total VOCs		209300	1275000	5371000	1940000	148300	10020

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
–	Not detected.
E	Concentration is above the calibration range of the instrument.
J	Estimated value.
B	Compound detected in blank.
D	Concentration determined at a secondary dilution factor.
VOCs	Volatile organic compounds.

Only those compounds detected are listed.

Table 5-8. Summary of Target Compound List Volatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	SB-11	SB-11	SB-12	SB-12	SB-12	SB-13
Sample Depth:	16-18 ft	30-32 ft	8-10 ft	22-24 ft	32-34 ft	16-18 ft
Sample Date:	5/19/92	5/20/92	5/15/92	5/18/92	5/18/92	5/21/92
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Parameter						
Methylene chloride	–	–	–	–	–	–
Acetone	18000 J	–	–	21000 J	3000	–
1,1-Dichloroethene	–	–	290 J	–	–	–
1,2-Dichloroethene (total)	–	–	–	–	–	–
Chloroform	–	–	–	–	–	360 J
1,2-Dichloroethane	–	–	–	–	–	–
2-Butanone (MEK)	–	–	2300 J	9000 J	–	2800
1,1,1-Trichloroethane	–	–	–	–	–	–
Bromodichloroethane	–	–	–	–	–	350 J
Trichloroethene	–	–	360 J	–	–	–
Dibromochloroethane	–	–	–	–	–	300 J
Benzene	–	–	320 J	1300 J	–	2200
4-Methyl-2-pentanone	–	–	–	–	–	–
Tetrachloroethene	–	37000	340 J	1800 J	–	–
Toluene	8700 J	26000	3600 J	9400 J	–	–
Chlorobenzene	–	190000	210 J	41000 J	7900	–
Ethylbenzene	–	9000 J	–	46000 J	3800	–
Xylenes	–	61000	–	230000 EJ	23000	–
Total VOCs	26700	323000	7420	359500	37700	6010

ug/L Micrograms per liter.
ug/kg Micrograms per kilogram.
– Not detected.
E Concentration is above the calibration range of the instrument.
J Estimated value.
B Compound detected in blank.
D Concentration determined at a secondary dilution factor.
VOCs Volatile organic compounds.

Only those compounds detected are listed.

Table 5-8. Summary of Target Compound List Volatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location:	SB-13	SB-13	SB-14	SB-14	SB-14	SB-15
	Sample Depth:	18-20 ft	30-32 ft	10-12 ft	20-22 ft	30-32 ft	16-18 ft
	Sample Date:	5/21/92	5/21/92	5/22/92	5/26/92	5/26/92	5/27/92
	Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Methylene chloride		–	–	–	–	10000 J	–
Acetone		2900	6600	–	–	–	200000 J
1,1-Dichloroethene		–	–	–	–	–	–
1,2-Dichloroethene (total)		–	–	–	–	–	–
Chloroform		–	–	–	–	–	–
1,2-Dichloroethane		–	–	–	–	–	–
2-Butanone (MEK)		2700 J	2400	3200	–	–	–
1,1,1-Trichloroethane		–	–	–	–	–	–
Bromodichloroethane		–	–	–	–	–	–
Trichloroethene		–	–	370 J	–	–	–
Dibromochloroethane		–	–	–	–	–	–
Benzene		420 J	9700	7200	1100 J	–	–
4-Methyl-2-pentanone		–	–	–	–	–	2800000
Tetrachloroethene		–	–	–	–	–	–
Toluene		–	270 J	540 J	2700 J	–	–
Chlorobenzene		360 J	6900	26000	23000	360000	390000
Ethylbenzene		–	–	–	–	–	510000
Xylenes		–	–	–	2900 J	–	4100000
Total VOCs		6380	25870	37310	29700	370000	8000000

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
–	Not detected.
E	Concentration is above the calibration range of the instrument.
J	Estimated value.
B	Compound detected in blank.
D	Concentration determined at a secondary dilution factor.
VOCs	Volatile organic compounds.

Only those compounds detected are listed.

Table 5-8. Summary of Target Compound List Volatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location:	SB-15	SB-15	SB-16	SB-16	SB-16	SB-16
	Sample Depth:	18-20 ft	26-28 ft	6-8 ft	16-18 ft	28-30 ft	30-32 ft
	Sample Date:	5/28/92	5/28/92	5/29/92	5/29/92	5/29/92	5/29/92
	Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Methylene chloride		10000 J	–	–	–	–	–
Acetone		–	15000 B	20000 B	–	–	–
1,1-Dichloroethene		–	–	–	–	–	–
1,2-Dichloroethene (total)		–	–	–	–	–	–
Chloroform		–	–	–	–	–	–
1,2-Dichloroethane		–	–	–	–	–	–
2-Butanone (MEK)		–	–	1300 J	1600	–	1800
1,1,1-Trichloroethane		–	–	–	–	–	–
Bromodichloroethane		–	–	–	–	–	–
Trichloroethene		–	–	–	–	–	–
Dibromochloroethane		–	–	–	–	–	–
Benzene		–	–	–	–	320 J	390 J
4-Methyl-2-pentanone		470000	16000	–	–	–	–
Tetrachloroethene		–	–	–	–	–	–
Toluene		–	–	–	–	–	–
Chlorobenzene		120000	–	750 J	6900	5100	4200
Ethylbenzene		65000	–	–	–	–	–
Xylenes		460000	–	–	–	–	–
Total VOCs		1125000	31000	22050	8500	5420	6390

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
–	Not detected.
E	Concentration is above the calibration range of the instrument.
J	Estimated value.
B	Compound detected in blank.
D	Concentration determined at a secondary dilution factor.
VOCs	Volatile organic compounds.

Only those compounds detected are listed.

Table 5-8. Summary of Target Compound List Volatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location:	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank
	Sample Depth:						
	Sample Date:	4/9/92	4/10/92	4/13/92	4/14/92	4/16/92	4/21/92
	Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Methylene chloride		–	–	–	–	–	–
Acetone		–	–	–	–	–	–
1,1-Dichloroethene		–	–	–	–	–	–
1,2-Dichloroethene (total)		–	–	–	–	–	–
Chloroform		–	–	–	–	–	–
1,2-Dichloroethane		–	–	–	–	–	–
2-Butanone (MEK)		–	–	–	–	–	–
1,1,1-Trichloroethane		–	–	–	–	–	–
Bromodichloroethane		–	–	–	–	–	–
Trichloroethene		–	–	–	–	–	–
Dibromochloroethane		–	–	–	–	–	–
Benzene		–	–	–	–	–	–
4-Methyl-2-pentanone		–	–	–	–	–	–
Tetrachloroethene		–	–	–	–	–	–
Toluene		–	–	–	–	–	–
Chlorobenzene		–	–	–	–	–	–
Ethylbenzene		–	–	–	–	–	–
Xylenes		–	–	–	–	–	–
Total VOCs		–	–	–	–	–	–

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
–	Not detected.
E	Concentration is above the calibration range of the instrument.
J	Estimated value.
B	Compound detected in blank.
D	Concentration determined at a secondary dilution factor.
VOCs	Volatile organic compounds.

Only those compounds detected are listed.

Table 5-8. Summary of Target Compound List Volatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location:	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank
	Sample Depth:						
	Sample Date:	4/23/92	4/27/92	5/4/92	5/5/92	5/6/92	5/7/92
	Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Methylene chloride		–	–	–	–	–	–
Acetone		21 J	4 J	–	–	–	–
1,1-Dichloroethene		–	–	–	–	–	–
1,2-Dichloroethene (total)		–	–	–	–	–	–
Chloroform		–	–	–	–	–	–
1,2-Dichloroethane		–	–	–	–	–	–
2-Butanone (MEK)		–	–	–	–	–	–
1,1,1-Trichloroethane		–	–	–	–	–	–
Bromodichloroethane		4 J	–	–	–	–	–
Trichloroethene		–	–	–	–	–	–
Dibromochloroethane		–	–	–	–	–	–
Benzene		–	–	–	–	–	–
4-Methyl-2-pentanone		–	–	–	–	–	–
Tetrachloroethene		–	–	–	–	–	–
Toluene		–	–	–	–	–	–
Chlorobenzene		–	–	–	–	–	–
Ethylbenzene		–	–	–	–	–	–
Xylenes		–	–	–	–	–	–
Total VOCs		25	4	–	–	–	–

ug/L Micrograms per liter.
ug/kg Micrograms per kilogram.
– Not detected.
E Concentration is above the calibration range of the instrument.
J Estimated value.
B Compound detected in blank.
D Concentration determined at a secondary dilution factor.
VOCs Volatile organic compounds.

Only those compounds detected are listed.

Table 5-8. Summary of Target Compound List Volatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location:	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank
	Sample Depth:						
	Sample Date:	5/8/92	5/13/92	5/14/92	5/15/92	5/18/92	5/19/92
	Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Methylene chloride		–	–	–	–	–	–
Acetone		–	–	–	–	–	–
1,1-Dichloroethene		–	–	–	–	–	–
1,2-Dichloroethene (total)		–	–	–	–	–	–
Chloroform		–	–	–	–	–	–
1,2-Dichloroethane		–	–	–	–	–	–
2-Butanone (MEK)		–	–	–	–	–	–
1,1,1-Trichloroethane		–	–	–	–	–	–
Bromodichloroethane		–	–	–	–	–	1 J
Trichloroethene		–	3 J	–	–	–	1 J
Dibromochloroethane		–	–	–	–	–	2 J
Benzene		–	–	–	–	–	–
4-Methyl-2-pentanone		–	–	–	–	–	–
Tetrachloroethene		–	–	–	–	–	–
Toluene		–	7 J	–	–	–	–
Chlorobenzene		–	1 J	–	–	–	–
Ethylbenzene		–	–	–	–	–	–
Xylenes		–	–	–	–	–	–
Total VOCs		–	11	–	–	–	4

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
–	Not detected.
E	Concentration is above the calibration range of the instrument.
J	Estimated value.
B	Compound detected in blank.
D	Concentration determined at a secondary dilution factor.
VOCs	Volatile organic compounds.

Only those compounds detected are listed.

Table 5-8. Summary of Target Compound List Volatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank
Sample Depth:						
Sample Date:	5/20/92	5/21/92	5/22/92	5/26/92	5/27/92	5/28/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter						
Methylene chloride	--	--	--	--	--	--
Acetone	--	--	--	--	--	--
1,1-Dichloroethene	--	--	--	--	--	--
1,2-Dichloroethene (total)	--	--	--	--	--	--
Chloroform	--	--	--	--	--	--
1,2-Dichloroethane	--	--	--	--	--	--
2-Butanone (MEK)	--	--	--	--	--	--
1,1,1-Trichloroethane	--	--	--	--	--	--
Bromodichloroethane	--	--	--	--	--	--
Trichloroethene	--	--	--	--	--	--
Dibromochloroethane	--	--	--	--	--	--
Benzene	--	--	--	--	--	--
4-Methyl-2-pentanone	--	--	--	--	--	--
Tetrachloroethene	--	--	--	--	--	--
Toluene	--	--	--	--	--	--
Chlorobenzene	--	--	--	--	--	--
Ethylbenzene	--	--	--	--	--	--
Xylenes	--	--	--	--	--	--
Total VOCs	--	--	--	--	--	--

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
--	Not detected.
E	Concentration is above the calibration range of the instrument.
J	Estimated value.
B	Compound detected in blank.
D	Concentration determined at a secondary dilution factor.
VOCs	Volatile organic compounds.

Only those compounds detected are listed.

Table 5-8. Summary of Target Compound List Volatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location:	Trip Blank
	Sample Depth:	
	Sample Date:	5/29/92
	Units:	ug/L
Methylene chloride		–
Acetone		–
1,1-Dichloroethene		–
1,2-Dichloroethene (total)		–
Chloroform		–
1,2-Dichloroethane		–
2-Butanone (MEK)		–
1,1,1-Trichloroethane		–
Bromodichloroethane		–
Trichloroethene		–
Dibromochloroethane		–
Benzene		–
4-Methyl-2-pentanone		–
Tetrachloroethene		–
Toluene		–
Chlorobenzene		–
Ethylbenzene		–
Xylenes		–
Total VOCs		–

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
–	Not detected.
E	Concentration is above the calibration range of the instrument.
J	Estimated value.
B	Compound detected in blank.
D	Concentration determined at a secondary dilution factor.
VOCs	Volatile organic compounds.

Only those compounds detected are listed.

Table 5-8. Summary of Target Compound List Volatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location:	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank
	Sample Depth:						
	Sample Date:	4/9/92	4/10/92	4/13/92	4/14/92	4/16/92	4/21/92
	Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Methylene chloride		–	–	–	–	–	–
Acetone		–	–	–	–	–	6 J
1,1-Dichloroethene		–	–	–	–	–	–
1,2-Dichloroethene (total)		–	–	–	–	–	–
Chloroform		–	–	–	–	–	–
1,2-Dichloroethane		–	–	–	–	–	–
2-Butanone (MEK)		–	–	–	–	–	–
1,1,1-Trichloroethane		–	–	–	–	–	–
Bromodichloroethane		–	–	–	–	–	–
Trichloroethene		–	–	–	2 J	–	–
Dibromochloroethane		–	–	–	–	–	–
Benzene		–	–	–	0.9 J	–	–
4-Methyl-2-pentanone		–	–	–	–	–	–
Tetrachloroethene		–	–	–	–	–	–
Toluene		–	–	–	–	–	–
Chlorobenzene		–	–	–	1 J	–	–
Ethylbenzene		–	–	–	–	–	–
Xylenes		–	–	–	–	–	–
Total VOCs		–	–	–	3.9	–	6

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
–	Not detected.
E	Concentration is above the calibration range of the instrument.
J	Estimated value.
B	Compound detected in blank.
D	Concentration determined at a secondary dilution factor.
VOCs	Volatile organic compounds.

Only those compounds detected are listed.

Table 5-8. Summary of Target Compound List Volatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location: Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank
Sample Depth:						
Sample Date:	4/23/92	4/27/92	5/4/92	5/5/92	5/6/92	5/7/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Methylene chloride	–	–	–	–	–	–
Acetone	–	–	–	–	9 J	–
1,1-Dichloroethene	–	–	–	–	–	–
1,2-Dichloroethene (total)	–	–	–	–	–	–
Chloroform	–	–	–	–	–	–
1,2-Dichloroethane	–	–	–	–	–	–
2-Butanone (MEK)	–	–	–	–	–	–
1,1,1-Trichloroethane	–	–	–	–	–	–
Bromodichloroethane	–	–	–	–	–	–
Trichloroethene	–	–	–	–	–	–
Dibromochloroethane	–	–	–	–	–	–
Benzene	–	–	–	–	–	–
4-Methyl-2-pentanone	–	–	–	–	–	–
Tetrachloroethene	–	–	–	–	–	–
Toluene	–	–	–	–	–	–
Chlorobenzene	–	–	–	–	–	–
Ethylbenzene	–	–	–	–	–	–
Xylenes	–	–	–	–	–	–
Total VOCs	–	–	–	–	9	–

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
–	Not detected.
E	Concentration is above the calibration range of the instrument.
J	Estimated value.
B	Compound detected in blank.
D	Concentration determined at a secondary dilution factor.
VOCs	Volatile organic compounds.

Only those compounds detected are listed.

Table 5-8. Summary of Target Compound List Volatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location:	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank
	Sample Depth:						
	Sample Date:	5/8/92	5/13/92	5/14/92	5/15/92	5/18/92	5/19/92
	Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Methylene chloride		–	–	–	–	–	–
Acetone		–	16	–	–	–	–
1,1-Dichloroethene		–	–	–	–	–	–
1,2-Dichloroethene (total)		–	–	–	–	–	–
Chloroform		–	–	–	–	–	–
1,2-Dichloroethane		–	–	–	–	–	–
2-Butanone (MEK)		–	–	–	–	–	–
1,1,1-Trichloroethane		–	–	–	–	–	–
Bromodichloroethane		–	–	–	–	–	–
Trichloroethene		–	–	–	–	–	–
Dibromochloroethane		–	–	–	–	–	–
Benzene		–	–	–	–	–	–
4-Methyl-2-pentanone		–	–	–	–	–	–
Tetrachloroethene		–	–	–	–	–	–
Toluene		–	–	–	–	–	–
Chlorobenzene		–	–	–	–	–	–
Ethylbenzene		–	–	–	–	–	–
Xylenes		–	–	–	–	–	–
Total VOCs		–	16	–	–	–	–

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
–	Not detected.
E	Concentration is above the calibration range of the instrument.
J	Estimated value.
B	Compound detected in blank.
D	Concentration determined at a secondary dilution factor.
VOCs	Volatile organic compounds.

Only those compounds detected are listed.

Table 5-8. Summary of Target Compound List Volatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location:	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank
	Sample Depth:						
	Sample Date:	5/20/92	5/21/92	5/22/92	5/26/92	5/27/92	5/28/92
	Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Methylene chloride		–	–	–	–	–	–
Acetone		–	–	–	–	–	–
1,1-Dichloroethene		–	–	–	–	–	–
1,2-Dichloroethene (total)		–	–	–	–	–	–
Chloroform		–	–	–	–	–	–
1,2-Dichloroethane		–	–	–	–	–	–
2-Butanone (MEK)		–	–	–	–	–	–
1,1,1-Trichloroethane		–	–	–	–	–	–
Bromodichloroethane		–	–	–	–	–	–
Trichloroethene		–	–	–	–	–	–
Dibromochloroethane		–	–	–	–	–	–
Benzene		–	–	–	–	–	–
4-Methyl-2-pentanone		–	–	–	–	–	–
Tetrachloroethene		–	–	–	–	–	–
Toluene		–	–	–	–	–	–
Chlorobenzene		–	–	–	–	–	–
Ethylbenzene		–	–	–	–	–	–
Xylenes		–	–	–	–	–	–
Total VOCs		–	–	–	–	–	–

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
–	Not detected.
E	Concentration is above the calibration range of the instrument.
J	Estimated value.
B	Compound detected in blank.
D	Concentration determined at a secondary dilution factor.
VOCs	Volatile organic compounds.

Only those compounds detected are listed.

Table 5-8. Summary of Target Compound List Volatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location:	Equipment Blank
	Sample Depth:	
	Sample Date:	5/29/92
	Units:	ug/L
Methylene chloride		–
Acetone		–
1,1-Dichloroethene		–
1,2-Dichloroethene (total)		–
Chloroform		–
1,2-Dichloroethane		–
2-Butanone (MEK)		–
1,1,1-Trichloroethane		–
Bromodichloroethane		–
Trichloroethene		–
Dibromochloroethane		–
Benzene		–
4-Methyl-2-pentanone		–
Tetrachloroethene		–
Toluene		–
Chlorobenzene		–
Ethylbenzene		–
Xylenes		–
Total VOCs		–

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
–	Not detected.
E	Concentration is above the calibration range of the instrument.
J	Estimated value.
B	Compound detected in blank.
D	Concentration determined at a secondary dilution factor.
VOCs	Volatile organic compounds.

Only those compounds detected are listed.

Table 5-9. Summary of Target Compound List Semivolatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location:	SB-1	SB-1	SB-1	SB-2	SB-2	SB-2
	Sample Depth:	12-14 ft	26-28 ft	32-34 ft	12-14 ft	14-16 ft	28-30 ft
	Sample Date:	4/9/92	4/9/92	4/9/92	4/10/92	4/10/92	4/13/92
	Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Phenol		2100000	520000	490000	120000 J	390000	720000 D
bis(2-Chloroethyl)ether		–	–	–	–	–	–
2-Chlorophenol		–	200000	64000 J	94000 J	160000	51000 J
1,3-Dichlorobenzene		–	–	–	–	8000 J	–
1,4-Dichlorobenzene		410000	59000 J	12000 J	410000	800000	37000 J
1,2-Dichlorobenzene		260000 J	180000	34000 J	280000	540000	26000 J
2-Methylphenol (o-cresol)		–	–	–	–	–	–
4-Methylphenol (p-cresol)		–	–	–	–	–	–
Nitrobenzene		38000 J	120000 J	22000 J	540000 D	650000	90000
2,4-Dimethylphenol		–	–	–	–	–	–
2,4-Dichlorophenol		1700000	300000	80000	610000 D	630000	93000
1,2,4-Trichlorobenzene		6700 J	75000 J	10000 J	5000 J	8700 J	–
Naphthalene		–	–	720 J	–	–	–
4-Chloroaniline		–	–	–	–	–	–
2-Methylnaphthalene		–	–	–	–	–	–
2,4,6-Trichlorophenol		1200000	110000 J	19000 J	260000 J	400000	81000
2,4,5-Trichlorophenol		–	–	–	–	–	–
2-Nitroaniline		–	–	–	–	–	–
Dimethylphthalate		–	–	–	–	–	–
Acenaphthene		–	–	–	–	–	–
Dibenzofuran		–	–	–	–	–	–
Diethylphthalate		–	–	–	–	–	–
Fluorene		–	–	–	–	–	–
4-Nitroaniline		120000 J	15000 J	–	33000 J	–	–
N-Nitrosodiphenylamine		–	10000 J	–	9100 J	7100 J	–
Pentachlorophenol		–	–	–	–	–	–
Phenanthrene		–	–	–	–	–	–
Anthracene		–	–	–	–	–	–
Carbazole		–	–	–	–	–	–
Di-n-butylphthalate		–	–	–	–	–	–
Fluoranthene		–	–	–	–	–	–
Pyrene		–	–	–	–	–	–
Butylbenzylphthalate		–	–	–	–	–	–
3,3'-Dichlorobenzidine		–	–	–	–	–	–
Benzo(a)anthracene		–	–	–	–	–	–
Chrysene		–	–	–	–	–	–
bis(2-Ethylhexyl)phthalate		960000	32000 J	–	–	–	–
Di-n-octylphthalate		–	–	–	–	–	2100 J
Benzo(b)fluoranthene		–	–	–	–	–	–
Benzo(k)fluoranthene		–	–	–	–	–	–
Benzo(a)pyrene		–	–	–	–	–	–
Indeno(1,2,3-cd)pyrene		–	–	–	–	–	–
Benzo(g,h,i)perylene		–	–	–	–	–	–
Aniline		–	–	–	–	–	–
2-Chloroaniline		170000 J	530000	210000	240000	480000	230000
3-Chloroaniline		–	–	3200 J	–	–	9000 J
Total SVOCs		6964700	2151000	944920	2601100	4073800	1339100

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
J	Estimated value.
D	Concentration determined at a secondary dilution factor.
R	Unusable value.
E	Exceeded the instrument calibration range.
–	Not detected.
SVOCs	Semivolatile organic compounds.

Only those compounds detected are listed.

Table 5-9. Summary of Target Compound List Semivolatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location: SB-3 / Sample Depth: 12-14 ft / Sample Date: 4/16/92 / Units: ug/kg	Sample Location: SB-3 / Sample Depth: 14-16 ft / Sample Date: 4/16/92 / Units: ug/kg	Sample Location: SB-3 / Sample Depth: 32-34 ft / Sample Date: 4/16/92 / Units: ug/kg	Sample Location: SB-4 / Sample Depth: 10-12 ft / Sample Date: 4/14/92 / Units: ug/kg	Sample Location: SB-4 / Sample Depth: 12-14 ft / Sample Date: 4/14/92 / Units: ug/kg	Sample Location: SB-4 / Sample Depth: 30-32 ft / Sample Date: 4/14/92 / Units: ug/kg
Phenol	1300000	1600000	1100000 D	830000	190000	320000 J
bis(2-Chloroethyl)ether	–	–	–	–	–	–
2-Chlorophenol	960000	1100000	490000	590000	270000	150000 J
1,3-Dichlorobenzene	–	–	–	–	–	–
1,4-Dichlorobenzene	–	96000 J	76000 J	55000 J	51000 J	22000 J
1,2-Dichlorobenzene	96000 J	170000 J	280000	470000	58000 J	75000 J
2-Methylphenol (o-cresol)	–	–	–	54000 J	–	–
4-Methylphenol (p-cresol)	–	–	–	–	–	7300 J
Nitrobenzene	450000 J	420000	110000 J	86000 J	69000	15000 J
2,4-Dimethylphenol	–	–	2700 J	–	–	3500 J
2,4-Dichlorophenol	3200000	3500000 D	950000	11000000 D	4200000 D	110000 J
1,2,4-Trichlorobenzene	–	–	200000	100000 J	72000	32000 J
Naphthalene	530000 J	800000	–	–	–	–
4-Chloroaniline	–	40000 J	34000 DJ	–	–	–
2-Methylnaphthalene	–	–	–	–	–	–
2,4,6-Trichlorophenol	3600000	3900000 D	290000	3700000 D	1700000 D	49000 J
2,4,5-Trichlorophenol	–	–	–	–	–	–
2-Nitroaniline	–	–	–	–	1900 J	–
Dimethylphthalate	–	–	–	–	–	3000 J
Acenaphthene	–	–	–	–	–	–
Dibenzofuran	–	–	–	–	–	–
Diethylphthalate	–	–	–	–	–	–
Fluorene	–	–	–	–	–	–
4-Nitroaniline	320000 J	400000 J	25000 J	52000 J	–	–
N-Nitrosodiphenylamine	–	–	–	–	7900 J	–
Pentachlorophenol	–	–	–	–	–	–
Phenanthrene	–	–	–	–	–	–
Anthracene	–	–	–	–	–	–
Carbazole	–	–	–	–	–	–
Di-n-butylphthalate	–	–	–	–	–	–
Fluoranthene	–	–	–	–	–	–
Pyrene	–	–	–	–	–	–
Butylbenzylphthalate	–	10000 J	7000 J	–	9200 J	–
3,3'-Dichlorobenzidine	–	–	–	–	–	–
Benzo(a)anthracene	–	–	–	–	–	–
Chrysene	–	–	–	–	–	–
bis(2-Ethylhexyl)phthalate	–	–	–	–	–	–
Di-n-octylphthalate	–	–	8800 J	–	–	–
Benzo(b)fluoranthene	–	–	–	–	–	–
Benzo(k)fluoranthene	–	–	–	–	–	–
Benzo(a)pyrene	–	–	–	–	–	–
Indeno(1,2,3-cd)pyrene	–	–	–	–	–	–
Benzo(g,h,i)perylene	–	–	–	–	–	–
Aniline	–	–	–	1100000	19000 J	–
2-Chloroaniline	1700000	3500000 D	1500000 D	220000 J	110000	73000 J
3-Chloroaniline	–	–	–	–	–	–
Total SVOCs	12156000	15536000	5073500	18257000	6758000	859800

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
J	Estimated value.
D	Concentration determined at a secondary dilution factor.
R	Unusable value.
E	Exceeded the instrument calibration range.
–	Not detected.
SVOCs	Semivolatile organic compounds.

Only those compounds detected are listed.

Table 5-9. Summary of Target Compound List Semivolatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location:	SB-5	SB-5	SB-5	SB-6	SB-6	SB-6
	Sample Depth:	12-14 ft	20-22 ft	28-30 ft	18-20 ft	20-22 ft	28-30 ft
	Sample Date:	5/4/92	5/4/92	5/4/92	5/5/92	5/5/92	5/6/92
	Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Phenol		260000 J	300000	590000	3300000	5800000 D	1500000
bis(2-Chloroethyl)ether		–	–	–	–	–	–
2-Chlorophenol		230000 J	61000 J	80000 J	4200000	6900000 D	3600000 D
1,3-Dichlorobenzene		–	1300 J	–	–	–	–
1,4-Dichlorobenzene		120000 J	43000 J	27000 J	–	20000 J	12000 J
1,2-Dichlorobenzene		2100000	200000	57000 J	570000 J	1100000	120000 J
2-Methylphenol (o-cresol)		–	–	–	–	–	–
4-Methylphenol (p-cresol)		–	–	–	500000 J	640000	290000
Nitrobenzene		–	100000	–	–	160000 J	110000 J
2,4-Dimethylphenol		–	–	–	120000 J	150000 J	100000 J
2,4-Dichlorophenol		11000000 D	950000 D	370000	4100000	9600000 D	1200000
1,2,4-Trichlorobenzene		1800000	140000	23000 J	260000 J	520000	69000 J
Naphthalene		–	–	–	670000	–	–
4-Chloroaniline		–	–	–	–	–	–
2-Methylnaphthalene		–	–	–	–	–	–
2,4,6-Trichlorophenol		1800000	190000	76000 J	1300000	300000	700000
2,4,5-Trichlorophenol		–	–	–	–	1600000	–
2-Nitroaniline		–	–	–	–	38000 J	–
Dimethylphthalate		–	–	–	–	–	–
Acenaphthene		–	–	–	–	–	–
Dibenzofuran		–	–	–	–	–	–
Diethylphthalate		–	–	–	–	–	–
Fluorene		–	–	–	–	–	–
4-Nitroaniline		–	–	–	–	–	–
N-Nitrosodiphenylamine		–	–	–	–	–	–
Pentachlorophenol		–	–	43000 J	150000 J	–	260000 J
Phenanthrene		–	–	–	–	–	–
Anthracene		–	–	–	–	–	–
Carbazole		–	–	–	–	–	–
Di-n-butylphthalate		–	–	–	–	–	–
Fluoranthene		–	–	–	–	–	–
Pyrene		–	–	–	–	–	–
Butylbenzylphthalate		–	–	–	–	–	–
3,3'-Dichlorobenzidine		–	–	–	R	R	–
Benzo(a)anthracene		–	–	–	–	–	–
Chrysene		–	–	–	–	–	–
bis(2-Ethylhexyl)phthalate		–	–	–	–	22000 J	–
Di-n-octylphthalate		–	–	–	–	–	–
Benzo(b)fluoranthene		–	–	–	–	–	–
Benzo(k)fluoranthene		–	–	–	–	–	–
Benzo(a)pyrene		–	–	–	–	–	–
Indeno(1,2,3-cd)pyrene		–	–	–	–	–	–
Benzo(g,h,i)perylene		–	–	–	–	–	–
Aniline		–	–	–	–	10000 J	–
2-Chloroaniline		33000 J	970000 D	500000 J	370000 J	790000	140000 J
3-Chloroaniline		–	–	–	–	–	–
Total SVOCs		17343000	2955300	1766000	15540000	27650000	8101000

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
J	Estimated value.
D	Concentration determined at a secondary dilution factor.
R	Unusable value.
E	Exceeded the instrument calibration range.
–	Not detected.
SVOCs	Semivolatile organic compounds.

Only those compounds detected are listed.

Table 5-9. Summary of Target Compound List Semivolatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location: SB-7 / Sample Depth: 16-18 ft / Sample Date: 5/7/92 / Units: ug/kg	SB-7 / 20-22 ft / 5/7/92 / ug/kg	SB-7 / 24-26 ft / 5/7/92 / ug/kg	SB-8 / 6-8 ft / 5/8/92 / ug/kg	SB-9 / 18-20 ft / 5/13/92 / ug/kg	SB-9 / 20-22 ft / 5/13/92 / ug/kg
Phenol	33000 J	120000 J	140000 J	–	1200000 J	270000 J
bis(2-Chloroethyl)ether	–	–	–	–	–	–
2-Chlorophenol	180000 J	100000 J	33000 J	–	–	4500 J
1,3-Dichlorobenzene	–	–	–	–	–	–
1,4-Dichlorobenzene	41000 J	21000 J	33000 J	–	–	–
1,2-Dichlorobenzene	78000 J	35000 J	37000 J	–	–	–
2-Methylphenol (o-cresol)	–	–	–	–	–	–
4-Methylphenol (p-cresol)	–	–	–	–	–	–
Nitrobenzene	370000 J	190000 J	130000 J	–	–	–
2,4-Dimethylphenol	–	–	–	–	–	–
2,4-Dichlorophenol	–	–	–	–	52000 J	13000 J
1,2,4-Trichlorobenzene	–	–	–	–	–	–
Naphthalene	–	–	–	–	–	–
4-Chloroaniline	–	–	–	–	–	20000 J
2-Methylnaphthalene	–	–	–	–	–	–
2,4,6-Trichlorophenol	–	–	–	–	–	11000 J
2,4,5-Trichlorophenol	–	–	–	–	–	–
2-Nitroaniline	–	–	–	–	–	–
Dimethylphthalate	–	–	–	–	14000 J	–
Acenaphthene	–	–	–	–	–	–
Dibenzofuran	–	–	–	–	–	–
Diethylphthalate	–	–	–	–	–	–
Fluorene	–	–	–	–	–	–
4-Nitroaniline	–	–	–	–	–	–
N-Nitrosodiphenylamine	–	–	–	–	–	–
Pentachlorophenol	–	–	–	–	–	–
Phenanthrene	–	–	–	–	–	–
Anthracene	–	–	–	–	–	–
Carbazole	–	–	–	–	–	–
Di-n-butylphthalate	–	–	–	–	–	–
Fluoranthene	–	–	–	–	–	–
Pyrene	–	–	–	–	–	–
Butylbenzylphthalate	–	–	–	–	39000 J	3300 J
3,3'-Dichlorobenzidine	–	–	–	–	–	–
Benzo(a)anthracene	–	–	–	–	–	–
Chrysene	–	–	–	–	–	–
bis(2-Ethylhexyl)phthalate	–	–	–	–	–	–
Di-n-octylphthalate	–	–	–	–	–	–
Benzo(b)fluoranthene	–	–	–	–	–	–
Benzo(k)fluoranthene	–	–	–	–	–	–
Benzo(a)pyrene	–	–	–	–	–	–
Indeno(1,2,3-cd)pyrene	–	–	–	–	–	–
Benzo(g,h,i)perylene	–	–	–	–	–	–
Aniline	–	–	–	–	–	4100 J
2-Chloroaniline	110000 J	280000 J	140000 J	–	170000 J	41000 J
3-Chloroaniline	–	–	–	–	–	5200 J
Total SVOCs	812000	746000	513000	–	1475000	372100

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
J	Estimated value.
D	Concentration determined at a secondary dilution factor.
R	Unusable value.
E	Exceeded the instrument calibration range.
–	Not detected.
SVOCs	Semivolatile organic compounds.

Only those compounds detected are listed.

Table 5-9. Summary of Target Compound List Semivolatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location:	SB-9	SB-9	SB-10	SB-10	SB-10	SB-11
	Sample Depth:	28-30 ft	30-32 ft	6-8 ft	18-20 ft	24-26 ft	14-16 ft
	Sample Date:	5/13/92	5/13/92	5/14/92	5/14/92	5/14/92	5/19/92
	Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Phenol		680000	2100000	280000 J	1300000 J	230000	470000
bis(2-Chloroethyl)ether		–	–	–	–	–	–
2-Chlorophenol		140000 J	670000	–	–	12000 J	–
1,3-Dichlorobenzene		–	–	–	–	–	–
1,4-Dichlorobenzene		24000 J	86000 J	–	–	–	–
1,2-Dichlorobenzene		46000 J	200000 J	–	100000 J	–	–
2-Methylphenol (o-cresol)		–	–	–	–	–	–
4-Methylphenol (p-cresol)		–	–	–	440000 J	18000 J	–
Nitrobenzene		52000 J	250000 J	–	–	2900 J	–
2,4-Dimethylphenol		–	–	–	150000 J	2800 J	–
2,4-Dichlorophenol		530000 J	2900000	–	200000 J	34000 J	160000 J
1,2,4-Trichlorobenzene		41000 J	200000 J	–	–	–	41000 J
Naphthalene		–	–	–	–	–	–
4-Chloroaniline		32000 J	–	130000 J	2000000 J	23000 J	–
2-Methylnaphthalene		–	–	–	–	–	–
2,4,6-Trichlorophenol		–	–	–	–	8600 J	130000 J
2,4,5-Trichlorophenol		–	–	–	–	–	–
2-Nitroaniline		–	–	–	1000000 J	13000 J	–
Dimethylphthalate		–	–	–	–	–	–
Acenaphthene		–	–	–	–	–	–
Dibenzofuran		–	–	–	–	–	–
Diethylphthalate		–	–	–	–	–	–
Fluorene		–	–	–	–	–	–
4-Nitroaniline		–	–	–	–	–	41000 J
N-Nitrosodiphenylamine		–	–	–	–	–	–
Pentachlorophenol		–	–	–	–	–	–
Phenanthrene		–	–	–	–	–	–
Anthracene		–	–	–	–	–	–
Carbazole		–	–	–	–	–	–
Di-n-butylphthalate		–	–	–	–	–	–
Fluoranthene		–	–	–	–	–	–
Pyrene		–	–	–	–	–	–
Butylbenzylphthalate		–	–	–	–	–	–
3,3'-Dichlorobenzidine		–	–	–	–	–	–
Benzo(a)anthracene		–	–	–	–	–	–
Chrysene		–	–	–	–	–	–
bis(2-Ethylhexyl)phthalate		–	–	370000 J	–	–	–
Di-n-octylphthalate		–	–	–	–	–	–
Benzo(b)fluoranthene		–	–	–	–	–	–
Benzo(k)fluoranthene		–	–	–	–	–	–
Benzo(a)pyrene		–	–	–	–	–	–
Indeno(1,2,3-cd)pyrene		–	–	–	–	–	–
Benzo(g,h,i)perylene		–	–	–	–	–	–
Aniline		23000 J	70000 J	–	100000 J	7800 J	–
2-Chloroaniline		590000 J	2500000	200000 J	4900000	110000	–
3-Chloroaniline		15000 J	–	–	190000 J	–	–
Total SVOCs		2173000	8976000	980000	10380000	462100	842000

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
J	Estimated value.
D	Concentration determined at a secondary dilution factor.
R	Unusable value.
E	Exceeded the instrument calibration range.
–	Not detected.
SVOCs	Semivolatile organic compounds.

Only those compounds detected are listed.

SUBSEM.XLS

Table 5-9. Summary of Target Compound List Semivolatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	SB-11	SB-11	SB-12	SB-12	SB-12	SB-12
Sample Depth:	16-18 ft	30-32 ft	8-10 ft	22-24 ft	32-34 ft	32-34 ft
Sample Date:	5/19/92	5/20/92	5/15/92	5/18/92	5/18/92	5/18/92
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Parameter						
Phenol	480000 J	9700 J	1800 J	5100000	1200000 E	710000 D
bis(2-Chloroethyl)ether	–	–	–	–	–	–
2-Chlorophenol	–	–	–	470000 J	130000	130000
1,3-Dichlorobenzene	–	–	–	–	–	–
1,4-Dichlorobenzene	–	–	–	–	3000 J	3000 J
1,2-Dichlorobenzene	–	–	–	610000 J	390000	390000
2-Methylphenol (o-cresol)	–	–	–	–	–	–
4-Methylphenol (p-cresol)	–	–	–	–	21000 J	21000 J
Nitrobenzene	–	–	–	–	16000 J	16000 J
2,4-Dimethylphenol	–	–	–	–	5000 J	5000 J
2,4-Dichlorophenol	–	19000 J	480 J	2800000	580000 E	370000 D
1,2,4-Trichlorobenzene	–	–	–	230000 J	84000	84000
Naphthalene	–	–	–	–	–	–
4-Chloroaniline	–	23000 J	–	–	–	–
2-Methylnaphthalene	–	–	–	–	–	–
2,4,6-Trichlorophenol	–	–	–	630000 J	93000	93000
2,4,5-Trichlorophenol	–	–	–	–	–	–
2-Nitroaniline	–	–	–	–	–	–
Dimethylphthalate	–	–	–	–	–	–
Acenaphthene	–	–	–	–	–	–
Dibenzofuran	–	–	–	–	–	–
Diethylphthalate	–	–	350 J	–	–	–
Fluorene	–	–	–	–	–	–
4-Nitroaniline	–	–	–	–	–	–
N-Nitrosodiphenylamine	–	–	–	–	–	–
Pentachlorophenol	–	–	–	–	25000 J	25000 J
Phenanthrene	–	–	–	–	–	–
Anthracene	–	–	–	–	–	–
Carbazole	–	–	–	–	–	–
Di-n-butylphthalate	–	–	–	–	–	–
Fluoranthene	–	–	–	–	–	–
Pyrene	–	–	–	–	–	–
Butylbenzylphthalate	–	–	–	–	–	–
3,3'-Dichlorobenzidine	–	–	–	–	–	–
Benzo(a)anthracene	–	–	–	–	–	–
Chrysene	–	–	–	–	–	–
bis(2-Ethylhexyl)phthalate	–	–	–	–	–	–
Di-n-octylphthalate	–	–	–	–	–	–
Benzo(b)fluoranthene	–	–	–	–	–	–
Benzo(k)fluoranthene	–	–	–	–	–	–
Benzo(a)pyrene	–	–	–	–	–	–
Indeno(1,2,3-cd)pyrene	–	–	–	–	–	–
Benzo(g,h,i)perylene	–	–	–	–	–	–
Aniline	–	–	440 J	990000 J	–	120000 DJ
2-Chloroaniline	–	230000 J	590 J	–	170000	170000 J
3-Chloroaniline	–	8200 J	–	–	19000 J	19000 J
Total SVOCs	480000	289900	3660	10830000	2736000	2156000

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
J	Estimated value.
D	Concentration determined at a secondary dilution factor.
R	Unusable value.
E	Exceeded the instrument calibration range.
–	Not detected.
SVOCs	Semivolatile organic compounds.

Only those compounds detected are listed.

SUBSEM.XLS

Table 5-9. Summary of Target Compound List Semivolatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location: SB-13 / Sample Depth: 16-18 ft / Sample Date: 5/21/92 / Units: ug/kg	Sample Location: SB-13 / Sample Depth: 18-20 ft / Sample Date: 5/21/92 / Units: ug/kg	Sample Location: SB-13 / Sample Depth: 30-32 ft / Sample Date: 5/21/92 / Units: ug/kg	Sample Location: SB-14 / Sample Depth: 10-12 ft / Sample Date: 5/22/92 / Units: ug/kg	Sample Location: SB-14 / Sample Depth: 20-22 ft / Sample Date: 5/26/92 / Units: ug/kg	Sample Location: SB-14 / Sample Depth: 30-32 ft / Sample Date: 5/26/92 / Units: ug/kg
Phenol	140 J	21000 J	460000	6500 J	2800000	890000
bis(2-Chloroethyl)ether	31 J	–	–	–	–	–
2-Chlorophenol	430 J	260000 EJ	120000	–	840000 J	220000 J
1,3-Dichlorobenzene	–	–	–	–	–	–
1,4-Dichlorobenzene	–	–	–	15000	–	–
1,2-Dichlorobenzene	–	–	–	9600 J	9100 J	440000
2-Methylphenol (o-cresol)	–	990 J	–	–	–	–
4-Methylphenol (p-cresol)	–	–	33000 J	4800 J	59000 J	59000 J
Nitrobenzene	–	–	–	–	5700 J	87000 J
2,4-Dimethylphenol	–	–	–	660 J	–	–
2,4-Dichlorophenol	39 J	230000 EJ	150000	1800 J	120000 J	690000
1,2,4-Trichlorobenzene	–	–	–	940 J	–	170000 J
Naphthalene	24 J	27000	23000 J	1500 J	–	–
4-Chloroaniline	–	85000 DJ	–	9700 J	–	–
2-Methylnaphthalene	20 J	–	–	–	–	–
2,4,6-Trichlorophenol	–	67000	22000 J	640 J	42000 J	130000 J
2,4,5-Trichlorophenol	–	–	–	–	–	–
2-Nitroaniline	–	–	–	3000 J	–	–
Dimethylphthalate	–	–	–	–	–	–
Acenaphthene	–	–	–	–	–	–
Dibenzofuran	–	–	–	–	–	–
Diethylphthalate	–	–	–	–	–	–
Fluorene	–	–	–	–	–	–
4-Nitroaniline	–	–	–	8300000 D	–	–
N-Nitrosodiphenylamine	–	–	–	–	–	–
Pentachlorophenol	–	790000 EJ	–	–	–	–
Phenanthrene	–	–	–	–	–	–
Anthracene	–	–	–	–	–	–
Carbazole	–	–	–	–	–	–
Di-n-butylphthalate	20 J	–	–	–	–	–
Fluoranthene	–	–	–	–	–	–
Pyrene	–	–	–	–	–	–
Butylbenzylphthalate	17 J	–	–	–	–	–
3,3'-Dichlorobenzidine	–	–	–	–	–	–
Benzo(a)anthracene	–	–	–	–	–	–
Chrysene	–	–	–	–	–	–
bis(2-Ethylhexyl)phthalate	–	–	–	–	–	–
Di-n-octylphthalate	17 J	–	–	–	–	–
Benzo(b)fluoranthene	–	–	–	–	–	–
Benzo(k)fluoranthene	–	–	–	–	–	–
Benzo(a)pyrene	–	–	–	–	–	–
Indeno(1,2,3-cd)pyrene	–	–	–	–	–	–
Benzo(g,h,i)perylene	–	–	–	–	–	–
Aniline	–	–	–	–	–	–
2-Chloroaniline	–	39000 DJ	–	8000 J	29000 J	43000 J
3-Chloroaniline	–	28000 DJ	–	9400 J	–	–
Total SVOCs	738	1547990	808000	8371540	3904800	2729000

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
J	Estimated value.
D	Concentration determined at a secondary dilution factor.
R	Unusable value.
E	Exceeded the instrument calibration range.
–	Not detected.
SVOCs	Semivolatile organic compounds.

Only those compounds detected are listed.

SUBSEM.XLS

Table 5-9. Summary of Target Compound List Semivolatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location:	SB-15	SB-15	SB-15	SB-16	SB-16	SB-16
	Sample Depth:	16-18 ft	18-20 ft	26-28 ft	6-8 ft	16-18 ft	28-30 ft
	Sample Date:	5/27/92	5/28/92	5/28/92	5/29/92	5/29/92	5/29/92
	Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Phenol		640000 J	150000 J	7300 J	R	–	–
bis(2-Chloroethyl)ether		–	–	–	–	–	–
2-Chlorophenol		1100000 J	220000 J	–	R	230000 D	950000
1,3-Dichlorobenzene		–	–	–	–	–	–
1,4-Dichlorobenzene		–	–	–	–	–	–
1,2-Dichlorobenzene		–	30000 J	–	12000 J	6200 J	–
2-Methylphenol (o-cresol)		–	–	–	–	–	–
4-Methylphenol (p-cresol)		–	–	–	R	–	–
Nitrobenzene		580000 J	97000 J	–	1900 J	8500 J	–
2,4-Dimethylphenol		–	–	–	16000 J	–	–
2,4-Dichlorophenol		16000000 D	2600000 D	19000 J	46000	58000	240000 J
1,2,4-Trichlorobenzene		–	–	–	5800 J	3300 J	–
Naphthalene		–	–	–	–	–	–
4-Chloroaniline		–	–	–	–	40000	–
2-Methylnaphthalene		–	–	–	–	–	–
2,4,6-Trichlorophenol		1900000	540000	–	23000	9800 J	51000 J
2,4,5-Trichlorophenol		–	–	–	–	–	–
2-Nitroaniline		–	–	–	–	–	–
Dimethylphthalate		–	–	–	–	–	–
Acenaphthene		–	–	–	–	–	–
Dibenzofuran		–	–	–	–	–	–
Diethylphthalate		–	–	–	–	–	–
Fluorene		–	–	–	–	–	–
4-Nitroaniline		–	–	–	350000 DJ	–	–
N-Nitrosodiphenylamine		–	–	–	–	–	–
Pentachlorophenol		–	–	–	86000	–	–
Phenanthrene		–	–	–	–	–	–
Anthracene		–	–	–	–	–	–
Carbazole		–	–	–	–	–	–
Di-n-butylphthalate		–	–	–	–	–	–
Fluoranthene		–	–	–	–	–	–
Pyrene		–	–	–	–	–	–
Butylbenzylphthalate		–	–	–	–	160 J	–
3,3'-Dichlorobenzidine		–	–	–	–	–	–
Benzo(a)anthracene		–	–	–	–	–	–
Chrysene		–	–	–	–	–	–
bis(2-Ethylhexyl)phthalate		–	–	–	–	–	–
Di-n-octylphthalate		–	–	–	–	–	–
Benzo(b)fluoranthene		–	–	–	–	–	–
Benzo(k)fluoranthene		–	–	–	–	–	–
Benzo(a)pyrene		–	–	–	–	–	–
Indeno(1,2,3-cd)pyrene		–	–	–	–	–	–
Benzo(g,h,i)perylene		–	–	–	–	–	–
Aniline		–	–	–	–	–	–
2-Chloroaniline		720000 J	190000 J	–	8600 J	190000 D	160000 J
3-Chloroaniline		–	–	–	–	44000 DJ	–
Total SVOCs		20940000	3827000	26300	549300	589960	1401000

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
J	Estimated value.
D	Concentration determined at a secondary dilution factor.
R	Unusable value.
E	Exceeded the instrument calibration range.
–	Not detected.
SVOCs	Semivolatile organic compounds.

Only those compounds detected are listed.

SUBSEM.XLS

Table 5-9. Summary of Target Compound List Semivolatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameter	Sample Location: SB-16 Sample Depth: 30-32 ft Sample Date: 5/29/92 Units: ug/kg
Phenol	420000 EJ
bis(2-Chloroethyl)ether	–
2-Chlorophenol	460000 EJ
1,3-Dichlorobenzene	–
1,4-Dichlorobenzene	–
1,2-Dichlorobenzene	–
2-Methylphenol (o-cresol)	–
4-Methylphenol (p-cresol)	36000 J
Nitrobenzene	690 J
2,4-Dimethylphenol	–
2,4-Dichlorophenol	420000 DJ
1,2,4-Trichlorobenzene	–
Naphthalene	–
4-Chloroaniline	–
2-Methylnaphthalene	–
2,4,6-Trichlorophenol	51000 J
2,4,5-Trichlorophenol	–
2-Nitroaniline	–
Dimethylphthalate	–
Acenaphthene	–
Dibenzofuran	–
Diethylphthalate	–
Fluorene	–
4-Nitroaniline	–
N-Nitrosodiphenylamine	–
Pentachlorophenol	–
Phenanthrene	–
Anthracene	–
Carbazole	–
Di-n-butylphthalate	–
Fluoranthene	–
Pyrene	–
Butylbenzylphthalate	–
3,3'-Dichlorobenzidine	–
Benzo(a)anthracene	–
Chrysene	–
bis(2-Ethylhexyl)phthalate	–
Di-n-octylphthalate	–
Benzo(b)fluoranthene	–
Benzo(k)fluoranthene	–
Benzo(a)pyrene	–
Indeno(1,2,3-cd)pyrene	–
Benzo(g,h,i)perylene	–
Aniline	–
2-Chloroaniline	49000
3-Chloroaniline	–
Total SVOCs	1436690

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
J	Estimated value.
D	Concentration determined at a secondary dilution factor.
R	Unusable value.
E	Exceeded the instrument calibration range.
–	Not detected.
SVOCs	Semivolatile organic compounds.

Only those compounds detected are listed.

SUBSEM.XLS

Table 5-9. Summary of Target Compound List Semivolatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank
Sample Depth:						
Sample Date:	4/9/92	4/10/92	4/13/92	4/14/92	4/16/92	4/21/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter						
Phenol	–	–	–	–	–	–
bis(2-Chloroethyl)ether	–	–	–	–	–	–
2-Chlorophenol	–	–	–	–	–	–
1,3-Dichlorobenzene	–	–	–	–	–	–
1,4-Dichlorobenzene	–	–	–	–	–	–
1,2-Dichlorobenzene	–	–	–	–	–	–
2-Methylphenol (o-cresol)	–	–	–	–	–	–
4-Methylphenol (p-cresol)	–	–	–	–	–	–
Nitrobenzene	–	–	–	–	–	–
2,4-Dimethylphenol	–	–	–	–	–	–
2,4-Dichlorophenol	–	–	–	–	–	–
1,2,4-Trichlorobenzene	–	–	–	–	–	–
Naphthalene	–	–	–	–	–	–
4-Chloroaniline	–	–	–	–	–	–
2-Methylnaphthalene	–	–	–	–	–	–
2,4,6-Trichlorophenol	–	–	–	–	–	–
2,4,5-Trichlorophenol	–	–	–	–	–	–
2-Nitroaniline	–	–	–	–	–	–
Dimethylphthalate	–	–	–	–	–	–
Acenaphthene	–	–	–	–	–	–
Dibenzofuran	–	–	–	–	–	–
Diethylphthalate	–	–	–	–	–	–
Fluorene	–	–	–	–	–	–
4-Nitroaniline	–	–	–	–	–	–
N-Nitrosodiphenylamine	–	–	–	–	–	–
Pentachlorophenol	–	–	–	–	–	–
Phenanthrene	–	–	–	–	–	–
Anthracene	–	–	–	–	–	–
Carbazole	–	0.3 J	–	–	–	–
Di-n-butylphthalate	–	–	–	–	–	–
Fluoranthene	–	–	–	–	–	–
Pyrene	–	1 J	–	–	–	–
Butylbenzylphthalate	–	–	–	–	–	–
3,3'-Dichlorobenzidine	–	–	–	–	–	–
Benzo(a)anthracene	–	–	–	–	–	–
Chrysene	0.8 J	360 D	0.7 J	–	4 J	6 J
bis(2-Ethylhexyl)phthalate	–	–	–	–	–	–
Di-n-octylphthalate	–	–	–	–	–	–
Benzo(b)fluoranthene	–	–	–	–	–	–
Benzo(k)fluoranthene	–	–	–	–	–	–
Benzo(a)pyrene	–	–	–	–	–	–
Indeno(1,2,3-cd)pyrene	–	–	–	–	–	–
Benzo(g,h,i)perylene	–	–	–	–	–	–
2-Chloroaniline	–	–	–	–	–	–
3-Chloroaniline	–	–	–	–	–	–
Total SVOCs	0.8	361.3	0.7	–	4	6

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
J	Estimated value.
D	Concentration determined at a secondary dilution factor.
R	Unusable value.
E	Exceeded the instrument calibration range.
–	Not detected.
SVOCs	Semivolatile organic compounds.

Only those compounds detected are listed.

Table 5-9. Summary of Target Compound List Semivolatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank
Sample Depth:						
Sample Date:	4/23/92	4/27/92	5/4/92	5/5/92	5/6/92	5/7/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter						
Phenol	–	0.4 J	–	–	–	–
bis(2-Chloroethyl)ether	–	–	–	–	–	–
2-Chlorophenol	–	–	–	–	–	–
1,3-Dichlorobenzene	–	–	–	–	–	–
1,4-Dichlorobenzene	–	–	–	–	–	–
1,2-Dichlorobenzene	–	–	–	–	–	–
2-Methylphenol (o-cresol)	–	–	–	–	–	–
4-Methylphenol (p-cresol)	–	–	–	–	–	–
Nitrobenzene	–	–	2 J	1 J	–	–
2,4-Dimethylphenol	–	–	–	–	–	–
2,4-Dichlorophenol	–	–	–	–	–	–
1,2,4-Trichlorobenzene	–	–	–	–	–	–
Naphthalene	–	0.7 J	–	–	6 J	0.3 J
4-Chloroaniline	–	–	–	–	–	–
2-Methylnaphthalene	–	–	–	–	–	–
2,4,6-Trichlorophenol	–	–	–	–	–	–
2,4,5-Trichlorophenol	–	–	–	–	–	–
2-Nitroaniline	–	–	–	–	–	–
Dimethylphthalate	–	–	–	–	–	–
Acenaphthene	–	–	–	–	–	–
Dibenzofuran	–	–	–	–	–	–
Diethylphthalate	–	–	–	–	–	–
Fluorene	–	–	–	–	–	–
4-Nitroaniline	–	–	–	–	–	–
N-Nitrosodiphenylamine	–	–	–	–	–	–
Pentachlorophenol	–	–	–	–	–	–
Phenanthrene	–	–	–	–	–	–
Anthracene	–	–	–	–	–	–
Carbazole	–	–	–	–	–	–
Di-n-butylphthalate	–	–	–	–	–	–
Fluoranthene	–	–	–	–	–	–
Pyrene	–	–	–	–	–	–
Butylbenzylphthalate	–	–	–	–	–	–
3,3'-Dichlorobenzidine	–	–	–	–	–	–
Benzo(a)anthracene	–	–	–	–	–	–
Chrysene	13 J	–	–	–	–	–
bis(2-Ethylhexyl)phthalate	–	–	–	–	–	–
Di-n-octylphthalate	–	–	–	–	–	–
Benzo(b)fluoranthene	–	–	–	–	–	–
Benzo(k)fluoranthene	–	–	–	–	–	–
Benzo(a)pyrene	–	–	–	–	–	–
Indeno(1,2,3-cd)pyrene	–	–	–	–	–	–
Benzo(g,h,i)perylene	–	–	–	–	–	–
2-Chloroaniline	–	–	–	–	–	–
3-Chloroaniline	–	–	–	–	–	–
Total SVOCs	13	1.1	2	1	6	0.3

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
J	Estimated value.
D	Concentration determined at a secondary dilution factor.
R	Unusable value.
E	Exceeded the instrument calibration range.
–	Not detected.
SVOCs	Semivolatile organic compounds.

Only those compounds detected are listed.

Table 5-9. Summary of Target Compound List Semivolatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank
Sample Depth:						
Sample Date:	5/8/92	5/13/92	5/14/92	5/15/92	5/18/92	5/19/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter						
Phenol	–	–	–	–	–	–
bis(2-Chloroethyl)ether	–	–	–	–	–	–
2-Chlorophenol	–	–	–	–	–	–
1,3-Dichlorobenzene	–	–	–	–	–	–
1,4-Dichlorobenzene	–	–	–	–	–	–
1,2-Dichlorobenzene	–	–	–	–	–	–
2-Methylphenol (o-cresol)	–	–	–	–	–	–
4-Methylphenol (p-cresol)	–	–	–	–	–	–
Nitrobenzene	–	–	–	–	–	–
2,4-Dimethylphenol	–	–	–	–	–	–
2,4-Dichlorophenol	–	–	–	–	–	–
1,2,4-Trichlorobenzene	–	–	–	–	–	–
Naphthalene	–	–	–	–	–	–
4-Chloroaniline	–	–	–	–	–	–
2-Methylnaphthalene	–	–	–	–	–	–
2,4,6-Trichlorophenol	–	–	–	–	–	–
2,4,5-Trichlorophenol	–	–	–	–	–	–
2-Nitroaniline	–	–	–	–	–	–
Dimethylphthalate	–	–	–	–	–	–
Acenaphthene	–	–	–	–	–	–
Dibenzofuran	–	–	–	–	–	–
Diethylphthalate	–	–	–	–	–	–
Fluorene	–	–	–	–	–	–
4-Nitroaniline	–	–	–	–	–	–
N-Nitrosodiphenylamine	–	–	–	–	–	–
Pentachlorophenol	–	–	–	–	–	–
Phenanthrene	–	–	–	–	–	–
Anthracene	–	–	–	–	–	–
Carbazole	–	–	–	–	–	–
Di-n-butylphthalate	–	–	–	–	–	–
Fluoranthene	–	–	–	–	–	–
Pyrene	–	–	–	–	–	–
Butylbenzylphthalate	–	–	–	–	–	R
3,3'-Dichlorobenzidine	–	–	–	–	–	–
Benzo(a)anthracene	–	–	–	–	–	–
Chrysene	–	–	–	–	–	–
bis(2-Ethylhexyl)phthalate	–	–	–	–	–	–
Di-n-octylphthalate	–	–	–	–	–	–
Benzo(b)fluoranthene	–	–	–	–	–	–
Benzo(k)fluoranthene	–	–	–	–	–	–
Benzo(a)pyrene	–	–	–	–	–	–
Indeno(1,2,3-cd)pyrene	–	–	–	–	–	–
Benzo(g,h,i)perylene	–	–	–	–	–	–
2-Chloroaniline	–	–	–	–	–	–
3-Chloroaniline	–	–	–	–	–	–
Total SVOCs	–	–	–	–	–	–

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
J	Estimated value.
D	Concentration determined at a secondary dilution factor.
R	Unusable value.
E	Exceeded the instrument calibration range.
–	Not detected.
SVOCs	Semivolatile organic compounds.

Only those compounds detected are listed.

Table 5-9. Summary of Target Compound List Semivolatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank
Sample Depth:						
Sample Date:	5/20/92	5/21/92	5/22/92	5/26/92	5/27/92	5/28/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter						
Phenol	–	–	–	–	–	–
bis(2-Chloroethyl)ether	–	–	–	–	–	–
2-Chlorophenol	–	–	–	–	–	–
1,3-Dichlorobenzene	–	–	–	–	–	–
1,4-Dichlorobenzene	–	–	–	–	–	–
1,2-Dichlorobenzene	–	–	–	–	–	–
2-Methylphenol (o-cresol)	–	–	–	–	–	–
4-Methylphenol (p-cresol)	–	–	–	–	–	–
Nitrobenzene	–	–	–	–	–	–
2,4-Dimethylphenol	–	–	–	–	–	–
2,4-Dichlorophenol	–	–	–	1 J	–	–
1,2,4-Trichlorobenzene	–	–	–	–	–	–
Naphthalene	–	–	–	–	–	–
4-Chloroaniline	–	–	–	–	–	–
2-Methylnaphthalene	–	–	–	–	–	–
2,4,6-Trichlorophenol	–	–	–	–	–	–
2,4,5-Trichlorophenol	–	–	–	–	–	–
2-Nitroaniline	–	–	–	–	–	–
Dimethylphthalate	–	–	–	–	–	–
Acenaphthene	–	–	–	–	–	–
Dibenzofuran	–	–	–	–	–	–
Diethylphthalate	–	–	–	–	–	–
Fluorene	–	–	–	–	–	–
4-Nitroaniline	–	–	–	–	–	–
N-Nitrosodiphenylamine	–	–	–	–	–	–
Pentachlorophenol	–	–	–	–	–	–
Phenanthrene	–	–	–	–	–	–
Anthracene	–	–	–	–	–	–
Carbazole	–	–	–	–	–	–
Di-n-butylphthalate	–	–	–	–	–	–
Fluoranthene	–	–	–	–	–	–
Pyrene	–	–	–	–	–	–
Butylbenzylphthalate	R	R	–	–	–	–
3,3'-Dichlorobenzidine	–	–	–	–	–	–
Benzo(a)anthracene	–	–	–	–	–	–
Chrysene	–	–	–	–	–	–
bis(2-Ethylhexyl)phthalate	–	–	–	–	–	–
Di-n-octylphthalate	–	–	–	–	–	–
Benzo(b)fluoranthene	–	–	–	–	–	–
Benzo(k)fluoranthene	–	–	–	–	–	–
Benzo(a)pyrene	–	–	–	–	–	–
Indeno(1,2,3-cd)pyrene	–	–	–	–	–	–
Benzo(g,h,i)perylene	–	–	–	–	–	–
2-Chloroaniline	–	–	–	–	–	–
3-Chloroaniline	–	–	–	–	–	–
Total SVOCs	–	–	–	1	–	–

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
J	Estimated value.
D	Concentration determined at a secondary dilution factor.
R	Unusable value.
E	Exceeded the instrument calibration range.
–	Not detected.
SVOCs	Semivolatile organic compounds.

Only those compounds detected are listed.

Table 5-9. Summary of Target Compound List Semivolatile Organic Compounds Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	Equipment Blank
Sample Depth:	
Sample Date:	5/29/92
Units:	ug/L
Parameter	
Phenol	5 J
bis(2-Chloroethyl)ether	–
2-Chlorophenol	–
1,3-Dichlorobenzene	–
1,4-Dichlorobenzene	–
1,2-Dichlorobenzene	–
2-Methylphenol (o-cresol)	1 J
4-Methylphenol (p-cresol)	3 J
Nitrobenzene	–
2,4-Dimethylphenol	–
2,4-Dichlorophenol	–
1,2,4-Trichlorobenzene	–
Naphthalene	8 J
4-Chloroaniline	–
2-Methylnaphthalene	2 J
2,4,6-Trichlorophenol	–
2,4,5-Trichlorophenol	–
2-Nitroaniline	–
Dimethylphthalate	–
Acenaphthene	–
Dibenzofuran	–
Diethylphthalate	–
Fluorene	–
4-Nitroaniline	–
N-Nitrosodiphenylamine	–
Pentachlorophenol	–
Phenanthrene	–
Anthracene	–
Carbazole	–
Di-n-butylphthalate	–
Fluoranthene	–
Pyrene	–
Butylbenzylphthalate	–
3,3'-Dichlorobenzidine	–
Benzo(a)anthracene	–
Chrysene	6 J
bis(2-Ethylhexyl)phthalate	–
Di-n-octylphthalate	–
Benzo(b)fluoranthene	–
Benzo(k)fluoranthene	–
Benzo(a)pyrene	–
Indeno(1,2,3-cd)pyrene	–
Benzo(g,h,i)perylene	–
2-Chloroaniline	–
3-Chloroaniline	–
Total SVOCs	25

ug/L	Micrograms per liter.
ug/kg	Micrograms per kilogram.
J	Estimated value.
D	Concentration determined at a secondary dilution factor.
R	Unusable value.
E	Exceeded the instrument calibration range.
–	Not detected.
SVOCs	Semivolatile organic compounds.

Only those compounds detected are listed.

Table 5-10. Summary of Target Compound List Pesticides, PCBs, and Herbicides Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	SB-1	SB-1	SB-1	SB-2	SB-2	SB-2	SB-3
Sample Depth:	12-14 ft	26-28 ft	32-34 ft	12-14 ft	14-16 ft	28-30 ft	12-14 ft
Sample Date:	4/9/92	4/9/92	4/9/92	4/10/92	4/10/92	4/13/92	4/16/92
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Parameter							
Pesticides/PCBs							
beta-BHC	–	–	–	–	–	–	–
delta-BHC	–	–	–	–	–	–	–
Heptachlor epoxide	–	–	–	–	–	–	–
Endosulfan I	–	–	–	–	3000 JN	R	–
4,4'-DDE	–	–	–	–	–	–	22000 J
Endrin	–	R	R	–	–	–	4600 J
Endosulfan II	R	–	–	–	R	–	–
4,4'-DDD	–	–	–	–	–	–	–
4,4'-DDT	–	–	–	1400	–	–	–
Methoxychlor	–	–	–	–	–	–	–
Endrin ketone	R	R	R	–	R	R	R
Endrin aldehyde	–	–	–	–	–	–	5900 JN
alpha-Chlordane	–	–	–	–	–	–	–
gamma-Chlordane	–	–	–	–	–	–	–
Aroclor-1248	–	–	–	–	–	–	4800000 J
Aroclor-1254	–	–	–	–	–	–	–
Aroclor-1260	–	–	–	–	–	–	–
Herbicides							
2,4-D	NA	NA	NA	NA	NA	NA	NA

ug/kg Micrograms per kilogram.
ug/L Micrograms per liter.
D Concentration determined at a secondary dilution factor.
NA Not analyzed.
J Estimated value.
R Unusable value.
N Presumptive evidence of the compound present.
– Not detected.
PCBs Polychlorinated biphenyls.

Only those compounds detected are listed.

Table 5-10. Summary of Target Compound List Pesticides, PCBs, and Herbicides Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	SB-3	SB-3	SB-4	SB-4	SB-4	SB-5	SB-5
Sample Depth:	14-16 ft	32-34 ft	10-12 ft	12-14 ft	30-32 ft	12-14 ft	20-22 ft
Sample Date:	4/16/92	4/16/92	4/14/92	4/14/92	4/14/92	5/4/92	5/4/92
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Parameter							
Pesticides/PCBs							
beta-BHC	–	–	7600 JN	–	–	–	–
delta-BHC	–	–	–	–	–	–	–
Heptachlor epoxide	–	–	–	–	–	–	–
Endosulfan I	–	–	–	–	–	–	–
4,4'-DDE	–	–	–	–	–	–	–
Endrin	–	–	–	–	–	–	–
Endosulfan II	–	3300	R	–	–	–	–
4,4'-DDD	720	–	–	–	–	–	–
4,4'-DDT	–	–	52000	–	–	–	–
Methoxychlor	–	–	–	–	–	–	–
Endrin ketone	R	15000	4600	–	99000 JN	11000	–
Endrin aldehyde	2000 J	–	–	–	–	–	–
alpha-Chlordane	–	420	–	–	–	–	–
gamma-Chlordane	–	–	–	–	–	–	–
Aroclor-1248	900000 J	–	–	–	–	470000 J	62000 J
Aroclor-1254	–	–	–	–	–	1100000 J	120000 JN
Aroclor-1260	–	–	–	100000	–	–	–
Herbicides							
2,4-D	NA	NA	NA	NA	NA	NA	NA

ug/kg	Micrograms per kilogram.
ug/L	Micrograms per liter.
D	Concentration determined at a secondary dilution factor.
NA	Not analyzed.
J	Estimated value.
R	Unusable value.
N	Presumptive evidence of the compound present.
–	Not detected.
PCBs	Polychlorinated biphenyls.

Only those compounds detected are listed.

Table 5-10. Summary of Target Compound List Pesticides, PCBs, and Herbicides Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	SB-5	SB-6	SB-6	SB-6	SB-7	SB-7	SB-7
Sample Depth:	28-30 ft	18-20 ft	20-22 ft	28-30 ft	16-18 ft	20-22 ft	24-26 ft
Sample Date:	5/4/92	5/5/92	5/5/92	5/6/92	5/7/92	5/7/92	5/7/92
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Parameter							
Pesticides/PCBs							
beta-BHC	–	–	–	–	–	–	–
delta-BHC	–	–	–	–	–	–	–
Heptachlor epoxide	–	600 DJ	–	–	–	–	–
Endosulfan I	–	–	–	–	–	–	–
4,4'-DDE	–	–	–	–	–	–	–
Endrin	–	–	–	–	–	–	–
Endosulfan II	–	–	45000 DJ	–	–	–	–
4,4'-DDD	–	–	–	–	–	–	–
4,4'-DDT	–	–	–	–	–	–	–
Methoxychlor	–	–	–	–	–	–	–
Endrin ketone	–	–	–	–	–	–	–
Endrin aldehyde	–	–	29000 DJ	–	–	–	–
alpha-Chlordane	–	1700 DJ	–	–	–	–	–
gamma-Chlordane	–	300 J	–	–	–	–	–
Aroclor-1248	12000 J	–	1200000 DJ	26000 J	–	–	–
Aroclor-1254	22000 J	–	–	–	–	–	–
Aroclor-1260	–	–	–	–	–	–	–
Herbicides							
2,4-D	NA	NA	NA	NA	NA	NA	NA

ug/kg Micrograms per kilogram.
ug/L Micrograms per liter.
D Concentration determined at a secondary dilution factor.
NA Not analyzed.
J Estimated value.
R Unusable value.
N Presumptive evidence of the compound present.
– Not detected.
PCBs Polychlorinated biphenyls.

Only those compounds detected are listed.

Table 5-10. Summary of Target Compound List Pesticides, PCBs, and Herbicides Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	SB-8	SB-9	SB-9	SB-9	SB-9	SB-10	SB-10
Sample Depth:	6-8 ft	18-20 ft	20-22 ft	28-30 ft	30-32 ft	6-8 ft	18-20 ft
Sample Date:	5/8/92	5/13/92	5/13/92	5/13/92	5/13/92	5/14/92	5/14/92
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Parameter							
Pesticides/PCBs							
beta-BHC	–	–	–	–	–	–	–
delta-BHC	–	–	–	–	–	–	330 J
Heptachlor epoxide	–	–	–	–	–	440 J	R
Endosulfan I	–	–	–	–	–	–	–
4,4'-DDE	–	–	–	–	–	–	–
Endrin	–	–	–	–	–	–	–
Endosulfan II	3500 J	–	–	–	–	1100 J	–
4,4'-DDD	–	–	–	–	–	–	–
4,4'-DDT	–	–	–	–	–	–	–
Methoxychlor	–	–	–	–	R	–	–
Endrin ketone	–	–	–	–	–	–	–
Endrin aldehyde	R	–	–	–	–	–	–
alpha-Chlordane	–	–	–	–	–	–	290 J
gamma-Chlordane	–	–	–	–	–	450 J	620 J
Aroclor-1248	270000 J	16000 J	7200 J	7000 J	160000 JN	130000 J	130000 J
Aroclor-1254	–	–	–	–	–	–	–
Aroclor-1260	–	3700 J	1000 J	14000 J	100000 J	9500 J	34000 J
Herbicides							
2,4-D	NA	NA	NA	NA	NA	970 J	NA

ug/kg Micrograms per kilogram.
ug/L Micrograms per liter.
D Concentration determined at a secondary dilution factor.
NA Not analyzed.
J Estimated value.
R Unusable value.
N Presumptive evidence of the compound present.
– Not detected.
PCBs Polychlorinated biphenyls.

Only those compounds detected are listed.

Table 5-10. Summary of Target Compound List Pesticides, PCBs, and Herbicides Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	SB-10	SB-11	SB-11	SB-11	SB-12	SB-12	SB-12
Sample Depth:	24-26 ft	14-16 ft	16-18 ft	30-32 ft	8-10 ft	22-24 ft	32-34 ft
Sample Date:	5/14/92	5/19/92	5/19/92	5/20/92	5/15/92	5/18/92	5/18/92
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Parameter							
Pesticides/PCBs							
beta-BHC	–	–	–	–	–	–	–
delta-BHC	–	–	–	–	–	–	–
Heptachlor epoxide	–	–	–	–	–	–	–
Endosulfan I	–	–	–	–	–	–	–
4,4'-DDE	–	–	–	–	–	–	–
Endrin	–	–	–	–	–	–	–
Endosulfan II	–	R	–	–	–	6100 J	–
4,4'-DDD	–	–	–	–	–	–	–
4,4'-DDT	–	–	–	–	–	–	–
Methoxychlor	–	–	–	–	–	–	–
Endrin ketone	–	–	–	–	–	–	–
Endrin aldehyde	–	–	–	–	–	–	–
alpha-Chlordane	–	–	–	–	–	–	–
gamma-Chlordane	–	–	–	–	–	3500 J	–
Aroclor-1248	49000 J	25000 J	19000 J	8400 J	–	800000 J	75 J
Aroclor-1254	–	–	11000 J	–	–	–	–
Aroclor-1260	24000 J	–	–	–	–	–	–
Herbicides							
2,4-D	2600	NA	1700	–	7.5 J	NA	3200

ug/kg Micrograms per kilogram.
ug/L Micrograms per liter.
D Concentration determined at a secondary dilution factor.
NA Not analyzed.
J Estimated value.
R Unusable value.
N Presumptive evidence of the compound present.
– Not detected.
PCBs Polychlorinated biphenyls.

Only those compounds detected are listed.

Table 5-10. Summary of Target Compound List Pesticides, PCBs, and Herbicides Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	SB-13	SB-13	SB-13	SB-14	SB-14	SB-14	SB-15
Sample Depth:	16-18 ft	18-20 ft	30-32 ft	10-12 ft	20-22 ft	30-32 ft	16-18 ft
Sample Date:	5/21/92	5/21/92	5/21/92	5/22/92	5/26/92	5/26/92	5/27/92
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Parameter							
Pesticides/PCBs							
beta-BHC	–	–	–	–	–	–	–
delta-BHC	–	–	–	–	–	–	–
Heptachlor epoxide	–	–	–	–	–	–	–
Endosulfan I	–	–	–	–	–	–	–
4,4'-DDE	–	–	–	–	–	–	–
Endrin	–	–	–	–	–	–	–
Endosulfan II	–	–	–	–	–	–	–
4,4'-DDD	–	–	–	–	–	–	–
4,4'-DDT	–	–	–	–	–	–	R
Methoxychlor	–	–	–	–	–	–	–
Endrin ketone	–	–	–	–	–	–	–
Endrin aldehyde	–	–	–	–	–	–	–
alpha-Chlordane	–	–	–	–	–	–	–
gamma-Chlordane	–	–	–	–	–	–	–
Aroclor-1248	–	–	–	–	–	–	–
Aroclor-1254	–	–	–	–	–	–	–
Aroclor-1260	–	–	–	–	–	–	–
Herbicides							
2,4-D	110	NA	96	NA	23000	130000	720000

ug/kg Micrograms per kilogram.
ug/L Micrograms per liter.
D Concentration determined at a secondary dilution factor.
NA Not analyzed.
J Estimated value.
R Unusable value.
N Presumptive evidence of the compound present.
– Not detected.
PCBs Polychlorinated biphenyls.

Only those compounds detected are listed.

Table 5-10. Summary of Target Compound List Pesticides, PCBs, and Herbicides Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	SB-15	SB-15	SB-16	SB-16	SB-16	SB-16
Sample Depth:	18-20 ft	26-28 ft	6-8 ft	16-18 ft	28-30 ft	30-32 ft
Sample Date:	5/28/92	5/28/92	5/29/92	5/29/92	5/29/92	5/29/92
Units:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Parameter						
Pesticides/PCBs						
beta-BHC	–	–	–	–	–	–
delta-BHC	–	–	–	–	–	–
Heptachlor epoxide	–	–	–	–	–	–
Endosulfan I	–	–	–	–	–	–
4,4'-DDE	–	–	–	240 J	–	–
Endrin	–	–	–	–	–	19
Endosulfan II	–	–	–	–	–	–
4,4'-DDD	–	–	–	–	–	–
4,4'-DDT	–	–	420	–	11 J	–
Methoxychlor	–	–	–	–	–	–
Endrin ketone	–	–	–	–	–	–
Endrin aldehyde	–	–	R	–	–	–
alpha-Chlordane	–	–	–	–	–	–
gamma-Chlordane	–	–	–	–	–	–
Aroclor-1248	–	–	–	–	–	–
Aroclor-1254	–	–	–	–	–	–
Aroclor-1260	–	–	–	–	–	–
Herbicides						
2,4-D	NA	5200	NA	310	8900	NA

ug/kg Micrograms per kilogram.
ug/L Micrograms per liter.
D Concentration determined at a secondary dilution factor.
NA Not analyzed.
J Estimated value.
R Unusable value.
N Presumptive evidence of the compound present.
– Not detected.
PCBs Polychlorinated biphenyls.

Only those compounds detected are listed.

Table 5-10. Summary of Target Compound List Pesticides, PCBs, and Herbicides Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank
Sample Depth:							
Sample Date:	4/9/92	4/10/92	4/13/92	4/14/92	4/16/92	4/23/92	4/27/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter							
Pesticides/PCBs							
beta-BHC	–	–	–	–	–	–	–
delta-BHC	–	–	–	–	–	–	–
Heptachlor epoxide	–	–	–	–	–	–	–
Endosulfan I	–	–	–	–	–	–	–
4,4'-DDE	–	–	–	–	–	–	–
Endrin	–	–	–	–	–	–	–
Endosulfan II	–	–	–	–	–	–	–
4,4'-DDD	–	–	–	–	–	–	–
4,4'-DDT	–	–	–	–	–	–	–
Methoxychlor	–	–	–	–	–	–	–
Endrin ketone	–	–	–	–	–	–	–
Endrin aldehyde	–	–	–	–	–	–	–
alpha-Chlordane	–	–	–	–	–	–	–
gamma-Chlordane	–	–	–	–	–	–	–
Aroclor-1248	–	–	–	–	–	–	–
Aroclor-1254	–	–	–	–	–	–	–
Aroclor-1260	–	–	–	–	–	–	–
Herbicides							
2,4-D	NA	NA	NA	NA	NA	NA	NA

ug/kg Micrograms per kilogram.
ug/L Micrograms per liter.
D Concentration determined at a secondary dilution factor.
NA Not analyzed.
J Estimated value.
R Unusable value.
N Presumptive evidence of the compound present.
– Not detected.
PCBs Polychlorinated biphenyls.

Only those compounds detected are listed.

Table 5-10. Summary of Target Compound List Pesticides, PCBs, and Herbicides Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank
Sample Depth:							
Sample Date:	5/4/92	5/5/92	5/6/92	5/7/92	5/8/92	5/13/92	5/14/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter							
Pesticides/PCBs							
beta-BHC	–	–	–	–	–	–	–
delta-BHC	–	–	–	–	–	–	–
Heptachlor epoxide	–	–	–	–	–	–	–
Endosulfan I	–	–	–	–	–	–	–
4,4'-DDE	–	–	–	–	–	–	–
Endrin	–	–	–	–	–	–	–
Endosulfan II	–	–	–	–	–	–	–
4,4'-DDD	–	–	–	–	–	–	–
4,4'-DDT	–	–	–	–	–	–	–
Methoxychlor	–	–	–	–	–	–	–
Endrin ketone	–	–	–	–	–	–	–
Endrin aldehyde	–	–	–	–	–	–	–
alpha-Chlordane	–	–	–	–	–	–	–
gamma-Chlordane	–	–	–	–	–	–	–
Aroclor-1248	–	–	–	–	–	–	–
Aroclor-1254	–	–	–	–	–	–	–
Aroclor-1260	–	–	–	–	–	–	–
Herbicides							
2,4-D	NA	NA	NA	NA	NA	NA	NA

ug/kg	Micrograms per kilogram.
ug/L	Micrograms per liter.
D	Concentration determined at a secondary dilution factor.
NA	Not analyzed.
J	Estimated value.
R	Unusable value.
N	Presumptive evidence of the compound present.
–	Not detected.
PCBs	Polychlorinated biphenyls.

Only those compounds detected are listed.

Table 5-10. Summary of Target Compound List Pesticides, PCBs, and Herbicides Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank
Sample Depth:							
Sample Date:	5/15/92	5/18/92	5/19/92	5/20/92	5/21/92	5/22/92	5/26/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter							
Pesticides/PCBs							
beta-BHC	--	--	--	--	--	--	--
delta-BHC	--	--	--	--	--	--	--
Heptachlor epoxide	--	--	--	--	--	--	--
Endosulfan I	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--
Endrin	--	--	--	--	--	--	--
Endosulfan II	--	--	--	--	--	--	--
4,4'-DDD	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--
Methoxychlor	--	--	--	--	--	--	--
Endrin ketone	--	--	--	--	--	--	--
Endrin aldehyde	--	--	--	--	--	--	--
alpha-Chlordane	--	--	--	--	--	--	--
gamma-Chlordane	--	--	--	--	--	--	--
Aroclor-1248	--	--	--	--	--	--	--
Aroclor-1254	--	--	--	--	--	--	--
Aroclor-1260	--	--	--	--	--	--	--
Herbicides							
2,4-D	NA	NA	NA	NA	NA	NA	NA

ug/kg	Micrograms per kilogram.
ug/L	Micrograms per liter.
D	Concentration determined at a secondary dilution factor.
NA	Not analyzed.
J	Estimated value.
R	Unusable value.
N	Presumptive evidence of the compound present.
--	Not detected.
PCBs	Polychlorinated biphenyls.

Only those compounds detected are listed.

Table 5-10. Summary of Target Compound List Pesticides, PCBs, and Herbicides Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	Equipment Blank	Equipment Blank	Equipment Blank
Sample Depth:			
Sample Date:	5/27/92	5/28/92	5/29/92
Units:	ug/L	ug/L	ug/L
Parameter			
Pesticides/PCBs			
beta-BHC	–	–	–
delta-BHC	–	–	–
Heptachlor epoxide	–	–	–
Endosulfan I	–	–	–
4,4'-DDE	–	–	–
Endrin	–	–	–
Endosulfan II	–	–	–
4,4'-DDD	–	–	–
4,4'-DDT	–	–	–
Methoxychlor	–	–	–
Endrin ketone	–	–	–
Endrin aldehyde	–	–	–
alpha-Chlordane	–	–	–
gamma-Chlordane	–	–	–
Aroclor-1248	–	–	–
Aroclor-1254	–	–	–
Aroclor-1260	–	–	–
Herbicides			
2,4-D	NA	NA	NA

ug/kg	Micrograms per kilogram.
ug/L	Micrograms per liter.
D	Concentration determined at a secondary dilution factor.
NA	Not analyzed.
J	Estimated value.
R	Unusable value.
N	Presumptive evidence of the compound present.
–	Not detected.
PCBs	Polychlorinated biphenyls.

Only those compounds detected are listed.

Table 5-11. Summary of Target Analyte List Parameters Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	SB-1	SB-1	SB-1	SB-2	SB-2	SB-2	SB-3
Sample Depth:	12-14 ft	26-28 ft	32-34 ft	12-14 ft	14-16 ft	28-30 ft	12-14 ft
Sample Date:	4/9/92	4/9/92	4/9/92	4/10/92	4/10/92	4/13/92	4/16/92
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Parameter							
Aluminum	7890	6350	8660	4080	3280	10100	3870 J
Antimony	–	–	–	–	–	–	–
Arsenic	6.6	–	4.5	3.7	–	4.7	–
Barium	71.1	180	237	62.8	62.2	117	70.8
Beryllium	–	–	–	–	–	–	–
Cadmium	–	–	–	–	–	–	–
Calcium	11500	12700	15600	7580	4670	7620	5860
Chromium	20.4 J	11.6 J	14.7 J	13.0 J	11.4 J	14.7 J	19.6
Cobalt	27.1	18.6	17.9	81.5	43.6	10.9	16.5 B
Copper	78.8 J	13.4 J	15.2 J	183 J	120 J	16.6 J	219 J
Iron	12100	10100	14600	10100	11000	13900	13500
Lead	16.8 J	6.8 J	10.3 J	8.1 J	3.6 J	10.6 J	6.0 J
Magnesium	858 B	5360	5930	540 B	291 B	4700	335 B
Manganese	59.8	209	734	73.8	38.3	623	29.9
Mercury	0.44	–	–	–	–	–	–
Nickel	65.5	21.9	28.8	20.4	26.1	24.0	40.2
Potassium	580	1360	1730	501	432	1670	495 B
Selenium	–	–	–	–	–	–	–
Sodium	423 B	573 B	2050	606 B	250 B	3190	339 B
Vanadium	183 J	21.1 J	25.4 J	17.5 J	13.3 J	27.3 J	13.6 B
Zinc	167 J	39.6 J	52.9 J	61.5 J	53.9 J	R	79.7
Cyanide	–	–	–	–	–	–	–

– Not detected.
ug/L Micrograms per liter.
mg/kg Milligrams per kilogram.
J Estimated value.
R Unusable value.
B Compound is between the contract required detection limit and the instrument detection limit.

Only those compounds detected are listed.

Table 5-11. Summary of Target Analyte List Parameters Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	SB-3	SB-3	SB-4	SB-4	SB-4	SB-5	SB-5
Sample Depth:	14-16 ft	32-34 ft	10-12 ft	12-14 ft	30-32 ft	12-14 ft	20-22 ft
Sample Date:	4/16/92	4/16/92	4/14/92	4/14/92	4/14/92	5/4/92	5/4/92
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Parameter							
Aluminum	4980 J	8480 J	3630	3740	6630	861	8220
Antimony	–	–	–	–	–	–	–
Arsenic	3.2	5.2	–	4.1	–	–	8.6
Barium	197	155	247	162	129	68.2	167
Beryllium	–	–	–	–	–	–	–
Cadmium	–	–	–	–	–	–	–
Calcium	7520	8720	8690	8090	12700	13900	13800
Chromium	27.0	14.5	15.9	10.0	24.0	18.7	23.4
Cobalt	59.0	19.8	83.2	71.2	10.4 B	2.4 B	69
Copper	82.8 J	14.8 J	77.6	129	12.4	18.9	320
Iron	16300	13600	12600	13000	8540	4250	27200
Lead	17.2 J	13.4 J	6.3 J	7.2 J	3.2 J	2.1 J	9.1 J
Magnesium	577 B	4080	337 B	320 B	2110	71.8 B	1890
Manganese	43.6	543	58.1	65.3	81.7	6.0	94.2
Mercury	0.95	–	0.08	–	–	–	0.12
Nickel	44.4	17.4	52.6	69.3	12.5	–	24.3
Potassium	528 B	1280	461 B	496 B	1100 B	–	1050 B
Selenium	–	–	–	–	–	R	R
Sodium	765 B	1690	405 B	278 B	1260	164 B	1270
Vanadium	16.5	21.7	16.9	17.3	18.5	6.0 B	26.4
Zinc	64.6	52.9	125 J	114 J	–	–	–
Cyanide	–	–	–	–	–	–	–

– Not detected.
ug/L Micrograms per liter.
mg/kg Milligrams per kilogram.
J Estimated value.
R Unusable value.
B Compound is between the contract required detection limit and the instrument detection limit.

Only those compounds detected are listed.

Table 5-11. Summary of Target Analyte List Parameters Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	SB-5	SB-6	SB-6	SB-6	SB-7	SB-7	SB-7
Sample Depth:	28-20 ft	18-20 ft	20-22 ft	28-30 ft	16-18 ft	20-22 ft	24-26 ft
Sample Date:	5/4/92	5/5/92	5/5/92	5/7/92	5/7/92	5/7/92	5/7/92
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Parameter							
Aluminum	11600	1360	1870	7190	4410	4620	3330
Antimony	–	–	–	–	–	–	–
Arsenic	9.4	–	–	6.4	5.7	5.7	3.7
Barium	255	300	293	132	170	158	154
Beryllium	–	–	–	–	–	–	–
Cadmium	–	–	–	–	–	–	–
Calcium	15000	15600	13000	8920	8430	9540	11500
Chromium	16.8	6.8 J	6.7 J	13.0	10.9	23.0	9.1
Cobalt	23.6	23.1	27.4	11.1 B	69.2	51.3	21.5
Copper	54.6	12.9	27.0	16.0	137	126	58.0
Iron	18100	3300	1760	9050	9640	11400	8010
Lead	11.7 J	21.1	24.4	8.2 J	5.5 J	5.5 J	5.8 J
Magnesium	7050	726 B	677 B	2180	4410	5220	5320
Manganese	787	4.8	2.9	132	93.5	92.3	114
Mercury	–	1.5	0.27	0.16	0.27	0.43	–
Nickel	26.7	–	14.0	14.4	11.1	14.9	10.2
Potassium	2250	795 B	821 B	1180 B	1060 B	1190 B	746 B
Selenium	R	–	–	R	R	R	R
Sodium	6610	1700	1810	2050	269 B	564 B	1130 B
Vanadium	27.8	–	–	22.7	47.9	32.4	19.4
Zinc	–	18.6	19.3	36.5	132	66.8	36.1
Cyanide	–	–	–	–	–	–	–

–	Not detected.
ug/L	Micrograms per liter.
mg/kg	Milligrams per kilogram.
J	Estimated value.
R	Unusable value.
B	Compound is between the contract required detection limit and the instrument detection limit.

Only those compounds detected are listed.

Table 5-11. Summary of Target Analyte List Parameters Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	SB-8	SB-9	SB-9	SB-9	SB-9	SB-10	SB-10
Sample Depth:	6-8 ft	18-20 ft	20-22 ft	28-30 ft	30-32 ft	6-8 ft	18-20 ft
Sample Date:	5/8/92	5/13/92	5/13/92	5/13/92	5/13/92	5/14/92	5/14/92
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Parameter							
Aluminum	8000	4720 J	4540 J	2350 J	17000 J	6290 J	7380 J
Antimony	–	R	R	R	R	R	R
Arsenic	5.0	3.8	5.8	3.9	5.3	147	14.9
Barium	331	210	195	61.3	198	114	111
Beryllium	–	–	–	–	–	1.7	–
Cadmium	1.2	1.2	–	–	–	4.3	1.2
Calcium	8620	10800	19500	7390	9060	14800	14700
Chromium	20.4	21.6	21.9	6.6	23.1	32.0	41.0
Cobalt	6.1 B	25.5	3.5 B	6.3 B	15.2	9.6 B	25.0
Copper	40.6	31.4	20.4	10.9	21.0	40.7	51.7
Iron	15900	42400	12300	6230	21200	42500	34600
Lead	15.1 J	19.5	8.6	4.4	12.9	15.6	26.8
Magnesium	3810	3050	1710	2550	4810	1290	561 B
Manganese	297	125	96.1	134	822	134	102
Mercury	0.80	0.24	1.1	–	–	1.5	0.51
Nickel	16.6	24.0	9.9	11.9	25.7	38.4	67.7
Potassium	671 B	1330	1450	458 B	2530	1620	1690
Selenium	R	–	–	–	–	2.8 J	4.2 J
Sodium	–	1140	1760	2150	4640	2870	1140 B
Vanadium	24.5	36.8	27.1	24.9	35.5	645	90.2
Zinc	336	175	43.1	33.1	72.7	718	2620
Cyanide	–	–	–	–	–	–	–

– Not detected.
ug/L Micrograms per liter.
mg/kg Milligrams per kilogram.
J Estimated value.
R Unusable value.
B Compound is between the contract required detection limit and the instrument detection limit.

Only those compounds detected are listed.

Table 5-11. Summary of Target Analyte List Parameters Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	SB-10	SB-11	SB-11	SB-11	SB-12	SB-12	SB-12
Sample Depth:	24-26 ft	14-16 ft	16-18 ft	30-32 ft	8-10 ft	22-24 ft	32-34 ft
Sample Date:	5/14/92	5/19/92	5/19/92	5/20/92	5/15/92	5/18/92	5/18/92
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Parameter							
Aluminum	2250 J	3450	3430	10200	5710 J	1660 J	11900 J
Antimony	R	–	–	–	R	R	R
Arsenic	–	6.2	4.0	5.9	9.3	–	–
Barium	85.8	89.6	73.0	173	86.4	49.6	260
Beryllium	–	–	–	–	–	–	–
Cadmium	–	–	–	–	1.5	–	–
Calcium	6950	21600	12200	7540	31100	3130	9990
Chromium	6.3	29.2	13.3	14.9	27.5	3.5	18.5
Cobalt	4.2 B	4.1 B	4.4 B	8.2 B	8.4 B	2.5 B	9.4 B
Copper	–	24.9	12.5	16.4	20.6	–	15.7
Iron	6220	16900	11600	16200	33900	3870	14400
Lead	4.1	13.7	9.2	10.6	12.1	3.2	12.4
Magnesium	2620	679 B	635 B	3670	785 B	1490	5410
Manganese	78.9	119	97.8	703	125	80.0	325
Mercury	–	43.0	1.3	–	19.4	0.33	–
Nickel	–	18.6	11.6	17.8	27.6	–	21.2
Potassium	562 B	759 B	578 B	1690	791 B	314 B	1720
Selenium	–	–	–	–	–	–	–
Sodium	409 B	3480	2180	–	485 B	1240	5090
Vanadium	9.1 B	17.4	15.5	24.4	36.5	5.5 B	27.9
Zinc	32.5	81.9	106	–	148	–	65.8
Cyanide	–	–	–	–	–	–	0.33

–	Not detected.
ug/L	Micrograms per liter.
mg/kg	Milligrams per kilogram.
J	Estimated value.
R	Unusable value.
B	Compound is between the contract required detection limit and the instrument detection limit.

Only those compounds detected are listed.

Table 5-11. Summary of Target Analyte List Parameters Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	SB-13	SB-13	SB-13	SB-14	SB-14	SB-14	SB-15
Sample Depth:	16-18 ft	18-20 ft	30-32 ft	10-12 ft	20-22 ft	30-32 ft	16-18 ft
Sample Date:	5/21/92	5/21/92	5/21/92	5/22/92	5/26/92	5/26/92	5/27/92
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Parameter							
Aluminum	12200	12600	9010	3820	8410	6030	6470
Antimony	–	–	–	–	–	–	–
Arsenic	81.7	89.6	5.3	11.9	9.1	4.8	–
Barium	114	129	209	70.8	181	180	40.0 B
Beryllium	3.1	2.8	–	1.7	–	–	–
Cadmium	5.5	7.0	–	–	1.5	–	–
Calcium	28300	21300	11400	14800	13700	12800	12000
Chromium	39.5	40.9	14.0	11.7	17.6	11.5	18.9
Cobalt	11.1 B	11.5 B	7.0 B	7.9 B	9.4 B	6.3 B	3.3 B
Copper	29.5	31.7	13.3	22.7	19.3	9.9	13.2
Iron	21000	17400	13000	–	16800	11800	16700
Lead	59.4	64.7	9.1	14.1	45.0 J	8.2 J	5.0 J
Magnesium	2570	3160	6610	1110 B	4350	5380	546 B
Manganese	262	206	312	57.7	144	471	61.4
Mercury	0.14	–	–	4.8	6.1	–	3.1
Nickel	37.9	40.3	17.5	19.8	17.9	16.1	18.1
Potassium	1570 B	1950	1550	538 B	1930	1160 B	556 B
Selenium	2.4 J	1.9 J	–	1.7 J	–	–	–
Sodium	591 B	1500 B	1530	–	679 B	2260	–
Vanadium	77.9	82.7	24.2	21.5	26.4	18.5	28.6
Zinc	491	602	53.2	52.9	94.2	37.8	84.5
Cyanide	–	–	–	–	–	–	–

–	Not detected.
ug/L	Micrograms per liter.
mg/kg	Milligrams per kilogram.
J	Estimated value.
R	Unusable value.
B	Compound is between the contract required detection limit and the instrument detection limit.

Only those compounds detected are listed.

Table 5-11. Summary of Target Analyte List Parameters Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	SB-15	SB-15	SB-16	SB-16	SB-16	SB-16
Sample Depth:	18-20 ft	26-28 ft	6-8 ft	16-18 ft	28-30 ft	30-32 ft
Sample Date:	5/28/92	5/28/92	5/29/92	5/29/92	5/29/92	5/29/92
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Parameter						
Aluminum	5240	230	7100	5290	6240	11400
Antimony	–	–	–	–	–	–
Arsenic	4.3	–	8.1	6.5	3.6	12.8
Barium	76.2	32.0 B	117	169	147	219
Beryllium	–	–	–	–	–	–
Cadmium	–	–	–	–	–	–
Calcium	9040	2050	85600	8690	9970	14900
Chromium	25.4	–	21.1	11.1	9.8	16.9
Cobalt	3.8 B	–	6.6 B	5.4 B	7.6 B	9.0 B
Copper	76.4	–	21.9	12.8	7.1	14.6
Iron	9500	–	17400	12200	13900	17300
Lead	8.8 J	2.4 J	14.3 J	15.5 J	7.4 J	14.5 J
Magnesium	1110 B	73.5 B	6570	3420	4980	6630
Manganese	65.0	7.1	457	269	266	619
Mercury	5.2	0.08	9.0	0.08	–	–
Nickel	16.8	–	22.9	15.6	19.4	22.5
Potassium	652 B	–	780 B	1060 B	1290	2100
Selenium	–	–	–	–	–	–
Sodium	–	–	–	988 B	10300	16600
Vanadium	30.0	–	22.5	19.6	18.6	31.8
Zinc	83.3	–	96.1	102	37.0	63.4
Cyanide	–	–	–	–	–	–

–	Not detected.
ug/L	Micrograms per liter.
mg/kg	Milligrams per kilogram.
J	Estimated value.
R	Unusable value.
B	Compound is between the contract required detection limit and the instrument detection limit.

Only those compounds detected are listed.

Table 5-11. Summary of Target Analyte List Parameters Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank
Sample Depth:							
Sample Date:	4/9/92	4/10/92	4/13/92	4/14/92	4/16/92	4/21/92	4/23/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter							
Aluminum	–	–	–	–	–	–	–
Antimony	–	–	–	–	–	–	–
Arsenic	–	–	–	–	–	–	–
Barium	–	–	–	–	–	–	11.8
Beryllium	–	–	–	–	–	–	–
Cadmium	–	–	–	–	–	–	–
Calcium	66.0 B	80.6 B	92.9 B	84.9 B	113 B	138 B	–
Chromium	–	–	–	–	–	–	–
Cobalt	–	–	–	–	–	–	–
Copper	–	–	–	–	–	–	–
Iron	–	–	–	–	–	–	–
Lead	R	R	R	–	–	–	–
Magnesium	–	–	–	–	–	–	–
Manganese	–	–	–	–	–	–	–
Mercury	–	–	–	–	–	–	–
Nickel	–	–	–	–	–	–	–
Potassium	–	–	–	–	–	–	2180 B
Selenium	–	–	–	–	–	–	–
Sodium	–	–	–	–	–	–	–
Vanadium	–	–	–	–	–	–	–
Zinc	22.7 J	R	133 J	40.1	–	–	R
Cyanide	–	–	–	–	–	–	–

– Not detected.
ug/L Micrograms per liter.
mg/kg Milligrams per kilogram.
J Estimated value.
R Unusable value.
B Compound is between the contract required detection limit and the instrument detection limit.

Only those compounds detected are listed.

Table 5-11. Summary of Target Analyte List Parameters Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank
Sample Depth:							
Sample Date:	4/27/92	5/4/92	5/5/92	5/6/92	5/7/92	5/8/92	5/13/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter							
Aluminum	–	–	–	–	–	–	–
Antimony	–	–	–	–	–	–	R
Arsenic	–	–	–	–	–	–	–
Barium	–	–	–	–	–	–	–
Beryllium	–	–	–	–	–	–	–
Cadmium	–	–	–	–	–	–	–
Calcium	18500	169 B	114 B	122 B	114 B	139 B	166 B
Chromium	–	–	–	–	–	–	–
Cobalt	–	–	–	–	–	–	–
Copper	–	–	–	–	–	–	–
Iron	–	–	–	–	–	–	–
Lead	–	–	–	–	–	–	–
Magnesium	6170	–	–	–	–	–	–
Manganese	–	–	–	–	–	–	–
Mercury	–	–	–	–	–	–	–
Nickel	–	–	–	–	–	–	–
Potassium	1690 B	–	–	–	–	–	–
Selenium	–	–	–	–	–	–	–
Sodium	9900	–	–	–	–	–	–
Vanadium	–	–	–	–	–	–	–
Zinc	539	34.9	–	–	–	23.9	–
Cyanide	–	–	–	–	–	–	–

–	Not detected.
ug/L	Micrograms per liter.
mg/kg	Milligrams per kilogram.
J	Estimated value.
R	Unusable value.
B	Compound is between the contract required detection limit and the instrument detection limit.

Only those compounds detected are listed.

Table 5-11. Summary of Target Analyte List Parameters Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank
Sample Depth:							
Sample Date:	5/14/92	5/15/92	5/18/92	5/19/92	5/20/92	5/21/92	5/22/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter							
Aluminum	–	–	–	–	–	–	–
Antimony	R	R	R	–	–	–	–
Arsenic	–	–	–	–	–	–	–
Barium	–	–	–	–	–	–	–
Beryllium	–	–	–	–	–	–	–
Cadmium	–	–	–	–	–	–	–
Calcium	192 B	165 B	252 B	226 B	251 B	230 B	271 B
Chromium	–	–	–	–	–	–	–
Cobalt	–	–	–	–	–	–	–
Copper	–	–	–	–	–	–	–
Iron	–	–	–	–	–	–	327
Lead	–	–	–	–	–	–	–
Magnesium	–	–	–	–	–	–	–
Manganese	–	–	–	–	–	–	–
Mercury	–	–	–	–	–	–	–
Nickel	–	–	–	–	–	–	–
Potassium	–	–	–	–	–	–	–
Selenium	–	–	–	–	–	–	–
Sodium	–	–	525 B	–	512 B	–	547 B
Vanadium	–	–	–	–	–	–	–
Zinc	–	–	21.6	–	39.6	–	–
Cyanide	–	–	–	–	–	–	–

–	Not detected.
ug/L	Micrograms per liter.
mg/kg	Milligrams per kilogram.
J	Estimated value.
R	Unusable value.
B	Compound is between the contract required detection limit and the instrument detection limit.

Only those compounds detected are listed.

Table 5-11. Summary of Target Analyte List Parameters Detected in Subsurface Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank
Sample Depth:				
Sample Date:	5/26/92	5/27/92	5/28/92	5/29/92
Units:	ug/L	ug/L	ug/L	ug/L
Parameter				
Aluminum	–	–	–	–
Antimony	–	–	–	–
Arsenic	–	–	–	–
Barium	–	–	–	–
Beryllium	–	–	–	–
Cadmium	–	–	–	–
Calcium	281 B	336 B	237 B	316 B
Chromium	–	–	–	–
Cobalt	–	–	–	–
Copper	–	–	–	–
Iron	145	2040	211	73.2 B
Lead	–	–	–	–
Magnesium	–	–	–	–
Manganese	–	10.6 B	–	–
Mercury	–	–	–	–
Nickel	–	–	–	–
Potassium	–	–	–	–
Selenium	–	–	–	–
Sodium	537 B	562 B	535 B	677 B
Vanadium	–	–	–	–
Zinc	–	20.8	–	–
Cyanide	–	–	–	–

–	Not detected.
ug/L	Micrograms per liter.
mg/kg	Milligrams per kilogram.
J	Estimated value.
R	Unusable value.
B	Compound is between the contract required detection limit and the instrument detection limit.

Only those compounds detected are listed.

Table 5-12. Concentrations of Total Extractable, Chromatographable, Semivolatile Organic Compounds in Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Boring Number	Depth (feet below land surface)	Concentration (mg/kg)
SB-1	10-12	13,400
SB-1	14-16	14,700
SB-1	24-26	890/790*
SB-2	8-10	64.0
SB-2	10-12	9,980
SB-2	34-35	320
SB-3	6-8	2,040/880*
SB-3	6-8 Clay	87.0
SB-3	10-12	4,850
SB-3	24-26 Clay	96.3
SB-3	24-26 Sand	115
SB-4	6-8	1,020
SB-4	18-20	7,010
SB-4	26-28 Clay	563
SB-4	26-28 Sand	454
SB-5	10-12	11,500
SB-5	14-16	4,840
SB-5	26-28	619
SB-6	14-16	2,490
SB-6	16-18	4,930/4,220*
SB-6	22-24	4,660
SB-7	10-12	1,700
SB-7	18-20	5,440
SB-7	22-24	4,920
SB-8	10-12	981/1,670*
SB-9	14-16	8,160
SB-9	14-16 Clay	4,770
SB-9	16-18	834
SB-9	24-26	42.5
SB-10	4-6	2.20
SB-10	4-6 Clay	ND
SB-10	16-18	994
SB-10	26-28	205
SB-11	12-14	2,080
SB-11	20-22	31.1/2.80*
SB-11	28-30	4.00
SB-12	12-14	17,400
SB-12	16-18	9,850
SB-12	24-26	1,260
SB-13	14-16	ND
SB-13	20-22	1.90
SB-13	28-30	ND

See footnotes on page 2.

Table 5-12. Concentrations of Total Extractable, Chromatographable, Semivolatile Organic Compounds in Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Boring Number	Depth (feet below land surface)	Concentration (mg/kg)
SB-14	6-8	ND
SB-14	22-24	1060
SB-14	28-30	1520
SB-15	14-16	58.9
SB-15	20-22	969
SB-15	28-30	1.00/ND*
SB-16	14-16	136.8
SB-16	18-20	413
SB-16	26-28	108

mg/kg Milligrams per kilogram.
ND Not detected.
* Duplicate analysis.

Table 5-13. Concentrations of Carbon and Chlorine Detected in Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location	Sample Depth	Sample Date	Total Organic Carbon	Total Halogens Calculated as Chlorine	Total Halides Calculated as Chloride	Total Organic Halogens Calculated as Chlorine (by difference)
SB-1	0-2 ft	4/9/92	16,200	19	<3	19
SB-1	2-4 ft	4/9/92	1,400	19	5	14
SB-1	4-6 ft	4/9/92	189,600	3,500	10	3,500
SB-1	6-8 ft	4/9/92	185,200	22,600	27	22,600
SB-1	16-18 ft	4/9/92	18,800	2,400	65	2,400
SB-1	18-20 ft	4/9/92	21,700	4,300	41	4,300
SB-1	22-24 ft	4/9/92	23,800	3,800	42	3,800
SB-1	28-30 ft	4/9/92	5,500	657	74	583
SB-1	30-32 ft	4/9/92	8,800	3,100	76	3,100
SB-1	34-36 ft	4/9/92	11,300	2,100	279	1,800
SB-2	0-2 ft	4/10/92	2,200	24	<4	24
SB-2	2-4 ft	4/10/92	1,800	26	10	16
SB-2	4-6 ft	4/10/92	2,700	44	18	26
SB-2	6-8 ft	4/10/92	123,400	133	26	107
SB-2	16-18 ft	4/10/92	124,800	26,400	32	26,400
SB-2	18-20 ft	4/13/92	55,800	8,100	38	8,100
SB-2	20-22 ft	4/13/92	18,900	4,700	53	4,600
SB-2	22-24 ft	4/13/92	14,200	5,200	63	5,100
SB-2	24-26 ft	4/13/92	16,100	2,000	65	1,900
SB-2	26-28 ft	4/13/92	23,100	9,200	69	9,100
SB-2	30-32 ft	4/13/92	25,700	6,700	85	6,600
SB-2	32-34 ft	4/13/92	12,300	3,200	43	3,200
SB-3	0-2 ft	4/16/92	1,200	15	<4	15
SB-3	2-4 ft	4/16/92	2,100	20	6	14
SB-3	4-6 ft	4/16/92	1,300	67	7	60
SB-3	8-10 ft	4/16/92	182,400	71,700	11	71,700
SB-3	16-18 ft	4/16/92	227,500	80,600	61	80,600
SB-3	18-20 ft	4/16/92	19,800	2,800	120	2,700
SB-3	20-22 ft	4/16/92	2,000	1,800	37	1,800
SB-3	22-24 ft	4/16/92	2,200	217	22	195
SB-3	26-28 ft	4/16/92	3,800	339	61	278

Concentrations are in milligrams per kilogram (mg/kg) for soil samples and milligrams per liter (mg/L) for water samples.

ft Feet.

Table 5-13. Concentrations of Carbon and Chlorine Detected in Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location	Sample Depth	Sample Date	Total Organic Carbon	Total Halogens Calculated as Chlorine	Total Halides Calculated as Chloride	Total Organic Halogens Calculated as Chlorine (by difference)
SB-3	28-30 ft	4/16/92	7,400	1,000	140	900
SB-3	30-32 ft	4/16/92	19,900	5,200	200	5,000
SB-3	34-35 ft	4/16/92	12,000	5,700	63	5,700
SB-4	0-2 ft	4/14/92	1,600	22	8	15
SB-4	2-4 ft	4/14/92	2,000	29	13	16
SB-4	4-6 ft	4/14/92	7,500	109	67	42
SB-4	8-10 ft	4/14/92	90,100	13,100	96	13,100
SB-4	14-16 ft	4/14/92	458,800	7,100	99	7,100
SB-4	16-18 ft	4/14/92	209,800	40,900	250	40,700
SB-4	20-22 ft	4/14/92	45,300	9,000	200	8,800
SB-4	22-24 ft	4/14/92	34,200	5,500	250	5,300
SB-4	24-26 ft	4/14/92	3,600	1,400	150	1,300
SB-4	28-30 ft	4/14/92	18,700	1,300	330	1,000
SB-4	32-34 ft	4/14/92	44,800	8,200	560	7,600
SB-4	34-35 ft	4/14/92	41,200	11,400	460	10,900
SB-5	0-2 ft	5/4/92	1,900	177.0	134.0	43.0
SB-5	2-4 ft	5/4/92	1,500	198.0	10	98.0
SB-5	4-6 ft	5/4/92	226,900	251	50	201
SB-5	6-8 ft	5/4/92	128,800	3,000	290	2,700
SB-5	8-10 ft	5/4/92	167,300	27,000	155	26,700
SB-5	16-18 ft	5/4/92	141,700	24,700	104	24,600
SB-5	18-20 ft	5/4/92	39,600	24,700	157	24,500
SB-5	22-24 ft	5/4/92	64,300	53,500	355	53,100
SB-5	24-26 ft	5/4/92	27,200	11,200	940	10,300
SB-5	30-32 ft	5/4/92	11,500	2,400	741	1,600
SB-5	32-34 ft	5/4/92	6,600	6,300	692	5,600
SB-5	34-35 ft	5/4/92	22,100	8,300	509	7,800
SB-6	0-2 ft	5/5/92	21,100	320	106	309
SB-6	2-4 ft	5/5/92	1,000	129	7.0	59
SB-6	4-6 ft	5/5/92	2,600	217	10.0	117
SB-6	6-8 ft	5/5/92	67,800	3,200	766	3,100

Concentrations are in milligrams per kilogram (mg/kg) for soil samples and milligrams per liter (mg/L) for water samples.

ft Feet.

Table 5-13. Concentrations of Carbon and Chlorine Detected in Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location	Sample Depth	Sample Date	Total Organic Carbon	Total Halogens Calculated as Chlorine	Total Halides Calculated as Chloride	Total Organic Halogens Calculated as Chlorine (by difference)
SB-6	8-10 ft	5/5/92	233,300	11,500	382	11,500
SB-6	10-12 ft	5/5/92	144,600	18,700	449.0	18,600
SB-6	12-14 ft	5/5/92	220,600	15,600	121	15,500
SB-6	24-26 ft	5/6/92	25,700	10,200	130	10,100
SB-6	26-28 ft	5/6/92	26,800	12,500	300	12,200
SB-6	30-32 ft	5/6/92	30,200	6,900	310	6,600
SB-6	32-34 ft	5/6/92	22,300	6,000	820	5,200
SB-6	34-35 ft	5/6/92	19,700	3,300	810	2,500
SB-7	0-2 ft	5/7/92	6,000	21	5	16
SB-7	2-4 ft	5/7/92	1,400	21	13	8
SB-7	4-6 ft	5/7/92	112,000	2,300	26	2,300
SB-7	6-8 ft	5/7/92	108,500	168	23	145
SB-7	8-10 ft	5/7/92	341,000	1,100	21	1,100
SB-7	12-14 ft	5/7/92	121,400	14,700	31	14,700
SB-7	14-16 ft	5/7/92	200,000	51,000	32	51,000
SB-7	26-28 ft	5/7/92	21,700	11,700	420	11,300
SB-7	28-30 ft	5/7/92	28,900	8,500	230	8,300
SB-7	30-32 ft	5/7/92	16,400	10,400	190	10,300
SB-7	32-34 ft	5/7/92	73,100	32,100	440	31,700
SB-7	34-35 ft	5/7/92	21,400	15,100	780	14,300
SB-8	0-2 ft	5/8/92	4,500	178	89	89
SB-8	2-4 ft	5/8/92	<100	132	78	54
SB-8	4-6 ft	5/8/92	1,700	226	77	149
SB-8	8-10 ft	5/8/92	621,300	19,200	467.0	19,200
SB-9	0-2 ft	5/12/92	4,100	56	47	9
SB-9	2-4 ft	5/12/92	131,300	672	190	482
SB-9	4-6 ft	5/12/92	700	1,900	649	1,200
SB-9	6-8 ft	5/12/92	2,900	3,000	857	2,100
SB-9	8-10 ft	5/12/92	365,100	11,400	111	11,300
SB-9	12-14 ft	5/12/92	250,600	2,700	411	2,300
SB-9	26-28 ft	5/12/92	7,500	1,800	626	1,200

Concentrations are in milligrams per kilogram (mg/kg) for soil samples and milligrams per liter (mg/L) for water samples.

ft Feet.

CHLOR-92.XLS

Table 5-13. Concentrations of Carbon and Chlorine Detected in Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location	Sample Depth	Sample Date	Total Organic Carbon	Total Halogens Calculated as Chlorine	Total Halides Calculated as Chloride	Total Organic Halogens Calculated as Chlorine (by difference)
SB-9	32-34 ft	5/12/92	20,200	5,900	789	5,200
SB-9	34-35 ft	5/12/92	11,800	3,100	1,000	2,100
SB-10	0-2 ft	5/14/92	21,700	26	9	17
SB-10	2-4 ft	5/14/92	7,500	30	28	2
SB-10	8-10 ft	5/14/92	178,500	6,200	1,400	4,800
SB-10	10-12 ft	5/14/92	260,400	5,300	1,600	3,700
SB-10	12-14 ft	5/14/92	179,300	5,000	2,200	2,800
SB-10	14-16 ft	5/14/92	198,500	4,500	414	4,100
SB-10	20-22 ft	5/14/92	21,400	6,300	133	6,200
SB-10	22-24 ft	5/14/92	12,300	1,300	238	1,100
SB-10	28-30 ft	5/14/92	2,800	2,200	244	2,000
SB-10	30-32 ft	5/14/92	8,100	1,100	357	735
SB-10	32-34 ft	5/14/92	11,100	2,100	910	1,200
SB-10	34-35 ft	5/14/92	15,000	4,200	1,200	3,000
SB-11	0-2 ft	5/19/92	3,800	19	5	14
SB-11	2-4 ft	5/19/92	38,600	188	111	77
SB-11	4-6 ft	5/19/92	100,500	297	167	130
SB-11	6-8 ft	5/19/92	334,600	181	97	84
SB-11	8-10 ft	5/19/92	137,000	1,200	270	900
SB-11	10-12 ft	5/19/92	146,500	999	322	677
SB-11	18-20 ft	5/19/92	18,100	1,600	1,900	<100
SB-11	22-24 ft	5/19/92	3,200	3,500	3,000	500
SB-11	24-26 ft	5/20/92	3,700	3,200	2,900	300
SB-11	26-28 ft	5/20/92	1,600	1,900	1,600	300
SB-11	32-34 ft	5/20/92	5,100	649	442	207
SB-11	34-35 ft	5/20/92	1,800	503	471	32
SB-12	0-2 ft	5/15/92	18,100	25	4	21
SB-12	2-4 ft	5/15/92	1,700	19	8	11
SB-12	4-6 ft	5/15/92	1,450	17	6	11
SB-12	6-8 ft	5/15/92	159,500	48	13	35
SB-12	10-12 ft	5/15/92	152,300	468	125	343

Concentrations are in milligrams per kilogram (mg/kg) for soil samples and milligrams per liter (mg/L) for water samples.

ft Feet.

CHLOR-92.XLS

Table 5-13. Concentrations of Carbon and Chlorine Detected in Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location	Sample Depth	Sample Date	Total Organic Carbon	Total Halogens Calculated as Chlorine	Total Halides Calculated as Chloride	Total Organic Halogens Calculated as Chlorine (by difference)
SB-12	14-16 ft	5/15/92	119,900	546	261	285
SB-12	18-20 ft	5/18/92	509,900	11,000	4,700	6,300
SB-12	20-22 ft	5/18/92	48,100	11,200	7,000	4,200
SB-12	26-28 ft	5/18/92	43,100	3,000	1,900	1,100
SB-12	28-30 ft	5/18/92	16,500	2,200	550	1,600
SB-12	30-32 ft	5/18/92	17,200	2,100	1,400	700
SB-12	34-35 ft	5/18/92	33,100	3,600	2,400	1,200
SB-13	0-2 ft	5/21/92	2,700	184.0	<3	18
SB-13	2-4 ft	5/21/92	1,300	15	5	10
SB-13	4-6 ft	5/21/92	5,800	19	6	13
SB-13	6-8 ft	5/21/92	84,200	27	6	21
SB-13	8-10 ft	5/21/92	40,000	<15	14	<1
SB-13	10-12 ft	5/21/92	41,500	12	15	<1
SB-13	12-14 ft	5/21/92	54,500	36	40	<1
SB-13	22-24 ft	5/21/92	2,900	121	57	64
SB-13	24-26 ft	5/21/92	100	20	11	9
SB-13	26-28 ft	5/21/92	250	20	6	14
SB-13	32-34 ft	5/21/92	6,300	420	472	<1
SB-13	34-35 ft	5/21/92	2,000	487	298	189
SB-14	0-2 ft	5/22/92	3,500	903.0	202.0	701.0
SB-14	2-4 ft	5/22/92	2,400	144	212.0	123
SB-14	4-6 ft	5/22/92	14,900	651	140	511
SB-14	8-10 ft	5/22/92	255,100	696	698	<5
SB-14	12-14 ft	5/26/92	129,000	1,300	1,000	300
SB-14	14-16 ft	5/26/92	126,500	4,200	3,000	1,200
SB-14	16-18 ft	5/26/92	175,800	1,100	920	180
SB-14	18-20 ft	5/26/92	206,500	650	362	288
SB-14	24-26 ft	5/26/92	20,500	5,900	420	5,500
SB-14	26-28 ft	5/26/92	37,700	2,900	420	2,500
SB-14	32-34 ft	5/26/92	16,500	3,200	1,100	2,100
SB-14	34-35 ft	5/26/92	35,900	3,800	890	2,900

Concentrations are in milligrams per kilogram (mg/kg) for soil samples and milligrams per liter (mg/L) for water samples.

ft Feet.

Table 5-13. Concentrations of Carbon and Chlorine Detected in Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location	Sample Depth	Sample Date	Total Organic Carbon	Total Halogens Calculated as Chlorine	Total Halides Calculated as Chloride	Total Organic Halogens Calculated as Chlorine (by difference)
SB-15	0-2 ft	5/27/92	2,200	17	<3	17
SB-15	2-4 ft	5/27/92	3,800	22	6	16
SB-15	4-6 ft	5/27/92	5,400	26	21	5
SB-15	6-8 ft	5/27/92	26,300	467	86	381
SB-15	8-10 ft	5/27/92	32,200	138	61	77
SB-15	10-12 ft	5/27/92	19,500	207	75	132
SB-15	12-14 ft	5/27/92	46,100	114	38	76
SB-15	22-24 ft	5/28/92	8,500	877	331	546
SB-15	24-26 ft	5/28/92	1,900	408	191	217
SB-15	30-32 ft	5/28/92	4,900	677	272	405
SB-15	32-34 ft	5/28/92	10,100	3,200	1,200	2,000
SB-16	0-2 ft	5/29/92	5,800	189.0	<4	<189
SB-16	2-4 ft	5/29/92	8,500	207.0	53.0	154.0
SB-16	4-6 ft	5/29/92	2,200	477.0	402.0	75.0
SB-16	8-10 ft	5/29/92	152,800	3,300	45	3,200
SB-16	10-12 ft	5/29/92	229,200	1,100	66	1,000
SB-16	12-14 ft	5/29/92	85,600	920	68	850
SB-16	20-22 ft	5/29/92	9,300	740	230	510
SB-16	22-24 ft	5/29/92	600	797.0	603.0	194.0
SB-16	24-26 ft	5/29/92	3,000	405	277	128
SB-16	32-34 ft	5/29/92	12,100	3,700	1,600	2,100
SB-16	34-35 ft	5/29/92	15,900	444	484	<5
Field Blank		4/9/92	8	<5	<5	<5
Field Blank		4/10/92	10	<5	<5	<5
Field Blank		4/13/92	6	41.0	39.0	2.0
Field Blank		4/14/92	<5	<5	<5	<5
Field Blank		4/16/92	6	<5	<5	<5
Field Blank		5/4/92	<1	<8	<8	<8

Concentrations are in milligrams per kilogram (mg/kg) for soil samples and milligrams per liter (mg/L) for water samples.

ft Feet.

Table 5-13. Concentrations of Carbon and Chlorine Detected in Soil Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location	Sample Depth	Sample Date	Total Organic Carbon	Total Halogens Calculated as Chlorine	Total Halides Calculated as Chloride	Total Organic Halogens Calculated as Chlorine (by difference)
Field Blank		5/5/92	<1	57.0	44.0	13.0
Field Blank		5/6/92	<1	<5	<5	<5
Field Blank		5/7/92	<1	<5	<5	<5
Field Blank		5/8/92	<1	<5	<5	<5
Field Blank		5/12/92	<1	10	5	5
Field Blank		5/14/92	<1	<5	<5	<5
Field Blank		5/15/92	<1	<5	<5	<5
Field Blank		5/19/92	<1	5	<5	5
Field Blank		5/20/92	<1	<5	<5	<5
Field Blank		5/21/92	<1	<5	<5	<5
Field Blank		5/22/92	<1	<5	<5	<5
Field Blank		5/26/92	<1	<5	<5	<5
Field Blank		5/27/92	<1	5	<5	5
Field Blank		5/28/92	<1	<5	<5	<5
Field Blank		5/29/92	<1	<5	<5	<5

Concentrations are in milligrams per kilogram (mg/kg) for soil samples and milligrams per liter (mg/L) for water samples.

ft Feet.

Table 5-14. Summary of Target Compound List Volatile Organic Compounds Detected in Groundwater Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

	Shallow Zone				Intermediate Zone				
Sample Identification:	P-6	P-7	P-14	GM-62A	GM-27B	GM-28B	P-1	P-2	P-3
Sample Date:	6/3/92	6/4/92	6/5/92	6/10/92	6/9/92	6/5/92	6/3/92	6/3/92	6/3/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameters									
Methylene chloride	--	--	--	--	--	--	--	--	--
Acetone	--	--	--	--	--	36 J	--	--	--
Carbon disulfide	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	--	--	--	--	--	--	--	--	--
Chloroform	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	--	--	--	--	--	--	--	--	--
Trichloroethene	--	--	--	0.8 J	--	--	--	--	--
Benzene	94	1100	--	--	1300 J	14 J	100	390	120
4-Methyl-2-pentanone	--	--	--	--	--	--	--	470	40 J
Tetrachloroethene	--	--	--	--	--	--	--	--	--
Toluene	--	95 J	--	--	740 J	26 J	--	340	--
Chlorobenzene	230	1700	34000	--	13000	460	1800	3900	420
Ethylbenzene	--	--	--	--	--	14 J	--	90 J	5 J
Xylenes	--	--	--	--	560 J	--	--	170 J	--
Total VOCs	324	2895	34000	0.8	15600	550	1900	5360	585

ug/L Micrograms per liter.
J Estimated value.
-- Not detected.
VOCs Volatile organic compounds.

Only those compounds detected are listed.

Table 5-14. Summary of Target Compound List Volatile Organic Compounds Detected in Groundwater Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

	Intermediate Zone							Deep Zone	
Sample Identification:	P-8	P-10	P-11	P-12	P-13	GM-62B	GM-62B Dup	GM-27C	GM-28C
Sample Date:	6/4/92	6/4/92	6/4/92	6/4/92	6/8/92	6/9/92	6/9/92	6/9/92	6/8/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameters									
Methylene chloride	270 J	240 J	--	--	--	--	--	--	--
Acetone	17000 J	--	--	--	--	--	--	--	--
Carbon disulfide	--	--	--	--	--	4 J	3 J	--	--
1,1-Dichloroethane	--	--	--	--	--	4 J	4 J	--	--
1,2-Dichloroethene (total)	--	--	--	--	--	2 J	2 J	--	--
Chloroform	--	180 J	--	--	--	--	--	--	--
1,2-Dichloroethane	2400	16000	840 J	5600	--	--	--	--	--
1,1,1-Trichloroethane	--	--	--	--	--	--	--	--	--
Trichloroethene	--	160 J	--	360 J	--	--	--	--	--
Benzene	2700 J	4600 J	2400 J	4300 J	2300	1 J	1 J	560	38 J
4-Methyl-2-pentanone	1900	1800	730 J	660 J	--	--	--	--	--
Tetrachloroethene	--	--	--	510 J	--	--	--	--	--
Toluene	530 J	2300	4800	2600	220 J	--	--	60 J	31 J
Chlorobenzene	4200	8600	7000	12000	4500	19	19	3400	1300
Ethylbenzene	--	--	410 J	260 J	42 J	--	--	25 J	14 J
Xylenes	--	700 J	340 J	960 J	63 J	--	--	--	44 J
Total VOCs	29000	34580	16520	27250	7125	30	29	4045	1427

ug/L Micrograms per liter.
J Estimated value.
-- Not detected.
VOCs Volatile organic compounds.

Only those compounds detected are listed.

Table 5-14. Summary of Target Compound List Volatile Organic Compounds Detected in Groundwater Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

	Deep Zone				Bedrock Zone				
Sample Identification:	GM-55C	GM-56C	GM-57C	GM-62C	GM-106	GM-106-DUP	Trip Blank	Trip Blank	Trip Blank
Sample Date:	6/8/92	6/5/92	6/5/92	6/9/92	6/8/92	6/8/92	6/3/92	6/4/92	6/5/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameters									
Methylene chloride	--	--	--	--	--	--	--	--	--
Acetone	--	420	350	--	--	--	--	--	--
Carbon disulfide	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)	--	--	--	--	--	--	--	--	--
Chloroform	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	--	--	300	--	--	--	--	--	--
1,1,1-Trichloroethane	--	--	--	--	--	--	--	--	--
Trichloroethene	--	17 J	16 J	--	32 J	33 J	--	--	--
Benzene	48 J	54 J	230	20	92 J	94 J	--	--	--
4-Methyl-2-pentanone	--	--	100	--	--	--	--	--	--
Tetrachloroethene	--	--	--	--	51 J	57 J	--	--	--
Toluene	84 J	240	230	--	560	580	--	--	--
Chlorobenzene	2500	740	930	130	1900	2000	--	--	--
Ethylbenzene	87 J	16 J	15 J	--	100 J	100	--	--	--
Xylenes	300	110	80 J	--	870	920	--	--	--
Total VOCs	3019	1597	2251	150	3605	3784	--	--	--

ug/L Micrograms per liter.
J Estimated value.
-- Not detected.
VOCs Volatile organic compounds.

Only those compounds detected are listed.

Table 5-14. Summary of Target Compound List Volatile Organic Compounds Detected in Groundwater Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameters	Sample Identification:	Trip Blank	Trip Blank	Trip Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank
	Sample Date:	6/8/92	6/9/92	6/10/92	6/3/92	6/4/92	6/5/92	6/8/92	6/9/92	6/10/92
	Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Methylene chloride		--	--	--	--	--	--	--	--	--
Acetone		--	--	--	--	15 J	--	16	9 J	15
Carbon disulfide		--	--	--	--	--	--	--	--	--
1,1-Dichloroethane		--	--	--	--	--	--	--	--	--
1,2-Dichloroethene (total)		--	--	--	--	--	--	--	--	--
Chloroform		--	--	--	--	--	--	--	--	--
1,2-Dichloroethane		--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane		--	--	--	--	--	--	--	--	--
Trichloroethene		--	--	--	--	--	--	--	--	--
Benzene		--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone		--	--	--	--	--	--	--	--	--
Tetrachloroethene		--	--	--	--	--	--	--	--	--
Toluene		--	--	--	--	--	--	--	--	--
Chlorobenzene		--	--	3 J	--	1 J	--	--	--	--
Ethylbenzene		--	--	--	--	--	--	--	--	--
Xylenes		--	--	--	--	--	--	--	--	--
Total VOCs		--	--	3	--	16	--	16	9	15

ug/L	Micrograms per liter.
J	Estimated value.
--	Not detected.
VOCs	Volatile organic compounds.

Only those compounds detected are listed.

Table 5-15. Summary of Target Compound List Semivolatile Organic Compound Parameters Detected in Groundwater Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

	Shallow Zone				Intermediate Zone				
Sample Identification:	P-6	P-7	P-14	GM-62A	GM-27B	GM-28B	P-1	P-2	P-3
Sample Date:	6/3/92	6/4/92	6/5/92	6/10/92	6/9/92	6/5/92	6/3/92	6/3/92	6/3/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameters									
Aniline	--	2600 DJ	2 J	--	2400000 DJ	--	--	--	160 DJ
Phenol	34 J	18000 DJ	7 J	--	--	2500 J	--	47000 J	--
2-Chlorophenol	9 J	640 J	68 J	--	--	--	20 J	11000 J	--
1,3-Dichlorobenzene	--	--	--	--	--	--	3 J	--	--
1,4-Dichlorobenzene	13 J	190 J	22 J	--	13000 J	--	24 J	--	--
1,2-Dichlorobenzene	11 J	120 J	12 J	--	--	6500 J	4 J	2200 J	0.7 J
2-Methylphenol	--	--	--	--	--	--	--	--	--
4-Methylphenol	--	27 J	--	--	7100 J	--	--	9800 J	--
Nitrobenzene	--	88 J	--	--	--	--	--	--	--
2-Chloroaniline	530 J	85000 D	--	--	--	130000 DJ	62 J	41000 J	68 J
2,4-Dimethylphenol	--	--	--	--	--	--	--	2400 J	19 J
2,4-Dichlorophenol	--	1500 J	2 J	--	--	6000 J	--	12000 J	0.7 J
1,2,4-Trichlorobenzene	--	5 J	--	--	--	--	--	--	--
Naphthalene	--	93 J	--	--	--	--	1 J	11000 J	--
3-Chloroaniline	270 DJ	4700 DJ	47 J	--	500000 DJ	220000 DJ	1700 DJ	35000 J	1400 DJ
4-Chloroaniline	1600 DJ	22000 DJ	200 J	--	1000000 DJ	320000 DJ	450 DJ	44000 J	680 DJ
2,4,6-Trichlorophenol	--	450 J	--	--	--	--	--	3800 J	0.4 J
Acenaphthene	--	--	--	--	--	--	--	--	0.2 J
4-Nitrophenol	--	84 J	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	--	--	0.6 J	--	0.4 J
Di-n-butylphthalate	--	--	--	--	--	--	--	--	0.2 J
Fluoranthene	--	--	--	--	--	--	1 J	--	0.2 J
Pyrene	--	--	--	--	--	--	0.6 J	--	--
Butylbenzylphthalate	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	--	--	--	3 J	--	--	2 J	--	--
Di-n-octylphthalate	--	--	--	--	--	--	--	--	--
Total SVOCs	2467	135497	360	3	3920100	685000	2268.2	219200	2329.8

ug/L Micrograms per liter.
J Estimated value.
E Compound exceeded the calibration range.
D Compound determined at a secondary dilution factor.
-- Not detected.
SVOCs Semivolatile organic compounds.

Only those compounds detected are listed.

Table 5-15. Summary of Target Compound List Semivolatile Organic Compound Parameters Detected in Groundwater Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

	Intermediate Zone							Deep Zone	
Sample Identification:	P-8	P-10	P-11	P-12	P-13	GM-62B	GM-62B Dup	GM-27C	GM-28C
Sample Date:	6/4/92	6/4/92	6/4/92	6/4/92	6/8/92	6/9/92	6/9/92	6/9/92	6/8/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameters									
Aniline	40000 J	19000 J	95000 DJ	--	86000 DJ	30 J	14 J	92000 DJ	1200 J
Phenol	57000 J	83000 J	5400 J	120000 DJ	--	--	--	--	310 J
2-Chlorophenol	13000 J	26000 J	--	21000 DJ	--	--	--	--	92 J
1,3-Dichlorobenzene	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	--	--	300 J	--	200 J	3 J	2 J	1200 J	140 J
1,2-Dichlorobenzene	--	--	34 J	1500 J	--	9 J	1 J	--	220000 DJ
2-Methylphenol	--	--	--	960 J	--	--	--	--	--
4-Methylphenol	1800 J	5400 J	2700 J	3400 DJ	--	--	--	--	--
Nitrobenzene	3600 J	2500 J	--	150 J	--	--	--	--	--
2-Chloroaniline	100000 EJ	140000 J	--	13000 EJ	1200 J	--	--	22000 J	15000 EJ
2,4-Dimethylphenol	430 J	920 J	580 J	480 J	39 J	--	--	--	--
2,4-Dichlorophenol	10000 J	18000 J	170 J	25000 DJ	--	1 J	1 J	--	760 J
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	76 J
Naphthalene	11000 J	--	--	13000 DJ	--	--	--	--	--
3-Chloroaniline	18000 J	9700 J	22000 J	5400 DJ	5800 EJ	16 J	--	77000 J	1400000 DJ
4-Chloroaniline	59000 J	29000 J	38000 J	10000 DJ	4300 EJ	19 J	5 J	49000 J	2300000 DJ
2,4,6-Trichlorophenol	830 J	--	--	6400 DJ	--	--	0.6 J	--	120 J
Acenaphthene	--	--	--	--	--	--	--	--	--
4-Nitrophenol	--	--	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate	--	--	73 J	--	--	--	--	--	--
Fluoranthene	--	--	--	--	--	--	--	--	--
Pyrene	--	--	--	--	--	--	--	--	--
Butylbenzylphthalate	--	--	--	--	--	--	0.2 J	--	--
bis(2-Ethylhexyl)phthalate	--	--	--	--	--	17 J	29 J	--	33 J
Di-n-octylphthalate	--	--	--	--	--	--	--	--	--
Total SVOCs	314660	333520	164257	220290	97539	95	52.8	241200	3937731

ug/L	Micrograms per liter.
J	Estimated value.
E	Compound exceeded the calibration range.
D	Compound determined at a secondary dilution factor.
--	Not detected.
SVOCs	Semivolatile organic compounds.

Only those compounds detected are listed.

Table 5-15. Summary of Target Compound List Semivolatile Organic Compound Parameters Detected in Groundwater Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

	Deep Zone				Bedrock Zone				
Sample Identification:	GM-55C	GM-56C	GM-57C	GM-62C	GM-106	GM-106-DUP	Equipment Blank	Equipment Blank	Equipment Blank
Sample Date:	6/8/92	6/5/92	6/5/92	6/9/92	6/8/92	6/8/92	6/3/92	6/4/92	6/5/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameters									
Aniline	120 J	3800 J	2300 J	6 J	23000 J	6200 J	--	54 J	2 J
Phenol	--	--	3500 J	--	--	--	42 J	70 J	--
2-Chlorophenol	--	--	--	--	4800 J	880 J	15 J	18 J	2 J
1,3-Dichlorobenzene	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	93 J	--	--	2 J	--	--	0.4 J	2 J	--
1,2-Dichlorobenzene	5700 DJ	--	--	2 J	2900 J	580 J	3 J	--	--
2-Methylphenol	--	--	--	--	--	--	--	--	--
4-Methylphenol	--	--	--	--	--	--	3 J	4 J	--
Nitrobenzene	8 J	--	--	--	5000 J	840 J	1 J	2 J	--
2-Chloroaniline	9600 EJ	200000 J	80000 J	--	1600000 EJ	390000 EJ	64 J	100 EJ	48 J
2,4-Dimethylphenol	--	--	--	--	--	--	0.6 J	0.6 J	--
2,4-Dichlorophenol	270 J	--	5000 J	2 J	33000 J	6400 J	6 J	10 J	3 J
1,2,4-Trichlorobenzene	140 J	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	4 J	--
3-Chloroaniline	7100 EJ	15000 J	--	5 J	100000 J	21000 J	6 J	17 J	3 J
4-Chloroaniline	9400 DJ	62000 J	27000 J	--	160000 J	40000 J	15 J	31 J	6 J
2,4,6-Trichlorophenol	22 J	--	--	--	43000 J	8600 J	--	--	--
Acenaphthene	--	--	--	--	--	--	--	--	--
4-Nitrophenol	--	--	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate	--	--	--	--	--	--	--	0.2 J	--
Fluoranthene	--	--	--	--	--	--	--	0.2 J	--
Pyrene	--	--	--	--	--	--	--	--	--
Butylbenzylphthalate	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	220 J	--	--	7 J	--	--	--	2 J	--
Di-n-octylphthalate	--	--	--	--	--	--	--	--	--
Total SVOCs	32673	280800	117800	24	1971700	474500	156	315	64

ug/L	Micrograms per liter.
J	Estimated value.
E	Compound exceeded the calibration range.
D	Compound determined at a secondary dilution factor.
–	Not detected.
SVOCs	Semivolatile organic compounds.

Only those compounds detected are listed.

Table 5-15. Summary of Target Compound List Semivolatile Organic Compound Parameters Detected in Groundwater Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Parameters	Sample Identification:	Equipment Blank	Equipment Blank	Equipment Blank
	Sample Date:	6/8/92	6/9/92	6/10/92
	Units:	ug/L	ug/L	ug/L
Aniline		21 J	--	--
Phenol		--	--	--
2-Chlorophenol		--	--	--
1,3-Dichlorobenzene		--	--	--
1,4-Dichlorobenzene		--	--	--
1,2-Dichlorobenzene		--	--	--
2-Methylphenol		--	--	--
4-Methylphenol		--	--	--
Nitrobenzene		--	--	--
2-Chloroaniline		--	--	--
2,4-Dimethylphenol		--	--	--
2,4-Dichlorophenol		--	--	--
1,2,4-Trichlorobenzene		--	--	--
Naphthalene		--	--	--
3-Chloroaniline		--	--	--
4-Chloroaniline		--	--	--
2,4,6-Trichlorophenol		--	--	--
Acenaphthene		--	--	--
4-Nitrophenol		--	--	--
Phenanthrene		--	--	--
Di-n-butylphthalate		--	--	--
Fluoranthene		--	--	--
Pyrene		--	--	--
Butylbenzylphthalate		--	--	--
bis(2-Ethylhexyl)phthalate		13 J	--	3 J
Di-n-octylphthalate		--	--	--
Total SVOCs		34	--	3

ug/L	Micrograms per liter.
J	Estimated value.
E	Compound exceeded the calibration range.
D	Compound determined at a secondary dilution factor.
--	Not detected.
SVOCs	Semivolatile organic compounds.

Only those compounds detected are listed.

Table 5-16. Summary of Target Compound List Pesticides, PCBs, and Herbicides Detected in Groundwater Samples, Sauget Site R, Monanto Company, Sauget, Illinois.

	Shallow Zone				Intermediate Zone					
Sample Location:	P-6	P-7	P-14	GM-62A	GM-27B	GM-28B	P-1	P-2	P-3	P-8
Sample Date:	6/3/92	6/4/92	6/5/92	6/9/92	6/9/92	6/5/92	6/3/92	6/3/92	6/3/92	6/4/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter										
Pesticides/PCBs										
alpha-BHC	--	--	--	--	--	--	--	--	--	--
beta-BHC	--	--	--	--	0.057 P	--	--	--	--	--
delta-BHC	--	--	--	--	--	0.063 P	--	--	--	--
gamma-BHC (Lindane)	--	--	--	--	--	--	--	--	--	--
Heptachlor	--	--	--	--	--	--	--	--	--	--
Aldrin	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	--	--	--	--	R	--	--	--	--	--
Endosulfan I	--	--	--	--	--	--	--	--	--	--
Dieldrin	--	--	--	--	0.17 P	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--	--	--	--
Endrin	--	--	--	--	--	--	--	--	--	--
Endosulfan II	--	--	--	--	0.15 P	--	--	--	--	--
4,4'-DDD	--	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--	--	--	--
Methoxychlor	--	--	--	--	--	--	--	--	--	--
Endrin ketone	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	--	--	--	--	--	--	--	--	--	--
alpha-Chlordane	--	R	--	--	--	--	--	--	--	--
gamma-Chlordane	--	--	--	--	--	--	--	--	--	--
Toxaphene	--	--	--	--	--	--	--	--	--	--
Aroclor-1016	--	--	--	--	--	--	--	--	--	--
Aroclor-1221	--	--	--	--	--	--	--	--	--	--
Aroclor-1232	--	--	--	--	--	--	--	--	--	--
Aroclor-1242	--	--	--	--	--	--	--	--	--	--
Aroclor-1248	--	--	--	--	--	--	--	--	--	--
Aroclor-1254	--	--	--	--	--	--	--	--	--	--
Aroclor-1260	--	--	--	--	--	--	--	--	--	--
Herbicides										
2,4-D	NA	850	NA	NA	--	8.1	NA	NA	NA	NA
2,4,5-T	NA	--	NA	NA	--	1.1	NA	NA	NA	NA

ug/L Micrograms per liter.
-- Not detected.
NA Not analyzed.
P Precision criteria were not met.
R Unusable value.
N Presumptive evidence of the compound is present.
J Estimated value.
PCBs Polychlorinated biphenyls.

Only those compounds detected are listed.

TARPEST.XLS

Table 5-16. Summary of Target Compound List Pesticides, PCBs, and Herbicides Detected in Groundwater Samples, Sauget Site R, Monanto Company, Sauget, Illinois.

	Intermediate Zone						Deep Zone			
Sample Location	P-10	P-11	P-12	P-13	GM-62B	GM-62B Dup	GM-27C	GM-28C	GM-55C	GM-56C
Sample Date	6/4/92	6/4/92	6/4/92	6/8/92	6/9/92	6/9/92	6/9/92	6/8/92	6/8/92	6/5/92
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter										
Pesticides/PCBs										
alpha-BHC	--	--	--	R	--	--	--	--	--	--
beta-BHC	--	--	--	R	--	--	--	--	--	--
delta-BHC	--	--	--	R	--	--	--	--	--	--
gamma-BHC (Lindane)	--	--	--	R	--	--	--	--	--	--
Heptachlor	--	--	--	R	--	--	--	--	--	--
Aldrin	--	--	--	R	--	--	--	--	--	--
Heptachlor epoxide	--	R	--	R	--	--	--	--	--	--
Endosulfan I	--	--	--	R	--	--	--	--	--	0.062 P
Dieldrin	--	--	--	R	--	--	--	--	--	--
4,4'-DDE	--	--	--	R	--	--	--	--	--	--
Endrin	--	--	--	R	--	--	--	--	--	--
Endosulfan II	--	--	--	0.10 J	--	--	--	--	--	--
4,4'-DDD	--	--	--	R	--	--	--	--	--	3.4 JN
Endosulfan sulfate	--	--	--	R	--	--	--	--	--	--
4,4'-DDT	--	--	--	R	--	--	--	--	--	--
Methoxychlor	--	--	--	R	--	--	--	--	--	--
Endrin ketone	--	--	--	R	--	--	--	--	--	--
Endrin aldehyde	--	--	--	R	--	--	--	--	--	--
alpha-Chlordane	--	--	--	R	--	--	--	--	--	--
gamma-Chlordane	--	--	--	R	--	--	--	--	--	--
Toxaphene	--	--	--	R	--	--	--	--	--	--
Aroclor-1016	--	--	--	R	--	--	--	--	--	--
Aroclor-1221	--	--	--	R	--	--	--	--	--	--
Aroclor-1232	--	--	--	R	--	--	--	--	--	--
Aroclor-1242	--	--	--	R	--	--	--	--	--	--
Aroclor-1248	--	--	--	R	--	--	--	--	--	--
Aroclor-1254	--	--	--	R	--	--	--	--	--	--
Aroclor-1260	--	--	--	R	--	--	--	--	--	--
Herbicides										
2,4-D	NA	NA	22000	NA	NA	NA	NA	NA	NA	15
2,4,5-T	NA	NA	--	NA	NA	NA	NA	NA	NA	19

ug/L Micrograms per liter.
-- Not detected.
NA Not analyzed.
P Precision criteria were not met.
R Unusable value.
N Presumptive evidence of the compound is present.
J Estimated value.
PCBs Polychlorinated biphenyls.

Only those compounds detected are listed.

TARPEST.XLS

Table 5-16. Summary of Target Compound List Pesticides, PCBs, and Herbicides Detected in Groundwater Samples, Sauget Site R, Monanto Company, Sauget, Illinois.

	----Deep Zone----		----Bedrock Zone----							
Sample Location:	GM-57C	GM-62C	GM-106	GM-106-DUP	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank	Equipment Blank
Sample Date:	6/5/92	6/9/92	6/8/92	6/8/92	6/3/92	6/4/92	6/5/92	6/8/92	6/9/92	6/10/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter										
Pesticides/PCBs										
alpha-BHC	--	--	--	--	--	--	--	--	--	--
beta-BHC	--	--	--	--	--	--	--	--	--	--
delta-BHC	--	--	--	--	--	--	--	--	--	--
gamma-BHC (Lindane)	--	--	--	--	--	--	--	--	--	--
Heptachlor	--	--	--	--	--	--	--	--	--	--
Aldrin	--	--	--	--	--	--	--	--	--	--
Heptachlor epoxide	--	--	--	--	--	--	--	--	--	--
Endosulfan I	R	--	--	--	--	--	--	--	--	--
Dieldrin	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	--	--	--	--	--	--	--	--	--	--
Endrin	--	--	--	--	--	--	--	--	--	--
Endosulfan II	--	--	--	--	--	--	--	--	--	--
4,4'-DDD	R	--	--	--	--	--	--	--	--	--
Endosulfan sulfate	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	--	--	--	--	--	--	--	--	--	--
Methoxychlor	2.1 J	--	--	--	--	--	--	--	--	--
Endrin ketone	--	--	--	--	--	--	--	--	--	--
Endrin aldehyde	--	--	--	--	--	--	--	--	--	--
alpha-Chlordane	--	--	--	--	--	--	--	--	--	--
gamma-Chlordane	--	--	--	--	--	--	--	--	--	--
Toxaphene	--	--	--	--	--	--	--	--	--	--
Aroclor-1016	--	--	--	--	--	--	--	--	--	--
Aroclor-1221	--	--	--	--	--	--	--	--	--	--
Aroclor-1232	--	--	--	--	--	--	--	--	--	--
Aroclor-1242	--	--	--	--	--	--	--	--	--	--
Aroclor-1248	--	--	--	--	--	--	--	--	--	--
Aroclor-1254	--	--	--	--	--	--	--	--	--	--
Aroclor-1260	--	--	--	--	--	--	--	--	--	--
Herbicides										
2,4-D	1100 J	NA	NA	NA	NA	R	--	NA	NA	NA
2,4,5-T	R	NA	NA	NA	NA	R	--	NA	NA	NA

ug/L Micrograms per liter.
-- Not detected.
NA Not analyzed.
P Precision criteria were not met.
R Unusable value.
N Presumptive evidence of the compound is present.
J Estimated value.
PCBs Polychlorinated biphenyls.

Only those compounds detected are listed.

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Table 5-17. Summary of Target Analyte List Parameters Detected in Groundwater Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

	Shallow Zone				Intermediate Zone				
Sample Location:	P-6	P-7	P-14	GM-62A	GM-27B	GM-28B	P-1	P-2	P-3
Sample Date:	6/3/92	6/4/92	6/5/92	6/9/92	6/9/92	6/5/92	6/3/92	6/3/92	6/3/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
Parameter									
Arsenic	35.6	--	--	--	--	--	73.8	98.0	100
Barium	431	31.8 B	266	170 B	1300	94.5 B	538	547	818
Calcium	462000	544000	334000	181000	216000	111000	136000	215000	337000
Cobalt	--	24.1 B	--	--	--	--	--	--	--
Iron	991	11100	3000	368	74100	8610	50600	42400	47900
Magnesium	35500	39000	36300	32900	52700	42800	62000	65500	64900
Manganese	2120	8040	4100	846	3720	252	2170	1880	1640
Mercury	--	--	--	--	0.20	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--
Potassium	27700	20600	21400	5510	13200	8130	9740	10000	11300
Sodium	102000	67000	218000	37100	343000	71500	137000	201000	110000
Thallium	R	R	R	--	--	R	R	R	R
Zinc	--	--	--	--	--	3420	--	--	--

ug/L Micrograms per liter.
-- Not detected.
B Analyte detected between the contract required detection limit and the instrument detection limit.
R Unusable value.

Only those compounds detected are listed.

Table 5-17. Summary of Target Analyte List Parameters Detected in Groundwater Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

	Intermediate Zone							Deep Zone	
Sample Location:	P-8	P-10	P-11	P-12	P-13	GM-62B	GM-62B Dup	GM-27C	GM-28C
Sample Date:	6/4/92	6/4/92	6/4/92	6/4/92	6/8/92	6/9/92	6/9/92	6/9/92	6/8/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
Parameter									
Arsenic	--	17.5	94.8	27.5	191	--	--	--	--
Barium	621	329	1190	329	1110	403	401	1550	85.8 B
Calcium	292000	209000	244000	289000	271000	192000	195000	315000	105000
Cobalt	--	--	--	--	--	--	--	--	--
Iron	14700	52700	105000	27400	114000	22100	22400	19500	16300
Magnesium	76800	55800	66800	88900	67500	50500	50400	97700	62000
Manganese	5870	3610	1380	4380	4630	1760	1760	1720	327
Mercury	--	--	--	--	--	--	--	--	--
Nickel	104	--	--	--	--	--	--	--	--
Potassium	20500	12500	9070	13500	12800	10000	1000-	11500	9230
Sodium	524000	446000	475000	432000	275000	106000	106000	249000	67800
Thallium	R	R	R	R	--	--	--	--	--
Zinc	76.4	31.2	68.9	--	--	--	--	--	--

ug/L Micrograms per liter.
-- Not detected.
B Analyte detected between the contract required detection limit and the instrument detection limit.
R Unusable value.

Only those compounds detected are listed.

Table 5-17. Summary of Target Analyte List Parameters Detected in Groundwater Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

	Deep Zone				Bedrock Zone				
Sample Location:	GM-55C	GM-56C	GM-57C	GM-62C	GM-106	GM-106-DUP	Equipment Blank	Equipment Blank	Equipment Blank
Sample Date:	6/8/92	6/5/92	6/5/92	6/9/92	6/8/92	6/8/92	6/3/92	6/4/92	6/5/92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
Parameter									
Arsenic	--	--	--	--	25.2	29.7	--	--	--
Barium	133 B	39.5 B	179 B	206	128 B	121 B	--	--	--
Calcium	276000	110000	191000	201000	25400	25200	91.3 B	57.7 B	94.3 B
Cobalt	--	--	--	--	--	--	--	--	--
Iron	2100	12500	19800	29200	--	--	--	--	--
Magnesium	71100	66500	67400	40400	23100	22500	--	--	--
Manganese	520	639	569	1880	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--
Potassium	8950	9170	9760	8970	6010	5910	--	--	--
Sodium	54300	97700	132000	34600	250000	237000	--	--	--
Thallium	--	R	R	--	--	--	R	R	R
Zinc	--	1100	1770	--	--	--	--	--	--

ug/L Micrograms per liter.
-- Not detected.
B Analyte detected between the contract required detection limit and the instrument detection limit.
R Unusable value.

Only those compounds detected are listed.

Table 5-17. Summary of Target Analyte List Parameters Detected in Groundwater Samples, Sauget Site R, Monsanto Company, Sauget, Illinois.

Sample Location:	Equipment Blank	Equipment Blank	Equipment Blank
Sample Date:	6/8/92	6/9/92	6/10/92
Units:	ug/L	ug/L	ug/L
	Dissolved	Dissolved	Dissolved
Parameter			
Arsenic	--	--	--
Barium	--	--	--
Calcium	230 B	280 B	176 B
Cobalt	--	--	--
Iron	--	--	--
Magnesium	53.4 B	68.0 B	--
Manganese	--	--	--
Mercury	--	--	--
Nickel	--	--	--
Potassium	--	--	--
Sodium	--	--	--
Thallium	--	--	--
Zinc	--	--	--

ug/L Micrograms per liter.
-- Not detected.
B Analyte detected between the contract required detection limit and the instrument detection limit.
R Unusable value.

Only those compounds detected are listed.

Appendix 10

Sauget Landfill
Soil and/or Groundwater Data

Volume 2
Sauget Area 2
Data Tables/Maps

ARCS Contract No. 68-W8-0086
Work Assignment No. 47-5N60

February 1998

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 5
Office of Superfund
77 West Jackson Boulevard
Chicago, Illinois 60604

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ecology and environment, inc.
International Specialists in the Environment

33 North Dearborn Street, Chicago, Illinois 60602
Tel. 312/578-9243, Fax: 312/578-9345

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SITE DESCRIPTION - Sauget Area 2/Site Q

Site Q is an inactive waste disposal facility in Sauget and Cahokia. The facility, which was operated by Sauget & Company between 1966 and 1973, covers approximately 90 acres. The site is located on the east bank of the Mississippi River and is on the river side of the flood control levee. Most of Site Q is occupied by the Pillsbury Company, which operates a coal and grain unloading and transfer facility. The northern half of the site contains coal and cinders while the southern portion is unoccupied. A railroad spur divides the site and several ponds exist on site. Site Q was operated without a permit. The north side was registered with the IDPH in 1967, prior to formation of IEPA. The site is presently covered with black cinders which makes it highly permeable. Site Q is presently being leased to the Pillsbury Co. by its owners the Riverport Terminal and Fleeting Co.

The following is a chronology of events for site Q as discovered in the file information search:

1966

Disposal operations began in the northern most portion of site Q. A flyash pond operated by Union Electric existed at the area immediately south of the Monsanto Chemical dump (Site R).

1968 - 1972

Septic tank pumping and general municipal refuse were accepted at the site.

Early 1970s

IEPA inspections documented several violations of the Illinois Environmental Protection Act, including open burning, using unsuitable cover materials (cinders and flyash), and disposal of liquid chemical wastes.

April 1971

IEPA filed a complaint against Sauget & Co.. The company was ordered to cease open burning, using flyash and cinders for cover materials, and accepting liquid chemical wastes.

May 1971

The Illinois Pollution Control Board issued an order to Sauget & Company to discontinue the use of cinders and flyash for final cover.

September 1971 - August 1971

IEPA conducted monthly inspections at the site. During this time they cited inadequate daily and final cover, and the disposal of liquid wastes.

July 1972

An IEPA inspection revealed a smoldering underground fire.

August 1972

Leach tests of the cinder cover was performed by IEPA. The material was found to be inadequate in terms of permeability of material and its high metal content.

October 1972

The fire which began in July 1972, finally went out. The fire smouldered continuously from July to October despite repeated attempts to extinguish it.

1972

Sauget & Company applied for a permit to extend the existing landfill to an area south ofthe Alton & Southern Railroad. IEPA denied all permit applications to the southern site extension. Approval was never issued by IEPA, however Sauget & Company used this area for disposal.

October 1972

IEPA collected two soil samples from Site Q. One was from ponded water, the other was a leachate sample. Results indicated the presence of metals including lead andmercury.

January 1973

Groundwater samples were collected from two monitoring wells.

March 1973

Mississippi River flood waters inundated Site Q. The flood conditions lasted until May 1973.

April 1973

Samples of ponded water collected by IEPA on two separate occasions.

November 1973

The Illinois Secretary of State revoked the authority of Sauget & Co. to transact business in the State of Illinois.

January 1975

Disposal activities were completed at Site Q by this time.

September 1976

An IEPA inspection of Site Q revealed and underground fire at the site. The fire smoldered for approximately 1 month.

May 1977

The Illinois Pollution Control Board filed suit #77-84 against Sauget & Co. and Paul Sauget. A monetary penalty was invoked and Sauget & Co. was ordered to put a two foot layer of suitable cover material to cap the entire site by February 1981.

May 1980

IEPA was notified that drums and chemical wastes were uncovered during excavation along a railroad spur.

May 1981

In response to Sauget's failure to comply with order #77-84 and alleging several violations of the Illinois Environmental Protection Act, the Illinois Attorney General filed suit against Sauget & Co.

October 1981

IEPA sampled leachate seeps from the banks of the river. Results indicated high levels of organic contaminants.

June 1983

A subsurface investigation at Site Q was initiated by a USEPA FIT Contractor. Over half of the organics analyzed for in the samples were detected including 2,3,7,8-TCDD in two samples. A geophysical investigation was completed by Technos of Miami, Florida.

September 1983

IEPA took more leachate seep samples from the bank of the river. The results weresimilar to the results in October 1981.

March 1985

The Illinois Attorney Generals' office reentered a suit against Sauget & Company. TheIAG's office ordered final cover to be applied at the site and also requested a civil penalty.

March 1987

E & E took nine samples from eight monitoring wells at site Q. Monitoring wells were also sampled in area adjacent to site Q.

Subsequent to 1987, several investigative and significant environmental events have taken place. In 1992, Monsanto conducted sampling at the south end of Site R, on the Site Q property. In 1994, most of site Q was innundated by the Mississippi River flood waters. IEPA and USEPA conducted sampling in the depressional areas at the southern portion of Site Q in 1994 and 1997, respectively. In addition to sampling activities, construction of offices and storeage areas for a landscaping firm has taken place in the northern and central portions of Site Q.

(Note: All information above was excerpted from a document with the heading of "Background" which was taken off microfiche from the IEPA file records)

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SITE NARRATIVE - SAUGET AREA 2 / Site Q			
Sample Locations	**Sampling Entity**	**Date Sampled**	**Data Source**
X101 - X111	IEPA	11/9 to 11/10/94	Memo to M. Rebbe (IDPH) from P. Takacs (IEPA) dated 12/30/94 Re: November Sampling with maps and data
QD1 - QD3	E & E	5/27/94	Removal Action Report for Sauget Area 2: Site Q prepared by Ecology and Environment 7/29/94
Pit #1, Pit #2	Riedel	9/89	Ltr. to Carol Ropski (EPA) from R. Burke (Eagle Marine) dated 1/19/95 Re: Response of Eagle Marine Industries to Information Request
B-1 through B-18	E & E	7/93	"Description of Current Situation at the Dead Creek Project Sites" prepared for IEPA by Ecology and Environment, Inc., July 1986
L-1, P-1	IEPA	10/17/72	"Description of Current Situation at the Dead Creek Project Sites" prepared for IEPA by Ecology and Environment, Inc., July 1986
P-2	IEPA	4/10/73	"Description of Current Situation at the Dead Creek Project Sites" prepared for IEPA by Ecology and Environment, Inc., July 1986
L-1, L-2	IEPA	10/28/81	"Description of Current Situation at the Dead Creek Project Sites" prepared for IEPA by Ecology and Environment, Inc., July 1986
L101 - L103	IEPA	9/29/83	"Description of Current Situation at the Dead Creek Project Sites" prepared for IEPA by Ecology and Environment, Inc., July 1986
Q201 - Q208	USEPA	1997	Preliminary Ecological Risk Assessment for Sauget Area 2: Site Q prepared by USEPA 1997

ecology and environment

SITE NARRATIVE - SAUGET AREA 2 / Site Q

Nature and Extent of Contamination:

Southern Portion of Site Q (samples X101-X111 and Q203-Q208):
VOC concentrations in soils ranged from 0.008 to 0.29 mg/kg for 5 of the 11 samples analyzed for these parameters. BNA concentrations ranged from 0.38 to 1.9 mg/kg for 5 of the 11 samples collected. Pesticides were not detected in any of the 11 samples analyzed for these parameters. PCB concentrations ranged from 0.06 to 223 mg/kg for 14 of 17 samples collected.

The samples collected from the southern portion of Site Q are collected from depressional areas. These depressional areas have been identified by IEPA as apparent disposal areas and not all of the property south of the Alton & Southern Railroad has been sampled or characterized. The extent of surficial contamination in the southern portion of Site Q (south of the Alton & Southern Railroad) is fairly well defined laterally. However, there are no subsurface soils to help delineate the extent of vertical contamination.

Northern Portion of Site Q (all samples north of the Alton & Southern Railroad):
Waste samples (QD1 to QD3) collected in drums adjacent to the river at Site Q revealed a BNA concentration of 534 mg/kg in one sample, and PCB concentrations ranged from 180,000 to 260,000 mg/kg for the drum samples collected.

Surface water samples (P1 and P2) collected on Site Q did not contain appreciably high concentrations of metals. These samples were not analyzed for organic parameters. Pond sediments (Q201 and Q202) collected in the center of Site Q had PCB concentrations which ranged from 1.8 to 4.6 mg/kg for the two samples.

BNA concentrations in leachate samples (from samples L-1, L-2, L101, L102, and L103) were 5 µg/L for 2 of the 5 samples collected. The leachate samples were not analyzed for VOCs, and pesticides were not detected in any of the 5 samples. PCB concentrations ranged from 0.1 to 1.0 µg/L for 4 of the 5 samples collected. Metals, particularly As, Cr, Cu, Pb, and Zn, were elevated in a few of these samples.

VOC concentrations in the subsurface soils (from borings B-1 to B-18 and Pits 1 & 2) ranged from 0.02 to 5,855 mg/kg for 28 of the 36 samples collected BNA concentrations ranged from 3.8 to 15,190 mg/kg for 34 of the 36 samples collected. Pesticide concentrations were 0.1 and 3.3 mg/kg for 2 of the 35 samples collected. PCB concentrations ranged from 0.002 to 16,000 mg/kg for 32 of the 36 samples collected. Dioxin (2,3,7,8-TCDD) concentrations in subsurface soil samples ranged from 0.0001 to 0.0033 mg/kg in two of the 35 samples analyzed for this parameter.

The extent of contamination in the southern portion of Site Q (south of the Alton & Southern Railroad) is fairly well defined laterally in and around the depressional areas identified by IEPA. However, there are no subsurface soils to help delineate the extent of vertical contamination. The extent of contamination in the central portion of Site Q is poorly defined. Wastes have been initially identified through sampling of drum samples and leachate but surface and subsurface soil samples are lacking in this area. The extent of contamination in the northern portion of Site Q, adjacent to Site R is well defined through multiple soil borings and subsurface soil samples.

Containment and Integrity (if known):

There is no known containment for site Q. Wastes are present at the surface in the southern portion of Site Q. The northern portion is covered primarily with cinders. Access to this site is unrestricted.

Other Comments: See the attached "Site Description" for more site details.

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SAUGET Analytical Data
Site Q

SURFACE SOIL SAMPLES
Volatile Organic Compounds (µg/kg)
Collected by IEPA (11/9-10/94)

Sample Number	X101	X102	X103	X104	X105	X106	X107	X108	X109	X110
VOC										
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	15	6 J	ND	ND	5 J	ND	ND	6 J	ND	12 J
Acetone	ND	ND	ND	ND	27	ND	ND	ND	ND	ND
Carbon Disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	24	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene (total)	240	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	10 J	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	10 J	ND	ND	ND	ND	18	ND	ND	ND	ND
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	5 J	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	8 J	ND	ND	ND	14	ND	ND	ND	ND	8 J
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	ND	ND	ND	ND	14	ND	ND	ND	ND	ND

µg/kg - Micrograms per kilogram

J - Estimated value

ND - Not detected

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SAUGET Analytical Data
Site Q

SURFACE SOIL SAMPLES
Volatile Organic Compounds (µg/kg)
Collected by IEPA (11/9-11/10/1994)

	Sample Number		X111	Maximum Detected
VOC				
Chloromethane			ND	ND
Bromomethane			ND	ND
Vinyl chloride			ND	ND
Chloroethane			ND	ND
Methylene chloride			ND	15
Acetone			ND	27
Carbon Disulfide			ND	ND
1,1-Dichloroethene			ND	ND
1,1-Dichloroethane			ND	24
1,2-Dichloroethene (total)			ND	240
Chloroform			ND	10 J
1,2-Dichloroethane			ND	ND
2-Butanone			ND	ND
1,1,1-Trichloroethane			ND	18
Carbon Tetrachloride			ND	ND
Vinyl Acetate			ND	ND
Bromodichloromethane			ND	ND
1,2-Dichloropropane			ND	ND
trans-1,3-Dichloropropene			ND	ND
Trichloroethene			ND	6 J
Dibromochloromethane			ND	ND
1,1,2-Trichloroethane			ND	ND
Benzene			ND	5 J
cis-1,3-Dichloropropene			ND	ND
2-Chloroethyl Vinyl Ether			ND	ND
Bromoform			ND	ND
4-Methyl-2-pentanone			ND	ND
2-Hexanone			ND	ND
Tetrachloroethene			ND	5 J
1,1,2,2-Tetrachloroethane			ND	ND
Toluene			ND	14
Chlorobenzene			ND	ND
Ethylbenzene			ND	ND
Styrene			ND	ND
Total Xylenes			ND	14

µg/kg - Micrograms per kilogram

J - Estimated value

ND - Not detected

SAUGET Analytical Data
Site Q

SURFACE SOIL SAMPLES
Base Neutrals/Acids (µg/kg)
Collected by IEPA (11/9-10/94)

Sample Number	X101	X102	X103	X104	X105	X106	X107	X108	X109	X110
BNAs										
Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND	ND	270 J	ND	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND	ND	280 J	ND	ND	ND
N-Nitroso-n-Dipropylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND	210 J	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	270 J	ND	ND	ND
Benzoic Acid	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis-(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	160 J	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphathalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl Phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

µg/kg - Micrograms per kilogram
B - Compound detected in blank sample
J - Estimated value
ND - Not detected

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SAUGET Analytical Data
Site Q

SURFACE SOIL SAMPLES
Base Neutrals/Acids (µg/kg)
Collected by IEPA (11/9-10/94)

Sample Number	X101	X102	X103	X104	X105	X106	X107	X108	X109	X110
BNAs										
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-Phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	76 J	ND
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butly phthalate	ND	ND	ND	ND	ND	ND	ND	340 J	310 J	380 J
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	160 J	ND
Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	170 J	ND
Butyl Benzyl phthalate	ND	ND	ND	ND	ND	ND	120 J	ND	ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	89 J	ND
bis(2-ethylhexyl)phthalate	1200000 B	13000 B	9300 B	110000000 B	13000 B	120000 B	1900 B	3800 B	310 JB	1000 B
Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	110 J	ND
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	87 J	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	96 J	ND
Benzo (a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	84 J	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

µg/kg - Micrograms per kilogram
B - Compound detected in blank sample
J - Estimated value
ND - Not detected

SAUGET Analytical Data
Site Q

SURFACE SOIL SAMPLES
Base Neutrals/Acids (µg/kg)
Collected by IEPA (11/9-10/94)

	Sample Number	X111	Maximum Detected
BNAs			
Phenol		ND	ND
bis(2-Chloroethyl)ether		ND	ND
2-Chlorophenol		ND	ND
1,3-Dichlorobenzene		ND	ND
1,4-Dichlorobenzene		ND	ND
Benzyl Alcohol		ND	ND
1,2-Dichlorobenzene		ND	ND
2-Methylphenol		ND	270 J
bis(2-Chloroisopropyl)ether		ND	ND
4-Methylphenol		ND	280 J
N-Nitroso-n-Dipropylamine		ND	ND
Hexachloroethane		ND	ND
Nitrobenzene		ND	ND
Isophorone		ND	210 J
2-Nitrophenol		ND	ND
2,4-Dimethylphenol		ND	270 J
Benzoic Acid		ND	ND
bis-(2-Chloroethoxy)methane		ND	ND
2,4-Dichlorophenol		ND	ND
1,2,4-Trichlorophenol		ND	ND
Naphthalene		ND	ND
4-Chloroaniline		ND	ND
Hexachlorobutadiene		ND	160 J
4-Chloro-3-methylphenol		ND	ND
2-Methylnaphathalene		ND	ND
Hexachlorocyclopentadiene		ND	ND
2,4,6-Trichlorophenol		ND	ND
2,4,5-Trichlorophenol		ND	ND
2-Chloronaphthalene		ND	ND
2-Nitroaniline		ND	ND
Dimethyl Phthalate		ND	ND
Acenaphthylene		ND	ND
3-Nitroaniline		ND	ND
Acenaphthene		ND	ND

µg/kg - Micrograms per kilogram
B - Compound detected in blank sample
J - Estimated value
ND - Not detected.

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SAUGET Analytical Data
Site Q

SURFACE SOIL SAMPLES
Base Neutrals/Acids (µg/kg)
Collected by IEPA (11/9-10/94)

	Sample Number	X111	Maximum Detected
BNAs			
2,4-Dinitrophenol		ND	ND
4-Nitrophenol		ND	ND
Dibenzofuran		ND	ND
2,4-Dinitrotoluene		ND	ND
2,6-Dinitrotoluene		ND	ND
Diethylphthalate		ND	ND
4-Chlorophenyl-Phenylether		ND	ND
Fluorene		ND	ND
4-Nitroaniline		ND	ND
4,6-Dinitro-2-methylphenol		ND	ND
N-Nitrosodiphenylamine		ND	ND
4-Bromophenyl-phenylether		ND	ND
Hexachlorobenzene		ND	ND
Pentachlorophenol		ND	ND
Phenanthrene		73 J	76 J
Anthracene		62 J	62
Carbazole		ND	ND
Di-n-butly phthalate		250 J	380 J
Fluoranthene		140 J	160 J
Pyrene		140 J	170 J
Butyl Benzyl phthalate		ND	120 J
3,3'-Dichlorobenzidine		ND	ND
Benzo (a)anthracene		ND	89 J
bis(2-ethylhexyl)phthalate		1500	110000000 B
Chrysene		110 J	110 J
Di-n-octyl phthalate		ND	ND
Benzo(b)fluoranthene		110 J	110 J
Benzo(k)fluoranthene		88 J	96 J
Benzo (a)pyrene		ND	84 J
Indeno(1,2,3-cd)pyrene		ND	ND
Benzo(g,h,i)perylene		ND	ND
Dibenzo(a,h)anthracene		ND	ND

µg/kg - Micrograms per kilogram
B - Compound detected in blank sample
J - Estimated value
ND - Not detected

SAUGET Analytical Data
Site Q

SURFACE SOIL SAMPLES
Pesticides/PCBs/Herbicides (µg/kg)
Collected by IEPA (11/9-10/94)

Sample Number	X101	X102	X103	X104	X105	X106	X107	X108	X109	X110
Pesticides/PCBs										
Alpha-BHC	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Beta-BHC	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Delta-BHC	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Gamma-BHC (Lindane)	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Heptachlor	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Aldrin	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Heptachlor Epoxide	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Dieldrin	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
4,4'-DDE	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Endrin	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
4,4'-DDD	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
4,4'-DDT	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Methoxychlor	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Endrin Ketone	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Chlordane	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Toxaphene	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Aroclor-1016	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Aroclor-1221	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Aroclor-1232	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Aroclor-1242	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Aroclor-1248	ND	ND	500	ND	ND	ND	4800 P	DM	DM	DM
Aroclor-1254	110000 P	1100 P	2300	14000 P	22000	1700 P	11000 E	DM	DM	DM
Aroclor-1260	83000	460	1500	12000	6500 P	2300	8800 PE	DM	DM	DM

µg/kg - Micrograms per kilogram

DM - Data missing

E - Estimated value Concentration detected exceeds the calibrated range

P - Greater than 25% differnce exists for the detected concentrations between the two GC columns The lower of the results is reported

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Site Q

SURFACE SOIL SAMPLES
Pesticides/PCBs/Herbicides (µg/kg)
Collected by IEPA (11/9-10/94)

	Sample Number		X111	Maximum Detected
Pesticides/PCBs				
Alpha-BHC			DM	ND
Beta-BHC			DM	ND
Delta-BHC			DM	ND
Gamma-BHC (Lindane)			DM	ND
Heptachlor			DM	ND
Aldrin			DM	ND
Heptachlor Epoxide			DM	ND
Endosulfan I			DM	ND
Dieldrin			DM	ND
4,4'-DDE			DM	ND
Endrin			DM	ND
Endosulfan II			DM	ND
4,4'-DDD			DM	ND
Endosulfan sulfate			DM	ND
4,4'-DDT			DM	ND
Methoxychlor			DM	ND
Endrin Ketone			DM	ND
Chlordane			DM	ND
Toxaphene			DM	ND
Aroclor-1016			DM	ND
Aroclor-1221			DM	ND
Aroclor-1232			DM	ND
Aroclor-1242			DM	ND
Aroclor-1248			DM	4800 P
Aroclor-1254			DM	110000 P
Aroclor-1260			DM	83000

µg/kg - Micrograms per kilogram
DM - Data missing
E - Estimated value Concentration detected exceeds the calibrated range
P - Greater than 25% difference exists for the detected concentrations between the two GC columns The lower of the results is reported

SAUGET Analytical Data
Site Q

SURFACE SOIL SAMPLES
Total Metals (mg/kg)
Collected by IEPA (11/9-10/94)

Sample Number	X101	X102	X103	X104	X105	X106	X107	X108	X109	X110
Total Metals										
Aluminum	10700 *	5710 *	3240 *	3500 *	237 *	3250 *	5630 *	3330 *	5590 *	1030 *
Antimony	157 N*	ND	17900 N*	ND	ND	ND	ND	ND	ND	47.6 N*
Arsenic	13.7 N*S	1.4 BN*S	216 N*S	1.6 BNW*	0.47 BN*	0.93 BN*	2.7 N*S	3.3 N*S	3 N*S	19.3 N*S
Barium	1220 N*	141 N*	1680 N*	63.3 N*	188 N*	3620 N*	103 N*	150 N*	123 N*	1120 N*
Beryllium	0.54 B	0.49 B	0.3 B	0.31 B	ND	ND	0.44 B	ND	0.47 B	ND
Cadmium	2280 *	3.9 *	8.7	1.1 B*	1.4 *	1.5 *	28.7 *	6 *	1.9 *	1.2 B
Calcium	13400	18000	10300	152000	456 B	1320	4360	2090	9070	413 B
Chromium	3650 *	12.1 *	142 *	5.8 *	3 *	7 *	287 *	43.9 *	10.4 *	40.8
Cobalt	18.7	7.4 B	13.3 B	2.9 B	ND	3.7 B	8.2 B	5.7 B	8 B	6.9 B
Copper	324	18.7	1630	7.6	2.8 B	9	32.8	166	21.6	226
Iron	83500 *	11600 *	80500 *	5450 *	469 *	2170 *	22500 *	7920 *	10900 *	65200 *
Lead	7690	152 *	195000 *	18100 *	62.2 *	41.1	191 *	571 *	52 *	5320 *
Magnesium	2940	4250	1350	4600	56.9 B	2350	2040	1230 B	2830	89.9 B
Manganese	606	372	1270	275	4	62.3	334	133	455	152
Mercury	4.9	ND	0.25	ND	ND	0.14	ND	0.3	ND	0.64
Nickel	153 N*	17.6 N*	101 N*	8.1 BN*	ND	6.5 BN*	23.1 N*	18.7 N*	18.9 N*	371 N*
Potassium	1310 B	1030 B	446 B	604 B	ND	301 B	898 B	598 B	940 B	2430
Selenium	59.9 *S	ND	ND	ND	2.1 B*	ND	1.5 *S	0.33 B*W	ND	ND
Silver	3.3 N	ND	30.2 N	ND	ND	ND	ND	ND	ND	28.9 N
Sodium	268 B	ND	ND	810 B	ND	ND	ND	ND	ND	476 B
Thallium	ND	ND	0.89 B	ND	ND	ND	ND	ND	ND	ND
Vanadium	7.3 B	16	ND	7.6 B	ND	10 B	13.8	9.1 B	13.6 B	ND
Zinc	7290 *	689	9520 *	95 *	10.8 *	66.1 *	2010 *	338 *	208 *	120 *
Cyanide	3.3	ND	2.8	ND	ND	ND	ND	ND	ND	ND
Sulfate	82.4	ND	55.9	ND	907	ND	76.1	170	4780	901
Sulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

mg/kg - Milligrams per kilogram

B - Estimated value. The value is less than the CRDL, but greater than the instrument detection limit

N - Laboratory spike recoveries were outside QC protocols

ND - Not detected

S - Analysis performed using the method of standard additions

W - Laboratory post-digestion spike for furnace AA analysis exceeds QC limits

* - Laboratory duplicate analysis not within control limits

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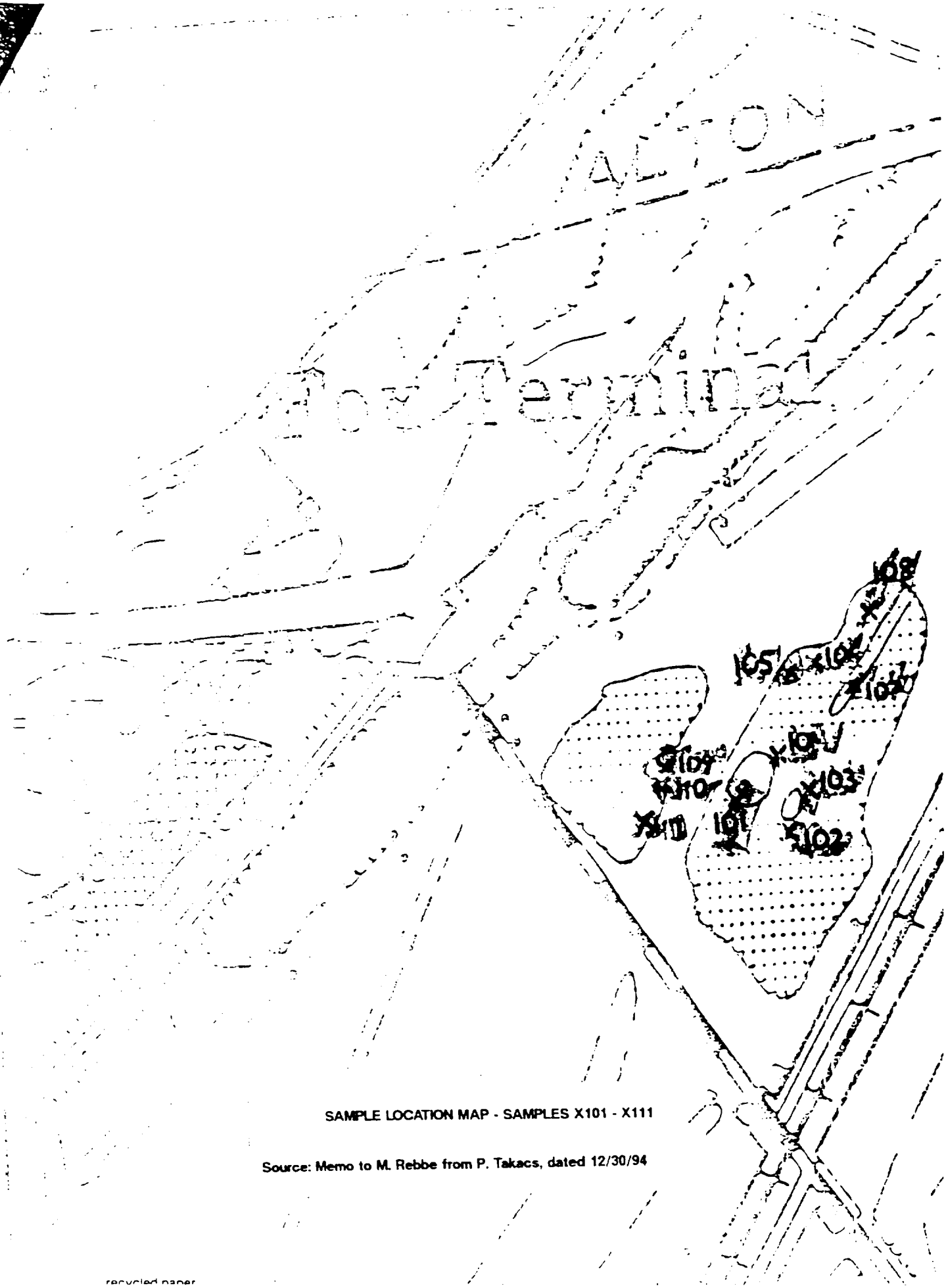
Site Q

SURFACE SOIL SAMPLES
Total Metals (mg/kg)
Collected by IEPA (11/9-10/94)

	Sample Number	X111	Maximum Detected
Total Metals			
Aluminum		10100 *	10700 *
Antimony		ND	17900 N*
Arsenic		4.4 BN*S	216 N*S
Barium		170 N*	3620 N*
Beryllium		0.73 B	0.73 B
Boron		1.9 *	2260 *
Cadmium		11500	152000
Chromium		15.6 *	3650 *
Cobalt		9.7 B	18.7
Copper		38	1630
Iron		17100 *	80500 *
Lead		58.1 *	195000 *
Magnesium		3990	4600
Manganese		597	1270
Mercury		ND	4.9
Nickel		25.9 N*	371 N*
Potassium		1520	2430
Selenium		ND	59.9 *S
Silver		ND	30.2 N
Sodium		ND	810 B
Thallium		ND	0.89 B
Vanadium		23.1 B	23.1
Zinc		216 *	9520 *
Cyanide		ND	3.3
Sulfate		300	4780
Sulfide		ND	ND

mg/kg - Milligrams per kilogram
B - Estimated value. The value is less than the CRDL, but greater than the instrument detection limit
N - Laboratory spike recoveries were outside QC protocols
ND - Not detected
S - Analysis performed using the method of standard additions
W - Laboratory post-digestion spike for furnace AA analysis exceeds QC limits
* - Laboratory duplicate analysis not within control limits



SAMPLE LOCATION MAP - SAMPLES X101 - X111

Source: Memo to M. Rebbe from P. Takacs, dated 12/30/94

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Site Q

SOIL SAMPLES
Semi-Volatiles (µg/kg)
Collected by E&E (5/27/94)

Semi-Volatiles	Sample Number	QD1	QD2	QD3	Maximum Concentration
Phenol		69000 JD	ND	ND	69000 JD
2-Chlorophenol		67000 JD	ND	ND	67000 JD
1,4-Dichlorobenzene		110000 JD	ND	ND	110000 JD
N-Nitroso-di-n-propylamine		42000 JD	ND	ND	42000 JD
1,2,4-Trichlorobenzene		51000 JD	ND	ND	51000 JD
4-Chloro-3-Methylphenol		67000 JD	ND	ND	67000 JD
Acenaphthene		44000 JD	ND	ND	44000 JD
4-Nitrophenol		24000 JD	ND	ND	24000 JD
2,4-Dinitrotoluene		40000 JD	ND	ND	40000 JD
Pentachlorophenol		20000 JD	ND	ND	20000 JD

µg/kg - Micrograms per kilogram
D - Compound concentration is at a secondary dilution factor
J - Estimated value
ND - Not detected

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SAUGET Analytical Data
Site Q

SOIL SAMPLES
TCLP Metals (µg/L)
Collected by E&E (5/27/94)

	Sample Number		QD1	QD2	QD3	Maximum
Total Metals						**Concentration**
Arsenic			ND	ND	ND	ND
Barium			**320**	**440**	**390**	**440**
Cadmium			ND	ND	ND	ND
Chromium			ND	ND	ND	ND
Lead			ND	ND	ND	ND
Mercury			ND	ND	ND	ND
Lead			ND	ND	ND	ND
Selenium			ND	ND	ND	ND
Silver			ND	ND	ND	ND

µg/L - Micrograms per liter
ND - Not detected

SAUGET Analytical Data
Site Q

SOIL SAMPLES
TCLP Semi-Volatiles (µg/L) and PCBs (mg/kg)
Collected by E&E (5/27/94)

	Sample Number		QD1	QD2	QD3	Maximum
TCLP and PCB						Concentration
2,4,6-Trichlorophenol			ND	6.3 J	ND	6.3 J
Pentachlorophenol			ND	16 J	ND	16 J
PCB - 1260 (mg/kg)			180000	260000	230000	260000

µg/L - Micrograms per liter
mg/kg - Milligrams per kilogram
J - estimated value
PCBs - polychlorinated biphenyls

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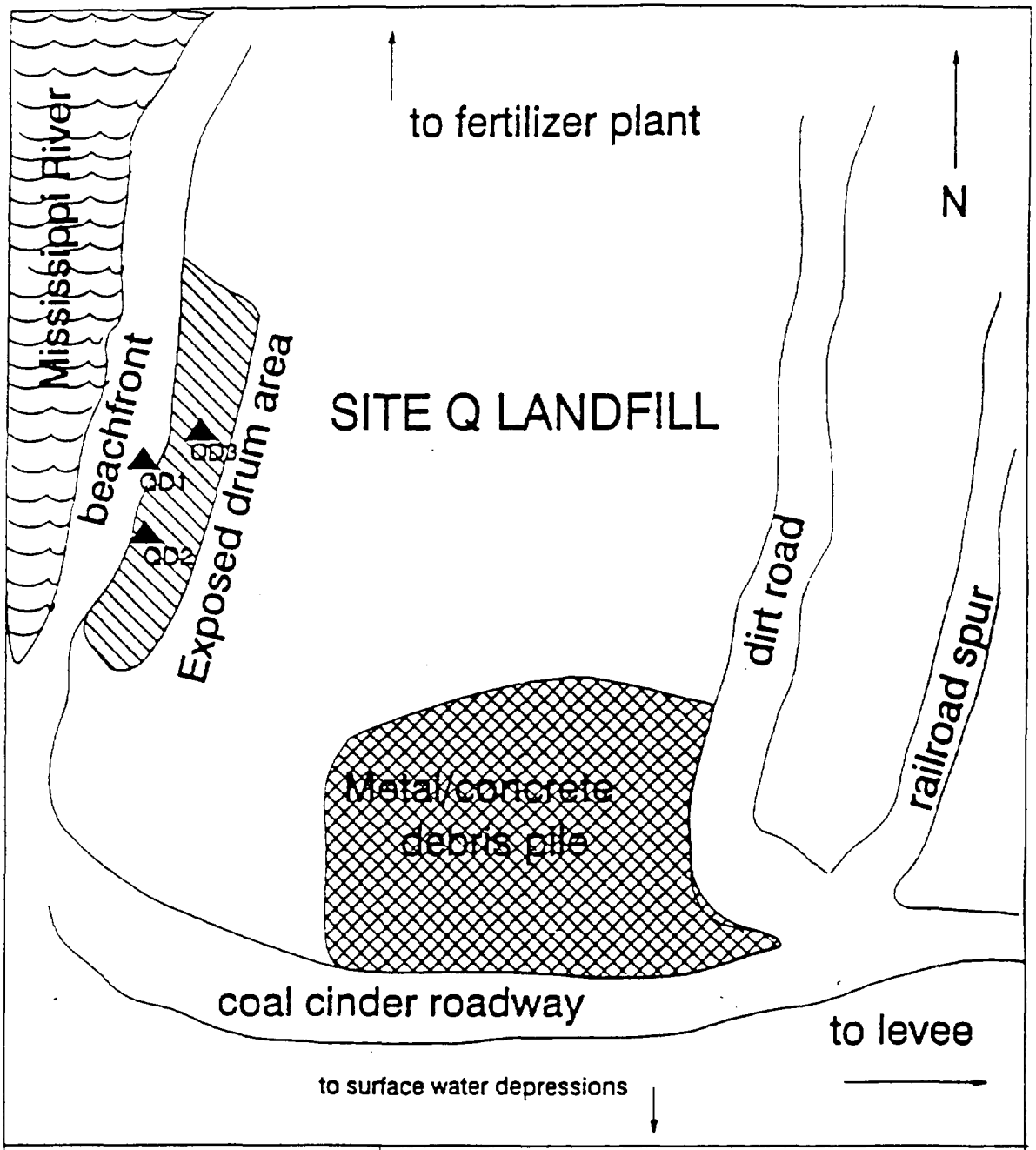

KEY

▲ Drum Sample

ecology and environment, inc.
Technical Assistance Team
Region V
111 West Jackson Blvd.
Chicago, IL 60604

TITLE: SAMPLE LOCATION MAP		FIGURE #: 3
SITE: SAUGET AREA 2 - SITE Q		SCALE: NOT TO SCALE
CITY: SAUGET	STATE: ILLINOIS	PAN: EIL0837SAA

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SAUGET Analytical Data
Site Q

SOIL SAMPLES (Sampling date not known)
Volatile Organic Compounds (µg/kg)
Collected by Riedel Industrial Waste Management, Inc.

	Sample Number		PIT #2	Maximum Concentration
VOC				
Chloromethane			ND	ND
Bromomethane			ND	ND
Vinyl chloride			ND	ND
Chloroethane			ND	ND
Methylene chloride			ND	ND
Carbon Disulfide			ND	ND
1,1-Dichloroethene			ND	ND
1,1 Dichloroethane			ND	ND
1,2-Dichloroethene (total)			ND	ND
Chloroform			69000	69000
1,2-Dichloroethane			ND	ND
2-Butanone			30200	30200
1,1,1-Trichloroethane			ND	ND
Carbon Tetrachloride			ND	ND
Vinyl Acetate			ND	ND
Bromodichloromethane			ND	ND
1,2-Dichloropropane			ND	ND
cis-1,3-Dichloropropene			ND	ND
Trichloroethene			ND	ND
Dibromochloromethane			ND	ND
1,1,2-Trichloroethane			ND	ND
Benzene			ND	ND
trans-1,3-Dichloropropene			ND	ND
Bromoform			ND	ND
4-Methyl-2-pentanone			ND	ND
2-Hexanone			ND	ND
Tetrachloroethene			ND	ND
1,1,2,2-Tetrachloroethane			ND	ND
Toluene			5500	5500
Chlorobenzene			15700	15700
Ethylbenzene			2780	2780
Styrene			ND	ND
Total Xylenes			6300	6300

µg/kg - Micrograms per kilogram
ND - Not detected

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SAUGET Analytical Data
Site Q

SOIL SAMPLES (Sampling date not known)
Base Neutrals/Acids (µg/kg)
Collected by Riedel Industrial Waste Management, Inc.

	Sample Number	PIT #1	Maximum Concentration
BNAs			
Phenol		ND	ND
bis(2-Chloroethyl)ether		ND	ND
2-Chlorophenol		ND	ND
1,3-Dichlorobenzene		ND	ND
1,4-Dichlorobenzene		ND	ND
Benzyl Alcohol		ND	ND
1,2-Dichlorobenzene		ND	ND
2-Methylphenol		ND	ND
bis(2-Chloroisopropyl)ether		ND	ND
4-Methylphenol		ND	ND
N-Nitroso-n-Dipropylamine		ND	ND
Nitrobenzene		ND	ND
Isophorone		ND	ND
2-Nitrophenol		ND	ND
2,4-Dimethylphenol		ND	ND
Benzoic Acid		ND	ND
bis-(2-Chloroethoxy)methane		ND	ND
2,4-Dichlorophenol		ND	ND
1,2,4-Trichlorophenol		ND	ND
Naphthalene		ND	ND
4-Chloroaniline		ND	ND
Hexachlorobutadiene		ND	ND
4-Chloro-3-methylphenol		ND	ND
2-Methylnaphthalene		ND	ND
Hexachlorocyclopentadiene		ND	ND
2,4,6-Trichlorophenol		ND	ND
2,4,5-Trichlorophenol		ND	ND
2-Chloronaphthalene		ND	ND
2-Nitroaniline		ND	ND
Dimethyl Phthalate		ND	ND
Acenaphthylene		ND	ND
3-Nitroaniline		ND	ND
Acenaphthene		ND	ND

µg/kg - Micrograms per kilogram
ND - Not detected

SAUGET Analytical Data
Site Q

SOIL SAMPLES (Sampling date not known)
Base Neutrals/Acids (µg/kg)
Collected by Riedel Industrial Waste Management, Inc.

	Sample Number	PIT #1	Maximum Concentration
BNAs			
2,4-Dinitrophenol		ND	ND
4-Nitrophenol		ND	ND
Dibenzofuran		ND	ND
2,4-Dinitrotoluene		ND	ND
2,6-Dinitrotoluene		ND	ND
Diethylphthalate		ND	ND
4-Chlorophenyl-Phenylether		ND	ND
Fluorene		ND	ND
4-Nitroaniline		ND	ND
4,6-Dinitro-2-methylphenol		ND	ND
N-Nitrosodiphenylamine		ND	ND
4-Bromophenyl-phenylether		ND	ND
Hexachlorobenzene		ND	ND
Pentachlorophenol		ND	ND
Phenanthrene		ND	ND
Anthracene		ND	ND
Di-n-butly phthalate		ND	ND
Fluoranthene		ND	ND
Pyrene		ND	ND
Butyl Benzyl phthalate		ND	ND
3,3'-Dichlorobenzidine		ND	ND
Benzo (a)anthracene		ND	ND
bis(2-ethylhexyl)phthalate		ND	ND
Chrysene		ND	ND
Di-n-octyl phthalate		ND	ND
Benzo(b)fluoranthene		ND	ND
Benzo(k)fluoranthene		ND	ND
Benzo (a)pyrene		ND	ND
Indeno(1,2,3-cd)pyrene		ND	ND
Benzo(g,h,i)perylene		ND	ND
Dibenzo(a,h)anthracene		ND	ND

µg/kg - Micrograms per kilogram
ND - Not detected

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SAUGET Analytical Data
Site Q

SOIL SAMPLES (Sampling date not known)

Collected by Riedel Industrial Waste Management, Inc.

	Sample Number		PIT #2	Maximum Detected
Test Performed				
EP Extraction			ND	ND
RCRA Metals (mg/kg)				ND
Arsenic			<0 4	ND
Barium			27 8	27 8
Cadmium			<0 5	ND
Chromium			<0 5	ND
Lead			<0 5	ND
Mercury			<0 1	ND
Selenium			<0 2	ND
Silver			<0 5	ND
Ignitability (setflash)			--	--
Corrosivity (pH)			--	--
Cyanide			--	--
Sulfides			--	--
Phenols			--	--
PCB Contamination (mg/kg)			342	342

mg/kg - Milligrams per kilogram
ND - Not detected

SAUGET Analytical Data
Site Q

SOIL SAMPLES
Organics (µg/kg)
Collected by Ecology & Environment, Inc. (7/83)

	Sample Number	B1A	B1B	B2A	B2B	B3A	B3B	B4A	B4B
	Sample Depth(ft)	10 - 11 5	17 5 - 19	13 5 - 15 5	17 - 19	10 - 12	13 5 - 15 5	10 - 12	13 5 - 15 5
Organics									
2, 3, 7, 8-TCDD		ND	ND	ND	ND	ND	ND	ND	3 31
2, 4, 6-trichlorophenol		2500	170000	22000	520	1400	1500	ND	94000
2-chlorophenol		24000	65000	800	ND	1500	LT	57000	360000
2, 4-dichlorophenol		66000	3100000	31000	1700	760	4500	ND	370000
2, 4-dimethylphenol		ND	ND	500	ND	ND	ND	ND	72000
4, 6-dinitro-2-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND
pentachlorophenol		ND	86000	5400	LT	ND	11000	ND	100000
phenol		24000	55000	45000	4400	3200	100000	98000	88000
2-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND
4-methylphenol		ND	ND	LT	ND	560	LT	ND	330000
2, 4, 5-trichlorophenol		ND	ND	ND	LT	ND	ND	ND	ND
acenaphthene		ND	ND	1200	2800	ND	ND	ND	ND
1, 2, 4-trichlorobenzene		ND	ND	ND	480	ND	ND	LT	100000
1, 2-dichlorobenzene		LT	ND	LT	ND	ND	LT	ND	20000
1, 4-dichlorobenzene		ND	ND	1800	720	LT	760	LT	66000
fluoranthene		ND	ND	ND	1200	ND	ND	ND	LT
isophorone		ND	ND	ND	ND	ND	ND	ND	ND
naphthalene		ND	ND	11000	8300	ND	ND	ND	LT
nitrobenzene		ND	8800	400	ND	ND	ND	ND	56000
N-nitrosodiphenylamine		ND	ND	ND	ND	ND	ND	ND	ND
bis(2-ethylhexyl)phthalate		ND	ND	ND	LT	ND	ND	ND	62000
butyl benzyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND
di-n-butyl phthalate		ND	ND	ND	ND	ND	ND	ND	LT
di-n-octyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND
diethyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND
benzo(a)anthracene		ND	ND	ND	ND	ND	ND	ND	ND
benzo(a)pyrene		ND	ND	ND	ND	ND	ND	ND	ND
benzo(b)fluoranthene		ND	ND	ND	ND	ND	ND	ND	ND
benzo(k)fluoranthene		ND	ND	ND	ND	ND	ND	ND	ND
chrysene		ND	ND	ND	ND	ND	ND	ND	ND
anthracene		ND	ND	ND	400	ND	ND	ND	ND
benzo(ghi)perylene		ND	ND	ND	ND	ND	ND	ND	ND
fluorene		ND	ND	600	2000	ND	ND	ND	ND
phenanthrene		ND	ND	1000	2700	ND	ND	ND	LT
dibenzo(a,h)anthracene		ND	ND	ND	ND	ND	ND	ND	ND
indeno(1,2,3-cd)pyrene		ND	ND	ND	ND	ND	ND	ND	ND
pyrene		ND	ND	LT	LT	ND	ND	ND	LT
aniline		ND	ND	ND	ND	ND	ND	ND	ND
4-chloroaniline		ND	ND	LT	ND	ND	ND	ND	ND
dibenzofuran		ND	ND	1000	3000	ND	ND	ND	ND
2-methylnaphthalene		ND	ND	2000	2300	ND	ND	ND	ND
3-nitroaniline		ND	ND	4600	ND	ND	ND	ND	ND
benzene		ND	ND	ND	ND	ND	ND	ND	ND

µg/kg - Micrograms per kilogram
ND - Not Detected
LT - Present, but lower than the detection limit for low hazard analyses

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SAUGET Analytical Data
Site Q

SOIL SAMPLES
Organics (µg/kg)
Collected by Ecology & Environment, Inc. (7/83)

	Sample Number	B1A	B1B	B2A	B2B	B3A	B3B	B4A	B4B
	Sample Depth(ft)	10 - 11 5	17 5 - 19	13 5 - 15 5	17 - 19	10 - 12	13 5 - 15 5	10 - 12	13 5 - 15 5
Organics									
chlorobenzene		ND	ND	ND	ND	ND	ND	10000	40000
1,2-dichloroethane		ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethane		ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane		ND	ND	ND	ND	ND	ND	ND	ND
1,2-trans-dichloroethene		ND	ND	ND	ND	ND	ND	ND	ND
ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND
methylene chloride		ND	ND	7.4	3.7	LM	8	ND	ND
tetrachloroethane		ND	ND	ND	ND	ND	ND	ND	ND
toluene		ND	ND	ND	ND	ND	ND	ND	ND
trichloroethane		ND	ND	ND	ND	ND	ND	ND	ND
acetone		ND	ND	960	ND	ND	977	ND	LM
2-butanone		ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone		ND	ND	ND	ND	ND	LT	ND	ND
styrene		ND	ND	ND	ND	ND	ND	ND	ND
o-xylene		ND	ND	ND	ND	ND	ND	ND	5100
PCB-1242		ND	ND	ND	2	ND	ND	--	--
PCB-1254		ND	ND	ND	ND	ND	ND	--	--
PCB-1248		1000	ND	ND	ND	ND	ND	--	--
PCB-1260		ND	ND	485 2	ND	69 6	ND	--	--
PCB-1016		ND	ND	2120 6	ND	ND	ND	--	--
Total PCB		NR	NR	NR	NR	NR	NR	68000	1000000

µg/kg - Micrograms per kilogram
ND - Not Detected
LT - Present, but lower than the detection limit for low hazard analyses
LM - Present, but lower than the detection limit for medium hazard analyses
NR - Total PCBs not reported
-- Only PCB Total was reported

SAUGET Analytical Data
Site Q

SOIL SAMPLES
Organics (µg/kg)
Collected by Ecology & Environment, Inc. (7/83)

	Sample Number	B5A	B5B	B6A	B6B	B7A	B7B	B8A	B8B
	Sample Depth(ft)	13.5-15.5	17.0-19.0	10.0-12.0	13.5-15.5	10.0-12.0	13.5-15.5	13.5-15.5	17.5-19.5
Organics									
2, 3, 7, 8-TCDD		ND	ND	ND	ND	ND	ND	ND	0.11
2, 4, 6-trichlorophenol		130000	26000	2700	4800	2700	ND	480000	10000
2-chlorophenol		31000	8400	1600	1600	LT	ND	ND	ND
2, 4-dichlorophenol		560000	260000	17000	15000	6100	ND	1500000	64000
2, 4-dimethylphenol		ND	ND	2000	ND	ND	ND	ND	ND
4, 6-dinitro-2-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND
pentachlorophenol		ND	ND	ND	16000	25000	31000	ND	ND
phenol		140000	250000	45000	11000	1800	ND	ND	ND
2-methylphenol		ND	ND	1400	600	ND	ND	ND	ND
4 methylphenol		ND	36000	7000	1400	ND	ND	ND	ND
2, 4, 6-trichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND
acenaphthene		ND	ND	ND	ND	ND	ND	ND	ND
1, 2, 4-trichlorobenzene		86000	13000	ND	ND	ND	ND	120000	ND
1, 2-dichlorobenzene		100000	28000	LT	ND	ND	ND	180000	ND
1, 4-dichlorobenzene		ND	ND	3100	800	ND	ND	LT	ND
fluoranthene		ND	ND	ND	ND	ND	ND	ND	ND
isophorone		ND	ND	ND	ND	ND	ND	ND	ND
naphthalene		ND	LT	800	LT	ND	ND	380000	LT
nitrobenzene		27000	11000	LT	ND	ND	ND	52000	ND
N-nitrosodiphenylamine		ND	ND	ND	ND	ND	ND	ND	ND
bis(2-ethylhexyl)phthalate		ND	ND	ND	ND	ND	ND	ND	ND
butyl benzyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND
di-n-butyl phthalate		ND	ND	400	LT	ND	ND	ND	ND
di-n-octyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND
diethyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND
benzo(a)anthracene		ND	ND	ND	ND	ND	ND	ND	ND
benzo(a)pyrene		ND	ND	ND	ND	ND	LT	ND	ND
benzo(b)fluoranthene		ND	ND	ND	ND	ND	LT	ND	ND
benzo(k)fluoranthene		ND	ND	ND	ND	ND	LT	ND	ND
chrysene		ND	ND	ND	ND	ND	LT	ND	ND
anthracene		ND	ND	ND	ND	ND	ND	ND	ND
benzo(ghi)perylene		ND	ND	ND	ND	ND	ND	ND	ND
fluorene		ND	ND	ND	ND	ND	ND	ND	ND
phenanthrene		ND	ND	ND	ND	ND	ND	ND	ND
dibenzo(a,h)anthracene		ND	ND	ND	ND	ND	ND	ND	ND
indeno(1,2,3-cd)pyrene		ND	ND	ND	ND	ND	ND	ND	ND
pyrene		ND	ND	ND	ND	ND	ND	ND	ND
aniline		ND	ND	ND	ND	ND	ND	ND	ND
4-chloroaniline		ND	ND	9000	ND	ND	ND	ND	ND
dibenzofuran		ND	ND	ND	ND	ND	ND	ND	ND
2-methylnaphthalene		ND	ND	ND	ND	ND	ND	ND	ND
3-nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND
benzene		ND	ND	ND	ND	ND	32	LM	ND

µg/kg - Micrograms per kilogram
ND - Not Detected
LT - Present, but lower than the detection limit for low hazard analyses
LM - Present, but lower than the detection limit for medium hazard analyses

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SAUGET Analytical Data
Site Q

SOIL SAMPLES
Organics (µg/kg)
Collected by Ecology & Environment, Inc. (7/83)

	Sample Number	B5A	B5B	B6A	B6B	B7A	B7B	B8A	B8B
	Sample Depth(ft)	13.5-15.5	17.0-19.0	10.0-12.0	13.5-15.5	10.0-12.0	13.5-15.5	13.5-15.5	17.5-19.5
Organics									
chlorobenzene		18000	27000	100000	8.4	ND	4.2	7100	ND
1,2-dichloroethane		ND	ND	12000	3.4	ND	ND	ND	ND
1,1 dichloroethane		ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane		ND	ND	ND	ND	ND	ND	ND	ND
1,2-trans-dichloroethene		ND	ND	ND	ND	ND	ND	ND	ND
ethylbenzene		ND	ND	46000	3.8	ND	4.5	ND	ND
methylene chloride		ND	ND	ND	15	86	45	LT	ND
tetrachloroethane		ND	ND	ND	ND	ND	LT	ND	ND
toluene		ND	ND	50000	LT	ND	6.1	ND	ND
trichloroethane		ND	ND	ND	ND	ND	LT	ND	ND
acetone		ND	ND	ND	330	200	2600	ND	LM
2-butanone		ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone		ND	ND	ND	LT	LT	LT	ND	ND
styrene		ND	ND	ND	ND	ND	ND	ND	ND
o-xylene		ND	ND	140000	13	LT	22	ND	ND
PCB-1242		170000	ND	ND	ND	ND	ND	1700	2700
PCB-1254		360000	ND	ND	ND	ND	ND	ND	ND
PCB-1248		ND	ND	ND	4700	ND	ND	ND	ND
PCB-1260		ND	ND	ND	ND	590	13000	880	1500
PCB-1016		ND	ND	ND	ND	2300	46000	ND	ND
Total PCB		NR	66000	NR	NR	NR	NR	NR	NR

µg/kg - Micrograms per kilogram
ND - Not Detected
LT - Present, but lower than the detection limit for low hazard analyses
NR - Total PCBs not reported

SAUGET Analytical Data
Site Q

SOIL SAMPLES
Organics (µg/kg)
Collected by Ecology & Environment, Inc. (7/83)

	Sample Number	B9A	B9B	B10A	B10B	B11A	B11B	B12A	B12B
	Sample Depth(ft)	15.0-17.0	17.0-19.0	17.0-19.0	19.0-21.0	17.0-19.0	19.0-21.0	17.0-19.0	19.0-21.0
Organics									
2, 3, 7, 8-TCDD		ND	ND	P	ND	P	P	ND	ND
2, 4, 6-trichlorophenol		LT	600	48000	640	ND	ND	4400	9400
2-chlorophenol		640	1100	1700	LT	ND	ND	1200	520
2, 4-dichlorophenol		7400	9800	170000	9600	3200	20000	8800	4200
2, 4-dimethylphenol		ND	LT	ND	ND	ND	ND	ND	ND
4, 6-dinitro-2-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND
pentachlorophenol		ND	4800	ND	2200	ND	ND	24000	920
phenol		7500	14000	32000	11000	6200	37000	17000	7500
2-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND
4-methylphenol		1400	2300	2700	ND	ND	ND	1000	720
2, 4, 5-trichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND
acenaphthene		ND	ND	ND	ND	ND	ND	ND	ND
1, 2, 4-trichlorobenzene		ND	ND	11000	ND	ND	ND	520	3600
1, 2 dichlorobenzene		ND	ND	11000	ND	LT	ND	ND	800
1, 4-dichlorobenzene		ND	LT	27000	ND	LT	ND	ND	1000
fluoranthene		ND	ND	ND	ND	ND	ND	ND	ND
isophorone		ND	ND	ND	ND	17000	LT	ND	720
naphthalene		ND	ND	6500	ND	72000	35000	LT	640
nitrobenzene		ND	ND	ND	ND	ND	ND	ND	ND
N-nitrosodiphenylamine		ND	ND	ND	ND	ND	ND	LT	ND
bis(2-ethylhexyl)phthalate		440	ND	ND	ND	52000	34000	440	ND
butyl benzyl phthalate		ND	ND	ND	ND	LT	ND	ND	ND
di-n-butyl phthalate		ND	1500	LT	ND	23000	LT	ND	ND
di-n-octyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND
diethyl phthalate		LT	840	ND	ND	ND	ND	ND	ND
benzo(a)anthracene		ND	ND	ND	ND	ND	ND	ND	ND
benzo(a)pyrene		ND	ND	ND	ND	ND	ND	ND	ND
benzo(b)fluoranthene		ND	ND	ND	ND	ND	ND	ND	1000
benzo(k)fluoranthene		ND	ND	ND	ND	ND	ND	ND	1000
chrysene		ND	ND	ND	ND	6400	ND	ND	ND
anthracene		ND	ND	ND	ND	ND	ND	ND	ND
benzo(ghi)perylene		ND	ND	ND	ND	ND	ND	ND	ND
fluorene		ND	ND	ND	ND	ND	ND	ND	ND
phenanthrene		ND	ND	ND	ND	5200	ND	ND	ND
dibenzo(a,h)anthracene		ND	ND	ND	ND	ND	ND	ND	ND
indeno(1,2,3-cd)pyrene		ND	ND	ND	ND	ND	ND	ND	ND
pyrene		ND	ND	ND	ND	5600	ND	ND	ND
aniline		ND	ND	ND	ND	ND	ND	ND	ND
4-chloroaniline		ND	ND	ND	ND	ND	ND	ND	LT
dibenzofuran		ND	ND	ND	ND	ND	ND	ND	ND
2-methylnaphthalene		ND	ND	ND	ND	10000	ND	ND	ND
3-nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND
benzene		ND	ND	LM	ND	ND	ND	ND	ND

µg/kg - Micrograms per kilogram

ND - Not Detected

LT - Present, but lower than the detection limit for low hazard analyses

LM - Present, but lower than the detection limit for medium hazard analyses

P - The sample could not be cleaned up sufficiently to yeild TCDD results

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SAUGET Analytical Data
Site Q

SOIL SAMPLES
Organics (µg/kg)
Collected by Ecology & Environment, Inc. (7/83)

	Sample Number	B9A	B9B	B10A	B10B	B11A	B11B	B12A	B12B
	Sample Depth(ft)	15.0-17.0	17.0-19.0	15.0-17.0	17.0-19.0	15.0-17.0	17.0-19.0	15.0-17.0	17.0-19.0
Organics									
chlorobenzene		ND	ND	5200	ND	LM	ND	ND	ND
1,2 dichloroethane		ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethane		ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane		ND	ND	ND	ND	ND	ND	ND	ND
1,2-trans-dichloroethene		ND	ND	ND	ND	ND	ND	ND	ND
ethylbenzene		ND	ND	6500	ND	220000	ND	ND	ND
methylene chloride		33	300	8700	LT	ND	ND	LT	ND
tetrachloroethane		ND	ND	ND	ND	ND	ND	ND	ND
toluene		ND	ND	130000	ND	1300000	100000	ND	LM
trichloroethane		ND	ND	ND	ND	42000	ND	ND	ND
acetone		210	14000	ND	4400	ND	ND	ND	ND
2-butanone		ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone		ND	ND	ND	ND	ND	ND	LT	ND
styrene		ND	ND	ND	ND	ND	ND	ND	ND
o-xylene		ND	ND	30000	ND	650000	70000	ND	LM
PCB-1242		600	ND	NA	ND	ND	ND	ND	ND
PCB-1254		ND	ND	NA	ND	ND	ND	ND	ND
PCB-1248		ND	ND	NA	ND	38000	70000	ND	ND
PCB-1260		1500	1300	NA	120	45000	681000	7000	5000
PCB-1016		ND	ND	NA	78	ND	ND	2200	3900
Total PCB		NR	NR	NR	NR	NR	NR	NR	NR

µg/kg - Micrograms per kilogram
ND Not Detected
NA Not Analyzed
LT Present, but lower than the detection limit for low hazard analyses
NR Total PCBs not reported

SAUGET Analytical Data
Site Q

SOIL SAMPLES
Organics (µg/kg)
Collected by Ecology & Environment, Inc. (7/83)

	Sample Number	B13A	B13B	B14A	B14B	B15A	B15B	B16A	B17A
	Sample Depth(ft)	17.0-19.0	19.0-21.0	17.0-19.0	19.0-21.0	22.0-24.0	24.0-26.0	22.0-24.0	22.0-24.0
Organics									
2, 3, 7, 8-TCDD		ND	ND	P	P	ND	ND	ND	ND
2, 4, 6-trichlorophenol		20000	4600	ND	ND	800	1900	7700	6400
2-chlorophenol		2500	3800	ND	ND	600	1600	4600	100000
2, 4-dichlorophenol		9400	11000	460000	ND	ND	11000	27000	120000
2, 4-dimethylphenol		ND	LT	ND	ND	ND	ND	680	ND
4, 6-dinitro-2-methylphenol		LT	ND	ND	ND	ND	ND	ND	ND
pentachlorophenol		12000	44000	ND	16000	4200	12000	39000	26000
phenol		8900	15000	ND	ND	6000	13000	16000	50000
2-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND
4-methylphenol		920	1400	ND	16000	ND	1000	1900	9200
2, 4, 5-trichlorophenol		ND	ND	ND	ND	ND	ND	LT	ND
acenaphthene		ND	ND	ND	ND	ND	ND	ND	ND
1, 2, 4-trichlorobenzene		2400	3000	13000000	2000000	ND	ND	ND	ND
1, 2-dichlorobenzene		ND	ND	620000	55000	ND	ND	LT	ND
1, 4-dichlorobenzene		1300	2000	1200000	100000	ND	1600	4100	ND
fluoranthene		ND	ND	ND	ND	ND	ND	ND	ND
isophorone		ND	ND	ND	14000	ND	ND	ND	ND
naphthalene		ND	LT	210000	20000	ND	720	2000	ND
nitrobenzene		ND	ND	ND	ND	ND	ND	ND	ND
N-nitrosodiphenylamine		ND	400	ND	ND	ND	ND	ND	ND
bis(2-ethylhexyl)phthalate		ND	ND	1100000	220000	ND	ND	ND	4600
butyl benzyl phthalate		ND	ND	ND	LT	ND	LT	ND	ND
di-n-butyl phthalate		ND	LT	900000	49000	LT	3800	ND	ND
di-n-octyl phthalate		ND	LT	ND	ND	ND	ND	ND	ND
diethyl phthalate		ND	ND	ND	ND	ND	LT	ND	ND
benzo(a)anthracene		ND	ND	ND	ND	ND	ND	ND	ND
benzo(a)pyrene		LT	ND	ND	ND	ND	ND	ND	ND
benzo(b)fluoranthene		1300*	ND	ND	ND	ND	ND	ND	ND
benzo(k)fluoranthene		1300*	ND	ND	ND	ND	ND	ND	ND
chrysene		ND	ND	ND	ND	ND	ND	ND	ND
anthracene		ND	ND	ND	ND	ND	ND	ND	ND
benzo(ghi)perylene		880	ND	ND	ND	ND	ND	ND	ND
fluorene		ND	ND	ND	ND	ND	ND	ND	ND
phenanthrene		ND	ND	ND	ND	ND	ND	ND	ND
dibenzo(a,h)anthracene		LT	ND	ND	ND	ND	ND	ND	ND
indeno(1,2,3-cd)pyrene		LT	ND	ND	ND	ND	ND	ND	ND
pyrene		ND	ND	ND	ND	ND	ND	ND	ND
aniline		ND	ND	ND	ND	ND	ND	680	ND
4-chloroaniline		LT	2200	ND	ND	ND	ND	9600	ND
dibenzofuran		ND	ND	ND	ND	ND	ND	ND	ND
2-methylnaphthalene		ND	ND	ND	LT	ND	ND	ND	ND
3-nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND
benzene		ND	ND	44000	ND	ND	ND	ND	ND

µg/kg - Micrograms per kilogram

ND - Not Detected

LT - Present, but lower than the detection limit for low hazard analyses

P - The sample could not be cleaned up sufficiently to yield TCDD results

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SAUGET Analytical Data
Site Q

SOIL SAMPLES
Organics (µg/kg)
Collected by Ecology & Environment, Inc. (7/83)

	Sample Number	B13A	B13B	B14A	B14B	B15A	B15B	B16A	B17A
	Sample Depth(ft)	17.0-19.0	19.0-21.0	17.0-19.0	19.0-21.0	22.0-24.0	24.0-26.0	22.0-24.0	22.0-24.0
Organics									
chlorobenzene		ND	ND	63000	LM	ND	ND	ND	ND
1,2-dichloroethane		ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethane		ND	ND	19000	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane		ND	ND	5700	ND	ND	ND	ND	ND
1,2-trans-dichloroethene		ND	ND	11000	ND	ND	ND	ND	ND
ethylbenzene		ND	ND	790000	330000	ND	LT	ND	ND
methylene chloride		50	10	5800	ND	2.5	23	ND	LM
tetrachloroethane		ND	ND	12000	ND	ND	ND	ND	ND
toluene		ND	ND	2400000	540000	ND	ND	ND	ND
trichloroethane		ND	ND	55000	ND	ND	ND	ND	ND
acetone		90	430	ND	ND	540	1400	ND	ND
2-butanone		ND	ND	LM	ND	ND	ND	ND	ND
4-methyl-2-pentanone		ND	LT	250000	ND	LT	ND	ND	ND
styrene		ND	ND	ND	64000	4.2	5.3	ND	ND
o-xylene		ND	ND	2300000	1400000	ND	LT	ND	ND
PCB-1242		ND	ND	ND	ND	ND	5000	ND	ND
PCB-1254		ND	ND	ND	ND	ND	ND	ND	ND
PCB-1248		ND	ND	ND	ND	ND	ND	ND	ND
PCB-1260		770	1300	2900000	16000000	190	1000	370	68
PCB-1016		ND	ND	ND	ND	210	ND	ND	ND
Total PCB		NR	NR	NR	NR	NR	NR	NR	NR

µg/kg - Micrograms per kilogram
ND - Not Detected
NA - Not Analyzed
LT - Present, but lower than the detection limit for low hazard analyses
LM - Present, but lower than the detection limit for medium hazard analyses
NR - Total PCBs not reported

SAUGET Analytical Data
Site Q

SOIL SAMPLES
Organics (µg/kg)
Collected by Ecology & Environment, Inc. (7/83)

	Sample Number	B17B	B18A	B18B	BLANK 1	BLANK 2	Maximum
	Sample Depth(ft)	24 0-26 0	22 0-24 0	24 0-26 0	NA	NA	Concentration
Organics							
2, 3, 7, 8-TCDD		ND	ND	ND	ND	ND	3.31
2, 4, 6-trichlorophenol		ND	ND	ND	ND	ND	ND
2-chlorophenol		ND	ND	ND	ND	ND	ND
2, 4-dichlorophenol		ND	ND	ND	ND	ND	ND
2, 4-dimethylphenol		3800	ND	ND	ND	ND	72000
4, 6-dinitro-2-methylphenol		ND	ND	ND	ND	ND	ND
pentachlorophenol		ND	ND	ND	ND	ND	ND
phenol		ND	ND	ND	ND	ND	ND
2-methylphenol		ND	ND	ND	ND	ND	1400
4-methylphenol		ND	ND	ND	ND	ND	ND
2, 4, 5-trichlorophenol		ND	ND	ND	ND	ND	ND
acenaphthene		ND	ND	ND	ND	ND	2800
1, 2, 4-trichlorobenzene		ND	ND	ND	ND	ND	ND
1, 2-dichlorobenzene		ND	ND	ND	ND	ND	ND
1, 4-dichlorobenzene		550	ND	LT	ND	ND	1200000
fluoranthene		ND	ND	ND	ND	1000	1200
isophorone		ND	ND	ND	ND	ND	17000
naphthalene		ND	ND	ND	ND	ND	ND
nitrobenzene		ND	ND	ND	ND	ND	66000
N-nitrosodiphenylamine		ND	ND	ND	ND	ND	400
bis(2-ethylhexyl)phthalate		580	910	1400	LT	ND	1100000
butyl benzyl phthalate		ND	ND	ND	ND	ND	ND
di-n-butyl phthalate		ND	ND	LT	ND	ND	900000
di-n-octyl phthalate		ND	LT	ND	ND	ND	ND
diethyl phthalate		ND	ND	ND	ND	ND	840
benzo(a)anthracene		ND	520	ND	ND	600	800
benzo(a)pyrene		ND	ND	ND	ND	LT	ND
benzo(b)fluoranthene		ND	LT	ND	ND	LT	1000
benzo(k)fluoranthene		ND	LT	ND	ND	LT	1000
chrysene		ND	640	ND	ND	560	6400
anthracene		ND	ND	ND	ND	ND	400
benzo(ghi)perylene		ND	ND	ND	ND	ND	880
fluorene		ND	ND	ND	ND	ND	2000
phenanthrene		ND	ND	ND	ND	720	5200
dibenzo(a,h)anthracene		ND	ND	ND	ND	ND	ND
indeno(1,2,3-cd)pyrene		ND	ND	ND	ND	ND	ND
pyrene		ND	LT	ND	ND	800	5600
aniline		61000	1700	ND	ND	ND	61000
4-chloroaniline		ND	960	ND	ND	ND	9600
dibenzofuran		ND	ND	ND	ND	ND	3000
2-methylnaphthalene		ND	ND	ND	ND	ND	10000
3-nitroaniline		ND	ND	ND	ND	ND	4600
benzene		ND	ND	ND	ND	ND	44000

µg/kg - Micrograms per kilogram

ND - Not Detected

LT - Present, but lower than the detection limit for low hazard analyses

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SAUGET Analytical Data
Site 9

SOIL SAMPLES
Organics (µg/kg)
Collected by Ecology & Environment, Inc. (7/83)

	Sample Number	B17B	B18A	B18B	BLANK 1	BLANK 2	Maximum
	Sample Depth(ft)	24.0-26.0	22.0-24.0	24.0-26.0	NA	NA	Concentration
Organics							
chlorobenzene		4.1	ND	ND	ND	ND	100000
1,2-dichloroethane		ND	ND	ND	ND	ND	12000
1,1-dichloroethane		ND	ND	ND	ND	ND	19000
1,1,2,2-tetrachloroethane		ND	ND	ND	ND	ND	5700
1,2-trans-dichloroethene		ND	ND	ND	ND	ND	11000
ethylbenzene		7.7	ND	ND	ND	ND	790000
methylene chloride		6.1	19	47	LM	6.9	8700
tetrachloroethane		ND	ND	ND	ND	ND	12000
toluene		ND	ND	ND	ND	ND	2400000
trichloroethane		ND	ND	ND	ND	ND	55000
acetone		2000	ND	260	ND	ND	14000
2-butanone		ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone		ND	ND	ND	ND	ND	250000
styrene		ND	ND	ND	ND	ND	64000
o-xylene		23	ND	ND	ND	ND	2300000
PCB-1242		ND	--	ND	ND	ND	ND
PCB-1254		ND	--	ND	ND	ND	360000
PCB-1248		ND	--	ND	ND	ND	70000
PCB-1260		160	--	2400	ND	260	16000000
PCB-1016		ND	--	ND	ND	ND	ND
Total PCB		NR	670	NR	NR	NR	1000000

µg/kg - Micrograms per kilogram.
ND - Not Detected
LM - Present, but lower than the detection limit for medium hazard analyses
NR - Total PCBs not reported.
-- Only PCB Total was reported

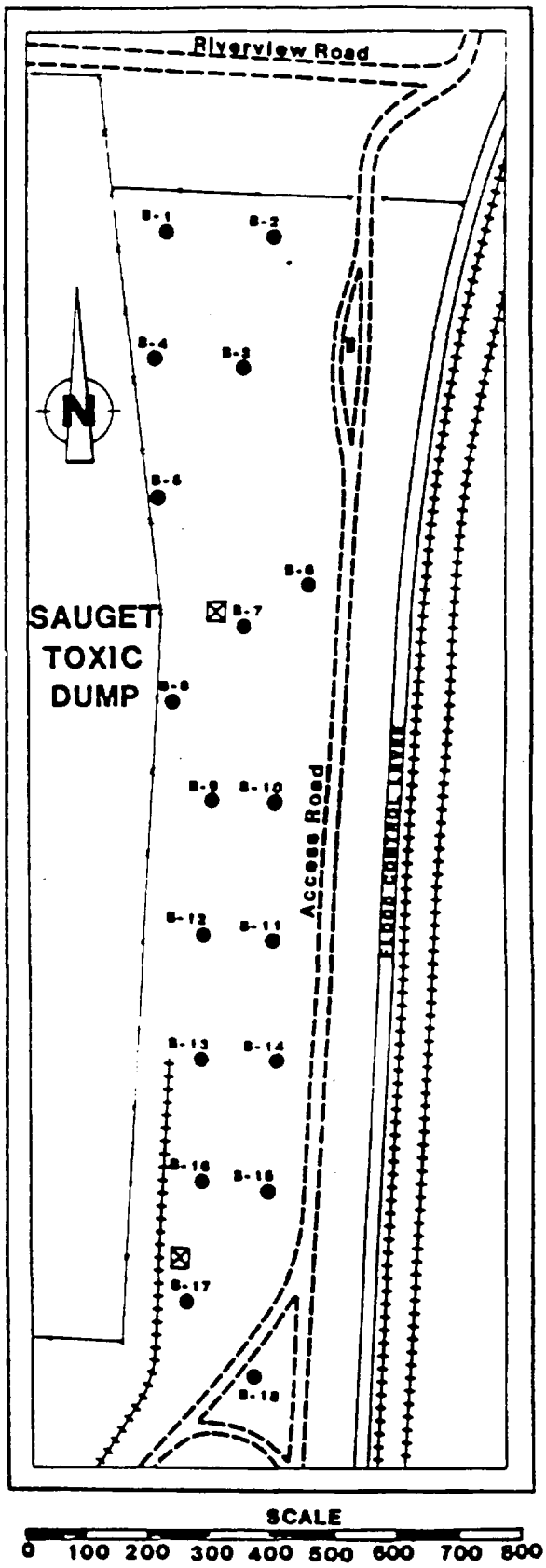

FIGURE Q-2
USEPA - FIT SUBSURFACE SOIL SAMPLING LOCATIONS AT SITE Q

LOCATION MAP - Borings B-1 through B-18

SAUGET Analytical Data
Site Q

SURFACE WATER, LEACHATE, GROUNDWATER SAMPLES
Total Metals and Misc.(mg/L unless otherwise noted)
Collected by IEPA

	Sample Number	P-1	L-1	GW-1	GW-2	P-2	P-3	Maximum
	Sample Type	Pond water	Leachate	Groundwater	Groundwater	Pond water	Pond water	Concentration
	Date Collected	10/17/72	10/17/72	1/17/73	1/17/73	4/10/73	4/26/73	Detected
Metals								
Calcium		80	56	310	137	250	280	310
Magnesium		8	26	57	205	42	44	205
Sodium		23	169	275	13	230	205	275
Potassium		6	30	10	4	85	70	85
Ammonia		0.19	21	NA	NA	32	36	36
Boron		7	6.5	NA	NA	2.6	2.8	7
Cadmium		ND	ND	0.02	ND	NA	0.02	0.02
Chromium (total)		ND	ND	ND	ND	NA	0.03	0.03
Copper		ND	0.01	ND	ND	0.02	ND	0.02
Iron		ND	46	ND	ND	60	67	67
Lead		ND	0.02	ND	ND	0.07	0.07	0.07
Manganese		ND	ND	ND	ND	6	6.5	6.5
Mercury (µg/L A28)		0.5	0.5	ND	ND	0.4	0.6	0.6
Nickel		ND	ND	ND	ND	0.3	0.2	0.3
Silver		ND	ND	0.01	ND	ND	ND	0.01
Zinc		ND	0.2	ND	0.1	4.2	5	5
Alkalinity		46	810	645	375	420	ND	810
Chloride		19	4	310	24	210	205	310
Nitrate		NA	NA	NA	NA	NA	ND	ND
Phosphate		NA	NA	NA	NA	3.7	5	5
Sulfate		230	18	325	25	350	270	350
Hardness		240	560	NA	NA	970	930	970
Phenols		NA	NA	0.02	ND	NA	NA	0.02

mg/L - Milligrams per liter
NA - Parameter not analyzed
ND - Not detected
µg/L - Micrograms per liter

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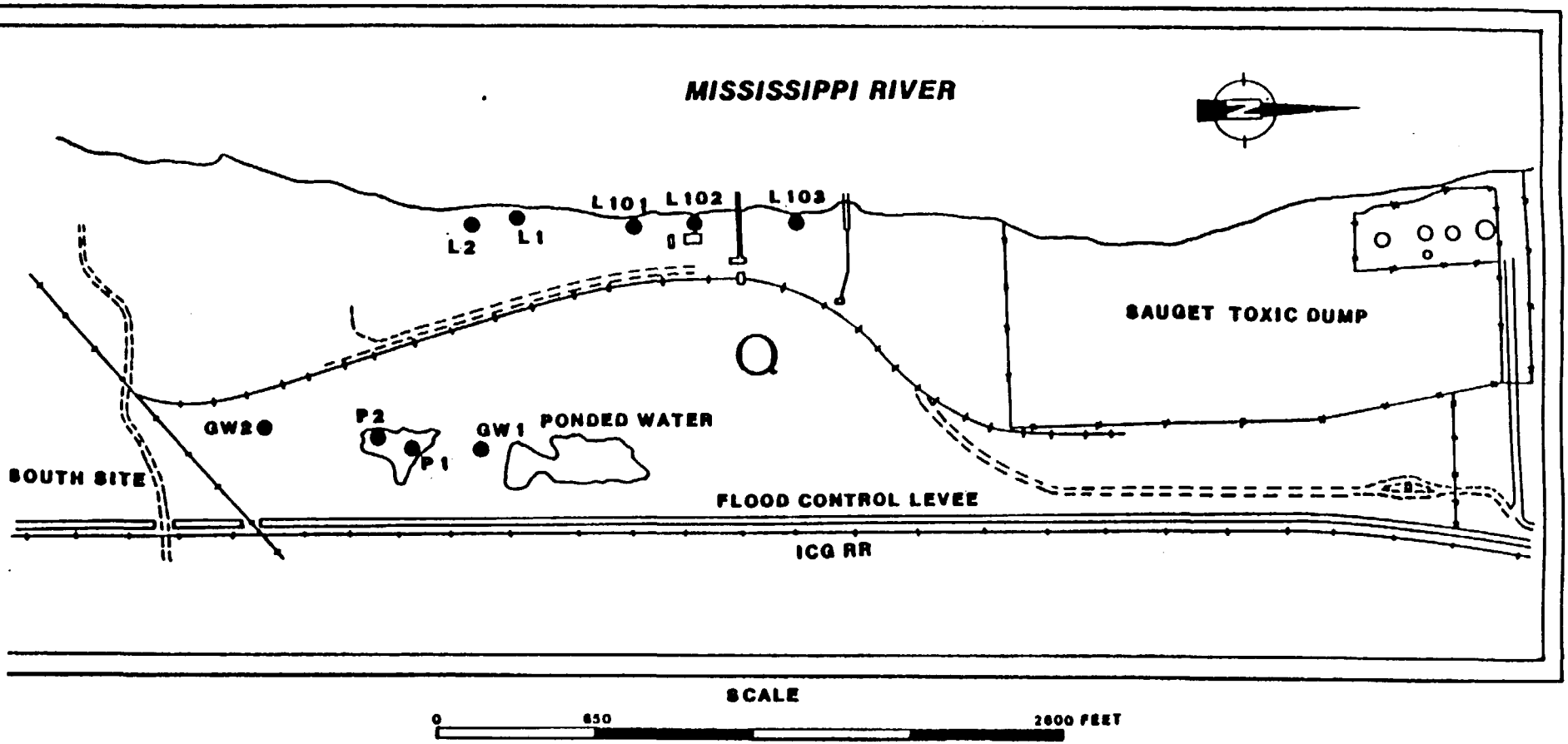

LEGEND

GW1	IEPA GROUNDWATER SAMPLING LOCATION
P1	IEPA SURFACE WATER SAMPLING LOCATION
L1	IEPA LEACHATE SAMPLING LOCATION

FIGURE Q-1
DEAD CREEK SITE AREA Q WITH SAMPLING LOCATIONS

LOCATION MAP - Samples P-1, P-2, and P-3

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SAUGET Analytical Data
Site Q

LEACHATE SAMPLES
Total Metals, PCB and Misc.(mg/L unless otherwise noted)
Collected by IEPA

	Sample Number	L-1	L-2	L101	L012	L103	Maximum
	Date Collected	10/28/81	10/28/81	9/29/83	9/29/83	9/29/83	Concentration
Metals, PCB and Misc.							Detected
Alkalinity		255	293	191	158	242	293
Ammonia		3.8	2.8	6.5	4	3.7	6.5
Arsenic		0.057	0.022	0.11	0.034	0.012	0.11
Barium		0.8	0.2	0.5	0.4	0.3	0.8
Boron		5.8	5.6	37.5	42	23	42
Cadmium		ND	ND	ND	ND	ND	ND
COD		445	35	87	94	71	445
Chloride		15	17	23	22	31	31
Chromium (total)		0.08	ND	0.03	0.01	ND	0.08
Copper		0.2	0.04	1.2	0.06	ND	1.2
Cyanide		ND	ND	ND	0.01	0.01	0.01
Hardness		1330	1220	1225	1360	1045	1360
Iron		207	17.5	86	36	6.4	207
Lead		0.26	ND	0.13	0.08	0.02	0.26
Magnesium		145	67	81	73	44.5	145
Manganese		7.7	34	6.7	6.8	2.7	34
Mercury		ND	ND	ND	ND	ND	ND
Nickel		0.3	ND	0.1	0.1	ND	0.3
Nitrate		0.24	0.4	0.21	6.1	1.8	6.1
Phosphorus		6.1	0.74	3.1	1.3	0.86	6.1
Potassium		16.5	9.5	13.4	13.5	17	17
R.O.E.		1980	1829	1880	2118	1563	2118
Silver		0.02	0.01	0.01	ND	ND	0.02
Sodium		55.7	53.3	56	70	51	70
Sulfate		1196	1059	1200	1350	900	1350
Zinc		1.2	0.2	0.3	0.2	ND	1.2
Phenol		0.005	0.005	ND	ND	ND	0.005
PCBs (µg/L)		0.7	1	0.5	ND	0.1	1
2,3-D (µg/L)		ND	ND	ND	ND	ND	ND

mg/L - Milligrams per liter.
ND - Not detected.
µg/L - Micrograms per liter.

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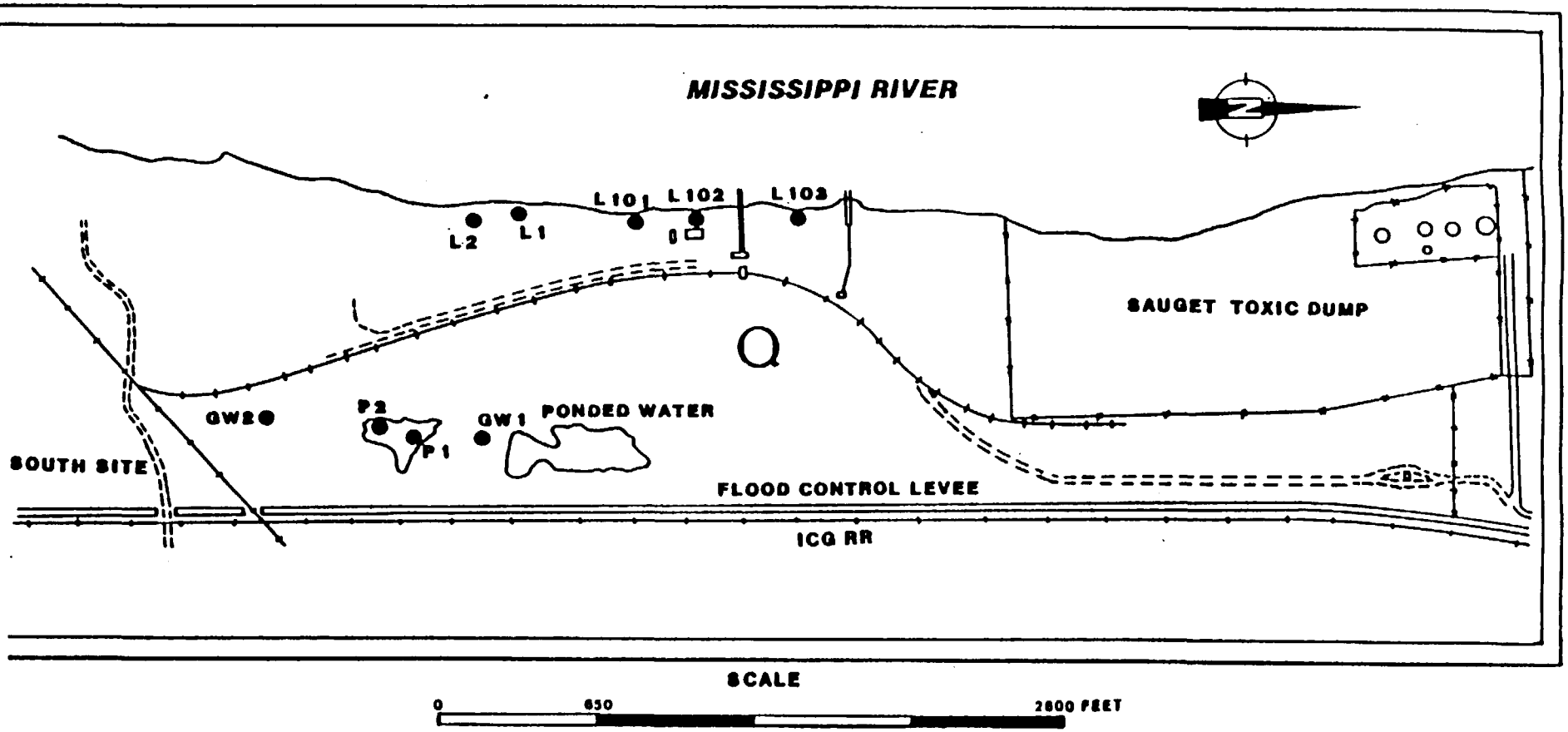

LOCATION MAP - Samples L-1, L-2, and L101 - L103

LEGEND

GW1	IEPA GROUNDWATER SAMPLING LOCATION
P1	IEPA SURFACE WATER SAMPLING LOCATION
L1	IEPA LEACHATE SAMPLING LOCATION

FIGURE Q-1
DEAD CREEK SITE AREA Q WITH SAMPLING LOCATIONS

ecology and environment

SAUGET Analytical Data
Site Q

SOIL/SEDIMENT SAMPLES
Metals (mg/kg)
Collected by START (1997)

Metal	Sample Number	Q201	Q202	Q203	Q204	Q205	Q206	Q207	Q208	Maximum Concentration
Arsenic		6.9	9.4	4.7	32.0	4.8	3.4	7.3	0.19	32
Barium		191	232	135	969	128	70.6	169	416	969
Cadmium		0.15	4.4	1.2	20.8	5.0	3.1	0.67	130	130
Chromium (total)		10.3	15.9	11.0	125	304	13.3	17.4	3900	3900
Lead		28.7	92.4	128	2450	102	139	47.8	2300	2450
Mercury		0.18	1.6	0.08	0.42	0.15	0.28	0.16	12.2	12.2
Selenium		1.0	1.9	1.1	0.62	1.3	0.76	1.4	8.1	8.1
Silver		0.36	0.71	1.4	18.7	0.40	0.37	0.32	0.80	18.7

mg/kg - Milligrams per kilogram.

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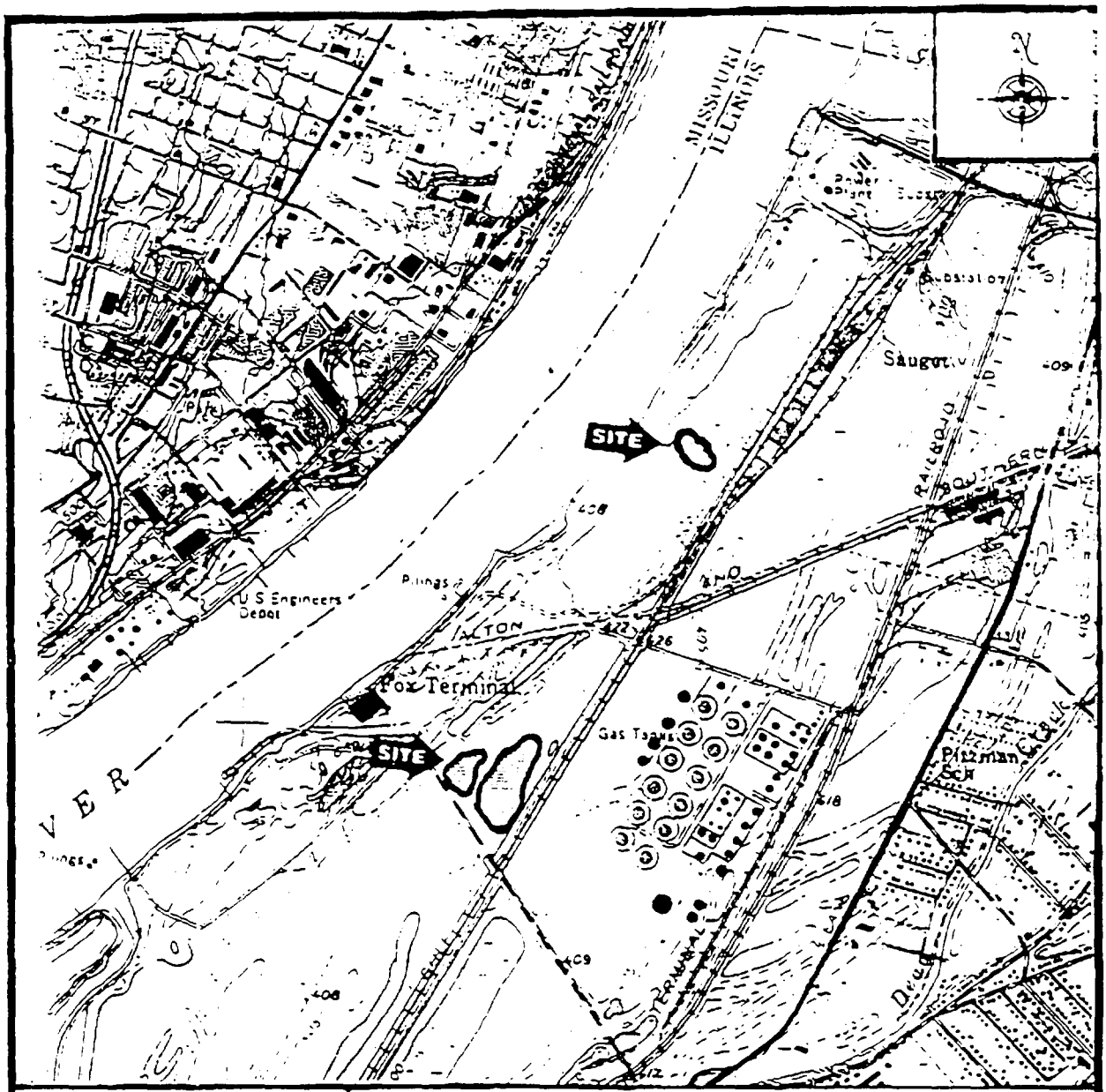
SAUGET Analytical Data
Site Q

SOIL/SEDIMENT SAMPLES
PCB (mg/kg)
Collected by START (1997)

	Sample Number	Q201	Q202	Q203	Q204	Q205	Q206	Q207	Q208	Maximum
PCB										Concentration
1254		0.72	1.7	0.88	1.8	0.034	4.2	1.6	ND	4.2
1248		0.48	1.6	ND	0.92	ND	2.6	ND	120	120
1260		0.61	0.76	0.11	1.1	0.028	1.9	1.8	ND	1.9

mg/kg - Milligrams per kilogram
ND - Not detected



Quadrangle Location

ecology and environment, inc.
Superfund Technical Assessment and Response Team
Region 5
33 North Dearborn Street, Chicago, Illinois 60602

TITLE: Site Location Map	FIGURE #: 2-1
SITE: Sauget Area 2	SCALE: 1:24000
CITY: Sauget STATE: Illinois	TDD: S05-9703-013
SOURCE: USGS Topographical Map, 7.5' Series Quadrangle: Cahokia, Illinois	DATE: 1980

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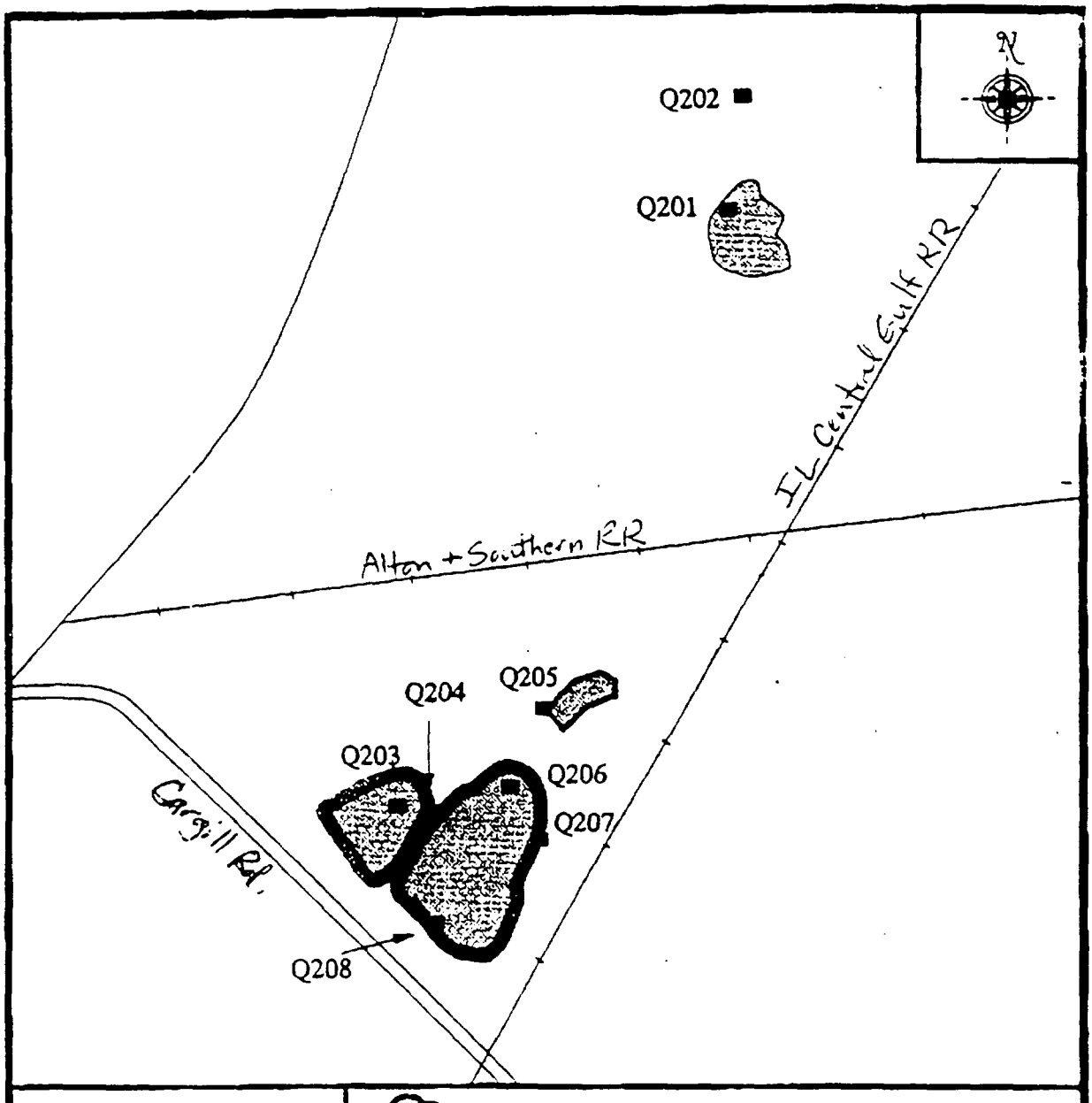

Legend

■ Sample Location

ecology and environment, inc.
Superfund Technical Assessment and Response Team
Region 5
33 North Dearborn Street, Chicago, Illinois 60602

TITLE: Sample Location Map	FIGURE #: 2-3
SITE: Sauget Area 2	SCALE: Not to scale
CITY: Sauget STATE: Illinois	TDD: S05-9703-013
SOURCE: Ecology and Environment, Inc.	DATE: 1997

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SAUGET Analytical Data
Site Q

GROUND WATER SAMPLES
Volatile Organic Compounds (µg/L)
Collected by Ecology & Environment, Inc. (3/87)

	Sample Number	DC-GW-01	DC-GW-02	DC-GW-03	DC-GW-04	DC-GW-05	DC-GW-06	DC-GW-07	DC-GW-08	DC-GW-09	Maximum
	Well Number	EE-06	EE-07	EE-09	EE-10	EE-17	EE-08	EE-19	EE-19	EE-18	Concentration
	Date Collected	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	3/16/87	3/16/87	3/16/87	3/16/87	Detected
VOC											
Chloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride		ND	ND	ND	ND	ND	ND	23 J	61 J	2200 BJ	2200 BJ
Acetone		15	9 BJ	10 B	14 B	12 B	13 B	400 B	210 B	7100 B	7100 BJ
Carbon Disulfide		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene		ND	1 J	ND	ND	4 J	ND	ND	ND	ND	4 J
Chloroform		ND	ND	ND	ND	1 J	ND	ND	ND	ND	1 J
1,2-Dichloroethane		ND	ND	ND	ND	ND	ND	ND	ND	3000	3000
2-Butanone (MEK)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene		ND	ND	ND	ND	2 J	ND	ND	ND	ND	2 J
Dibromochloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene		9	24	1 J	14	1 J	1 J	2000	2000	2000 J	2000 J
cis-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone		ND	ND	ND	ND	ND	ND	250	290	2700 J	2700 J
2-Hexanone		ND	5 J	ND	ND	ND	ND	ND	ND	3500 J	3500 J
Tetrachloroethene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	4 J	ND	ND	ND	ND	450	410	1600 J	1600 J
Chlorobenzene		14	1 J	33	380 E	29	7	1500	1400	6700 J	6700 J
Ethylbenzene		ND	1 J	ND	ND	ND	ND	33 J	28 J	ND	33 J
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes		2	230	ND	ND	ND	ND	180	160	ND	230

µg/L - Micrograms per liter

B - Compound detected in blank sample.

J - Estimated value.

ND - Not detected.

SAUGET Analytical Data
Site Q

GROUND WATER SAMPLES
Base Neutrals/Acids (µg/L)
Collected by Ecology & Environment, Inc. (3/87)

	Sample Number	DC-GW-01	DC-GW-02	DC-GW-03	DC-GW-04	DC-GW-05	DC-GW-06	DC-GW-07	DC-GW-08	DC-GW-09	Maximum
	Sample Depth (ft)	EE-06	EE-07	EE-09	EE-10	EE-17	EE-08	EE-19	EE-19	EE-18	Concentration
	Date Collected	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	Detected
BNAs											
Phenol		ND	ND	ND	ND	ND	ND	110000 E	190000 E	8100 E	190000 E
bis(2-Chloroethyl)ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol		ND	ND	ND	4 J	ND	ND	20000 E	33000 E	2600	33000 E
1,3-Dichlorobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene		ND	ND	ND	4	ND	ND	220 J	250	70 J	250
Benzyl Alcohol		ND	ND	ND	ND	ND	ND	460	490	180	490
1,2-Dichlorobenzene		ND	ND	ND	ND	ND	ND	260	300	2000	2000
2-Methylphenol		ND	ND	ND	ND	ND	ND	190 J	350	10 J	350
bis(2-Chloroisopropyl)ether		ND	3 J	ND	ND	ND	ND	ND	ND	ND	3
4-Methylphenol		ND	ND	ND	ND	ND	ND	14000 E	23000 E	850	23000 E
N-Nitroso-n-Dipropylamine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene		ND	ND	ND	ND	ND	ND	ND	100 J	820	820
Isophorone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol		ND	5 J	ND	ND	ND	ND	ND	2800	62	2800
Benzoic Acid		ND	10 J	ND	ND	ND	ND	ND	ND	600	600
bis-(2-Chloroethoxy)methane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol		ND	ND	ND	ND	ND	ND	1900 E	14000 E	7600 E	14000 E
1,2,4-Trichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	390	390
Naphthalene		ND	ND	ND	ND	ND	ND	41 J	42 J	70	70
4-Chloroaniline		120	ND	ND	ND	ND	ND	14000 E	15000 E	4400	15000 E
Hexachlorobutadiene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphathalene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol		ND	ND	ND	ND	ND	ND	4100	6000	1800	6000
2,4,5-Trichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline		ND	ND	ND	ND	ND	ND	1700	1800	2000	2000
Dimethyl Phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene		ND	ND	ND	ND	ND	ND	3900	ND	480 J	3900
3-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

µg/L - Micrograms per liter.

B - Compound detected in blank sample.

E - Estimated value. Concentration detected exceeds the calibrated range.

J - Estimate

ND - Not

SAUGET Analytical Data
Site Q

GROUND WATER SAMPLES
Base Neutrals/Acids (µg/L)
Collected by Ecology & Environment, Inc. (3/87)

	Sample Number	DC-GW-01	DC-GW-02	DC-GW-03	DC-GW-04	DC-GW-05	DC-GW-06	DC-GW-07	DC-GW-08	DC-GW-09	Maximum
	Sample Depth (ft)	EE-06	EE-07	EE-09	EE-10	EE-17	EE-08	EE-19	EE-19	EE-18	Concentration
	Date Collected	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	Detected
BNAs											
2,4-Dinitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	80 J	80 J
Dibenzofuran		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-Phenylether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol		ND	ND	ND	ND	ND	ND	24000 E	35000 E	310	35000 E
Phenanthrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butly phthalate		12 BJ	8 BJ	5 BJ	8 BJ	5 BJ	5 BJ	ND	ND	ND	12
Fluoranthene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl Benzyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (a)anthracene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-ethylhexyl)phthalate		95	160	32	ND	26	ND	ND	ND	ND	160
Chrysene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate		ND	7 J	4 J	ND	ND	2 J	ND	ND	ND	7 J
Benzo(b)fluoranthene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (a)pyrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

µg/L - Micrograms per liter.
B - Compound detected in blank sample.
E - Estimated value. Concentration detected exceeds the calibrated range
J - Estimated value.
ND - Not Detected.

SAUGET Analytical Data
Site Q

GROUND WATER SAMPLES
Pesticides/PCBs (µg/L)
Collected by Ecology & Environment, Inc. (3/87)

	Sample Number	DC-GW-01	DC-GW-02	DC-GW-03	DC-GW-04	DC-GW-05	DC-GW-06	DC-GW-07	DC-GW-08	DC-GW-09	Maximum
	Sample Depth (ft)	EE-06	EE-07	EE-09	EE-10	EE-17	EE-08	EE-19	EE-19	EE-18	Concentration
	Date Collected	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	Detected
Pesticides/PCBs											
Alpha-BHC		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Delta-BHC		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC (Lindane)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin Ketone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1016		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1254		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

µg/L - Micrograms per liter
ND - Not Detected

SAUGET Analytical Data
Site Q

GROUND WATER SAMPLES
Total Metals (µg/L)
Collected by Ecology & Environment, Inc. (3/87)

	Sample Number	DC-GW-01	DC-GW-02	DC-GW-03	DC-GW-04	DC-GW-05	DC-GW-06	DC-GW-07	DC-GW-08	DC-GW-09	Maximum
	Sample Depth (ft)	EE-06	EE-07	EE-09	EE-10	EE-17	EE-08	EE-19	EE-19	EE-18	Concentration
	Date Collected	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	03/16/87	Detected
Total Metals											
Aluminum		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Antimony		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic		64	82	18	100	ND	ND	11	11	16	100
Barium		384	482	ND	358	ND	336	ND	ND	ND	482
Beryllium		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Boron		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium		ND	ND	ND	ND	ND	ND	ND	ND	13	13
Cobalt		ND	ND	ND	ND	ND	ND	ND	ND	148	148
Copper		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron		8960	54000	16800	20000	671	11300	36700	36500	41200	54000
Lead		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese		1320	1600	522	1090	1640	13200	2660	2600	6630	13200
Mercury		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel		64	74	ND	ND	ND	ND	ND	ND	112	112
Selenium		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tin		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc		25	326	26	22	313	48	172	171	4.31	326
Cyanide		1560	ND	ND	ND	ND	ND	ND	ND	ND	1560

µg/L - Micrograms per liter
ND - Not Detected

Appendix 11

Sterling Steel
Soil and/or Groundwater Data

Sterling Steel

Explanation For Analytical Data Summary Tables

All ground water results in ug/l.
All soil/sediment organic results in ug/kg
All soil/ sediment inorganic results in mg/kg

For sample location headings, the following qualifiers are used :

+	Denotes blank samples.
*	Denotes duplicate samples.
^	Denotes that sample was not analyzed for the compounds listed.

For chemical results, the folling qualifiers are used :

B	Compound detected in blank samples.
J	Estimated value . Result is less than the specified detection limit, but greater than zero.
E	Estimated value. Concentration detected exceeds the calibrated range.
C	Result confirmed by GC/MS.
*	Duplicate analysis not with in control limits.
R	Spike sample recovery not with in control limits.

Sterling Steel Foundry 11/13/86 Surface Soil Sample Results

	SS-46	SS-47	SS-48
Aluminum	4810	630	651
Arsenic	5.3 ?	9.1 ?	6.4 ?
Barium	346	75	24
Cadmium	2.3 R?	690 R?	9.9 R?
Chromium	123 R?	690 R?	500 R?
Cobalt		[19]	[13]
Copper		614	[615]
Iron	57500 ?	243000 ?	201000
Lead	34 ?	23 ?	30 ?
Manganese	627 R?	2180 R?	1430 R?
Nickel	59 ?	350 ?	377 ?
Zinc	63	46	34

B = detected in blank
J = estimated value <specified detection limit > 0
E = estimated value exceeds calibrated range
C = confirmed by GC/MS
R = spike sample recovery not within control limits
(9/14/88 IEPA CERCLA Preliminary Assessment Report for Sterling Steel Foundry) (5/88 E&E Expanded Site Investigation Report)

Sterling Steel Foundry 12/17/86 Subsurface Soil Sample Results

	J1-11	J2-12	J3-13
Aroclor 1260			18
ethylbenzene		2051	
xylene		7949	
methylene chloride		720 BJ	3 BJ
acetone		4487 B	467 BE
2-butanone (MEK)		6026 B	
2-methylnaphthalene		61538 B	
4-methyl-2-pentanone			4 J
acenaphthene		2179 J	
dibenzofurans		1013 J	
fluorene		3462 J	
phenanthrene		14103	
anthracene		91 J	
pyrene		462 J	
bis(2-ethylhexyl)phthalate	1027	2949 J	11 J
1,4-dichlorobenzene			211 J
1,2-dichlorobenzene			1 J
naphthalene		17949	
Aluminum	6904	3.476	2522
Arsenic	3 B	2 B	6
Barium	156	106	44
Cadmium			4
Chromium	9	7	55
Cobalt	4	4	5
Copper	7	6	83

Iron	>10	732	5489
Lead	7 B	5 B	10 B
Manganese	258	113	827
Nickel	11	8	72
Vanadium	15		
Zinc	36	24	70

B = detected in blank
J = estimated value <specified detection limit > 0
E = estimated value exceeds calibrated range
C = confirmed by GC/MS
R = spike sample recovery not within control limits
(9/14/88 IEPA CERCLA Preliminary Assessment Report for Sterling Steel Foundry) (5/88 E&E Expanded Site Investigation Report)

Sterling Steel Foundry Industrial Gas Products Facility Groundwater Results mg/l – 1/25/96

	B-1	B-2	B-3
arsenic	.005	.076	N/A
barium	1.2	2.2	N/A
cadmium	.005	.0078	N/A
chromium	.34	.97	N/A
lead	.18	.13	N/A
mercury	<.0002	<.0002	N/A
selenium	<.04	<.04	N/A
silver	<.005	<.005	N/A
VOC	U	N/A	U
SVOC	U	U	N/A

U= not detected
N/A = not analyzed
(7/1/97 Sterling Steel Foundry, Inc. 104(e) Response for Area 1 & Area 2 Exhibit B – 2/96 Phase II Investigation Report at EPA02335)

Appendix 12

T.J. Moss
Soil and/or Groundwater Data

Kerr McGee 1/96 Groundwater Sample Results mg/l

(2/98 E&E Tables and Maps - Data Compilation)

	MAG101	MAG103	MAG108	MAG110	MAG201	MAG203	MAG208	MAG209	MAG210
benzene	.00503	NS	0	0	.154	NS	0	0	0
ethylbenzene	.00259	NS	0	0	.087	NS	0	0	0
toluene	.00068	NS	0	0	.0611	NS	0	0	0
xylene	.00453	NS	0	0	.1041	NS	0	0	0
PCP	0	NS	0	0	0	NS	0	0	0
phenol	0	NS	0	0	0	NS	0	0	0
cresols	0	NS	0	0	0	NS	0	0	0
naphthalene	.6	NS	.0545	0	7.32	NS	0	.00257	0
TNCPA11	.922	NS	.23246	0	.26	NS	0	0	0
TCPA11	.6	NS	.0604	0	7.32	NS	0	.00257	0
BTEX	.01283	NS	0	0	.4062	NS	0	0	0

	MAG401	MAG403	MAG404	MAG408	MAG409	MAG410	MAG411	MAG412
benzene	0	NS	0	.00353	0	0	.00181	0
ethylbenzene	0	NS	0	0	0	0	.31	0
toluene	0	NS	0	.00566	0	0	.184	0
xylene	0	NS	0	.00081	0	0	.393	0
PCP	0	NS	0	0	0	0	0	0
phenol	0	NS	0	0	0	0	0	0
cresols	0	NS	0	0	0	0	0	0
naphthalene	0	NS	0	0	0	0	11.7	0
TNCPA11	0	NS	0	0	.0223	0	.534	0
TCPA11	0	NS	0	0	0	0	11.7	0
BTEX	0	NS	0	.001	0	0	.88881	0

NS = Not Sampled

KERR MCGEE SURFACE WATER SAMPLES

North Pond Surface Water Sample mg/1 - 9/1/93

On 9/1/93 a surface water sample was taken from the North Pond and analytical results indicated mg/1 of

Ammonia as N	0.43
Barium	0.222
Magnesium	9.1
Total Suspended Solids	82
Volatile Suspended Solids	33

(3/6/95 Brownfield Redevelopment Plan and Feasibility Study Report Appendix K - 11/15/93 Geotechnical and Treatability Test Results Appendix B ABWTP Surface Water Results)

North Pond Surface Water Sample ug/1 - 9/1/93

9/1/93 surface water sample North Pond analytical results indicated ug/1 of

Cadmium	0.006
Copper	0.010
Lead	0.054
Zinc	0.1
Phenol(s)	27
Phenol, 2,4-dimethyl	21
m-Cresol, p-chloro	44
Acenaphthene	24
Fluorene	24
Phenanthrene	56
Anthracene	24
Fluoranthene	120
Pyrene	71
Chrysene	43
Benzo(b)Fluoranthene	19
Benzo(k)Fluoranthene	15
Benzo(a)Pyrene	12

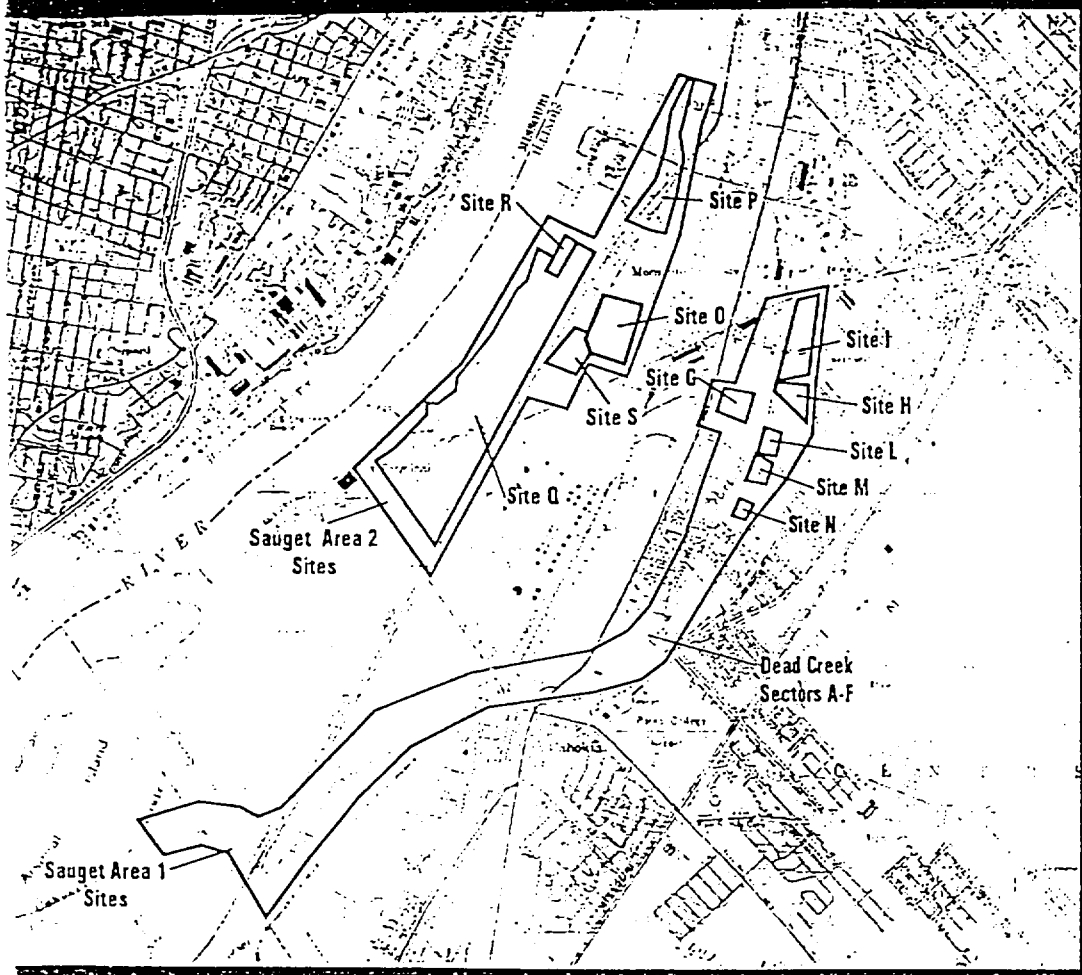
(3/6/95 Brownfield Redevelopment Plan and Feasibility Study Report Appendix K - 11/15/93 Geotechnical and Treatability Test Results Appendix B ABWTP Surface Water Results)

Appendix 13

Village of Sauget WWTP
Soil and/or Groundwater Data

auget Area 1 and 2 Sites

Clair County, Illinois



olume 2 - Area 2 Data Tables/Map

CS Contract No. 68-W8-0086

ork Assignment No. 47-5N60

Prepared by: ecology and environment,

Volume 2
Sauget Area 2
Data Tables/Maps

ARCS Contract No. 68-W8-0086
Work Assignment No. 47-5N60

February 1998

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 5
Office of Superfund
77 West Jackson Boulevard
Chicago, Illinois 60604

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ecology and environment, inc.
International Specialists in the Environment

33 North Dearborn Street, Chicago, Illinois 60602
Tel. 312/578-9243, Fax: 312/578-9345

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SITE NARRATIVE

SITE O

SITE NARRATIVE - SAUGET AREA 2 / Site O

Sample Locations	Sampling Entity	Date Sampled	Data Source
DC-01 thru DC-10	E & E	2/87	"Expanded Site Investigation Dead Creek Project Sites" prepared for IEPA by Ecology and Environment, Inc., May 1988
#1, #2	Russel & Axon	7/20/84	"Description of Current Situation at the Dead Creek Project Sites" prepared for IEPA by Ecology and Environment, Inc., July 1986
1 through 16	IEPA/EEI	2/83 to 3/83	"Description of Current Situation at the Dead Creek Project Sites" prepared for IEPA by Ecology and Environment, Inc., July 1986
STS-Series Borings EFM-Series Borings DSM-Series Borings	Russell & Axon	9/83	"Assessment of Groundwater Conditions at the Village of Sauget Treatment Plant Sites" Sauget, Illinois, prepared by Geraghty & Miller, December, 1986 (Table 9)
BG-1 thru BG-12	Geraghty & Miller	8/84	"Assessment of Groundwater Conditions at the Village of Sauget Treatment Plant Sites" Sauget, Illinois, prepared by Geraghty & Miller, December, 1986 (Table 10)

Nature and Extent of Contamination:

The following description of the nature and extent of contamination refers to samples collected in and adjacent to the closed lagoons at Site O. Samples 1 thru 16, collected adjacent to Clayton Chemical property, are presented on the Site O figure and in summary table format, but are not included in this discussion of the lagoon area samples.

VOC concentrations in soil samples collected at Site O ranged from 0.001 to 889.9 mg/kg for 10 of the 12 samples collected. BNAs were detected at concentrations ranging from 0.28 to 1916 mg/kg in 9 of the 12 samples collected. Pesticides were not detected in any of the 12 samples collected. PCB concentrations ranged from 11.4 to 1,871 mg/kg for 9 of the 12 samples collected. Metals, particlaurly Cu, Hg, and Zn, were elevated in a few samples collected. The greatest contaminant concentrations in subsurface soils were detected at depths between 0 to 10 feet BGS.

The extent of soil contamination at Site O is fairly well defined through the 12 samples collected at various depths, both within and adjacent to the lagoons. The lagoons are unlined, and were excavated into the Henry Formation sands. The lateral boundary of the lagoons is well-defined, and is readily evident in historical aerial photos.

Containment and Integrity (if known):

The lagoons at Site O are closed, covered, and vegetated. Therefore, there is some containment of the wastes within the lagoons, but the quality and amount of cover is unknown. The lagoons are unlined, and were excavated into the Henry Formation sands. Access to Site O is somewhat restricted, only by the fact that the entrance road to the lagoon area is posted as a private drive; otherwise the site access is unrestricted.

:r Comments: See the attached "Site Description" for more site details.

Table 10. (Continued)

Soil Boring No.	Sample Collection Date	Depth of Sample (feet below land surface)	Photoionization-Sensitive Compounds (ppm)	PCBs (ppm)
BG-11	8-23-84	0 - 1.5	0	NA
		1.5 - 3	0	NA
		3 - 4.5	0	NA
		4.5 - 6	0	NA
		6 - 7.5	0	NA
		7.5 - 9	0	NA
BG-12	8-23-84	0 - 1.5	0	NA
		1.5 - 3	0	NA
		3 - 4.5	0	NA
		4.5 - 6	200	NA
		6 - 7.5	150	91.59[d)]
		7.5 - 9	5	NA
		9 - 10.5	5	NA

d) The zone of black sludge material is from 5.5 to 7.5 feet.

LOCATION MAP - GERAGHTY & MILLER BORINGS BG-1 TO BG-12

Source: "Assessment of Groundwater Conditions at the village of Sauget Treatment Plant Sites", Geraghty & Miller, 1986

SAUGET Analytical Data
Site O

GROUND WATER SAMPLES
Volatile Organic Compounds (µg/L)
Collected by Ecology & Environment, Inc. (3/87, 7/87)

	Sample Number	DC-GW-38	DC-GW-38A	DC-GW-39	DC-GW-39A	DC-GW-40	DC-GW-40A	DC-GW-41	DC-GW-41A	DC-GW-42	DC-GW-43
	Well Number	EE-21	EE-21	EE-22	EE-22	EE-23	EE-23	EE-24	EE-24	EE-24	EE-25
	Date Collected	03/24/87	07/14/87	03/24/87	07/14/87	03/24/87	7/14/87	3/24/87	7/14/87	3/24/87	3/24/87
VOC											
Chloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride		ND	ND	52000	31000	ND	ND	ND	ND	310	ND
Acetone		7 J	ND	38000 B	34000	6 J	ND	10	ND	430	5 J
Carbon Disulfide		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane		ND	ND	ND	1700	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene		ND	ND	ND	14000	ND	ND	ND	ND	94 J	ND
Chloroform		ND	ND	3000 J	1800	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane		ND	ND	4000 J	2600	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)		ND	13 B	62000	54000 E	ND	11 B	ND	ND	570	ND
1,1,1-Trichloroethane		ND	ND	7800	5000	ND	ND	ND	ND	43 J	ND
Carbon Tetrachloride		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene		ND	ND	83000	64000 E	ND	ND	ND	ND	1000	ND
Dibromochloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene		ND	ND	190000	150000 E	ND	ND	10	20	1800	ND
cis-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone		ND	ND	38000	28000	ND	ND	ND	ND	ND	ND
2-Hexanone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene		ND	ND	10000	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		ND	ND	ND	12000	ND	ND	ND	ND	ND	ND
Toluene		ND	ND	15000	1300	ND	17	1 J	ND	130	ND
Chlorobenzene		ND	ND	150000	180000 E	ND	ND	5	8	1000	ND
Ethylbenzene		ND	ND	ND	860	ND	ND	ND	ND	ND	ND
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes		ND	ND	4600 J	2600	ND	ND	2 J	ND	27 J	ND

µg/L - Micrograms per liter.

B - Compound detected in blank sample.

E - Estimated value. Concentration detected exceeds the calibrated range.

J - Estimated value.

ND - Not detected.

SAUGET Analytical Data
Site G

GROUND WATER SAMPLES
Volatile Organic Compounds (µg/L)
Collected by Ecology & Environment, Inc. (3/87, 7/87)

	Sample Number	DC-GW-43A	DC-GW-35	DC-GW-57	Maximum
	Well Number	EE-25	NA	NA	Concentration
	Date Collected	07/14/87	03/24/87	07/14/87	Detected
VOC			BLANK	BLANK	
Chloromethane		ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND
Vinyl chloride		ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND
Methylene chloride		ND	2 J	ND	52000
Acetone		ND	13 B	ND	38000 B
Carbon Disulfide		ND	ND	ND	ND
1,1-Dichloroethene		ND	ND	ND	ND
1,1-Dichloroethane		ND	ND	ND	1700
trans-1,2-Dichloroethene		ND	ND	ND	14000
Chloroform		ND	1 J	ND	3000 J
1,2-Dichloroethane		ND	ND	ND	4000 J
2-Butanone (MEK)		5 BJ	ND	ND	62000
1,1,1-Trichloroethane		ND	ND	ND	7800
Carbon Tetrachloride		ND	ND	ND	ND
Vinyl Acetate		ND	ND	ND	ND
Bromodichloromethane		ND	ND	ND	ND
1,2-Dichloropropane		ND	ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND	ND
Trichloroethene		ND	ND	ND	83000
Dibromochloromethane		ND	ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND	ND
Benzene		ND	ND	ND	190000
cis-1,3-Dichloropropene		ND	ND	ND	ND
2-Chloroethyl Vinyl Ether		ND	ND	ND	ND
Bromoform		ND	ND	ND	ND
4-Methyl-2-pentanone		ND	ND	ND	38000
2-Hexanone		ND	ND	ND	ND
Tetrachloroethene		ND	ND	ND	10000
1,1,2,2-Tetrachloroethane		ND	ND	ND	12000
Toluene		ND	ND	ND	15000
Chlorobenzene		ND	ND	ND	180000 E
Ethylbenzene		ND	ND	ND	860
Styrene		ND	ND	ND	ND
Total Xylenes		ND	ND	ND	4600 J

µg/L - Micrograms per liter

B - Compound detected in blank sample.

E - Estimated value. Concentration detected exceeds the calibrated range

J - Estimated value

ND - Not dete

SAUGET Analytical Data
Site O

GROUND WATER SAMPLES
Base Neutrals/Acids (µg/L)
Collected by Ecology & Environment, Inc. (3/87, 7/87)

	Sample Number	DC-GW-38	DC-GW-38A	DC-GW-39	DC-GW-39A	DC-GW-40	DC-GW-40A	DC-GW-41	DC-GW-41A	DC-GW-42	DC-GW-43
	Well Number	EE-21	EE-21	EE-22	EE-22	EE-23	EE-23	EE-24	EE-24	EE-24	EE-25
	Date Collected	03/24/87	07/14/87	03/24/87	07/14/87	03/24/87	07/14/87	03/24/87	07/14/87	03/24/87	03/24/87
BNAs											
Phenol		ND	ND	500	1100	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)ether		ND	ND	ND	91 J	ND	ND	ND	ND	ND	ND
2-Chlorophenol		ND	ND	120	58 J	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene		ND	ND	320	290	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene		ND	ND	10000 E	15000 E	ND	ND	ND	ND	ND	ND
Benzyl Alcohol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene		ND	ND	7800	11000 E	ND	ND	ND	ND	ND	ND
2-Methylphenol		ND	ND	78 J	120	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol		ND	ND	820	1100	ND	ND	ND	ND	ND	ND
N-Nitroso-n-Dipropylamine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol		ND	ND	350	400	ND	ND	ND	ND	ND	ND
Benzoic Acid		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis-(2-Chloroethoxy)methane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol		ND	ND	30 J	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene		ND	ND	270	200	ND	ND	ND	ND	ND	ND
Naphthalene		ND	ND	160	100	ND	ND	ND	ND	ND	ND
4-Chloroaniline		ND	ND	780	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphathalene		ND	ND	6 J	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl Phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

µg/L - Micrograms per liter.

B - Compound detected in blank sample.

E - Estimated value. Concentration detected exceeds the calibrated range.

J - Estimated value

ND - Not detected.

SAUGET Analytical Data
Site O

GROUND WATER SAMPLES
Base Neutrals/Acids (µg/L)
Collected by Ecology & Environment, Inc. (3/87, 7/87)

	Sample Number	DC-GW-38	DC-GW-38A	DC-GW-39	DC-GW-39A	DC-GW-40	DC-GW-40A	DC-GW-41	DC-GW-41A	DC-GW-42	DC-GW-43
	Well Number	EE-21	EE-21	EE-22	EE-22	EE-23	EE-23	EE-24	EE-24	EE-24	EE-25
	Date Collected	03/24/87	07/14/87	03/24/87	07/14/87	03/24/87	07/14/87	03/24/87	07/14/87	03/24/87	03/24/87
BNAs											
2,4-Dinitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-Phenylether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol		ND	ND	23 J	ND	ND	ND	ND	ND	ND	ND
Phenanthrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butly phthalate		ND	ND	ND	ND	ND	ND	10 B	7 J	10 B	ND
Fluoranthene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl Benzyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (a)anthracene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-ethylhexyl)phthalate		ND	ND	ND	ND	ND	ND	3 BJ	ND	ND	ND
Chrysene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate		ND	ND	ND	ND	ND	ND	2 BJ	ND	11 B	ND
Benzo(b)fluoranthene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (a)pyrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

µg/L - Micrograms per liter.

B - Compound detected in blank sample.

E - Estimated value. Concentration detected exceeds the calibrated range.

J - Estimated value.

ND - Not detected.

SAUGET Analytical Data
Site O

GROUND WATER SAMPLES
Base Neutrals/Acids (µg/L)
Collected by Ecology & Environment, Inc. (3/87, 7/87)

	Sample Number	DC-GW-43A	DC-GW-35	DC-GW-57	Maximum
	Well Number	EE-25	NA	NA	Concentration
	Date Collected	07/14/87	03/24/87	07/14/87	Detected
BNAs			BLANK	BLANK	
Phenol		ND	ND	ND	1100
bis(2-Chloroethyl)ether		ND	ND	ND	91 J
2-Chlorophenol		ND	ND	ND	120
1,3-Dichlorobenzene		ND	ND	ND	320
1,4-Dichlorobenzene		ND	ND	ND	15000 E
Benzyl Alcohol		ND	ND	ND	ND
1,2-Dichlorobenzene		ND	ND	ND	11000 E
2-Methylphenol		ND	ND	ND	120
bis(2-Chloroisopropyl)ether		ND	ND	ND	ND
4-Methylphenol		ND	ND	ND	1100
N-Nitroso-n-Dipropylamine		ND	ND	ND	ND
Hexachloroethane		ND	ND	ND	ND
Nitrobenzene		ND	ND	ND	ND
Isophorone		ND	ND	ND	ND
2-Nitrophenol		ND	ND	ND	ND
2,4-Dichlorophenol		ND	ND	ND	400
Benzoic Acid		ND	ND	ND	ND
bis-(2-Chloroethoxy)methane		ND	ND	ND	ND
2,4-Dichlorophenol		ND	ND	ND	30 J
1,2,4-Trichlorophenol		ND	ND	ND	270
Naphthalene		ND	ND	ND	160
4-Chloroaniline		ND	ND	ND	780
Hexachlorobutadiene		ND	ND	ND	ND
4-Chloro-3-methylphenol		ND	ND	ND	ND
2-Methylnaphathalene		ND	ND	ND	6 J
Hexachlorocyclopentadiene		ND	ND	ND	ND
2,4,6-Trichlorophenol		ND	ND	ND	ND
2,4,5-Trichlorophenol		ND	ND	ND	ND
2-Chloronaphthalene		ND	ND	ND	ND
2-Nitroaniline		ND	ND	ND	ND
Dimethyl Phthalate		ND	ND	ND	ND
Acenaphthylene		ND	ND	ND	ND
3-Nitroaniline		ND	ND	ND	ND
Acenaphthene		ND	ND	ND	ND

µg/L - Micrograms per liter.

B - Compound detected in blank sample.

E - Estimated value. Concentration detected exceeds the calibrated range.

J - Estimated value.

ND - Not detected

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SAUGET Analytical Data
Site O

GROUND WATER SAMPLES
Base Neutrals/Acids (µg/L)
Collected by Ecology & Environment, Inc. (3/87, 7/87)

	Sample Number	DC-GW-43A	DC-GW-35	DC-GW-57	Maximum
	Well Number	EE-25	NA	NA	Concentration
	Date Collected	07/14/87	03/24/87	07/14/87	Detected
BNAs			BLANK	BLANK	
2,4-Dinitrophenol		ND	ND	ND	ND
4-Nitrophenol		ND	ND	ND	ND
Dibenzofuran		ND	ND	ND	ND
2,4-Dinitrotoluene		ND	ND	ND	ND
2,6-Dinitrotoluene		ND	ND	ND	ND
Diethylphthalate		ND	ND	ND	ND
4-Chlorophenyl-Phenylether		ND	ND	ND	ND
Fluorene		ND	ND	ND	ND
4-Nitroaniline		ND	ND	ND	ND
4,6-Dinitro-2-methylphenol		ND	ND	ND	ND
N-Nitrosodiphenylamine		ND	ND	ND	ND
4-Bromophenyl-phenylether		ND	ND	ND	ND
Hexachlorobenzene		ND	ND	ND	ND
Pentachlorophenol		ND	ND	ND	23 J
Phenanthrene		ND	ND	ND	ND
Anthracene		ND	ND	ND	ND
Di-n-butly phthalate		ND	6 BJ	ND	10 B
Fluoranthene		ND	ND	ND	ND
Pyrene		ND	ND	ND	ND
Butyl Benzyl phthalate		ND	ND	ND	ND
3,3'-Dichlorobenzidine		ND	ND	ND	ND
Benzo (a)anthracene		ND	ND	ND	ND
bis(2-ethylhexyl)phthalate		ND	2 BJ	ND	3 BJ
Chrysene		ND	ND	ND	ND
Di-n-octyl phthalate		ND	3 BJ	ND	11 B
Benzo(b)fluoranthene		ND	ND	ND	ND
Benzo(k)fluoranthene		ND	ND	ND	ND
Benzo (a)pyrene		ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene		ND	ND	ND	ND
Benzo(g,h,i)perylene		ND	ND	ND	ND
Dibenzo(a,h)anthracene		ND	ND	ND	ND

µg/L - Micrograms per liter.
B - Compound detected in blank sample.
E - Estimated value. Concentration detected exceeds the calibrated range.
J - Estimated value.
ND - Not detected.

SAUGET Analytical Data
Site O

GROUND WATER SAMPLES
Pesticides/PCBs (µg/L)
Collected by Ecology & Environment, Inc. (3/87, 7/87)

	Sample Number	DC-GW-38	DC-GW-38A	DC-GW-39	DC-GW-39A	DC-GW-40	DC-GW-40A	DC-GW-41	DC-GW-41A	DC-GW-42	DC-GW-43
	Well Number	EE-21	EE-21	EE-22	EE-22	EE-23	EE-23	EE-24	EE-24	EE-24	EE-25
	Date Collected	03/24/87	07/14/87	03/24/87	07/14/87	03/24/87	07/14/87	03/24/87	07/14/87	03/24/87	03/24/87
Pesticides/PCBs											
Alpha-BHC		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Delta-BHC		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC (Lindane)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin		ND	ND	ND	ND	ND	ND.	ND	ND	ND	ND
4,4'-DDE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin Ketone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1016		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1254		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

µg/L - Micrograms per liter.
ND - Not detected.

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SAUGET Analytical Data
Site O

GROUND WATER SAMPLES
Pesticides/PCBs (µg/L)
Collected by Ecology & Environment, Inc. (3/87, 7/87)

	Sample Number	DC-GW-43A	DC-GW-35	DC-GW-57	Maximum
	Well Number	EE-25	NA	NA	Concentration
	Date Collected	07/14/87	03/24/87	07/14/87	Detected
Pesticides/PCBs			BLANK	BLANK	
Alpha-BHC		ND	ND	ND	ND
Beta-BHC		ND	ND	ND	ND
Delta-BHC		ND	ND	ND	ND
Gamma-BHC (Lindane)		ND	ND	ND	ND
Heptachlor		ND	ND	ND	ND
Aldrin		ND	ND	ND	ND
Heptachlor Epoxide		ND	ND	ND	ND
Endosulfan I		ND	ND	ND	ND
Dieldrin		ND	ND	ND	ND
4,4'-DDE		ND	ND	ND	ND
Endrin		ND	ND	ND	ND
Endosulfan II		ND	ND	ND	ND
4,4'-DDD		ND	ND	ND	ND
Endosulfan sulfate		ND	ND	ND	ND
4,4'-DDT		ND	ND	ND	ND
Methoxychlor		ND	ND	ND	ND
Endrin Ketone		ND	ND	ND	ND
Chlordane		ND	ND	ND	ND
Toxaphene		ND	ND	ND	ND
Aroclor-1016		ND	ND	ND	ND
Aroclor-1221		ND	ND	ND	ND
Aroclor-1232		ND	ND	ND	ND
Aroclor-1242		ND	ND	ND	ND
Aroclor-1248		ND	ND	ND	ND
Aroclor-1254		ND	ND	ND	ND
Aroclor-1260		ND	ND	ND	ND

µg/L - Micrograms per liter.

ND - Not detected.

SAUGET Analytical Data
Site O

GROUND WATER SAMPLES
Total Metals (µg/L)
Collected by Ecology & Environment, Inc. (3/87, 7/87)

	Sample Number	DC-GW-38	DC-GW-38A	DC-GW-39	DC-GW-39A	DC-GW-40	DC-GW-40A	DC-GW-41	DC-GW-41A	DC-GW-42	DC-GW-43
	Sample Depth (ft)	EE-21	EE-21	EE-22	EE-22	EE-23	EE-23	EE-24	EE-24	EE-24	EE-25
	Date Collected	03/24/87	07/14/87	03/24/87	07/14/87	03/24/87	07/14/87	03/24/87	07/14/87	03/24/87	03/24/87
Total Metals											
Aluminum		ND	200	ND	ND	ND	ND	ND	ND	ND	ND
Antimony		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic		16	ND	133	123	25	17	18	15	23	ND
Barium		159	[36]	636	500	[161]	[152]	[170]	204	[184]	141
Beryllium		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Boron		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium		ND	ND	8	11	ND	ND	ND	ND	ND	ND
Chromium		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron		20400	15900	147000	171000	19600	16800	36400	29200	36600	3930
Lead		ND	3270	ND	6350	ND	ND	ND	ND	ND	ND
Manganese		4340	ND	5460	ND	1270	1330	4110	1520	4300	2300
Mercury		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tin		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium		ND	ND	42	66	ND	ND	504	ND	ND	ND
Zinc		41	67	101	40	95	[15]	23	24	34	26
Cyanide		20	ND	ND	ND	ND	ND	ND	ND	ND	ND

µg/L - Micrograms per liter
ND - Not detected

SAUGET Analytical Data
Site O

GROUND WATER SAMPLES
Total Metals (µg/L)
Collected by Ecology & Environment, Inc. (3/87, 7/87)

	Sample Number	DC-GW-43A	DC-GW-35	DC-GW-57	Maximum
	Sample Depth (ft)	EE-25	NA	NA	Concentration
	Date Collected	07/14/87	03/24/87	07/14/87	Detected
Total Metals			BLANK	BLANK	
Aluminum		ND	ND	ND	200
Antimony		ND	ND	ND	ND
Arsenic		[92]	ND	ND	133
Barium		ND	ND	ND	536
Beryllium		ND	ND	ND	ND
Boron		ND	ND	ND	ND
Cadmium		ND	ND	ND	11
Chromium		ND	ND	ND	ND
Cobalt		ND	ND	ND	ND
Copper		ND	ND	ND	ND
Iron		2360	111	[87]	171000
Lead		ND	ND	ND	6360
Manganese		1620	ND	ND	5460
Mercury		ND	ND	ND	ND
Nickel		ND	ND	ND	ND
Selenium		ND	ND	ND	ND
Silver		ND	ND	ND	ND
Thallium		ND	ND	ND	ND
Tin		ND	ND	ND	ND
Vanadium		ND	ND	ND	604
Zinc		24	10	ND	101
Cyanide		ND	ND	ND	20

µg/L - Micrograms per liter
ND - Not detected

SITE DESCRIPTION - Sauget Area 2/Site O

Site O consists of four inactive sludge dewatering lagoons associated with the Sauget Wastewater Treatment Plant (WWTP). The site is located on Mobile Avenue in Sauget. The site covers approximately 20 acres to the northeast of the American Bottoms WWTP. The lagoons have been covered with clay and vegetated, and no waste material is present at the surface. An access road to the American Bottoms WWTP runs through the middle of the site. The history of Site O includes activities at the Sauget WWTP. The Sauget WWTP began operation in approximately 1952. The plant treated waste from area industries and residents. Approximately 10 million gallon per day of wastewater was treated, more than 95% was from area industries. Industries which contributed wastewater to the plant include Monsanto, Cerro Copper, Sterling Steel Foundry, Amax Zinc, Rogers Cartage, Edwin Cooper, and Midwest Rubber. Effluent from the plant was discharged to the Mississippi River under NPDES permit. The Sauget WWTP had many past violations of the NPDES permit, mainly due to chemical quality of the plant effluent. Mercury, PCBs and organic solvents had been detected at levels which violated the set permit levels on several occasions. A 1982 USEPA study concluded that the effluent from the Sauget WWTP contributed a substantial volume of priority pollutants annually to the river. The lagoons which comprise Site O were usedas sludge drying beds for the original Sauget WWTP. It is not known if sludge was removed from the lagoons prior to closure and capping.

The following is a chronology of events for site O as discovered in the file information search:

Circa 1952

Sauget Water Treatment Plant has been in operation in some form.

1965 to approx. 1978

The former lagoons were used for disposal of clarified sludges.

1981

The Village of Sauget submitted a Notification of Hazardous Waste Site Form to USEPA in June. The form stated that the lagoons were used for disposal of clarified sludges. The lagoons were designed to drain liquids from the sludge. The lagoons were not lined and were excavated into the Henry Formation Sand. In March, following a long history of effluent problems, the Sauget WWTP submitted specifications for a pretreatment program to increase the treatment efficiency in their waste streams.

December 1982

IEPA collected soils around the Bliss Waste Oil tanks at Clayton Chemical. This area is near site O. High levels of PCBs and pentachlorophenol were detected. Dioxin, especially 2,3,7,8-TCDD was suspected since Russel Bliss had been connected to dioxin-contaminated waste oil in the past.

January 1983

Construction began on the new American Bottoms WWTP which will replace the old Sauget WWTP. The Illinois Attorney General filed suit against Russel Bliss and Clayton Chemical for an alleged water pollution hazard.

February 1983

IEPA and Envirodyne Engineers soil samples reveal PCBs and 2,3,7,8,-TCDD contamination in an area northwest of Site O.

April 1983

Clean-up plan submitted for dioxin contaminated soils. USEPA and IEPA approve the plan.

June 1983

IEPA ordered the excavation of an underground storage tank owned by Russel Bliss on Clayton Chemical property. The tank was found to be ruptured - soil and waste samples were collected by IEPA.

August 1983

IEPA ordered the excavation of additional soil from the Bliss underground storage tank. This was done based on the results of previous IEPA samples.

May 1984

A trench was dug in the area of the lagoons to bury a water pipe. Wastes were encountered during trenching, and the trench was covered and the water line laid above ground.

July 1984

A hydrogeologic investigation was initiated by Geraghty & Miller.

August 1984

Excavation for the construction of a transfer sewer at Site O uncovered contaminated soils.

December 1986

Geraghty & Miller completed their report on investigations at Site O. The report outlined the extent of groundwater contamination from the former sludge lagoons.

December 1986 - March 1987

Nine subsurface soil samples were taken at Site O. An additional two subsurface samples were taken in areas just off-site.

July 1987

Two groundwater monitoring wells were sampled on site. Three monitoring wells located just off-site were sampled by E & E.

March 1994

Surface and subsurface soil samples are expected to be taken by IEPA.

(Note: All information above was excerpted from a document with the heading of "Background" which was taken off microfiche from the IEPA file records)

SAUGET Analytical Data
Site O

SUBSURFACE SOIL SAMPLES
Volatile Organic Compounds (µg/kg)
Collected by Ecology & Environment, Inc. (2/87)

	Sample Number	DC-O10-74	DC-O10-75	Maximum
	Sample Depth (ft)	5-10	10-15	Concentration
	Date Collected	02/26/87	02/26/87	Detected
VOC				
Chloromethane		ND	ND	ND
Bromomethane		ND	ND	ND
Vinyl chloride		ND	ND	ND
Chloroethane		ND	ND	ND
Methylene chloride		731 BJ	341 BJ	878 BJ
Acetone		3846 B	2514 B	11463 BE
Carbon Disulfide		ND	ND	ND
1,1-Dichloroethene		ND	ND	ND
1,1-Dichloroethane		ND	ND	10 J
trans-1,2-Dichloroethene		ND	ND	192
Chloroform		ND	ND	ND
1,2-Dichloroethane		ND	ND	23
2-Butanone (MEK)		7436 B	6705 B	25641 BE
1,1,1-Trichloroethane		ND	ND	1410
Carbon Tetrachloride		ND	ND	ND
Vinyl Acetate		ND	ND	ND
Bromodichloromethane		ND	ND	ND
1,2-Dichloropropane		ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND
Trichloroethene		ND	ND	69
Dibromochloromethane		ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND
Benzene		1795	ND	30769
cis-1,3-Dichloropropene		ND	ND	ND
2-Chloroethyl Vinyl Ether		ND	ND	ND
Bromoform		ND	ND	ND
4-Methyl-2-pentanone		ND	ND	7692
2-Hexanone		ND	ND	63
Tetrachloroethene		ND	ND	ND
1,1,2,2-Tetrachloroethane		ND	ND	28
Toluene		4339	ND	29487
Chlorobenzene		58974	1250	58974
Ethylbenzene		9103	341 J	166667 E
Styrene		ND	ND	ND
Total Xylenes		29487	1114 J	615385 E

µg/kg - Micrograms per kilogram

B - Compound detected in blank sample

E - Estimated value. Concentration detected exceeds the calibrated range

J - Estimated value

ND - Not detected

SAUGET Analytical Data
Site O

SUBSURFACE SOIL SAMPLES
Volatile Organic Compounds (µg/kg)
Collected by Ecology & Environment, Inc. (2/87)

	Sample Number	DC-O1-59	DC-O2-60	DC-O3-61	DC-O4-62	DC-O5-63	DC-O5-64	DC-O8-65	DC-O6-66	DC-O9-72	DC-O9-73
	Sample Depth (ft)	15-25	20-30	10-20	0-10	8.5-20	8.5-20	NA	15-25	0-10	15-20
	Date Collected	02/16/87	02/17/87	02/17/87	02/17/87	02/17/87	2/17/87	2/18/87	2/18/87	2/26/87	2/26/87
VOC								BLANK			
Chloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride		ND	35	10 J	833 BJ	ND	18 J	139 B	4 J	878 BJ	519 BJ
Acetone		1379 BE	9103 BE	4405 BE	7692 B	8659 BE	11463 BE	ND	457 B	ND	2593 B
Carbon Disulfide		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane		ND	10 J	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene		ND	192	6 J	ND	ND	ND	ND	ND	ND	ND
Chloroform		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane		ND	23	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)		30 B	25641 BE	38 B	7179 B	244 B	171 B	ND	20 B	ND	4444 B
1,1,1-Trichloroethane		ND	ND	ND	1410	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene		ND	69	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene		ND	667	24	30769	ND	18 J	ND	ND	ND	ND
cis-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone		ND	1244 B	ND	7692	ND	ND	ND	ND	ND	ND
2-Hexanone		ND	63	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		ND	28	ND	ND	ND	ND	ND	ND	ND	ND
Toluene		ND	ND	ND	29487	ND	ND	ND	ND	293 J	ND
Chlorobenzene		ND	1667	62	38462	74	159	ND	ND	841 J	ND
Ethylbenzene		ND	46	167	166667 E	37 J	57 J	ND	ND	2439	74 J
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes		ND	141	976	615385 E	244	256	ND	ND	21951	235 J

µg/kg - Micrograms per kilogram
B - Compound detected in blank sample
E - Estimated value. Concentration detected exceeds the calibrated range
J - Estimated value
ND - N[illegible]ted

Filename SBSITEO.XLS [illegible] Soil VOCs

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SAUGET Analytical Data
Site O

SUBSURFACE SOIL SAMPLES
Base Neutrals/Acids (µg/kg)
Collected by Ecology & Environment, Inc. (2/87)

	Sample Number	DC 01 59	DC 02 60	DC 03 61	DC 04 62	DC 05 63	DC 05 64	DC 08 65	DC 06 66	DC 09 72	DC 09 73
	Sample Depth (ft)	15-25	20-30	10-20	0-10	8-20	8-20	NA	15-25	0-10	15-20
	Date Collected	02/16/87	02/17/87	02/17/87	02/17/87	02/17/87	02/17/87	02/18/87	02/18/87	02/26/87	02/26/87
BNAs								BLANK			
2,4-Dinitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran		ND	ND	ND	ND	ND	ND	ND	ND	1463 J	ND
2,4-Dinitrotoluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-Phenylether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene		ND	ND	ND	ND	ND	ND	ND	ND	3049 J	ND
4-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine		ND	ND	ND	50000 J	ND	ND	ND	ND	10244 J	ND
4-Bromophenyl-phenylether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol		ND	ND	22619	474359 J	ND	ND	ND	ND	329268	6420 J
Phenanthrene		ND	ND	ND	217949	963 J	ND	ND	ND	21951	469 J
Anthracene		ND	ND	5357	ND	ND	ND	ND	ND	4146 J	ND
Di-n-butly phthalate		ND	ND	ND	ND	3780 J	ND	2785 J	ND	7195 J	6049
Fluoranthene		ND	ND	ND	43590 J	ND	ND	ND	ND	7317 J	ND
Pyrene		ND	ND	ND	282051	ND	ND	ND	ND	62195	1605 J
Butyl Benzyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (a)anthracene		ND	ND	ND	121795	ND	ND	ND	ND	25610	ND
bis(2-ethylhexyl)phthalate		ND	ND	1905 BJ	ND	ND	2439 JB	ND	ND	ND	914 J
Chrysene		ND	ND	ND	282051	ND	1951 J	ND	ND	62195	1605 J
Di-n-octyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene		ND	ND	ND	79487 J	ND	ND	ND	ND	17073 J	ND
Benzo(k)fluoranthene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (a)pyrene		ND	ND	ND	66667 J	ND	ND	ND	ND	19512	ND
Indeno(1,2,3-cd)pyrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene		ND	ND	ND	52564 J	ND	ND	ND	ND	17073 J	ND
Dibenzo(a,h)anthracene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

µg/kg - Micrograms per kilogram
B - Compound detected in blank sample
E - Estimated value. Concentration detected exceeds the calibrated range
J - Estimated value
ND - Not detected

SAUGET Analytical Data
Site O

SUBSURFACE SOIL SAMPLES
Base Neutrals/Acids (µg/kg)
Collected by Ecology & Environment, Inc. (2/87)

	Sample Number	DC-O1-59	DC-O2-60	DC-O3-61	DC-O4-62	DC-O5-63	DC-O5-64	DC-O8-65	DC-O6-66	DC-O9-72	DC-O9-73
	Sample Depth (ft)	15-25	20-30	10-20	0-10	8 5-20	8 5-20	NA	15-25	0-10	15-20
	Date Collected	02/16/87	02/17/87	02/17/87	02/17/87	02/17/87	02/17/87	02/18/87	02/18/87	02/26/87	02/26/87
BNAs								BLANK			
Phenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene		ND	ND	ND	ND	ND	ND	ND	ND	4634 J	ND
Benzyl Alcohol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene		ND	ND	ND	24339 J	ND	ND	ND	ND	32927	ND
2-Methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-n-Dipropylamine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis-(2-Chloroethoxy)methane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene		ND	ND	ND	26923 J	ND	ND	ND	ND	25610	ND
Naphthalene		ND	ND	ND	34615 J	ND	ND	ND	ND	6707 J	ND
4-Chloroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphathalene		ND	ND	ND	160256	ND	ND	ND	ND	31707	ND
Hexachlorocyclopentadiene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl Phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene		ND	ND	ND	ND	ND	ND	ND	ND	2561 J	ND

µg/kg - Micrograms per kilogram
B - Compound detected in blank sample
E - Estimated value Concentration detected exceeds the calibrated range
J - Estimated value
ND - Not detected

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SAUGET Analytical Data
Site O

SUBSURFACE SOIL SAMPLES
Base Neutrals/Acids (µg/kg)
Collected by Ecology & Environment, Inc. (2/87)

	Sample Number	DC O10-74	DC-O10 75	Maximum
	Sample Depth (ft)	5-10	10 15	Concentration
	Date Collected	02/26/87	02/26/87	Detected
BNAs				
2,4-Dinitrophenol		ND	ND	ND
4-Nitrophenol		ND	ND	ND
Dibenzofuran		ND	ND	1463 J
2,4-Dinitrotoluene		ND	ND	ND
2,6-Dinitrotoluene		ND	ND	ND
Diethylphthalate		ND	ND	ND
4-Chlorophenyl-Phenylether		ND	ND	ND
Fluorene		ND	ND	3049 J
4-Nitroaniline		ND	ND	ND
4,6-Dinitro-2-methylphenol		ND	ND	ND
N-Nitrosodiphenylamine		ND	ND	50000 J
4-Bromophenyl-phenylether		ND	ND	ND
Hexachlorobenzene		ND	ND	ND
Pentachlorophenol		112821 J	7159 J	474359 J
Phenanthrene		42308	863 J	217949
Anthracene		ND	ND	5357
Di-n-butly phthalate		ND	5000 J	7195 J
Fluoranthene		11026 J	ND	43590 J
Pyrene		82051	1477 J	282051
Butyl Benzyl phthalate		3846154 E	67045	3846154 E
3,3'-Dichlorobenzidine		ND	ND	ND
Benzo (a)anthracene		ND	ND	121795
bis(2-ethylhexyl)phthalate		ND	1080 J	2439 JB
Chrysene		82051	1818 J	282051
Di-n-octyl phthalate		ND	ND	ND
Benzo(b)fluoranthene		ND	ND	79487 J
Benzo(k)fluoranthene		ND	ND	ND
Benzo (a)pyrene		ND	ND	66667 J
Indeno(1,2,3-cd)pyrene		ND	ND	ND
Benzo(g,h,i)perylene		ND	ND	52564 J
Dibenzo(a,h)anthracene		ND	ND	ND

µg/kg - Micrograms per kilogram
B - Compound detected in blank sample
E - Estimated value Concentration detected exceeds the calibrated range
J - Estimated value
ND - Not detected

SAUGET Analytical Data
Site O

SUBSURFACE SOIL SAMPLES
Base Neutrals/Acids (µg/kg)
Collected by Ecology & Environment, Inc. (2/87)

	Sample Number	DC-O10-74	DC-O10-75	Maximum
	Sample Depth (ft)	5-10	10-15	Concentration
	Date Collected	02/26/87	02/26/87	Detected
BNAs				
Phenol		ND	ND	ND
bis(2-Chloroethyl)ether		ND	ND	ND
2-Chlorophenol		ND	ND	ND
1,3-Dichlorobenzene		ND	ND	ND
1,4-Dichlorobenzene		112821	ND	112821
Benzyl Alcohol		ND	ND	ND
1,2-Dichlorobenzene		100000	ND	100000
2-Methylphenol		ND	ND	ND
bis(2-Chloroisopropyl)ether		ND	ND	ND
4-Methylphenol		ND	ND	ND
N-Nitroso-n-Dipropylamine		ND	ND	ND
Hexachloroethane		ND	ND	ND
Nitrobenzene		ND	ND	ND
Isophorone		ND	ND	ND
2-Nitrophenol		ND	ND	ND
2,4-Dichlorophenol		ND	ND	ND
Benzoic Acid		ND	ND	ND
bis-(2-Chloroethoxy)methane		ND	ND	ND
2,4-Dichlorophenol		ND	ND	ND
1,2,4-Trichlorophenol		ND	ND	26923 J
Naphthalene		ND	ND	34615 J
4-Chloroaniline		ND	ND	ND
Hexachlorobutadiene		ND	ND	ND
4-Chloro-3-methylphenol		ND	ND	ND
2-Methylnaphathalene		7308	ND	160256
Hexachlorocyclopentadiene		ND	ND	ND
2,4,6-Trichlorophenol		ND	ND	ND
2,4,5-Trichlorophenol		ND	ND	ND
2-Chloronaphthalene		ND	ND	ND
2-Nitroaniline		ND	ND	ND
Dimethyl Phthalate		ND	ND	ND
Acenaphthylene		ND	ND	ND
3-Nitroaniline		ND	ND	ND
Acenaphthene		ND	ND	2561 J

µg/kg - Micrograms per kilogram.

B - Compound detected in blank sample

E - Estimated value. Concentration detected exceeds the calibrated range

J - Estimated value

ND - Not detected

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SAUGET Analytical Data
Site O

SUBSURFACE SOIL SAMPLES
Pesticides/PCBs (µg/kg)
Collected by Ecology & Environment, Inc. (2/87)

	Sample Number	DC-O10-74	DC-O10-75	Maximum
	Sample Depth (ft)	5-10	10-15	Concentration
	Date Collected	02/26/87	02/26/87	Detected
Pesticides/PCBs				
Alpha-BHC		ND	ND	ND
Beta-BHC		ND	ND	ND
Delta-BHC		ND	ND	ND
Gamma-BHC (Lindane)		ND	ND	ND
Heptachlor		ND	ND	ND
Aldrin		ND	ND	ND
Heptachlor Epoxide		ND	ND	ND
Endosulfan I		ND	ND	ND
Dieldrin		ND	ND	ND
4,4'-DDE		ND	ND	ND
Endrin		ND	ND	ND
Endosulfan II		ND	ND	ND
4,4'-DDD		ND	ND	ND
Endosulfan sulfate		ND	ND	ND
4,4'-DDT		ND	ND	ND
Methoxychlor		ND	ND	ND
Endrin Ketone		ND	ND	ND
Chlordane		ND	ND	ND
Toxaphene		ND	ND	ND
Aroclor-1016		ND	ND	ND
Aroclor-1221		ND	ND	ND
Aroclor-1232		ND	ND	30366
Aroclor-1242		461539	11364	1871795
Aroclor-1248		ND	ND	ND
Aroclor-1254		ND	ND	ND
Aroclor-1260		ND	ND	5488 JC

µg/kg - Micrograms per kilogram

C - Result confirmed by GC/MS

J - Estimated value

ND - Not detected

SAUGET Analytical Data
Site O

SUBSURFACE SOIL SAMPLES
Pesticides/PCBs (µg/kg)
Collected by Ecology & Environment, Inc. (2/87)

	Sample Number	DC-O1-59	DC-O2-60	DC-O3-61	DC-O4-62	DC-O5-63	DC-O5-64	DC-O8-65	DC-O6-66	DC-O9-72	DC-O9-73
	Sample Depth (ft)	15-25	20-30	10-20	0-10	8 5-20	8 5-20	NA	15-25	0-10	15-20
	Date Collected	02/16/87	02/17/87	02/17/87	02/17/87	02/17/87	02/17/87	02/18/87	02/18/87	02/26/87	02/26/87
Pesticides/PCBs								BLANK			
Alpha-BHC		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Delta-BHC		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC (Lindane)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin Ketone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1016		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232		ND	ND	ND	ND	26829 C	30366	ND	ND	ND	ND
Aroclor-1242		ND	ND	ND	1871795	ND	ND	ND	ND	634146	24691
Aroclor-1248		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1254		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260		ND	ND	ND	ND	5488 JC	3902 J	ND	ND	ND	ND

µg/kg - Micrograms per kilogram
C - Result confirmed by GC/MS
J - Estimated value
ND - Not detected

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SAUGET Analytical Data
Site O

SUBSURFACE SOIL SAMPLES
Total Metals (mg/kg)
Collected by Ecology & Environment, Inc. (2/87)

	Sample Number	DC-O10-74	DC-O10-75	Maximum
	Sample Depth (ft)	5-10	10-15	Concentration
	Date Collected	02/26/87	02/26/87	Detected
Total Metals				
Aluminum		5038	2114	6215
Antimony		ND	ND	ND
Arsenic		7 R	3 R	8 R
Barium		158	45	411
Beryllium		ND	ND	ND
Boron		ND	ND	ND
Cadmium		11	ND	31
Chromium		22	4	22
Cobalt		ND	ND	ND
Copper		341	16	341
Iron		11910	5648	12658
Lead		71 *	6 *	147 *
Manganese		206 *	101 *	357 *
Mercury		1.9	ND	6.3
Nickel		136 *	11 *	136
Selenium		ND	ND	ND
Silver		ND	ND	ND
Thallium		ND	ND	ND
Tin		ND	ND	ND
Vanadium		16	ND	19
Zinc		688 *	43 *	1398
Cyanide		ND	ND	ND

mg/kg - Milligrams per kilogram
B - Compound detected in blank sample
R - Spike sample recovery not within control limits
* - Duplicate analysis not within control limits

SAUGET Analytical Data
Site O

SUBSURFACE SOIL SAMPLES
Total Metals (mg/kg)
Collected by Ecology & Environment, Inc. (2/87)

Sample Number	DC-O1-59	DC-O2-60	DC-O3-61	DC-O4-62	DC-O5-63	DC-O5-64	DC-O8-65	DC-O6-66	DC-O9-72	DC-O9-73
Sample Depth (ft)	15-25	20-30	10-20	0-10	8 5-20	8 5-20	NA	15-25	0-10	15-20
Date Collected	02/16/87	02/17/87	02/17/87	02/17/87	02/17/87	02/17/87	02/18/87	02/18/87	02/26/87	02/26/87
Total Metals							BLANK			
Aluminum	2023	1923	3786	5885	3232	3061	6216	2148	4902	3346
Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	ND	ND	4 R	ND	3 R	3 R	8 R	2 R	6 R	3 R
Barium	67	ND	131	214	106	101	411	ND	165	125
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Boron	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	ND	ND	ND	31	ND	ND	2	ND	4	ND
Chromium	5	6	9	18	7	6	10	5	13	6
Cobalt	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	ND	ND	8	205	7	ND	33	ND	59	ND
Iron	5230	5705	9548	11859	8902	8232	12658	4815	11793	7580
Lead	3 *	6 *	7 *	147 *	7 *	9 *	54 *	4 *	18 *	5 *
Manganese	106 *	108 *	233 *	329 *	207 *	187 *	357 *	79 *	190 *	152 *
Mercury	ND	ND	ND	6.3	ND	ND	ND	ND	1.7	0.3
Nickel	ND	ND	ND	45 *	11 *	10 *	15 *	ND	38	ND
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	ND	ND	13	18	ND	ND	15	ND	19	ND
Zinc	18 *	18 *	54 *	1398	37 *	35 *	181 *	17 *	277	30 *
Cyanide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

mg/kg - Milligrams per kilogram
B - Compound detected in blank sample
R - Spike sample recovery not within control limits
* - Duplicate analysis not within control limits

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SAUGET Analytical Data
Site O

Soil Samples
PCB and TCDD (ng/g)
Split Samples collected by IEPA and EEI

	Sample Number	1	2A	2B	3A	3B	4A	4A Dup EEI	4B	5A	5A Dup IEPA
	Depth (inch)	0 - F	0 - F	7 - 13	0 - 7	7 - 13	0 - 6	0 - 6	6 - 13	0 - 6	0 - 6
	Date Collected	2/19/83	2/19/83	2/19/83	2/19/83	2/19/83	2/19/83	2/19/83	2/19/83	2/19/83	2/19/83
PCB and TCDD											
PCBs - IEPA		1500	7600	390	9100	40	20000	NA	54000	32000	NA
PCBs - EEI		3690	5350	716	137250	28	21020	15510	149600	112930	NA
TCDD - IEPA		ND	ND	ND	ND	ND	ND	ND	ND	18	17
TCDD - EEI		ND	ND	ND	ND	ND	ND	ND	ND	28	NA

	Sample Number	5B	6	7A	7B	8A	8B	8C	8D Dup	8D	9A
	Depth (inch)	6 - 14	0 - 8	0 - 6	8 - 16	0 - 6	6 - 12	13 - 18	18 - 25	18 - 25	0 - 6
	Date Collected	2/19/83	2/19/83	30387	30387	30387	30387	30387	30387	30387	30387
PCB and TCDD											
PCBs - IEPA		20000	120	NA	NA	NA	NA	NA	NA	NA	NA
PCBs - EEI		12050	90	NA	NA	NA	NA	NA	NA	NA	NA
TCDD - IEPA		4.1	ND	ND	1.8	77	*	ND	ND	ND	1.3
TCDD - EEI		5.1	ND	ND	44	Interferences	19	37	56	ND	ND

	Sample Number	9B	9C	9D	10A	10B	11A	11B	12	13A	13B
	Depth (inch)	6 - 12	14 - 21	22 - 28			0 - 6	G - 18	10 - 19	0 - 7	7 - 18
	Date Collected	2/19/83	2/19/83	30387	30387	30387	30387	30387	30387	30387	30387
PCB and TCDD											
PCBs - IEPA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs - EEI		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TCDD - IEPA		*	ND	0.92	12	*	ND	*	*	ND	13
TCDD - EEI		ND	ND	ND	ND	13	ND	ND	ND	ND	13

	Sample Number	14	15	16	Maximum
	Depth (inch)	0 - 6	0 - 16	0 - 18	Concentration
	Date Collected	2/19/83	2/19/83	30387	Detected
PCB and TCDD					
PCBs - IEPA		NA	NA	NA	54000
PCBs - EEI		NA	NA	NA	149600
TCDD - IEPA		25	ND	ND	77
TCDD - EEI		170	ND	ND	170

ng/g - Nanograms per gram
NA - Parameter not analyzed
ND - Not detected
* - Sample not collected by IEPA
PCB - Polychlorinated biphenyl
TCDD - Tetrachlorodibenzo-p-dioxin

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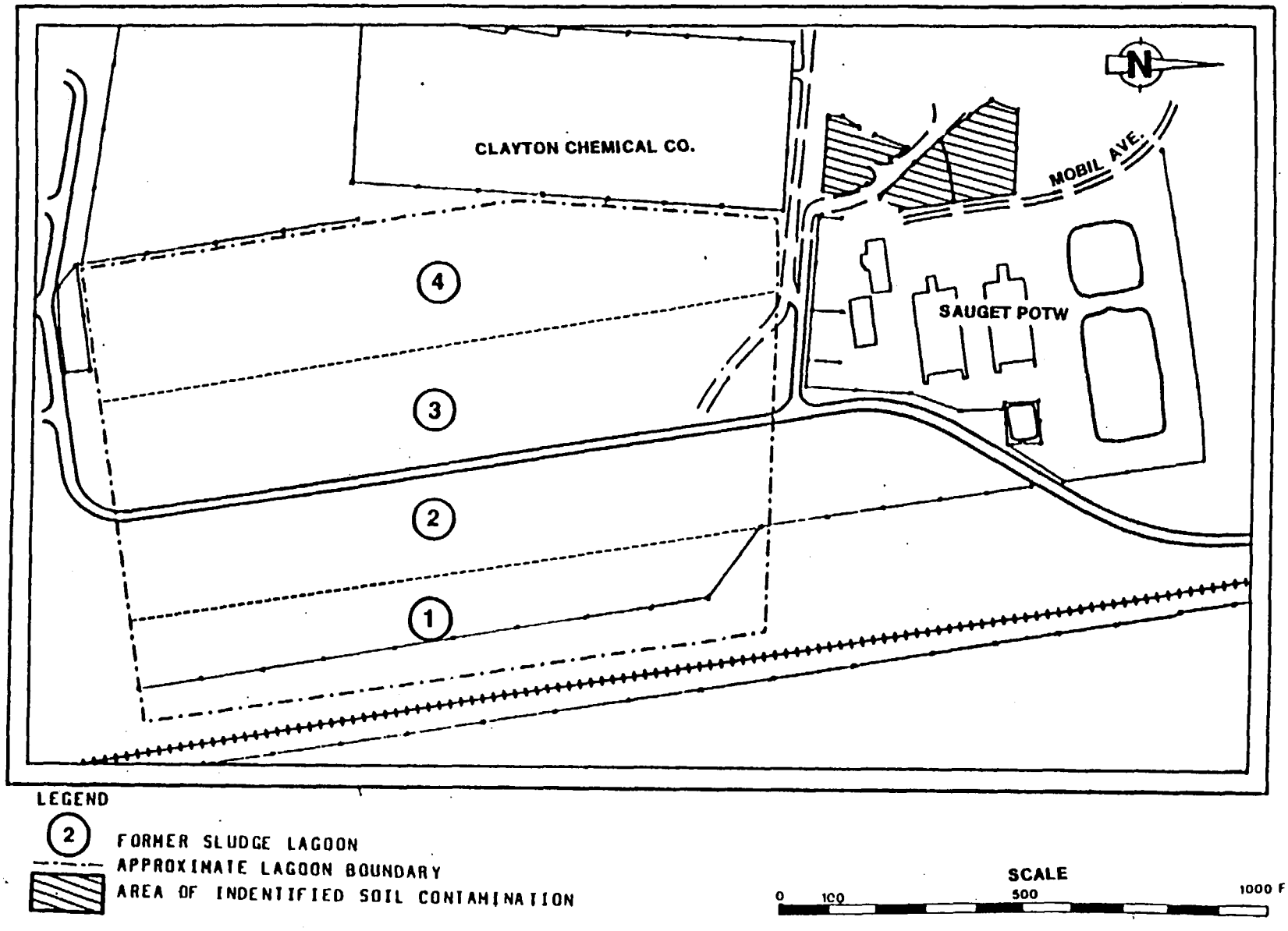

FIGURE O-1
FORMER SLUDGE LAGOONS AND CONTAMINATED SOIL AREAS AT SITE O

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SAUGET Analytical Data

Site O

SOIL SAMPLES

Misc. (MG/KG)

Collected by Clayton Environmental Consultants 7/31/84

	Sample Number		Sample No 1	Sample No 2	Maximum
	Date Collected		7/31/84	7/31/84	Concentration
Misc.					Detected
Total PCBs			477	653	653
Benzene (ug/kg)			1	1	1
Phenol			0 28	12	12
Oil and Grease (%)			29	35	35
Solids (%)			82.2	87.3	87.3

SAUGET Analytical Data

Site O

SOIL SAMPLES

Organic (mg/kg)

Collected by Russell and Axon (July 20, 1984)

Sample Number	1	2	BLANK	Maximum Concentration
Organics				
2,4-Dichlorophenol	50.1	ND	ND	50.1
Pentachlorophenol	3600	159	ND	3600
2,4,6-Trichlorophenol	39.3	ND	ND	39.3
Crysene	123	2.2	ND	123
Benzo-k-Fluoranthene	15.9	0.45	ND	15.9
Bis(2-Ethylhexyl) Phthalate	10.9	ND	0.098	10.9
1,2-Chlorobenzene	ND	12.2	ND	12.2
1,4-Dichlorobenzene	ND	8.01	ND	8.01
Di-Butyl Phthalate	ND	5.06	0.1	5.06
Phenanthrene	100	1.6	ND	100
Pyrene	102	2.1	ND	102
1,2,4-Trichlorobenzene	65.3	1.6	ND	65.3
PCBs	*	*	ND	ND
Benzo(a)Pyrene	4.2	1	ND	4.2

mg/kg - Milligrams per kilogram
ND - Not detected
* - identified, but values cannot be verified

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NOTE: THE DATA PRESENTED IN THIS SECTION IS PRESENTED IN THE ORIGINAL REPORT FORMAT.

SOURCE: "Assessment of Ground-Water Conditions at the Village of Sauget Treatment Plant Sites", Sauget, Illinois, prepared by Geraghty & Miller, December 1986

Table 9. (continued)

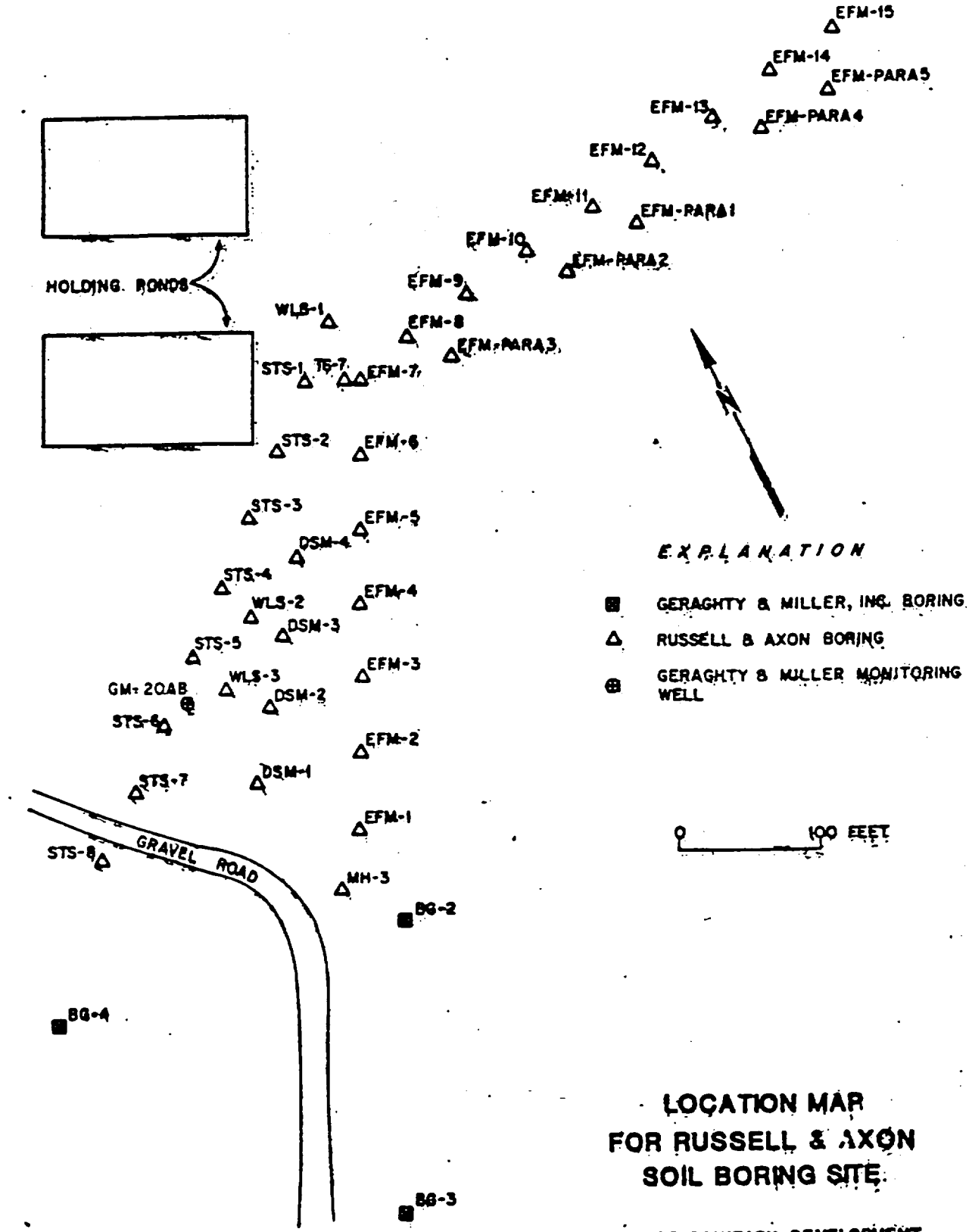
Soil Boring No.	Depth of Sample (feet below land surface)	Photoionization Sensitive Compounds (ppm)
STS-7	0 - 4	0
	4 - 9	0
	9 - 14	0
STS-8	0 - 4	10
	4 - 9	0
	9 - 14	0
DSM-2	0 - 4	110
	4 - 8	25
	8 - 11	85
	11 - 14	25
DSM-3	0 - 4	110
	4 - 9	20
DSM-4	0 - 4	80
	4 - 8	20 - 40
EFM-8	0 - 4	0 - 20
	4 - 9	0 - 10
EFM-9	0 - 4	20
	4 - 9	0 - 20
EFM-10	0 - 4	0
	4 - 9	0
EFM-11	0 - 4	0
	4 - 9	0
EFM-Para 1	0 - 4	0
	4 - 9	0
EFM-Para 2	0 - 4	0 - 20
	4 - 5	0 - 20
	5 - 9	0
EFM-Para 3	0 - 4	0
	4 - 9	0

Table 9. Results of Soil Sample Analyses for Photoionization-Sensitive Compounds from Selected Depths and Locations Collected by Russell and Axon in September 1983, Sauget Sanitary Development and Research Association, Sauget, Illinois.

Soil Boring No.	Depth of Sample (feet below land surface)	Photoionization Sensitive Compounds (ppm)
STS-3	0 - 4	0
	4 - 9	0
STS-1	0 - 4	0
	4 - 9	0
	9 - 11	0
	11 - 13 1/2	0
	13 1/2 - 18 1/2	
TS-7	0 - 4	0
	4 - 9	0
	9 - 14 1/2	0
EFM-7	0 - 4	0
	4 - 8	0
	8 - 14	0
EFM-6	0 - 4	0
	4 - 9	0
	9 - 14	0
EFM-5	0 - 4	0
	4 - 8	0
	8 - 14	0
STS-4	0 - 4	18
	4 - 9	0
	9 - 14	6
STS-5	0 - 4	110
	4 - 8	20 - 40
	8 - 14	0 - 20
STS-6	0 - 1.3	110
	1.3 - 4	60
	4 - 6.5	40 - 80
	7.5 - 8.5	0 - 20
	9 - 14	0

Table 9. (continued)

Soil Boring No.	Depth of Sample (feet below land surface)	Photoionization Sensitive Compounds (ppm)
EFM-15	0 - 4	0
	4 - 9	0
EFM-13	0 - 4	0
	4 - 9	0
EFM-14	0 - 4	0
	4 - 9	0
EFM-Para 4	0 - 4	0
	4 - 9	0
EFM-Para 5	0 - 4	0
	4 - 9	0
WLS-1	0 - 4	0
	4 - 9	0
WLS-2	0 - 4	0
	4 - 9	0
MH-3	23 1/2	30
EFM-#1	0 - 1	40
	3 1/2	90
	19	90
	24	32
EFM-#3	0 - 3	32
	3 - 7	18
	7 - 14	18
EFM-#2	0 - 3 1/2	30
	3 1/2 - 8	30
	8 - 13	32
	13 - 14	40
EFM-#4	1 - 4	58
	4 - 7	58
	9 - 12	60



LOCATION MAP FOR RUSSELL & AXON SOIL BORING SITE

SAUGET SANITARY DEVELOPMENT AND RESEARCH ASSOCIATION
SAUGET, ILLINOIS

GERAGHTY & MILLER, INC.
Ground-Water Consultants

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FIGURE 3

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NOTE: THE DATA PRESENTED IN THIS SECTION IS PRESENTED IN THE ORIGINAL REPORT FORMAT AND A PORTION IS PRESENTED IN THE E & E SUMMARY TABLE FORMAT.

SOURCE: "Assessment of Ground-Water Conditions at the Village of Sauget Treatment Plant Sites", Sauget, Illinois, prepared by Geraghty & Miller, December 1986

SAUGET Analytical Data
Area 2 - Monsanto

SOIL SAMPLES
Base/Neutral Extractable Compounds (ug/kg)
Collected by Geraghty & Miller (8/21-23/84)

	Sample Number	BG-2	BG-3	BG-10	BG-12							Maximum
	Sample Depth (ft)	3-4.5	6-7.5	0.5-1.5	5.5-6							Detected
Base/Neutral												
Acenaphthene		ND	ND	ND	ND							ND
Acenapthylene		ND	ND	ND	ND							ND
Anthracene		ND	ND	ND	ND							ND
Benzidine		ND	ND	ND	ND							ND
Benzo(a)anthracene		10,400	8,000	ND	41,600							41600
Benzo(a)pyrene		9,650	8,000	ND	42,400							42400
Benzo(a)fluoranthene		ND	ND	ND	ND							ND
Benzo(ghi)perylene		4,660	5,000	ND	63,000							63000
Benzo(k)fluoranthene		9,600	6,000	ND	40,500							40500
Bis(2-chloroethoxy)methane		ND	ND	ND	ND							ND
Bis(2-chloroethyl)ether		ND	ND	ND	ND							ND
Bis(2-chloroisopropyl)ether		ND	ND	ND	ND							ND
Bis(2-ethylhexyl)phthalate		ND	7,000	7,610	ND							7610
4-Bromophenyl phenyl ether		ND	ND	ND	ND							ND
Butyl benzyl phthalate		342,000	ND	ND	206,000							342000
2-Chloronaphthalene		ND	ND	ND	ND							ND
4-Chlorophenyl phenyl ether		ND	ND	ND	ND							ND
Chrysene		18,400	15,000	ND	87,000							87000
Dibenzo(a,h)anthracene		5,170	ND	ND	34,800							34800
1,2-Dichlorobenzene		606,000	595,000	4,380	247,000							606000
1,3-Dichlorobenzene		ND	ND	ND	ND							ND
1,4-Dichlorobenzene		1,030,000	795,000	3,430	364,000							1030000
3,3-Dichlorobenzidine		ND	ND	ND	ND							ND
Diethyl phthalate		ND	ND	ND	ND							ND
Dimethyl phthalate		ND	ND	ND	ND							ND
Di-n-buyl phthalate		ND	ND	ND	ND							ND
2,4-Dinitrotoluene		ND	ND	ND	ND							ND
2,6-Dinitrotoluene		ND	ND	ND	ND							ND
Di-n-octyl phthalate		ND	5,000	ND	ND							5000
1,2-Diphenylhydrazine		ND	ND	ND	ND							ND
Fluoranthene		ND	12,000	ND	74,600							74600
Fluorene		ND	7,000	ND	13,500							13500
Hexachlorobenzene		ND	ND	ND	ND							ND
Hexachlorobutadiene		ND	ND	ND	ND							ND
Hexachlorocyclopentadiene		ND	ND	ND	ND							ND
Hexachloroethane		ND	ND	ND	ND							ND
Indeno(1,2,3-c,d)pyrene		ND	ND	ND	26,800							26800
Isophorone		ND	ND	ND	ND							ND
Naphthalene		ND	ND	ND	10,400							10400
Nitrobenzene		ND	ND	ND	ND							ND
n-Nitrosodimethylamine		ND	ND	ND	ND							ND
n-Nitrosodi-n-propylamine		ND	ND	ND	ND							ND
n-Nitrosodiphenylamine		ND	ND	ND	ND							ND
Phenanthrene		ND	ND	ND	230,000							230000
Pyrene		ND	ND	ND	ND							ND
1,2,4-Trichlorob[illegible]e		ND	ND	ND	5,920							5[illegible]

SAUGET Analytical Data
Area 2 - Monsanto

SOIL SAMPLES
Volatile Organic Compounds (ug/kg)
Collected by Geraghty & Miller (8/21-23/84)

	Sample Number	BG-2	BG-3	BG-10	BG-12							Maximum
	Sample Depth (ft)	3-4 5	6-7 5	0 5-1 5	5 5-6							
VOC												Max
Acrolein		ND	ND	ND	ND							ND
Acrylonitrile		ND	ND	ND	ND							ND
Benzene		b)	b)	1,000	1,700							1700
Bis (chloromethyl)ether		ND	ND	ND	ND							ND
Bromoform		ND	ND	ND	ND							ND
Carbon Tetrachloride		b)	b)	ND	ND							ND
Chlorobenzene		ND	ND	ND	ND							ND
Chlorodibromomethane		ND	ND	ND	ND							ND
Chloroethane		ND	ND	ND	ND							ND
2-Chloroethylvinyl ether		ND	ND	ND	ND							ND
Chloroform		ND	ND	ND	ND							ND
Dichlorobromomethane		ND	ND	ND	ND							ND
Dichlorodifluoromethane		ND	ND	ND	ND							ND
1,1-Dichloroethane		ND	ND	ND	ND							ND
1,2-Dichloroethane		ND	ND	ND	ND							ND
1,1-Dichloroethylene		ND	ND	ND	ND							ND
1,2-Dichloropropane		ND	ND	ND	ND							ND
cis-1,3-Dichloropropylene		ND	ND	ND	ND							ND
trans-1,3-Dichloropropylene		ND	ND	ND	ND							ND
Ethylbenzene		b)	b)	1,600	440							1600
Methyl Bromide		ND	ND	ND	ND							ND
Methyl Chloride		ND	ND	ND	ND							ND
Methylene Chloride		ND	ND	25,900	15,400							25900
1,1,2,2-Tetrachloroethane		ND	ND	ND	ND							ND
Tetrachloroethylene		ND	ND	ND	ND							ND
Toluene		b)	b)	6,900	4,800							6900
1,2-trans-dichloroethylene		ND	ND	ND	ND							ND
1,1,1-Trichloroethane		ND	ND	ND	ND							ND
1,1,2-Trichloroethane		ND	ND	ND	ND							ND
Trichloroethylene		ND	ND	ND	ND							ND
Trichlorofluoromethane		ND	ND	ND	ND							ND
Vinyl Chloride		ND	ND	ND	ND							ND

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SAUGET Analytical Data
Area 2 - Monsanto

SOIL SAMPLES
Pesticide/PCB Compounds (ug/kg)
Collected by Geraghty & Miller (8/21-23/84)

	Sample Number	BG-2	BG-3	BG-10	BG-12							Maximum
	Sample Depth (ft)	3-4 5	6-7 5	0 5-1 5	5 5-6							Detected
PESTICIDE/PCB												
Aldrin		8.58	10.5	8.58	ND							10 5
Alpha-BHC		34.4	16.5	34.4	ND							34 4
Beta-BHC		ND	ND	ND	ND							ND
Gamma-BHC		22.9	32.7	22.9	ND							32 7
Delta-BHC		ND	ND	ND	ND							ND
Chlordane		ND	ND	72.2	ND							72 2
4,4'-DDT		ND	ND	ND	ND							ND
4,4'-DDE		ND	ND	ND	ND							ND
4-4'-DDD		ND	ND	ND	ND							ND
Dieldrin		ND	ND	ND	ND							ND
Endosulfan I		ND	ND	ND	ND							ND
Endosulfan II		ND	ND	ND	ND							ND
Endosulfan sulfate		ND	ND	ND	ND							ND
Endrin		ND	ND	ND	ND							ND
Endrin aldehyde		ND	0.287	ND	ND							0 287
Heptachlor		28.4	29.8	28.4	ND							29 8
Heptachlor epoxide		ND	ND	ND	830							830
PCB-1016		1.9	1.22	1.9	ND							1 9
PCB-1221		ND	ND	ND	ND							ND
PCB-1232		ND	ND	ND	ND							ND
PCB-1242		ND	ND	ND	ND							ND
PCB-1248		ND	ND	ND	ND							ND
PCB-1254		ND	ND	43.2	ND							43 2
PCB-1260		ND	ND	ND	ND							ND
Toxaphene		ND	ND	ND	ND							ND

SAUGET Analytical Data
Area 2 - Monsanto

SOIL SAMPLES
Acid Extractable Organic Compounds (ug/kg)
Collected by Geraghty & Miller (8/21-23/84)

	Sample Number	BG-2	BG-3	BG-10	BG-12							Maximum
	Sample Depth (ft)	3-4 5	6-7 5	0 5-1 5	5 5-6							Detected
ACID EXTRACTABLE												
2-Chlorophenol		ND	ND	ND	ND							ND
2,4-Dichlorophenol		170,000	100,000	11,500	69,400							170000
2,4-Dimethylphenol		ND	ND	ND	ND							ND
4,6-Dinitro-o-cresol		ND	ND	ND	ND							ND
2,4-Dinitrophenol		ND	ND	ND	ND							ND
2-Nitrophenol		ND	ND	ND	ND							ND
4-Nitrophenol		ND	ND	ND	ND							ND
p-Chloro-m-cresol		ND	ND	ND	ND							ND
Pentachlorophenol		1,430,000	1,620,000	181,000	382,000							1620000
Phenol		151,000	ND	ND	104,000							151000
2,4,6-Trichlorophenol		214,000	108,000	11,500	32,900							214000

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Table 10. (Continued)

Soil Boring No.	Sample Collection Date	Depth of Sample (feet below land surface)	Photoioni-zation-Sensitive Compounds (ppm)	PCBs (ppm)
BG-6	8-22-84	0 - 1.5	0	NA
		1.5 - 3	0	NA
		3 - 4.5	0	NA
		4.5 - 6	185	NA
		6 - 7.5	195	NA
		7.5 - 9	10	NA
BG-7	8-22-84	0 - 1.5	0	NA
		1.5 - 3	150	NA
		3 - 4.5	0	NA
		4.5 - 6	0	NA
		6 - 7.5	0	NA
		8.5 - 10	0	NA
		10 - 11.5	0	NA
BG-8	8-22-84	0 - 1.5	0	NA
		1.5 - 3	0	NA
		3 - 4.5	0	NA
		4.5 - 6	0	NA
		6 - 7.5	0	NA
		7.5 - 9	0	NA
		9 - 10.5	0	NA
BG-9	8-22-84	0 - 1.5	0	NA
		1.5 - 3	0	NA
		3 - 4.5	0	NA
		4.5 - 6	0	NA
		6 - 7.5	0	NA
		7.5 - 9	0	NA
		9 - 10.5	0	NA
BG-10	8-22-84	0 - 1.5	10	NA
		1.5 - 3	10	12.47
		3 - 4.5	10	NA
		4.5 - 6	15	NA
		6 - 7.5	-c)	NA
		7.5 - 9	-c)	NA
		9 - 10.5	0	NA

c) No recovery of soil sample.

Table 10. Results of Soil Sample Analyses for Photoionization-Sensitive Compounds and PCBs From Selected Depths and Locations, Collected by Geraghty & Miller, Inc. Sauget Sanitary Development and Research Association, Sauget, Illinois.

Soil Boring No.	Sample Collection Date	Depth of Sample (feet below land surface)	Photoionization-Sensitive Compounds (ppm)	PCBs (ppm)
BG-1	8-21-84	0 - 1.5	0	NA[a]
		1.5 - 3	0	NA
		3 - 4.5	0	NA
		4.5 - 6	0	NA
		6 - 7.5	0	NA
		7.5 - 9	0	NA
		9 - 10.5	0	NA
BG-2	8-21-84	0 - 1.5	0	NA
		1.5 - 3	75	NA
		3 - 4.5	150	NA
		4.5 - 6	150	NA
		6 - 7.5	50	NA
		7.5 - 9	75	NA
BG-3	8-21-84	0 - 1.5	10	NA
		3 - 4.5	125	NA
		4.5 - 6	250	88.10
		6 - 7.5	200	NA
		7.5 - 9	175	NA
		9 - 10.5	175	NA
BG-4	8-21-84	0 - 1.5	0	NA
		1.5 - 3	30	NA
		3 - 4.5	0	NA
		4.5 - 6	0	NA
		6 - 7.5	0	NA
		7.5 - 9	5	NA
BG-5	8-22-84	0 - 1.5	0	NA
		1.5 - 3	0	NA
		3 - 4.5	30	NA[b]
		4.5 - 6	175	NA[b]
		6 - 7.5	150	NA
		7.5 - 9	30	NA
		9 - 10.5	30	NA

a) Not analyzed
b) Black sticky lagoon sludge (3-inches thick) was detected at 5.75-6 feet. Insufficient recovery for analysis. It appeared to be the same material as was detected in BG-12.

Appendix 15

Historical Soil Data

Water Quality Data (1986-1994)

APPENDICES

A. Table 1 - Summary of Volatile Organic Compounds.

B. Table 2 - Summary of Acid Extractable Organic Compounds.

C. Table 3 - Summary of Base/Neutral Extractable Organic Compounds.

APPENDIX A

TABLE 1 - SUMMARY OF VOLATILE ORGANIC COMPOUNDS

Well Number:	GM-4A	GM-4A	GM-4A	GM-4A	GM-4A	GM-4A	GM-4A	GM-4A	GM-4A	GM-4A
Date:	12/86	5/87	11/87	5/88	11/88	11/89	11/90	11/91	11/92	9/94
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	SL
Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<100	<100	<100	<100	<100	<100	<100	<20	<100
Acrylonitrile	<100	<100	<100	<100	<100	<100	<100	<100	<10	<100
Benzene	<4.4	<4.4	<4.4	<4.4	<4.4	**4.84**	<4.4	<4.4	<4.4	<5.0
Bis (chloromethyl) ether	<10	<10	<10	<10	<10	<10	<10	<10	NA	NA
Bromoform	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<5.0
Carbon tetrachloride	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.0
Chlorobenzene	<6	<6.0	<6.0	<6.0	<6.0	**20.7**	**9.44**	<6.0	<6.0	<5.0
Chlorodibromomethane	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<5.0
Chloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chloroethylvinyl ether	<10	<10	<10	<10	<10	<10	<10	<10	NA	<50
Chloroform	<1.6	<1.6	<1.6	**1.9**	<1.6	<1.6	<1.6	<1.6	<1.6	<5.0
Dichlorobromomethane	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<5.0
Dichlorodifluoromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<5.0
1,1-Dichloroethane	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<5.0
1,2-Dichloroethane	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.0
1,1-Dichloroethylene	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5.0
1,2-Dichloropropane	<6	<6	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<5.0
cis-1,3-Dichloropropylene	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<5.0
Methyl bromide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methyl chloride	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylene chloride	<2.8	**41.5**	**3.23**	**13.3**	**13.6**	**3.71**	<2.8	<2.8	<2.8	<5.0
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<5.0
Tetrachloroethylene	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<5.0
Toluene	<6	<6	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<5.0
1,2-trans-Dichloroethylene	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<5.0
1,1,1-Trichloroethane	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<5.0
1,1,2-Trichloroethane	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethylene	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<5.0
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<5.0
Vinyl chloride	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropylene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<5.0
Sub Total 1	0	42	3	15	14	29	9	0	0	0
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
Methyl-iso-butyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	<10	<25
Methyl isoamyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	<25
m-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	<10	<5.0
o-Xylene/p-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	<10	<5.0
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	0	42	3	15	14	29	9	0	0	0

See footnotes on last page.

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Well Number:	GM-4B	GM-4B	GM-4B	GM-4B	GM-4B	GM-4B	GM-4B	GM-4B	GM-4B	GM-4B
Date:	12/86	5/87	11/87	5/88	11/88	5/89	11/89	5/90	11/90	5/91
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<5,000	<500	<100	<100	<1,000	<10,000	<25,000	<20,000	<5,000
Acrylonitrile	<100	<5,000	<500	<100	<100	<1,000	<10,000	<25,000	<20,000	<5,000
Benzene	<4.4	<220	**31.9**	<4.4	**13.2**	**127**	<440	<1,100	<880	<220
Bis (chloromethyl) ether	<10	<500	<50	<10	<10	<100	<1,000	<2,500	<2,000	<500
Bromoform	<4.7	<240	<24	<4.7	<4.7	<47	<470	<1,200	<940	<240
Carbon tetrachloride	<2.8	<140	<14	<2.8	<2.8	<28	<280	<700	<560	<140
Chlorobenzene	<6	**3,050**	**1,990**	<6.0	<6.0	**3,510**	**8,120**	**11,800**	**14,600**	**8,990**
Chlorodibromomethane	<3.1	<160	<16	<3.1	<3.1	<31	<310	<780	<620	<160
Chloroethane	<10	<500	<50	<10	<10	<100	<1,000	<2,500	<2,000	<500
2-Chloroethylvinyl ether	<10	<500	<50	<10	<10	<100	<1,000	<2,500	<2,000	<500
Chloroform	<1.6	<80	<8.0	**2.0**	<1.6	<16	<160	<400	<320	<80
Dichlorobromomethane	<2.2	<110	<11	<2.2	<2.2	<22	<220	<550	<440	<110
Dichlorodifluoromethane	<10	<500	<50	<10	<10	<100	<1,000	<2,500	<2,000	<500
1,1-Dichloroethane	<4.7	<240	<24	<4.7	<4.7	<47	<470	<1,200	<940	<240
1,2-Dichloroethane	<2.8	<140	<14	<2.8	<2.8	<28	<280	<700	<560	<140
1,1-Dichloroethylene	<2.8	<140	<14	<2.8	<2.8	<28	<280	<700	<560	<140
1,2-Dichloropropane	<6	<300	<30	<6.0	<6.0	<60	<600	<1,500	<1,200	<300
cis-1,3-Dichloropropylene	<5	<250	<25	<5.0	<5.0	<50	<500	<1,300	<1,000	<250
Ethylbenzene	<7.2	<360	<36	<7.2	<7.2	<72	<720	<1,800	<1,400	<360
Methyl bromide	<10	<500	<50	<10	<10	<100	<1,000	<2,500	<2,000	<500
Methyl chloride	<10	<500	<50	<10	<10	<100	<1,000	<2,500	<2,000	<500
Methylene chloride	<2.8	**208**	<14	**64.9**	<2.8	<28	<280	**2,180**	<560	<140
1,1,2,2-Tetrachloroethane	<6.9	<350	<35	<6.9	<6.9	<69	<690	<1,700	<1,400	<350
Tetrachloroethylene	<4.1	<210	<21	<4.1	<4.1	<41	<410	<1,000	<820	<210
Toluene	<6	<300	<30	<6.0	<6.0	<60	<600	<1,500	<1,200	<300
1,2-trans-Dichloroethylene	<1.6	<80	<8.0	<1.6	<1.6	<16	<160	<400	<320	<80
1,1,1-Trichloroethane	<3.8	<190	<19	<3.8	<3.8	<38	<380	<950	<760	<190
,1,2-Trichloroethane	<5	<250	<25	<5.0	<5.0	<50	<500	<1,300	<1,000	<250
richloroethylene	<1.9	<95	<9.5	<1.9	<1.9	<19	<190	<480	<380	<95
Trichlorofluoromethane	<10	<500	<50	<10	<10	<100	<1,000	<2,500	<2,000	<500
Vinyl chloride	<10	<500	<50	<10	<10	<100	<1,000	<2,500	<2,000	<500
trans-1,3-Dichloropropylene	<10	<500	<50	<10	<10	<100	<1,000	<2,500	<2,000	<500
Sub Total 1	0	3,258	2,022	67	13	3,637	8,120	13,980	14,600	8,990
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl isoamyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene/p-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	0	3,258	2,022	67	13	3,637	8,120	13,980	14,600	8,990

See footnotes on last page.

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Table 1. Summary of Volatile Organic Compounds in Groundwater, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-4B	GM-4B	GM-4B	GM-4B	GM-4C	GM-4C	GM-4C	GM-4C	GM-4C	GM-4C
Date:	11/91	11/92	9/94	9/94*	12/86	5/87	11/87	5/88	11/88	5/89
Laboratory:	ETC	ETC	SL	SL	ETC	ETC	ETC	ETC	ETC	ETC
Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<25,000	<200	<2500	<50,000	<100	<5,000	<1,000	<100	<100	<1,000
Acrylonitrile	<25,000	<100	<2500	<50,000	<100	<5,000	<1,000	<100	<100	<1,000
Benzene	<1,100	**136**	**57,000**	**29,000**	<4.4	<220	<44	<4.4	<4.4	**290**
Bis (chloromethyl) ether	<2,500	NA	NA	NA	<10	<500	<100	<10	<10	<100
Bromoform	<1,200	<120	<120	<2,500	<4.7	<240	<47	<4.7	<4.7	<47
Carbon tetrachloride	<700	<70	<120	<2,500	<2.8	<140	<28	<2.8	<2.8	<28
Chlorobenzene	**10,700**	**3,880**	**2,000**	**1,800**	<6	**1,770**	**2,490**	<6.0	**71.6**	**5,440**
Chlorodibromomethane	<780	<78	<120	<2,500	<3.1	<160	<31	<3.1	<3.1	<31
Chloroethane	<2,500	<250	<250	<5,000	<10	<500	<100	<10	<10	<100
2-Chloroethylvinyl ether	<2,500	NA	<1200	<25,000	<10	<500	<100	<10	<10	<100
Chloroform	<400	<40	<120	<2,500	<1.6	<80	**46**	<1.6	<1.6	<16
Dichlorobromomethane	<550	<55	<120	<2,500	<2.2	<110	<22	<2.2	<2.2	<22
Dichlorodifluoromethane	<2,500	<250	<120	<2,500	<10	<500	<100	<10	<10	<100
1,1-Dichloroethane	<1,200	<120	<120	<2,500	<4.7	<240	<47	<4.7	<4.7	<47
1,2-Dichloroethane	<700	<70	<120	<2,500	<2.8	<140	<28	<2.8	<2.8	<28
1,1-Dichloroethylene	<700	<70	<120	<2,500	<2.8	<140	<28	<2.8	<2.8	<28
1,2-Dichloropropane	<1,500	<150	<120	<2,500	<6	<300	<60	<6.0	<6.0	<60
cis-1,3-Dichloropropylene	<1,300	<130	<120	<2,500	<5	<250	<50	<5.0	<5.0	<50
Ethylbenzene	<1,800	<180	<120	<2,500	<7.2	<360	<72	<7.2	<7.2	<72
Methyl bromide	<2,500	<250	<5000	<5,000	<10	<500	<100	<10	<10	<100
Methyl chloride	<2,500	<250	<250	<5,000	<10	<500	<100	<10	<10	<100
Methylene chloride	<700	<70	<120	<2,500	<2.8	**203**	<28	**38.4**	<2.8	**60.5**
1,1,2,2-Tetrachloroethane	<1,700	<170	<120	<2,500	<6.9	<350	<69	<6.9	<6.9	<69
Tetrachloroethylene	<1,000	<100	<120	<2,500	<4.1	<210	<41	<4.1	<4.1	<41
Toluene	<1,500	<150	<120	<2,500	<6	<300	<60	<6	<6	<60
1,2-trans-Dichloroethylene	<400	<40	<120	<2,500	<1.6	<80	<16	<1.6	<1.6	<16
1,1,1-Trichloroethane	<950	<95	<120	<2,500	<3.8	<190	<38	<3.8	<3.8	<38
1,1,2-Trichloroethane	<1,300	<130	<120	<2,500	<5	<250	<50	<5	<5	<50
Trichloroethylene	<480	<48	<120	<2,500	<1.9	<95	<19	<1.9	<1.9	<19
Trichlorofluoromethane	<2,500	<250	<120	<2,500	<10	<500	<100	<10	<10	<100
Vinyl chloride	<2,500	<250	<250	<5,000	<10	<500	<100	<10	<10	<100
trans-1,3-Dichloropropylene	<2,500	<250	<120	<2,500	<10	<500	<100	<10	<10	<100
Sub Total 1	10,700	4,016	59,000	30,800	0	1,973	2,536	38	72	5,791
Miscellaneous Volatile Organic Compounds										
Acetone	NA	<250	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	<250	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	<250	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	<250	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	<250	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	<10	<620	<12,000	NA	NA	NA	NA	NA	NA
Methyl isoamyl ketone	NA	NA	<620	<12,000	NA	NA	NA	NA	NA	NA
m-Xylene	NA	<250	<120	<2,500	NA	NA	NA	NA	NA	NA
o-Xylene/p-Xylene	NA	<250	<120	<2,500	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	10,700	4,016	59,000	30,800	0	1,973	2,536	38	72	5,791

See footnotes on last page.

Well Number:	GM-4C	GM-4C	GM-4C	GM-4C	GM-4C	GM-4C	GM-4C	GM-5	GM-5	GM-6A
Date:	11/89	5/90	11/90	5/91	11/91	11/92	9/94	11/92	9/94	11/92
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	SL	ETC	SL	ETC
Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<10,000	<25,000	<10,000	<5,000	<5,000	<2,000	<50000	<20	<100	<50
Acrylonitrile	<10,000	<25,000	<10,000	<5,000	<5,000	<1,000	<50000	<10	<100	<25
Benzene	**693**	<1,100	<440	<220	**337**	<1,100	**32000**	<4.4	<5	**745**
Bis (chloromethyl) ether	<1,000	<2,500	<1,000	<500	<500	NA	NA	NA	NA	NA
Bromoform	<470	<1,200	<470	<240	<240	<1,200	<2500	<4.7	<5	<24
Carbon tetrachloride	<280	<700	<280	<140	<140	<700	<2500	<2.8	<5	<14
Chlorobenzene	**14,700**	**16,700**	**10,700**	**10,800**	**14,100**	**20400**	<2500	<6.0	<5	**2420**
Chlorodibromomethane	<310	<780	<310	<160	<160	<780	<2500	<3.1	<5	<16
Chloroethane	<1,000	<2,500	<1,000	<500	<500	<2,500	<5000	<10	<10	<50
2-Chloroethylvinyl ether	<1,000	<2,500	<1,000	<500	<500	NA	<25000	NA	<50	NA
Chloroform	<160	<400	<160	<80	<80	<400	<2500	<1.6	<5	<8.0
Dichlorobromomethane	<220	<550	<220	<110	<110	<550	<2500	<2.2	<5	<11
Dichlorodifluoromethane	<1,000	<2,500	<1,000	<500	<500	<2,500	<2500	<10	<5	<50
1,1-Dichloroethane	<470	<1,200	<470	<240	<240	<1,200	<2500	<4.7	<5	<24
1,2-Dichloroethane	<280	<700	<280	<140	<140	<700	<2500	<2.8	<5	<14
1,1-Dichloroethylene	<280	<700	<280	<140	<140	<700	<2500	<2.8	<5	<14
1,2-Dichloropropane	<600	<1,500	<600	<300	<300	<1,500	<2500	<6.0	<5	<30
cis-1,3-Dichloropropylene	<500	<1,300	<500	<250	<250	<1,300	<2500	<5.0	<5	<25
Ethylbenzene	<720	<1,800	<720	<360	<360	<1,800	<2500	<7.2	<5	<36
Methyl bromide	<1,000	<2,500	<1,000	<500	<500	<2,500	<5000	<10	<10	<50
Methyl chloride	<1,000	<2,500	<1,000	<500	<500	<2,500	<5000	<10	<10	<50
Methylene chloride	**455**	**1,250**	<280	**159**	**142**	<700	<2500	<2.8	<5	<14
1,1,2,2-Tetrachloroethane	<690	<1,700	<690	<350	<350	<1,700	<2500	<6.9	<5	<35
Tetrachloroethylene	<410	<1,000	<410	<210	<210	<1,000	<2500	<4.1	<5	<21
Toluene	<600	<1,500	<600	<300	<300	<1,500	<2500	<6.0	<5	<30
1,2-trans-Dichloroethylene	<160	<400	<160	<80	<80	<400	<2500	<1.6	<5	<8.0
1,1,1-Trichloroethane	<380	<950	<380	<190	<190	<950	<2500	<3.8	<5	**74.2**
1,2-Trichloroethane	<500	<1,300	<500	<250	<250	<1,300	<2500	<5.0	<5	<25
richloroethylene	<190	<480	<190	<95	<95	<480	<2500	<1.9	<5	<9.5
Trichlorofluoromethane	<1,000	<2,500	<1,000	<500	<500	<2,500	<2500	<10	<5	<50
Vinyl chloride	<1,000	<2,500	<1,000	<500	<500	<2,500	<5000	<10	<10	<50
trans-1,3-Dichloropropylene	<1,000	<2,500	<1,000	<500	<500	<2,500	<12000	<10	<5	<50
Sub Total 1	15,848	17,950	10,700	10,959	14,579	20,400	32,000	0	0	3,239
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	<2,500	NA	<10	NA	<50
Methyl ethyl ketone	NA	NA	NA	NA	NA	<2,500	NA	<10	NA	<50
Carbon disulfide	NA	NA	NA	NA	NA	<2,500	NA	<10	NA	<50
2-Hexanone	NA	NA	NA	NA	NA	<2,500	NA	<10	NA	<50
Styrene	NA	NA	NA	NA	NA	<2,500	NA	<10	NA	<50
Methyl-iso-butyl ketone	NA	NA	NA	NA	NA	<2,500	<12000	<10	<25	<50
Methyl isoamyl ketone	NA	NA	NA	NA	NA	NA	<12000	NA	<25	NA
m-Xylene	NA	NA	NA	NA	NA	<2,500	<2500	<10	<5	<50
o-Xylene/p-Xylene	NA	NA	NA	NA	NA	<2,500	<2500	<10	<5	<50
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	15,848	17,950	10,700	10,959	14,579	20,400	32,000	0	0	3,239

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Well Number:	GM-6B	GM-9A	GM-9A	GM-9A	GM-9A	GM-9A	GM-9A	GM-9A	GM-9A	GM-9A
Date:	11/92	12/86	5/87	11/87	5/88	11/88	11/89	11/90	11/91	11/92
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<20	<1,000	<100	<100	<100	<100	<100	<2,000	<250	<2,500
Acrylonitrile	<10	<1,000	<100	<100	<100	<100	<100	<2,000	<250	<2,500
Benzene	<4.4	**74.4**	**8.6**	<4.4	<4.4	<4.4	<4.4	**1,290**	**69.0**	**863**
Bis (chloromethyl) ether	NA	<100	<10	<10	<10	<10	<10	<200	<25	<250
Bromoform	<4.7	<47	<4.7	<4.7	<4.7	<4.7	<4.7	<94	<12	<120
Carbon tetrachloride	<2.8	<28	<2.8	<2.8	<2.8	<2.8	<2.8	<56	<7.0	<70
Chlorobenzene	**180**	<60	**138**	<6.0	<6.0	<6.0	<6.0	**2,090**	**443**	**2,010**
Chlorodibromomethane	<3.1	<31	<3.1	<3.1	<3.1	<3.1	<3.1	<62	<7.8	<78
Chloroethane	<10	<100	<10	<10	<10	<10	<10	<200	<25	<250
2-Chloroethylvinyl ether	NA	<100	<10	<10	<10	<10	<10	<200	<25	<250
Chloroform	<1.6	<16	<1.6	<1.6	<1.6	<1.6	<1.6	<32	<4.0	<40
Dichlorobromomethane	<2.2	<22	<2.2	<2.2	<2.2	<2.2	<2.2	<44	<5.5	<55
Dichlorodifluoromethane	<10	<100	<10	<10	<10	<10	<10	<200	<25	<250
1,1-Dichloroethane	<4.7	<47	**6.2**	<4.7	<4.7	<4.7	<4.7	<94	<12	<120
1,2-Dichloroethane	<2.8	<28	<2.8	<2.8	<2.8	<2.8	<2.8	<56	<7.0	<70
1,1-Dichloroethylene	<2.8	<28	**7.1**	<2.8	<2.8	<2.8	<2.8	<56	<7.0	<70
1,2-Dichloropropane	<6.0	<60	<6	<6.0	<6.0	<6.0	<6.0	<120	<15	<150
cis-1,3-Dichloropropylene	<5.0	<50	<5	<5.0	<5.0	<5.0	<5.0	<100	<13	<130
Ethylbenzene	<7.2	<72	<7.2	<7.2	<7.2	<7.2	<7.2	<140	<18	<180
Methyl bromide	<10	<100	<10	<10	<10	<10	<10	<200	<25	<250
Methyl chloride	<10	<100	<10	<10	<10	<10	<10	<200	<25	<250
Methylene chloride	<2.8	<28	<2.8	**11.6**	**7.4**	**5.46**	<2.8	<56	<7.0	<70
1,1,2,2-Tetrachloroethane	<6.9	<69	<6.9	<6.9	<6.9	<6.9	<6.9	<140	<17	<170
Tetrachloroethylene	<4.1	<41	<4.1	<4.1	<4.1	<4.1	<4.1	<82	<10	<100
Toluene	<6.0	<60	<6	<6.0	<6.0	<6.0	<6.0	<120	<15	<150
1,2-trans-Dichloroethylene	<1.6	<16	<1.6	<1.6	<1.6	<1.6	<1.6	<32	<4.0	<40
1,1,1-Trichloroethane	<3.8	<38	**112**	<3.8	<3.8	**5.92**	**4.46**	<76	<9.5	<95
1,1,2-Trichloroethane	<5.0	<50	<5	<5.0	<5.0	<5.0	<5.0	<100	<13	<130
Trichloroethylene	<1.9	<19	<1.9	<1.9	<1.9	<1.9	<1.9	<38	<4.8	<48
Trichlorofluoromethane	<10	<100	<10	<10	<10	<10	<10	<200	<25	<250
Vinyl chloride	<10	<100	<10	<10	<10	<10	<10	<200	<25	<250
trans-1,3-Dichloropropylene	<10	<100	<10	<10	<10	<10	<10	<200	<25	<250
Sub Total 1	180	74	272	12	7	11	4	3,380	512	2,873
Miscellaneous Volatile Organic Compounds										
Acetone	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl isoamyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m-Xylene	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene/p-Xylene	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	180	74	272	12	7	11	4	3,380	512	2,873

See footnotes on last page.

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Well Number:	GM-9A	GM-9B	GM-9B	GM-9B	GM-9B	GM-9B	GM-9B	GM-9B	GM-9B	GM-9B
Date:	9/94	12/86	5/87	11/87	5/88	11/88	11/89	11/90	11/91	11/92
Laboratory:	SL	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<1,000	<100	<100	<100	<500	<100	<100	<2,000	<500	<2,500
Acrylonitrile	<1,000	<100	<100	<100	<500	<100	<100	<2,000	<500	<2,500
Benzene	**810**	<4.4	**10.8**	**11.9**	<22	**7.66**	**5.60**	**1,680**	**717**	**3,960**
Bis (chloromethyl) ether	NA	<10	<10	<10	<50	<10	<10	<200	<50	<250
Bromoform	<50	<4.7	<4.7	<4.7	<24	<4.7	<4.7	<94	<24	<120
Carbon tetrachloride	<50	<2.8	<2.8	<2.8	<14	<2.8	<2.8	<56	<14	<70
Chlorobenzene	**1,400**	<6	**96.6**	**130.0**	**248**	**187**	**124**	**289**	**621**	**486**
Chlorodibromomethane	<50	<3.1	<3.1	<3.1	<16	<3.1	<3.1	<62	<16	<78
Chloroethane	<100	<10	<10	<10	<50	<10	<10	<200	<50	<250
2-Chloroethylvinyl ether	<500	<10	<10	<10	<50	<10	<10	<200	<50	<250
Chloroform	<50	<1.6	<1.6	<1.6	<8.0	<1.6	<1.6	<32	<8.0	<40
Dichlorobromomethane	<50	<2.2	<2.2	<2.2	<11	<2.2	<2.2	<44	<11	<55
Dichlorodifluoromethane	<50	<10	<10	<10	<50	<10	<10	<200	<50	<250
1,1-Dichloroethane	<50	<4.7	**34.6**	**31.1**	<24	<4.7	<4.7	<94	<24	<120
1,2-Dichloroethane	<50	<2.8	<2.8	<2.8	<14	<2.8	<2.8	<56	<14	<70
1,1-Dichloroethylene	<50	<2.8	**13.5**	**5.94**	<14	<2.8	<2.8	<56	<14	<70
1,2-Dichloropropane	<50	<6	<6	<6.0	<30	<6	<6.0	<120	<30	<150
cis-1,3-Dichloropropylene	<50	<5	<5	<5.0	<25	<5	<5.0	<100	<25	<130
Ethylbenzene	<50	<7.2	<7.2	<7.2	<36	<7.2	<7.2	<140	<36	<180
Methyl bromide	<100	<10	<10	<10	<50	<10	<10	<200	<50	<250
Methyl chloride	<100	<10	<10	<10	<50	<10	<10	<200	<50	<250
Methylene chloride	<50	<2.8	<2.8	<2.8	**39.3**	**7.84**	<2.8	<56	**15.7**	<70
1,1,2,2-Tetrachloroethane	<50	<6.9	<6.9	<6.9	<35	<6.9	<6.9	<140	<35	<170
Tetrachloroethylene	<50	<4.1	<4.1	<4.1	<21	<4.1	<4.1	<82	<21	<100
Toluene	<50	<6	<6	<6.0	<30	<6	<6.0	<120	<30	<150
1,2-trans-Dichloroethylene	<50	<1.6	**146**	**110**	**22.6**	<1.6	<1.6	<32	<8.0	<40
1,1,1-Trichloroethane	<50	<3.8	**8.4**	<3.8	<19	<3.8	<3.8	<76	<19	<95
,1,2-Trichloroethane	<50	<5	<5	<5.0	<25	<5	<5.0	<100	<25	<130
richloroethylene	<50	<1.9	<1.9	<1.9	<9.5	<1.9	<1.9	<38	<9.5	<48
Trichlorofluoromethane	<50	<10	<10	<10	<50	<10	<10	<200	<50	<250
Vinyl chloride	<100	<10	**22.8**	**13.9**	<50	**73.8**	<10	<200	<50	<250
trans-1,3-Dichloropropylene	<50	<10	<10	<10	<50	<10	<10	<200	<50	<250
Sub Total 1	2,210	0	333	303	310	276	130	1,969	1,354	4,446
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	<250	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl isoamyl ketone	<250	NA	NA	NA	NA	NA	NA	NA	NA	NA
m-Xylene	**120**	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene/p-Xylene	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	120	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	2,330	0	333	303	310	276	130	1,969	1,354	4,446

See footnotes on last page.

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Well Number:	GM-9B	GM-9C	GM-9C	GM-9C	GM-9C	GM-9C	GM-9C	GM-9C	GM-9C	GM-9C
Date:	9/94	12/86	5/87	11/87	5/88	11/88	11/89	11/90	11/91	11/92
Laboratory:	SL	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<20,000	<100	<100	<100	<100	<100	<100	<2,000	<1,000	<500
Acrylonitrile	<20,000	<100	<100	<100	<100	<100	<100	<2,000	<1,000	<500
Benzene	**3,300**	<4.4	**30.9**	**11.9**	<4.4	**22.5**	**5.43**	**1,730**	**313**	**299**
Bis (chloromethyl) ether	NA	<10	<10	<10	<10	<10	<10	<200	<100	<50
Bromoform	<100	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<94	<47	<24
Carbon tetrachloride	<100	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<56	<28	<14
Chlorobenzene	**540**	**17.9**	**636.0**	**214.0**	<6.0	**139**	**56.9**	**307**	**1,060**	**584**
Chlorodibromomethane	<100	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<62	<31	<16
Chloroethane	<200	<10	<10	<10	<10	<10	<10	<200	<100	<50
2-Chloroethylvinyl ether	<1,000	<10	<10	<10	<10	<10	<10	<200	<100	<50
Chloroform	<100	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<32	<16	<8.0
Dichlorobromomethane	<100	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<44	<22	<11
Dichlorodifluoromethane	<100	<10	<10	<10	<10	<10	<10	<200	<100	<50
1,1-Dichloroethane	<100	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<94	<47	<24
1,2-Dichloroethane	<100	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<56	<28	<14
1,1-Dichloroethylene	<100	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<56	<28	<14
1,2-Dichloropropane	<100	<6	<6	<6.0	<6.0	<6	<6.0	<120	<60	<30
cis-1,3-Dichloropropylene	<100	<5	<5	<5.0	<5.0	<5	<5.0	<100	<50	<25
Ethylbenzene	<100	<7.2	**10.7**	<7.2	<7.2	<7.2	<7.2	<140	<72	<36
Methyl bromide	<200	<10	<10	<10	<10	<10	<10	<200	<100	<50
Methyl chloride	<200	<10	<10	<10	<10	<10	<10	<200	<100	<50
Methylene chloride	<100	<2.8	<2.8	**9.40**	**34.5**	**8.14**	<2.8	<56	<28	<14
1,1,2,2-Tetrachloroethane	<100	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<140	<69	<35
Tetrachloroethylene	<100	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<82	<41	<21
Toluene	<100	<6	<6	**10.8**	<6.0	<6	<6.0	<120	<60	<30
1,2-trans-Dichloroethylene	<100	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<32	,16	<8.0
1,1,1-Trichloroethane	<100	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<76	<38	<19
1,1,2-Trichloroethane	<100	<5	<5	<5.0	<5.0	<5	<5.0	<100	<50	<25
Trichloroethylene	<100	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<38	<19	<9.5
Trichlorofluoromethane	<100	<10	<10	<10	<10	<10	<10	<200	<100	<50
Vinyl chloride	<200	<10	<10	<10	<10	<10	<10	<200	<100	<50
trans-1,3-Dichloropropylene	<100	<10	<10	<10	<10	<10	<10	<200	<100	<50
Sub Total 1	3,840	18	678	246	35	170	62	2,037	1,373	883
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	<500	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl isoamyl ketone	<500	NA	NA	NA	NA	NA	NA	NA	NA	NA
m-Xylene	<100	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene/p-Xylene	<100	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	3,840	18	678	246	35	170	62	2,037	1,373	883

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Well Number:	GM-9C	GM-10A	GM-10A	GM-10A	GM-10A	GM-10A	GM-10A	GM-10A	GM-10A	GM-10A
Date:	9/94	12/86	5/87	11/87	5/88	11/88	11/89	11/90	11/92	9/94
Laboratory:	SL	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	SL
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<500	<100	<100	<100	<100	<100	<100	<5,000	<100	<100
Acrylonitrile	<500	<100	<100	<100	<100	<100	<100	<5,000	<100	<100
Benzene	**150**	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	**6,030**	<4.4	<5
Bis (chloromethyl) ether	NA	<10	<10	<10	<10	<10	<10	<500	<10	NA
Bromoform	<25	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<240	<4.7	<5
Carbon tetrachloride	<25	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<140	<2.8	<5
Chlorobenzene	**200**	<6	<6	<6.0	<6.0	<6.0	<6.0	<300	<6.0	<5
Chlorodibromomethane	<25	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<160	<3.1	<5
Chloroethane	<50	<10	<10	<10	<10	<10	<10	<500	<10	<10
2-Chloroethylvinyl ether	<250	<10	<10	<10	<10	<10	<10	<500	<10	<50
Chloroform	<25	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<80	<1.6	<5
Dichlorobromomethane	<25	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<110	<2.2	<5
Dichlorodifluoromethane	<25	<10	<10	<10	<10	<10	<10	<500	<10	<5
1,1-Dichloroethane	<25	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<240	<4.7	<5
1,2-Dichloroethane	<25	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<140	<2.8	<5
1,1-Dichloroethylene	<25	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<140	<2.8	<5
1,2-Dichloropropane	<25	<6	<6	<6.0	<6.0	<6.0	<6.0	<300	<6.0	<5
cis-1,3-Dichloropropylene	<25	<5	<5	<5.0	<5.0	<5.0	<5.0	<250	<5.0	<5
Ethylbenzene	<25	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<360	<7.2	<5
Methyl bromide	<50	<10	<10	<10	<10	<10	<10	<500	<10	<10
Methyl chloride	<50	<10	<10	<10	<10	<10	<10	<500	<10	<10
Methylene chloride	<25	<2.8	<2.8	<2.8	**37.2**	**7.09**	<2.8	<140	<2.8	<5
1,1,2,2-Tetrachloroethane	<25	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<350	<6.9	<5
Tetrachloroethylene	<25	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<210	<4.1	<5
Toluene	<25	<6	<6	<6.0	<6.0	<6.0	<6.0	<300	<6.0	<5
1,2-trans-Dichloroethylene	<25	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<80	<1.6	<5
1,1-Trichloroethane	<25	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<190	<3.8	<5
1,1,2-Trichloroethane	<25	<5	<5	<5.0	<5.0	<5.0	<5.0	<250	<5.0	<5
Trichloroethylene	<25	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<95	<1.9	<5
Trichlorofluoromethane	<25	<10	<10	<10	<10	<10	<10	<500	<10	<5
Vinyl chloride	<50	<10	<10	<10	<10	<10	<10	<500	<10	<10
trans-1,3-Dichloropropylene	<25	<10	<10	<10	<10	<10	<10	<500	<10	<5
Sub Total 1	350	0	0	0	37	7	0	5,030	0	0
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	<120	NA	NA	NA	NA	NA	NA	NA	NA	<25
Methyl isoamyl ketone	<120	NA	NA	NA	NA	NA	NA	NA	NA	<25
m-Xylene	<25	NA	NA	NA	NA	NA	NA	NA	NA	<5
o-Xylene/p-Xylene	<25	NA	NA	NA	NA	NA	NA	NA	NA	<5
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	350	0	0	0	37	7	0	5,030	0	0

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Well Number:	GM-10B	GM-10B	GM-10B	GM-10B	GM-10B	GM-10B	GM-10B	GM-10B	GM-10B	GM-10B
Date:	12/86	5/87	11/87	5/88	11/88	11/89	11/90	11/91	11/92	9/94
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	SL
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<1,000	<100	<100	<100	<100	<1,000	<100	<1,000	<5,000	<2,500
Acrylonitrile	<1,000	<100	<100	<100	<100	<1,000	<100	<1,000	<5,000	<2,500
Benzene	<44	<4.4	**13.1**	<4.4	<4.4	<44	**10.2**	**63.0**	<220	<120
Bis (chloromethyl) ether	<100	<10	<10	<10	<10	<100	<10	<100	<500	NA
Bromoform	<47	<4.7	<4.7	<4.7	<4.7	<47	<4.7	<47	<240	<120
Carbon tetrachloride	<28	<2.8	<2.8	<2.8	<2.8	<28	<2.8	<28	<140	<120
Chlorobenzene	**299**	<6	**616**	<6.0	<6.0	**502**	**7.46**	**1,250**	**3,140**	**2,300**
Chlorodibromomethane	<31	<3.1	<3.1	<3.1	<3.1	<31	<3.1	<31	<160	<120
Chloroethane	<100	<10	<10	<10	<10	<100	<10	<100	<500	<250
2-Chloroethylvinyl ether	<100	<10	<10	<10	<10	<100	<10	<100	<500	<1,200
Chloroform	<16	<1.6	<1.6	**1.7**	<1.6	<16	<1.6	<16	<80	<120
Dichlorobromomethane	<22	<2.2	<2.2	<2.2	<2.2	<22	<2.2	<22	<110	<120
Dichlorodifluoromethane	<100	<10	<10	<10	<10	<100	<10	<100	<500	<120
1,1-Dichloroethane	<47	<4.7	<4.7	<4.7	<4.7	<47	<4.7	<47	<240	<120
1,2-Dichloroethane	<28	<2.8	<2.8	<2.8	<2.8	<28	<2.8	<28	<140	<120
1,1-Dichloroethylene	<28	<2.8	<2.8	<2.8	<2.8	<28	<2.8	<28	<140	<120
1,2-Dichloropropane	<60	<6	<6.0	<6.0	<6.0	<60	<6.0	<60	<300	<120
cis-1,3-Dichloropropylene	<50	<5	<5.0	<5.0	<5.0	<50	<5.0	<50	<250	<120
Ethylbenzene	<72	<7.2	<7.2	<7.2	<7.2	<72	<7.2	<72	<360	<120
Methyl bromide	<100	<10	<10	<10	<10	<100	<10	<100	<500	<250
Methyl chloride	<100	<10	<10	<10	<10	<100	<10	<100	<500	<250
Methylene chloride	<28	**5**	<2.8	**35.1**	**7.46**	<28	<2.8	<28	<140	<120
1,1,2,2-Tetrachloroethane	<69	<6.9	<6.9	<6.9	<6.9	<69	<6.9	<69	<350	<120
Tetrachloroethylene	<41	<4.1	<4.1	<4.1	<4.1	<41	<4.1	<41	<210	<120
Toluene	<60	<6	<6.0	<6.0	<6.0	<60	<6.0	<60	<300	<120
1,2-trans-Dichloroethylene	<16	<1.6	<1.6	<1.6	<1.6	<16	<1.6	<16	<80	<120
1,1,1-Trichloroethane	<38	<3.8	<3.8	<3.8	<3.8	<38	<3.8	<38	<190	<120
1,1,2-Trichloroethane	<50	<5	<5.0	<5.0	<5.0	<50	<5.0	<50	<250	<120
Trichloroethylene	<19	<1.9	<1.9	<1.9	<1.9	<19	<1.9	<19	<95	<120
Trichlorofluoromethane	<100	<10	<10	<10	<10	<100	<10	<100	<500	<120
Vinyl chloride	<100	<10	<10	<10	<10	<100	<10	<100	<500	<250
trans-1,3-Dichloropropylene	<100	<10	<10	<10	<10	<100	<10	<100	<500	<120
Sub Total 1	299	5	629	37	7	502	18	1,313	3,140	2,300
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	<620
Methyl isoamyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	<620
m-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	<120
o-Xylene/p-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	<120
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	299	5	629	37	7	502	18	1,313	3,140	2,300

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Well Number:	GM-10C	GM-10C	GM-10C	GM-10C	GM-10C	GM-10C	GM-10C	GM-10C	GM-10C	GM-12A
Date:	12/86	5/87	11/87	11/88	11/89	11/90	11/91	11/92	9/94	12/86
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	SL	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<100	<100	<100	<100	<500	<100	<100	<100	<1,000
Acrylonitrile	<100	<100	<100	<100	<100	<500	<100	<100	<100	<1,000
Benzene	<4.4	<4.4	<4.4	<4.4	<4.4	<22	<4.4	<4.4	<5	**957**
Bis (chloromethyl) ether	<10	<10	<10	<10	<10	<50	<10	<10	NA	<100
Bromoform	<4.7	<4.7	<4.7	<4.7	<4.7	<24	<4.7	<4.7	<5	<47
Carbon tetrachloride	<2.8	<2.8	<2.8	<2.8	<2.8	<14	<2.8	<2.8	<5	<28
Chlorobenzene	**23.4**	**38.9**	**42.8**	**42.7**	**752.0**	**421**	**83.2**	**18.2**	**120**	**560**
Chlorodibromomethane	<3.1	<3.1	<3.1	<3.1	<3.1	<16	<3.1	<3.1	<5	<31
Chloroethane	<10	<10	<10	<10	<10	<50	<10	<10	<10	<100
2-Chloroethylvinyl ether	<10	<10	<10	<10	<10	<50	<10	<10	<50	<100
Chloroform	<1.6	<1.6	<1.6	<1.6	<1.6	<8.0	<1.6	<1.6	<5	<16
Dichlorobromomethane	<2.2	<2.2	<2.2	<2.2	<2.2	<11	<2.2	<2.2	<5	<22
Dichlorodifluoromethane	<10	<10	<10	<10	<10	<50	<10	<10	<5	<100
1,1-Dichloroethane	<4.7	<4.7	<4.7	<4.7	<4.7	<24	<4.7	<4.7	<5	<47
1,2-Dichloroethane	<2.8	<2.8	<2.8	<2.8	<2.8	<14	<2.8	<2.8	<5	<28
1,1-Dichloroethylene	<2.8	<2.8	<2.8	<2.8	<2.8	<14	<2.8	<2.8	<5	<28
1,2-Dichloropropane	<6	<6	<6.0	<6.0	<6.0	<30	<6.0	<6.0	<5	<60
cis-1,3-Dichloropropylene	<5	<5	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5	<50
Ethylbenzene	<7.2	<7.2	<7.2	<7.2	<7.2	<36	<7.2	<7.2	<5	<72
Methyl bromide	<10	<10	<10	<10	<10	<50	<10	<10	<10	<100
Methyl chloride	<10	<10	<10	<10	<10	<50	<10	<10	<10	<100
Methylene chloride	**14.4**	**17.4**	**6.64**	<2.8	<2.8	<14	<2.8	<2.8	<5	**66**
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<6.9	<6.9	<6.9	<35	<6.9	<6.9	<5	<69
Tetrachloroethylene	<4.1	<4.1	<4.1	<4.1	<4.1	<21	<4.1	<4.1	<5	<41
Toluene	<6	<6	**48.7**	<6.0	<6.0	<30	**6.72**	<6.0	<5	<60
2-trans-Dichloroethylene	<1.6	<1.6	<1.6	<1.6	<1.6	<8.0	<1.6	<1.6	<5	<16
1,1,1-Trichloroethane	<3.8	<3.8	<3.8	<3.8	<3.8	<19	<3.8	<3.8	<5	<38
1,1,2-Trichloroethane	<5	<5	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5	<50
Trichloroethylene	<1.9	<1.9	<1.9	<1.9	<1.9	<9.5	<1.9	<1.9	<5	<19
Trichlorofluoromethane	<10	<10	<10	<10	<10	<50	<10	<10	<5	<100
Vinyl chloride	<10	<10	<10	<10	<10	<50	<10	<10	<10	<100
trans-1,3-Dichloropropylene	<10	<10	<10	<10	<10	<50	<10	<10	<5	<100
Sub Total 1	38	56	98	43	752	421	90	18	120	1,583
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	<25	<100
Methyl isoamyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	<25	<100
m-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	<5	<100
o-Xylene/p-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	<5	<100
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	38	56	98	43	752	421	90	18	120	1,583

See footnotes on last page.

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Well Number:	GM-10C	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A
Date:	5/88	12/86*	5/87	5/87*	11/87	11/87*	5/88	5/88*	11/88	11/88 *
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<1,000	<1,000	<1,000	<500	<500	<1,000	<1,000	<1,000	<1,000
Acrylonitrile	<100	<1,000	<1,000	<1,000	<500	<500	<1,000	<1,000	<1,000	<1,000
Benzene	<4.4	**632**	**428**	**646**	**817**	**697**	**587**	**583**	**674**	**613**
Bis (chloromethyl) ether	<10	<100	<100	<100	<50	<50	<100	<100	<100	<100
Bromoform	<4.7	<47	<47	<47	<24	<24	<47	<47	<47	<47
Carbon tetrachloride	<2.8	<28	<28	<28	<14	<14	<28	<28	<28	<28
Chlorobenzene	**38.4**	**377**	**261**	**334**	**283**	**243**	**276**	**251**	**179**	**162**
Chlorodibromomethane	<3.1	<31	<31	<31	<16	<16	<31	<31	<31	<31
Chloroethane	<10	<100	<100	<100	<50	<50	<100	<100	<100	<100
2-Chloroethylvinyl ether	<10	<100	<100	<100	<50	<50	<100	<100	<100	<100
Chloroform	**1.8**	<16	<16	<16	<8.0	<8.0	<16	<16	<16	<16
Dichlorobromomethane	<2.2	<22	<22	<22	<11	<11	<22	<22	<22	<22
Dichlorodifluoromethane	<10	<100	<100	<100	<50	<50	<100	<100	<100	<100
1,1-Dichloroethane	<4.7	<47	<47	<47	<24	<24	<47	<47	<47	<47
1,2-Dichloroethane	<2.8	<28	<28	<28	<14	<14	<28	<28	<28	<28
1,1-Dichloroethylene	<2.8	<28	<28	<28	<14	<14	<28	<28	<28	<28
1,2-Dichloropropane	<6.0	<60	<60	<60	<30	<30	<60	<60	<60	<60
cis-1,3-Dichloropropylene	<5.0	<50	<50	<50	<36	<25	<50	<50	<50	<50
Ethylbenzene	<7.2	<72	<72	<72	<50	<36	<72	<72	<72	<72
Methyl bromide	<10	<100	<100	<100	<50	<50	<100	<100	<100	<100
Methyl chloride	<10	<100	<100	<100	<50	<50	<100	<100	<100	<100
Methylene chloride	**8.0**	**80**	**67.4**	**64**	<14	**18.8**	**120**	**101**	**49.3**	**263**
1,1,2,2-Tetrachloroethane	<6.9	<69	<69	<69	<35	<35	<69	<69	<69	<69
Tetrachloroethylene	<4.1	<41	<41	<41	<21	<21	<41	<41	<41	<41
Toluene	<6.0	<60	<60	<60	<30	<30	<60	<60	<60	<60
1,2-trans-Dichloroethylene	<1.6	<16	<16	<16	<8.0	<8.0	<16	<16	<16	<16
1,1,1-Trichloroethane	<3.8	<38	<38	<38	<19	<19	<38	<38	<38	<38
1,1,2-Trichloroethane	<5.0	<50	<50	<50	<25	<25	<50	<50	<50	<50
Trichloroethylene	<1.9	<19	<19	<19	<9.5	<9.5	<19	<19	<19	<19
Trichlorofluoromethane	<10	<100	<100	<100	<50	<50	<100	<100	<100	<100
Vinyl chloride	<10	<100	<100	<100	<50	<50	<100	<100	<100	<100
trans-1,3-Dichloropropylene	<10	<100	<100	<100	<50	<50	<100	<100	<100	<100
Sub Total 1	48	1,089	756	943	1,100	859	983	935	902	1,038
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	<100	<100	<100	<50	<50	<100	<100	<100	<100
Methyl isoamyl ketone	NA	<100	<100	<100	<50	<50	<100	<100	<100	<100
m-Xylene	NA	<100	<100	<100	<50	<50	<100	<100	<100	<100
o-Xylene/p-Xylene	NA	<100	<100	<100	<50	<50	<100	<100	<100	<100
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	48	1,089	756	943	1,100	859	983	935	902	1,038

See footnotes on last page.

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Well Number:	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A
Date:	11/88	5/89	5/89 *	11/89	11/89*	5/90	5/90*	11/90	11/90*	5/91
Laboratory:	SL	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<500	<1,000	<1,000	<2,000	<2,000	<5,000	<5,000	<5,000	<5,000	<1,000
Acrylonitrile	<500	<1,000	<1,000	<2,000	<2,000	<5,000	<5,000	<5,000	<5,000	<1,000
Benzene	**410**	**762**	**678**	**669**	**676**	**2,850**	**2,620**	<220	**3,650**	**1,280**
Bis (chloromethyl) ether	<100	<100	<100	<200	<200	<500	<500	<500	<500	<100
Bromoform	<50	<47	<47	<94	<94	<240	<240	<240	<240	<47
Carbon tetrachloride	<50	<28	<28	<56	<56	<140	<140	<140	<140	<28
Chlorobenzene	**130**	**96.5**	**93.0**	<120	<120	**432**	**425**	**2,750**	**1,180**	**183**
Chlorodibromomethane	<50	<31	<31	<62	<62	<160	<160	<160	<160	<31
Chloroethane	<100	<100	<100	<200	<200	<500	<500	<500	<500	<100
2-Chloroethylvinyl ether	<50	<100	<100	<200	<200	<500	<500	<500	<500	<100
Chloroform	<50	<16	<16	<32	<32	<80	<80	<80	<80	<16
Dichlorobromomethane	<50	<22	<22	<44	<44	<110	<110	<110	<110	<22
Dichlorodifluoromethane	<100	<100	<100	<200	<200	<500	<500	<500	<500	<100
1,1-Dichloroethane	<50	<47	<47	<94	<94	<240	<240	<240	<240	<47
1,2-Dichloroethane	<50	<28	<28	<56	<56	<140	<140	<140	<140	<28
1,1-Dichloroethylene	<50	<28	<28	<56	<56	<140	<140	<140	<140	<28
1,2-Dichloropropane	<50	<60	<60	<120	<120	<300	<300	<300	<300	<60
cis-1,3-Dichloropropylene	<50	<50	<50	<100	<100	<250	<250	<250	<250	<50
Ethylbenzene	<50	<72	<72	<140	<140	<360	<360	<360	<360	<72
Methyl bromide	<100	<100	<100	<200	<200	<500	<500	<500	<500	<100
Methyl chloride	<100	<100	<100	<200	<200	<500	<500	<500	<500	<100
Methylene chloride	<50	**40.9**	**39.0**	**126**	**147.0**	<140	**432**	<140	<140	**32.0**
1,1,2,2-Tetrachloroethane	<50	<69	<69	<140	<140	<350	<350	<350	<350	<69
Tetrachloroethylene	<50	<41	<41	<82	<82	<210	<210	<210	<210	<41
Toluene	<50	<60	<60	<120	<120	<300	<300	<300	<300	<60
.2-trans-Dichloroethylene	<50	<16	<16	<32	<32	<80	<80	<80	<80	<16
.,1,1-Trichloroethane	<50	<38	<38	<76	<76	<190	<190	<190	<190	<38
1,1,2-Trichloroethane	<50	<50	<50	<100	<100	<250	<250	<250	<250	<50
Trichloroethylene	<50	<19	<19	**43.5**	<38	<95	<95	<95	<95	<19
Trichlorofluoromethane	<50	<100	<100	<200	<200	<500	<500	<500	<500	<100
Vinyl chloride	<100	<100	<100	<200	<200	<500	<500	<500	<500	<100
trans-1,3-Dichloropropylene	<50	<100	<100	<200	<200	<500	<500	<500	<500	<100
Sub Total 1	540	889	810	729	823	3,282	3,377	2,750	4,830	1,495
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	<500	<100	<100	<200	<200	<500	<500	<500	<500	<100
Methyl isoamyl ketone	<100	<100	<100	<200	<200	<500	<500	<500	<500	NA
m-Xylene	<50	<100	<100	<200	<200	<500	<500	<500	<500	<100
o-Xylene/p-Xylene	<50	<100	<100	<200	<200	<500	<500	<500	<500	<100
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	540	889	810	729	823	3,282	3,377	2,750	4,830	1,495

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Well Number:	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12B	GM-12B	GM-12B
Date:	5/91*	11/91	11/91*	11/92	11/92*	9/94	9/94*	12/86	5/87	11/87
Laboratory:	ETC	ETC	ETC	ETC	ETC	SL	SL	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<1,000	<100	<1,000	<100	<100	<2,000	<2,000	<100	<100	<500
Acrylonitrile	<1,000	<100	<1,000	<50	<50	<2,000	<2,000	<100	<100	<500
Benzene	**1,100**	**1,530**	**1,580**	**15.7**	**1,950**	**3,300**	**3,000**	**469**	**11.3**	**1,780**
Bis (chloromethyl) ether	<100	<100	<100	NA	NA	NA	NA	<10	<10	<50
Bromoform	<47	<47	<47	<4.7	<47	<100	<100	<4.7	<4.7	<24
Carbon tetrachloride	<28	<28	<28	<2.8	<28	<100	<100	<2.8	<2.8	<14
Chlorobenzene	**169**	**186**	**183**	<6.0	**112**	**240**	**200**	<6	<6	<30
Chlorodibromomethane	<31	<31	<31	<3.1	<31	<100	<100	<3.1	<3.1	<16
Chloroethane	<100	<100	<100	<10	<100	<200	<200	<10	<10	<50
2-Chloroethylvinyl ether	<100	<100	<100	NA	NA	<1,000	<1,000	<10	<10	<50
Chloroform	<16	<16	<16	<1.6	<16	<100	<100	<1.6	<1.6	<8.0
Dichlorobromomethane	<22	<22	<22	<2.2	<22	<100	<100	<2.2	<2.2	<11
Dichlorodifluoromethane	<100	<100	<100	<10	<100	<100	<100	<10	<10	<50
1,1-Dichloroethane	<47	<47	<47	<4.7	<47	<100	<100	<4.7	<4.7	<24
1,2-Dichloroethane	<28	<28	<28	<2.8	<28	<100	<100	<2.8	<2.8	<14
1,1-Dichloroethylene	<28	<28	<28	<2.8	<28	<100	<100	<2.8	<2.8	<14
1,2-Dichloropropane	<60	<60	<60	<6.0	<60	<100	<100	<6	<6	<30
cis-1,3-Dichloropropylene	<50	<50	<50	<5.0	<50	<100	<100	<5	<5	<25
Ethylbenzene	<72	<72	<72	<7.2	<72	<100	<100	<7.2	<7.2	<36
Methyl bromide	<100	<100	<100	<10	<100	<200	<200	<10	<10	<50
Methyl chloride	<100	<100	<100	<10	<100	<200	<200	<10	<10	<50
Methylene chloride	**39.4**	<28	<28	<2.8	<28	<100	<100	<2.8	**16.1**	<14
1,1,2,2-Tetrachloroethane	<69	<69	<69	<6.9	<69	<100	<100	<6.9	<6.9	<35
Tetrachloroethylene	<41	<41	<41	<4.1	<41	<100	<100	<4.1	<4.1	<21
Toluene	<60	<60	<60	<6.0	<60	<100	<100	**17.2**	<6.0	**35.4**
1,2-trans-Dichloroethylene	<16	<16	<16	<1.6	<16	<100	<100	<1.6	<1.6	<8.0
1,1,1-Trichloroethane	<38	<38	<38	<3.8	<38	<100	<100	<3.8	<3.8	<19
1,1,2-Trichloroethane	<50	<50	<50	<5.0	<50	<100	<100	<5	<5	<25
Trichloroethylene	<19	<19	<19	<1.9	<19	<100	<100	<1.9	<1.9	<9.5
Trichlorofluoromethane	<100	<100	<100	<10	<100	<100	<100	<10	<10	<50
Vinyl chloride	<100	<100	<100	<10	<100	<200	<200	<10	<10	<50
trans-1,3-Dichloropropylene	<100	<100	<100	<10	<100	<100	<100	<10	<10	<50
Sub Total 1	1,308	1,716	1,763	16	2,062	3,540	3,200	486	27	1,815
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	<10	<100	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	<10	<100	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	<10	<100	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	<100	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	<10	<100	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	<100	<100	<100	NA	<100	<500	<500	<10	<10	<50
Methyl isoamyl ketone	NA	<100	<100	NA	NA	<500	<500	<10	<10	<50
m-Xylene	<100	<100	<100	NA	<100	<100	<100	<10	<10	<50
o-Xylene/p-Xylene	<100	<100	<100	NA	<100	<100	<100	**20.9**	**20.9**	**54.7**
Sub Total 2	0	0	0	0	0	0	0	21	21	55
Total VOCs Analyzed	1,308	1,716	1,763	16	2,062	3,540	3,200	507	48	1,870

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Well Number:	GM-12B	GM-12B	GM-12B	GM-12B	GM-12B	GM-12B	GM-12B	GM-12B	GM-12B	GM-12B
Date:	5/88	11/88	5/89	11/89	5/90	11/90	5/91	11/91	11/92	9/94
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	SL
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<1,000	<1,000	<5,000	<5,000	<1,000	<100	<2,500	<1,000	<50	<10,000
Acrylonitrile	<1,000	<1,000	<5,000	<5,000	<1,000	<100	<2,500	<1,000	<25	<10,000
Benzene	**398**	**1,990**	**1,920**	**2,810**	**634**	<4.4	**2,400**	**2,100**	**524**	**9,400**
Bis (chloromethyl) ether	<100	<100	<500	<500	<100	<10	<250	<100	NA	NA
Bromoform	<47	<47	<240	<240	<47	<4.7	<120	<47	<24	<500
Carbon tetrachloride	<28	<28	<140	<140	<28	<2.8	<70	<28	<14	<500
Chlorobenzene	<60	<60	<300	<300	<60	<6.0	<150	<60	<30	<500
Chlorodibromomethane	<31	<31	<160	<160	<31	<3.1	<78	<31	<16	<500
Chloroethane	<100	<100	<500	<500	<100	<10	<250	<100	<50	<1,000
2-Chloroethylvinyl ether	<100	<100	<500	<500	<100	<10	<250	<100	NA	<5,000
Chloroform	<16	<16	<80	<80	<16	<1.6	<40	<16	<8.0	<500
Dichlorobromomethane	<22	<22	<110	<110	<22	<2.2	<55	<22	<11	<500
Dichlorodifluoromethane	<100	<100	<500	<500	<100	<10	<250	<100	<50	<500
1,1-Dichloroethane	<47	<47	<240	<240	<47	<4.7	<120	<47	<24	<500
1,2-Dichloroethane	<28	<28	<140	<140	<28	<2.8	<70	<28	<14	<500
1,1-Dichloroethylene	<28	<28	<140	<140	<28	<2.8	<70	<28	<14	<500
1,2-Dichloropropane	<60	<60	<300	<300	<60	<6.0	<150	<60	<30	<500
cis-1,3-Dichloropropylene	<50	<50	<250	<250	<50	<5.0	<130	<50	<25	<500
Ethylbenzene	<72	<72	<360	<360	<72	<7.2	<180	<72	<36	<500
Methyl bromide	<100	<100	<500	<500	<100	<10	<250	<100	<50	<1,000
Methyl chloride	<100	<100	<500	<500	<100	<10	<250	<100	<50	<1,000
Methylene chloride	<28	**223**	**232**	<140	**33.8**	<2.8	<70	<28	<14	<500
1,1,2,2-Tetrachloroethane	<69	<69	<350	<350	<69	<6.9	<170	<69	<35	<500
Tetrachloroethylene	<41	<41	<210	<210	<41	<4.1	<100	<41	<21	<500
Toluene	<60	<60	<300	<300	<60	<6.0	<150	<60	<30	<500
1,2-trans-Dichloroethylene	<16	**16.1**	<80	<80	<16	<1.6	<40	<16	<8.0	<500
,1,1-Trichloroethane	<38	<38	<190	<190	<38	<3.8	<95	<38	<19	<500
ı,1,2-Trichloroethane	<50	<50	<250	<250	<50	<5.0	<130	<50	<25	<500
Trichloroethylene	<19	<19	<95	<95	<19	<1.9	<48	<19	<9.5	<500
Trichlorofluoromethane	<100	<100	<500	<500	<100	<10	<250	<100	<50	<500
Vinyl chloride	<100	<100	<500	<500	<100	<10	<250	<100	<50	<1,000
trans-1,3-Dichloropropylene	<100	<100	<500	<500	<100	<10	<250	<100	<50	<500
Sub Total 1	398	2,229	2,152	2,810	668	0	2,400	2,100	524	9,400
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	**257**	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	<50	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	<50	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	<50	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	<50	NA
Methyl-iso-butyl ketone	<100	<100	<500	<500	<100	<10	<250	<100	<50	<2,500
Methyl isoamyl ketone	<100	<100	<500	<500	<100	<10	NA	<100	NA	<2,500
m-Xylene	**1,110**	**143**	<500	<500	<100	<10	<250	<100	<50	<500
o-Xylene/p-Xylene	**832**	**141**	<500	<500	<100	<10	<250	<100	<50	<500
Sub Total 2	1,942	284	0	0	0	0	0	0	257	0
Total VOCs Analyzed	2,340	2,513	2,152	2,810	668	0	2,400	2,100	781	9,400

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Well Number:	GM-12C	GM-12C	GM-12C	GM-12C	GM-12C	GM-12C	GM-12C	GM-12C	GM-12C	GM-12C
Date:	12/86	5/87	11/87	5/88	11/88	5/89	11/89	5/90	11/90	5/91
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<100	<100	<100	<100	<100	<100	<100	<5,000	<100
Acrylonitrile	<100	<100	<100	<100	<100	<100	<100	<100	<5,000	<100
Benzene	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	**32.7**	<220	<4.4
Bis (chloromethyl) ether	<10	<10	<10	<10	<10	<10	<10	<10	<500	<10
Bromoform	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<240	<4.7
Carbon tetrachloride	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<140	<2.8
Chlorobenzene	<6	<6	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	**3,960**	<6.0
Chlorodibromomethane	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<160	<3.1
Chloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<500	<10
2-Chloroethylvinyl ether	<10	<10	<10	<10	<10	<10	<10	<10	<500	<10
Chloroform	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<80	<1.6
Dichlorobromomethane	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<110	<2.2
Dichlorodifluoromethane	<10	<10	<10	<10	<10	<10	<10	<10	<500	<10
1,1-Dichloroethane	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<240	<4.7
1,2-Dichloroethane	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<140	<2.8
1,1-Dichloroethylene	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<140	<2.8
1,2-Dichloropropane	<6	<6	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<300	<6.0
cis-1,3-Dichloropropylene	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<250	<5.0
Ethylbenzene	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<360	<7.2
Methyl bromide	<10	<10	<10	<10	<10	<10	<10	<10	<500	<10
Methyl chloride	<10	<10	<10	<10	<10	<10	<10	<10	<500	<10
Methylene chloride	**4.6**	**13.6**	<2.8	**17.4**	**3.29**	<2.8	<2.8	**3.33**	<140	<2.8
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<350	<6.9
Tetrachloroethylene	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<210	<4.1
Toluene	<6	<6	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<300	<6.0
1,2-trans-Dichloroethylene	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<80	<1.6
1,1,1-Trichloroethane	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<190	<3.8
1,1,2-Trichloroethane	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<250	<5.0
Trichloroethylene	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<95	<1.9
Trichlorofluoromethane	<10	<10	**10.6**	<10	<10	<10	<10	<10	<500	<10
Vinyl chloride	<10	<10	<10	<10	<10	<10	<10	<10	<500	<10
trans-1,3-Dichloropropylene	<10	<10	<10	<10	<10	<10	<10	<10	<500	<10
Sub Total 1	5	14	11	17	3	0	0	36	3,960	0
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	<10	<10	<10	<10	<10	<10	<10	<10	<500	<10
Methyl isoamyl ketone	<10	<10	<10	<10	<10	<10	<10	<10	<500	NA
m-Xylene	<10	<10	<10	<10	<10	<10	<10	<10	<500	<10
o-Xylene/p-Xylene	<10	<10	<10	<10	<10	<10	<10	<10	<500	<10
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	5	14	11	17	3	0	0	36	3,960	0

See footnotes on last page.

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Well Number:	GM-12C	GM-12C	GM-12C	GM-17A	GM-17A	GM-17A	GM-17A	GM-17A	GM-17A	GM-17A
Date:	11/91	11/92	9/94	12/86	5/87	11/87	5/88	11/88	11/89	11/90
Laboratory:	ETC	ETC	SL	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<20	<100	<100,000	<100,000	<10,000	<500,000	<100,000	0,000,000	<500,000
Acrylonitrile	<100	<10	<100	<100,000	<100,000	<10,000	<500,000	<100,000	0,000,000	<500,000
Benzene	<4.4	<4.4	<5	**482,000**	**517,000**	**654,000**	**537,000**	**700,000**	**286,000**	**551,000**
Bis (chloromethyl) ether	<10	NA	NA	<10,000	<10,000	<1,000	<50,000	<10,000	1,000,000	<50,000
Bromoform	<4.7	<4.7	<5	<4,700	<4,700	<470	<24,000	<4,700	<470,000	<24,000
Carbon tetrachloride	<2.8	<2.8	<5	<2,800	<2,800	<280	<14,000	<2,800	<280,000	<14,000
Chlorobenzene	<6.0	**13.2**	**16**	**153,000**	**221,000**	**234,000**	**233,000**	**155,000**	**129,000**	**267,000**
Chlorodibromomethane	<3.1	<3.1	<5	<3,100	<3,100	<310	<16,000	<3,100	3,100,000	<16,000
Chloroethane	<10	<10	<10	<10,000	<10,000	<1,000	<50,000	<10,000	1,000,000	<50,000
2-Chloroethylvinyl ether	<10	NA	<50	<10,000	<10,000	<1,000	<50,000	<10,000	1,000,000	<50,000
Chloroform	<1.6	<1.6	<5	<1,600	<1,600	<160	<8,000	<1,600	<160,000	<8,000
Dichlorobromomethane	<2.2	<2.2	<5	<2,200	<2,200	<220	<11,000	<2,200	<220,000	<11,000
Dichlorodifluoromethane	<10	<10	<5	<10,000	<10,000	<1,000	<50,000	<10,000	1,000,000	<50,000
1,1-Dichloroethane	<4.7	<4.7	<5	<4,700	<4,700	<470	<24,000	<4,700	<470,000	<24,000
1,2-Dichloroethane	<2.8	<2.8	<5	<2,800	<2,800	<280	<14,000	<2,800	<280,000	<14,000
1,1-Dichloroethylene	<2.8	<2.8	<5	<2,800	<2,800	<280	<14,000	<2,800	<280,000	<14,000
1,2-Dichloropropane	<6.0	<6.0	<5	<6,000	<6,000	<600	<30,000	<6,000	<600,000	<30,000
cis-1,3-Dichloropropylene	<5.0	<5.0	<5	<5,000	<5,000	<1,000	<25,000	<5,000	<500,000	<25,000
Ethylbenzene	<7.2	<7.2	<5	<7,200	<7,200	<720	<36,000	<7,200	<720,000	<36,000
Methyl bromide	<10	<10	<10	<10,000	<10,000	<1,000	<50,000	<10,000	1,000,000	<50,000
Methyl chloride	<10	<10	<10	<10,000	<10,000	<1,000	<50,000	<10,000	1,000,000	<50,000
Methylene chloride	<2.8	<2.8	<5	<2,800	**17,200**	**890**	<14,000	**9,460**	<28,000	<14,000
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<5	<6,900	<6,900	<690	<35,000	<6,900	<690,000	<35,000
Tetrachloroethylene	<4.1	<4.1	<5	<4,100	<4,100	<410	<21,000	<4,100	<410,000	<21,000
Toluene	<6.0	<6.0	<5	<6,000	<6,000	<600	<30,000	<6,000	<600,000	<30,000
1,2-trans-Dichloroethylene	<1.6	<1.6	<5	<1,600	<1,600	<160	<8,000	<1,600	<160,000	<8,000
1,1,1-Trichloroethane	<3.8	<3.8	<5	<3,800	<3,800	<380	<19,000	<3,800	<380,000	<19,000
1,1,2-Trichloroethane	<5.0	<5.0	<5	<5,000	<5,000	<500	<25,000	<5,000	<500,000	<25,000
Trichloroethylene	<1.9	<1.9	<5	<1,900	<1,900	<190	<9,500	<1,900	<190,000	<9,500
Trichlorofluoromethane	<10	<10	<5	<10,000	<10,000	<1,000	<50,000	<10,000	1,000,000	<50,000
Vinyl chloride	<10	<10	<10	<10,000	<10,000	<1,000	<50,000	<10,000	1,000,000	<50,000
trans-1,3-Dichloropropylene	<10	<10	<10	<10,000	<10,000	<500	<50,000	<10,000	1,000,000	<50,000
Sub Total 1	0	13	15	635,000	755,200	888,890	770,000	864,460	415,000	818,000
Miscellaneous Volatile Organic Compounds										
Acetone	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	<10	<10	<25	NA	NA	NA	NA	NA	NA	NA
Methyl isoamyl ketone	<10	NA	<25	NA	NA	NA	NA	NA	NA	NA
m-Xylene	<10	<10	<5	NA	NA	NA	NA	NA	NA	NA
o-Xylene/p-Xylene	<10	<10	<5	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	0	13	15	635,000	755,200	888,890	770,000	864,460	415,000	818,000

See footnotes on last page.

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Well Number:	GM-17A	GM-17A	GM-17A	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B
Date:	11/91	11/92	9/94	12/86	5/87	11/87	5/88	11/88	5/89	11/89
Laboratory:	ETC	ETC	SL	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<500,000	<20,000	<250,000	<2,000	<100,000	<10,000	<10,000	<1,000	<1,000	<10,000
Acrylonitrile	<500,000	<10,000	<250,000	<2,000	<100,000	<10,000	<10,000	<1,000	<1,000	<10,000
Benzene	**127,000**	**532,000**	**380,000**	**52,900**	**70,600**	**69,300**	**9,610**	<44	**220**	<440
Bis (chloromethyl) ether	<50,000	NA	NA	<200	<10,000	<1,000	<1,000	<100	<100	<1,000
Bromoform	<24,000	<24,000	<12,000	<94	<4,700	<470	<470	<47	<47	<470
Carbon tetrachloride	<14,000	<14,000	<12,000	<56	<2,800	<280	<280	<28	<28	<280
Chlorobenzene	**42,000**	**341,000**	**310,000**	**9,260**	**13,500**	**8,530**	**2,210**	**622**	**6,390**	**10,100**
Chlorodibromomethane	<16,000	<16,000	<12,000	<62	<3,100	<310	<310	<31	<31	<310
Chloroethane	<50,000	<50,000	<25,000	<200	<10,000	<1,000	<1,000	<100	<100	<1,000
2-Chloroethylvinyl ether	<50,000	NA	<120,000	<200	<10,000	<1,000	<1,000	<100	<100	<1,000
Chloroform	<8,000	<8,000	<12,000	<32	<1,600	<160	<160	<16	<16	<160
Dichlorobromomethane	<11,000	<11,000	<12,000	<44	<2,200	<220	<220	<22	<22	<220
Dichlorodifluoromethane	<50,000	<50,000	<12,000	<200	<10,000	<1,000	<1,000	<100	<100	<1,000
1,1-Dichloroethane	<24,000	<24,000	<12,000	<94	<4,700	<470	<470	<47	<47	<470
1,2-Dichloroethane	<14,000	<14,000	<12,000	<56	<2,800	<280	<280	<28	<28	<280
1,1-Dichloroethylene	<14,000	<14,000	<12,000	<56	<2,800	<280	<280	<28	<28	<280
1,2-Dichloropropane	<30,000	<30,000	<12,000	<120	<6,000	<600	<600	<60	<60	<600
cis-1,3-Dichloropropylene	<25,000	<25,000	<12,000	<120	<5,000	<1,000	<500	<50	<50	<500
Ethylbenzene	<36,000	<36,000	<12,000	<140	<7,200	<720	<720	<72	<72	<750
Methyl bromide	<50,000	<50,000	<25,000	<200	<10,000	<1,000	<1,000	<100	<100	<1,000
Methyl chloride	<50,000	<50,000	<25,000	<200	<10,000	<1,000	<1,000	<100	<100	<1,000
Methylene chloride	<14,000	**31,400**	<12,000	<56	**15,700**	**1,220**	<280	**662**	**37.9**	**364**
1,1,2,2-Tetrachloroethane	<35,000	<35,000	<12,000	<140	<6,900	<690	<690	<69	<69	<690
Tetrachloroethylene	<21,000	<21,000	<12,000	<82	<4,100	<410	<410	<41	<41	<410
Toluene	<30,000	<30,000	<12,000	<120	<6,000	<600	<600	<60	<60	<600
1,2-trans-Dichloroethylene	<8,000	<8,000	<12,000	<32	<1,600	<160	<160	<16	<16	<160
1,1,1-Trichloroethane	<19,000	<19,000	<12,000	<76	<3,800	<380	<380	<38	<38	<380
1,1,2-Trichloroethane	<25,000	<25,000	<12,000	<100	<5,000	<500	<500	<50	<50	<500
Trichloroethylene	<9,500	<9,500	<12,000	<38	<1,900	<190	<190	<19	<19	<190
Trichlorofluoromethane	**76,700**	<50,000	<12,000	<200	<10,000	<1,000	<1,000	<100	<100	<1,000
Vinyl chloride	<50,000	<50,000	<25,000	<200	<10,000	<1,000	<1,000	<100	<100	<1,000
trans-1,3-Dichloropropylene	<50,000	<50,000	<12,000	<200	<10,000	<500	<1,000	<100	<100	<1,000
Sub Total 1	245,700	904,400	690,000	62,160	99,800	79,050	11,820	1,284	6,648	10,464
Miscellaneous Volatile Organic Compounds										
Acetone	NA	<50,000	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	<50,000	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	<50,000	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	<50,000	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	<50,000	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	<50,000	<62,000	NA	NA	NA	NA	NA	NA	NA
Methyl isoamyl ketone	NA	NA	<62,000	NA	NA	NA	NA	NA	NA	NA
m-Xylene	NA	<50,000	<12,000	NA	NA	NA	NA	NA	NA	NA
o-Xylene/p-Xylene	NA	<50,000	<12,000	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	245,700	904,400	690,000	62,160	99,800	79,050	11,820	1,284	6,648	10,464

See footnotes on last page.

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Well Number:	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B	GM-17C	GM-17C	GM-17C	GM-17C
Date:	5/90	11/90	5/91	11/91	11/92	9/94	12/86	5/87	11/87	5/88
Laboratory:	ETC	ETC	ETC	ETC	ETC	SL	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<500	<10,000	<5,000	<10,000	<200	<2,500	<10,000	<5,000	<10,000	<10,000
Acrylonitrile	<500	<10,000	<5,000	<10,000	<100	<2,500	<10,000	<5,000	<10,000	<10,000
Benzene	<22	<440	**249**	<440	<110	<120	<440	<220	<440	<440
Bis (chloromethyl) ether	<50	<1,000	<500	<1,000	NA	NA	<1,000	<500	<1,000	<1,000
Bromoform	<24	<470	<240	<470	<120	<120	<470	<240	<470	<470
Carbon tetrachloride	<14	<280	<140	<280	<70	<120	<280	<140	<280	<280
Chlorobenzene	**120**	**8,670**	**7,030**	**10,700**	**5,400**	**1,200**	**6,290**	**20,200**	**21,400**	**3,110**
Chlorodibromomethane	<16	<310	<160	<310	<78	<120	<310	<160	<310	<310
Chloroethane	<50	<1,000	<500	<1,000	<250	<250	<1,000	<500	<1,000	<1,000
2-Chloroethylvinyl ether	<50	<1,000	<500	<1,000	NA	<1,200	<1,000	<500	<1,000	<1,000
Chloroform	<8.0	<160	<80	<160	<40	<120	<160	<80	<160	<160
Dichlorobromomethane	<11	<220	<110	<220	<55	<120	<220	<110	<220	<220
Dichlorodifluoromethane	<50	<1,000	<500	<1,000	<250	<120	<1,000	<500	<1,000	<1,000
1,1-Dichloroethane	<24	<470	<240	<470	<120	<120	<470	<240	<470	<470
1,2-Dichloroethane	<14	<280	<140	<280	<70	<120	<280	<140	<280	<280
1,1-Dichloroethylene	<14	<280	<140	<280	<70	<120	<280	<140	<280	<280
1,2-Dichloropropane	<30	<600	<300	<600	<150	<120	<600	<300	<600	<600
cis-1,3-Dichloropropylene	<25	<500	<250	<500	<130	<120	<500	<250	<500	<500
Ethylbenzene	<36	<720	<360	<720	<180	<120	<720	<360	<720	<720
Methyl bromide	<50	<1,000	<500	<1,000	<250	<250	<1,000	<500	<1,000	<1,000
Methyl chloride	<50	<1,000	<500	<1,000	<250	<250	<1,000	<500	<1,000	<1,000
Methylene chloride	**19.7**	<280	**152**	<280	<70	<120	**1,030**	**361**	<280	<280
1,1,2,2-Tetrachloroethane	<35	<690	<350	<690	<170	<120	<690	<350	<690	<690
Tetrachloroethylene	<21	<410	<210	<410	<100	<120	<410	<210	<410	<410
Toluene	<30	<600	<300	<600	<150	<120	<600	<300	<600	<600
1,2-trans-Dichloroethylene	<8.0	<160	<80	<160	<40	<120	<160	<80	<160	<160
,1,1-Trichloroethane	<19	<380	<190	<380	<95	<120	<380	<190	<380	<380
,,1,2-Trichloroethane	<25	<500	<250	<500	<130	<120	<500	<250	<500	<500
Trichloroethylene	<9.5	<190	<95	<190	<48	<120	<190	<95	<190	<190
Trichlorofluoromethane	<50	<1,000	<500	<1,000	<250	<120	<1,000	<500	<1,000	<1,000
Vinyl chloride	<50	<1,000	<500	<1,000	<250	<250	<1,000	<500	<1,000	<1,000
trans-1,3-Dichloropropylene	<50	<1,000	<500	<1,000	<250	<120	<1,000	<500	<1,000	<1,000
Sub Total 1	140	8,670	7,431	10,700	5,400	1,200	7,320	20,561	21,400	3,110
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	<250	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	<250	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	<250	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	<250	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	<250	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	NA	NA	NA	<250	<620	NA	NA	NA	NA
Methyl isoamyl ketone	NA	NA	NA	NA	NA	<620	NA	NA	NA	NA
m-Xylene	NA	NA	NA	NA	<250	<120	NA	NA	NA	NA
o-Xylene/p-Xylene	NA	NA	NA	NA	<250	<120	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	140	8,670	7,431	10,700	5,400	1,200	7,320	20,561	21,400	3,110

See footnotes on last page.

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Well Number:	GM-17C	GM-17C	GM-17C	GM-17C	GM-17C	GM-17C	GM-17C	GM-17C	GM-17C	GM-18B
Date:	11/88	5/89	11/89	5/90	11/90	5/91	11/91	11/92	9/94	11/92
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	SL	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<10,000	<100	<2,000	<1,000	<5,000	<2,000	<10,000	<200	<20,000	<100
Acrylonitrile	<10,000	<100	<2,000	<1,000	<5,000	<2,000	<10,000	<100	<20,000	<100
Benzene	<440	**22.5**	<88	**92.8**	<220	**133**	<440	**390**	**4,200**	<4.4
Bis (chloromethyl) ether	<1,000	<10	<200	<100	<500	<200	<1,000	NA	NA	<10
Bromoform	<470	<4.7	<94	<47	<240	<94	<470	<240	<1,000	<4.7
Carbon tetrachloride	<280	<2.8	<56	<28	<140	<56	<280	<140	<1,000	<2.8
Chlorobenzene	**3,480**	**701**	**1,430**	**923**	**3,330**	**1,740**	**7,690**	**6,520**	**27,000**	**29.2**
Chlorodibromomethane	<310	<3.1	<62	<31	<160	<62	<310	<160	<1,000	<3.1
Chloroethane	<1,000	<10	<200	<100	<500	<200	<1,000	<500	<2,000	<10
2-Chloroethylvinyl ether	<1,000	<10	<200	<100	<500	<200	<1,000	NA	<10,000	<10
Chloroform	<160	<1.6	<32	<16	<80	<32	<160	<80	<1,000	<1.6
Dichlorobromomethane	<220	<2.2	<44	<22	<110	<44	<220	<110	<1,000	<2.2
Dichlorodifluoromethane	<1,000	<10	<200	<100	<500	<200	<1,000	<500	<1,000	<10
1,1-Dichloroethane	<470	<4.7	<94	<47	<240	<94	<470	<240	<1,000	<4.7
1,2-Dichloroethane	<280	<2.8	<56	<28	<140	<56	<280	<140	<1,000	<2.8
1,1-Dichloroethylene	<280	<2.8	<56	<28	<140	<56	<280	<140	<1,000	<2.8
1,2-Dichloropropane	<600	<6.0	<120	<60	<300	<120	<600	<300	<1,000	<6.0
cis-1,3-Dichloropropylene	<500	<5.0	<100	<50	<250	<100	<500	<250	<1,000	<5.0
Ethylbenzene	<720	<7.2	<140	<72	<360	<140	<720	<360	<1,000	<7.2
Methyl bromide	<1,000	<10	<200	<100	<500	<200	<1,000	<500	<2,000	<10
Methyl chloride	<1,000	<10	<200	<100	<500	<200	<1,000	<500	<2,000	<10
Methylene chloride	**422**	**4.76**	<56	<28	<140	<56	<280	<140	<1,000	**5.19**
1,1,2,2-Tetrachloroethane	<690	<6.9	<140	<69	<350	<140	<690	<350	<1,000	<6.9
Tetrachloroethylene	<410	<4.1	<82	<41	<210	<82	<410	<210	<1,000	<4.1
Toluene	<600	<6.0	<120	<60	<300	<120	<600	<300	<1,000	<6.0
1,2-trans-Dichloroethylene	<160	<1.6	<32	<16	<80	<32	<160	<80	<1,000	<1.6
1,1,1-Trichloroethane	<380	<3.8	<76	<38	<190	<76	<380	<190	<1,000	<3.8
1,1,2-Trichloroethane	<500	<5.0	<100	<50	<250	<100	<500	<250	<1,000	<5.0
Trichloroethylene	<190	<1.9	<38	<19	<95	<38	<190	<95	<1,000	<1.9
Trichlorofluoromethane	<1,000	<10	<200	<100	<500	<200	<1,000	<500	<1,000	<10
Vinyl chloride	<1,000	<10	<200	<100	<500	<200	<1,000	<500	<2,000	<10
trans-1,3-Dichloropropylene	<1,000	<10	<200	<100	<500	<200	<1,000	<500	<1,000	<10
Sub Total 1	3,902	728	1,430	1,016	3,330	1,873	7,690	6,910	31,200	34
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	<500	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	<500	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	<500	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	<500	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	<500	NA	NA
Methyl-iso-butyl ketone	NA	NA	NA	NA	NA	NA	NA	<500	<5,000	NA
Methyl isoamyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	<5,000	NA
m-Xylene	NA	NA	NA	NA	NA	NA	NA	<500	<1,000	NA
o-Xylene/p-Xylene	NA	NA	NA	NA	NA	NA	NA	<500	<1,000	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	3,902	728	1,430	1,016	3,330	1,873	7,690	6,910	31,200	34

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Well Number:	GM-20B	GM-20B	GM-27B	GM-27B	GM-27B	GM-27B	GM-27B	GM-27B	GM-27B	GM-27B
Date:	11/92	9/94	12/86	5/87	11/87	5/88	11/89	11/90	11/91	11/92
Laboratory:	ETC	SL	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<500	<100	<100	<50,000	<10,000	<5,000	<10,000	<10,000	<10,000
Acrylonitrile	<100	<500	<100	<100	<50,000	<10,000	<5,000	<10,000	<10,000	<10,000
Benzene	<4.4	<25	**237**	**156**	**9,980**	**670**	**2,460**	**1,170**	**1,070**	**1,010**
Bis (chloromethyl) ether	<10	NA	<10	<10	<5,000	<1,000	<500	<1,000	<1,000	<1,000
Bromoform	<4.7	<25	<4.7	<4.7	<2,400	<470	<240	<470	<470	<470
Carbon tetrachloride	<2.8	<25	<2.8	<2.8	<1,400	<280	<140	<280	<280	<280
Chlorobenzene	**20**	**460**	**383**	**193**	**60,200**	**2,940**	**10,500**	**10,100**	**8,760**	**10,800**
Chlorodibromomethane	<3.1	<25	<3.1	<3.1	<1,600	<310	<160	<310	<310	<310
Chloroethane	<10	<50	<10	<10	<5,000	<1,000	<500	<1,000	<1,000	<1,000
2-Chloroethylvinyl ether	<10	<250	<10	<10	<5,000	<1,000	<500	<1,000	<1,000	<1,000
Chloroform	<1.6	<25	<1.6	<1.6	<800	<160	<80	<160	<160	<160
Dichlorobromomethane	<2.2	<25	<2.2	<2.2	<1,100	<220	<110	<220	<220	<220
Dichlorodifluoromethane	<10	<25	<10	<10	<5,000	<1,000	<500	<1,000	<1,000	<1,000
1,1-Dichloroethane	<4.7	**41**	<4.7	<4.7	<2,400	<470	<240	<470	<470	<470
1,2-Dichloroethane	<2.8	<25	<2.8	<2.8	<1,400	<280	<140	<280	<280	<280
1,1-Dichloroethylene	<2.8	<25	<2.8	<2.8	<1,400	<280	<140	<280	<280	<280
1,2-Dichloropropane	<6.0	<25	<6	<6	<3,000	<600	<300	<600	<600	<600
cis-1,3-Dichloropropylene	<5.0	<25	<5	<5	<2,500	<500	<250	<500	<500	<500
Ethylbenzene	<7.2	<25	<7.2	<7.2	<3,600	<720	<360	<720	<720	<720
Methyl bromide	<10	<50	<10	<10	<5,000	<1,000	<500	<1,000	<1,000	<1,000
Methyl chloride	<10	<50	<10	<10	<5,000	<1,000	<500	<1,000	<1,000	<1,000
Methylene chloride	<2.8	<50	**9.6**	<2.8	<1,400	<280	**227**	<280	<280	<280
1,1,2,2-Tetrachloroethane	<6.9	<50	<6.9	<6.9	<3,500	<690	<350	<690	<690	<690
Tetrachloroethylene	<4.1	<50	<4.1	<4.1	<2,100	<410	<210	<410	<410	<410
Toluene	<6.0	<50	**6**	<6	<3,000	<600	**1,400**	**1,120**	**857**	**809**
1,2-trans-Dichloroethylene	<1.6	<50	<1.6	<1.6	<800	<160	<80	<160	<160	<160
1,1-Trichloroethane	<3.8	<50	<3.8	<3.8	<1,900	<380	<190	<380	<380	<380
,,1,2-Trichloroethane	<5.0	<50	<5	<5	<2,500	<500	<250	<500	<500	<500
Trichloroethylene	<1.9	<50	<1.9	<1.9	<950	<190	<95	<190	<190	<190
Trichlorofluoromethane	<10	<50	<10	<10	<5,000	<1,000	<500	<1,000	<1,000	<1,000
Vinyl chloride	<10	<50	<10	<10	<5,000	<1,000	<500	<1,000	<1,000	<1,000
trans-1,3-Dichloropropylene	<10	<25	<10	<10	<5,000	<1,000	<500	<1,000	<1,000	<1,000
Sub Total 1	20	491	636	349	70,180	3,610	14,587	12,390	10,687	12,619
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	<120	NA	NA	<5,000	NA	NA	NA	NA	NA
Methyl isoamyl ketone	NA	<120	NA	NA	<5,000	NA	NA	NA	NA	NA
m-Xylene	NA	<25	NA	NA	<5,000	NA	NA	NA	NA	NA
o-Xylene/p-Xylene	NA	<25	NA	NA	<5,000	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	20	491	636	349	70,180	3,610	14,587	12,390	10,687	12,619

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Well Number:	GM-27C	GM-27C	GM-27C	GM-27C	GM-27C	GM-27C	GM-27C	GM-27C	GM-27C	GM-28B
Date:	12/86	5/87	11/87	5/88	11/88	11/89	11/90	11/91	11/92	12/86
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<100	<1,000	<5,000	<1,000	<5,000	<500	<1,000	<1,000	<2,000
Acrylonitrile	<100	<100	<1,000	<5,000	<1,000	<5,000	<500	<1,000	<1,000	<2,000
Benzene	**159**	**122**	**433**	**346**	**529**	**331**	**414**	**323**	**263**	**289**
Bis (chloromethyl) ether	<10	<10	<100	<500	<100	<500	<50	<100	<100	<200
Bromoform	<4.7	<4.7	<47	<240	<47	<240	<24	<47	<47	<94
Carbon tetrachloride	<2.8	<2.8	<28	<140	<28	<140	<14	<28	<28	<56
Chlorobenzene	**385**	**318**	**1,300**	**710**	**2,030**	**1,840**	**2,440**	**1,850**	**1,510**	**3,310**
Chlorodibromomethane	<3.1	<3.1	<31	<160	<31	<160	<16	<31	<31	<62
Chloroethane	<10	<10	<100	<500	<100	<500	<50	<100	<100	<200
2-Chloroethylvinyl ether	<10	<10	<100	<500	<100	<500	<50	<100	<100	<200
Chloroform	<1.6	<1.6	<16	<80	<16	<80	<8.0	<16	<16	<32
Dichlorobromomethane	<2.2	<2.2	<22	<110	<22	<110	<11	<22	<22	<44
Dichlorodifluoromethane	<10	<10	<100	<500	<100	<500	<50	<100	<100	<200
1,1-Dichloroethane	<4.7	<4.7	<47	<240	<47	<240	<24	<47	<47	<94
1,2-Dichloroethane	<2.8	<2.8	<28	<140	<28	<140	<14	<28	<28	<56
1,1-Dichloroethylene	<2.8	<2.8	<28	<140	<28	<140	<14	<28	<28	<56
1,2-Dichloropropane	<6	<6	<60	<300	<60	<300	<30	<60	<60	<120
cis-1,3-Dichloropropylene	<5	<5	<50	<250	<50	<250	<25	<50	<50	<100
Ethylbenzene	<7.2	<7.2	<72	<360	<72	<360	<36	<72	<72	<140
Methyl bromide	<10	<10	<100	<500	<100	<500	<50	<100	<100	<200
Methyl chloride	<10	<10	<100	<500	<100	<500	<50	<100	<100	<200
Methylene chloride	<2.8	<2.8	<28	<140	**203**	**693**	<14	<28	<28	<56
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<69	<350	<69	<350	<35	<69	<69	<140
Tetrachloroethylene	<4.1	<4.1	<41	<210	<41	<210	<21	<41	<41	<82
Toluene	<6	<6	<60	<300	**232**	<300	**90.6**	<60	<60	<120
1,2-trans-Dichloroethylene	<1.6	<1.6	<16	<80	<16	<80	<8.0	<16	<16	<32
1,1,1-Trichloroethane	<3.8	<3.8	<38	<190	<38	<190	<19	<38	<38	<76
1,1,2-Trichloroethane	<5	<5	<50	<250	<50	<250	<25	<50	<50	<100
Trichloroethylene	<1.9	<1.9	<19	<95	<19	<95	<9.5	<19	<19	<38
Trichlorofluoromethane	<10	<10	<100	<500	<100	<500	<50	<100	<100	<200
Vinyl chloride	<10	<10	<100	<500	<100	<500	<50	<100	<100	<200
trans-1,3-Dichloropropylene	<10	<10	<100	<500	<100	<500	<50	<100	<100	<200
Sub Total 1	544	440	1,733	1,056	2,994	2,864	2,945	2,173	1,773	3,599
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	NA	<100	NA	NA	NA	NA	NA	NA	NA
Methyl isoamyl ketone	NA	NA	<100	NA	NA	NA	NA	NA	NA	NA
m-Xylene	NA	NA	<100	NA	NA	NA	NA	NA	NA	NA
o-Xylene/p-Xylene	NA	NA	<100	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	544	440	1,733	1,056	2,994	2,864	2,945	2,173	1,773	3,599

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Well Number:	GM-28B	GM-28B	GM-28B	GM-28B	GM-28B	GM-28B	GM-28B	GM-28C	GM-28C	GM-28C
Date:	5/87	11/87	5/88	3/89	11/89	11/90	11/91	12/86	5/87	11/87
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<5,000	<1,000	<10,000	<1,000	<5,000	<5,000	<2,500	<100	<5,000	<1,000
Acrylonitrile	<5,000	<1,000	<10,000	<1,000	<5,000	<5,000	<2,500	<100	<5,000	<1,000
Benzene	<220	**485**	<440	**85.5**	<220	<220	<110	**582**	<220	**297**
Bis (chloromethyl) ether	<500	<100	<1,000	<100	<500	<500	<250	<10	<500	<100
Bromoform	<240	<47	<470	<47	<240	<240	<120	<4.7	<240	<47
Carbon tetrachloride	<140	<28	<280	<28	<140	<140	<70	<2.8	<140	<28
Chlorobenzene	**447**	**4,060**	**2,200**	**2,760**	**2,560**	**3,560**	**2,410**	**4,530**	**621**	**4,910**
Chlorodibromomethane	<160	<31	<310	<31	<160	<160	<78	<3.1	<160	<31
Chloroethane	<500	<100	<1,000	<100	<500	<500	<250	<10	<500	<100
2-Chloroethylvinyl ether	<500	<100	<1,000	<100	<500	<500	<250	<10	<500	<100
Chloroform	<80	<16	<160	<16	<80	<80	<40	<1.6	<80	<16
Dichlorobromomethane	<110	<22	<220	<22	<110	<110	<55	<2.2	<110	<22
Dichlorodifluoromethane	<500	<100	<1,000	<100	<500	<500	<250	<10	<500	<100
1,1-Dichloroethane	<240	<47	<470	<47	<240	<240	<120	<4.7	<240	<47
1,2-Dichloroethane	<140	<28	<280	<28	<140	<140	<70	<2.8	<140	<28
1,1-Dichloroethylene	<140	<28	<280	<28	<140	<140	<70	<2.8	<140	<28
1,2-Dichloropropane	<300	<60	<600	<60	<300	<300	<150	<6	<300	<60
cis-1,3-Dichloropropylene	<250	<50	<500	<50	<250	<250	<130	<5	<250	<50
Ethylbenzene	<360	<72	<720	<100	<360	<360	<180	<7.2	<360	<72
Methyl bromide	<500	<100	<1,000	<100	<500	<500	<250	<10	<500	<100
Methyl chloride	<500	<100	<1,000	**79.2**	<500	<500	<250	<10	<500	<100
Methylene chloride	**360**	**1,350**	<280	<69	**706**	<140	<70	<2.8	**254**	**1,790**
1,1,2,2-Tetrachloroethane	<350	<69	<690	<41	<350	<350	<170	<6.9	<350	<69
Tetrachloroethylene	<210	<41	<410	**215**	<210	<210	<100	<4.1	<210	<41
Toluene	<300	**321**	<600	<16	<300	**533**	<150	<6	<300	**115**
1,2-trans-Dichloroethylene	<80	<16	<160	<38	<80	<80	<40	<1.6	<80	<16
1,1-Trichloroethane	<190	<38	<380	<50	<190	<190	<95	<3.8	<190	<38
.,1,2-Trichloroethane	<250	<50	<500	<19	<250	<250	<130	<5	<250	<50
Trichloroethylene	<95	<19	<190	<100	<95	<95	<48	<1.9	<95	<19
Trichlorofluoromethane	<500	<100	<1,000	<100	<500	<500	<250	<10	<500	<100
Vinyl chloride	<500	<100	<1,000	<100	<500	<500	<250	<10	<500	<100
trans-1,3-Dichloropropylene	<500	<100	<1,000	<72	<500	<500	<250	<10	<500	<100
Sub Total 1	807	6,216	2,200	3,140	3,266	4,093	2,410	5,112	875	7,112
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	**1,250**	NA	<100	NA	NA	NA	NA	NA	**236**
Methyl isoamyl ketone	NA	<100	NA	<100	NA	NA	NA	NA	NA	<100
m-Xylene	NA	**149**	NA	<100	NA	NA	NA	NA	NA	<100
o-Xylene/p-Xylene	NA	**116**	NA	<100	NA	NA	NA	NA	NA	<100
Sub Total 2	0	1,515	0	0	0	0	0	0	0	236
Total VOCs Analyzed	807	7,731	2,200	3,140	3,266	4,093	2,410	5,112	875	7,348

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Well Number:	GM-28C	GM-28C	GM-28C	GM-28C	GM-28C	GM-28C	GM-28C	GM-28C	GM-31A	GM-31A
Date:	5/88	11/88	3/89	3/89*	11/89	11/90	11/91	11/92	12/86	12/86*
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<10,000	<5,000	<5,000	<5,000	<5,000	<5,000	<2,500	<2,000	<100	<100
Acrylonitrile	<10,000	<5,000	<5,000	<5,000	<5,000	<5,000	<2,500	<2,000	<100	<100
Benzene	<440	<220	<220	<220	<220	<220	<110	<88	**15.5**	**15.2**
Bis (chloromethyl) ether	<1,000	<500	<500	<500	<500	<500	<250	<200	<10	<10
Bromoform	<470	<240	<240	<240	<240	<240	<120	<94	<4.7	<4.7
Carbon tetrachloride	<280	<140	<140	<140	<140	<140	<70	<56	<2.8	<2.8
Chlorobenzene	**4,700**	**2,920**	**2,510**	**3,220**	**2,840**	**3,680**	**2,800**	**1,480**	**6.5**	**7.1**
Chlorodibromomethane	<310	<160	<160	<160	<160	<160	<78	<62	<3.1	<3.1
Chloroethane	<1,000	<500	<500	<500	<500	<500	<250	<200	<10	<10
2-Chloroethylvinyl ether	<1,000	<500	<500	<500	<500	<500	<250	<200	<10	<10
Chloroform	<160	<80	<80	<80	<80	<80	<40	<32	<1.6	<1.6
Dichlorobromomethane	<220	<110	<110	<110	<110	<110	<55	<44	<2.2	<2.2
Dichlorodifluoromethane	<1,000	<500	<500	<500	<500	<500	<250	<200	<10	<10
1,1-Dichloroethane	<470	<240	<240	<240	<240	<240	<120	<94	<4.7	<4.7
1,2-Dichloroethane	<280	<140	<140	<140	<140	<140	<70	<56	<2.8	<2.8
1,1-Dichloroethylene	<280	<140	<140	<140	<140	<140	<70	<56	<2.8	<2.8
1,2-Dichloropropane	<600	<300	<300	<300	<300	<300	<150	<120	<6	<6
cis-1,3-Dichloropropylene	<500	<250	<250	<250	<250	<250	<130	<100	<5	<5
Ethylbenzene	<720	<360	<500	<500	<360	<360	<180	<140	<7.2	<7.2
Methyl bromide	<1,000	<500	<500	<500	<500	<500	<250	<200	<10	<10
Methyl chloride	<1,000	<500	<140	<140	<500	<500	<250	<200	<10	<10
Methylene chloride	<280	**283**	<350	<350	**488**	<140	<70	<56	**4.4**	**12.7**
1,1,2,2-Tetrachloroethane	<690	<350	<210	<210	<350	<350	<170	<140	<6.9	<6.9
Tetrachloroethylene	<410	<210	<300	<300	<210	<210	<100	<82	<4.1	<4.1
Toluene	<600	<300	<80	<80	<300	**431**	<150	<120	<6	<6
1,2-trans-Dichloroethylene	<160	<80	<190	<190	<80	<80	<40	<32	<1.6	<1.6
1,1,1-Trichloroethane	<380	<190	<250	<250	<190	<190	<95	<76	<3.8	<3.8
1,1,2-Trichloroethane	<500	<250	<95	<95	<250	<250	<130	<100	<5	<5
Trichloroethylene	<190	<95	<500	<500	<95	<95	<48	<38	<1.9	<1.9
Trichlorofluoromethane	<1,000	<500	<500	<500	<500	<500	<250	<200	<10	<10
Vinyl chloride	<1,000	<500	<500	<500	<500	<500	<250	<200	<10	<10
trans-1,3-Dichloropropylene	<1,000	<500	<360	<360	<500	<500	<250	<200	<10	<10
Sub Total 1	4,700	3,203	2,510	3,220	3,328	4,011	2,800	1,480	26	35
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	NA	<500	<500	NA	NA	NA	NA	<10	<10
Methyl isoamyl ketone	NA	NA	<500	<500	NA	NA	NA	NA	<10	<10
m-Xylene	NA	NA	<500	<500	NA	NA	NA	NA	<10	<10
o-Xylene/p-Xylene	NA	NA	<500	<500	NA	NA	NA	NA	<10	<10
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	4,700	3,203	2,510	3,220	3,328	4,011	2,800	1,480	26	35

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Well Number:	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A
Date:	5/87	5/87*	11/87	11/87*	5/88	5/88*	11/88	11/88*	11/88	11/88*
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	SL	SL
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<100	<500	<100	<100	<100	<500	<500	<500	<500
Acrylonitrile	<100	<100	<500	<100	<100	<100	<500	<500	<500	<500
Benzene	**13**	**13.2**	**1,220**	**973**	**45.8**	**46.1**	**30.1**	**25.1**	**70**	**84**
Bis (chloromethyl) ether	<10	<10	<50	<10	<10	<10	<50	<50	<100	<100
Bromoform	<4.7	<4.7	<24	<4.7	<4.7	<4.7	<24	<24	<50	<50
Carbon tetrachloride	<2.8	<2.8	<14	<2.8	<2.8	<2.8	<14	<14	<50	<50
Chlorobenzene	**18.1**	**18.4**	<30	**26.0**	<6.0	<6.0	<30	<30	<50	<50
Chlorodibromomethane	<3.1	<3.1	<16	<3.1	<3.1	<3.1	<16	<16	<50	<50
Chloroethane	<10	<10	<50	<10	<10	<10	<50	<50	<100	<100
2-Chloroethylvinyl ether	<10	<10	<50	<10	<10	<10	<50	<50	<50	<50
Chloroform	<1.6	<1.6	<8.0	<1.6	<1.6	<1.6	<8.0	<8.0	<50	<50
Dichlorobromomethane	<2.2	<2.2	<11	<2.2	<2.2	<2.2	<11	<11	<50	<50
Dichlorodifluoromethane	<10	<10	<50	<10	<10	<10	<50	<50	<100	<100
1,1-Dichloroethane	<4.7	<4.7	<24	<4.7	<4.7	<4.7	<24	<24	<50	<50
1,2-Dichloroethane	<2.8	<2.8	<14	<2.8	<2.8	<2.8	<14	<14	<50	<50
1,1-Dichloroethylene	<2.8	<2.8	<14	<2.8	<2.8	<2.8	<14	<14	<50	<50
1,2-Dichloropropane	<6	<6	<30	<6.0	<6.0	<6.0	<30	<30	<50	<50
cis-1,3-Dichloropropylene	<5	<5	<25	<5.0	<5.0	<5.0	<25	<25	<50	<50
Ethylbenzene	<7.2	<7.2	<36	<7.2	<7.2	<7.2	<36	<36	<50	<50
Methyl bromide	<10	<10	<50	<10	<10	<10	<50	<50	<100	<100
Methyl chloride	<10	<10	<50	<10	<10	<10	<50	<50	<100	<100
Methylene chloride	**9.3**	**14.6**	**33.8**	**4.71**	**9.8**	**7.6**	**29.9**	**52.8**	<50	<50
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<35	<6.9	<6.9	<6.9	<35	<35	<50	<50
Tetrachloroethylene	<4.1	<4.1	<21	<4.1	<4.1	<4.1	<21	<21	<50	<50
Toluene	<6	<6	<30	<6.0	<6.0	<6.0	<30	<30	<50	<50
1,2-trans-Dichloroethylene	<1.6	<1.6	<8.0	<1.6	<1.6	<1.6	<8.0	<8.0	<50	<50
,1,1-Trichloroethane	<3.8	<3.8	<19	<3.8	<3.8	<3.8	<19	<19	<50	<50
,1,2-Trichloroethane	<5	<5	<25	<5.0	<5.0	<5.0	<25	<25	<50	<50
Trichloroethylene	<1.9	<1.9	<9.5	<1.9	<1.9	<1.9	<9.5	<9.5	<50	<50
Trichlorofluoromethane	<10	<10	<50	<10	<10	<10	<50	<50	<50	<50
Vinyl chloride	<10	<10	<50	<10	<10	<10	<50	<50	<100	<100
trans-1,3-Dichloropropylene	<10	<10	<50	<10	<10	<10	<50	<50	<50	<50
Sub Total 1	40	46	1,254	1,004	56	54	60	78	70	84
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	<10	<10	<50	<10	<10	<10	<50	<50	<500	<500
Methyl isoamyl ketone	<10	<10	<50	<10	<10	<10	<50	<50	<100	<100
m-Xylene	<10	<10	<50	<10	<10	<10	<50	<50	<50	<50
o-Xylene/p-Xylene	<10	<10	<50	<10	<10	<10	<50	<50	<50	<50
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	40	46	1,254	1,004	56	54	60	78	70	84

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Well Number:	GM-31A	GM-31A	GM-31A	GM-31A	GM-31B	GM-31B	GM-31B	GM-31B	GM-31B	GM-31B
Date:	11/89	11/89*	11/90	11/90*	12/86	12/86*	5/87	5/87*	11/87	11/87*
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Acrylonitrile	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Benzene	**15.6**	**17.0**	**10.4**	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4
Bis (chloromethyl) ether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromoform	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7
Carbon tetrachloride	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8
Chlorobenzene	**12.1**	**12.1**	**12.8**	**8.48**	<6	<6	**7.1**	**10.3**	<6.0	**8.7**
Chlorodibromomethane	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1
Chloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chloroethylvinyl ether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroform	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Dichlorobromomethane	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2
Dichlorodifluoromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7
1,2-Dichloroethane	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8
1,1-Dichloroethylene	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8
1,2-Dichloropropane	<6.0	<6.0	<6.0	<6.0	<6	<6	<6	<6	<6.0	<6.0
cis-1,3-Dichloropropylene	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5.0	<5.0
Ethylbenzene	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2
Methyl bromide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methyl chloride	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylene chloride	<2.8	<2.8	<2.8	<2.8	**4.4**	**14.6**	**15**	**44.5**	**13.4**	**14.3**
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9
Tetrachloroethylene	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1
Toluene	<6.0	<6.0	<6.0	<6.0	<6	<6	<6	<6	<6.0	<6.0
1,2-trans-Dichloroethylene	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
1,1,1-Trichloroethane	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5.0	<5.0
Trichloroethylene	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Vinyl chloride	<10	<10	<10	<10	<10	<10	<10	<10	**15.4**	**20.5**
trans-1,3-Dichloropropylene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Sub Total 1	28	29	23	8	4	15	22	55	29	43
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA
Methyl isoamyl ketone	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA
m-Xylene	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA
o-Xylene/p-Xylene	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	28	29	23	8.48	4	15	22	55	29	43

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Well Number:	GM-31B	GM-31B	GM-31B	GM-31B	GM-31B	GM-31B	GM-31B	GM-31B	GM-31B	GM-31B
Date:	5/88	5/88*	11/88	11/88*	5/89	11/89	11/89*	5/90	11/90	11/90*
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<100	<100	<100	<100	<200	<100	<100	<100	<100
Acrylonitrile	<100	<100	<100	<100	<100	<200	<100	<100	<100	<100
Benzene	<4.4	<4.4	**14.2**	**9.83**	<4.4	**32.8**	<4.4	**6.53**	<4.4	<4.4
Bis (chloromethyl) ether	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Bromoform	<4.7	<4.7	<4.7	<4.7	<4.7	<9.4	<4.7	<4.7	<4.7	<4.7
Carbon tetrachloride	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8	<2.8	<2.8	<2.8
Chlorobenzene	<6.0	<6.0	<6.0	<6.0	**8.26**	**387**	<6.0	**16.7**	<6.0	<6.0
Chlorodibromomethane	<3.1	<3.1	<3.1	<3.1	<3.1	<6.2	<3.1	<3.1	<3.1	<3.1
Chloroethane	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
2-Chloroethylvinyl ether	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Chloroform	<1.6	<1.6	<1.6	<1.6	<1.6	<3.2	<1.6	<1.6	<1.6	<1.6
Dichlorobromomethane	<2.2	<2.2	<2.2	<2.2	<2.2	<4.4	<2.2	<2.2	<2.2	<2.2
Dichlorodifluoromethane	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
1,1-Dichloroethane	<4.7	<4.7	<4.7	<4.7	<4.7	<9.4	<4.7	<4.7	<4.7	<4.7
1,2-Dichloroethane	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8	<2.8	<2.8	<2.8
1,1-Dichloroethylene	<2.8	<2.8	<2.8	<2.8	<2.8	<5.6	<2.8	<2.8	<2.8	<2.8
1,2-Dichloropropane	<6.0	<6.0	<6.0	<6.0	<6.0	<12	<6.0	<6.0	<6.0	<6.0
cis-1,3-Dichloropropylene	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	<7.2	<7.2	<7.2	<7.2	<7.2	<14	<7.2	<7.2	<7.2	<7.2
Methyl bromide	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Methyl chloride	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Methylene chloride	**6.3**	**6.1**	**13.2**	**4.6**	<2.8	**9.62**	<2.8	**4.59**	<2.8	<2.8
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<6.9	<6.9	<6.9	<14	<6.9	<6.9	<6.9	<6.9
Tetrachloroethylene	<4.1	<4.1	<4.1	<4.1	<4.1	<8.2	<4.1	<4.1	<4.1	<4.1
oluene	<6.0	<6.0	<6.0	**8.75**	<6.0	<12	<6.0	<6.0	**17.6**	**11.6**
,2-trans-Dichloroethylene	<1.6	<1.6	<1.6	<1.6	<1.6	<3.2	**2.70**	**2.00**	**3.53**	<1.6
1,1,1-Trichloroethane	<3.8	<3.8	<3.8	<3.8	<3.8	<7.6	<3.8	<3.8	<3.8	<3.8
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0
Trichloroethylene	<1.9	<1.9	<1.9	<1.9	<1.9	<3.8	<1.9	<1.9	<1.9	<1.9
Trichlorofluoromethane	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Vinyl chloride	**24.3**	**24.2**	<10	<10	**30.1**	<20	<10	**14.4**	**19.4**	**12.7**
trans-1,3-Dichloropropylene	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Sub Total 1	31	30	27	23	38	429	3	43	41	24
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl isoamyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene/p-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	31	30	27	23	38	429	3	43	41	24

See footnotes on last page.

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Well Number:	GM-31B	GM-31C	GM-31C	GM-31C	GM-31C	GM-31C	GM-31C	GM-31C	GM-31C	GM-31C
Date:	5/91	12/86	5/87	11/87	5/88	11/88	5/89	11/89	5/90	11/90
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<100	<100	<100	<100	<2,000	<100	<100	<500	<100
Acrylonitrile	<100	<100	<100	<100	<100	<2,000	<100	<100	<500	<100
Benzene	**16.6**	<4.4	<4.4	**16.4**	<4.4	**144**	**94.1**	<4.4	**34.2**	**21.7**
Bis (chloromethyl) ether	<10	<10	<10	<10	<10	<200	<10	<10	<50	<10
Bromoform	<4.7	<4.7	<4.7	<4.7	<4.7	<94	<4.7	<4.7	<24	<4.7
Carbon tetrachloride	<2.8	<2.8	<2.8	<2.8	<2.8	<56	<2.8	<2.8	<14	<2.8
Chlorobenzene	**82.1**	**52.7**	<6	**174**	<6.0	**1,070**	**1,120**	<6.0	**354**	**233**
Chlorodibromomethane	<3.1	<3.1	<3.1	<3.1	<3.1	<62	<3.1	<3.1	<16	<3.1
Chloroethane	<10	<10	<10	<10	<10	<200	<10	<10	<50	<10
2-Chloroethylvinyl ether	<10	<10	<10	<10	<10	<200	<10	<10	<50	<10
Chloroform	<1.6	<1.6	<1.6	<1.6	<1.6	<32	<1.6	<1.6	<8.0	<1.6
Dichlorobromomethane	<2.2	<2.2	<2.2	<2.2	<2.2	<44	<2.2	<2.2	<11	<2.2
Dichlorodifluoromethane	<10	<10	<10	<10	<10	<200	<10	<10	<50	<10
1,1-Dichloroethane	<4.7	<4.7	<4.7	<4.7	<4.7	<94	<4.7	<4.7	<24	<4.7
1,2-Dichloroethane	<2.8	<2.8	<2.8	<2.8	<2.8	<56	<2.8	<2.8	<14	<2.8
1,1-Dichloroethylene	<2.8	<2.8	<2.8	<2.8	<2.8	<56	<2.8	<2.8	<14	<2.8
1,2-Dichloropropane	<6.0	<6	<6	<6.0	<6.0	<120	<6.0	<6.0	<30	<6.0
cis-1,3-Dichloropropylene	<5.0	<5	<5	<5.0	<5.0	<100	<5.0	<5.0	<25	<5.0
Ethylbenzene	<7.2	<7.2	<7.2	<7.2	<7.2	<140	<7.2	<7.2	<36	<7.2
Methyl bromide	<10	<10	<10	<10	<10	<200	<10	<10	<50	<10
Methyl chloride	<10	<10	<10	<10	<10	<200	<10	<10	<50	<10
Methylene chloride	<2.8	**16.6**	**20.7**	<2.8	**7.1**	**122**	<2.8	**3.94**	**20.1**	<2.8
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<6.9	<6.9	<6.9	<140	<6.9	<6.9	<35	<6.9
Tetrachloroethylene	<4.1	<4.1	<4.1	<4.1	<4.1	<82	<4.1	<4.1	<21	<4.1
Toluene	<6.0	<6	<6	<6.0	<6.0	<120	<6.0	<6.0	<30	**99.7**
1,2-trans-Dichloroethylene	**4.21**	<1.6	**2.6**	<1.6	<1.6	<32	<1.6	<1.6	<8.0	<1.6
1,1,1-Trichloroethane	<3.8	<3.8	<3.8	<3.8	<3.8	<76	<3.8	<3.8	<19	<3.8
1,1,2-Trichloroethane	<5.0	<5	<5	<5.0	<5.0	<100	<5.0	<5.0	<25	<5.0
Trichloroethylene	<1.9	<1.9	<1.9	<1.9	<1.9	<38	<1.9	<1.9	<9.5	<1.9
Trichlorofluoromethane	<10	<10	<10	<10	<10	<200	<10	<10	<50	<10
Vinyl chloride	**30.2**	<10	<10	**11.2**	<10	<200	<10	**21.0**	<50	<10
trans-1,3-Dichloropropylene	<10	<10	<10	<10	<10	<200	<10	<10	<50	<10
Sub Total 1	133	69	23	201	7	1,336	1,214	25	408	354
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl isoamyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene/p-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	133	69	23	201	7	1,336	1,214	25	408	354

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Well Number:	GM-31C	GM-54A	GM-54A	GM-54A	GM-54B	GM-54B	GM-54B	GM-54B	GM-54B	GM-54B
Date:	5/91	11/87	5/88	9/94	11/87	5/88	11/88	4/89	10/89	11/90
Laboratory:	ETC	ETC	ETC	SL	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<100	<100	<100	<100	<100	<100	<100	<1,000	<100
Acrylonitrile	<100	<100	<100	<100	<100	<100	<100	<100	<1,000	<100
Benzene	<4.4	<4.4	<4.4	<5	<4.4	**28.3**	<4.4	**59.2**	<44	**6.50**
Bis (chloromethyl) ether	<10	<10	<10	NA	<10	<10	<10	<10	<100	<10
Bromoform	<4.7	<4.7	<4.7	<5	<4.7	<4.7	<4.7	<4.7	<47	<4.7
Carbon tetrachloride	<2.8	<2.8	<2.8	<5	<2.8	<2.8	<2.8	<2.8	<28	<2.8
Chlorobenzene	**56.6**	<6.0	<6.0	<5	**83.0**	**181.0**	**123**	**466**	**435**	**177**
Chlorodibromomethane	<3.1	<3.1	<3.1	<5	<3.1	<3.1	<3.1	<3.1	<31	<3.1
Chloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<100	<10
2-Chloroethylvinyl ether	<10	<10	<10	<50	<10	<10	<10	<10	<100	<10
Chloroform	<1.6	<1.6	<1.6	<5	<1.6	<1.6	<1.6	<1.6	<16	<1.6
Dichlorobromomethane	<2.2	<2.2	<2.2	<5	<2.2	<2.2	<2.2	<2.2	<22	<2.2
Dichlorodifluoromethane	<10	<10	<10	<5	<10	<10	<10	<10	<100	<10
1,1-Dichloroethane	<4.7	<4.7	<4.7	<5	<4.7	<4.7	<4.7	<4.7	<47	<4.7
1,2-Dichloroethane	<2.8	<2.8	<2.8	<5	<2.8	<2.8	<2.8	<2.8	<28	<2.8
1,1-Dichloroethylene	<2.8	<2.8	<2.8	<5	<2.8	<2.8	<2.8	<2.8	<28	<2.8
1,2-Dichloropropane	<6.0	<6.0	<6.0	<5	<6.0	<6.0	<6.0	<6.0	<60	<6.0
cis-1,3-Dichloropropylene	<5.0	<5.0	<5.0	<5	<5.0	<5.0	<5.0	<5.0	<50	<5.0
Ethylbenzene	<7.2	<7.2	<7.2	<5	<7.2	<7.2	<7.2	<7.2	<72	<7.2
Methyl bromide	<10	<10	<10	<10	<10	<10	<10	<10	<100	<10
Methyl chloride	<10	<10	<10	<10	<10	<10	<10	<10	<100	<10
Methylene chloride	<2.8	**9.37**	**34**	<5	**13.5**	**44.4**	**71.1**	**3.32**	**35.9**	<2.8
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<6.9	<5	<6.9	<6.9	<6.9	<6.9	<69	<6.9
Tetrachloroethylene	<4.1	<4.1	<4.1	<5	**4.12**	<4.1	<4.1	<4.1	<41	<4.1
Toluene	<6.0	<6.0	<6.0	<5	<6.0	<6.0	<6.0	<6.0	<60	**10.6**
1,2-trans-Dichloroethylene	<1.6	<1.6	<1.6	<5	<1.6	<1.6	<1.6	<1.6	<16	<1.6
1,1-Trichloroethane	<3.8	<3.8	<3.8	<5	<3.8	<3.8	<3.8	<3.8	<38	<3.8
,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5	<5.0	<5.0	<5.0	<5.0	<50	<5.0
Trichloroethylene	<1.9	<1.9	<1.9	<5	<1.9	<1.9	<1.9	<1.9	<19	<1.9
Trichlorofluoromethane	<10	<10	<10	<5	<10	<10	<10	<10	<100	<10
Vinyl chloride	<10	<10	<10	<10	<10	<10	<10	<10	<100	<10
trans-1,3-Dichloropropylene	<10	<10	<10	<5	<10	<10	<10	<10	<100	<10
Sub Total 1	57	9	34	0	101	254	194	529	471	194
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	<10	<10	<25	<10	<10	NA	NA	NA	NA
Methyl isoamyl ketone	NA	<10	<10	<25	<10	<10	NA	NA	NA	NA
m-Xylene	NA	<10	<10	<5	<10	<10	NA	NA	NA	NA
o-Xylene/p-Xylene	NA	<10	<10	<5	<10	<10	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	57	9	34	0	101	254	194	529	471	194

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Well Number:	GM-54B	GM-54B	GM-54B	GM-55C	GM-55C	GM-55C	GM-55C	GM-55C	GM-55C	GM-55C
Date:	11/91	11/92	9/94	11/87	5/88	11/88	11/89	11/90	11/91	11/92
Laboratory:	ETC	ETC	SL	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<100	<500	<1,000	<10,000	<5,000	<5,000	<5,000	<2,500	<2,500
Acrylonitrile	<100	<100	<500	<1,000	<10,000	<5,000	<5,000	<5,000	<2,500	<2,500
Benzene	<4.4	**12.2**	<25	**163**	<440	<220	<220	<220	<110	<110
Bis (chloromethyl) ether	<10	<10	NA	<100	<1,000	<500	<500	<500	<250	<250
Bromoform	<4.7	<4.7	<25	<47	<470	<240	<240	<240	<120	<120
Carbon tetrachloride	<2.8	<2.8	<25	<28	<280	<140	<140	<140	<70	<70
Chlorobenzene	**69.0**	**108**	**340**	**4,030**	**3,360**	**2,700**	**3,220**	**2,580**	**2,990**	**1,410**
Chlorodibromomethane	<3.1	<3.1	<25	<31	<310	<160	<160	<160	<78	<78
Chloroethane	<10	<10	<50	<100	<1,000	<500	<500	<500	<250	<250
2-Chloroethylvinyl ether	<10	<10	<250	<100	<1,000	<500	<500	<500	<250	<250
Chloroform	<1.6	<1.6	<25	<16	<160	<80	<80	<80	<40	<40
Dichlorobromomethane	<2.2	<2.2	<25	<22	<220	<110	<110	<110	<55	<55
Dichlorodifluoromethane	<10	<10	<25	<100	<1,000	<500	<500	<500	<250	<250
1,1-Dichloroethane	<4.7	<4.7	<25	<47	<470	<240	<240	<240	<120	<120
1,2-Dichloroethane	<2.8	<2.8	<25	<28	<280	<140	<140	<140	<70	<70
1,1-Dichloroethylene	<2.8	<2.8	<25	<28	<280	<140	<140	<140	<70	<70
1,2-Dichloropropane	<6.0	<6.0	<25	<60	<600	<300	<300	<300	<150	<150
cis-1,3-Dichloropropylene	<5.0	<5.0	<25	<50	<500	<250	<250	<250	<130	<130
Ethylbenzene	<7.2	<7.2	<25	<72	<720	<360	<360	<360	<180	<180
Methyl bromide	<10	<10	<50	<100	<1,000	<500	<500	<500	<250	<250
Methyl chloride	<10	<10	<50	<100	<1,000	<500	<500	<500	<250	<250
Methylene chloride	<2.8	<2.8	<25	**48.9**	**415**	**255**	**140**	<140	<70	<70
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<25	<69	<690	<350	<350	<350	<170	<170
Tetrachloroethylene	<4.1	<4.1	<25	<41	<410	<210	<210	<210	<100	<100
Toluene	<6.0	<6.0	<25	<60	<600	<300	<300	<300	<150	<150
1,2-trans-Dichloroethylene	<1.6	<1.6	<25	<16	<160	<80	<80	<80	<40	<40
1,1,1-Trichloroethane	<3.8	<3.8	<25	<38	<380	<190	<190	<190	<95	<95
1,1,2-Trichloroethane	<5.0	<5.0	<25	<50	<500	<250	<250	<250	<130	<130
Trichloroethylene	<1.9	<1.9	<25	<19	<190	<95	<95	<95	<48	<48
Trichlorofluoromethane	<10	<10	<25	<100	<1,000	<500	<500	<500	<250	<250
Vinyl chloride	<10	<10	<50	<100	<1,000	<500	<500	<500	<250	<250
trans-1,3-Dichloropropylene	<10	<10	<25	<100	<1,000	<500	<500	<500	<250	<250
Sub Total 1	69	120	340	4,242	3,775	2,955	3,360	2,580	2,990	1,410
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	NA	<120	<100	<1,000	<500	<500	<500	<250	<250
Methyl isoamyl ketone	NA	NA	<120	<100	<1,000	<500	<500	<500	<250	<250
m-Xylene	NA	NA	<25	<100	<1,000	<500	<500	<500	<250	<250
o-Xylene/p-Xylene	NA	NA	<25	<100	<1,000	<500	<500	<500	<250	<250
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	69	120	340	4,242	3,775	2,955	3,360	2,580	2,990	1,410

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Well Number:	GM-55C	GM-56C	GM-56C	GM-56C	GM-56C	GM-56C	GM-56C	GM-56C	GM-57C	GM-57C
Date:	11/92*	11/87	5/88	11/88	11/88	11/89	11/90	11/91	11/87	11/87*
Laboratory:	ETC	ETC	ETC	ETC	SL	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<2,500	<1,000	<1,000	<5,000	<1,000	<1,000	<5,000	<1,000	<1,000	<5,000
Acrylonitrile	<2,500	<1,000	<1,000	<5,000	<1,000	<1,000	<5,000	<1,000	<1,000	<5,000
Benzene	<110	**510**	**163**	<220	**250**	**108**	<220	<44	**605**	**459**
Bis (chloromethyl) ether	<250	<100	<100	<500	<100	<100	<500	<100	<100	<500
Bromoform	<120	<47	<47	<240	<50	<47	<240	<47	<47	<240
Carbon tetrachloride	<70	<28	<28	<140	<50	<28	<140	<28	<28	<140
Chlorobenzene	**1,590**	**3,980**	**1,000**	**2,400**	**4,200**	**3,100**	**4,620**	**1,280**	**5,050**	**3,740**
Chlorodibromomethane	<78	<31	<31	<160	<50	<31	<160	<31	<31	<160
Chloroethane	<250	<100	<100	<500	<100	<100	<500	<100	<100	<500
2-Chloroethylvinyl ether	<250	<100	<100	<500	<50	<100	<500	<100	<100	<500
Chloroform	<40	<16	<16	<80	<50	<16	<80	<16	<16	<80
Dichlorobromomethane	<55	<22	<22	<110	<50	<22	<110	<22	<22	<110
Dichlorodifluoromethane	<250	<100	<100	<500	<100	<100	<500	<100	<100	<500
1,1-Dichloroethane	<120	<47	<47	<240	<50	<47	<240	<47	<47	<240
1,2-Dichloroethane	<70	<28	<28	<140	<50	<28	<140	<28	**1,910**	**1,690**
1,1-Dichloroethylene	<70	<28	<28	<140	<50	<28	<140	<28	<28	<140
1,2-Dichloropropane	<150	<60	<60	<300	<50	<60	<300	<60	<60	<300
cis-1,3-Dichloropropylene	<130	<50	<50	<250	<50	<50	<250	<50	<50	<250
Ethylbenzene	<180	**150**	<72	<360	**140**	**105**	<360	<72	**160**	<500
Methyl bromide	<250	<100	<100	<500	<100	<100	<500	<100	<100	<500
Methyl chloride	<250	<100	<100	<500	<100	<100	<500	<100	<100	<500
Methylene chloride	<70	<28	<28	**240**	<50	<28	<140	<28	**94.0**	**231**
1,1,2,2-Tetrachloroethane	<170	<69	<69	<350	<50	<69	<350	<69	<69	<350
Tetrachloroethylene	<100	**80.9**	<41	<210	**67**	**64.7**	<210	<41	**102**	<210
Toluene	<150	**1,810**	**232**	**698**	**1,200**	**700**	**1,360**	<60	**1,210**	**775**
1,2-trans-Dichloroethylene	<40	<16	<16	<80	<50	<16	<80	<16	<16	<80
,1,1-Trichloroethane	<95	<38	<38	<190	<50	<38	<190	<38	<38	<190
,1,2-Trichloroethane	<130	<50	<50	<250	<50	<50	<250	<50	<50	<250
Trichloroethylene	<48	**192**	<19	<95	<50	**30.6**	<95	<19	**88.4**	<95
Trichlorofluoromethane	<250	<100	<100	<500	<50	<100	<500	<100	<100	<500
Vinyl chloride	<250	<100	<100	<500	<100	<100	<500	<100	<100	<500
trans-1,3-Dichloropropylene	<250	<100	<100	<500	<50	<100	<500	<100	<100	<500
Sub Total 1	1,590	6,723	1,385	3,338	5,857	4,108	5,980	1,280	9,219	6,895
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	<250	**287**	<100	<500	<500	<100	<500	<100	**841**	**687**
Methyl isoamyl ketone	<250	<100	<100	<500	<100	<100	<500	<100	<100	<500
m-Xylene	<250	**846**	<100	<500	**260**	**458**	**813**	**229**	**901**	**533**
o-Xylene/p-Xylene	<250	**450**	NA	<500	**130**	**293**	<500	**116**	**465**	<500
Sub Total 2	0	1,583	0	0	390	751	813	345	2,207	1,220
Total VOCs Analyzed	1,590	8,306	1,385	3,338	6,247	4,859	6,793	1,625	11,426	8,115

See footnotes on last page.

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Well Number:	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C
Date:	5/88	5/88*	11/88	11/88	3/89	11/89	11/89*	11/90	11/90*	11/91
Laboratory:	ETC	ETC	ETC	SL	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<10,000	<10,000	<5,000	<1,000	<10,000	<10,000	<5,000	<5,000	<5,000	<2,500
Acrylonitrile	<10,000	<10,000	<5,000	<1,000	<10,000	<10,000	<5,000	<5,000	<5,000	<2,500
Benzene	<440	<440	**566**	**520**	<440	<440	<220	**613**	**607**	**220**
Bis (chloromethyl) ether	<1,000	<1,000	<500	<100	<1,000	<1,000	<500	<500	<500	<250
Bromoform	<470	<470	<240	<50	<470	<470	<240	<240	<240	<120
Carbon tetrachloride	<280	<280	<140	<50	<280	<280	<140	<140	<140	<70
Chlorobenzene	**3,020**	**3,020**	**4,510**	**5,200**	**7,380**	**2,320**	**2,330**	**5,850**	**5,650**	**4,900**
Chlorodibromomethane	<310	<310	<160	<50	<310	<310	<160	<160	<160	<78
Chloroethane	<1,000	<1,000	<500	<100	<1,000	<1,000	<500	<500	<500	<250
2-Chloroethylvinyl ether	<1,000	<1,000	<500	<50	<1,000	<1,000	<500	<500	<500	<250
Chloroform	<160	<160	<80	<50	<160	<160	<80	<80	<80	<40
Dichlorobromomethane	<220	<220	<110	<50	<220	<220	<110	<110	<110	<55
Dichlorodifluoromethane	<1,000	<1,000	<500	<100	<1,000	<1,000	<500	<500	<500	<250
1,1-Dichloroethane	<470	<470	<240	<50	<470	<470	<240	<240	<240	<120
1,2-Dichloroethane	<280	<280	**1,260**	<50	**555**	<280	**286**	**811**	**787**	**112**
1,1-Dichloroethylene	<280	<280	<140	<50	<280	<280	<140	<140	<140	<70
1,2-Dichloropropane	<600	<600	<300	<50	<600	<600	<300	<300	<300	<150
cis-1,3-Dichloropropylene	<500	<500	<250	<50	<500	<500	<250	<250	<250	<130
Ethylbenzene	<720	<720	<500	**190**	<1,000	<720	<360	<360	<360	**279**
Methyl bromide	<1,000	<1,000	<500	<100	<1,000	<1,000	<500	<500	<500	<250
Methyl chloride	<1,000	<1,000	<500	<100	**466**	<1,000	<500	<500	<500	<250
Methylene chloride	**417**	<280	**284**	**58**	<690	<280	<140	<140	<140	<70
1,1,2,2-Tetrachloroethane	<690	<690	<350	<50	<410	<690	<350	<350	<350	<170
Tetrachloroethylene	<410	<410	<210	**95**	**1220**	<410	<210	<210	<210	<100
Toluene	<600	<600	**817**	**890**	<160	<600	**328**	**1,150**	**2,070**	**742**
1,2-trans-Dichloroethylene	<160	<160	<80	<50	<380	<160	<80	<80	<80	<40
1,1,1-Trichloroethane	<380	<380	<190	<50	<500	<380	<190	<190	<190	<95
1,1,2-Trichloroethane	<500	<500	<250	<50	<190	<500	<250	<250	<250	<130
Trichloroethylene	<190	<190	<95	<50	<1,000	<190	<95	<95	<95	<48
Trichlorofluoromethane	<1,000	<1,000	<500	<50	<1,000	<1,000	<500	<500	<500	<250
Vinyl chloride	<1,000	<1,000	<500	<100	<1,000	<1,000	<500	<500	<500	<250
trans-1,3-Dichloropropylene	<1,000	<1,000	<360	<50	**720**	<1,000	<500	<500	<500	<250
Sub Total 1	3,437	3,020	7,437	6,953	9,621	2,320	2,944	8,424	9,114	6,253
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	<1,000	<1,000	**521**	<500	<1,000	<1,000	<500	<500	<500	<250
Methyl isoamyl ketone	<1,000	<1,000	<500	<100	<1,000	<1,000	<500	<500	<500	<250
m-Xylene	<1,000	<1,000	<500	**240**	<1,000	<1,000	<500	<500	<500	**962**
o-Xylene/p-Xylene	<1,000	<1,000	<500	**120**	<1,000	<1,000	<500	<500	<500	**538**
Sub Total 2	0	0	521	360	0	0	0	0	0	1,500
Total VOCs Analyzed	3,437	3,020	7,958	7,313	9,621	2,320	2,944	8,424	9,114	7,753

See footnotes on last page.

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Well Number:	GM-57C	GM-58A	GM-58A	GM-58A	GM-58A	GM-58A	GM-58A	GM-58A	GM-58A	GM-59A
Date:	11/91*	11/87	5/88	11/88	11/89	11/90	11/91	11/92	9/94	11/87
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	SL	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<2,500	<100	<100	<100	<100	<100	<100	<100	<100	<100
Acrylonitrile	<2,500	<100	<100	<100	<100	<100	<100	<100	<100	<100
Benzene	**225**	<4.4	<4.4	<4.4	<4.4	**9.55**	<4.4	<4.4	<5	<4.4
Bis (chloromethyl) ether	<250	<10	<10	<10	<10	<10	<10	<10	NA	<10
Bromoform	<120	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<5	<4.7
Carbon tetrachloride	<70	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5	<2.8
Chlorobenzene	**4,570**	<6.0	<6.0	<6.0	<6.0	**17.4**	**9.17**	**14.1**	<5	<6.0
Chlorodibromomethane	<78	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<5	<3.1
Chloroethane	<250	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chloroethylvinyl ether	<250	<10	<10	<10	<10	<10	<10	<10	<50	<10
Chloroform	<40	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<5	<1.6
Dichlorobromomethane	<55	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<5	<2.2
Dichlorodifluoromethane	<250	<10	<10	<10	<10	<10	<10	<10	<5	<10
1,1-Dichloroethane	<120	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<5	<4.7
1,2-Dichloroethane	<70	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5	<2.8
1,1-Dichloroethylene	<70	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5	<2.8
1,2-Dichloropropane	<150	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<5	<6.0
cis-1,3-Dichloropropylene	<130	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5.0
Ethylbenzene	**280**	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<5	<7.2
Methyl bromide	<250	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methyl chloride	<250	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylene chloride	<70	**12.1**	**9.7**	**51.2**	**3.05**	<2.8	<2.8	<2.8	<5	**6.88**
1,1,2,2-Tetrachloroethane	<170	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<5	<6.9
Tetrachloroethylene	**107**	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<5	<4.1
Toluene	**800**	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<5	<6.0
1,2-trans-Dichloroethylene	<95	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<5	<1.6
1,1,1-Trichloroethane	<130	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<5	<3.8
1,1,2-Trichloroethane	<48	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5.0
Trichloroethylene	<250	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<5	<1.9
Trichlorofluoromethane	<250	<10	<10	<10	<10	<10	<10	<10	<5	<10
Vinyl chloride	<250	<10	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropylene	<250	<10	<10	<10	<10	<10	<10	<10	<5	<10
Sub Total 1	5,982	12	10	51	3	27	9	14	0	7
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	<250	<10	<10	NA	NA	NA	NA	NA	<25	<10
Methyl isoamyl ketone	<250	<10	<10	NA	NA	NA	NA	NA	<25	<10
m-Xylene	**953**	<10	<10	NA	NA	NA	NA	NA	**6**	<10
o-Xylene/p-Xylene	**539**	<10	<10	NA	NA	NA	NA	NA	**6**	<10
Sub Total 2	1,492	0	0	0	0	0	0	0	10	0
Total VOCs Analyzed	7,474	12	10	51	3	27	9	14	10	7

See footnotes on last page.

Well Number:	GM-59A	GM-59A	GM-59A	GM-59A	GM-59A	GM-59A	B-25A	B-26A	B-28A	GM-106
Date:	5/88	11/88	11/89	11/90	11/91	11/92	3/87	3/87	3/87	12/86
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<100	<100	<100	<100	<100	<1,000	<100	<1,000	<100
Acrylonitrile	<100	<100	<100	<100	<100	<100	<1,000	<100	<1,000	<100
Benzene	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	**92**	**42.3**	<44	<4.4
Bis (chloromethyl) ether	<10	<10	<10	<10	<10	<10	<100	<10	<100	<10
Bromoform	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<47	<4.7	<47	<4.7
Carbon tetrachloride	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<28	<2.8	<28	<2.8
Chlorobenzene	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	**8,210**	**158**	**929**	**63.7**
Chlorodibromomethane	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<31	<3.1	<31	<3.1
Chloroethane	<10	<10	<10	<10	<10	<10	**200**	<10	<100	<10
2-Chloroethylvinyl ether	<10	<10	<10	<10	<10	<10	<100	<10	<100	<10
Chloroform	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	**70.7**	<1.6	<16	<1.6
Dichlorobromomethane	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<22	<2.2	<22	<2.2
Dichlorodifluoromethane	<10	<10	<10	<10	<10	<10	<100	<10	<100	<10
1,1-Dichloroethane	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<47	**8.86**	<47	<4.7
1,2-Dichloroethane	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	**16,500**	<2.8	<28	<2.8
1,1-Dichloroethylene	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<28	<2.8	<28	<2.8
1,2-Dichloropropane	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<60	<6.0	<60	<6.0
cis-1,3-Dichloropropylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<5.0	<50	<5.0
Ethylbenzene	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<72	<7.2	<72	<7.2
Methyl bromide	<10	<10	<10	<10	<10	<10	<100	<10	<100	<10
Methyl chloride	<10	<10	<10	<10	<10	<10	<100	<10	<100	<10
Methylene chloride	<2.8	**54.9**	**3.31**	<2.8	<2.8	<2.8	<28	<2.8	<28	**9.4**
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<69	<6.9	<69	<6.9
Tetrachloroethylene	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<41	<4.1	<41	<4.1
Toluene	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	**465**	<6.0	<60	**27.7**
1,2-trans-Dichloroethylene	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<16	**4.64**	<16	<1.6
1,1,1-Trichloroethane	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<38	<3.8	<38	<3.8
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<5.0	<50	<5.0
Trichloroethylene	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<19	<1.9	<19	<1.9
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<100	<10	<100	<10
Vinyl chloride	<10	<10	<10	<10	<10	<10	<100	<10	<100	<10
trans-1,3-Dichloropropylene	<10	<10	<10	<10	<10	<10	<100	<10	<100	<10
Sub Total 1	0	55	3	0	0	0	25,538	214	929	101
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	**19,400**	<10	<100	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	<100	<10	<100	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	<100	<10	<100	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	<100	<10	<100	NA
Styrene	NA	NA	NA	NA	NA	NA	<100	<10	<100	NA
Methyl-iso-butyl ketone	<10	NA	NA	NA	NA	NA	**206**	<10	<100	NA
Methyl isoamyl ketone	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
m-Xylene	<10	NA	NA	NA	NA	NA	<100	<10	<100	NA
o-Xylene/p-Xylene	<10	NA	NA	NA	NA	NA	<100	<10	<100	NA
Sub Total 2	0	0	0	0	0	0	19,606	0	0	0
Total VOCs Analyzed	0	55	3	0	0	0	45,144	214	929	101

See footnotes on last page.

Well Number:	GM-106	GM-106	GM-106	GM-106	GM-106	GM-106	GM-106	GM-106	P-1	P-1
Date:	5/87	11/87	5/88	11/88	11/89	11/90	11/91	11/92	3/87	11/87
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<1,000	<1,000	<2,500	<5,000	<500	<1,000	<10,000	<100	<1,000
Acrylonitrile	<100	<1,000	<1,000	<2,500	<5,000	<500	<1,000	<10,000	<100	<1,000
Benzene	**8.1**	**44.6**	<44	<110	<220	**55.0**	**61.8**	<440	<4.4	**102**
Bis (chloromethyl) ether	<10	<100	<100	<250	<500	<50	<100	<1,000	<10	<100
Bromoform	<4.7	<47	<47	<120	<240	<24	<47	<470	<4.7	<47
Carbon tetrachloride	<2.8	<28	<28	<70	<140	<14	<28	<280	<2.8	<28
Chlorobenzene	**119.0**	**970**	**584**	**1,760**	**1,940**	**1,270**	**1,420**	**2,110**	**454**	**1,110**
Chlorodibromomethane	<3.1	<31	<31	<78	<160	<16	<31	<310	<3.1	<31
Chloroethane	<10	<100	<100	<250	<500	<50	<100	<1,000	<10	<100
2-Chloroethylvinyl ether	<10	<100	<100	<250	<500	<50	<100	<1,000	<10	<100
Chloroform	<1.6	<16	<16	<40	<80	<8.0	<16	<160	<1.6	<16
Dichlorobromomethane	<2.2	<22	<22	<55	<110	<11	<22	<220	<2.2	<22
Dichlorodifluoromethane	<10	<100	<100	<250	<500	<50	<100	<1,000	<10	<100
1,1-Dichloroethane	<4.7	<47	<47	<120	<240	<24	<47	<470	<4.7	<47
1,2-Dichloroethane	<2.8	<28	<28	<70	<140	<14	<28	<280	<2.8	<28
1,1-Dichloroethylene	<2.8	<28	<28	<70	<140	<14	<28	<280	<2.8	**35.1**
1,2-Dichloropropane	<6.0	<60	<60	<150	<300	<30	<60	<600	<6.0	<60
cis-1,3-Dichloropropylene	<5.0	<60	<60	<130	<250	<25	<50	<500	<5.0	<50
Ethylbenzene	**7.3**	<72	<72	<180	<360	**79.2**	**85.2**	<720	<7.2	<72
Methyl bromide	<10	<100	<100	<250	<500	<50	<100	<1,000	<10	<100
Methyl chloride	<10	<100	<100	<250	<500	<50	<100	<1,000	<10	<100
Methylene chloride	**7.2**	**38.8**	<28	**760**	**228**	<14	<28	<280	<2.8	**95.0**
1,1,2,2-Tetrachloroethane	<6.9	<69	<69	<170	<350	<35	<69	<690	<6.9	<69
Tetrachloroethylene	<4.1	<41	<41	<100	<210	**43.6**	**49.3**	<410	<4.1	<41
Toluene	**37.1**	**307**	**177**	**488**	**571**	**407**	**429**	**764**	<6.0	<60
1,2-trans-Dichloroethylene	<1.6	<16	<16	<40	<80	<8.0	<16	<160	<1.6	**29.2**
1,1,1-Trichloroethane	<3.8	<38	<38	<95	<190	<19	<38	<380	<3.8	<38
1,1,2-Trichloroethane	<5.0	<50	<50	<130	<250	<25	<50	<500	<5.0	<50
Trichloroethylene	<1.9	<19	<19	<48	<95	**22.2**	<19	<190	<1.9	<19
Trichlorofluoromethane	<10	<100	<100	<250	<500	<50	<100	<1,000	<10	<100
Vinyl chloride	<10	<100	<100	<250	<500	<50	<100	<1,000	<10	<100
trans-1,3-Dichloropropylene	<10	<100	<100	<250	<500	<50	<100	<1,000	<10	<100
Sub Total 1	179	1,360	761	2,998	2,739	1,877	2,045	2,874	454	1,371
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	**30.4**	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
Methyl-iso-butyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	<10	<100
Methyl isoamyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	<100
m-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	<10	<100
o-Xylene/p-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	<10	<100
Sub Total 2	0	0	0	0	0	0	0	0	30	0
Total VOCs Analyzed	179	1,360	761	2,998	2,739	1,877	2,045	2,874	484	1,371

See footnotes on last page.

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Well Number:	P-2	P-2	P-2	P-2	P-2	P-2	P-2	P-2	P-2	P-3
Date:	12/86	5/87	11/87	5/88	11/88	11/89	11/90	11/91	11/92	11/87
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<100	<1,000	<2,000	<2,000	<5,000	<5,000	<2,500	<5,000	<1,000
Acrylonitrile	<100	<100	<1,000	<2,000	<2,000	<5,000	<5,000	<2,500	<5,000	<1,000
Benzene	**56.1**	**50.8**	**140**	**88.3**	**571**	**272**	**241**	**514**	**245**	**2,220**
Bis (chloromethyl) ether	<10	<10	<100	<200	<200	<500	<500	<250	<500	<100
Bromoform	<4.7	<4.7	<47	<94	<94	<240	<240	<120	<240	<47
Carbon tetrachloride	<2.8	<2.8	<28	<56	<56	<140	<140	<70	<140	<28
Chlorobenzene	**618**	**497**	**1,040**	**605**	**1,510**	**1,810**	**2,950**	**3,670**	**3,480**	**346**
Chlorodibromomethane	<3.1	<3.1	<31	<62	<62	<160	<160	<78	<160	<31
Chloroethane	<10	<10	<100	<200	<200	<500	<500	<250	<500	<100
2-Chloroethylvinyl ether	<10	<10	<100	<200	<200	<500	<500	<250	<500	<100
Chloroform	<1.6	<1.6	<16	<32	<32	<80	<80	<40	<80	<16
Dichlorobromomethane	<2.2	<2.2	<22	<44	<44	<110	<110	<55	<110	<22
Dichlorodifluoromethane	<10	<10	<100	<200	<200	<500	<500	<250	<500	<100
1,1-Dichloroethane	<4.7	<4.7	<47	<94	<94	<240	<240	<120	<240	<47
1,2-Dichloroethane	<2.8	<2.8	<28	<56	<56	<140	<140	<70	<140	<28
1,1-Dichloroethylene	<2.8	<2.8	<28	<56	<56	<140	<140	<70	<140	<28
1,2-Dichloropropane	<6.0	<6.0	<60	<120	<120	<300	<300	<150	<300	<60
cis-1,3-Dichloropropylene	<5.0	<5.0	<50	<100	<100	<250	<250	<130	<250	<50
Ethylbenzene	<7.2	<7.2	<72	<140	<140	<360	<360	<180	<360	<72
Methyl bromide	<10	<10	<100	<200	<200	<500	<500	<250	<500	<100
Methyl chloride	<10	<10	<100	<200	<200	<500	<500	<250	<500	<100
Methylene chloride	**13.6**	<2.8	<28	<56	**664**	<140	<140	<70	<140	<28
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<69	<140	<140	<350	<350	<170	<350	<69
Tetrachloroethylene	<4.1	<4.1	<41	<82	<82	<210	<210	<100	<210	<41
Toluene	<6.0	<6.0	<60	<120	**198**	<300	**306**	**717**	<300	<60
1,2-trans-Dichloroethylene	<1.6	<1.6	<16	<32	**609**	<80	<80	<40	<80	<16
1,1,1-Trichloroethane	<3.8	<3.8	<38	<76	**146**	<190	<190	<95	<190	<38
1,1,2-Trichloroethane	<5.0	<5.0	<50	<100	<100	<250	<250	<130	<250	<50
Trichloroethylene	<1.9	<1.9	<19	<38	**249**	<95	<95	<48	<95	<19
Trichlorofluoromethane	<10	<10	<100	<200	<200	<500	<500	<250	<500	<100
Vinyl chloride	<10	<10	<100	<200	**1,290**	<500	<500	<250	<500	<100
trans-1,3-Dichloropropylene	<10	<10	<100	<200	<200	<500	<500	<250	<500	<100
Sub Total 1	688	548	1,180	693	5,237	2,082	3,497	4,901	3,725	2,566
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	NA	<100	NA	NA	NA	NA	NA	NA	**400**
Methyl isoamyl ketone	NA	NA	<100	NA	NA	NA	NA	NA	NA	<100
m-Xylene	NA	NA	<100	NA	NA	NA	NA	NA	NA	<100
o-Xylene/p-Xylene	NA	NA	<100	NA	NA	NA	NA	NA	NA	<100
Sub Total 2	0	0	0	0	0	0	0	0	0	400
Total VOCs Analyzed	688	548	1,180	693	5,237	2,082	3,497	4,901	3,725	2,966

See footnotes on last page.

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Well Number:	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-7
Date:	12/86	5/87	11/87	5/88	11/88	11/89	11/90	11/91	11/92	12/86
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<100	<100	<100	<1,000	<5,000	<500	<100	<100	<10,000
Acrylonitrile	<100	<100	<100	<100	<1,000	<5,000	<500	<100	<100	<10,000
Benzene	**79.2**	<4.4	<4.4	<4.4	**419**	**434**	**230**	**117**	**173**	**523**
Bis (chloromethyl) ether	<10	<10	<10	<10	<100	<500	<50	<10	<10	<1,000
Bromoform	<4.7	<4.7	<4.7	<4.7	<47	<240	<24	<4.7	<4.7	<470
Carbon tetrachloride	<2.8	<2.8	<2.8	<2.8	<28	<140	<14	<2.8	<2.8	<280
Chlorobenzene	**366**	**33.1**	**7.48**	<6.0	**837**	**1,000**	**998**	**292**	**352**	**1,470**
Chlorodibromomethane	<3.1	<3.1	<3.1	<3.1	<31	<160	<16	<3.1	<3.1	<310
Chloroethane	<10	<10	<10	<10	<100	<500	<50	<10	<10	<1,000
2-Chloroethylvinyl ether	<10	<10	<10	<10	<100	<500	<50	<10	<10	<1,000
Chloroform	<1.6	<1.6	<1.6	<1.6	**28.8**	<80	<8.0	<1.6	<1.6	<160
Dichlorobromomethane	<2.2	<2.2	<2.2	<2.2	<22	<110	<11	<2.2	<2.2	<220
Dichlorodifluoromethane	<10	<10	<10	<10	<100	<500	<50	<10	<10	<1,000
1,1-Dichloroethane	<4.7	<4.7	<4.7	<4.7	**154**	<240	<24	<4.7	<4.7	<470
1,2-Dichloroethane	<2.8	<2.8	<2.8	<2.8	<28	<140	<14	<2.8	<2.8	<280
1,1-Dichloroethylene	<2.8	<2.8	<2.8	<2.8	<28	<140	<14	<2.8	<2.8	<280
1,2-Dichloropropane	<6.0	<6.0	<6.0	<6.0	<60	<300	<30	<6.0	<6.0	<600
cis-1,3-Dichloropropylene	<5.0	<5.0	<5.0	<5.0	<50	<250	<25	<5.0	<5.0	<500
Ethylbenzene	<7.2	<7.2	<7.2	<7.2	<72	<360	<36	<7.2	<7.2	<720
Methyl bromide	<10	<10	<10	<10	<100	<500	<50	<10	<10	<1,000
Methyl chloride	<10	<10	<10	<10	<100	<500	<50	<10	<10	<1,000
Methylene chloride	**33.9**	<2.8	**3.87**	<2.8	**581.0**	**170**	<14	<2.8	<2.8	**1,230**
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<6.9	<6.9	<69	<350	<35	<6.9	<6.9	<690
Tetrachloroethylene	<4.1	<4.1	<4.1	<4.1	<41	<210	<21	<4.1	<4.1	<410
Toluene	<6.0	<6.0	<6.0	<6.0	**189**	<300	<30	<6.0	<6.0	<600
1,2-trans-Dichloroethylene	<1.6	<1.6	<1.6	<1.6	**585**	<80	<8.0	<1.6	<1.6	<160
1,1,1-Trichloroethane	<3.8	<3.8	<3.8	<3.8	**104**	<190	<19	<3.8	<3.8	<380
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<50	<250	<25	<5.0	<5.0	<500
Trichloroethylene	<1.9	<1.9	<1.9	<1.9	**207**	<95	<9.5	<1.9	<1.9	<190
Trichlorofluoromethane	<10	<10	<10	<10	<100	<500	<50	<10	<10	<1,000
Vinyl chloride	<10	<10	<10	<10	**1,580**	<500	<50	<10	<10	<1,000
trans-1,3-Dichloropropylene	<10	<10	<10	<10	<100	<500	<50	<10	<10	<1,000
Sub Total 1	479	33	11	0	4,685	1,604	1,228	409	525	3,223
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA
Methyl isoamyl ketone	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA
m-Xylene	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA
o-Xylene/p-Xylene	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	479	33	11	0	4,685	1,604	1,228	409	525	3,223

See footnotes on last page.

Well Number:	P-7	P-7	P-7	P-7	P-7	P-7	P-7	P-7	P-8	P-8
Date:	3/87	5/87	11/87	5/88	11/88	11/90	11/91	11/92	12/86	5/87
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<10,000	<50,000	<1,000	<2,000	<10,000	<5,000	<2,500	<5,000	<1,000	<1,000
Acrylonitrile	<10,000	<50,000	<1,000	<2,000	<10,000	<5,000	<2,500	<5,000	<1,000	<1,000
Benzene	**1,420**	**11,300**	**1,830**	**861**	**5,650**	**1,790**	**1,460**	**1,650**	**194**	**424**
Bis (chloromethyl) ether	<1,000	<5,000	<100	<200	<1,000	<500	<250	<500	<100	<100
Bromoform	<470	<2,400	**62.3**	<94	<470	<240	<120	<240	<47	<47
Carbon tetrachloride	<280	<1,400	<28	<56	<280	<140	<70	<140	<28	<28
Chlorobenzene	**4,310**	**25,200**	**3,290**	**1,560**	**9,000**	**4,860**	**4,250**	**3,550**	**909**	**2,180**
Chlorodibromomethane	<310	<1600	<31	<62	<310	<160	<78	<160	<31	<31
Chloroethane	<1,000	<5,000	<100	<200	<1,000	<500	<250	<500	<100	<100
2-Chloroethylvinyl ether	<1,000	<5,000	<100	<200	<1,000	<500	<250	<500	<100	<100
Chloroform	<160	<800	<16	<32	**462**	<80	<40	<80	<16	<16
Dichlorobromomethane	<220	<1,100	<22	<44	<220	<110	<55	<110	<22	<22
Dichlorodifluoromethane	<1,000	<500	<100	<200	<1,000	<500	<250	<500	<100	<100
1,1-Dichloroethane	<470	<2,400	<47	<94	**2,880**	<240	<120	<240	<47	<47
1,2-Dichloroethane	<280	<1,400	<28	<56	<280	<140	<70	<140	<28	<28
1,1-Dichloroethylene	<280	<1,400	<28	<56	**373**	<140	<70	<140	<28	<28
1,2-Dichloropropane	<600	<3,000	<60	<120	<600	<300	<150	<300	<60	<60
cis-1,3-Dichloropropylene	<500	<2,500	<50	<100	<500	<250	<130	<250	<50	<50
Ethylbenzene	<720	<3,600	<72	<140	<720	<360	<180	<360	<72	<72
Methyl bromide	<1,000	<5,000	<100	<200	<1,000	<500	<250	<500	<100	<100
Methyl chloride	<1,000	<5,000	<100	<200	<1,000	<500	<250	<500	<100	<100
Methylene chloride	<280	**18,200**	<28	<56	**10,200**	<140	<70	<140	<28	<28
1,1,2,2-Tetrachloroethane	<690	<3,500	**117**	<140	<690	<350	<170	<350	<69	<69
Tetrachloroethylene	<410	<2100	<41	,82	<410	<210	<100	<210	<41	<41
Toluene	<600	<3,000	**251**	<120	**3,620**	**613**	**408**	<300	<60	<60
1,2-trans-Dichloroethylene	<160	<800	<16	<32	**11,300**	<80	<40	<80	<16	<16
1,1,1-Trichloroethane	<380	<1,900	<38	<76	**2,720**	<190	<95	<190	<38	<38
1,1,2-Trichloroethane	<500	<2,500	<50	<100	<500	<250	<130	<250	<50	<50
Trichloroethylene	<190	<950	<19	<38	**4,610**	<95	<48	<95	<19	<19
Trichlorofluoromethane	<1,000	<5,000	<100	<200	<1,000	<500	<250	<500	<100	<100
Vinyl chloride	<1,000	<5,000	<100	<200	**24,500**	<500	<250	<500	<100	<100
trans-1,3-Dichloropropylene	<1,000	<5,000	<100	<200	<1,000	<500	<250	<500	<100	<100
Sub Total 1	5,730	54,700	5,550	2,421	75,315	7,263	6,118	5,200	1,103	2,604
Miscellaneous Volatile Organic Compounds										
Acetone	**3,120**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	<1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	<1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	<1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	<1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	<1,000	NA	**172**	NA	NA	NA	NA	NA	NA	NA
Methyl isoamyl ketone	NA	NA	<100	NA	NA	NA	NA	NA	NA	NA
m-Xylene	<1,000	NA	<100	NA	NA	NA	NA	NA	NA	NA
o-Xylene/p-Xylene	<1,000	NA	<100	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	3,120	0	172	0	0	0	0	0	0	0
Total VOCs Analyzed	8,850	54,700	5,722	2,421	75,315	7,263	6,118	5,200	1,103	2,604

See footnotes on last page.

Well Number:	P-8	P-8	P-8	P-8	P-8	P-8	P-8	P-8	P-10	P-11
Date:	11/87	5/88	11/88	3/89	11/89	11/90	11/91	11/92	11/87	3/87
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<1,000	<1,000	<2,000	<10,000	<5,000	<5,000	<2,500	<5,000	<1,000	<100
Acrylonitrile	<1,000	<1,000	<2,000	<10,000	<5,000	<5,000	<2,500	<5,000	<1,000	<100
Benzene	**1,390**	**1,720**	**1,980**	**1,680**	**3,340**	**1,990**	**2,380**	**2,160**	**1,080**	**120**
Bis (chloromethyl) ether	<100	<100	<200	<1,000	<500	<500	<250	<500	<100	<10
Bromoform	<47	<47	<94	<470	<240	<240	<120	<240	<47	<4.7
Carbon tetrachloride	<28	<28	<56	<280	<140	<140	<70	<140	<28	<2.8
Chlorobenzene	**4,910**	**3,180**	**3,810**	**3,660**	**4,340**	**5,280**	**4,450**	**3,540**	**5,210**	**483**
Chlorodibromomethane	<31	<31	<62	<310	<160	<160	<78	<160	<31	<3.1
Chloroethane	<100	<100	<200	<1,000	<500	<500	<250	<500	<100	<10
2-Chloroethylvinyl ether	<100	<100	<200	<1,000	<500	<500	<250	<500	<100	<10
Chloroform	<16	<16	**121**	<160	<80	<80	<40	<80	<16	<1.6
Dichlorobromomethane	<22	<22	<44	<220	<110	<110	<55	<110	<22	<2.2
Dichlorodifluoromethane	<100	<100	<200	<1,000	<500	<500	<250	<500	<100	<10
1,1-Dichloroethane	<47	<47	<94	<470	<240	<240	<120	<240	<47	<4.7
1,2-Dichloroethane	**73.9**	<28	**303**	<280	<140	**409**	**2,200**	**1,860**	**49.6**	<2.8
1,1-Dichloroethylene	<28	<28	<56	<280	<140	<140	<70	<140	<28	<2.8
1,2-Dichloropropane	<60	<60	<120	<600	<300	<300	<150	<300	<60	<6.0
cis-1,3-Dichloropropylene	<50	<50	<100	<500	<250	<250	<130	<250	<50	<5.0
Ethylbenzene	**79.1**	<72	<140	<1,000	<360	<360	<180	<360	**137**	<7.2
Methyl bromide	<100	<100	<200	<1,000	<500	<500	<250	<500	<100	<10
Methyl chloride	<100	<100	<200	**466**	<500	<500	<250	<500	<100	<10
Methylene chloride	**217**	**558**	**495**	<690	**1,080**	**516**	**279**	<140	**653**	<2.8
1,1,2,2-Tetrachloroethane	<69	<69	<140	<410	<350	<350	<170	<350	<69	<6.9
Tetrachloroethylene	<41	<41	<82	<600	<210	<210	<100	<210	<41	<4.1
Toluene	**590**	**538**	**603**	<160	**512**	**1,300**	**637**	**387**	**103**	<6.0
1,2-trans-Dichloroethylene	<16	<16	<32	<380	<80	<80	<40	<80	**25.4**	<1.6
1,1,1-Trichloroethane	<38	<38	<76	<500	<190	<190	<95	<190	<38	<3.8
1,1,2-Trichloroethane	<50	<50	<100	<190	<250	<250	<130	<250	<50	<5.0
Trichloroethylene	<19	**24.3**	<38	<1,000	<95	<95	<48	<95	<19	<1.9
Trichlorofluoromethane	<100	<100	<200	<1,000	<500	<500	<250	<500	<100	<10
Vinyl chloride	<100	<100	<200	<1,000	<500	<500	<250	<500	<100	<10
trans-1,3-Dichloropropylene	<100	<100	<200	<720	<500	<500	<250	<500	<100	<10
Sub Total 1	7,260	6,020	7,312	5,806	9,272	9,495	9,946	7,947	7,258	603
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	**22.9**
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10
Methyl-iso-butyl ketone	**2,860**	NA	NA	**1,920**	NA	NA	NA	NA	<100	<10
Methyl isoamyl ketone	<100	NA	NA	<1,000	NA	NA	NA	NA	<100	NA
m-Xylene	**173**	NA	NA	<1,000	NA	NA	NA	NA	<100	<10
o-Xylene/p-Xylene	**144**	NA	NA	<1,000	NA	NA	NA	NA	**137**	<10
Sub Total 2	3,177	0	0	1,920	0	0	0	0	137	23
Total VOCs Analyzed	10,437	6,020	7,312	7,726	9,272	9,495	9,946	7,947	7,395	626

See footnotes on last page.

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Well Number:	P-11	P-12	P-13	P-13	P-13	P-13	P-13	P-13	P-13	P-13
Date:	11/87	11/87	12/86	5/87	11/87	5/88	11/88	11/89	11/90	11/91
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<1,000	<50,000	<1,000	<100	<100	<1,000	<1,000	<5,000	<5,000	<2,500
Acrylonitrile	<1,000	<50,000	<1,000	<100	<100	<1,000	<1,000	<5,000	<5,000	<2,500
Benzene	**337**	**7,330**	**45.8**	**89.7**	**365**	**684**	**1,040**	**3,410**	**2,200**	**2,970**
Bis (chloromethyl) ether	<100	<5,000	<100	<10	<100	<100	<100	<500	<500	<250
Bromoform	<47	<2,400	<47	<4.7	<47	<47	<47	<240	<240	<120
Carbon tetrachloride	<28	<1,400	<28	<2.8	<28	<28	<28	<140	<140	<70
Chlorobenzene	**1,660**	**37,400**	**225**	**306**	**881**	**1,050**	**1,500**	**5,530**	**4,560**	**6,400**
Chlorodibromomethane	<31	<1600	<31	<3.1	<31	<31	<31	<160	<160	<78
Chloroethane	<100	<5,000	<100	<10	<100	<100	<100	<500	<500	<250
2-Chloroethylvinyl ether	<100	<5,000	<100	<10	<100	<100	<100	<500	<500	<250
Chloroform	<16	<800	<16	<1.6	<16	<16	<16	<80	<80	<40
Dichlorobromomethane	<22	<1,100	<22	<2.2	<22	<22	<22	<110	<110	<55
Dichlorodifluoromethane	<100	<5,000	<100	<10	<100	<100	<100	<500	<500	<250
1,1-Dichloroethane	<47	<2,400	<47	<4.7	<47	<47	<47	<240	<240	<120
1,2-Dichloroethane	<28	<1,400	<28	<2.8	<28	<28	<28	<140	<140	<70
1,1-Dichloroethylene	<28	<1,400	<28	<2.8	<28	<28	<28	<140	<140	<70
1,2-Dichloropropane	<60	<3,000	<60	<6.0	<60	<60	<60	<300	<300	<150
cis-1,3-Dichloropropylene	<50	<2,500	<50	<5.0	<50	<50	<50	<250	<250	<130
Ethylbenzene	<72	<5,000	<72	<7.2	<72	<72	<72	<360	<360	<180
Methyl bromide	<100	<5,000	<100	<10	<100	<100	<100	<500	<500	<250
Methyl chloride	<100	<5,000	<100	<10	<100	<100	<100	<500	<500	<250
Methylene chloride	**2,260**	<1,400	**114**	<2.8	<28	<28	**136**	**398**	<140	<70
1,1,2,2-Tetrachloroethane	<69	<3,500	<69	<6.9	<69	<69	<69	<350	<350	<170
Tetrachloroethylene	<41	<2100	<41	<4.1	<41	<41	<41	<210	<210	<100
Toluene	<60	<3,000	<60	<6.0	<60	<60	<60	**928**	<300	**448**
1,2-trans-Dichloroethylene	<16	<800	<16	<1.6	<16	<16	<16	<80	<80	<40
1,1,1-Trichloroethane	<38	<1,900	<38	<3.8	<38	<38	<38	<190	<190	<95
1,1,2-Trichloroethane	<50	<2,500	<50	<5.0	<50	<50	<50	<250	<250	<130
Trichloroethylene	<19	<950	<19	<1.9	<19	<19	<19	<95	<95	<48
Trichlorofluoromethane	<100	<5,000	<100	<10	<100	<100	<100	<500	<500	<250
Vinyl chloride	<100	<5,000	<100	<10	<100	<100	<100	<500	<500	<250
trans-1,3-Dichloropropylene	<100	<3,600	<100	<10	<100	<100	<100	<500	<500	<250
Sub Total 1	4,257	44,730	385	395	1,246	1,734	2,676	10,266	6,760	9,818
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	<100	<5,000	NA	NA	<100	NA	NA	NA	NA	NA
Methyl isoamyl ketone	<100	<5,000	NA	NA	<100	NA	NA	NA	NA	NA
m-Xylene	<100	<5,000	NA	NA	<100	NA	NA	NA	NA	NA
o-Xylene/p-Xylene	<100	<5,000	NA	NA	<100	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	4,257	44,730	385	395	1,246	1,734	2,676	10,266	6,760	9,818

See footnotes on last page.

Well Number:	P-13	P-14	P-14	P-14	P-14	P-14	P-14	P-14	P-14	P-14
Date:	11/92	12/86	5/87	11/87	5/88	11/88	11/89	11/90	11/91	11/92
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<10,000	<100	<10,0000	<100	<10,0000	<50,000	<5,000	<10,0000	<50,000	<20,0000
Acrylonitrile	<10,000	<100	<10,0000	<100	<10,0000	<50,000	<5,000	<10,0000	<50,000	<20,0000
Benzene	**2,340**	<4.4	<4400	<4.4	<4,400	<2,200	<220	<4,400	**2,200**	<8,800
Bis (chloromethyl) ether	<1,000	<10	<10,000	<10	<10,000	<5,000	<500	<10,000	<5,000	<20,000
Bromoform	<470	<4.7	<4700	<4.7	<4,700	<2,400	<240	<4,700	<2,400	<9,400
Carbon tetrachloride	<280	<2.8	<2800	<2.8	<2,800	<1,400	<140	<2,800	<1,400	<5,600
Chlorobenzene	**6,430**	<6.0	**168,000**	<6.0	**37,200**	**12,100**	**17,500**	**40,900**	**59,400**	**64,700**
Chlorodibromomethane	<310	<3.1	<3100	<3.1	<3,100	<1,600	<160	<3,100	<1,600	<6,200
Chloroethane	<1,000	<10	<10,000	<10	<10,000	<5,000	<500	<10,000	<5,000	<20,000
2-Chloroethylvinyl ether	<1,000	<10	<10,000	<10	<10,000	<5,000	<500	<10,000	<5,000	<20,000
Chloroform	<160	<1.6	<1600	<1.6	<1,600	<800	<80	<1,600	<800	<3,200
Dichlorobromomethane	<220	<2.2	<2200	<2.2	<2,200	<1,100	<110	<2,200	<1,100	<4,400
Dichlorodifluoromethane	<1,000	<10	<10,000	<10	<10,000	<5,000	<500	<10,000	<5,000	<20,000
1,1-Dichloroethane	<470	<4.7	<4700	<4.7	<4,700	<2,400	<240	<4,700	<2,400	<9,400
1,2-Dichloroethane	<280	<2.8	<2800	<2.8	<2,800	<1,400	<140	<2,800	<1,400	<5,600
1,1-Dichloroethylene	<280	<2.8	<2800	<2.8	<2,800	<1,400	<140	<2,800	<1,400	<5,600
1,2-Dichloropropane	<600	<6.0	<6000	<6.0	<6,000	<3,000	<300	<6,000	<3,000	<12,000
cis-1,3-Dichloropropylene	<500	<5.0	<5,000	<5.0	<5,000	<2,500	<250	<5,000	<2,500	<10,000
Ethylbenzene	<720	<7.2	<7200	<7.2	<7,200	<5,000	<360	<7,200	<5,000	<14,000
Methyl bromide	<1,000	<10	<10,000	<10	<10,000	<5,000	<500	<10,000	<5,000	<20,000
Methyl chloride	<1,000	<10	<10,000	<10	<10,000	<5,000	<500	<10,000	<5,000	<20,000
Methylene chloride	<280	**468**	**22,400**	**26.5**	<2,800	<1,400	**280**	<2,800	<1,400	<5600
1,1,2,2-Tetrachloroethane	<690	<6.9	<6900	<6.9	<6,900	<3,500	<350	<6,900	<3,500	<14,000
Tetrachloroethylene	<410	<4.1	<4100	<4.1	<4,100	<2,100	<210	<4,100	<2,100	<8,200
Toluene	<600	<6.0	<6000	<6.0	<6,000	<3,000	<300	<6,000	<3,000	<12,000
1,2-trans-Dichloroethylene	<160	<1.6	<1600	<1.6	<1,600	<800	<80	<1,600	<800	<3,200
1,1,1-Trichloroethane	<380	<3.8	<3800	<3.8	<3,800	<1,900	<190	<3,800	<1,900	<7,600
1,1,2-Trichloroethane	<500	<5.0	<5,000	<5.0	<5,000	<2,500	<250	<5,000	<2,500	<10,000
Trichloroethylene	<190	<1.9	<1,900	<1.9	<1,900	<950	<95	<1,900	<950	<3800
Trichlorofluoromethane	<1,000	<10	<10,000	<10	<10,000	<5,000	<500	<10,000	<5,000	<20,000
Vinyl chloride	<1,000	<10	<10,000	<10	<10,000	<5,000	<500	<10,000	<5,000	<20,000
trans-1,3-Dichloropropylene	<1,000	<10	<10,000	<10	<10,000	<3,600	<500	<10,000	<5,000	<20,000
Sub Total 1	7,770	468	180,400	27	37,200	12,100	17,780	40,900	61,600	64,700
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA
Methyl isoamyl ketone	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA
m-Xylene	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA
o-Xylene/p-Xylene	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	7,770	468	180,400	27	37,200	12,100	17,780	40,900	61,600	64,700

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Well Number:	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank
Date:	12/86	3/87	5/87	11/87	5/88	11/88	11/88	3/89	5/89	11/89
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<100	<100	<100	<100	<100	<50	<100	<100	<100
Acrylonitrile	<100	<100	<100	<100	<100	<100	<50	<100	<100	<100
Benzene	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<5	<4.4	<4.4	<4.4
Bis (chloromethyl) ether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bromoform	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<5	<4.7	<4.7	<4.7
Carbon tetrachloride	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5	<2.8	<2.8	<2.8
Chlorobenzene	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<5	<6.0	<6.0	<6.0
Chlorodibromomethane	<3.1	<3.1	<3.1	**3.90**	<3.1	<3.1	<5	<3.1	<3.1	<3.1
Chloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chloroethylvinyl ether	<10	<10	<10	<10	<10	<10	<5	<10	<10	<10
Chloroform	<1.6	<1.6	<1.6	**39.7**	<1.6	<1.6	<5	<1.6	<1.6	<1.6
Dichlorobromomethane	<2.2	<2.2	<2.2	**16.5**	<2.2	<2.2	<5	<2.2	<2.2	<2.2
Dichlorodifluoromethane	<10	<10	<10	<10	<10	**23.1**	<10	<10	<10	<10
1,1-Dichloroethane	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<5	<4.7	<4.7	<4.7
1,2-Dichloroethane	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5	<2.8	<2.8	<2.8
1,1-Dichloroethylene	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5	<2.8	<2.8	<2.8
1,2-Dichloropropane	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<5	<6.0	<6.0	<6.0
cis-1,3-Dichloropropylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5.0	<5.0	<5.0
Ethylbenzene	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<5	<10	<7.2	<7.2
Methyl bromide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methyl chloride	<10	<10	<10	<10	<10	<10	<10	<2.8	<10	<10
Methylene chloride	**8.4**	<2.8	<2.8	**9.67**	**10.2**	**29.2**	<5	<6.9	**4.20**	<2.8
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<5	<4.1	<6.9	<6.9
Tetrachloroethylene	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<5	<6.0	<4.1	<4.1
Toluene	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<5	<1.6	<6.0	<6.0
1,2-trans-Dichloroethylene	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<5	<3.8	<1.6	<1.6
1,1,1-Trichloroethane	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<5	<5.0	<3.8	<3.8
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<1.9	<5.0	<5.0
Trichloroethylene	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<5	<10	<1.9	<1.9
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<5	<10	<10	<10
Vinyl chloride	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropylene	<10	<10	<10	<10	<10	<10	<5	<7.2	<10	<10
Sub Total 1	8	0	0	70	10	52	0	0	4	0
Miscellaneous Volatile Organic Compounds										
Acetone	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	<10	NA	NA	NA	NA	<500	NA	NA	NA
Methyl isoamyl ketone	NA	NA	NA	NA	NA	NA	<100	NA	NA	NA
m-Xylene	NA	<10	NA	NA	NA	NA	<50	NA	NA	NA
o-Xylene/p-Xylene	NA	<10	NA	NA	NA	NA	<50	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	8	0	0	70	10	52	0	0	4	0

See footnotes on last page.

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Well Number:	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank	Trip Blank	Trip Blank	Trip Blank
Date:	5/90	11/90	5/91	11/91	11/9/92	11/12/92	9/94	12/86	3/87	5/87
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	SL	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Acrylonitrile	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Benzene	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<5	<4.4	<4.4	<4.4
Bis (chloromethyl) ether	<10	<10	<10	<10	<10	<10	NA	<10	<10	<10
Bromoform	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<5	<4.7	<4.7	<4.7
Carbon tetrachloride	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5	<2.8	<2.8	<2.8
Chlorobenzene	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<5	<6.0	<6.0	<6.0
Chlorodibromomethane	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<5	<3.1	<3.1	<3.1
Chloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chloroethylvinyl ether	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10
Chloroform	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<5	<1.6	<1.6	<1.6
Dichlorobromomethane	<2.2	<2.2	**3.76**	<2.2	<2.2	<2.2	<5	<2.2	<2.2	<2.2
Dichlorodifluoromethane	<10	<10	<10	<10	<10	<10	<5	<10	<10	<10
1,1-Dichloroethane	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<5	<4.7	<4.7	<4.7
1,2-Dichloroethane	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5	<2.8	<2.8	<2.8
1,1-Dichloroethylene	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5	<2.8	<2.8	<2.8
1,2-Dichloropropane	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<5	<6.0	<6.0	<6.0
cis-1,3-Dichloropropylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5.0	<5.0	<5.0
Ethylbenzene	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<5	<7.2	<7.2	<7.2
Methyl bromide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methyl chloride	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylene chloride	**9.01**	<2.8	<2.8	<2.8	**3.7**	<2.8	<5	**4.2**	<2.8	<2.8
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<5	<6.9	<6.9	<6.9
Tetrachloroethylene	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<5	<4.1	<4.1	<4.1
Toluene	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<5	<6.0	<6.0	<6.0
1,2-trans-Dichloroethylene	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<5	<1.6	<1.6	<1.6
1,1,1-Trichloroethane	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<5	<3.8	<3.8	<3.8
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5.0	<5.0	<5.0
Trichloroethylene	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<5	<1.9	<1.9	<1.9
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<5	<10	<10	<10
Vinyl chloride	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropylene	<10	<10	<10	<10	<10	<10	<5	<10	<10	<10
Sub Total 1	9	0	4	0	4	0	0	4	0	0
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	**40.1**	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
Methyl-iso-butyl ketone	NA	<10	NA	NA	NA	NA	<25	NA	<10	NA
Methyl isoamyl ketone	NA	<10	NA	NA	NA	NA	<25	NA	NA	NA
m-Xylene	NA	<10	NA	NA	NA	NA	<5	NA	<10	NA
o-Xylene/p-Xylene	NA	<10	NA	NA	NA	NA	<5	NA	<10	NA
Sub Total 2	0	0	0	0	0	0	0	0	40	0
Total VOCs Analyzed	9	0	4	0	4	0	0	4	40	0

See footnotes on last page.

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Well Number:	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank
Date:	11/87	5/88	11/88	11/88	5/89	11/89	5/90	11/90	5/91	11/91
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<100	<100	<50	<100	<100	<100	<100	<100	<100
Acrylonitrile	<100	<100	<100	<50	<100	<100	<100	<100	<100	<100
Benzene	<4.4	<4.4	<4.4	<5	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4
Bis (chloromethyl) ether	<10	<10	<10	<5	<10	<10	<10	<10	<10	<10
Bromoform	<4.7	<4.7	<4.7	<5	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7
Carbon tetrachloride	<2.8	<2.8	<2.8	<5	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8
Chlorobenzene	<6.0	<6.0	<6.0	<5	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0
Chlorodibromomethane	<3.1	<3.1	<3.1	<5	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1
Chloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chloroethylvinyl ether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroform	<1.6	<1.6	<1.6	<5	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Dichlorobromomethane	<2.2	<2.2	<2.2	<5	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2
Dichlorodifluoromethane	<10	<10	**26**	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	<4.7	<4.7	<4.7	<5	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7
1,2-Dichloroethane	<2.8	<2.8	<2.8	<5	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8
1,1-Dichloroethylene	<2.8	<2.8	<2.8	<5	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8
1,2-Dichloropropane	<6.0	<6.0	<6.0	<5	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0
cis-1,3-Dichloropropylene	<5.0	<5.0	<5.0	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	<7.2	<7.2	<7.2	<5	<10	<7.2	<7.2	<7.2	<7.2	<7.2
Methyl bromide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methyl chloride	<10	<10	<10	<10	<2.8	<10	<10	<10	<10	<10
Methylene chloride	<2.8	<2.8	**6.50**	<5	<6.9	**8.76**	**7.75**	<2.8	**15.8**	<2.8
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<6.9	<5	<4.1	<6.9	<6.9	<6.9	<6.9	<6.9
Tetrachloroethylene	<4.1	<4.1	<4.1	<5	<6.0	<4.1	<4.1	<4.1	<4.1	<4.1
Toluene	<6.0	<6.0	<6.0	<5	<1.6	<6.0	<6.0	<6.0	<6.0	<6.0
1,2-trans-Dichloroethylene	<1.6	<1.6	<1.6	<5	<3.8	<1.6	<1.6	<1.6	<1.6	<1.6
1,1,1-Trichloroethane	<3.8	<3.8	<3.8	<5	<5.0	<3.8	<3.8	<3.8	<3.8	<3.8
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5	<1.9	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethylene	<1.9	<1.9	<1.9	<5	<10	<1.9	<1.9	<1.9	<1.9	<1.9
Trichlorofluoromethane	<10	<10	<10	<5	<10	<10	<10	<10	<10	**30.1**
Vinyl chloride	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropylene	<10	<10	<10	<5	<7.2	<10	<10	<10	<10	<10
Sub Total 1	0	0	33	0	0	9	8	0	16	30
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl isoamyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene/p-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	0	0	33	0	0	9	8	0	16	30

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Well Number:	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank 1	Trip Blank 2	Trip Blank 3
Date:	11/4/92	11/4/92	11/5/92	11/5/92	11/9/92	11/11/92	11/12/92	9/94	9/94	9/94
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	SL	SL	SL
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
Acrolein	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Acrylonitrile	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Benzene	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	<4.4	NA	NA	NA
Bis (chloromethyl) ether	<10	<10	<10	<10	<10	<10	<10	<5	<5	<5
Bromoform	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<5	<5	<5
Carbon tetrachloride	<2.8	<2.8	*<2.8	<2.8	<2.8	<2.8	<2.8	<5	<5	<5
Chlorobenzene	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<5	<5	<5
Chlorodibromomethane	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<5	<5	<5
Chloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chloroethylvinyl ether	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50
Chloroform	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<5	<5	<5
Dichlorobromomethane	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<5	<5	<5
Dichlorodifluoromethane	<10	<10	<10	<10	<10	<10	<10	<5	<5	<5
1,1-Dichloroethane	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<5	<5	<5
1,2-Dichloroethane	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5	<5	<5
1,1-Dichloroethylene	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<5	<5	<5
1,2-Dichloropropane	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<5	<5	<5
cis-1,3-Dichloropropylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5
Ethylbenzene	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<5	<5	<5
Methyl bromide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methyl chloride	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylene chloride	<2.8	<2.8	**2.88**	<2.8	<2.8	<2.8	<2.8	<5	<5	<5
1,1,2,2-Tetrachloroethane	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<5	<5	<5
Tetrachloroethylene	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<5	<5	<5
Toluene	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<5	<5	<5
1,2-trans-Dichloroethylene	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<5	<5	<5
1,1,1-Trichloroethane	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<5	<5	<5
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5
Trichloroethylene	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<5	<5	<5
Trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<10	<5	<5	<5
Vinyl chloride	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
trans-1,3-Dichloropropylene	<10	<10	<10	<10	<10	<10	<10	<5	<5	<5
Sub Total 1	0	0	3	0	0	0	0	0	0	0
Miscellaneous Volatile Organic Compounds										
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl ethyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl-iso-butyl ketone	NA	NA	NA	NA	NA	NA	NA	<25	<25	<25
Methyl isoamyl ketone	NA	NA	NA	NA	NA	NA	NA	<25	<25	<25
m-Xylene	NA	NA	NA	NA	NA	NA	NA	<5	<5	<5
o-Xylene/p-Xylene	NA	NA	NA	NA	NA	NA	NA	<5	<5	<5
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOCs Analyzed	0	0	3	0	0	0	0	0	0	0

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

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APPENDIX B

TABLE 2 - SUMMARY OF ACID EXTRACTABLE ORGANIC COMPOUNDS

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-4A	GM-4A	GM-4A	GM-4A	GM-4A	GM-4A	GM-4A	GM-4A	GM-4A	GM-4B
Date:	12/86	5/87	11/87	5/88	11/88	11/89	11/90	11/91	11/92	12/86
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	NA	NA	<3.4	<3.5	<3.8	<3.6	<3.3	<3.3	<3.3	NA
2,4-Dichlorophenol	NA	NA	<2.8	<2.9	<3.1	<2.9	<2.7	<2.7	<2.7	NA
2,4-Dimethylphenol	NA	NA	<2.8	<2.9	<3.1	<2.9	<2.7	<2.7	<2.7	NA
4,6-Dinitro-o-cresol	NA	NA	<24	<26	<28	<26	<24	<24	<24	NA
2,4-Dinitrophenol	NA	NA	<43	<45	<48	<46	<42	<42	<42	NA
2-Nitrophenol	NA	NA	<3.7	<3.8	<4.1	<3.9	<3.6	<3.6	<3.6	NA
4-Nitrophenol	NA	NA	<2.4	<2.6	<2.8	<2.6	<2.4	<2.4	<2.4	NA
p-Chloro-m-cresol	NA	NA	<3.1	<3.2	<3.4	<3.3	<3.0	<3.0	<3.0	NA
Pentachlorophenol	NA	NA	<3.7	<3.8	<4.1	<3.9	<3.6	<3.6	<3.6	NA
Phenol	NA	NA	<1.5	<1.6	<1.7	<1.6	<1.5	<1.5	<1.5	NA
2,4,6-Trichlorophenol	NA	NA	<2.8	<2.9	<3.1	<2.9	<2.7	<2.7	<2.7	NA
Sub Total 1	0	0	0	0	0	0	0	0	0	0
Miscellaneous Acid Extractable Organic Compounds										
4-Chlorophenol	<10	<10	<10	<11	<11	<11	<10	<10	NA	<11
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
Benzoic acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total Acid Compounds Analyzed	0	0	0	0	0	0	0	0	0	0

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-4B	GM-4B	GM-4B	GM-4B	GM-4B	GM-4B	GM-4B	GM-4B	GM-4B	GM-4B
Date:	5/87	11/87	5/88	11/88	5/89	11/89	5/90	11/90	5/91	11/91
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	NA	**17.4**	**46.5**	**42.3**	**81.3**	**71.5**	**77.6**	<17	**62.7**	**26.3**
2,4-Dichlorophenol	NA	**7.1**	**28.6**	**6.91**	**9.01**	**3.79**	<14	<14	**3.36**	**3.68**
2,4-Dimethylphenol	NA	<2.9	<2.7	<3.1	<2.8	<2.8	<14	<14	<2.7	<2.7
4,6-Dinitro-o-cresol	NA	<26	<24	<28	<24	<24	<120	<120	<24	<24
2,4-Dinitrophenol	NA	<45	<42	<48	<43	<43	<220	<210	<42	<42
2-Nitrophenol	NA	<3.9	<3.6	<4.1	<3.7	<3.7	<19	<18	<3.6	<3.6
4-Nitrophenol	NA	<2.6	<2.4	<2.8	<2.4	<2.4	<12	<12	<2.4	<2.4
p-Chloro-m-cresol	NA	<3.2	<3.0	<3.4	<3.1	<3.1	<15	<15	<3.0	<3.0
Pentachlorophenol	NA	<3.9	<3.6	<4.1	<3.7	<3.7	<19	<18	<3.6	<3.6
Phenol	NA	<1.6	<1.5	<1.7	<1.5	<1.5	<7.7	<7.6	<1.5	<1.5
2,4,6-Trichlorophenol	NA	<2.9	<2.7	<3.1	<2.8	<2.8	<14	<14	<2.7	<2.7
Sub Total 1	0	25	75	49	90	75	78	0	66	30
Miscellaneous Acid Extractable Organic Compounds										
;hlorophenol	**72.6**	**57.8**	**20.1**	**19**	<10	<10	<52	<51	<10	<10
⌐-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzoic acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	73	58	20	19	0	0	0	0	0	0
Total Acid Compounds Analyzed	73	82	95	68	90	75	78	0	66	30

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-4B	GM-4B	GM-48	GM-4C	GM-4C	GM-4C	GM-4C	GM-4C	GM-4C	GM-4C
Date:	11/92	9/94	9/94*	12/86	5/87	11/87	5/88	11/88	5/89	11/89
Laboratory:	ETC	SL	SL	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	**61.5**	<50	<50	NA	NA	**51.4**	**14.8**	<34	**27.6**	<35
2,4-Dichlorophenol	<2.7	<50	<50	NA	NA	**21**	**22.5**	<28	<2.8	<29
2,4-Dimethylphenol	<2.7	<50	<50	NA	NA	<2.8	<2.9	<28	<2.8	<29
4,6-Dinitro-o-cresol	<24	<250	<250	NA	NA	<25	<26	<240	<25	<260
2,4-Dinitrophenol	<42	<250	<250	NA	NA	<43	<45	<430	<44	<450
2-Nitrophenol	<3.6	<50	<50	NA	NA	<3.7	<3.8	<37	<3.8	<39
4-Nitrophenol	<2.4	<250	<250	NA	NA	<2.5	<2.6	<24	<2.8	<26
p-Chloro-m-cresol	<3.0	<50	<50	NA	NA	<3.1	<3.2	<31	<3.2	<32
Pentachlorophenol	<3.6	<250	<250	NA	NA	<3.7	<3.8	<37	<3.8	<39
Phenol	<1.5	**80**	**84**	NA	NA	<1.5	**2.3**	<15	**1.6**	<16
2,4,6-Trichlorophenol	<2.7	<50	<50	NA	NA	<2.8	<2.9	<28	<2.8	<29
Sub Total 1	62	80	84	0	0	72	40	0	29	0
Miscellaneous Acid Extractable Organic Compounds										
4-Chlorophenol	NA	<50	<50	**27.4**	**35.9**	**113**	<11	<100	<11	<110
2-Methylphenol	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzoic acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	27	36	113	0	0	0	0
Total Acid Compounds Analyzed	62	80	84	27	36	185	40	0	29	0

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-4C	GM-4C	GM-4C	GM-4C	GM-4C	GM-4C	GM-5	GM-5	GM-6A	GM-6B
Date:	5/90	11/90	5/91	11/91	11/92	9/94	11/92	9/94	11/92	11/92
Laboratory:	ETC	ETC	ETC	ETC	ETC	SL	ETC	SL	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	**32.5**	<17	**43.0**	**17.7**	**23.6**	<10	<3.3	<10	**18.6**	**9**
2,4-Dichlorophenol	<15	<14	<2.7	<2.7	<2.7	<10	<2.7	<10	<2.7	**8.17**
2,4-Dimethylphenol	<15	<14	<2.7	<2.7	<2.7	<10	<2.7	<10	<2.7	<2.7
4,6-Dinitro-o-cresol	<130	<120	<24	<24	<24	<50	<24	<50	<24	<24
2,4-Dinitrophenol	<230	<210	<42	<42	<42	<50	<42	<50	<42	<42
2-Nitrophenol	<19	<18	<3.6	<3.6	<3.6	<10	<3.6	<10	<3.6	<3.6
4-Nitrophenol	<13	<12	<2.4	<2.4	<2.4	<50	<2.4	<50	<2.4	<2.4
p-Chloro-m-cresol	<16	<15	<3.0	<3.0	<3.0	<10	<3.0	<10	<3.0	<3.0
Pentachlorophenol	<19	<18	<3.6	<3.6	<3.6	<50	<3.6	<50	<3.6	<3.6
Phenol	<8.1	<7.6	<1.5	<1.5	<1.5	<10	<1.5	<10	<1.5	<1.5
2,4,6-Trichlorophenol	<15	<14	<2.7	<2.7	<2.7	<10	<2.7	<10	<2.7	<2.7
Sub Total 1	33	0	43	18	24	0	0	0	19	17
Miscellaneous Acid Extractable Organic Compounds										
Chlorophenol	<54	<51	<10	<10	NA	<10	NA	<10	NA	NA
2-Methylphenol	NA	NA	NA	NA	<10	NA	<10	NA	<10	<10
4-Methylphenol	NA	NA	NA	NA	<10	NA	<10	NA	<10	<10
Benzoic acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	<10	NA	<10	NA	<10	<10
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total Acid Compounds Analyzed	33	0	43	18	24	0	0	0	19	17

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-17A	GM-17A	GM-17A	GM-17A	GM-17A	GM-17A	GM-17A	GM-17A	GM-17A	GM-17B
Date:	12/86	5/87	11/87	5/88	11/88	11/89	11/90	11/91	11/92	12/86
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	**51.6**	**67.7**	**38.3**	**98.4**	**68.6**	**59.1**	**54.3**	**3.35**	**25.9**	**21.5**
2,4-Dichlorophenol	<2.9	<2.9	<2.8	<3.0	<2.8	<2.8	<2.7	<2.8	<2.7	<2.9
2,4-Dimethylphenol	<2.9	<2.9	<2.8	<3.0	<2.8	<2.8	<2.7	<2.8	<2.7	<2.9
4,6-Dinitro-o-cresol	<25	<26	<25	<27	<25	<25	<24	<24	<24	<26
2,4-Dinitrophenol	<44	<45	<44	<47	<44	<44	<42	<43	<42	<46
2-Nitrophenol	<3.8	<3.9	<3.8	<4.0	<3.8	<3.8	<3.6	<3.7	<3.6	<3.9
4-Nitrophenol	<2.5	<2.6	<2.5	<2.7	<2.5	<2.5	<2.4	<2.4	<2.4	<2.6
p-Chloro-m-cresol	<3.2	<3.2	<3.1	<3.3	<3.1	<3.1	<3.0	<3.1	<3.0	<3.3
Pentachlorophenol	<3.8	<3.9	<3.8	<4.0	<3.8	<3.8	<3.6	<3.7	<3.6	<3.9
Phenol	<1.6	**73**	**62.8**	**110**	**106**	**183**	**25.0**	**2.9**	**12.8**	**372**
2,4,6-Trichlorophenol	<2.9	<2.9	<2.8	<3.0	<2.8	<2.8	<2.7	<2.8	<2.7	<2.9
Sub Total 1	52	141	101	208	175	242	79	6	39	394
Miscellaneous Acid Extractable Organic Compounds										
4-Chlorophenol	NA	NA	**33**	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
Benzoic acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
Sub Total 2	0	0	33	0	0	0	0	0	0	0
Total Acid Compounds Analyzed	52	141	134	208	175	242	79	6	39	394

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B
Date:	5/87	11/87	5/88	11/88	5/89	11/89	5/90	11/90	5/91	11/91
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	**91.6**	**23.4**	**46.9**	**36.8**	**24.6**	**15.5**	**20.7**	**18.1**	**21.3**	**25.7**
2,4-Dichlorophenol	<3.1	<2.8	<2.8	<3.2	<2.9	<2.8	<2.8	<2.7	<2.7	<2.7
2,4-Dimethylphenol	<3.1	<2.8	<2.8	<3.2	<2.9	<2.8	<2.8	<2.7	<2.7	<2.7
4,6-Dinitro-o-cresol	<28	<25	<24	<29	<26	<25	<25	<24	<24	<24
2,4-Dinitrophenol	<49	<43	<43	<50	<45	<44	<44	<42	<42	<42
2-Nitrophenol	<4.2	<3.7	<3.7	<4.3	<3.9	<3.8	<3.8	<3.6	<3.6	<3.6
4-Nitrophenol	<2.8	<2.5	<2.4	<2.9	<2.6	<2.5	<2.5	<2.4	<2.4	<2.4
p-Chloro-m-cresol	<3.5	<3.1	<3.1	<3.6	<3.2	<3.2	<3.2	<3.0	<3.0	<3.0
Pentachlorophenol	<4.2	<3.7	<3.7	<4.3	<3.9	<3.8	<3.8	<3.6	<3.6	<3.6
Phenol	**546**	**235**	**330**	<1.8	<1.6	**2.06**	<1.6	<1.5	<1.5	**3.16**
2,4,6-Trichlorophenol	<3.1	<2.8	<2.8	<3.2	<2.9	<2.8	<2.8	<2.7	<2.7	<2.7
Sub Total 1	638	258	377	37	25	18	21	18	21	29
Miscellaneous Acid Extractable Organic Compounds										
Chlorophenol	NA	**14.7**	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzoic acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	15	0	0	0	0	0	0	0	0
Total Acid Compounds Analyzed	638	273	377	37	25	18	21	18	21	29

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-17B	GM-17B	GM-17C	GM-17C	GM-17C	GM-17C	GM-17C	GM-17C	GM-17C	GM-17C
Date:	11/92	9/94	12/86	5/87	11/87	5/88	11/88	5/89	11/89	5/90
Laboratory:	ETC	SL	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	**13.2**	<100	**30.8**	**34**	**19.4**	**34.9**	<34	**26.1**	**6.23**	<18
2,4-Dichlorophenol	<2.7	<100	**10**	**4.7**	**3.44**	**12.1**	<28	**17.7**	**10.3**	<15
2,4-Dimethylphenol	<2.7	<100	<3.3	<2.7	<2.8	<2.8	<28	<2.8	<2.8	<15
4,6-Dinitro-o-cresol	<24	<500	<29	<24	<25	<25	<240	<25	<25	<130
2,4-Dinitrophenol	<42	<500	<51	<42	<44	<44	<430	<44	<44	<230
2-Nitrophenol	<3.6	<100	<4.3	<3.6	<3.8	<3.8	<37	<3.8	<3.8	<20
4-Nitrophenol	<2.4	<500	<2.9	<2.4	<2.5	<2.5	<24	<2.5	<2.5	<13
p-Chloro-m-cresol	<3.0	<100	<3.6	<3	<3.1	<3.1	<31	<3.2	<3.1	<16
Pentachlorophenol	<3.6	<500	<4.3	<3.6	<3.8	<3.8	<37	<3.8	<3.8	<20
Phenol	<1.5	<100	<1.8	<1.5	**4.07**	<1.6	<15	<1.6	<1.6	<8.2
2,4,6-Trichlorophenol	<2.7	<100	<3.3	<2.7	<2.8	<2.8	<28	<2.8	<2.8	<15
Sub Total 1	13	0	41	39	27	47	0	44	17	0
Miscellaneous Acid Extractable Organic Compounds										
4-Chlorophenol	NA	<100	NA	NA	**26.6**	NA	<100	NA	NA	NA
2-Methylphenol	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzoic acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	27	0	0	0	0	0
Total Acid Compounds Analyzed	13	0	41	39	54	47	0	44	17	0

NA Not analyzed.
• Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-17C	GM-17C	GM-17C	GM-17C	G,-17C	GM-18B	GM-20B	GM-20B	GM-27B	GM-27B
Date:	11/90	5/91	11/91	11/92	9/94	11/92	11/92	9/94	11/87	11/91
Laboratory:	ETC	ETC	ETC	ETC	SL	ETC	ETC	SL	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	**15.5**	**25.3**	**15.7**	**42.8**	<50	<3.3	<3.3	<10	<3.8	<330
2,4-Dichlorophenol	**6.47**	**2.82**	**7.93**	**9.02**	<50	<2.7	<2.7	<10	<3.1	<270
2,4-Dimethylphenol	<2.7	<2.8	<2.7	<2.7	<50	<2.7	<2.7	<10	**7.44**	<270
4,6-Dinitro-o-cresol	<24	<24	<24	<24	<250	<24	<24	<50	<27	<2400
2,4-Dinitrophenol	<42	<43	<42	<42	<250	<42	<42	<50	<48	<4200
2-Nitrophenol	<3.6	<3.7	<3.6	<3.6	<50	<3.6	<3.6	<10	<4.1	<360
4-Nitrophenol	<2.4	<2.4	<2.4	<2.4	<250	<2.4	<2.4	<50	<2.7	<240
p-Chloro-m-cresol	<3.0	<3.1	<3.0	<3.0	<50	<3.0	<3.0	<10	<3.4	<300
Pentachlorophenol	<3.6	<3.7	<3.6	<3.6	<250	<3.6	<3.6	<50	<4.1	<360
Phenol	<1.5	<1.5	**3.25**	<1.5	<50	**1.72**	<1.5	<10	<1.7	**1910**
2,4,6-Trichlorophenol	<2.7	<2.8	<2.7	<2.7	<50	<2.7	<2.7	<10	<3.1	<270
Sub Total 1	22	28	27	52	0	2	0	0	7	1,910
Miscellaneous Acid Extractable Organic Compounds										
Chlorophenol	NA	NA	NA	NA	<50	NA	NA	<10	NA	NA
2-Methylphenol	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA
Benzoic acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total Acid Compounds Analyzed	22	28	27	52	0	2	0	0	7	1,910

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-27B	GM-27C	GM-27C	GM-27C	GM-27C	GM-27C	GM-27C	GM-27C	GM-27C	GM-27C
Date:	11/92	12/86	5/87	11/87	5/88	11/88	11/89	11/90	11/91	11/92
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	<3.3	NA	NA	**6.34**	**4.7**	<3.4	**12.7**	<3.3	<33	**8.03**
2,4-Dichlorophenol	<2.7	NA	NA	<3.1	<3.1	<2.8	<3.1	<2.7	<27	<2.8
2,4-Dimethylphenol	<2.7	NA	NA	**8.44**	**18.6**	**59.9**	**18.3**	<2.7	<27	<2.8
4,6-Dinitro-o-cresol	<24	NA	NA	<27	<27	<24	<28	<24	<240	<24
2,4-Dinitrophenol	<42	NA	NA	<48	<48	<43	<48	<42	<420	<43
2-Nitrophenol	<3.6	NA	NA	<4.1	<4.1	<3.7	<4.1	<3.6	<36	<3.7
4-Nitrophenol	<2.4	NA	NA	<2.7	<2.7	<2.4	<2.8	<2.4	<24	<2.4
p-Chloro-m-cresol	<3.0	NA	NA	<3.4	<3.4	<3.1	<3.4	<3.0	<30	<3.1
Pentachlorophenol	<3.6	NA	NA	<4.1	<4.1	<3.7	<4.1	<3.6	<36	<3.7
Phenol	<1.5	NA	NA	<1.7	**2.7**	**113**	<1.7	<1.5	<15	<1.5
2,4,6-Trichlorophenol	<2.7	NA	NA	<3.1	<3.1	<2.8	<3.1	<2.7	<27	<2.8
Sub Total 1	0	0	0	15	26	173	31	0	0	8
Miscellaneous Acid Extractable Organic Compounds										
4-Chlorophenol	NA	<11	<10	**25**	**24.9**	**387**	<11	<10	<100	<10
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzoic acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	25	25	387	0	0	0	0
Total Acid Compounds Analyzed	0	0	0	40	51	560	31	0	0	8

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-28B	GM-28B	GM-28B	GM-28B	GM-28B	GM-28B	GM-28B	GM-28B	GM-28C	GM-28C
Date:	12/86	5/87	11/87	5/88	3/89	11/89	11/90	11/91	12/86	5/87
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	NA	NA	**5,570**	**6,610**	**1,140**	**5,510**	**111**	**206**	NA	NA
2,4-Dichlorophenol	NA	NA	**18,600**	**34,700**	**5,070**	**1,930**	**2,700**	**804**	NA	NA
2,4-Dimethylphenol	NA	NA	**1,220**	**2,040**	**311**	**531**	**24.8**	<55	NA	NA
4,6-Dinitro-o-cresol	NA	NA	<1200	<300	<250	<260	<24	<490	NA	NA
2,4-Dinitrophenol	NA	NA	<2100	<520	<430	<460	<42	<850	NA	NA
2-Nitrophenol	NA	NA	<180	<44	<37	<40	<3.6	<73	NA	NA
4-Nitrophenol	NA	NA	<120	<30	<25	<26	<2.4	<49	NA	NA
p-Chloro-m-cresol	NA	NA	<150	<37	<31	<33	<3.0	<61	NA	NA
Pentachlorophenol	NA	NA	<180	**1,270**	**296**	<40	**43.7**	<73	NA	NA
Phenol	NA	NA	**21,300**	**29,500**	**3,390**	**7,840**	**352**	**442**	NA	NA
2,4,6-Trichlorophenol	NA	NA	**5,950**	**13,800**	<28	**501**	**457**	**225**	NA	NA
Sub Total 1	0	0	52,640	86,920	10,207	16,312	3,689	1,677	0	0
Miscellaneous Acid Extractable Organic Compounds										
Chlorophenol	**684**	<56	**8,070**	**11,900**	**6,580**	<110	<10	**1,380**	**439**	<64
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzoic acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	684	0	8,070	11,900	6,580	0	0	1,380	439	0
Total Acid Compounds Analyzed	684	0	60,710	98,820	16,787	16,312	3,689	3,057	439	0

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-28C	GM-28C	GM-28C	GM-28C	GM-28C	GM-28C	GM-28C	GM-28C	GM-28C	GM-31A
Date:	11/87	5/88	11/88	3/89	3/89*	11/89	11/90	11/91	11/92	12/86
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	**868**	**1,120**	<3.8	<3,400	<330	**206**	<3,300	**149**	<170	<3.5
2,4-Dichlorophenol	**4,430**	**8,440**	**4,630**	<2,800	**3,630**	**461**	<2,700	**497**	<140	**11.2**
2,4-Dimethylphenol	**253**	**192**	**42.7**	<2,800	<270	**39.0**	<2,700	<55	<140	<2.9
4,6-Dinitro-o-cresol	<270	<34	<27	<24,000	<2,400	<28	<24,000	<490	<1,200	<25
2,4-Dinitrophenol	<470	<59	<48	<43,000	<4,200	<49	<42,000	<860	<2,100	**26,200**
2-Nitrophenol	<40	<5.1	<4.1	<3,700	<360	<4.2	<3,600	<73	<180	**12**
4-Nitrophenol	<27	<3.4	<2.7	<2,400	<240	<2.8	<2,400	<49	<120	<2.5
p-Chloro-m-cresol	<33	<4.2	<3.4	<3,100	<300	<3.5	<3,000	<61	<150	<3.2
Pentachlorophenol	**113**	**116**	**57**	<3,700	<360	<4.2	<3,600	<73	<180	<3.8
Phenol	**1,260**	**2,910**	<1.7	<1,500	**263**	**119**	<1,500	**229**	<76	**6.6**
2,4,6-Trichlorophenol	**1,660**	**1,570**	<3.1	<2,800	**415**	**383**	<2,700	**78.4**	<140	**1,740**
Sub Total 1	8,584	14,348	4,730	0	4,308	1,207	0	953	0	27,970
Miscellaneous Acid Extractable Organic Compounds										
4-Chlorophenol	**2,250**	**2,610**	**691**	<10,000	<1,000	<12	<10,000	<200	<10	NA
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzoic acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	2,250	2,610	691	0	0	0	0	0	0	0
Total Acid Compounds Analyzed	10,834	16,958	5,421	0	4,308	1,207	0	953	0	27,970

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A
Date:	12/86*	5/87	5/87*	11/87	11/87*	5/88	5/88*	11/88	11/88*	11/88
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	SL
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	<3.8	<78	<37	<34	**4.54**	<33	<35	<180	<340	<100
2,4-Dichlorophenol	**10.6**	<64	<30	<28	**24.6**	<27	<28	<140	<280	<100
2,4-Dimethylphenol	<3.1	<64	<30	<28	<2.8	<27	<28	<140	<280	<100
4,6-Dinitro-o-cresol	<27	<560	<270	<250	<25	<240	<250	<1,300	<2,500	<500
2,4-Dinitrophenol	**20,600**	**12,400**	**7,630**	**2,040**	**2,520**	**447**	**299**	<2,200	<4,300	<500
2-Nitrophenol	**11.8**	<85	<40	<38	**13.7**	**251**	**193**	<190	<370	**140**
4-Nitrophenol	<2.7	**158**	**72.9**	**136**	**159**	<24	<25	<130	<250	<500
p-Chloro-m-cresol	<3.4	<71	<33	<31	<3.1	<30	<31	<160	<310	<100
Pentachlorophenol	<4.1	<85	<40	<38	<3.8	<36	<38	<190	<370	<100
Phenol	**5.1**	<35	**25.6**	<16	**9.87**	**50,400**	**119,000**	**339,000**	**586,000**	**340,000**
2,4,6-Trichlorophenol	**1,560**	**2,310**	**2,200**	**955**	**1,010**	**591**	**590**	**538**	<280	<100
Sub Total 1	22,188	14,868	9,929	3,131	3,742	51,689	120,082	339,538	586,000	340,140
Miscellaneous Acid Extractable Organic Compounds										
;hlorophenol	NA	NA	NA	<100	NA	NA	NA	NA	NA	NA
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzoic acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total Acid Compounds Analyzed	22,188	14,868	9,929	3,131	3,742	51,689	120,082	339,538	586,000	340,140

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-54A	GM-54A	GM-54A	GM-54B	GM-54B
Date:	11/88*	11/89	11/89*	11/90	11/90*	11/87	5/88	9/94	11/87	5/88
Laboratory:	SL	ETC	ETC	ETC	ETC	ETC	ETC	SL	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	<100	<3.4	<3.4	<33	<35	<3.5	<3.6	<10	**3.99**	<3.6
2,4-Dichlorophenol	<100	**44.0**	**40.1**	<27	<29	<2.8	<2.9	<10	**3.96**	<3.0
2,4-Dimethylphenol	<100	<2.8	<2.8	<27	<29	<2.8	<2.9	<10	<2.9	<3.0
4,6-Dinitro-o-cresol	<500	<24	<25	<240	<260	<25	<26	<50	<26	<26
2,4-Dinitrophenol	<500	**282**	**244**	<420	<450	<44	<46	<50	<45	<46
2-Nitrophenol	**140**	**59.2**	**45.7**	<36	<39	<3.8	<3.9	<10	<3.9	<4.0
4-Nitrophenol	<500	**171**	**132**	<24	<26	<3.5	<2.6	<50	<2.6	<2.6
p-Chloro-m-cresol	<100	<3.1	<3.1	<30	<32	<3.2	,3.3	<10	<3.2	<3.3
Pentachlorophenol	<100	**20.5**	**23.5**	<36	<39	<3.8	<3.9	<50	<3.9	<4.0
Phenol	**270,000**	**1,020**	**934**	<15	<19	<1.6	<1.6	<10	<1.6	<1.6
2,4,6-Trichlorophenol	<100	**878**	**924**	**353**	**363**	<2.8	<2.9	<10	<2.9	<3.0
Sub Total 1	270,140	2,475	2,343	353	363	0	0	0	8	0
Miscellaneous Acid Extractable Organic Compounds										
4-Chlorophenol	NA	**878**	**924**	NA	NA	<11	<11	<10	<11	<11
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzoic acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	878	924	0	0	0	0	0	0	0
Total Acid Compounds Analyzed	270,140	3,353	3,267	353	363	0	0	0	8	0

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-54B	GM-54B	GM-54B	GM-54B	GM-54B	GM-54B	GM-54B	GM-55C	GM-55C	GM-55C
Date:	11/88	5/89	11/89	11/90	11/91	11/92	9/94	11/87	5/88	11/88
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	SL	ETC	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	<3.7	**5.46**	**7.24**	**3.5**	<3.3	<3.3	<10	**10.9**	**31**	<370
2,4-Dichlorophenol	<3.0	<3.1	<2.8	<2.7	<2.7	<2.7	<10	<2.8	**196**	<300
2,4-Dimethylphenol	<3.0	<3.1	<2.8	<2.7	<2.7	<2.7	<10	<2.8	**4.3**	<300
4,6-Dinitro-o-cresol	<27	**28**	<24	<24	<24	<24	<50	<25	<28	<2,700
2,4-Dinitrophenol	<47	**48**	<43	<42	<42	<42	<50	<44	<49	<4,700
2-Nitrophenol	<4.0	**4.1**	<3.7	<3.6	<3.6	<3.6	<10	<3.8	<4.2	<400
4-Nitrophenol	<2.7	**2.8**	<2.4	<2.4	<2.4	<2.4	<50	<2.5	<2.8	<270
p-Chloro-m-cresol	<3.3	**3.4**	<3.1	<3.0	<3.0	<3.0	<10	<3.1	<3.5	<340
Pentachlorophenol	<4.0	**4.1**	<3.7	<3.6	<3.6	<3.6	<50	<3.8	<4.2	<400
Phenol	<1.7	**1.74**	**5.28**	<1.5	<1.5	<1.5	<10	<1.6	**24.6**	<170
2,4,6-Trichlorophenol	<3.0	**3.1**	<2.8	<2.7	<2.7	<2.7	<10	<2.8	**22**	<300
Sub Total 1	0	101	13	4	0	0	0	11	278	0
Miscellaneous Acid Extractable Organic Compounds										
Chlorophenol	NA	NA	NA	NA	NA	NA	<10	<10	**254**	<1100
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzoic acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	254	0
Total Acid Compounds Analyzed	0	101	13	4	0	0	0	11	532	0

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-55C	GM-55C	GM-55C	GM-55C	GM-55C	GM-56C	GM-56C	GM-56C	GM-56C	GM-56C
Date:	11/89	11/90	11/91	11/92	11/92*	11/87	5/88	11/88	11/88	11/89
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	<400	<33	<340	<330	<330	**2,020**	**4,680**	**239**	**240**	**584**
2,4-Dichlorophenol	**417**	<27	**281**	<270	<270	**6,010**	**5,190**	**3,010**	**3,100**	**1,410**
2,4-Dimethylphenol	<330	**58.5**	<280	<270	<270	**348**	**563**	<160	<100	<3.1
4,6-Dinitro-o-cresol	<2,900	<240	<2,500	<2,400	<2,400	<1,200	<29	<1,500	<500	<27
2,4-Dinitrophenol	<5,100	<420	<4,300	<4,200	<4,200	<2,100	<51	<2,600	<500	<48
2-Nitrophenol	<430	<36	<370	<360	<360	<180	<4.4	<220	<100	<4.1
4-Nitrophenol	<290	<24	<250	<240	<240	<120	<2.9	<150	<500	<2.7
p-Chloro-m-cresol	<360	<30	<310	<300	<300	<150	<3.7	<180	<100	<3.4
Pentachlorophenol	<430	<36	<370	<360	<360	<180	**18**	<220	<100	<4.1
Phenol	<180	<15	<150	<150	<150	**2,340**	**5,100**	**1,880**	**210**	<1.7
2,4,6-Trichlorophenol	<330	**62.5**	<280	<270	<270	**2,020**	**1,830**	**1,420**	**1,300**	**880**
Sub Total 1	417	121	281	0	0	12,738	17,381	6,549	4,850	2,874
Miscellaneous Acid Extractable Organic Compounds										
4-Chlorophenol	<1200	<100	<1,000	<1,000	<1,000	**9,200**	**14,100**	<610	<100	<1
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzoic acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	9,200	14,100	0	0	0
Total Acid Compounds Analyzed	417	121	281	0	0	21,938	31,481	6,549	4,850	2,874

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-56C	GM-56C	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C
Date:	11/90	11/91	11/87	11/87*	5/88	5/88*	11/88	11/88	3/89	11/89
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	<340	**2,650**	**5,690**	**5,460**	**4,680**	**8,440**	**5,110**	**8,500**	**1,280**	**4,390**
2,4-Dichlorophenol	**1,910**	**1,380**	**4,630**	**4,560**	**5,990**	**9,470**	**6,310**	**7,800**	**4,260**	**8,750**
2,4-Dimethylphenol	<280	<27	**196**	<160	**180**	**209**	<300	<100	<28	**192**
4,6-Dinitro-o-cresol	<2,500	<240	<1,300	<1,400	<240	<25	<2,700	<500	<250	<290
2,4-Dinitrophenol	<4,300	<420	<2,300	<2,400	<420	<43	<4,700	<500	<444	<500
2-Nitrophenol	<370	<36	<200	<210	<36	<3.7	<400	<100	<38	<43
4-Nitrophenol	<250	<24	<130	<140	<24	<2.5	<270	<500	<25	<29
p-Chloro-m-cresol	<310	<30	<160	<170	<30	<3.1	<330	<100	<32	<36
Pentachlorophenol	<370	<36	<200	<210	<36	**24**	<400	<100	<38	<43
Phenol	**233**	**9,150**	**28,700**	**33,000**	**14,400**	**28,000**	**13,700**	**13,000**	**3,100**	**7,650**
2,4,6-Trichlorophenol	**1,050**	<27	**992**	**922**	**1,250**	**1,580**	**1,120**	**1,300**	**523**	**1,490**
Sub Total 1	3,193	13,180	40,108	43,942	26,500	47,723	26,240	30,600	9,163	22,472
Miscellaneous Acid Extractable Organic Compounds										
Chlorophenol	<1,000	**9,440**	**11,300**	**11,700**	**7,530**	**12,300**	**13,700**	**18,000**	**4,310**	**5,360**
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzoic acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	9,440	11,300	11,700	7,530	12,300	13,700	18,000	4,310	5,360
Total Acid Compounds Analyzed	3,193	22,620	51,408	55,642	34,030	60,023	39,940	48,600	13,473	27,832

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C	GM-58A	GM-58A	GM-58A	GM-58A	GM-58A
Date:	11/89*	11/90	11/90*	11/91	11/91*	11/87	5/88	11/88	11/89	11/90
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	**5,330**	**4,270**	**3,480**	**879**	**878**	<3.4	<3.8	<3.4	<3.4	<3.3
2,4-Dichlorophenol	**9,710**	**11,900**	**12,800**	**3,660**	**4,120**	<2.8	<3.1	<2.8	<2.8	<2.7
2,4-Dimethylphenol	**200**	**200**	**222**	<140	<140	<2.8	<3.1	<2.8	<2.8	<2.7
4,6-Dinitro-o-cresol	<250	<1,200	<250	<1,200	<1,200	<24	<27	<25	<25	<24
2,4-Dinitrophenol	<440	<2,100	<430	<2,100	<2,100	<43	<48	<43	<44	<42
2-Nitrophenol	<38	<180	<37	<180	<180	<3.7	<4.1	<3.7	<3.7	<3.6
4-Nitrophenol	<25	<120	<25	<120	<120	<2.4	<2.7	<2.5	<2.5	<2.4
p-Chloro-m-cresol	<32	<150	<31	<150	<150	<3.1	<3.4	,3.1	,3.1	<3.0
Pentachlorophenol	<38	<180	**80.8**	<180	<180	<3.7	<4.1	<3.7	<3.7	<3.6
Phenol	**10,300**	**4,490**	**4,460**	**961**	**963**	**4.08**	<1.7	<1.5	<1.6	<1.5
2,4,6-Trichlorophenol	**1,260**	**3,030**	**2,680**	**1,040**	**1,220**	**5.29**	**3.6**	<2.8	**9.13**	**9.98**
Sub Total 1	26,800	23,890	23,723	6,540	7,181	9	4	0	9	10
Miscellaneous Acid Extractable Organic Compounds										
4-Chlorophenol	**3,630**	**5,110**	**6,710**	**2,360**	**2,690**	<10	<11	NA	NA	NA
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzoic acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	3,630	5,110	6,710	2,360	2,690	0	0	0	0	0
Total Acid Compounds Analyzed	30,430	29,000	30,433	8,900	9,871	9	4	0	9	10

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-58A	GM-58A	GM-58A	GM-58A	GM-59A	GM-59A	GM-59A	GM-59A	GM-59A	GM-59A
Date:	11/91	11/91	11/92	9/94	11/87	5/88	11/88	11/89	11/90	11/91
Laboratory:	ETC	ETC	ETC	SL	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	<3.9	<3.9	<3.3	<10	<3.4	<3.3	<3.7	<3.5	<3.4	<3.3
2,4-Dichlorophenol	<3.2	<3.2	<2.7	<10	<2.8	<2.7	<3.0	<2.8	<2.8	<2.2
2,4-Dimethylphenol	<3.2	<3.2	<2.7	<10	<2.8	<2.7	<3.0	<2.8	<2.8	<2.7
4,6-Dinitro-o-cresol	<28	<28	<24	<50	<24	<24	<27	<25	<25	<24
2,4-Dinitrophenol	<49	<49	<42	<50	<43	<42	<47	<44	<43	<42
2-Nitrophenol	<4.2	<4.2	<3.6	<10	<3.7	<3.6	<4.0	<3.8	<3.7	<3.6
4-Nitrophenol	<2.8	<2.8	<2.4	<50	<2.4	<2.4	<2.7	<2.5	<2.5	<2.4
p-Chloro-m-cresol	<3.5	<3.5	<3.0	<10	<3.1	<3.0	<3.3	<3.2	<3.1	<3.0
Pentachlorophenol	<4.2	<4.2	<3.6	<50	<3.7	<3.6	<4.0	<3.8	<3.7	<3.6
Phenol	<1.8	<1.8	<1.5	<10	<1.5	<1.5	<1.7	<1.6	<1.5	<1.5
2,4,6-Trichlorophenol	<3.2	<3.2	<2.7	<10	<2.8	<2.7	<3.0	<2.8	<2.8	<2.7
Sub Total 1	0	0	0	0	0	0	0	0	0	0
Miscellaneous Acid Extractable Organic Compounds										
Chlorophenol	NA	NA	NA	<10	<10	<10	NA	NA	NA	NA
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzoic acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total Acid Compounds Analyzed	0	0	0	0	0	0	0	0	0	0

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-59A	B-25A	B-26A	B-28A	GM-106	GM-106	GM-106	GM-106	GM-106	GM-106
Date:	11/92	3/87	3/87	3/87	12/86	5/87	11/87	5/88	11/88	11/89
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	<3.3	**116,000**	**10.3**	**10.5**	**26.5**	**58.7**	**174**	**261**	**266**	<380
2,4-Dichlorophenol	<2.7	**182,000**	<2.7	<2.7	**38.5**	**58.7**	**552**	**1,260**	**884**	**1,290**
2,4-Dimethylphenol	<2.7	**1,620**	<2.7	<2.7	<2.9	**4.4**	**14.9**	**19.1**	<27	<310
4,6-Dinitro-o-cresol	<24	<13,000	<24	<24	<26	<24	<24	<25	<240	<2800
2,4-Dinitrophenol	<42	<24,000	<42	<42	<45	<42	<42	<43	<420	<4800
2-Nitrophenol	<3.6	<2,000	<3.6	<3.6	<3.8	<3.6	<3.6	<3.7	<36	<410
4-Nitrophenol	<2.4	<1,300	<2.4	<2.4	<2.6	<2.4	<2.4	<2.5	<24	<280
p-Chloro-m-cresol	<3.0	<1,700	<3	<3	<3.2	<3	<3.0	<3.1	<30	<340
Pentachlorophenol	<3.6	<2,000	<3.6	<3.6	<3.8	<3.6	**10.9**	**9.6**	<36	<410
Phenol	<1.5	**403,000**	**5.4**	<1.5	**12.9**	**1.8**	**71.3**	**184**	**104**	**224**
2,4,6-Trichlorophenol	<2.7	**25,900**	<2.7	<2.7	**52.1**	**82.2**	**667**	**1,070**	**1,100**	**1,000**
Sub Total 1	0	728,520	16	11	130	206	1,490	2,804	2,354	2,514
Miscellaneous Acid Extractable Organic Compounds										
4-Chlorophenol	NA	NA	NA	NA	NA	NA	**183**	NA	NA	<1,100
2-Methylphenol	NA	<5,600	<10	<10	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	**47,000**	<10	<10	NA	NA	NA	NA	NA	NA
Benzoic acid	NA	**50,800**	<10	<10	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	<5,600	<10	<10	NA	NA	NA	NA	NA	NA
Sub Total 2	0	97,800	0	0	0	0	183	0	0	0
Total Acid Compounds Analyzed	0	826,320	16	11	130	206	1,673	2,804	2,354	2,514

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-106	GM-106	GM-106	P-1	P-1	P-2	P-3	P-6	P-6	P-7
Date:	11/90	11/91	11/92	3/87	11/87	11/87	11/87	11/87	11/91	12/86
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	**242**	**307**	**292**	**5.6**	**11.3**	**8.82**	<3.3	<3.3	<3.3	**776**
2,4-Dichlorophenol	**542**	**1,440**	**1,770**	<3.0	<2.7	<2.8	<2.7	<2.7	<2.7	**2,540**
2,4-Dimethylphenol	**21.3**	<54	<140	<3.0	<2.7	<2.8	<2.7	<2.7	<2.7	<2.7
4,6-Dinitro-o-cresol	<24	<480	<1,300	<27	<24	<25	<24	<24	<24	<24
2,4-Dinitrophenol	<42	<840	<2,200	<47	<42	<43	<42	<42	<42	<42
2-Nitrophenol	<3.6	<72	<190	<4.0	<3.6	<3.7	<3.6	<3.6	<3.6	<3.6
4-Nitrophenol	<2.4	<48	<130	<2.7	<2.4	<2.5	<2.4	<2.4	<2.4	**68.6**
p-Chloro-m-cresol	<3.0	<60	<160	<3.3	<3.0	<3.1	<3.0	<3.0	<3.0	<3.0
Pentachlorophenol	**17.9**	<72	<190	<4.0	<3.6	<3.7	<3.6	<3.6	<3.6	<3.6
Phenol	**117**	**331**	**242**	<1.7	<1.5	**70.4**	**22.8**	<1.5	<1.5	**9,410**
2,4,6-Trichlorophenol	**976**	**1,420**	**1,960**	<3.0	<2.7	<2.8	<2.7	<2.7	<2.7	**599**
Sub Total 1	1,916	3,498	4,264	6	11	79	23	0	0	13,394
Miscellaneous Acid Extractable Organic Compounds										
Chlorophenol	NA	NA	NA	NA	**12.7**	<10	<10	<10	NA	**2,600**
2-Methylphenol	NA	NA	NA	<11	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	<11	NA	NA	NA	NA	NA	NA
Benzoic acid	NA	NA	NA	<11	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	<11	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	13	0	0	0	0	2,600
Total Acid Compounds Analyzed	1,916	3,498	4,264	6	24	79	23	0	0	15,994

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL *Savannah Laboratories and Environmental Testing, Savannah, Georgia.*

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	P-7	P-7	P-7	P-7	P-7	P-7	P-7	P-7	P-7	P-7
Date:	5/87	3/87	11/87	5/88	11/88	3/89	11/89	11/90	11/91	11/92
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds *concentrations are in ug/L*										
2-Chlorophenol	**866**	**1,660**	**331**	**1,590**	**982**	**580**	**2,550**	**1,080**	**402**	<830
2,4-Dichlorophenol	**2,120**	<30	**748**	**7,960**	**5,490**	**1,910**	**7,090**	**4,530**	**2,000**	**876**
2,4-Dimethylphenol	<2.7	<30	<2.8	<3.1	<28	<28	<32	<54	<2.8	<680
4,6-Dinitro-o-cresol	<24	<260	<24	<27	<250	<250	<280	<480	<25	<6,100
2,4-Dinitrophenol	<42	<460	<43	<48	<430	<430	<490	<840	<43	<11,000
2-Nitrophenol	<3.6	<40	<3.7	<4.1	<37	<37	<42	<72	<3.7	<910
4-Nitrophenol	<2.4	**130**	**18.2**	**79.5**	<25	<25	<28	<48	**57.5**	<610
p-Chloro-m-cresol	<3.0	<33	<3.1	<3.4	<31	<31	<35	<60	<3.1	<760
Pentachlorophenol	<3.6	<40	<3.7	<4.1	<37	<37	<42	<72	<3.7	<910
Phenol	**8,930**	**11,400**	**3,090**	**19,000**	**7,410**	**6,750**	**21,500**	**5,930**	**4,550**	**2,400**
2,4,6-Trichlorophenol	**602**	**2,170**	**336**	**2,820**	**3,180**	**509**	**3,810**	**1,720**	**741**	<680
Sub Total 1	12,518	15,360	4,523	31,450	31,450	9,749	34,950	13,260	7,751	3,276
Miscellaneous Acid Extractable Organic Compounds										
4-Chlorophenol	**4,820**	NA	**4,650**	**5,660**	**2,130**	**2,650**	<120	<200	<10	<2,500
2-Methylphenol	NA	<110	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	<110	NA	NA	NA	NA	NA	NA	NA	NA
Benzoic acid	NA	**1,720**	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	<110	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	4,820	1,720	4,650	5,660	2,130	2,650	0	0	0	0
Total Acid Compounds Analyzed	17,338	17,080	9,173	37,110	33,580	12,399	34,950	13,260	7,751	3,276

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	P-8	P-8	P-8	P-8	P-8	P-8	P-8	P-8	P-8	P-8
Date:	12/86	5/87	11/87	5/88	11/88	3/89	11/89	11/90	11/91	11/92
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	NA	NA	**1,330**	**5,290**	**8,100**	**6,450**	**10,700**	**3,590**	**5,050**	**8,310**
2,4-Dichlorophenol	NA	NA	**413**	**3,880**	**4,450**	**3,680**	**9,780**	**4,140**	**5,230**	**7,760**
2,4-Dimethylphenol	NA	NA	<54	**410**	**318**	<1,400	<1,500	**186**	**111**	**312**
4,6-Dinitro-o-cresol	NA	NA	<480	<2,600	<2,400	<12,000	<14,000	<240	<480	<1,200
2,4-Dinitrophenol	NA	NA	<840	<4,500	<4,300	<21,000	<24,000	<430	<850	<2,100
2-Nitrophenol	NA	NA	<72	<380	<370	<1800	<2,000	<37	<73	<180
4-Nitrophenol	NA	NA	<48	<260	<240	<1200	<1,400	<24	<48	<120
p-Chloro-m-cresol	NA	NA	<60	<320	<310	<1500	<1,700	<31	<61	<150
Pentachlorophenol	NA	NA	<72	<380	<370	<1800	<2,000	<37	<73	<180
Phenol	NA	NA	**10,400**	**38,700**	**6,080**	**8,490**	**29,200**	**10,800**	**9,320**	**37,400**
2,4,6-Trichlorophenol	NA	NA	**112**	**446**	**370**	<1400	<1500	**452**	**414**	**770**
Sub Total 1	0	0	12,255	48,726	19,318	18,620	49,680	19,167	20,125	54,552
Miscellaneous Acid Extractable Organic Compounds										
Chlorophenol	<11	<11	**3,820**	**13,400**	**9,600**	<5,100	**19,400**	**6,200**	**28,600**	<5,100
2-Methylphenol	NA	NA	NA	NA	NA	<5,100	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	<5,100	NA	NA	NA	NA
Benzoic acid	NA	NA	NA	NA	NA	<5,100	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	3,820	13,400	9,600	0	19,400	6,200	28,600	0
Total Acid Compounds Analyzed	0	0	16,075	62,126	28,918	18,620	69,080	25,367	48,725	54,552

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	P-10	P-11	P-11	P-12	P-13	P-14	Field Blank	Field Blank	Field Blank	Field Blank
Date:	11/87	3/87	11/87	11/87	11/87	11/87	3/87	11/90	11/91	11/9/92
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-Chlorophenol	**22.4**	<3.6	<3.4	**45.7**	**3.80**	**26.6**	<3.5	<3.3	<3.4	<3.3
2,4-Dichlorophenol	<2.7	<3.0	<2.8	<2.7	<2.7	<3.0	<2.9	<2.7	<2.8	<2.7
2,4-Dimethylphenol	**9.64**	<3.0	<2.8	**32.7**	<2.7	<3.0	<2.9	<2.7	<2.8	<2.7
4,6-Dinitro-o-cresol	<24	<26	<25	<24	<24	<26	<26	<24	<24	<24
2,4-Dinitrophenol	<42	<46	<43	<42	<42	<46	<45	<42	<43	<42
2-Nitrophenol	<3.6	<4.0	<3.7	<3.6	<3.6	<4.0	<3.8	<3.6	<3.7	<3.6
4-Nitrophenol	<2.4	<2.6	<2.5	<2.4	<2.4	<2.6	<2.6	<2.4	<2.4	<2.4
p-Chloro-m-cresol	<3.0	<3.3	<3.1	<3.0	<3.0	<3.3	**4.1**	<3.0	<3.1	<3.0
Pentachlorophenol	<3.6	<4.0	<3.7	<3.6	<3.6	<4.0	<3.8	<3.6	<3.7	<3.6
Phenol	**69.3**	**5.1**	<1.5	**2,680**	<1.5	<1.6	<1.6	<1.5	<1.5	<1.5
2,4,6-Trichlorophenol	<2.7	<3	<2.8	<2.7	<2.7	<3.0	<2.9	<2.7	<2.8	<2.7
Sub Total 1	101	5	0	2,758	4	27	4	0	0	0
Miscellaneous Acid Extractable Organic Compounds										
4-Chlorophenol	**2,330**	NA	<10	**3,380**	<10	**12.9**	NA	<10	NA	NA
2-Methylphenol	NA	<11	NA	NA	NA	NA	<11	NA	NA	NA
4-Methylphenol	NA	<11	NA	NA	NA	NA	<11	NA	NA	NA
Benzoic acid	NA	<11	NA	NA	NA	NA	<11	NA	NA	NA
2,4,5-Trichlorophenol	NA	<11	NA	NA	NA	NA	<11	NA	NA	NA
Sub Total 2	2,330	0	0	3,380	0	13	0	0	0	0
Total Acid Compounds Analyzed	2,431	5	0	6,138	4	40	4	0	0	0

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

Table 2. Summary of Acid Extractable Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

	Field	Field
Well Number:	Blank	Blank
Date:	11/12/92	9/94
Laboratory:	ETC	SL
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L		
2-Chlorophenol	<3.3	<10
2,4-Dichlorophenol	<2.7	<10
2,4-Dimethylphenol	<2.7	<10
4,6-Dinitro-o-cresol	<24	<50
2,4-Dinitrophenol	<42	<50
2-Nitrophenol	<3.6	<10
4-Nitrophenol	<2.4	<50
p-Chloro-m-cresol	<3.0	<10
Pentachlorophenol	<3.6	<50
Phenol	<1.5	<10
2,4,6-Trichlorophenol	<2.7	<10
Sub Total 1	0	0
Miscellaneous Acid Extractable Organic Compounds		
4-Chlorophenol	NA	<10
2-Methylphenol	NA	NA
4-Methylphenol	NA	NA
Benzoic acid	NA	NA
2,4,5-Trichlorophenol	NA	NA
Sub Total 2	0	0
Total Acid Compounds Analyzed	0	0

NA Not analyzed.
* Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.

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APPENDIX C

TABLE 3 - SUMMARY OF BASE/NEUTRAL EXTRACTABLE ORGANIC COMPOUNDS

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L	Well Number:	GM-4A	GM-4B	GM-4B	GM-4B	GM-4C	GM-4C	GM-5	GM-5	GM-6A	GM-6B	GM-12A	GM-12A	GM-12B
	Date:	11/92	11/92	9/94	9/94*	11/92	9/94	11/92	9/94	11/92	11/92	11/92	11/92*	11/92
	Laboratory:	ETC	ETC	SL	SL	ETC	SL	ETC	SL	ETC	ETC	ETC	ETC	ETC
Acenaphthene		<1.9	<1.9	<50	<50	<1.9	<10	<1.9	<10	<1.9	<1.9	<1.9	<2.1	<1.9
Acenapthylene		<3.5	<3.5	<50	<50	<3.5	<10	<3.5	<10	<3.5	<3.5	<3.5	<3.9	<3.5
Anthracene		<1.9	<1.9	<50	<50	<1.9	<10	<1.9	<10	<1.9	<1.9	<1.9	<2.1	<1.9
Benzidine		NA	NA	<400	<400	NA	<80	NA	<80	NA	NA	NA	NA	NA
Benzo (a) anthracene		<7.8	<7.8	<50	<50	<7.8	<10	<7.8	<10	<7.8	<7.8	<7.8	<8.7	<7.8
Benzo (a) pyrene		<2.5	<2.5	<50	<50	<2.5	<10	<2.5	<10	<2.5	<2.5	<2.5	<2.8	<2.5
Benzo (b) fluoroanthene		<4.8	<4.8	<50	<50	<4.8	<10	<4.8	<10	<4.8	<4.8	<4.8	<5.3	<4.8
Benzo (ghi) perylene		<4.1	<4.1	<50	<50	<4.1	<10	<4.1	<10	<4.1	<4.1	<4.1	<4.6	<4.1
Benzo (k) fluoranthene		<2.5	<2.5	<50	<50	<2.5	<10	<2.5	<10	<2.5	<2.5	<2.5	<2.8	<2.5
Bis (2-chloroethoxy) methane		<5.3	<5.3	<50	<50	<5.3	<10	<5.3	<10	<5.3	<5.3	<5.3	<5.9	<5.3
Bis (2-chloroethyl) ether		<5.7	<5.7	<50	<50	<5.7	<10	<5.7	<10	<5.7	<5.7	<5.7	<6.3	<5.7
Bis (2-chloroisopropyl) ether		<5.7	<5.7	<50	<50	<5.7	<10	<5.7	<10	<5.7	<5.7	<5.7	<6.3	<5.7
Bis (2-ethylhexyl) phthalate		<10	<10	**190**	**240**	<10	**53**	<10	<10	<10	**14.7**	<10	<11	<10
4-Bromophenyl phenyl ether		<1.9	<1.9	<50	<50	<1.9	<10	<1.9	<10	<1.9	<1.9	<1.9	<2.1	<1.9
Butyl benzyl phthalate		<10	<10	<50	<50	<10	<10	<10	<10	<10	<10	<10	<11	<10
2-Chloronaphthalene		<1.9	<1.9	<50	<50	<1.9	<10	<1.9	<10	<1.9	<1.9	<1.9	<2.1	<1.9
4-Chlorophenyl phenyl ether		<4.2	<4.2	<50	<50	<4.2	<10	<4.2	<10	<4.2	<4.2	<4.2	<4.7	<4.2
Chrysene		<2.5	<2.5	<50	<50	<2.5	<10	<2.5	<10	<2.5	<2.5	<2.5	<2.8	<2.5
Dibenzo (a,h) anthracene		<2.5	<2.5	<50	<50	<2.5	<10	<2.5	<10	<2.5	<2.5	<2.5	<2.8	<2.5
1,2-Dichlorobenzene		<1.9	**5.13**	<50	<50	<1.9	<10	<1.9	<10	**25.7**	**8.24**	**142**	**264**	<1.9
1,3-Dichlorobenzene		<1.9	**18.7**	<50	<50	**14.6**	<10	<1.9	<10	<1.9	**4.3**	<1.9	<2.1	<1.9
1,4-Dichlorobenzene		<4.4	**135**	<50	<50	**15.5**	**26**	<4.4	<10	**17.9**	**117**	<4.4	<4.9	<4.4
3,3-Dichlorobenzidine		<16.5	<16.5	<100	<100	<16.5	<20	<16.5	<20	<16.5	<16.5	<16.5	<18.3	<16.5
Diethyl phthalate		<10	<10	<50	<50	<10	<10	<10	<10	<10	<10	<10	<11	<10
Dimethyl phthalate		<5.0	<5.0	<50	<50	<5.0	<10	<5.0	<10	<5.0	<5.0	<5.0	<5.6	<5.0
Di-n-butyl phthalate		<10	<10	<50	<50	<10	<10	<10	<10	<10	<10	<10	<11	<10
2,4-Dinitrotoluene		<5.7	<5.7	<50	<50	<5.7	<10	<5.7	<10	<5.7	<5.7	<5.7	<6.3	<5.7
2,6-Dinitrotoluene		<1.9	<1.9	<50	<50	<1.9	<10	<1.9	<10	<1.9	<1.9	<1.9	<2.1	<1.9
Di-n-octyl phthalate		<10	<10	<50	<50	<10	<10	<10	<10	<10	<10	<10	<11	<10
1,2-Diphenylhydrazine		NA	NA	<50	<50	NA	<10	NA	<10	NA	NA	NA	NA	NA
Fluoranthene		<2.2	<2.2	<50	<50	<2.2	<10	<2.2	<10	<2.2	<2.2	<2.2	<2.4	<2.2
Fluorene		<1.9	<1.9	<50	<50	<1.9	<10	<1.9	<10	<1.9	<1.9	<1.9	<2.1	<1.9
Hexachlorobenzene		<1.9	<1.9	<50	<50	<1.9	<10	<1.9	<10	<1.9	<1.9	<1.9	<2.1	<1.9
Hexachlorobutadiene		<.90	<.90	<50	<50	<.90	<10	<.90	<10	<.90	<.90	<.90	<1.0	<.90
Hexachlorocyclopentadiene		<10	<10	<50	<50	<10	<10	<10	<10	<10	<10	<10	<11	<10
Hexachloroethane		<1.6	<1.6	<50	<50	<1.6	<10	<1.6	<10	<1.6	<1.6	<1.6	<1.8	<1.6
Indeno (1,2,3-c,d) pyrene		<3.7	<3.7	<50	<50	<3.7	<10	<3.7	<10	<3.7	<3.7	<3.7	<4.1	<3.7
Isophorone		<2.2	<2.2	<50	<50	<2.2	<10	<2.2	<10	<2.2	<2.2	<2.2	<2.4	<2.2
Naphthalene		<1.6	<1.6	<50	<50	<1.6	<10	<1.6	<10	<1.6	<1.6	<1.6	**1.9**	<1.6
Nitrobenzene		<1.9	<1.9	<50	<50	<1.9	<10	<1.9	<10	<1.9	<1.9	<1.9	<2.1	<1.9
n-Nitrosodimethylamine		<10	<10	<50	<50	<10	<10	<10	<10	<10	<10	<10	<11	<10
n-Nitrosodi-n-propylamine		<10	<10	<50	<50	<10	<10	<10	<10	<10	<10	<10	<11	<10
n-Nitrosodiphenylamine		<1.9	**6.26**	<50	<50	**7.13**	<10	<1.9	<10	<1.9	**17.4**	<1.9	<2.1	<1.9
Phenanthrene		<5.4	<5.4	<50	<50	<5.4	<10	<5.4	<10	<5.4	<5.4	<5.4	<6.0	<5.4
Pyrene		<1.9	<1.9	<50	<50	<1.9	<10	<1.9	<10	<1.9	<1.9	<1.9	<2.1	<1.9
1,2,4-Trichlorobenzene		<1.9	<1.9	<50	<50	<1.9	<10	<1.9	<10	<1.9	<1.9	<1.9	<2.1	<1.9
Sub Total 1		0	165	190	240	37	79	0	0	44	162	142	266	0

See last page for footnotes.

Well Number:	GM-4A	GM-4B	GM-4B	GM-4B	GM-4C	GM-4C	GM-5	GM-5	GM-6A	GM-6B	GM-12A	GM-12A	GM-12B
Date:	11/92	11/92	9/94	9/94*	11/92	9/94	11/92	9/94	11/92	11/92	11/92	11/92*	11/92
Laboratory:	ETC	ETC	SL	SL	ETC	SL	ETC	SL	ETC	ETC	ETC	ETC	ETC
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L													
2,4-and 3,4-Dinitrochlorobenzene	NA	NA	<50	<50	NA	<10	NA	<10	NA	NA	NA	NA	NA
2-Nitroaniline	<10	<10	NA	NA	<10	NA	<10	NA	<10	<10	<10	<11	<10
4-Nitroaniline	<10	<10	NA	NA	<10	NA	<10	NA	<10	<10	<10	<11	<10
2-Nitrochlorobenzene	<10	<10	<50	<50	<10	<10	<10	<10	<10	<10	NA	NA	NA
3-Nitrochlorobenzene	NA	NA	<50	<50	NA	<10	NA	<10	NA	NA	NA	NA	NA
4-Nitrochlorobenzene	<10	611	<50	<50	<10	<10	<10	<10	<10	<10	NA	NA	NA
4-Nitrodiphenylamine	NA	NA	<50	<50	NA	<10	NA	<10	NA	NA	NA	NA	NA
Triphenyl phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrobiphenyl	NA	NA	<50	<50	NA	<10	NA	<10	NA	NA	NA	NA	NA
4-Nitrobiphenyl	NA	NA	<50	<50	NA	<10	NA	<10	NA	NA	NA	NA	NA
Benzyl alcohol	<10	<10	NA	NA	<10	NA	<10	NA	<10	<10	<10	<11	<10
Aniline	<10	<10	<250	110 J	<10	70	<10	<50	<10	<10	1280	2820	<10
4-Chloroaniline	<10	196	<50	130	3,650	64	<10	<10	<10	36.6	<10	<11	<10
2-Methylnaphthalene	<10	<10	NA	NA	<10	NA	<10	NA	<10	<10	<10	<11	<10
N-nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	<10	<10	NA	NA	<10	NA	<10	NA	<10	<10	<10	<11	<10
3-Chloroaniline	<10	588	<50	**	<10	**	<10	<10	<10	<10	NA	NA	NA
2-Chloroaniline	<10	611	<50	59	16.9	50	<10	<10	188	43.9	NA	NA	NA
Sub Total 2	0	2,006	0	189	3,667	184	0	0	188	81	1,280	2,820	0
Total Base/Neutral Compounds	0	2,171	190	429	3,704	263	0	0	232	242	1,422	3,086	0

See last page for footnotes.

Well Number:	GM-12C	GM-17A	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B
Date:	11/92	11/92	12/86	5/87	11/87	5/88	11/88	5/89	11/89
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
Acenaphthene	<1.9	<1.9	<2.1	<2.2	<2.0	<1.9	<2.3	<2.0	<2.0
Acenapthylene	<3.5	<3.5	<3.8	<4.1	<3.6	<3.6	<4.2	<3.8	<3.7
Anthracene	<1.9	<1.9	<2.1	<2.2	<2.0	<1.9	<2.3	<2.0	<2.0
Benzidine	NA	NA	<48	<51	<45	<45	<52	<47	<46
Benzo (a) anthracene	<7.8	<7.8	<8.5	<9.1	<8.0	<8.0	<9.3	<8.4	<8.2
Benzo (a) pyrene	<2.5	<2.5	<2.7	<2.9	<2.6	<2.6	<3.0	<2.7	<2.6
Benzo (b) fluoroanthene	<4.8	<4.8	<11	<12	<10	<4.9	<5.7	<5.2	<5.1
Benzo (ghi) perylene	<4.1	<4.1	<4.5	<4.8	<4.2	<4.2	<4.9	<4.4	<4.3
Benzo (k) fluoranthene	<2.5	<2.5	<3.8	<4.1	<3.6	<2.6	<3.0	<2.7	<2.6
Bis (2-chloroethoxy) methane	<5.3	<5.3	<5.8	<6.2	<5.5	<5.4	<6.3	<5.7	<5.6
Bis (2-chloroethyl) ether	<5.7	<5.7	<6.2	<6.6	<5.9	<5.8	<6.8	<6.1	<6.0
Bis (2-chloroisopropyl) ether	<5.7	<5.7	<6.2	<6.6	<5.9	<5.8	<6.8	<6.1	<6.0
Bis (2-ethylhexyl) phthalate	<10	<10	<11	<12	<10	<10	**48.9**	<11	**51.5**
4-Bromophenyl phenyl ether	<1.9	<1.9	<2.1	<2.2	<2.0	<1.9	<2.3	<2.0	<2.0
Butyl benzyl phthalate	<10	<10	<11	<12	<10	<10	<12	<11	<11
2-Chloronaphthalene	<1.9	<1.9	<2.1	<2.2	<2.0	<1.9	<2.3	<2.0	<2.0
4-Chlorophenyl phenyl ether	<4.2	<4.2	<4.6	<4.9	<4.3	<4.3	<5.0	<4.5	<4.4
Chrysene	<2.5	<2.5	<2.7	<2.9	<2.6	<2.6	<3.0	<2.7	<2.6
Dibenzo (a,h) anthracene	<2.5	<2.5	<11	<12	<10	<10	<12	<11	11
1,2-Dichlorobenzene	**36.3**	**2.24**	**2.6**	<2.2	<2.0	<1.9	<2.3	**9.48**	**10.8**
1,3-Dichlorobenzene	<1.9	<1.9	<2.1	<2.2	<2.0	<1.9	**54.9**	<2.0	<2.0
1,4-Dichlorobenzene	<4.4	**15.8**	**50.8**	**32.6**	**26.5**	**12.4**	**5.44**	**74.5**	**80.5**
3,3-Dichlorobenzidine	<16.5	<16.5	<18	<19	<17	<17	<20	<18	<17
Diethyl phthalate	<10	<10	<11	<12	<10	<10	<12	<11	<11
Dimethyl phthalate	<5.0	<5.0	<11	<12	<10	<10	<12	<11	<11
Di-n-butyl phthalate	<10	<10	<11	**17.3**	<10	<10	<12	<11	<11
2,4-Dinitrotoluene	<5.7	<5.7	<6.2	<6.6	<5.9	<5.8	<6.8	<6.1	<6.0
2,6-Dinitrotoluene	<1.9	<1.9	<2.1	<2.2	<2.0	<1.9	<2.3	<2.0	<2.0
Di-n-octyl phthalate	<10	<10	<11	<12	<10	<10	<12	<11	<11
1,2-Diphenylhydrazine	NA	NA	<11	<12	<10	<10	<12	<11	<11
Fluoranthene	<2.2	<2.2	<2.4	<2.6	<2.3	<2.2	<2.6	<2.4	<2.3
Fluorene	<1.9	<1.9	<2.1	<2.2	<2.0	<1.9	<2.3	<2.0	<2.0
Hexachlorobenzene	<1.9	<1.9	<2.1	<2.2	<2.0	<2.0	<2.3	<2.0	<2.0
Hexachlorobutadiene	<.90	<.90	<1	<1	<.93	<0.9	<1.1	<.97	<.95
Hexachlorocyclopentadiene	<10	<10	<11	<12	<10	<10	<12	<11	<11
Hexachloroethane	<1.6	<1.6	<1.7	<1.9	<1.6	<1.6	<1.9	<1.7	<1.7
Indeno (1,2,3-c,d) pyrene	<3.7	<3.7	<5.1	<5.5	<4.8	<4.8	<5.6	<5.1	<4.9
Isophorone	<2.2	<2.2	<2.4	<2.6	<2.3	<2.2	<2.6	<2.4	<2.3
Naphthalene	<1.6	<1.6	<1.7	<1.9	<1.6	<1.6	<1.9	<1.7	<1.7
Nitrobenzene	<1.9	<1.9	<2.1	<2.2	<2.0	<1.9	<2.3	<2.0	<2.0
n-Nitrosodimethylamine	<10	<10	<11	<12	<10	<10	<12	<11	<11
n-Nitrosodi-n-propylamine	<10	<10	<11	<12	<10	<10	<12	<11	<11
n-Nitrosodiphenylamine	<1.9	<1.9	<2.1	<2.2	<2.0	<1.9	<2.3	<2.0	<2.0
Phenanthrene	<5.4	<5.4	<5.9	<6.3	<5.6	<5.5	<6.4	<5.8	<5.7
Pyrene	<1.9	<1.9	<2.1	<2.2	<2.0	<1.9	<2.3	<2.0	<2.0
1,2,4-Trichlorobenzene	<1.9	<1.9	<2.1	<2.2	<2.0	<1.9	<2.3	<2.0	<2.0
Sub Total 1	36	18	53	50	27	12	109	84	143

See last page fo tnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-12C	GM-17A	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B
Date:	11/92	11/92	12/86	5/87	11/87	5/88	11/88	5/89	11/89
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2,4-and 3,4-Dinitrochlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	<10	<10	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	<10	<10	NA	NA	NA	NA	NA	NA	NA
2-Nitrochlorobenzene	NA	<10	NA	NA	NA	NA	NA	NA	NA
3-Nitrochlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrochlorobenzene	NA	<10	NA	NA	NA	NA	NA	NA	NA
4-Nitrodiphenylamine	NA	NA	NA	NA	NA	NA	NA	NA	NA
Triphenyl phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrobiphenyl	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrobiphenyl	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzyl alcohol	<10	<10	NA	NA	NA	NA	NA	NA	NA
Aniline	<10	<10	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	<10	<10	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	<10	<10	NA	NA	NA	NA	NA	NA	NA
N-nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	<10	<10	NA	NA	NA	NA	NA	NA	NA
3-Chloroaniline	NA	<10	NA	NA	NA	NA	NA	NA	NA
2-Chloroaniline	NA	<10	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	0	0
Total Base/Neutral Compounds	36	18	53	50	27	12	109	84	143

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B	GM-17C	GM-17C	GM-17C	GM-17C
Date:	5/90	11/90	5/91	11/91	11/92	9/94	12/86	5/87	11/87	5/88
Laboratory:	ETC	ETC	ETC	ETC	ETC	SL	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L										
Acenaphthene	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<190	<40	<2.0
Acenapthylene	<3.7	<3.5	<3.5	<3.5	<3.5	<10	<3.5	<350	<73	<3.6
Anthracene	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<190	<40	<2.0
Benzidine	<46	<44	<44	<44	NA	<80	<44	<4400	<920	<46
Benzo (a) anthracene	<8.2	<7.8	<7.8	<7.9	<7.8	<10	<7.8	<790	<160	<8.1
Benzo (a) pyrene	<2.6	<2.5	<2.5	<2.5	<2.5	<10	<2.5	<250	<52	<2.6
Benzo (b) fluoroanthene	<5.1	<4.8	<4.8	<4.8	<4.8	<10	<10	<1,000	<210	<5.0
Benzo (ghi) perylene	<4.3	<4.1	<4.1	<4.1	<4.1	<10	<4.1	<410	<85	<4.3
Benzo (k) fluoranthene	<2.6	<2.5	<2.5	<2.5	<2.5	<10	<3.5	<350	<73	<2.6
Bis (2-chloroethoxy) methane	<5.6	<5.3	<5.3	<5.4	<5.3	<10	<5.3	<540	<110	<5.5
Bis (2-chloroethyl) ether	<6.0	<5.7	<5.7	<5.8	<5.7	<10	<5.7	<580	<120	<5.9
Bis (2-chloroisopropyl) ether	<6.0	<5.7	<5.7	<5.8	<5.7	<10	<5.7	<580	<120	<5.9
Bis (2-ethylhexyl) phthalate	<11	**12.6**	**18.7**	<10	<10	<10	<10	<1,000	<210	**22.5**
4-Bromophenyl phenyl ether	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<190	<40	<2.0
Butyl benzyl phthalate	<11	<10	<10	<10	<10	<10	<10	<1,000	<210	<10
2-Chloronaphthalene	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<190	<40	<2.0
4-Chlorophenyl phenyl ether	<4.4	<4.2	<4.2	<4.2	<4.2	<10	<4.2	<420	<87	<4.4
Chrysene	<2.6	<2.5	<2.5	<2.5	<2.5	<10	<2.5	<250	<52	<2.6
Dibenzo (a,h) anthracene	<11	<2.5	<2.5	<2.5	<2.5	<10	<10	<1,000	<210	<10
1,2-Dichlorobenzene	**28.8**	**14.7**	**19.0**	<1.9	**15.5**	<10	**102**	<190	**83.4**	**69.4**
1,3-Dichlorobenzene	**12.3**	**2.68**	**3.00**	<1.9	<1.9	<10	**56.7**	<190	**44.1**	**39.8**
1,4-Dichlorobenzene	**275**	**142**	**153**	<4.4	**109**	**170**	**653**	**2,120**	**1,370**	**1,070**
3,3-Dichlorobenzidine	<17	<16.5	<16.5	<16.7	<16.5	<20	<17	<1700	<340	<17
Diethyl phthalate	<11	<10	<10	<10	<10	<10	<10	<1,000	<210	<10
Dimethyl phthalate	<11	<10	<10	<10	<5.0	<10	<10	<1,000	<210	<10
Di-n-butyl phthalate	<11	<10	<10	<10	<10	<10	<10	<1,000	<210	<10
2,4-Dinitrotoluene	<6.0	<5.7	<5.7	<5.8	<5.7	<10	<5.7	<580	<120	<5.9
2,6-Dinitrotoluene	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<190	<40	<2.0
Di-n-octyl phthalate	<11	<10	<10	<10	<10	<10	<10	<1,000	<210	<10
1,2-Diphenylhydrazine	<11	<10	<10	<10	NA	<10	<10	<1,000	<210	<10
Fluoranthene	<2.3	<2.2	<2.2	<2.2	<2.2	<10	<2.2	<220	<46	<2.3
Fluorene	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<190	<40	<2.0
Hexachlorobenzene	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<190	<40	<2.0
Hexachlorobutadiene	<.95	<90	<0.9	<.91	<.90	<10	<0.9	<91	<19	<0.9
Hexachlorocyclopentadiene	<11	<10	<10	<10	<10	<10	<10	<1,000	<210	<10
Hexachloroethane	<1.7	<1.6	<1.6	<1.6	<1.6	<10	<1.6	<160	<33	<1.7
Indeno (1,2,3-c,d) pyrene	<4.9	<3.7	<3.7	<3.7	<3.7	<10	<4.7	<470	<98	<4.9
Isophorone	<2.3	<2.2	<2.2	<2.2	<2.2	<10	<2.2	<220	<46	<2.3
Naphthalene	<1.7	<1.6	<1.6	<1.6	<1.6	<10	<1.6	<160	<33	<1.7
Nitrobenzene	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<190	<40	<2.0
n-Nitrosodimethylamine	<11	<10	<10	<10	<10	<10	<10	<1,000	<210	<10
n-Nitrosodi-n-propylamine	<11	<10	<10	<10	<10	<10	<10	<1,000	<210	<10
n-Nitrosodiphenylamine	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<190	<40	<2.0
Phenanthrene	<5.7	<5.4	<5.4	<5.5	<5.4	<10	<5.4	<550	<110	<5.6
Pyrene	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<190	<40	<2.0
1,2,4-Trichlorobenzene	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<190	<40	<2.0
Sub Total 1	316	172	194	0	125	170	812	2,120	1,498	1,202

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B	GM-17B	GM-17C	GM-17C	GM-17C	GM-17C
Date:	5/90	11/90	5/91	11/91	11/92	9/94	12/86	5/87	11/87	5/88
Laboratory:	ETC	ETC	ETC	ETC	ETC	SL	ETC	ETC	ETC	ETC
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L										
2,4-and 3,4-Dinitrochlorobenzene	NA	NA	NA	NA	NA	10	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA
2-Nitrochlorobenzene	NA	NA	NA	NA	<10	<10	NA	NA	NA	NA
3-Nitrochlorobenzene	NA	NA	NA	NA	NA	<10	NA	NA	NA	NA
4-Nitrochlorobenzene	NA	NA	NA	NA	<10	<10	NA	NA	NA	NA
4-Nitrodiphenylamine	NA	NA	NA	NA	NA	<10	NA	NA	NA	NA
Triphenyl phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrobiphenyl	NA	NA	NA	NA	NA	<10	NA	NA	NA	NA
4-Nitrobiphenyl	NA	NA	NA	NA	NA	<10	NA	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA
Aniline	NA	NA	NA	NA	<10	<500	NA	NA	NA	NA
4-Chloroaniline	NA	NA	NA	NA	**1740**	**370**	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA
N-nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA
3-Chloroaniline	NA	NA	NA	NA	<10	**	NA	NA	NA	NA
2-Chloroaniline	NA	NA	NA	NA	**688**	**1,400**	NA	NA	NA	NA
Sub Total 2	0	0	0	0	2,428	1,770	0	0	0	0
Total Base/Neutral Compounds	316	172	194	0	2,553	1,940	812	2,120	1,498	1,202

See last page for footnotes.

Well Number:	GM-17C	GM-17C	GM-17C	GM-17C	GM-17C	GM-17C	GM-17C	GM-17C	GM-17C	GM-18B	GM-20B
Date:	11/88	5/89	11/89	5/90	11/90	5/91	11/91	11/92	9/94	11/92	11/92
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	SL	ETC	SL
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L											
Acenaphthene	<19	<2.0	<2.0	<10	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<1.9
Acenapthylene	<36	<3.7	<3.6	<19	<3.5	<3.6	<3.5	<3.5	<10	<3.5	<3.5
Anthracene	<19	<2.0	<2.0	<10	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<1.9
Benzidine	<450	<46	<46	<240	<44	<45	<44	NA	<80	<44	<44
Benzo (a) anthracene	<80	<8.2	<8.1	<42	<7.8	<8.0	<7.9	<7.8	<10	<7.9	<7.9
Benzo (a) pyrene	<26	<2.6	<2.6	<14	<2.5	<2.6	<2.5	<2.5	<10	<2.5	<2.5
Benzo (b) fluoroanthene	<49	<5.1	<5.0	<26	<4.8	<4.9	<4.8	<4.8	<10	<4.8	<4.8
Benzo (ghi) perylene	<42	<4.3	<4.3	<22	<4.1	<4.2	<4.1	<4.1	<10	<4.1	<4.1
Benzo (k) fluoranthene	<26	<2.6	<2.6	<14	<2.5	<2.6	<2.5	<2.5	<10	<2.5	<2.5
Bis (2-chloroethoxy) methane	<54	<5.6	<5.5	<29	<5.3	<5.4	<5.4	<5.3	<10	<5.4	<5.4
Bis (2-chloroethyl) ether	<58	<6.0	<5.9	<31	<5.7	<5.8	<5.8	<5.7	<10	<5.8	<5.8
Bis (2-chloroisopropyl) ether	<58	<6.0	<5.9	<31	<5.7	<5.8	<5.8	<5.7	<10	<5.8	<5.8
Bis (2-ethylhexyl) phthalate	**144**	**11**	**59.6**	<54	**17.2**	<10	<10	<10	<10	**27.7**	<10
4-Bromophenyl phenyl ether	<19	<2.0	<2.0	<10	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<1.9
Butyl benzyl phthalate	<100	<11	<10	<54	<10	<10	<10	<10	<10	<10	<10
2-Chloronaphthalene	<19	<2.0	<2.0	<10	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<1.9
4-Chlorophenyl phenyl ether	<43	<4.4	<4.4	<23	<4.2	<4.3	<4.2	<4.2	<10	<4.2	<4.2
Chrysene	<26	<2.6	<2.6	<14	<2.5	<2.6	<2.5	<2.5	<10	<2.5	<2.5
Dibenzo (a,h) anthracene	<100	<11	<10	<54	<2.5	<2.6	<2.5	<2.5	<10	<2.5	<2.5
1,2-Dichlorobenzene	**94.2**	**61.0**	**40.1**	**43.0**	**40.3**	**30.9**	<1.9	**13.1**	<10	**2.99**	<1.9
1,3-Dichlorobenzene	**42.1**	**36.9**	**31.3**	**35.1**	**50.2**	**41.3**	<1.9	**43.4**	<10	<1.9	<1.9
1,4-Dichlorobenzene	**1,190**	**304**	**475**	**833**	**953**	**544**	<4.4	**305**	**520**	<4.4	<4.4
3,3-Dichlorobenzidine	<170	<17	<17	<90	<16.5	<16.8	<16.7	<16.5	<20	<16.7	<16.7
Diethyl phthalate	<100	<11	<10	<54	<10	<10	<10	<10	<10	<10	<10
Dimethyl phthalate	<100	<11	<10	<54	<10	<10	<10	<5.0	<10	<5.1	<5.1
Di-n-butyl phthalate	<100	<11	<10	<54	<10	<10	<10	<10	<10	<10	<10
2,4-Dinitrotoluene	<58	<6.0	<5.9	<31	<5.7	<5.8	<5.8	<5.7	<10	<5.8	<5.8
2,6-Dinitrotoluene	<19	<2.0	<2.0	<10	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<1.9
Di-n-octyl phthalate	<100	<11	<10	<54	<10	<10	<10	<10	<10	<10	<10
1,2-Diphenylhydrazine	<100	<11	<10	<54	<10	<10	<10	NA	<10	<10	<10
Fluoranthene	<22	<2.3	<2.3	<12	<2.2	<2.2	<2.2	<2.2	<10	<2.2	<2.2
Fluorene	<19	<2.0	<2.0	<10	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<1.9
Hexachlorobenzene	<19	<2.0	<2.0	<10	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<1.9
Hexachlorobutadiene	**9.2**	<9.5	<.94	<4.9	<90	<0.92	<.91	<.90	<10	<.91	<.91
Hexachlorocyclopentadiene	<100	<11	<10	<54	<10	<10	<10	<10	<10	<10	<10
Hexachloroethane	<16	<1.7	<1.7	<8.7	<1.6	<1.6	<1.6	<1.6	<10	<1.6	<1.6
Indeno (1,2,3-c,d) pyrene	<48	<4.9	<4.9	<26	<3.7	<3.8	<3.7	<3.7	<10	<3.7	<3.7
Isophorone	<22	<2.3	<2.3	<12	<2.2	<2.2	<2.2	<2.2	<10	<2.2	<2.2
Naphthalene	<16	<1.7	<1.7	<8.7	**3.55**	<1.6	<1.6	<1.6	<10	<1.6	<1.6
Nitrobenzene	<19	<2.0	<2.0	<10	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<1.9
n-Nitrosodimethylamine	<100	<11	<10	<54	<10	<10	<10	<10	<10	<10	<10
n-Nitrosodi-n-propylamine	<100	<11	<10	<54	<10	<10	<10	<10	<10	<10	<10
n-Nitrosodiphenylamine	<19	**16.3**	<2.0	<10	**2.24**	<1.9	<1.9	**5.85**	<10	<1.9	<1.9
Phenanthrene	<55	<5.7	<5.6	<29	<5.4	<5.5	<5.5	<5.4	<10	<5.5	<5.5
Pyrene	<19	<2.0	<2.0	<10	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<1.9
1,2,4-Trichlorobenzene	<19	<2.0	<2.0	<10	<1.9	<1.9	<1.9	<1.9	<10	<1.9	<1.9
Sub Total 1	1,480	429	606	911	1,066	616	0	367	520	31	0

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-17C	GM-17C	GM-17C	GM-17C	GM-17C	GM-17C	GM-17C	GM-17C	GM-17C	GM-18B	GM-20B
Date:	11/88	5/89	11/89	5/90	11/90	5/91	11/91	11/92	9/94	11/92	11/92
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	SL	ETC	SL
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L											
2,4-and 3,4-Dinitrochlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	<10	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	<10	NA	NA	NA
2-Nitrochlorobenzene	NA	NA	NA	NA	NA	NA	NA	<10	<10	NA	NA
3-Nitrochlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA	NA
4-Nitrochlorobenzene	NA	NA	NA	NA	NA	NA	NA	<10	<10	NA	NA
4-Nitrodiphenylamine	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA	NA
Triphenyl phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrobiphenyl	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA	NA
4-Nitrobiphenyl	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA	NA	NA	<10	NA	NA	NA
Aniline	NA	NA	NA	NA	NA	NA	NA	<10	<250	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	**186**	**170**	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	<10	NA	NA	NA
N-nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA	<10	NA	NA	NA
3-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	<10	**	NA	NA
2-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	**327**	**380**	NA	NA
Sub Total 2	0	0	0	0	0	0	0	513	550	0	0
Total Base/Neutral Compounds	1,480	429	606	911	1,066	616	0	880	1,070	31	0

See last page for footnotes.

Well Number:	GM-20B	GM-27B	GM-27B	GM-27B	GM-27B	GM-27B	GM-27C	GM-27C	GM-27C	GM-27C
Date:	9/94	11/87	11/89	11/90	11/91	11/92	11/87	11/89	11/90	11/91
Laboratory:	SL	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L										
Acenaphthene	<10	<2.2	<210	<100	<190	<1.9	<2.2	<2.2	<1.9	<19
Acenapthylene	<10	<4.0	<390	<190	<350	<3.5	<4.0	<4.0	<3.5	<35
Anthracene	<10	<2.2	<210	<100	<190	<1.9	<2.2	<2.2	<1.9	<19
Benzidine	<80	<50	<4900	<2,300	<4400	<44	<50	<51	<44	<440
Benzo (a) anthracene	<10	<8.9	<870	<410	<780	<7.9	<8.9	<9.0	<7.9	<78
Benzo (a) pyrene	<10	<2.8	<280	<130	<250	<2.5	**6.33**	<2.9	<2.5	<25
Benzo (b) fluoroanthene	<10	<11	<530	<260	<480	<4.8	<11	<5.5	<4.8	<48
Benzo (ghi) perylene	<10	<4.7	<460	<220	<410	<4.1	<4.7	<4.7	<4.1	<41
Benzo (k) fluoranthene	<10	<4.0	<280	<130	<250	<2.5	**9.51**	<2.9	<2.5	<25
Bis (2-chloroethoxy) methane	<10	<6.0	<590	<280	<530	<5.4	<6.0	<6.1	<5.4	<53
Bis (2-chloroethyl) ether	<10	<6.5	<630	<300	<570	<5.8	<6.5	<6.6	<5.8	<57
Bis (2-chloroisopropyl) ether	<10	<6.5	<630	<300	<570	<5.8	<6.5	<6.6	<5.8	<57
Bis (2-ethylhexyl) phthalate	<10	<11	<1,100	<530	<1,000	<10	<11	<11	**27.0**	<100
4-Bromophenyl phenyl ether	<10	<2.2	<210	<100	<190	<1.9	<2.2	<2.2	<1.9	<19
Butyl benzyl phthalate	<10	<11	<1,100	<530	<1,000	<10	<11	<11	<10	<100
2-Chloronaphthalene	<10	<2.2	<210	<100	<190	<1.9	<2.2	<2.2	<1.9	<19
4-Chlorophenyl phenyl ether	<10	<4.8	<470	<220	<420	<4.2	<4.8	<4.8	<4.2	<42
Chrysene	<10	**3.77**	<280	<130	<250	<2.5	**8.73**	<2.9	<2.5	<25
Dibenzo (a,h) anthracene	<10	<11	<1,100	<130	<250	<2.5	<11	<11	<2.5	<25
1,2-Dichlorobenzene	<10	<2.2	<210	<100	<190	**26.6**	**400**	**22.6**	**6.21**	**25.5**
1,3-Dichlorobenzene	<10	<2.2	<210	<100	<190	**18**	<2.2	**3.36**	**2.78**	<19
1,4-Dichlorobenzene	**83**	**397**	**617**	**812**	**888**	**764**	**65.1**	**94.5**	**122**	**159**
3,3-Dichlorobenzidine	<20	<19.3	<1800	<878	<1650	<16.7	<19.3	<19	<16.7	<165
Diethyl phthalate	<10	<11	<1,100	<530	<1,000	<10	<11	<11	<10	<100
Dimethyl phthalate	<10	<11	<1,100	<530	<1,000	<5.1	<11	<11	<10	<100
Di-n-butyl phthalate	<10	<11	<1,100	<530	<1,000	<10	<11	<11	**34.1**	<100
2,4-Dinitrotoluene	<10	<6.5	<630	<300	<570	<5.8	<6.5	<6.6	<5.8	<57
2,6-Dinitrotoluene	<10	<2.2	<210	<100	<190	<1.9	<2.2	<2.2	<1.9	<19
Di-n-octyl phthalate	<10	<11	<1,100	<530	<1,000	<10	<11	<11	<10	<100
1,2-Diphenylhydrazine	<10	<11	<1,100	<530	<1,000	<10	<11	<11	<10	<100
Fluoranthene	<10	**6.58**	<240	<120	<220	<2.2	**15.7**	<2.5	<2.2	<22
Fluorene	<10	<2.2	<210	<100	<190	<1.9	<2.2	<2.2	<1.9	<19
Hexachlorobenzene	<10	<2.2	<210	<100	<190	<1.9	<2.2	<2.2	<1.9	<19
Hexachlorobutadiene	<10	<1.0	<100	<48	<90	<.91	<1.0	<1.0	<91	<9.0
Hexachlorocyclopentadiene	<10	<11	<1,100	<530	<1,000	<10	<11	<11	<10	<100
Hexachloroethane	<10	<1.8	<180	<85	<160	<1.6	<1.8	<1.8	<1.6	<16
Indeno (1,2,3-c,d) pyrene	<10	<5.3	<520	<200	<370	<3.7	<5.3	<5.4	<3.7	<37
Isophorone	<10	<2.5	<240	<120	<220	<2.2	<2.5	<2.5	<2.2	<22
Naphthalene	<10	**23.9**	<180	<85	<160	**8.82**	**4.55**	**3.92**	**5.79**	<16
Nitrobenzene	<10	<2.2	<210	<100	<190	<1.9	<2.2	<2.2	<1.9	<19
n-Nitrosodimethylamine	<10	<11	<1,100	<530	<1,000	<10	<11	<11	<10	<100
n-Nitrosodi-n-propylamine	<10	<11	<1,100	<530	<1,000	<10	<11	<11	<10	<100
n-Nitrosodiphenylamine	<10	**2.84**	<210	<100	<190	**4.31**	<2.2	<2.2	<1.9	<19
Phenanthrene	<10	<6.1	<600	<290	<540	<5.5	<6.1	<6.2	<5.5	<54
Pyrene	<10	**5.59**	<210	<100	<190	<1.9	**13.9**	<2.2	,1.9	<19
1,2,4-Trichlorobenzene	<10	<2.2	<210	<100	<190	<1.9	<2.2	<2.2	<1.9	<19
Sub Total 1	83	440	617	812	888	822	524	124	198	185

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-20B	GM-27B	GM-27B	GM-27B	GM-27B	GM-27B	GM-27C	GM-27C	GM-27C	GM-27C
Date:	9/94	11/87	11/89	11/90	11/91	11/92	11/87	11/89	11/90	11/91
Laboratory:	SL	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L										
2,4-and 3,4-Dinitrochlorobenzene	<10	<11	<1,100	<530	<1,000	<10	<11	<11	<10	<100
2-Nitroaniline	NA	<11	<1,100	<530	<1,000	<10	<11	<11	<10	<100
4-Nitroaniline	NA	<11	<1,100	<530	<1,000	<10	<11	<11	**126**	<100
2-Nitrochlorobenzene	<10	<11	<1,100	<530	<1,000	<10	<11	**79.8**	<10	<100
3-Nitrochlorobenzene	<10	NA	NA	NA	<1,000	NA	NA	NA	NA	<100
4-Nitrochlorobenzene	<10	<11	<1,100	<530	<1,000	<10	<11	**20.1**	<10	<100
4-Nitrodiphenylamine	<10	<11	<1,100	<530	<1,000	<10	<11	<11	<10	<100
Triphenyl phosphate	NA	<11	<1,100	<530	<1,000	NA	<11	<11	<10	<100
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	<1,000	NA	NA	NA	NA	NA
2-Nitrobiphenyl	<10	NA	<1,100	NA	<1,000	NA	NA	<11	NA	NA
4-Nitrobiphenyl	<10	NA	<1,100	NA	<1,000	<10	NA	<11	NA	NA
Benzyl alcohol	NA	NA	NA	NA	<1,000	NA	NA	NA	NA	NA
Aniline	<50	NA	**444,000**	**302,000**	**159,000**	**6,410**	NA	**869**	**48,000**	**27,600**
4-Chloroaniline	<10	NA	NA	NA	**31,600**	<10	NA	NA	NA	**12,500**
2-Methylnaphthalene	NA	NA	NA	NA	<1,000	<10	NA	NA	NA	NA
N-nitroaniline	NA	NA	NA	NA	<1,000	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	<1,000	NA	NA	NA	NA	NA
3-Chloroaniline	<10	NA	NA	NA	**34,400**	<10	NA	NA	NA	**10,800**
2-Chloroaniline	**140**	NA	NA	NA	**24,800**	**3,220**	NA	NA	NA	**6,590**
Sub Total 2	140	0	444,000	302,000	249,800	9,630	0	969	48,126	57,490
Total Base/Neutral Compounds	223	440	444,617	302,812	250,688	10,452	524	1,093	48,324	57,675

See last page for footnotes.

Well Number:	GM-27C	GM-28B	GM-28B	GM-28B	GM-28B	GM-28B	GM-28B	GM-28B	GM-28B
Date:	11/92	12/86	5/87	11/87	5/88	3/89	11/89	11/90	11/91
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
Acenaphthene	<1.9	NA	NA	<190	<120	<20	<21	<1.9	<39
Acenapthylene	<3.6	NA	NA	<350	<220	<36	<38	<3.5	<71
Anthracene	<1.9	NA	NA	<190	<120	<20	<21	<1.9	<39
Benzidine	<45	NA	NA	<4400	<2,700	<450	<480	<44	<890
Benzo (a) anthracene	<8.0	NA	NA	<790	<480	<80	<86	<7.8	<160
Benzo (a) pyrene	<2.6	NA	NA	<250	<150	<26	<27	<2.5	<51
Benzo (b) fluoroanthene	<4.9	NA	NA	<1,000	<300	<49	<53	<4.8	<97
Benzo (ghi) perylene	<4.2	NA	NA	<410	<250	<42	<45	<4.1	<83
Benzo (k) fluoranthene	<2.6	NA	NA	<350	<150	<26	<27	<2.5	<51
Bis (2-chloroethoxy) methane	<5.4	NA	NA	<540	<330	<55	<58	<5.3	<110
Bis (2-chloroethyl) ether	<5.8	NA	NA	<580	<350	<59	<63	<5.7	<120
Bis (2-chloroisopropyl) ether	<5.8	NA	NA	<580	<350	<59	<63	<5.7	<120
Bis (2-ethylhexyl) phthalate	<10	NA	NA	<1,000	<620	<100	<110	**115**	<200
4-Bromophenyl phenyl ether	<1.9	NA	NA	<190	<120	<20	<21	<1.9	<39
Butyl benzyl phthalate	<10	NA	NA	<1,000	<620	<100	<110	<10	<200
2-Chloronaphthalene	<1.9	NA	NA	<190	<120	<20	<21	<1.9	<39
4-Chlorophenyl phenyl ether	<4.3	NA	NA	<420	<260	<43	<46	<4.2	<85
Chrysene	<2.6	NA	NA	<250	<150	<26	<27	<2.5	<51
Dibenzo (a,h) anthracene	<2.6	NA	NA	<1,000	<620	<100	<110	<2.5	<51
1,2-Dichlorobenzene	**9.3**	NA	NA	**3,830**	**4,560**	**3,380**	**6,770**	**2,430**	**4,160**
1,3-Dichlorobenzene	**3.73**	NA	NA	<190	<120	<20	<21	**11.4**	<39
1,4-Dichlorobenzene	**119**	NA	NA	<440	**338**	**200**	**378**	**129**	**188**
3,3-Dichlorobenzidine	<16.8	NA	NA	<1700	<1,000	<170	<180	<16.5	<335
Diethyl phthalate	<10	NA	NA	<1,000	<620	<100	<110	<10	<200
Dimethyl phthalate	<5.1	NA	NA	<1,000	<620	<100	<110	<10	<200
Di-n-butyl phthalate	<10	NA	NA	<1,000	<620	<100	<110	<10	<200
2,4-Dinitrotoluene	<5.8	NA	NA	<580	<350	<59	<63	<5.7	<120
2,6-Dinitrotoluene	<1.9	NA	NA	<190	<120	<20	<21	<1.9	<39
Di-n-octyl phthalate	<10	NA	NA	<1,000	<620	<100	<110	<10	<200
1,2-Diphenylhydrazine	<10	NA	NA	<1,000	<620	<100	<110	<10	<200
Fluoranthene	<2.2	NA	NA	<220	<140	<23	<24	<2.2	<45
Fluorene	<1.9	NA	NA	<190	<120	<20	<21	<1.9	<39
Hexachlorobenzene	<1.9	NA	NA	<190	<120	<20	<21	<1.9	<39
Hexachlorobutadiene	<.92	NA	NA	<91	<56	<9.3	<9.9	<90	<18
Hexachlorocyclopentadiene	<10	NA	NA	<1,000	<620	<100	<110	<10	<200
Hexachloroethane	<1.6	NA	NA	<160	<99	<16	<18	<1.6	<32
Indeno (1,2,3-c,d) pyrene	<3.8	NA	NA	<470	<290	<48	<52	<3.7	<75
Isophorone	<2.2	NA	NA	<220	<140	<23	<24	<2.2	<45
Naphthalene	**2.77**	NA	NA	<160	<99	<16	<18	<1.6	<32
Nitrobenzene	<1.9	NA	NA	**1,190**	**919**	<20	<21	**154**	<39
n-Nitrosodimethylamine	<10	NA	NA	<1,000	<620	<100	<110	<10	<200
n-Nitrosodi-n-propylamine	<10	NA	NA	<1,000	<620	<100	<110	<10	<200
n-Nitrosodiphenylamine	<1.9	NA	NA	<190	<120	<20	<21	<1.9	<39
Phenanthrene	<5.5	NA	NA	<550	<330	<56	<59	<5.4	<110
Pyrene	<1.9	NA	NA	<190	<120	<20	<21	<1.9	<39
1,2,4-Trichlorobenzene	<1.9	NA	NA	<190	<120	<20	<21	**172**	**62.9**
Sub Total 1	135	0	0	5,020	5,817	3,580	7,148	3,011	4,411

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-27C	GM-28B	GM-28B	GM-28B	GM-28B	GM-28B	GM-28B	GM-28B	GM-28B
Date:	11/92	12/86	5/87	11/87	5/88	3/89	11/89	11/90	11/91
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2,4-and 3,4-Dinitrochlorobenzene	<10	<11	<1,100	<1,000	<620	<100	<110	<10	<200
2-Nitroaniline	<10	<11	<1,100	<1,000	<620	<100	<110	<10	<200
4-Nitroaniline	<10	<11	<1,100	<1,000	<620	<100	<110	<10	<200
2-Nitrochlorobenzene	<10	<11	<1,100	**13,100**	**17,900**	**8,660**	**222**	**22,700**	**2,120**
3-Nitrochlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	**918**
4-Nitrochlorobenzene	<10	<11	<1,100	**28,800**	**43,800**	**34,700**	**470**	**63,000**	**2,030**
4-Nitrodiphenylamine	<10	<11	<1,100	<1,000	<620	<100	<110	<10	<200
Triphenyl phosphate	NA	<11	<1,100	<1,000	<620	<100	<110	<10	<200
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrobiphenyl	NA	NA	NA	NA	<620	NA	<110	NA	NA
4-Nitrobiphenyl	<10	NA	NA	NA	<620	NA	<110	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aniline	**14,500**	NA	NA	NA	NA	NA	**6,780**	**2,630**	**1,020**
4-Chloroaniline	**9,110**	NA	NA	NA	NA	NA	NA	NA	**53,100**
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Chloroaniline	<10	NA	NA	NA	NA	NA	NA	NA	**46,000**
2-Chloroaniline	**4,460**	NA	NA	NA	NA	NA	NA	NA	**36,200**
Sub Total 2	28,070	0	0	41,900	61,700	43,360	7,472	88,330	141,388
Total Base/Neutral Compounds	28,205	0	0	46,920	67,517	46,940	14,620	91,341	145,799

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-28C	GM-28C	GM-28C	GM-28C	GM-28C	GM-28C	GM-28C	GM-28C	GM-28C
Date:	12/86	5/87	11/87	5/88	11/88	3/89	3/89 *	11/89	11/90
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
Acenaphthene	NA	NA	<1.9	<130	<2.2	<1,900	<190	<2.2	<1,900
Acenapthylene	NA	NA	<3.5	<250	<4.0	<3,600	<350	<4.1	<3,500
Anthracene	NA	NA	<1.9	<130	<2.2	<1,900	<190	<2.2	<1,900
Benzidine	NA	NA	<44	<3,100	<50	<45,000	<4400	<51	<44,000
Benzo (a) anthracene	NA	NA	<7.8	<550	<8.9	<8,000	<780	<9.1	<7,800
Benzo (a) pyrene	NA	NA	<2.5	<180	<2.8	<2,600	<250	<2.9	<2,500
Benzo (b) fluoroanthene	NA	NA	<10	<340	<5.5	<4,900	<480	<5.6	<4,800
Benzo (ghi) perylene	NA	NA	<4.1	<290	<4.7	<4,200	<410	<4.8	<4,100
Benzo (k) fluoranthene	NA	NA	<3.5	<180	<2.8	<2,600	<250	<2.9	<2,500
Bis (2-chloroethoxy) methane	NA	NA	<5.3	<370	<6.0	<5,400	<530	<6.2	<5,300
Bis (2-chloroethyl) ether	NA	NA	<5.7	<400	<6.5	<5,800	<570	<6.6	<5,700
Bis (2-chloroisopropyl) ether	NA	NA	<5.7	<400	<6.5	<5,800	<570	<6.6	<5,700
Bis (2-ethylhexyl) phthalate	NA	NA	<10	<700	**32.7**	<10,000	<1,000	**23.9**	<10,000
4-Bromophenyl phenyl ether	NA	NA	<1.9	<130	<2.2	<1,900	<190	<2.2	<1,900
Butyl benzyl phthalate	NA	NA	<10	<700	<11	<10,000	<1,000	<12	<10,000
2-Chloronaphthalene	NA	NA	<1.9	<130	<2.2	<1,900	<190	<2.2	<1,900
4-Chlorophenyl phenyl ether	NA	NA	<4.2	<300	<4.8	<4,300	<430	<4.9	<4,200
Chrysene	NA	NA	<2.5	<180	<2.8	<2,600	<250	<2.9	<2,500
Dibenzo (a,h) anthracene	NA	NA	<10	<700	<11	<10,000	<1,000	<12	<2,500
1,2-Dichlorobenzene	NA	NA	**3,040**	**3,370**	**5,810**	**5,470**	**5,640**	**3,880**	**9,810**
1,3-Dichlorobenzene	NA	NA	<1.9	<130	**11.1**	<1,900	<190	**17.4**	<1,900
1,4-Dichlorobenzene	NA	NA	**193**	<310	**199**	<4,500	<440	**167**	<4,400
3,3-Dichlorobenzidine	NA	NA	**47.0**	<1,200	<19	<17,000	<1700	<19	<16,500
Diethyl phthalate	NA	NA	<10	<700	<11	<10,000	<1,000	<12	<10,000
Dimethyl phthalate	NA	NA	<10	<700	<11	<10,000	<1,000	<12	<10,000
Di-n-butyl phthalate	NA	NA	<10	<700	<11	<10,000	<1,000	<12	<10,000
2,4-Dinitrotoluene	NA	NA	<5.7	<400	<6.5	<5,800	<570	<6.6	<5,700
2,6-Dinitrotoluene	NA	NA	<1.9	<130	<2.2	<1,900	<190	<2.2	<1,900
Di-n-octyl phthalate	NA	NA	<10	<700	<11	<10,000	<1,000	<12	<10,000
1,2-Diphenylhydrazine	NA	NA	<10	<700	<11	<10,000	<1,000	<12	<10,000
Fluoranthene	NA	NA	<2.2	<150	<2.5	<2,200	<220	<2.6	<2,200
Fluorene	NA	NA	<1.9	<130	<2.2	<1,900	<190	<2.2	<1,900
Hexachlorobenzene	NA	NA	<1.9	<130	<2.2	<1,900	<190	<2.2	<1,900
Hexachlorobutadiene	NA	NA	<.90	<63	<1.0	<920	<90	<1.0	<900
Hexachlorocyclopentadiene	NA	NA	<10	<700	<11	**10,000**	<1,000	<12	<10,000
Hexachloroethane	NA	NA	<1.6	<110	<1.8	<2,600	<160	<1.9	<1,600
Indeno (1,2,3-c,d) pyrene	NA	NA	<4.7	<330	<5.3	<4,800	<470	<5.5	<3,700
Isophorone	NA	NA	<2.2	<150	<2.5	<2,200	<220	<2.6	<2,200
Naphthalene	NA	NA	<1.6	<110	<1.8	<1,600	<160	**2.91**	<1,600
Nitrobenzene	NA	NA	<1.9	<130	**9.81**	<1,900	**210**	<2.2	<1,900
n-Nitrosodimethylamine	NA	NA	<10	<700	<11	<10,000	<1,000	<12	<10,000
n-Nitrosodi-n-propylamine	NA	NA	<10	<700	<11	<10,000	<1,000	<12	<10,000
n-Nitrosodiphenylamine	NA	NA	<1.9	<130	<2.2	<1,900	<190	<2.2	,1,900
Phenanthrene	NA	NA	<5.4	<380	<6.1	<5,500	<540	<6.3	<5,400
Pyrene	NA	NA	<1.9	<130	<2.2	<1,900	<190	<2.2	<1,900
1,2,4-Trichlorobenzene	NA	NA	<1.9	<130	**138**	<1,900	<190	**57.1**	<1,900
Sub Total 1	0	0	3,280	3,370	6,201	15,470	5,850	4,148	9,810

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-28C	GM-28C	GM-28C	GM-28C	GM-28C	GM-28C	GM-28C	GM-28C	GM-28C
Date:	12/86	5/87	11/87	5/88	11/88	3/89	3/89 *	11/89	11/90
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2,4-and 3,4-Dinitrochlorobenzene	<11	<1300	<10	<700	<11	<1,0000	<1,000	<12	<10,000
2-Nitroaniline	<11	<1300	<10	<700	**21.9**	<1,0000	<1,000	<12	<10,000
4-Nitroaniline	<11	<1300	<10	<700	<11	<1,0000	<1,000	<12	<10,000
2-Nitrochlorobenzene	<11	<1300	**17,400**	**15,400**	**23,700**	**20,500**	**26,300**	**238**	**70,100**
3-Nitrochlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrochlorobenzene	<11	<1300	**36,000**	**30,600**	**45,300**	**27,600**	**55,800**	**591**	**79,500**
4-Nitrodiphenylamine	<11	<1300	**56.3**	<700	**107**	<1,0000	<1,000	<12	<10,000
Triphenyl phosphate	<11	<1300	<10	<700	<11	<1,0000	<1,000	<12	<10,000
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrobiphenyl	NA	NA	NA	<700	NA	NA	NA	<12	NA
4-Nitrobiphenyl	NA	NA	NA	<700	NA	NA	NA	<12	NA
Benzyl alcohol	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aniline	NA	NA	NA	NA	NA	NA	NA	**8,920**	<10,000
4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	53,456	46,000	69,129	48,100	82,100	9,749	149,600
Total Base/Neutral Compounds	0	0	56,736	49,370	75,330	63,570	87,950	13,897	159,410

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-28C	GM-28C	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A
Date:	11/91	11/92	12/86	12/86*	5/87	5/87*	11/87	11/87*	5/88
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
Acenaphthene	<39	<96	<2.0	<2.2	<220	<210	<2	<2.0	<1.9
Acenapthylene	<71	<180	<3.7	<4.0	<410	<390	<3.6	<3.6	<3.5
Anthracene	<39	<96	<2.0	<2.2	<220	<210	<2	<2.0	<1.9
Benzidine	<900	<2200	<47	<50	<5200	<4900	<46	<46	<44
Benzo (a) anthracene	<160	<390	<8.3	<8.9	<920	<870	<8.1	<8.1	<7.8
Benzo (a) pyrene	<51	<130	1	<2.9	<290	<280	<2.6	<2.6	<2.5
Benzo (b) fluoroanthene	<98	<240	<11	<11	<1200	<1,100	<10	<10	<4.8
Benzo (ghi) perylene	<84	<210	<4.3	<4.7	<480	<460	<4.3	<4.3	<4.1
Benzo (k) fluoranthene	<51	<130	<3.7	<4.0	<410	<390	<3.6	<3.6	<2.5
Bis (2-chloroethoxy) methane	<110	<270	<5.6	<6.1	<620	<590	<5.5	<5.5	<5.3
Bis (2-chloroethyl) ether	<120	<290	<6.0	<6.5	<670	<630	<5.9	<5.9	<5.7
Bis (2-chloroisopropyl) ether	<120	<290	<6.0	<6.5	<670	<630	<5.9	<5.9	<5.7
Bis (2-ethylhexyl) phthalate	<200	<510	<11	<11	<1200	<1,100	<10	<10	<10
4-Bromophenyl phenyl ether	<39	<96	<2	<2.2	<220	<210	<2	<2.0	<1.9
Butyl benzyl phthalate	<200	<510	<11	<11	<1200	<1,100	<10	<10	<10
2-Chloronaphthalene	<39	<96	<2	<2.2	<220	<210	<2	<2.0	<1.9
4-Chlorophenyl phenyl ether	<86	<210	<4.4	<4.8	<490	<470	<4.4	<4.4	<4.2
Chrysene	<51	<130	<2.6	<2.9	<290	<280	<2.6	<2.6	<2.5
Dibenzo (a,h) anthracene	<51	<130	<11	<11	<1200	<1,100	<10	<10	<10
1,2-Dichlorobenzene	**3,330**	**1040**	**6.6**	**5.5**	<220	<210	**22.2**	**19.8**	**24.3**
1,3-Dichlorobenzene	<39	<96	<2	<2.2	<220	<210	<2	<2.0	<1.9
1,4-Dichlorobenzene	**138**	<220	**7.4**	**6**	<520	<490	**11.9**	**11.7**	**12.2**
3,3-Dichlorobenzidine	<337	<833	<17	<19	<1,900	<1800	<17	<17	<17
Diethyl phthalate	<200	<510	<11	<11	<1200	<1,100	<10	<10	<10
Dimethyl phthalate	<200	<250	<11	<11	<1200	<1,100	<10	<10	<10
Di-n-butyl phthalate	<200	<510	<11	<11	<1200	<1,100	<10	<10	<10
2,4-Dinitrotoluene	<120	<290	<6.0	<6.5	<670	<630	<5.9	<5.9	<5.7
2,6-Dinitrotoluene	<39	<96	<2.0	<2.2	<220	<210	<2	<2.0	<1.9
Di-n-octyl phthalate	<200	<510	<11	<11	<1200	<1,100	<10	<10	<10
1,2-Diphenylhydrazine	<200	<510	<11	<11	<1200	<1,100	<10	<10	<10
Fluoranthene	<45	<110	<2.3	<2.5	<260	<240	<2.3	<2.3	<2.2
Fluorene	<39	<96	<2.0	<2.2	<220	<210	<2	<2.0	<1.9
Hexachlorobenzene	<39	<96	<2.0	<2.2	<220	<210	<2	<2.0	<1.9
Hexachlorobutadiene	<18	<45	<1.0	<1.0	<110	<100	<.94	<.94	<0.9
Hexachlorocyclopentadiene	<200	<510	<11	<11	<1200	<1,100	<10	<10	<10
Hexachloroethane	<33	<81	<1.7	<1.8	<190	<180	<1.7	<1.7	<1.6
Indeno (1,2,3-c,d) pyrene	<76	<190	<5	<5.4	<550	<520	<4.9	<4.9	<4.7
Isophorone	<45	<110	<2.3	<2.5	<260	<240	<2.3	<2.3	<2.2
Naphthalene	<33	<81	<1.7	<1.8	<190	<180	<1.7	<1.7	<1.6
Nitrobenzene	<39	<96	**32.4**	**23.5**	<220	<210	**309**	**307**	**84.9**
n-Nitrosodimethylamine	<200	<510	<11	<11	<1200	<1,100	<10	<10	<10
n-Nitrosodi-n-propylamine	<200	<510	<11	<11	<1200	<1,100	<10	<10	<10
n-Nitrosodiphenylamine	<39	<96	<2.0	<2.2	<220	<210	<2	<2.0	<1.9
Phenanthrene	<110	<270	<5.7	<6.2	<640	<600	<5.6	<5.6	<5.4
Pyrene	<39	<96	<2.0	<2.2	<220	<210	<2	<2.0	<1.9
1,2,4-Trichlorobenzene	**43.3**	<96	<2.0	<2.2	<220	<210	<2	<2.0	<1.9
Sub Total 1	3,511	1,040	47	35	0	0	343	339	121

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-28C	GM-28C	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A
Date:	11/91	11/92	12/86	12/86*	5/87	5/87*	11/87	11/87*	5/88
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2,4-and 3,4-Dinitrochlorobenzene	<200	<510	**48,400**	**43,500**	**9,780**	**16,300**	**19,800**	**22,900**	**1,170**
2-Nitroaniline	<200	<510	<11	<11	<1,200	<1,100	**21.3**	**20.8**	**15.9**
4-Nitroaniline	<200	<510	<11	<11	<1,200	<1,100	<10	<10	<10
2-Nitrochlorobenzene	**1,740**	<510	**1,820**	**1,900**	**2,600**	**2,890**	**4,190**	**4,460**	**2,400**
3-Nitrochlorobenzene	**730**	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrochlorobenzene	**1,420**	<510	**4,910**	**4,450**	**4,770**	**5,700**	**8,330**	**9,130**	**2,480**
4-Nitrodiphenylamine	<200	<510	<11	<11	<1,200	<1,100	<10	<10	<10
Triphenyl phosphate	<200	NA	<11	<11	<1,200	<1,100	<10	<10	<10
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrobiphenyl	NA	NA	<11	<11	<1,200	<1,100	<10	<10	<10
4-Nitrobiphenyl	NA	<510	<11	<11	<1,200	<1,100	<10	<10	<10
Benzyl alcohol	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aniline	**3,930**	**1,530**	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	**51,900**	**5,390**	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Chloroaniline	**52,400**	**18,000**	NA	NA	NA	NA	NA	NA	NA
2-Chloroaniline	**59,100**	**12,000**	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	171,220	36,920	55,130	49,850	17,150	24,890	32,341	36,511	6,066
Total Base/Neutral Compounds	174,731	37,960	55,177	49,885	17,150	24,890	32,684	36,849	6,187

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A
Date:	5/88*	11/88	11/88 *	11/88	11/88 *	11/89	11/89 *	11/90	11/90*
Laboratory:	ETC	ETC	ETC	SL	SL	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
Acenaphthene	<2.0	<100	<200	<100	<100	<1.9	<2.0	<19	<20
Acenapthylene	<3.7	<190	<360	<100	<100	<3.6	<3.6	<35	<38
Anthracene	<2.0	<100	<200	<100	<100	<1.9	<2.0	<19	<20
Benzidine	<46	<2,300	<4,500	<800	<800	<45	<45	<440	<470
Benzo (a) anthracene	<8.2	<410	<800	<100	<100	<8.0	<8.0	<78	<84
Benzo (a) pyrene	<2.6	<130	<260	<100	<100	<2.6	<2.6	<25	<27
Benzo (b) fluoroanthene	<5.0	<260	<490	<100	<100	<4.9	<4.9	<48	<52
Benzo (ghi) perylene	<4.3	<220	<420	<100	<100	<4.2	<4.2	<41	<44
Benzo (k) fluoranthene	<2.6	<130	<260	<100	<100	<2.6	<2.6	<25	<27
Bis (2-chloroethoxy) methane	<5.5	<280	<550	<100	<100	<5.4	<5.5	<53	<57
Bis (2-chloroethyl) ether	<6.0	<300	<590	<100	<100	<5.8	<5.9	<57	<61
Bis (2-chloroisopropyl) ether	<6.0	<300	<590	<100	<100	<5.8	<5.9	<57	<61
Bis (2-ethylhexyl) phthalate	<10	<530	<1,000	<100	<100	<10	<10	<100	<110
4-Bromophenyl phenyl ether	<2.0	<100	<200	<100	<100	<1.9	<2.0	<19	<20
Butyl benzyl phthalate	<10	<530	<1,000	<100	<100	<10	<10	<100	<110
2-Chloronaphthalene	<2.0	<100	<200	<100	<100	<1.9	<2.0	<19	<20
4-Chlorophenyl phenyl ether	<4.4	<220	<430	<100	<100	<4.3	<4.3	<42	<45
Chrysene	<2.6	<130	<260	<100	<100	<2.6	<2.6	<25	<27
Dibenzo (a,h) anthracene	<10	<530	<1,000	<100	<100	<10	<10	<25	<27
1,2-Dichlorobenzene	**23.3**	**243**	<200	<100	<100	**42.8**	**37.6**	**41.1**	**40.5**
1,3-Dichlorobenzene	<2.0	<100	<200	<100	<100	<1.9	<2.0	<19	<20
1,4-Dichlorobenzene	**11.8**	<230	<450	<100	<100	**15.7**	**15.0**	<44	<47
3,3-Dichlorobenzidine	<17	<880	<1,700	<200	<200	<17	<17	<165	<177
Diethyl phthalate	<10	<530	<1,000	<100	<100	<10	<10	<100	<110
Dimethyl phthalate	<10	<530	<1,000	<100	<100	<10	<10	<100	<110
Di-n-butyl phthalate	<10	<530	<1,000	<100	<100	<10	<10	<100	<110
2,4-Dinitrotoluene	<6.0	<300	<590	<100	<100	<5.8	<5.9	<57	<61
2,6-Dinitrotoluene	<2.0	<100	<200	<100	<100	<1.9	<2.0	<19	<20
Di-n-octyl phthalate	<10	<530	<1,000	<100	<100	<10	<10	<100	<110
1,2-Diphenylhydrazine	<10	<530	<1,000	<100	<100	<10	<10	<100	<110
Fluoranthene	<2.3	<120	<230	<100	<100	<2.2	<2.3	<22	<24
Fluorene	<2.0	<100	<200	<100	<100	<1.9	<2.0	<19	<20
Hexachlorobenzene	<2.0	<100	<200	<100	<100	<1.9	<2.0	<19	<20
Hexachlorobutadiene	<0.9	<48	<93	<100	<100	<.92	<.93	<9.0	<9.7
Hexachlorocyclopentadiene	<10	<530	<1,000	<100	<100	<10	<10	<100	<110
Hexachloroethane	<1.7	<85	<160	<100	<100	<1.6	<1.6	<16	<17
Indeno (1,2,3-c,d) pyrene	<4.9	<250	<480	<100	<100	<4.8	<4.8	<37	<40
Isophorone	<2.3	<120	<230	<100	<100	<2.2	<2.3	<22	<24
Naphthalene	<1.7	<85	<160	<100	<100	<1.6	<1.6	<16	<17
Nitrobenzene	**75.9**	**217**	<200	**290**	**250**	**129**	**114**	**90.9**	**64.5**
n-Nitrosodimethylamine	<10	<530	<1,000	<100	<100	<10	<10	<100	<110
n-Nitrosodi-n-propylamine	<10	<530	<1,000	<100	<100	<10	<10	<100	<110
n-Nitrosodiphenylamine	<2.0	<100	<200	<100	<100	<1.9	<2.0	<19	<20
Phenanthrene	<5.7	<290	<560	<100	<100	<5.5	<5.6	<54	<58
Pyrene	<2.0	<100	<200	<100	<100	<1.9	<2.0	<19	<20
1,2,4-Trichlorobenzene	<2.0	<100	<200	<100	<100	<1.9	<2.0	<19	<20
Sub Total 1	111	460	0	290	250	188	167	132	105

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A
Date:	5/88*	11/88	11/88 *	11/88	11/88 *	11/89	11/89 *	11/90	11/90*
Laboratory:	ETC	ETC	ETC	SL	SL	ETC	ETC	ETC	ETC
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2,4-and 3,4-Dinitrochlorobenzene	**1,250**	**2,700**	**2,690**	**1,500**	**2,700**	**157**	**278**	**1,480**	**1,470**
2-Nitroaniline	**16.3**	<530	<1,000	<500	<500	**13.8**	**13.1**	<100	<110
4-Nitroaniline	<10	<530	<1,000	<500	<500	<10	<10	<100	<110
2-Nitrochlorobenzene	**723**	**596**	<1,000	**590**	**530**	**200**	**175**	**410**	**381**
3-Nitrochlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrochlorobenzene	**2,330**	**3,200**	**5,510**	**3,700**	**3,000**	**798**	**754**	**1170**	**1060**
4-Nitrodiphenylamine	<10	<530	<1,000	<200	<200	<10	<10	<100	<110
Triphenyl phosphate	<10	<530	<1,000	<100	<100	<10	<10	<100	<110
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrobiphenyl	<10	<530	<1,000	**280**	**230**	**274**	**291**	**293**	**252**
4-Nitrobiphenyl	<10	<530	<1,000	<100	<100	<10	<10	<100	<110
Benzyl alcohol	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aniline	NA	NA	NA	NA	NA	NA	NA	<100	<110
4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	4,319	6,496	8,200	6,070	6,460	1,443	1,511	3,353	3,163
Total Base/Neutral Compounds	4,430	6,956	8,200	6,360	6,710	1,630	1,678	3,485	3,268

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-54A	GM-54A	GM-54A	GM-54B	GM-54B	GM-54B	GM-54B	GM-54B	GM-54B	GM-54B
Date:	11/87	5/88	9/94	11/87	5/88	11/88	5/89	11/89	11/90	11/91
Laboratory:	ETC	ETC	SL	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L										
Acenaphthene	<2.0	<2.1	<10	<2.1	<2.0	<2.1	<2.2	<1.9	<1.9	<1.9
Acenapthylene	<3.7	<3.8	<10	<3.8	<3.7	<3.9	<4.0	<3.6	<3.5	<3.5
Anthracene	<2.0	<2.1	<10	<2.1	<2.0	<2.1	<2.2	<1.9	<1.9	<1.9
Benzidine	<46	<48	<80	<48	<47	<49	<51	<45	<44	<44
Benzo (a) anthracene	<8.2	<8.5	<10	<8.5	<8.3	<8.7	<9.0	<8.0	<7.8	<7.9
Benzo (a) pyrene	<2.6	<2.7	<10	<2.7	<2.7	<2.8	<2.9	<2.6	<2.5	<2.5
Benzo (b) fluoroanthene	<11	<5.2	<10	<11	<5.1	<5.3	<5.5	<4.9	<4.8	<4.8
Benzo (ghi) perylene	<4.3	<4.5	<10	<4.5	<4.4	<4.6	<4.7	<4.2	<4.1	<4.1
Benzo (k) fluoranthene	<3.7	<2.7	<10	<3.8	<2.7	<2.8	<2.9	<2.6	<2.5	<2.5
Bis (2-chloroethoxy) methane	<5.6	<5.8	<10	<5.8	<5.6	<5.9	<6.1	<5.4	<5.3	<5.4
Bis (2-chloroethyl) ether	<6.0	<6.2	<10	<6.2	<6.1	<6.3	<6.6	<5.8	<5.7	<5.8
Bis (2-chloroisopropyl) ether	<6.0	<6.2	<10	<6.2	<6.1	<6.3	<6.6	<5.8	<5.7	<5.8
Bis (2-ethylhexyl) phthalate	<11	<11	<10	**18.4**	<11	<11	<11	**33.1**	**11.4**	<10
4-Bromophenyl phenyl ether	<2.0	<2.1	<10	<2.1	<2.0	<2.1	<2.2	<1.9	<1.9	<1.9
Butyl benzyl phthalate	<11	<11	<10	<11	<11	<11	<11	<10	<10	<10
2-Chloronaphthalene	<2.0	<2.1	<10	<2.1	<2.0	<2.1	<2.2	<1.9	<1.9	<1.9
4-Chlorophenyl phenyl ether	<4.4	<4.6	<10	<4.6	<4.5	<4.7	<4.8	<4.3	<4.2	<4.2
Chrysene	<2.6	<2.7	<10	<2.7	<2.7	<2.8	<2.9	<2.6	<2.5	<2.5
Dibenzo (a,h) anthracene	<11	<11	<10	<11	<11	<11	<11	<10	<2.5	<2.5
1,2-Dichlorobenzene	<2.0	<2.1	<10	<2.1	<2.0	<2.1	<2.2	<1.9	<1.9	<1.9
1,3-Dichlorobenzene	<2.0	<2.1	<10	<2.1	<2.0	<2.1	<2.2	<1.9	<1.9	<1.9
1,4-Dichlorobenzene	<4.6	<4.8	<10	<4.8	<4.7	<4.9	<5.1	<4.5	<4.4	<4.4
3,3-Dichlorobenzidine	<17	<18	<20	<18	<18	<18	<19	<17	<16.5	<16.7
Diethyl phthalate	<11	<11	<10	<11	<11	<11	<11	<10	<10	<10
Dimethyl phthalate	<11	<11	<10	<11	<11	<11	<11	<10	<10	<10
Di-n-butyl phthalate	<11	<11	<10	<11	<11	<11	<11	<10	<10	<10
2,4-Dinitrotoluene	<6.0	<6.2	<10	<6.2	<6.1	<6.3	<6.6	<5.8	<5.7	<5.8
2,6-Dinitrotoluene	<2.0	<2.1	<10	<2.1	<2.0	<2.1	<2.2	<1.9	<1.9	<1.9
Di-n-octyl phthalate	<11	<11	<10	**50.4**	<11	<11	<11	<10	<10	<10
1,2-Diphenylhydrazine	<11	<11	<10	<11	<11	<11	<11	<10	<10	<10
Fluoranthene	<2.3	<2.4	<10	<2.4	<2.3	<2.4	<2.5	<2.2	<2.2	<2.2
Fluorene	<2.0	<2.1	<10	<2.1	<2.0	<2.1	<2.2	<1.9	<1.9	<1.9
Hexachlorobenzene	<2.0	<2.1	<10	<2.1	<2.0	<2.1	<2.2	<1.9	<1.9	<1.9
Hexachlorobutadiene	<.95	<1.0	<10	<.98	<1.0	<1.0	<1.0	<.92	<90	<.91
Hexachlorocyclopentadiene	<11	<11	<10	<11	<11	<11	<11	<10	<10	<10
Hexachloroethane	<1.7	<1.7	<10	<1.7	<1.7	<1.8	<1.8	<1.6	<1.6	<1.6
Indeno (1,2,3-c,d) pyrene	<4.9	<5.1	<10	<5.1	<5.0	<5.2	<5.4	<4.8	<3.7	<3.7
Isophorone	<2.3	<2.4	<10	<2.4	<2.3	<2.4	<2.5	<2.2	<2.2	<2.2
Naphthalene	<1.7	<1.7	<10	<1.7	<1.7	<1.8	<1.8	<1.6	<1.6	<1.6
Nitrobenzene	<2.0	<2.1	<10	<2.1	<2.0	<2.1	<2.2	<1.9	<1.9	<1.9
n-Nitrosodimethylamine	<11	<11	<10	<11	<11	<11	<11	<10	<10	<10
n-Nitrosodi-n-propylamine	<11	<11	<10	<11	<11	<11	<11	<10	<10	<10
n-Nitrosodiphenylamine	<2.0	<2.1	<10	<2.1	<2.0	<2.1	<2.2	<1.9	<1.9	<1.9
Phenanthrene	<5.7	<5.9	<10	<5.9	<5.7	<6.0	<6.2	<5.5	<5.4	<5.5
Pyrene	<2.0	<2.1	<10	<2.1	<2.0	<2.1	<2.2	<1.9	<1.9	<1.9
1,2,4-Trichlorobenzene	<2.0	<2.1	<10	<2.1	<2.0	<2.1	<2.2	<1.9	<1.9	<1.9
Sub Total 1	0	0	0	69	0	0	0	33	11	0

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-54A	GM-54A	GM-54A	GM-54B	GM-54B	GM-54B	GM-54B	GM-54B	GM-54B	GM-54B
Date:	11/87	5/88	9/94	11/87	5/88	11/88	5/89	11/89	11/90	11/91
Laboratory:	ETC	ETC	SL	ETC	ETC	ETC	ETC	ETC	ETC	ETC
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L										
2,4-and 3,4-Dinitrochlorobenzene	<11	<11	<10	<11	<11	<11	<11	<10	<10	<10
2-Nitroaniline	<11	<11	NA	<11	<11	<11	<11	<10	<10	<10
4-Nitroaniline	<11	<11	NA	<11	<11	<11	<11	NA	<10	<10
2-Nitrochlorobenzene	<11	<11	<10	**24.7**	<11	<11	<10	<10	<10	<10
3-Nitrochlorobenzene	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA
4-Nitrochlorobenzene	<11	<11	<10	<11	<11	<11	<10	NA	<10	<10
4-Nitrodiphenylamine	<11	<11	<10	<11	<11	<11	<11	<10	<10	<10
Triphenyl phosphate	NA	NA	NA	NA	NA	NA	NA	<10	<10	<10
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrobiphenyl	<11	<11	<10	<11	<11	<11	<11	<10	<10	<10
4-Nitrobiphenyl	<11	<11	<10	<11	<11	<11	<11	<10	<10	<10
Benzyl alcohol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aniline	NA	NA	<50	NA	NA	NA	NA	NA	<10	<10
4-Chloroaniline	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Chloroaniline	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA
2-Chloroaniline	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	25	0	0	0	0	0	0
Total Base/Neutral Compounds	0	0	0	94	0	0	0	33	11	0

See last page for footnotes.

Well Number:	GM-54B	GM-54B	GM-55C	GM-55C	GM-55C	GM-55C	GM-55C	GM-55C	GM-55C	GM-55C
Date:	11/92	9/94	11/87	5/88	11/88	11/89	11/90	11/91	11/92	11/92*
Laboratory:	ETC	SL	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L										
Acenaphthene	<1.9	<10	<2.0	<45	<210	<230	<19	<200	<190	<190
Acenapthylene	<3.5	<10	<3.6	<82	<390	<420	<35	<360	<350	<350
Anthracene	<1.9	<10	<2.0	<45	<210	<230	<19	<200	<190	<190
Benzidine	<44	<80	<46	<1,000	<4,900	<5300	<440	<4500	<4400	<4400
Benzo (a) anthracene	<7.9	<10	<8.1	<180	<880	<940	<78	<800	<790	<780
Benzo (a) pyrene	<2.5	<10	<2.6	<59	<280	<300	<25	<260	<250	<250
Benzo (b) fluoroanthene	<4.8	<10	<10	<110	<540	<580	<48	<490	<480	<480
Benzo (ghi) perylene	<4.1	<10	<4.3	<96	<460	<490	<41	<420	<410	<410
Benzo (k) fluoranthene	<2.5	<10	<3.6	<59	<280	<300	<25	<260	<250	<250
Bis (2-chloroethoxy) methane	<5.4	<10	<5.5	<120	<600	<640	<53	<550	<540	<530
Bis (2-chloroethyl) ether	<5.8	<10	**5.9**	<130	<640	<690	<57	<590	<580	<570
Bis (2-chloroisopropyl) ether	<5.8	<10	**5.9**	<130	<640	<690	<57	<590	<580	<570
Bis (2-ethylhexyl) phthalate	<10	**50**	<10	<240	<1,100	<1200	<100	<1,000	<1,000	<1,000
4-Bromophenyl phenyl ether	<1.9	<10	<2.0	<45	<210	<230	<19	<200	<190	<190
Butyl benzyl phthalate	<10	<10	<10	<240	<1,100	<1200	<100	<1,000	<1,000	<1,000
2-Chloronaphthalene	<1.9	<10	<2.0	<45	<210	<230	<19	<200	<190	<190
4-Chlorophenyl phenyl ether	<4.2	<10	<4.4	<99	<470	<510	<42	<430	<420	<420
Chrysene	<2.5	<10	<2.6	<59	<280	<300	<25	<260	<250	<250
Dibenzo (a,h) anthracene	<2.5	<10	<10	<240	<1,100	<1200	<25	<260	<250	<250
1,2-Dichlorobenzene	<1.9	<10	**6.00**	**693**	**4,030**	**4,760**	**2,390**	**8,730**	**7910**	**8110**
1,3-Dichlorobenzene	<1.9	<10	<2.0	<45	<210	<230	<19	<200	<190	<190
1,4-Dichlorobenzene	<4.4	<10	**38.7**	**311**	<490	<530	<44	<450	<440	<440
3,3-Dichlorobenzidine	<16.7	<20	<17	<390	<1,900	<2000	<165	<1700	<1670	<1650
Diethyl phthalate	<10	<10	<10	<240	<1,100	<1200	<100	<1,000	<1,000	<1,000
Dimethyl phthalate	<5.1	<10	<10	<240	<1,100	<1200	<100	<1,000	<510	<500
Di-n-butyl phthalate	<10	<10	<10	<240	<1,100	<1200	<100	<1,000	<1,000	<1,000
2,4-Dinitrotoluene	<5.8	<10	<5.9	<130	<640	<690	<57	<590	<580	<570
2,6-Dinitrotoluene	<1.9	<10	<2.0	<45	<210	<230	<19	<200	<190	<190
Di-n-octyl phthalate	<10	<10	<10	<240	<1,100	<1200	<100	<1,000	<1,000	<1,000
1,2-Diphenylhydrazine	<10	<10	<10	<240	<1,100	<1200	<100	<1,000	<1,000	<1,000
Fluoranthene	<2.2	<10	**4.21**	<52	<250	<270	<22	<230	<220	<220
Fluorene	<1.9	<10	<2.0	<45	<210	<230	<19	<200	<190	<190
Hexachlorobenzene	<1.9	<10	<2.0	<45	<210	<230	<19	<200	<190	<190
Hexachlorobutadiene	<.91	<10	<.94	<21	<100	<110	<9.0	<93	<91	<90
Hexachlorocyclopentadiene	<10	<10	<10	<240	<1,100	<1200	<100	<1,000	<1,000	<1,000
Hexachloroethane	<1.6	<10	<1.7	<38	<180	<190	<16	<160	<160	<160
Indeno (1,2,3-c,d) pyrene	<3.7	<10	<4.9	<110	<530	<570	<37	<380	<370	<370
Isophorone	<2.2	<10	<2.3	<52	<250	<270	<22	<230	<220	<220
Naphthalene	<1.6	<10	<1.7	<38	<180	<190	<16	<160	<160	<160
Nitrobenzene	<1.9	<10	<2.0	<45	<210	<230	,19	<200	<190	<190
n-Nitrosodimethylamine	<10	<10	<10	<240	<1,100	<1200	<100	<1,000	<1,000	<1,000
n-Nitrosodi-n-propylamine	<10	<10	<10	<240	<1,100	<1200	<100	<1,000	<1,000	<1,000
n-Nitrosodiphenylamine	<1.9	<10	<2.0	<45	<210	<230	<19	<200	<190	<190
Phenanthrene	<5.5	<10	<5.6	<130	<610	<650	<54	<560	<550	<540
Pyrene	<1.9	<10	**3.14**	<45	<210	<230	<19	<200	<190	<190
1,2,4-Trichlorobenzene	<1.9	<10	<2.0	<45	<210	<230	<19	<200	<190	<190
Sub Total 1	0	50	64	1,004	4,030	4,760	2,390	8,730	7,910	8,110

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-54B	GM-54B	GM-55C	GM-55C	GM-55C	GM-55C	GM-55C	GM-55C	GM-55C	GM-55C
Date:	11/92	9/94	11/87	5/88	11/88	11/89	11/90	11/91	11/92	11/92*
Laboratory:	ETC	SL	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L										
2,4-and 3,4-Dinitrochlorobenzene	NA	<10	<10	<240	<1,100	<1200	<100	<1,000	<1,000	<1,000
2-Nitroaniline	NA	NA	<10	<240	<1,100	<1200	<100	<1,000	<1,000	<1,000
4-Nitroaniline	NA	NA	<10	<240	<1,100	<1200	<100	<1,000	<1,000	<1,000
2-Nitrochlorobenzene	<10	<10	<10	**2,980**	**41,700**	**38,800**	<100	**42,300**	**116,000**	**99,000**
3-Nitrochlorobenzene	NA	<10	NA	NA	NA	NA	NA	**30,900**	NA	NA
4-Nitrochlorobenzene	<10	<10	**14.6**	**1,140**	**74,600**	**66,700**	<100	**34,800**	**115,000**	**99,200**
4-Nitrodiphenylamine	<10	<10	<10	<240	<1,100	<1200	<100	<1,000	<1,000	<1,000
Triphenyl phosphate	NA	NA	<10	<240	<1,100	<1200	<100	<1,000	NA	NA
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrobiphenyl	<10	<10	NA	<240	NA	<1200	NA	NA	NA	NA
4-Nitrobiphenyl	<10	<10	NA	<240	NA	<1200	NA	NA	<1,000	<1,000
Benzyl alcohol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aniline	NA	<50	NA	NA	NA	**1,220**	**24,800**	<1,000	<1,000	<1,000
4-Chloroaniline	**157**	<10	NA	NA	NA	NA	NA	**17,200**	**24,300**	**23,900**
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Chloroaniline	**125**	<10	NA	NA	NA	NA	NA	**9,170**	**12,900**	**12,100**
2-Chloroaniline	**17.3**	<10	NA	NA	NA	NA	NA	**35,300**	**58,100**	**44,700**
Sub Total 2	299	0	15	4,120	116,300	106,720	24,800	169,670	326,300	278,900
Total Base/Neutral Compounds	299	50	78	5,124	120,330	111,480	27,190	178,400	334,210	287,010

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-56C	GM-56C	GM-56C	GM-56C	GM-56C	GM-56C	GM-56C	GM-57C	GM-57C
Date:	11/87	5/88	11/88	11/88	11/89	11/90	11/91	11/87	11/87*
Laboratory:	ETC	ETC	ETC	SL	SL	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
Acenaphthene	<190	<120	<120	<100	<2.2	<200	<19	<210	<220
Acenapthylene	<360	<210	<210	<100	<4.0	<360	<35	<380	<400
Anthracene	<190	<120	<120	<100	<2.2	<200	<19	<210	<220
Benzidine	<4500	<2700	<2700	<800	<50	<4500	<440	<4800	<5100
Benzo (a) anthracene	<800	<480	<480	<100	<8.9	<800	<79	<860	<900
Benzo (a) pyrene	<260	<150	<150	<100	<2.8	<260	<25	<270	<290
Benzo (b) fluoroanthene	<1,000	<290	<290	<100	<5.5	<490	<48	<1,100	<1,100
Benzo (ghi) perylene	<420	<250	<250	<100	<4.7	<420	<41	<450	<470
Benzo (k) fluoranthene	<360	<150	<150	<100	<2.8	<260	<25	<380	<400
Bis (2-chloroethoxy) methane	<540	<320	<320	<100	<6.0	<550	<54	<580	<610
Bis (2-chloroethyl) ether	<580	<350	<350	<100	<6.5	<590	<58	<630	<660
Bis (2-chloroisopropyl) ether	<580	<350	<350	<100	<6.5	<590	<58	<630	<660
Bis (2-ethylhexyl) phthalate	<1,000	<610	<610	<100	<11	<1,000	<100	<1,100	<1,100
4-Bromophenyl phenyl ether	<190	<120	<120	<100	<2.2	<200	<19	<210	<220
Butyl benzyl phthalate	<1,000	<610	<610	<100	<11	<1,000	<100	<1,100	<1,100
2-Chloronaphthalene	<190	<120	<120	<100	<2.2	<200	<19	<210	<220
4-Chlorophenyl phenyl ether	<430	<260	<260	<100	<4.8	<430	<42	<460	<480
Chrysene	<260	<150	<150	<100	<2.8	<260	<25	<270	<290
Dibenzo (a,h) anthracene	<1,000	<610	<610	<100	<11	<260	<25	<1,100	<1,100
1,2-Dichlorobenzene	**1,570**	**880**	**1,260**	**1,000**	**693**	**1,100**	**204**	**638**	**575**
1,3-Dichlorobenzene	<190	<120	<120	<100	**13.1**	<200	<19	<210	<220
1,4-Dichlorobenzene	<450	<270	<270	**120**	**96.8**	<450	<44	<480	<510
3,3-Dichlorobenzidine	<1700	<1040	<1,000	<200	<19	<1700	<167	<1800	<1,900
Diethyl phthalate	<1,000	<610	<610	<100	<11	<1,000	<100	<1,100	<1,100
Dimethyl phthalate	<1,000	<610	<610	<100	<11	<1,000	<100	<1,100	<1,100
Di-n-butyl phthalate	<1,000	<610	<610	<100	<11	<1,000	<100	<1,100	<1,100
2,4-Dinitrotoluene	<580	<350	<350	<100	<6.5	<590	<58	<630	<660
2,6-Dinitrotoluene	<190	<120	<120	<100	<2.2	<200	<19	<210	<220
Di-n-octyl phthalate	<1,000	<610	<610	<100	<11	<1,000	<100	<1,100	<1,100
1,2-Diphenylhydrazine	<1,000	<610	<610	<100	<11	<1,000	<100	<1,100	<1,100
Fluoranthene	<220	<130	<130	<100	<2.5	<230	<22	<240	<250
Fluorene	<190	<120	<120	<100	<2.2	<200	<19	<210	<220
Hexachlorobenzene	<190	<120	<120	<100	<2.2	<200	<19	<210	<220
Hexachlorobutadiene	<92	<55	<55	<100	<1.0	<93	<9.1	<99	<100
Hexachlorocyclopentadiene	<1,000	<610	<610	<100	<11	<1,000	<100	<1,100	<1,100
Hexachloroethane	<160	<98	<98	<100	<1.8	<160	<16	<180	<180
Indeno (1,2,3-c,d) pyrene	<480	<290	<290	<100	<5.3	<380	<37	<520	<540
Isophorone	<220	<130	<130	<100	<2.5	<230	<22	<240	<250
Naphthalene	<160	<98	<98	<100	**40.9**	<160	**19.7**	<180	<180
Nitrobenzene	<190	<120	**223**	**220**	**135**	**306**	<19	**430**	**449**
n-Nitrosodimethylamine	<1,000	<610	<610	<100	<11	<1,000	<100	<1,100	<1,100
n-Nitrosodi-n-propylamine	<1,000	<610	<610	<100	<11	<1,000	<100	<1,100	<1,100
n-Nitrosodiphenylamine	<190	<120	<120	<100	<2.2	<200	<19	<210	<220
Phenanthrene	<550	<330	<330	<100	<6.1	<560	<55	<590	<620
Pyrene	<190	<120	<120	<100	<2.2	<200	<19	<210	<220
1,2,4-Trichlorobenzene	<190	<120	<120	<100	**39.8**	<200	<19	<210	<220
Sub Total 1	1,570	880	1,483	1,340	1,019	1,406	224	1,068	1,024

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-56C	GM-56C	GM-56C	GM-56C	GM-56C	GM-56C	GM-56C	GM-57C	GM-57C
Date:	11/87	5/88	11/88	11/88	11/89	11/90	11/91	11/87	11/87*
Laboratory:	ETC	ETC	ETC	SL	SL	ETC	ETC	ETC	ETC
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2,4-and 3,4-Dinitrochlorobenzene	<1,000	<610	<610	<100	<11	<1,000	<100	<1,100	<1,100
2-Nitroaniline	<1,000	<610	<610	<500	<11	<1,000	<100	<1,100	<1,100
4-Nitroaniline	<1,000	<610	<610	<500	<11	<1,000	<100	<1,100	<1,100
2-Nitrochlorobenzene	**84,900**	**26,300**	**70,700**	**130,000**	**68,800**	**136,000**	**564**	**82,100**	**85,600**
3-Nitrochlorobenzene	NA	NA	NA	NA	NA	NA	**2,030**	NA	NA
4-Nitrochlorobenzene	**24,800**	**7,360**	**17,500**	**30,000**	**17,000**	**33,500**	<100	**21,400**	**21,700**
4-Nitrodiphenylamine	<1,000	<610	<610	<200	<11	<1,000	<100	<1,100	<1,100
Triphenyl phosphate	<1,000	<610	<610	<100	<11	<1,000	<100	<1,100	<1,100
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrobiphenyl	NA	<610	NA	NA	<11	NA	NA	<1,100	<1,100
4-Nitrobiphenyl	NA	<610	NA	NA	<11	NA	NA	<1,100	<1,100
Benzyl alcohol	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aniline	NA	NA	NA	NA	**34,300**	**23,100**	**20,600**	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA	NA	**56,900**	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Chloroaniline	NA	NA	NA	NA	NA	NA	**25,200**	NA	NA
2-Chloroaniline	NA	NA	NA	NA	NA	NA	**183,000**	NA	NA
Sub Total 2	109,700	33,660	88,200	160,000	120,100	192,600	288,294	103,500	107,300
Total Base/Neutral Compounds	111,270	34,540	89,683	161,340	121,119	194,006	288,518	104,568	108,324

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C
Date:	5/88	5/88*	11/88	11/88	3/89	11/89	11/89 *	11/90	11/90*
Laboratory:	ETC	ETC	ETC	SL	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
Acenaphthene	<96	<98	<210	<100	<20	<23	<20	<96	<20
Acenapthylene	<180	<180	<390	<100	<37	<42	<37	<180	<36
Anthracene	<96	<98	<210	<100	<20	<23	<20	<96	<20
Benzidine	<2,200	<2,300	<4,900	<800	<460	<520	<460	<2,200	<450
Benzo (a) anthracene	<390	<400	<870	<100	<82	<93	<82	<390	<80
Benzo (a) pyrene	<130	<130	<280	<100	<26	<30	<26	<130	<26
Benzo (b) fluoroanthene	<240	<250	<530	<100	<51	<57	<51	<240	<49
Benzo (ghi) perylene	<210	<210	<460	<100	<43	<49	<43	<210	<42
Benzo (k) fluoranthene	<130	<130	<280	<100	<26	<30	<26	<130	<26
Bis (2-chloroethoxy) methane	<270	<270	<590	<100	<56	<63	<56	<270	<55
Bis (2-chloroethyl) ether	<290	<290	<630	<100	<60	<68	<60	<290	<59
Bis (2-chloroisopropyl) ether	<290	<290	<630	<100	<60	<68	<60	<290	<59
Bis (2-ethylhexyl) phthalate	<510	<520	<1,100	<100	<110	<120	<110	<510	<100
4-Bromophenyl phenyl ether	<96	<98	<210	<100	<20	<23	<20	<96	<20
Butyl benzyl phthalate	<510	<520	<1,100	<100	<110	<120	<110	<510	<100
2-Chloronaphthalene	<96	<98	<210	<100	<20	<23	<20	<96	<20
4-Chlorophenyl phenyl ether	<210	<220	<470	<100	<44	<50	<44	<210	<43
Chrysene	<130	<130	<280	<100	<26	<30	<26	<130	<26
Dibenzo (a,h) anthracene	<510	<520	<1,100	<100	<110	<120	<110	<130	<26
1,2-Dichlorobenzene	**837**	**922**	**650**	**540**	**598**	**562**	**591**	**555**	**599**
1,3-Dichlorobenzene	<96	<98	<210	<100	<20	<23	<20	<96	<20
1,4-Dichlorobenzene	**387**	**395**	<490	**320**	**298**	**413**	**449**	**456**	**447**
3,3-Dichlorobenzidine	<830	<850	<1,800	<200	<170	<200	<170	<833	<170
Diethyl phthalate	<510	<520	<1,100	<100	<110	<120	<110	<510	<100
Dimethyl phthalate	<510	<520	<1,100	<100	<110	<120	<110	<510	<100
Di-n-butyl phthalate	<510	<520	<1,100	<100	<110	<120	<110	<510	<100
2,4-Dinitrotoluene	<290	<290	<630	<100	<60	<68	<60	<290	<59
2,6-Dinitrotoluene	<96	<98	<210	<100	<20	<23	<20	<96	<20
Di-n-octyl phthalate	<510	<520	<1,100	<100	<110	<120	<110	<510	<100
1,2-Diphenylhydrazine	<510	<520	<1,100	<100	<110	<120	<110	<510	<100
Fluoranthene	<110	<110	<240	<100	<23	<26	<23	<110	<23
Fluorene	<96	<98	<210	<100	<20	<23	<20	<96	<20
Hexachlorobenzene	<96	<98	<210	<100	<20	<23	<20	<96	<20
Hexachlorobutadiene	<45	<46	<100	<100	<9.5	<11	<9.5	<45	<9.3
Hexachlorocyclopentadiene	<510	<520	<1,100	<100	<110	<120	<110	<510	<100
Hexachloroethane	<81	<82	<180	<100	<17	<19	<17	<81	<16
Indeno (1,2,3-c,d) pyrene	<240	<240	<520	<100	<49	<56	<49	<190	<38
Isophorone	<110	<110	<240	<100	<23	<26	<23	<110	<23
Naphthalene	<81	<82	<180	<100	<17	**35.5**	**34.9**	<81	**22.2**
Nitrobenzene	<96	<98	**321**	**260**	<20	**579**	**219**	**674**	**1010**
n-Nitrosodimethylamine	<510	<520	<1,100	<100	<110	<120	<110	<510	<100
n-Nitrosodi-n-propylamine	<510	<520	<1,100	<100	<110	<120	<110	<510	<100
n-Nitrosodiphenylamine	<96	<98	<210	<100	<20	<23	<20	<96	<20
Phenanthrene	<270	<280	<600	<100	<57	<64	<57	<270	<56
Pyrene	<96	<98	<210	<100	<20	<23	<20	<96	<20
1,2,4-Trichlorobenzene	<96	<98	<210	<100	<20	**98.8**	**95.7**	<96	**59.0**
Sub Total 1	1,224	1,317	971	1,120	896	1,688	1,390	1,685	2,137

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C	GM-57C
Date:	5/88	5/88*	11/88	11/88	3/89	11/89	11/89 *	11/90	11/90*
Laboratory:	ETC	ETC	ETC	SL	ETC	ETC	ETC	ETC	ETC
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2,4-and 3,4-Dinitrochlorobenzene	<510	<520	<1,100	<100	<110	<120	<110	<510	<100
2-Nitroaniline	<510	<520	<1,100	<500	<110	<120	<110	<510	<100
4-Nitroaniline	<510	<520	<1,100	<500	<110	<120	<110	<510	<100
2-Nitrochlorobenzene	**124,000**	**142,000**	**219,000**	**100,000**	**112,000**	**109,000**	**123,000**	**116,000**	**169,000**
3-Nitrochlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrochlorobenzene	**25,800**	**30,600**	**40,500**	**31,000**	**33,900**	**21,400**	**21,200**	**26,300**	**33,000**
4-Nitrodiphenylamine	<510	<520	<1,100	<200	<110	<120	<110	<510	<100
Triphenyl phosphate	<510	<520	<1,100	<100	<110	<120	<110	<510	<100
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrobiphenyl	<510	<520	NA	NA	NA	<120	NA	NA	NA
4-Nitrobiphenyl	<510	<520	NA	NA	NA	<120	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aniline	NA	NA	NA	NA	NA	**38,800**	**44,800**	**35,200**	**41,300**
4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	149,800	172,600	259,500	131,000	145,900	169,200	189,000	177,500	243,300
Total Base/Neutral Compounds	151,024	173,917	260,471	132,120	146,796	170,888	190,390	179,185	245,437

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-57C	GM-57C	GM-58A	GM-58A	GM-58A	GM-58A	GM-58A	GM-58A	GM-58A	GM-58A
Date:	11/91	11/91*	11/87	5/88	11/88	11/89	11/90	11/91	11/92	9/94
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	SL
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L										
Acenaphthene	<95	<95	<1.9	<2.2	<2.0	<2.0	<1.9	<2.2	<1.9	<10
Acenapthylene	<180	<180	<3.6	<4.0	<3.6	<3.6	<3.5	<4.1	<3.5	<10
Anthracene	<95	<95	<1.9	<2.2	<2.0	<2.0	<1.9	<2.2	<1.9	<10
Benzidine	<2200	<2200	<45	<50	<45	<46	<44	<52	<44	<80
Benzo (a) anthracene	<390	<390	<8.0	<8.9	<8.0	<8.1	<7.8	<9.2	<7.9	<10
Benzo (a) pyrene	<130	<130	<2.6	<2.8	<2.6	<2.6	<2.5	<2.9	<2.5	<10
Benzo (b) fluoroanthene	<240	<240	<10	<5.5	<4.9	<5.0	<4.8	<5.6	<4.8	<10
Benzo (ghi) perylene	<210	<210	<4.2	<4.7	<4.2	<4.3	<4.1	<4.8	<4.1	<10
Benzo (k) fluoranthene	<130	<130	<3.6	<2.8	<2.6	<2.6	<2.5	<2.9	<2.5	<10
Bis (2-chloroethoxy) methane	<270	<270	<5.4	<6.0	<5.5	<5.5	<5.3	<6.2	<5.4	<10
Bis (2-chloroethyl) ether	<290	<290	<5.8	<6.5	<5.9	<5.9	<5.7	<6.7	<5.8	<10
Bis (2-chloroisopropyl) ether	<290	<290	<5.8	<6.5	<5.9	<5.9	<5.7	<6.7	<5.8	<10
Bis (2-ethylhexyl) phthalate	<500	<500	<10	<11	<10	<10	<10	<12	<10	<10
4-Bromophenyl phenyl ether	<95	<95	<1.9	<2.2	<2.0	<2.0	<1.9	<2.2	<1.9	<10
Butyl benzyl phthalate	<500	<500	<10	<11	<10	<10	<10	<12	<10	<10
2-Chloronaphthalene	<95	<95	<1.9	<2.2	<2.0	<2.0	<1.9	<2.2	<1.9	<10
4-Chlorophenyl phenyl ether	<210	<210	<4.3	<4.8	<4.3	<4.4	<4.2	<4.9	<4.2	<10
Chrysene	<130	<130	<2.6	<2.8	<2.6	<2.6	<2.5	<2.9	<2.5	<10
Dibenzo (a,h) anthracene	<130	<130	<10	<11	<10	<10	<2.5	<2.9	<2.5	<10
1,2-Dichlorobenzene	**674**	**709**	<1.9	<2.2	<2.0	<2.0	<1.9	<2.2	<1.9	<10
1,3-Dichlorobenzene	<95	<95	<1.9	<2.2	<2.0	<2.0	<1.9	<2.2	<1.9	<10
1,4-Dichlorobenzene	**312**	**346**	<4.5	<5.0	<4.5	<4.6	<4.4	<5.2	<4.4	<10
3,3-Dichlorobenzidine	<825	<825	<17	<19	<17	<17	<16.5	<19.4	<16.7	<20
Diethyl phthalate	<500	<500	<10	<11	<10	<10	<10	<12	<10	<10
Dimethyl phthalate	<500	<500	<10	<11	<10	<10	<10	<12	<5.1	<10
Di-n-butyl phthalate	<500	<500	<10	<11	<10	<10	<10	<12	<10	<10
2,4-Dinitrotoluene	<290	<290	<5.8	<6.5	<5.9	<5.9	<5.7	<6.7	<5.8	<10
2,6-Dinitrotoluene	<95	<95	<1.9	<2.2	<2.0	<2.0	<1.9	<2.2	<1.9	<10
Di-n-octyl phthalate	<500	<500	<10	<11	**12.6**	<10	<10	<12	<10	<10
1,2-Diphenylhydrazine	<500	<500	<10	<11	<10	<10	<10	<12	<10	<10
Fluoranthene	<110	<110	<2.2	<2.5	<2.3	<2.3	<2.2	<2.6	<2.2	<10
Fluorene	<95	<95	<1.9	<2.2	<2.0	<2.0	<1.9	<2.2	<1.9	<10
Hexachlorobenzene	<95	<95	<1.9	<2.2	<2.0	<2.0	<1.9	<2.2	<1.9	<10
Hexachlorobutadiene	<45	<45	<.92	<1.0	<0.93	<.94	<90	<1.1	<.91	<10
Hexachlorocyclopentadiene	<500	<500	<10	<11	<10	<10	<10	<12	<10	<10
Hexachloroethane	<80	<80	<1.6	<1.8	<1.6	<1.7	<1.6	<1.9	<1.6	<10
Indeno (1,2,3-c,d) pyrene	<190	<190	<4.8	<5.3	<4.8	<4.9	<3.7	<4.4	<3.7	<10
Isophorone	<110	<110	<2.2	<2.5	<2.3	<2.3	<2.2	<2.6	<2.2	<10
Naphthalene	<80	<80	<1.6	<1.8	<1.6	<1.7	<1.6	<1.9	<1.6	<10
Nitrobenzene	<95	<95	<1.9	<2.2	<2.0	**3.30**	**4.15**	<2.2	<1.9	<10
n-Nitrosodimethylamine	<500	<500	<10	<11	<10	<10	<10	<12	<10	<10
n-Nitrosodi-n-propylamine	<500	<500	<10	<11	<10	<10	<10	<12	<10	<10
n-Nitrosodiphenylamine	<95	<95	<1.9	<2.2	<2.0	<2.0	<1.9	<2.2	<1.9	<10
Phenanthrene	<270	<270	<5.5	<6.1	**5.6**	<5.6	<5.4	<6.4	<5.5	<10
Pyrene	<95	<95	<1.9	<2.2	<2.0	<2.0	<1.9	<2.2	<1.9	<10
1,2,4-Trichlorobenzene	<95	**99.5**	<1.9	<2.2	<2.0	<2.0	<1.9	<2.2	<1.9	<10
Sub Total 1	986	1,155	0	0	18	3	4	0	0	0

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-57C	GM-57C	GM-58A	GM-58A	GM-58A	GM-58A	GM-58A	GM-58A	GM-58A	GM-58
Date:	11/91	11/91*	11/87	5/88	11/88	11/89	11/90	11/91	11/92	9/94
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	SL
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L										
2,4-and 3,4-Dinitrochlorobenzene	<500	<500	**31.0**	<11	**16.6**	**19.8**	**15.2**	**21.5**	<10	<10
2-Nitroaniline	<500	<500	<10	<11	<10	<10	<10	<12	<10	NA
4-Nitroaniline	<500	<500	<10	<11	<10	<10	<10	<12	<10	NA
2-Nitrochlorobenzene	<500	<500	<10	**14.1**	**12.9**	**13.8**	**67.6**	<12	**40.3**	**29**
3-Nitrochlorobenzene	<500	<500	NA	NA	NA	NA	NA	NA	NA	<10
4-Nitrochlorobenzene	<500	<500	**19.4**	**31.1**	**28.7**	**87.2**	**52.8**	<12	<10	**
4-Nitrodiphenylamine	<500	<500	<10	<11	<10	<10	<10	<12	NA	<10
Triphenyl phosphate	<500	<500	<10	<11	<10	<10	<10	<12	<10	NA
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrobiphenyl	NA	NA	<10	<11	<10	<10	<10	<12	<10	<10
4-Nitrobiphenyl	NA	NA	<10	<11	<10	<10	<10	<12	<10	<10
Benzyl alcohol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aniline	**31,100**	**34,500**	NA	NA	NA	NA	<10	<12	<10	<50
4-Chloroaniline	**26,200**	**44,300**	NA	NA	NA	NA	NA	NA	<10	<10
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
3-Chloroaniline	**41,800**	**25,500**	NA	NA	NA	NA	NA	NA	<10	<10
2-Chloroaniline	**195,000**	<500	NA	NA	NA	NA	NA	NA	NA	<10
Sub Total 2	294,100	104,300	50	45	58	121	136	22	40	29
Total Base/Neutral Compounds	295,086	105,455	50	45	76	124	140	22	40	29

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-59A	GM-59A	GM-59A	GM-59A	GM-59A	GM-59A	GM-59A	B-25A	B-26A
Date:	11/87	5/88	11/88	11/89	11/90	11/91	11/92	3/87	3/87
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
Acenaphthene	<1.9	<1.9	<2.1	<2.0	<2.0	<1.9	<1.9	<210	<2.1
Acenapthylene	<3.6	<3.5	<3.9	<3.7	<3.6	<3.5	<3.5	<390	<3.9
Anthracene	<1.9	<1.9	<2.1	<2.0	<2.0	<1.9	<1.9	<210	<2.1
Benzidine	<45	<44	<49	<46	<45	<44	<44	<4,900	<49
Benzo (a) anthracene	<8.0	<7.8	<8.7	<8.2	<8.0	<7.9	<7.9	<880	<8.7
Benzo (a) pyrene	<2.6	<2.5	<2.8	<2.6	<2.6	<2.5	<2.5	<280	<2.8
Benzo (b) fluoroanthene	<10	<4.8	<5.3	<5.1	<4.9	<4.8	<4.8	<1,100	<11
Benzo (ghi) perylene	<4.2	<4.1	<4.6	<4.3	<4.2	<4.1	<4.1	<460	<4.6
Benzo (k) fluoranthene	<3.6	<2.5	<2.8	<2.6	<2.6	<2.5	<2.5	<390	<3.9
Bis (2-chloroethoxy) methane	<5.4	<5.3	<5.9	<5.6	<5.5	<5.4	<5.4	<600	<5.9
Bis (2-chloroethyl) ether	<5.8	<5.7	<6.3	<6.0	<5.9	<5.8	<5.8	<640	<6.3
Bis (2-chloroisopropyl) ether	<5.8	<5.7	<6.3	<6.0	<5.9	<5.8	<5.8	<640	<6.3
Bis (2-ethylhexyl) phthalate	<10	<10	<11	<11	<10	<10	<10	<1,100	**13.1**
4-Bromophenyl phenyl ether	<1.9	<1.9	<2.1	<2.0	<2.0	<1.9	<1.9	<210	<2.1
Butyl benzyl phthalate	<10	<10	<11	<11	<10	<10	<10	<1,100	<11
2-Chloronaphthalene	<1.9	<1.9	<2.1	<2.0	<2.0	<1.9	<1.9	<210	<2.1
4-Chlorophenyl phenyl ether	<4.3	<4.2	<4.7	<4.4	<4.3	<4.2	<4.2	<470	<4.7
Chrysene	<2.6	<2.5	<2.8	<2.6	<2.6	<2.5	<2.5	<280	<2.8
Dibenzo (a,h) anthracene	<10	<10	<11	<11	<2.6	<2.5	<2.5	<1,100	<11
1,2-Dichlorobenzene	<1.9	<1.9	<2.1	<2.0	<2.0	<1.9	<1.9	**8,800**	**2.76**
1,3-Dichlorobenzene	<1.9	<1.9	<2.1	<2.0	<2.0	<1.9	<1.9	<210	<2.1
1,4-Dichlorobenzene	<4.5	<4.4	<4.9	<4.6	<4.5	<4.4	<4.4	<490	<4.9
3,3-Dichlorobenzidine	<17	<17	<18	<17	<17.0	<16.7	<16.7	<1,900	<18
Diethyl phthalate	<10	<10	<11	<11	<10	<10	<10	<1,100	<11
Dimethyl phthalate	<10	<10	<11	<11	<10	<10	<5.1	<1,100	<11
Di-n-butyl phthalate	<10	<10	<11	<11	<10	<10	<10	<1,100	<11
2,4-Dinitrotoluene	<5.8	<5.7	<6.3	<6.0	<5.9	<5.8	<5.8	<640	<6.3
2,6-Dinitrotoluene	<1.9	<1.9	<2.1	<2.0	<2.0	<1.9	<1.9	<210	<2.1
Di-n-octyl phthalate	<10	<10	<11	<11	<10	<10	<10	<1,100	<11
1,2-Diphenylhydrazine	<10	<10	<11	<11	<10	<10	<10	<1,100	<11
Fluoranthene	<2.2	<2.2	<2.4	<2.3	<2.3	<2.2	<2.2	<250	<2.4
Fluorene	<1.9	<1.9	<2.1	<2.0	<2.0	<1.9	<1.9	<210	<2.1
Hexachlorobenzene	<1.9	<1.9	<2.1	<2.0	<2.0	<1.9	<1.9	<210	<2.1
Hexachlorobutadiene	<.92	<0.9	<1.0	<.95	<93	<.91	<.91	<100	<1.0
Hexachlorocyclopentadiene	<10	<10	<11	<11	<10	<10	<10	<1,100	<11
Hexachloroethane	<1.6	<1.6	<1.8	<1.7	<1.6	<1.6	<1.6	<180	<1.8
Indeno (1,2,3-c,d) pyrene	<4.8	<4.7	<5.2	<4.9	<3.8	<3.7	<3.7	<530	<5.2
Isophorone	<2.2	<2.2	<2.4	<2.3	<2.3	<2.2	<2.2	<250	<2.4
Naphthalene	<1.6	<1.6	<1.8	<1.7	<1.6	<1.6	<1.6	**872**	<1.8
Nitrobenzene	<1.9	<1.9	<2.1	<2.0	<2.0	<1.9	<1.9	**12,900**	**15.8**
n-Nitrosodimethylamine	<10	<10	<11	<11	<10	<10	<10	<1,100	<11
n-Nitrosodi-n-propylamine	<10	<10	<11	<11	<10	<10	<10	<1,100	<11
n-Nitrosodiphenylamine	<1.9	<1.9	<2.1	<2.0	<2.0	<1.9	<1.9	<210	<2.1
Phenanthrene	<5.5	<5.4	<6.0	<5.7	<5.6	<5.5	<5.5	<610	<6.0
Pyrene	<1.9	<1.9	<2.1	<2.0	<2.0	<1.9	<1.9	<210	<2.1
1,2,4-Trichlorobenzene	<1.9	<1.9	<2.1	<2.0	<2.0	<1.9	<1.9	**2,170**	<2.1
Sub Total 1	0	0	0	0	0	0	0	24,742	32

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-59A	GM-59A	GM-59A	GM-59A	GM-59A	GM-59A	GM-59A	B-25A	B-26A
Date:	11/87	5/88	11/88	11/89	11/90	11/91	11/92	3/87	3/87
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2,4-and 3,4-Dinitrochlorobenzene	<10	<10	**13.5**	<11	<10	<10	<10	NA	NA
2-Nitroaniline	<10	<10	<11	<11	<10	<10	<10	**1,160**	<11
4-Nitroaniline	<10	<10	<11	<11	<10	<10	<10	<1,100	<11
2-Nitrochlorobenzene	<10	<10	**12**	<11	<10	<10	<10	NA	NA
3-Nitrochlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrochlorobenzene	<10	<10	**27.2**	<11	<10	<10	<10	NA	NA
4-Nitrodiphenylamine	<10	<10	<11	<11	<10	<10	<10	NA	NA
Triphenyl phosphate	<10	<10	<11	<11	<10	<10	NA	NA	NA
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrobiphenyl	<10	<10	<11	<11	<10	<10	<10	NA	NA
4-Nitrobiphenyl	<10	<10	<11	<11	<10	<10	<10	NA	NA
Benzyl alcohol	NA	NA	NA	NA	<10	NA	NA	**1,830**	<11
Aniline	NA	NA	NA	NA	NA	<10	NA	<1,000	**20**
4-Chloroaniline	NA	NA	NA	NA	NA	NA	<10	**5,380**	**710**
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	<1,000	<11
N-nitroaniline	NA	NA	NA	NA	NA	NA	NA	<1,000	<11
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA	<1,000	<11
3-Chloroaniline	NA	NA	NA	NA	NA	NA	<10	NA	NA
2-Chloroaniline	NA	NA	NA	NA	NA	NA	<10	NA	NA
Sub Total 2	0	0	53	0	0	0	0	8,370	730
Total Base/Neutral Compounds	0	0	53	0	0	0	0	33,112	762

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	B-28A	GM-106	GM-106	GM-106	GM-106	GM-106	GM-106	GM-106	GM-106
Date:	3/87	12/86	5/87	11/87	5/88	11/88	11/89	11/90	11/91
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
Acenaphthene	<2.0	<2.0	<1.9	<1.9	<39	<19	<220	<1.9	<38
Acenapthylene	<3.8	<3.7	<3.5	<3.5	<72	<35	<400	<3.5	<70
Anthracene	<2.0	<2.0	<1.9	<1.9	<39	<19	<220	<1.9	<38
Benzidine	<47	<47	<44	<44	<910	<440	<5100	<44	<880
Benzo (a) anthracene	<8.4	<8.3	<7.9	<7.8	<160	<79	<900	<7.8	<160
Benzo (a) pyrene	<2.7	<2.7	<2.5	<2.5	<52	<25	<290	<2.5	<50
Benzo (b) fluoroanthene	<11	<11	<10	<10	<99	<48	<550	<4.8	<96
Benzo (ghi) perylene	<4.4	<4.4	<4.1	<4.1	<85	<41	<470	<4.1	<82
Benzo (k) fluoranthene	<3.8	<3.7	<3.5	<3.5	<52	<25	<290	<2.5	<50
Bis (2-chloroethoxy) methane	<5.7	<5.6	<5.4	<5.3	<110	<54	<610	<5.3	<110
Bis (2-chloroethyl) ether	<6.1	<6.1	<5.8	<5.7	<120	<58	<660	<5.7	<110
Bis (2-chloroisopropyl) ether	<6.1	<6.1	<5.8	<5.7	<120	<58	<660	<5.7	<110
Bis (2-ethylhexyl) phthalate	<11	<11	<10	<10	<210	<100	<1,100	<10	<200
4-Bromophenyl phenyl ether	<2.0	<2	<1.9	<1.9	<39	<19	<220	<1.9	<38
Butyl benzyl phthalate	<11	<11	<10	<10	<210	<100	<1,100	<10	<200
2-Chloronaphthalene	<2.0	<2	<1.9	<1.9	<39	<19	<220	<1.9	<38
4-Chlorophenyl phenyl ether	<4.5	<4.5	<4.2	<4.2	<87	<42	<480	<4.2	<84
Chrysene	<2.7	<2.7	<2.5	<2.5	<52	<25	<290	<2.5	<50
Dibenzo (a,h) anthracene	<11	<11	<10	<10	<210	<100	<1,100	<2.5	<50
1,2-Dichlorobenzene	<2.0	**2.7**	**6.4**	**56.6**	**85.8**	**126**	<220	**120**	**184**
1,3-Dichlorobenzene	<2.0	<2	<1.9	<1.9	<39	<19	<220	**4.23**	<38
1,4-Dichlorobenzene	<4.7	<4.7	<4.4	**10.4**	<91	<44	<510	**26.8**	<88
3,3-Dichlorobenzidine	<18.3	<18	<17	<17.0	<340	<170	<1,900	<16.5	<330
Diethyl phthalate	<11	<11	<10	<10	<210	<100	<1,100	<10	<200
Dimethyl phthalate	<11	<11	<10	<10	<210	<100	<1,100	<10	<200
Di-n-butyl phthalate	<11	<11	<10	<10	<210	<100	<1,100	<10	<200
2,4-Dinitrotoluene	<6.1	<6.1	<5.8	<5.7	<120	<58	<660	<5.7	<110
2,6-Dinitrotoluene	<2.0	<2.0	<1.9	<1.9	<39	<19	<220	<1.9	<38
Di-n-octyl phthalate	<11	<11	<10	<10	<210	<100	<1,100	<10	<200
1,2-Diphenylhydrazine	<11	<11	<10	<10	<210	<100	<1,100	<10	<200
Fluoranthene	<2.4	<2.3	<2.2	<2.2	<45	<22	<250	<2.2	<44
Fluorene	<2.0	<2.0	<1.9	<1.9	<39	<19	<220	<1.9	<38
Hexachlorobenzene	<2.0	<2.0	<1.9	<1.9	<39	<19	<220	<1.9	<38
Hexachlorobutadiene	<.97	<1.0	<0.9	<0.90	<19	<9.1	<100	<90	<18
Hexachlorocyclopentadiene	<11	<11	<10	<10	<210	<100	<1,100	<10	<200
Hexachloroethane	<1.7	<1.7	<1.6	<1.6	<33	<16	<180	<1.6	<32
Indeno (1,2,3-c,d) pyrene	<5.1	<5.0	<4.7	<4.7	<97	<47	<540	<3.7	<74
Isophorone	<2.4	<2.3	<2.2	<2.2	<45	<22	<250	<2.2	<44
Naphthalene	<1.7	<1.7	**2.7**	**6.35**	<33	**16.8**	<180	**11.5**	<32
Nitrobenzene	<2.0	<2.0	<1.9	**19.8**	<39	**50.9**	<220	**132**	<38
n-Nitrosodimethylamine	<11	<11	<10	<10	<210	<100	<1,100	<10	<200
n-Nitrosodi-n-propylamine	<11	<11	<10	<10	<210	<100	<1,100	<10	<200
n-Nitrosodiphenylamine	<2.0	<2.0	<1.9	<1.9	<39	<19	<220	<1.9	<38
Phenanthrene	<5.8	<5.7	<5.5	<5.4	<110	<55	<620	<5.4	<110
Pyrene	<2.0	<2.0	<1.9	<1.9	<39	<19	<220	<1.9	<38
1,2,4-Trichlorobenzene	<2.0	<2.0	<1.9	<1.9	<39	<19	<220	**4.75**	<38
Sub Total 1	0	3	9	93	86	194	0	299	184

See last page f( )tnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	B-28A	GM-106	GM-106	GM-106	GM-106	GM-106	GM-106	GM-106	GM-106
Date:	3/87	12/86	5/87	11/87	5/88	11/88	11/89	11/90	11/91
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2,4-and 3,4-Dinitrochlorobenzene	NA	<11	<10	<10	<210	<100	<1,100	<10	<200
2-Nitroaniline	<11	<11	<10	<10	<210	<100	<1,100	<10	<200
4-Nitroaniline	<11	<11	<10	<10	<210	<100	<1,100	<10	<200
2-Nitrochlorobenzene	NA	**1,450**	**2,670**	**59,900**	**5,050**	**99,000**	**5,410**	**66,800**	<200
3-Nitrochlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	<200
4-Nitrochlorobenzene	NA	**172**	**452**	**9,950**	**795**	**14,300**	<1,100	**15300**	<200
4-Nitrodiphenylamine	NA	<11	<10	<10	<210	<100	<1,100	<10	<200
Triphenyl phosphate	NA	<11	<10	<10	<210	<100	<1,100	<10	<200
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrobiphenyl	NA	NA	NA	NA	<210	NA	<1,100	NA	NA
4-Nitrobiphenyl	NA	NA	NA	NA	<210	NA	<1,100	NA	NA
Benzyl alcohol	<11	NA	NA	NA	NA	NA	NA	NA	NA
Aniline	<11	NA	NA	NA	NA	NA	**3,420**	**2,250**	**3,290**
4-Chloroaniline	<11	NA	NA	NA	NA	NA	NA	NA	**19,900**
2-Methylnaphthalene	<11	NA	NA	NA	NA	NA	NA	NA	NA
N-nitroaniline	<11	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	<11	NA	NA	NA	NA	NA	NA	NA	NA
3-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA	**7,820**
2-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA	**10,900**
Sub Total 2	0	1,622	3,122	69,850	5,845	113,300	8,830	84,350	41,910
Total Base/Neutral Compounds	0	1,625	3,131	69,943	5,931	113,494	8,830	84,649	42,094

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-106	P-1	P-1	P-2	P-2	P-2	P-2	P-2	P-3
Date:	11/92	3/87	11/87	11/87	11/89	11/90	11/91	11/92	11/87
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
Acenaphthene	<99	<2.1	<1.9	<2.0	<21	<21	<19	<480	<1.9
Acenapthylene	<180	<3.9	<3.5	<3.6	<39	<38	<35	<880	<3.5
Anthracene	<99	<2.1	<1.9	<2.0	<21	<21	<19	<480	<1.9
Benzidine	<2300	<49	<44	<45	<490	<480	<440	<1,1000	<44
Benzo (a) anthracene	<410	<8.7	<7.8	<8.0	<87	<85	<78	<2000	<7.8
Benzo (a) pyrene	<130	<2.8	<2.5	<2.6	<28	<27	<25	<630	<2.5
Benzo (b) fluoroanthene	<250	<11	<10	<10	<53	<52	<48	<1200	<10
Benzo (ghi) perylene	<210	<4.6	<4.1	<4.2	<46	<45	<41	<1,000	<4.1
Benzo (k) fluoranthene	<130	<3.9	<3.5	<3.6	<28	<27	<25	<630	<3.5
Bis (2-chloroethoxy) methane	<280	<5.9	<5.3	<5.5	<59	<58	<53	<1300	<5.3
Bis (2-chloroethyl) ether	<300	<6.3	<5.7	<5.9	<63	<62	<57	<1,400	<5.7
Bis (2-chloroisopropyl) ether	<300	<6.3	<5.7	<5.9	<63	<62	<57	<1,400	<5.7
Bis (2-ethylhexyl) phthalate	<520	<11	<10	<10	<110	<110	<100	<2,500	<10
4-Bromophenyl phenyl ether	<99	<2.1	<1.9	<2.0	<21	<21	<19	<480	<1.9
Butyl benzyl phthalate	<520	<11	<10	<10	<110	<110	<100	<2,500	<10
2-Chloronaphthalene	<99	<2.1	<1.9	<2.0	<21	<21	<19	<480	<1.9
4-Chlorophenyl phenyl ether	<220	<4.7	<4.2	<4.3	<47	<46	<42	<1,100	<4.2
Chrysene	<130	<2.8	<2.5	<2.6	<28	<27	<25	<630	<2.5
Dibenzo (a,h) anthracene	<130	<11	<10	<10	<110	<27	<25	<630	<10
1,2-Dichlorobenzene	**241**	<2.1	**2.54**	**4.59**	**769**	**5,770**	**1,890**	**3350**	<1.9
1,3-Dichlorobenzene	<99	<2.1	**2.11**	<2.0	<21	<21	<19	<480	<1.9
1,4-Dichlorobenzene	<230	**10.2**	**18.2**	**25.4**	**64.8**	<48	**75.0**	<1,100	<4.4
3,3-Dichlorobenzidine	<859	<18	<17	<17	<180	<179	<165	<4130	<17
Diethyl phthalate	<520	<11	<10	<10	<110	<110	<100	<2,500	<10
Dimethyl phthalate	<260	<11	<10	<10	<110	<110	<100	<1300	<10
Di-n-butyl phthalate	<520	<11	<10	<10	<110	<110	<100	<2,500	<10
2,4-Dinitrotoluene	<300	<6.3	<5.7	<5.9	<63	<62	<57	<1,400	<5.7
2,6-Dinitrotoluene	<99	<2.1	<1.9	<2.0	<21	<21	<19	<480	<1.9
Di-n-octyl phthalate	<520	<11	<10	<10	<110	<110	<100	<2,500	<10
1,2-Diphenylhydrazine	<520	<11	<10	<10	<110	<110	<100	<2,500	<10
Fluoranthene	<110	<2.4	<2.2	<2.3	<24	<24	<22	<550	<2.2
Fluorene	<99	<2.1	<1.9	<2.0	<21	<21	<19	<480	<1.9
Hexachlorobenzene	<99	<2.1	<1.9	<2.0	<21	<21	<19	<480	<1.9
Hexachlorobutadiene	<47	<1.0	<0.90	<.93	<10	<9.8	<9.0	<230	<0.90
Hexachlorocyclopentadiene	<520	<11	<10	<10	<110	<110	<100	<2,500	<10
Hexachloroethane	<83	<1.8	<1.6	<1.6	<18	<17	<16	<400	<1.6
Indeno (1,2,3-c,d) pyrene	<190	<5.2	<4.7	<4.8	<52	<40	<37	<930	<4.7
Isophorone	<110	<2.4	<2.2	<2.3	<24	<24	<22	<550	<2.2
Naphthalene	<83	<1.8	<1.6	<1.6	<18	<17	<16	<400	<1.6
Nitrobenzene	**282**	<2.1	<1.9	<2.0	<21	**46.3**	<19	<480	<1.9
n-Nitrosodimethylamine	<520	<11	<10	<10	<110	<110	<100	<2,500	<10
n-Nitrosodi-n-propylamine	<520	<11	<10	<10	<110	<110	<100	<2,500	<10
n-Nitrosodiphenylamine	<99	<2.1	<1.9	<2.0	<21	<21	<19	<480	<1.9
Phenanthrene	<280	<6.0	<5.4	<5.6	<60	<59	<54	<1,400	<5.4
Pyrene	<99	<2.1	<1.9	<2.0	<21	<21	<19	<480	<1.9
1,2,4-Trichlorobenzene	<99	<2.1	<1.9	<2.0	<21	**44.9**	<19	<480	<1.9
Sub Total 1	523	10	23	30	834	5,861	1,965	3,350	0

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	GM-106	P-1	P-1	P-2	P-2	P-2	P-2	P-2	P-3
Date:	11/92	3/87	11/87	11/87	11/89	11/90	11/91	11/92	11/87
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2,4-and 3,4-Dinitrochlorobenzene	<520	NA	<10	<10	<110	<110	<100	<2,500	<10
2-Nitroaniline	<520	<11	<10	<10	<110	<110	<100	<100	<10
4-Nitroaniline	<520	<11	<10	<10	<110	<110	<100	<2,500	<10
2-Nitrochlorobenzene	**20938**	NA	<10	<10	<110	**52,600**	**179**	<2,500	<10
3-Nitrochlorobenzene	NA	NA	NA	NA	NA	NA	**865**	NA	NA
4-Nitrochlorobenzene	**5365**	NA	<10	<10	<110	**98,000**	<100	<2,500	<10
4-Nitrodiphenylamine	<520	NA	<10	<10	<110	<110	<100	<2,500	<10
Triphenyl phosphate	NA	NA	<10	<10	<110	<110	<100	NA	<10
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrobiphenyl	NA	NA	NA	NA	<110	NA	NA	NA	NA
4-Nitrobiphenyl	NA	NA	NA	NA	<110	NA	NA	NA	NA
Benzyl alcohol	NA	<11	NA	NA	NA	NA	NA	NA	NA
Aniline	**8780**	<11	NA	NA	**35,000**	**2,400**	**19,400**	**15,800**	NA
4-Chloroaniline	**18,600**	<11	NA	NA	NA	NA	**50,400**	**90,800**	NA
2-Methylnaphthalene	NA	<11	NA	NA	NA	NA	NA	NA	NA
N-nitroaniline	NA	<11	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	<11	NA	NA	NA	NA	NA	NA	NA
3-Chloroaniline	<520	NA	NA	NA	NA	NA	**57,200**	<2,500	NA
2-Chloroaniline	**78,229**	NA	NA	NA	NA	NA	**72,000**	**92,100**	NA
Sub Total 2	131,912	0	0	0	35,000	153,000	200,044	198,700	0
Total Base/Neutral Compounds	132,435	10	23	30	35,834	158,861	202,009	202,050	0

See last page for footnotes.

Well Number:	P-6	P-6	P-6	P-6	P-6	P-7	P-7	P-7	P-7
Date:	11/87	11/89	11/90	11/91	11/92	12/86	3/87	5/87	11/87
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
Acenaphthene	<1.9	<2.0	<1.9	<1.9	<1.9	<1.9	<2.1	<38	<1.9
Acenapthylene	<3.5	<3.6	<3.5	<3.5	<3.5	<3.5	<3.8	<70	<3.6
Anthracene	<1.9	<2.0	<1.9	<1.9	<1.9	<1.9	<2.1	<38	<1.9
Benzidine	<44	<46	<44	<44	<44	<44	<48	<880	<45
Benzo (a) anthracene	<7.8	<8.1	<7.8	<7.9	<7.8	<7.8	<8.6	<160	<8.0
Benzo (a) pyrene	<2.5	<2.6	<2.5	<2.5	<2.5	<2.5	<2.7	<50	<2.6
Benzo (b) fluoroanthene	<10	<5.0	<4.8	<4.8	<4.8	<4.8	<11	<200	<10
Benzo (ghi) perylene	<4.1	<4.3	<4.1	<4.1	<4.1	<4.1	<4.5	<82	<4.2
Benzo (k) fluoranthene	<3.5	<2.6	<2.5	<2.5	<2.5	<2.5	<3.8	<70	<3.6
Bis (2-chloroethoxy) methane	<5.3	<5.5	<5.3	,5.4	<5.3	<5.3	<5.8	<110	<5.4
Bis (2-chloroethyl) ether	<5.7	<5.9	<5.7	<5.8	<5.7	<5.7	<6.3	<110	<5.8
Bis (2-chloroisopropyl) ether	<5.7	<5.9	<5.7	<5.8	<5.7	<5.7	<6.3	<110	<5.8
Bis (2-ethylhexyl) phthalate	<10	<10	<10	<10	<10	<2.5	<11	<200	<10
4-Bromophenyl phenyl ether	<1.9	<2.0	<1.9	<1.9	<1.9	<1.9	<2.1	<38	<1.9
Butyl benzyl phthalate	<10	<10	<10	<10	<10	<2.5	<11	<200	<10
2-Chloronaphthalene	<1.9	<2.0	<1.9	<1.9	<1.9	<1.9	**940**	<38	<1.9
4-Chlorophenyl phenyl ether	<4.2	<4.4	<4.2	<4.2	<4.2	<4.2	<4.6	<84	<4.3
Chrysene	<2.5	<2.6	<2.5	<2.5	<2.5	<2.5	<2.7	<50	<2.6
Dibenzo (a,h) anthracene	<10	<10	<2.5	<2.5	<2.5	<2.5	<11	<200	<10
1,2-Dichlorobenzene	**2.82**	**44.6**	**33.3**	**11.0**	**9.8**	**88.1**	**346**	**190**	**106**
1,3-Dichlorobenzene	<1.9	<2.0	<1.9	<1.9	<1.9	**2**	**7.00**	<38	**2.29**
1,4-Dichlorobenzene	<4.4	**53.4**	**49.9**	**16.7**	**14.1**	**154**	**585**	**321**	**148**
3,3-Dichlorobenzidine	<17	<17	<16.5	<16.7	<16.5	<16.5	<18.7	<330	<17
Diethyl phthalate	<10	<10	<10	<10	<10	<1.9	<11	<200	<10
Dimethyl phthalate	<10	<10	<10	<10	<5.0	<1.6	<11	<200	<10
Di-n-butyl phthalate	<10	<10	<10	<10	<10	<2.5	<11	<200	<10
2,4-Dinitrotoluene	<5.7	<5.9	<5.7	<5.8	<5.7	<5.7	<6.3	<110	<5.8
2,6-Dinitrotoluene	<1.9	<2.0	<1.9	<1.9	<1.9	<1.9	<2.1	<38	<1.9
Di-n-octyl phthalate	<10	<10	<10	<10	<10	<2.5	<11	<200	<10
1,2-Diphenylhydrazine	<10	<10	<10	<10	<10	<10	<11	<200	<10
Fluoranthene	<2.2	<2.3	<2.2	<2.2	<2.2	<2.2	<2.4	<44	<2.2
Fluorene	<1.9	<2.0	<1.9	<1.9	<1.9	<1.9	<2.1	<38	<1.9
Hexachlorobenzene	<1.9	<2.0	<1.9	<1.9	<1.9	<1.9	<2.1	<38	<1.9
Hexachlorobutadiene	<0.90	<.94	<90	<.91	<.90	<0.9	<.99	<18	<.92
Hexachlorocyclopentadiene	<10	<10	<10	<10	<10	<10	<11	<200	<10
Hexachloroethane	<1.6	<1.7	<1.6	<1.6	<1.6	<1.6	<1.8	<32	<1.6
Indeno (1,2,3-c,d) pyrene	<4.7	<4.9	<3.7	<3.7	<3.7	<3.7	<5.2	<94	<4.8
Isophorone	<2.2	<2.3	<2.2	<2.2	<2.2	<2.2	<2.4	<44	<2.2
Naphthalene	<1.6	<1.7	<1.6	<1.6	<1.6	<1.6	**7.95**	<32	<1.6
Nitrobenzene	<1.9	<2.0	<1.9	<1.9	<1.9	**357**	**113**	**286**	<1.9
n-Nitrosodimethylamine	<10	<10	<10	<10	<10	<10	<11	<200	<10
n-Nitrosodi-n-propylamine	<10	<10	<10	<10	<10	<10	<11	<200	<10
n-Nitrosodiphenylamine	<1.9	<2.0	<1.9	<1.9	<1.9	<1.9	<2.1	<38	<1.9
Phenanthrene	<5.4	<5.6	<5.4	<5.5	<5.4	<5.4	<5.9	<110	<5.5
Pyrene	<1.9	<2.0	<1.9	<1.9	<1.9	<1.9	<2.1	<38	<1.9
1,2,4-Trichlorobenzene	<1.9	<2.0	<1.9	<1.9	<1.9	**4.8**	**33.4**	<38	<1.9
Sub Total 1	3	98	83	28	24	606	2,032	797	256

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Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	P-6	P-6	P-6	P-6	P-6	P-7	P-7	P-7	P-7
Date:	11/87	11/89	11/90	11/91	11/92	12/86	3/87	5/87	11/87
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2,4-and 3,4-Dinitrochlorobenzene	<10	<10	<10	<10	<10	<10	NA	<200	<10
2-Nitroaniline	<10	<10	<10	<10	<10	<10	<11	<200	<10
4-Nitroaniline	<10	<10	<10	<10	<10	**52**	**62.2**	<200	**11.3**
2-Nitrochlorobenzene	<10	<10	<10	<10	<10	**27,000**	NA	**40,800**	**22,400**
3-Nitrochlorobenzene	NA	NA	NA	<10	NA	NA	NA	NA	NA
4-Nitrochlorobenzene	<10	<10	<10	<10	<10	**8,590**	NA	**11,900**	**5,230**
4-Nitrodiphenylamine	<10	<10	<10	<10	<10	**202**	NA	<200	**160**
Triphenyl phosphate	<10	<10	<10	<10	NA	<10	NA	<200	<10
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrobiphenyl	NA	<10	NA	NA	NA	NA	NA	NA	NA
4-Nitrobiphenyl	NA	<10	NA	NA	NA	NA	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA	NA	**171**	NA	NA
Aniline	NA	**10,200**	**95.5**	<10	<10	NA	**6,360**	NA	NA
4-Chloroaniline	NA	NA	NA	**1,570**	**56**	NA	**15,000**	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	<11	NA	NA
N-nitroaniline	NA	NA	NA	NA	NA	NA	<11	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	<11	NA	NA
3-Chloroaniline	NA	NA	NA	<10	<10	NA	NA	NA	NA
2-Chloroaniline	NA	NA	NA	**3,880**	**688**	NA	NA	NA	NA
Sub Total 2	0	10,200	96	5,450	744	35,844	21,593	52,700	27,801
Total Base/Neutral Compounds	3	10,298	179	5,478	768	36,450	23,626	53,497	28,058

See last page for footnotes.

Well Number:	P-7	P-7	P-7	P-7	P-7	P-7	P-7	P-8	P-8
Date:	5/88	11/88	3/89	11/89	11/90	11/91	11/92	11/87	3/89
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
Acenaphthene	<220	<20	<20	<22	<38	<2.0	<480	<190	<970
Acenapthylene	<400	<36	<36	<41	<70	<3.6	<880	<350	<1800
Anthracene	<220	<20	<20	<22	<38	<2.0	<480	<190	<970
Benzidine	<5,000	<450	<450	<520	<880	<45	<1,1000	<4400	<22000
Benzo (a) anthracene	<890	<80	<80	<92	<160	<8.0	<2000	<790	<4000
Benzo (a) pyrene	<290	<26	<26	<29	<50	<2.6	<630	<250	<1300
Benzo (b) fluoroanthene	<550	<49	<49	<56	<96	<4.9	<1200	<1,000	<2,400
Benzo (ghi) perylene	<470	<42	<42	<48	<82	<4.2	<1,000	<410	<2100
Benzo (k) fluoranthene	<290	<26	<26	<29	<50	<2.6	<630	<350	<1300
Bis (2-chloroethoxy) methane	<610	<55	<55	<62	<110	<5.5	<1300	<530	<2700
Bis (2-chloroethyl) ether	<650	<59	<59	<67	<110	<5.9	<1,400	<570	<2900
Bis (2-chloroisopropyl) ether	<650	<59	<59	<67	<110	<5.9	<1,400	<580	<2900
Bis (2-ethylhexyl) phthalate	<1,100	**188**	<100	<120	<200	<10	<2,500	<1,000	<5100
4-Bromophenyl phenyl ether	<220	<20	<20	<22	<38	<2.0	<480	<190	<970
Butyl benzyl phthalate	<1,100	<100	<100	<120	<200	<10	<2,500	<1,000	<5100
2-Chloronaphthalene	<220	<20	<20	<22	<38	<2.0	<480	<190	<970
4-Chlorophenyl phenyl ether	<480	<43	<43	<49	<84	<4.3	<1,100	<420	<2100
Chrysene	<290	<26	<26	<29	<50	<2.6	<630	<250	<1300
Dibenzo (a,h) anthracene	<1,100	<100	<100	<120	<50	<2.6	<630	<1,000	<5100
1,2-Dichlorobenzene	**424**	**949**	**250**	**781**	**603**	**396**	<480	<190	<970
1,3-Dichlorobenzene	<220	<20	<20	<22	<38	**8.68**	<480	<190	<970
1,4-Dichlorobenzene	**797**	**1,580**	**441**	**1,350**	**996**	**572**	<1,100	<440	<2200
3,3-Dichlorobenzidine	<1,900	<175	<170	<190	<330	<17.0	<4170	<1700	<8400
Diethyl phthalate	<1,100	<100	<100	<120	<200	<10	<2,500	<1,000	<5100
Dimethyl phthalate	<1,100	<100	<100	<120	<200	<10	<1300	<1,000	<5100
Di-n-butyl phthalate	<1,100	<100	<100	<120	<200	<10	<2,500	<1,000	<5100
2,4-Dinitrotoluene	<650	<59	<59	<67	<110	<5.9	<1,400	<570	<2900
2,6-Dinitrotoluene	<220	<20	<20	<22	<38	<2.0	<480	<190	<970
Di-n-octyl phthalate	<1,100	<100	<100	<120	<200	<10	<2,500	<1,000	<5100
1,2-Diphenylhydrazine	<1,100	<100	<100	<120	<200	<10	<2,500	<1,000	<5100
Fluoranthene	<250	<23	<23	<26	<44	<2.3	<560	<220	<1,100
Fluorene	<220	<20	<20	<22	<38	<2.0	<480	<190	<970
Hexachlorobenzene	<220	<20	<20	<22	<38	<2.0	<480	<190	<970
Hexachlorobutadiene	<100	<9.3	<9.3	<11	<18	<.93	<230	<90	<460
Hexachlorocyclopentadiene	<1,100	<100	<100	<120	<200	<10	<2,500	<1,000	<5100
Hexachloroethane	<180	<16	<16	<19	<32	<1.6	<400	<160	<820
Indeno (1,2,3-c,d) pyrene	<540	<48	<48	<55	<74	<3.8	<930	<470	<2,400
Isophorone	<250	<23	<23	<26	<44	<2.3	<560	<220	<1,100
Naphthalene	<180	<16	<16	<19	<32	**7.73**	<400	<160	<820
Nitrobenzene	**6,770**	**516**	**473**	**1,760**	**1,040**	**169**	<480	<190	**2,220**
n-Nitrosodimethylamine	<1,100	<100	<100	<120	<200	<10	<2,500	<1,000	<5100
n-Nitrosodi-n-propylamine	<1,100	<100	<100	<120	<200	<10	<2,500	<1,000	<5100
n-Nitrosodiphenylamine	<220	<20	<20	<22	<38	<2.0	<480	<190	<970
Phenanthrene	<620	<56	<56	<64	<110	<5.6	<1,400	<540	<2800
Pyrene	<220	<20	<20	<22	<38	<2.0	<480	<190	<970
1,2,4-Trichlorobenzene	<220	**117**	<20	**46.6**	**39.2**	**37.7**	<480	<190	<970
Sub Total 1	7,991	3,350	1,164	3,938	2,678	1,191	0	0	2,220

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	P-7	P-7	P-7	P-7	P-7	P-7	P-7	P-8	P-8
Date:	5/88	11/88	3/89	11/89	11/90	11/91	11/92	11/87	3/89
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2,4-and 3,4-Dinitrochlorobenzene	<1,100	NA	<100	<120	<200	<10	<2,500	<1,000	<5100
2-Nitroaniline	<1,100	NA	<100	<120	<200	<10	<2,500	<1,000	<5100
4-Nitroaniline	<1,100	NA	<100	<120	<200	<10	<2,500	<1,000	<5100
2-Nitrochlorobenzene	**64,900**	NA	**62,600**	**357,000**	**196,000**	**29,700**	**8110**	**55,100**	**57,100**
3-Nitrochlorobenzene	NA	NA	NA	NA	NA	**114,000**	NA	NA	NA
4-Nitrochlorobenzene	**29,100**	NA	**19,400**	**90,600**	**48,100**	**4,900**	<2,500	**32,400**	**14,200**
4-Nitrodiphenylamine	<1,100	NA	<100	**627**	<200	<10	<2,500	<1,000	<5100
Triphenyl phosphate	<1,100	NA	NA	<120	<200	<10	NA	<1,000	<5100
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrobiphenyl	<1,100	NA	NA	<120	NA	NA	NA	NA	NA
4-Nitrobiphenyl	<1,100	NA	NA	<120	NA	NA	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA	NA	NA	NA	<5100
Aniline	NA	NA	NA	**22,300**	**7,230**	**3,100**	**3190**	NA	**155,000**
4-Chloroaniline	NA	NA	NA	NA	NA	**12,500**	**23,600**	NA	**49,100**
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Chloroaniline	NA	NA	NA	NA	NA	**3,110**	<2,500	NA	NA
2-Chloroaniline	NA	NA	NA	NA	NA	**58,900**	**86,600**	NA	NA
Sub Total 2	94,000	0	82,000	470,527	251,330	226,210	121,500	87,500	275,400
Total Base/Neutral Compounds	101,991	3,350	83,164	474,465	254,008	227,401	121,500	87,500	277,620

See last page for footnotes.

Well Number:	P-8	P-8	P-8	P-8	P-10	P-11	P-11	P-12	P-13
Date:	11/89	11/90	11/91	11/92	11/87	3/87	11/87	11/87	11/87
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
Acenaphthene	<1,100	<19	<38	<97	<190	<2.1	<2.0	<1.9	<1.9
Acenapthylene	<2000	<36	<71	<180	<350	<3.8	<3.6	<3.5	<3.5
Anthracene	<1,100	<19	<38	<97	<190	<2.1	<2.0	<1.9	<1.9
Benzidine	<2,5000	<450	<890	<2200	<4400	<48	<45	<44	<44
Benzo (a) anthracene	<4400	<80	<160	<400	<790	<8.6	<8.0	<7.8	<7.8
Benzo (a) pyrene	<1,400	<26	<51	<130	<250	<2.7	<2.6	<2.5	<2.5
Benzo (b) fluoroanthene	<2700	<49	<97	<240	<1,000	<11	<10	<10	<10
Benzo (ghi) perylene	<2300	<42	<83	<210	<410	<4.5	<4.2	<4.1	<4.1
Benzo (k) fluoranthene	<1,400	<26	<51	<130	<350	<3.8	<3.6	<3.5	<3.5
Bis (2-chloroethoxy) methane	<3,000	<54	<110	<270	<540	<5.8	<5.5	<5.3	<5.3
Bis (2-chloroethyl) ether	<3200	<58	<120	<290	<580	<6.3	<5.9	<5.7	<5.7
Bis (2-chloroisopropyl) ether	<3200	<58	<120	<290	<580	<6.3	<5.9	<5.7	<5.7
Bis (2-ethylhexyl) phthalate	<5700	<100	<200	<510	<1,000	<11	<10	<10	<10
4-Bromophenyl phenyl ether	<1,100	<19	<38	<97	<190	<2.1	<2.0	<1.9	<1.9
Butyl benzyl phthalate	<5700	<100	<200	<510	<1,000	<11	<10	<10	<10
2-Chloronaphthalene	<1,100	<19	<38	<97	<190	<2.1	<2.0	<1.9	<1.9
4-Chlorophenyl phenyl ether	<2,400	<43	<85	<210	<420	<4.6	<4.3	<4.2	<4.2
Chrysene	<1,400	<26	<51	<130	<250	<2.7	<2.6	<2.5	<2.5
Dibenzo (a,h) anthracene	<5700	<26	<51	<130	<1,000	<11	<10	<10	<10
1,2-Dichlorobenzene	<1,100	**153**	**172**	**155**	<190	**5.4**	**6.00**	**1,790**	<1.9
1,3-Dichlorobenzene	<1,100	<19	<38	<97	<190	<2.1	<2.0	<1.9	<1.9
1,4-Dichlorobenzene	<2,500	**265**	**230**	**304**	**449**	**82.3**	**111**	**252**	**22.5**
3,3-Dichlorobenzidine	<9400	<168	<333	<842	<1700	<18.7	<17	<17	<17
Diethyl phthalate	<5700	<100	<200	<510	<1,000	<11	<10	<10	<10
Dimethyl phthalate	<5700	<100	<200	<260	<1,000	<11	<10	<10	<10
Di-n-butyl phthalate	<5700	<100	<200	<510	<1,000	<11	<10	<10	<10
2,4-Dinitrotoluene	<3200	<58	<120	<290	<580	<6.3	<5.9	<5.7	<5.7
2,6-Dinitrotoluene	<1,100	<19	<38	<97	<190	<2.1	<2.0	<1.9	<1.9
Di-n-octyl phthalate	<5700	<100	<200	<510	<1,000	<11	<10	<10	<10
1,2-Diphenylhydrazine	<5700	<100	<200	<510	<1,000	<11	<10	<10	<10
Fluoranthene	<1200	<22	<44	<110	<220	<2.4	<2.3	<2.2	<2.2
Fluorene	<1,100	<19	<38	<97	<190	<2.1	<2.0	<1.9	<1.9
Hexachlorobenzene	<1,100	<19	<38	<97	<190	<2.1	<2.0	<1.9	<1.9
Hexachlorobutadiene	<510	<9.2	<18	<46	<91	<.99	<.93	<0.90	<0.90
Hexachlorocyclopentadiene	<5700	<100	<200	<510	<1,000	<11	<10	<10	<10
Hexachloroethane	<910	<16	<32	<82	<160	<1.8	<1.6	<1.6	<1.6
Indeno (1,2,3-c,d) pyrene	<2700	<38	<75	<190	<470	<5.2	<4.8	<4.7	<4.7
Isophorone	<1200	<22	<44	<110	<220	<2.4	<2.3	<2.2	<2.2
Naphthalene	<910	<16	<32	<82	<160	<1.8	<1.6	<1.6	<1.6
Nitrobenzene	**4,270**	**2,470**	**1,940**	**3600**	<190	<2.1	<2.0	<1.9	<1.9
n-Nitrosodimethylamine	<5700	<100	<200	<510	<1,000	<11	<10	<10	<10
n-Nitrosodi-n-propylamine	<5700	<100	<200	<510	<1,000	<11	<10	<10	<10
n-Nitrosodiphenylamine	<1,100	<19	<38	<97	<190	<2.1	<2.0	<1.9	**9.00**
Phenanthrene	<3100	<55	<110	<280	<550	<5.9	<5.6	<5.4	<5.4
Pyrene	<1,100	<19	<38	<97	<190	<2.1	<2.0	<1.9	<1.9
1,2,4-Trichlorobenzene	<1,100	<19	<38	<97	<190	<2.1	<2.0	<1.9	<1.9
Sub Total 1	4,270	2,888	2,342	4,059	449	88	117	2,042	32

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	P-8	P-8	P-8	P-8	P-10	P-11	P-11	P-12	P-13
Date:	11/89	11/90	11/91	11/92	11/87	3/87	11/87	11/87	11/87
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2,4-and 3,4-Dinitrochlorobenzene	<5700	<100	<200	<510	<1,000	NA	<10	<10	<10
2-Nitroaniline	<5700	<100	<200	<510	<1,000	<11	<10	<10	<10
4-Nitroaniline	<5700	<100	<200	<510	<1,000	<11	<10	<10	<10
2-Nitrochlorobenzene	**463,000**	**180,000**	**171,000**	**105,000**	<1,000	NA	<10	<10	<10
3-Nitrochlorobenzene	NA	NA	**461,000**	NA	NA	NA	NA	NA	NA
4-Nitrochlorobenzene	**185,000**	**88,500**	**21,500**	**14,500**	<1,000	NA	<10	<10	<10
4-Nitrodiphenylamine	<5700	<100	<200	<510	<1,000	NA	<10	<10	<10
Triphenyl phosphate	<5700	<100	<200	NA	<1,000	NA	<10	<10	<10
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrobiphenyl	<5700	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrobiphenyl	<5700	NA	NA	NA	NA	<11	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA	<11	NA	NA	NA
Aniline	**522,000**	**160,000**	**163,000**	**62,700**	NA	<11	NA	NA	NA
4-Chloroaniline	NA	NA	**105,000**	**87,300**	NA	**4,020**	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	<11	NA	NA	NA
N-nitroaniline	NA	NA	NA	NA	NA	<11	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	<11	NA	NA	NA
3-Chloroaniline	NA	NA	**22,500**	<510	NA	NA	NA	NA	NA
2-Chloroaniline	NA	NA	**329,000**	**191,000**	NA	NA	NA	NA	NA
Sub Total 2	1,170,000	428,500	1,273,000	460,500	0	4,020	0	0	0
Total Base/Neutral Compounds	1,174,270	431,388	1,275,342	464,559	449	4,108	117	2,042	32

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	P-13	P-13	P-13	P-13	P-14	P-14	P-14	P-14	P-14
Date:	11/89	11/90	11/91	11/92	11/87	11/89	11/90	11/91	11/92
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
Acenaphthene	<200	<2.0	<390	<20	<1.9	<2.0	<2.0	<1.9	<1.9
Acenapthylene	<370	<3.8	<710	<36	<3.5	<3.6	<3.8	<3.6	<3.5
Anthracene	<200	<2.0	<390	<20	<1.9	<2.0	<2.0	<1.9	<1.9
Benzidine	<4600	<47	<9000	<450	<44	<45	<47	<45	<44
Benzo (a) anthracene	<820	<8.4	<1600	<80	<7.8	<8.0	<8.4	<8.0	<7.8
Benzo (a) pyrene	<260	<2.7	<510	<26	<2.5	<2.6	<2.7	<2.6	<2.5
Benzo (b) fluoroanthene	<510	<5.2	<980	<49	<10	<4.9	<5.2	<4.9	<4.8
Benzo (ghi) perylene	<430	<4.4	<840	<42	<4.1	<4.2	<4.4	<4.2	<4.1
Benzo (k) fluoranthene	<260	<2.7	<510	<26	<3.5	<2.6	<2.7	<2.6	<2.5
Bis (2-chloroethoxy) methane	<560	<5.7	<1,100	<55	<5.3	<5.5	<5.7	<5.4	<5.3
Bis (2-chloroethyl) ether	<600	<6.1	<1200	<59	<5.7	<5.9	<6.1	<5.8	<5.7
Bis (2-chloroisopropyl) ether	<600	<6.1	<2000	<59	<5.7	<5.9	<6.1	<5.8	<5.7
Bis (2-ethylhexyl) phthalate	<1,100	<11	<390	<100	<10	<10	<11	<10	<10
4-Bromophenyl phenyl ether	<200	<2.0	<2000	<20	<1.9	<2.0	<2.0	<1.9	<1.9
Butyl benzyl phthalate	<1,100	<11	<390	<100	<10	<10	<11	<10	<10
2-Chloronaphthalene	<200	<2.0	<860	<20	<1.9	<2.0	<2.0	<1.9	<1.9
4-Chlorophenyl phenyl ether	<440	<4.5	<510	<43	<4.2	<4.3	<4.5	<4.3	<4.2
Chrysene	<260	<2.7	<510	<26	<2.5	<2.6	<2.7	<2.6	<2.5
Dibenzo (a,h) anthracene	<1,100	<2.7	<390	<26	<10	<10	<2.7	<2.6	<2.5
1,2-Dichlorobenzene	<200	**6.51**	<390	**31.1**	**22.0**	**20.7**	**29.4**	**18.2**	**14.2**
1,3-Dichlorobenzene	<200	<2.0	<900	<20	<1.9	<2.0	<2.0	<1.9	<1.9
1,4-Dichlorobenzene	<460	**104**	<3370	**398**	**35.7**	**35.5**	**47.3**	**28.7**	**25.2**
3,3-Dichlorobenzidine	<1700	<17.7	<2000	<170	<17	<17	<17.7	<16.8	<16.5
Diethyl phthalate	<1,100	<11	<2000	<100	<10	<10	<11	<10	<10
Dimethyl phthalate	<1,100	<11	<2000	<52	<10	<10	<11	<10	<5.0
Di-n-butyl phthalate	<1,100	<11	<1200	<100	<10	<10	<11	<10	<10
2,4-Dinitrotoluene	<600	<6.1	<390	<59	<5.7	<5.9	<6.1	<5.8	<5.7
2,6-Dinitrotoluene	<200	<2.0	<2000	<20	<1.9	<2.0	<2.0	<1.9	<1.9
Di-n-octyl phthalate	<1,100	<11	<2000	<100	<10	<10	<11	<10	<10
1,2-Diphenylhydrazine	<1,100	<11	<450	<100	<10	<10	<11	<10	<10
Fluoranthene	<230	<2.4	<390	<23	<2.2	<2.3	<2.4	<2.2	<2.2
Fluorene	<200	<2.0	<390	<20	<1.9	<2.0	<2.0	<1.9	<1.9
Hexachlorobenzene	<200	<2.0	<180	<20	<1.9	<2.0	<2.0	<1.9	<1.9
Hexachlorobutadiene	<95	<97	<2000	<9.3	<0.90	<.93	<97	<.92	<.90
Hexachlorocyclopentadiene	<1,100	<11	<330	<100	<10	<10	<11	<10	<10
Hexachloroethane	<170	<1.7	<760	<16	<1.6	<1.6	<1.7	<1.6	<1.6
Indeno (1,2,3-c,d) pyrene	<490	<4.0	<450	<38	<4.7	<4.8	<4.0	<3.8	<3.7
Isophorone	<230	<2.4	<330	<23	<2.2	<2.3	<2.4	<2.2	<2.2
Naphthalene	<170	**7.94**	<390	**38.6**	<1.6	<1.6	<1.7	<1.6	<1.6
Nitrobenzene	<200	<2.0	<2000	<20	<1.9	<2.0	<2.0	<1.9	<1.9
n-Nitrosodimethylamine	<1,100	<11	<2000	<100	<10	<10	<11	<10	<10
n-Nitrosodi-n-propylamine	<1,100	<11	<390	<100	<10	<10	<11	<10	<10
n-Nitrosodiphenylamine	<200	<2.0	<1,100	<20	<1.9	<2.0	<2.0	<1.9	<1.9
Phenanthrene	<570	<5.8	<390	<56	<5.4	<5.6	<5.8	<5.5	<5.4
Pyrene	<200	<2.0	<390	<20	<1.9	<2.0	<2.0	<1.9	<1.9
1,2,4-Trichlorobenzene	<200	<2.0	<2000	<20	<1.9	<2.0	<2.0	<1.9	<1.9
Sub Total 1	0	118	0	468	58	56	77	47	39

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	P-13	P-13	P-13	P-13	P-14	P-14	P-14	P-14	P-14
Date:	11/89	11/90	11/91	11/92	11/87	11/89	11/90	11/91	11/92
Laboratory:	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC	ETC
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2,4-and 3,4-Dinitrochlorobenzene	<1,100	<11	<2000	<100	<10	<10	<11	<10	<10
2-Nitroaniline	<1,100	<11	<2000	<100	<10	<10	<11	<10	<10
4-Nitroaniline	<1,100	<11	<2000	<100	<10	<10	<11	<10	<10
2-Nitrochlorobenzene	<1,100	<11	<2000	<100	<10	<10	<11	<10	<10
3-Nitrochlorobenzene	NA	NA	<2000	NA	NA	NA	NA	<10	NA
4-Nitrochlorobenzene	<1,100	<11	<2000	<100	<10	<10	<11	<10	<10
4-Nitrodiphenylamine	<1,100	<11	<2000	<100	<10	<10	<11	<10	<10
Triphenyl phosphate	<1,100	<11	<2000	NA	<10	<10	<11	<10	NA
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrobiphenyl	<1,100	NA	NA	NA	NA	<10	NA	NA	NA
4-Nitrobiphenyl	<1,100	NA	NA	NA	NA	<10	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA	NA	NA	NA	<10
Aniline	**685,000**	**71,600**	**288,000**	**527000**	NA	**11.2**	<11	<10	<10
4-Chloroaniline	NA	NA	**9,970**	**30,700**	NA	NA	NA	<10	**55.6**
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Chloroaniline	NA	NA	**13,500**	**13000**	NA	NA	NA	<10	<10
2-Chloroaniline	NA	NA	**12,400**	**29000**	NA	NA	NA	**103**	**105**
Sub Total 2	685,000	71,600	323,870	599,700	0	11	0	103	161
Total Base/Neutral Compounds	685,000	71,718	323,870	600,168	58	67	77	150	200

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank	Trip Blank
Date:	3/87	11/90	11/91	11/9/92	11/12/92	9/94	3/87
Laboratory:	ETC	ETC	ETC	ETC	ETC	SL	ETC
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L							
Acenaphthene	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<2.1
Acenapthylene	<3.7	<3.5	<3.6	<3.5	<3.5	<10	<3.9
Anthracene	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<2.1
Benzidine	<47	<44	<45	<44	<44	<80	<49
Benzo (a) anthracene	<8.3	<7.8	<8.0	<7.9	<7.9	<10	<8.7
Benzo (a) pyrene	<2.7	<2.5	<2.6	<2.5	<2.5	<10	<2.8
Benzo (b) fluoroanthene	<11	<4.8	<4.9	<4.8	<4.8	<10	<11
Benzo (ghi) perylene	<4.4	<4.1	<4.2	<4.1	<4.1	<10	<4.6
Benzo (k) fluoranthene	<3.7	<2.5	<2.6	<2.5	<2.5	<10	<3.9
Bis (2-chloroethoxy) methane	<5.6	<5.3	<5.4	<5.4	<5.4	<10	<5.9
Bis (2-chloroethyl) ether	<6.1	<5.7	<5.8	<5.8	<5.8	<10	<6.3
Bis (2-chloroisopropyl) ether	<6.1	<5.7	<5.8	<5.8	<5.8	<10	<6.3
Bis (2-ethylhexyl) phthalate	<11	<10	<10	<10	<10	<10	<11
4-Bromophenyl phenyl ether	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<2.1
Butyl benzyl phthalate	<11	<10	<10	<10	<10	<10	<11
2-Chloronaphthalene	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<2.1
4-Chlorophenyl phenyl ether	<4.5	<4.2	<4.3	<4.2	<4.2	<10	<4.7
Chrysene	<2.7	<2.5	<2.6	<2.5	<2.5	<10	<2.8
Dibenzo (a,h) anthracene	<11	<2.5	<2.6	<2.5	<2.5	<10	<11
1,2-Dichlorobenzene	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<2.1
1,3-Dichlorobenzene	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<2.1
1,4-Dichlorobenzene	<4.7	<4.4	<4.5	<4.4	<4.4	<10	<4.9
3,3-Dichlorobenzidine	<18	<16.5	<16.8	<16.7	<16.7	<20	<18
Diethyl phthalate	<11	<10	<10	<10	<10	<10	<11
Dimethyl phthalate	<11	<10	<10	<5.1	<5.1	<10	<11
Di-n-butyl phthalate	<11	<10	<10	<10	<10	<10	<11
2,4-Dinitrotoluene	<6.1	<5.7	<5.8	<5.8	<5.8	<10	<6.3
2,6-Dinitrotoluene	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<2.1
Di-n-octyl phthalate	<11	<10	<10	<10	<10	<10	<11
1,2-Diphenylhydrazine	<11	<10	<10	<10	<10	<10	<11
Fluoranthene	<2.3	<2.2	<2.2	<2.2	<2.2	<10	<2.4
Fluorene	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<2.1
Hexachlorobenzene	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<2.1
Hexachlorobutadiene	<.96	<90	<.92	<.91	<.91	<10	<1.0
Hexachlorocyclopentadiene	<11	<10	<10	<10	<10	<10	<11
Hexachloroethane	<1.7	<1.6	<1.6	<1.6	<1.6	<10	<1.8
Indeno (1,2,3-c,d) pyrene	<5.0	<3.7	<3.8	<3.7	<3.7	<10	<5.2
Isophorone	<2.3	<2.2	<2.2	<2.2	<2.2	<10	<2.4
Naphthalene	<1.7	<1.6	<1.6	<1.6	<1.6	<10	<1.8
Nitrobenzene	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<2.1
n-Nitrosodimethylamine	<11	<10	<10	<10	<10	<10	<11
n-Nitrosodi-n-propylamine	<11	<10	<10	<10	<10	<10	<11
n-Nitrosodiphenylamine	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<2.1
Phenanthrene	<5.7	<5.4	<5.5	<5.5	<5.5	<10	<6.0
Pyrene	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<2.1
1,2,4-Trichlorobenzene	<2.0	<1.9	<1.9	<1.9	<1.9	<10	<2.1
Sub Total 1	0	0	0	0	0	0	0

See last page for footnotes.

Table 3. Summary of Base/Neutral Compounds in Ground Water, Krummrich Plant, Sauget, Illinois.

Well Number:	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank	Trip Blank
Date:	3/87	11/90	11/91	11/9/92	11/12/92	9/94	3/87
Laboratory:	ETC	ETC	ETC	ETC	ETC	SL	ETC
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L							
2,4-and 3,4-Dinitrochlorobenzene	NA	<10	NA	NA	NA	<10	NA
2-Nitroaniline	<11	<10	NA	NA	NA	NA	<11
4-Nitroaniline	<11	<10	NA	NA	NA	NA	<11
2-Nitrochlorobenzene	NA	<10	NA	NA	NA	<10	NA
3-Nitrochlorobenzene	NA	NA	NA	NA	NA	<10	NA
4-Nitrochlorobenzene	NA	<10	NA	NA	NA	<10	NA
4-Nitrodiphenylamine	NA	<10	NA	NA	NA	<10	NA
Triphenyl phosphate	NA	<10	NA	NA	NA	NA	NA
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	NA	<10	NA	NA	NA	NA	NA
2-Nitrobiphenyl	NA	NA	NA	NA	NA	<10	NA
4-Nitrobiphenyl	<11	<10	NA	NA	NA	<10	<11
Benzyl alcohol	<11	<10	NA	NA	NA	NA	<11
Aniline	<11	NA	NA	NA	NA	<50	<11
4-Chloroaniline	<11	<10	NA	NA	NA	<10	<11
2-Methylnaphthalene	<11	NA	NA	NA	NA	NA	<11
N-nitroso[illegible]ne	<11	NA	NA	NA	NA	NA	<11
Dibenzofuran	<11	NA	NA	NA	NA	NA	<11
3-Chloroaniline	NA	NA	NA	NA	NA	<10	NA
2-Chloroaniline	NA	NA	NA	NA	NA	<10	NA
Sub Total 2	0	0	0	0	0	0	0
Total Base/Neutral Compounds	0	0	0	0	0	0	0

NA Not analyzed.
• Replicate sample.
ETC Environmental Testing and Certification, Edison, New Jersey.
SL Savannah Laboratories and Environmental Testing, Savannah, Georgia.
•• The compounds 2- and 4-nitrochlorobenzene and 3- and 4-chloroniline were found to coelute by Savannah Laboratories.
J Estimated value.

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Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, Il.

Well Number:	GM-1	GM-1	GM-1	GM-1	GM-2	GM-2	GM-2	GM-2	GM-3	GM-3
Date:	11/83	11/83*	2/84	5/84	11/83	11/83*	2/84	5/84	11/83	2/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	0.011	NA	NA	<0.05	0.165	NA	NA	<0.5	0.097	NA
arsenic	0.017	NA	NA	<0.01	<0.002	NA	NA	<0.01	0.007	NA
beryllium	0.023	NA	NA	<0.01	0.019	NA	NA	<0.01	0.027	NA
cadmium	<0.01	NA	NA	<0.02	0.030	NA	NA	<0.02	0.020	NA
chromium	0.411	NA	NA	<0.05	0.048	NA	NA	<0.05	0.051	NA
copper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
lead	<0.001	NA	NA	<0.01	0.057	NA	NA	<0.01	0.035	NA
mercury	<0.0002	NA	NA	<0.0005	0.00047	NA	NA	<0.0005	0.00035	NA
nickel	0.08	NA	NA	<0.05	0.18	NA	NA	<0.05	0.09	NA
selenium	<0.002	NA	NA	<0.01	0.006	NA	NA	<0.01	<0.002	NA
silver	<0.001	NA	NA	<0.05	0.006	NA	NA	<0.05	0.002	NA
thallium	0.002	NA	NA	<0.2	0.062	NA	NA	<0.2	0.047	NA
zinc	0.334	NA	NA	0.07	3.26	NA	NA	0.52	6.41	NA
Miscellaneous Parameters										
pH (units)	NA	NA	8.1	7.6	NA	NA	7.5	7.3	8.5	8.2
spec. conductance (umhos/cm)	1,200	1,200	950	1,000	3,000	3,000	2,900	2,600	2,500	800
temperature (deg./centigrade)	12	12	14	14	11	11	14	15	12	13
	60#	24#	24	18	83#	44#	7	8	72	9
total phenols	0.020	0.019	0.004	0.014	0.007	0.003	<0.002	<0.002	0.006	0.002
TOX	0.016	0.02	0.021	0.014	0.160	0.51	0.033	0.027	0.54	0.012
total dissolved solids (TDS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	NA	NA	50	48.5	NA	NA	275.0	169.0	NA	15
cyanide	<0.005	NA	NA	<0.005	0.005	NA	NA	<0.005	<0.005	NA
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, Il.

Well Number:	GM-3	GM-3	GM-4A	GM-4A	GM-4A	GM-4B	GM-4B	GM-4B	GM-4B	GM-4B
Date:	5/84	5/84*	11/83	2/84	5/84	9/84	11/84	11/84*	2/85	11/85
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	<0.5	<0.5	0.014	NA	<0.5	0.049	<0.07	<0.07	<0.1	NA
arsenic	<0.01	<0.01	<0.002	NA	<0.01	<0.001	<0.005	<0.005	<0.01	NA
beryllium	<0.01	<0.01	0.017	NA	<0.01	<0.002	<0.005	<0.005	<0.001	NA
cadmium	<0.02	<0.02	<0.01	NA	<0.02	<0.002	<0.005	<0.005	<0.004	NA
chromium	<0.05	<0.05	<0.04	NA	<0.05	<0.004	<0.008	<0.008	<0.02	NA
copper	NA	NA	NA	NA	NA	<0.004	<0.008	<0.008	<0.01	NA
lead	<0.01	<0.01	<0.001	NA	<0.01	<0.004	<0.06	<0.06	<0.07	NA
mercury	<0.0005	<0.0005	<0.0002	NA	<0.0005	<0.0002	<0.0003	<0.0003	<0.0003	NA
nickel	<0.05	<0.05	<0.04	NA	<0.05	0.007	<0.01	<0.01	<0.01	NA
selenium	<0.01	<0.01	<0.002	NA	<0.01	<0.001	<0.01	<0.005	<0.006	NA
silver	<0.05	<0.05	<0.001	NA	<0.05	<0.01	<0.008	<0.008	<0.008	NA
thallium	<0.2	<0.02	0.003	NA	<0.2	0.212	<0.005	<0.005	<0.005	NA
zinc	1.09	1.11	0.014	NA	0.03	0.128	<0.008	<0.008	<0.006	NA
Miscellaneous Parameters										
pH (units)	7.9	7.9	7.8	7.6	7.1	6.6	7.0	7.0	7.8	6.7
spec. conductance (umhos/cm)	900	900	1,050	850	1,050	3,500	4,100	4,100	4,000	3,300
temperature (deg./centigrade)	14	14	12	14	14	18	14	14	10	18
TOC	6	<5	42	12	6	34	NA	NA	NA	NA
total phenols	0.002	0.002	0.004	<0.002	0.003	NA	0.096	0.076	0.110	<0.05
TOX	0.005	0.01	0.017	0.019	0.007	NA	NA	NA	NA	NA
total dissolved solids (TDS)	NA	NA	NA	NA	NA	2,534	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	760
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	270
chloride	11	12	NA	45	76	510	NA	NA	NA	448
cyanide	<0.005	<0.005	<0.005	NA	<0.005	NA	<0.025	<0.025	<0.025	<0.025
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	67.8
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	156
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	357
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	770

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, Il.

Well Number:	GM-4B	GM-4C	GM-4C	GM-5	GM-5	GM-5	GM-6A	GM-6A	GM-6A	GM-6A
Date:	11/85*	2/85	5/85	11/83	2/84	5/84	11/83	2/84	5/84	11/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	NA	<0.07	<0.07	0.009	NA	<0.5	0.012	NA	<0.5	<0.08
arsenic	NA	<0.01	<0.01	<0.002	NA	<0.01	0.007	NA	<0.01	<0.005
beryllium	NA	<0.001	<0.001	0.013	NA	<0.01	0.012	NA	<0.01	<0.005
cadmium	NA	<0.003	<0.004	<0.01	NA	<0.02	0.01	NA	<0.02	<0.005
chromium	NA	<0.01	<0.01	<0.04	NA	<0.05	<0.04	NA	<0.05	<0.02
copper	NA	<0.02	<0.01	NA	NA	NA	NA	NA	NA	<0.01
lead	NA	<0.06	<0.07	0.001	NA	<0.01	0.004	NA	<0.01	<0.06
mercury	NA	<0.0003	<0.0002	<0.0002	NA	<0.0005	<0.0002	NA	<0.0005	<0.0003
nickel	NA	<0.04	<0.02	<0.04	NA	<0.05	0.05	NA	<0.05	0.014
selenium	NA	<0.006	<0.005	<0.002	NA	<0.01	0.002	NA	<0.01	0.015
silver	NA	<0.008	<0.009	<0.001	NA	<0.05	<0.001	NA	<0.05	<0.007
thallium	NA	0.006	<0.005	0.004	NA	<0.2	0.004	NA	<0.2	<0.005
zinc	NA	<0.05	0.04	0.011	NA	0.03	0.018	NA	0.05	0.012
Miscellaneous Parameters										
pH (units)	6.7	7.1	6.5	7.8	7.9	7.2	7.5	7.4	7.3	6.7
spec. conductance (umhos/cm)	3,300	2,600	1,200	625	650	700	2,000	1,900	2,600	1,470
temperature (deg./centigrade)	18	11	16	11	14	14	12	15	14	16.5
	NA	NA	NA	36	16	<5	36	11	11	NA
total phenols	<0.05	<0.05	<0.05	0.003	0.004	0.004	0.020	0.003	0.009	<0.05
TOX	NA	NA	NA	0.011	0.013	0.022	0.110	0.031	0.190	NA
total dissolved solids (TDS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	810	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	272	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	451	NA	NA	NA	10	12	NA	55	117	NA
cyanide	<0.025	<0.025	<0.025	<0.005	NA	<0.005	<0.005	NA	<0.005	<0.025
iron	7.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	70.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	150	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	371	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	770	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, W6 Kruamrich Plant, Sauget, Il.

Well Number:	GM-6B	GM-6B	GM-6B	GM-7	GM-7	GM-7	GM-8	GM-8	GM-8	GM-8
Date:	9/84	11/84	11/85	11/83	2/84	5/84	11/83	2/84	5/84	11/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	0.053	<0.08	NA	0.01	NA	<0.5	0.012	NA	<0.5	<0.08
arsenic	<0.001	<0.005	NA	0.002	NA	0.03	<0.002	NA	<0.01	<0.005
beryllium	<0.002	<0.005	NA	0.01	NA	<0.01	0.012	NA	<0.01	<0.005
cadmium	<0.002	<0.005	NA	0.01	NA	-<0.02	<0.01	NA	<0.02	<0.005
chromium	<0.004	<0.02	NA	<0.04	NA	<0.05	<0.04	NA	<0.05	<0.02
copper	0.006	<0.01	NA	NA	NA	NA	NA	NA	NA	<0.01
lead	<0.004	<0.06	NA	0.001	NA	<0.01	0.005	NA	<0.01	<0.06
mercury	<0.0004	<0.0003	NA	<0.0002	NA	<0.005	<0.0002	NA	<0.0005	<0.0003
nickel	0.005	<0.01	NA	<0.04	NA	<0.05	<0.04	NA	<0.05	<0.01
selenium	<0.001	<0.005	NA	0.005	NA	<0.01	<0.002	NA	<0.01	0.005
silver	0.005	<0.007	NA	<0.001	NA	<0.05	0.002	NA	<0.05	<0.007
thallium	0.014	<0.005	NA	0.002	NA	<0.2	0.003	NA	<0.2	<0.005
zinc	0.078	<0.01	NA	0.015	NA	<0.03	0.010	NA	<0.03	0.015
Miscellaneous Parameters										
pH (units)	7.0	6.9	7.0	7.3	7.3	7.1	6.8	6.7	6.8	7.2
spec. conductance (umhos/cm)	1,660	2,500	1,500	1,150	1,400	1,300	1,200	1,150	1,500	825
temperature (deg./centigrade)	20	16	14	12	14	14	12	14	14	14
TOC	14	NA	NA	28	10	5	94	16	16	NA
total phenols	NA	0.057	<0.05	0.003	0.003	0.003	0.013	0.003	0.003	<0.05
TOX	NA	NA	NA	0.009	0.030	0.018	0.150	0.057	0.082	NA
total dissolved solids (TDS)	1,330	NA	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	320	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	232	NA	NA	NA	NA	NA	NA	NA
chloride	175	NA	111	NA	35	15	NA	10	150	NA
cyanide	NA	<0.025	<0.025	<0.005	NA	<0.005	0.021	NA	0.099	<0.025
iron	NA	NA	18.2	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	63.9	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	11.1	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	212	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	69	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, IL.

Well Number:	GM-8	GM-8	GM-9A	GM-9A	GM-9A	GM-9A	GM-9A	GM-9B	GM-9B	GM-9B
Date:	2/85	11/85	11/83	11/83*	2/84	2/84*	5/84	9/84	5/85	11/85
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	<0.07	NA	0.017	0.017	NA	NA	<0.5	0.049	<0.07	NA
arsenic	<0.01	NA	0.003	0.005	NA	NA	<0.01	<0.001	<0.01	NA
beryllium	<0.001	NA	0.013	<0.01	NA	NA	<0.01	<0.01	<0.001	NA
cadmium	<0.003	NA	0.010	<0.01	NA	NA	<0.02	7.46	<0.004	NA
chromium	<0.01	NA	<0.04	<0.04	NA	NA	<0.05	<0.04	<0.01	NA
copper	<0.02	NA	NA	NA	NA	NA	NA	0.05	<0.01	NA
lead	<0.06	NA	0.005	0.005	NA	NA	0.01	0.018	<0.07	NA
mercury	<0.0003	NA	<0.0002	<0.0002	NA	NA	<0.0005	<0.0002	<0.0002	NA
nickel	<0.04	NA	<0.04	<0.04	NA	NA	<0.05	0.026	<0.02	NA
selenium	<0.006	NA	0.004	0.003	NA	NA	<0.01	<0.001	<0.005	NA
silver	<0.008	NA	<0.001	<0.001	NA	NA	<0.05	<0.002	<0.009	NA
thallium	<0.005	NA	0.007	0.006	NA	NA	<0.2	0.015	<0.005	NA
zinc	0.06	NA	0.030	0.037	NA	NA	0.11	0.060	<0.01	NA
Miscellaneous Parameters										
pH (units)	7.3	7.2	7.0	NA	7.1	7.1	7.3	6.9	7.0	6.9
spec. conductance (umhos/cm)	950	1,250	8,500	8,500	4,000	4,000	3,500	1,450	980	900
temperature (deg./centigrade)	11	12	11	NA	14	14	16	18	16	15
	NA	NA	112	130	25	24	27	50	NA	NA
total phenols	0.058	<0.05	0.190	NA	0.003	0.054	0.003	NA	<0.050	<0.050
TOX	NA	NA	0.750	NA	0.059	0.055	0.360	NA	NA	NA
total dissolved solids (TDS)	NA	NA	NA	NA	NA	NA	NA	956	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	NA	NA	NA	NA	495	480	350	115	NA	NA
cyanide	<0.025	<0.025	0.016	NA	NA	NA	<0.005	NA	<0.025	<0.025
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, Il.

Well Number:	GM-9C	GM-9C	GM-9C	GM-10A	GM-10A	GM-10A	GM-10B	GM-10B	GM-10C	GM-10C
Date:	9/84	5/85	11/85	11/83	2/84	5/84	2/85	5/85	2/85	5/85
USEPA Priority Pollutant Metals (concentrations are in ug/L, except where noted)										
antimony	0.34	<0.07	NA	0.011	NA	<0.5	<0.07	<0.07	<0.08	<0.07
arsenic	<0.001	<0.01	NA	<0.002	NA	<0.01	0.016	0.036	<0.01	<0.01
beryllium	<0.01	<0.001	NA	<0.01	NA	<0.01	<0.001	<0.001	<0.001	<0.001
cadmium	4.82	<0.004	NA	<0.01	NA	<0.02	<0.003	<0.004	<0.005	<0.004
chromium	0.046	<0.01	NA	<0.04	NA	<0.05	<0.01	<0.01	<0.02	<0.01
copper	0.01	<0.01	NA	NA	NA	NA	<0.02	<0.01	<0.02	<0.01
lead	0.016	<0.07	NA	0.004	NA	<0.01	<0.06	<0.07	<0.1	<0.07
mercury	0.0004	<0.0002	NA	<0.0002	NA	<0.0005	<0.0003	<0.0002	<0.0003	<0.0002
nickel	0.068	<0.02	NA	<0.04	NA	<0.05	<0.04	<0.02	<0.03	<0.02
selenium	<0.001	<0.005	NA	0.003	NA	<0.01	<0.006	<0.005	<0.006	<0.005
silver	0.002	<0.009	NA	0.006	NA	<0.05	<0.008	<0.009	<0.01	<0.009
thallium	0.012	<0.005	NA	0.004	NA	<0.2	<0.005	<0.005	<0.005	<0.005
zinc	0.065	<0.01	NA	0.049	NA	0.09	<0.05	<0.01	<0.03	<0.01
Miscellaneous Parameters										
pH (units)	7.0	7.2	7.7	7.0	7.1	7.3	7.8	7.4	7.4	7.0
spec. conductance (umhos/cm)	1,800	900	2,300	2100	2,000	1,700	2,000	1,600	1,000	990
temperature (deg./centigrade)	18	16	17	11	15	15	10	16	11	16
TOC	8.8	NA	NA	72	9	10	NA	NA	NA	NA
total phenols	NA	<0.050	<0.050	<0.002	<0.002	<0.002	0.083	<0.05	<0.050	<0.05
TOX	NA	NA	NA	0.013	0.028	0.014	NA	NA	NA	NA
total dissolved solids (TDS)	1,080	NA	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	236	NA	NA	NA	15	36	NA	NA	NA	NA
cyanide	NA	<0.025	<0.025	<0.005	NA	<0.005	<0.025	<0.025	<0.025	<0.025
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, W6 Kruamrich Plant, Sauget, Il.

Well Number:	GM-11	GM-11	GM-11	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A
Date:	11/83	2/84	5/84	11/83	2/84	2/84*	5/84	5/84*	11/84	11/84*
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	0.012	NA	<0.5	0.131	NA	NA	<0.5	<0.5	<0.07	<0.07
arsenic	<0.002	NA	<0.01	0.024	NA	NA	<0.01	<0.01	0.022	0.017
beryllium	<0.01	NA	<0.01	<0.01	NA	NA	<0.01	<0.01	<0.005	<0.005
cadaium	<0.01	NA	<0.02	0.03	NA	NA	<0.02	0.02	<0.005	<0.005
chromium	<0.04	NA	<0.05	<0.04	NA	NA	<0.05	<0.05	<0.008	<0.008
copper	NA	NA	NA	NA	NA	NA	NA	NA	<0.008	<0.008
lead	0.002	NA	<0.01	0.015	NA	NA	<0.01	<0.01	<0.06	<0.06
mercury	<0.0002	NA	<0.0005	<0.0002	NA	NA	<0.0005	<0.0005	<0.0003	<0.0003
nickel	<0.04	NA	<0.05	0.13	NA	NA	<0.05	<0.05	<0.01	<0.01
selenium	0.003	NA	<0.01	0.034	NA	NA	<0.01	<0.01	<0.01	<0.005
silver	<0.001	NA	<0.05	<0.001	NA	NA	<0.05	<0.05	<0.008	<0.008
thallium	0.003	NA	<0.2	0.023	NA	NA	<0.2	<0.2	<0.01	<0.005
zinc	0.019	NA	0.09	0.037	NA	NA	0.03	0.03	<0.008	<0.008
Miscellaneous Parameters										
pH (units)	7.3	7.2	7.3	7.9	7.8	7.8	7.8	7.8	6.9	6.9
spec. conductance (umhos/cm)	1,100	1,100	1,150	30,000	7,000	7,000	5,500	5,500	4,500	4,500
perature (deg./centigrade)	12	13	14	12	16	16	16	16	14	14
	36	18	10	118	29	30	25	22	NA	NA
total phenols	0.002	<0.002	<0.002	0.68	0.86	0.11	0.86	0.054	<0.05	0.079
TOX	0.022	0.033	0.015	4.7	5.2	5.1	4.7	5.5	NA	NA
total dissolved solids (TDS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	NA	40	22	5,198	1,055	1,050	835	902	NA	NA
cyanide	<0.005	NA	<0.005	0.013	NA	NA	<0.005	<0.005	<0.025	<0.025
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, Il.

Well Number:	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12B	GM-12B
Date:	2/85	2/85*	5/85	5/85*	11/85	11/85*	2/86	2/86*	9/84	11/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	<0.1	<0.1	<0.07	<0.07	NA	NA	<0.050	<0.050	0.024	<0.07
arsenic	0.032	0.041	0.035	0.033	NA	NA	0.04	0.02	<0.001	<0.005
beryllium	<0.001	<0.001	<0.001	<0.001	NA	NA	<0.001	<0.001	<0.01	<0.005
cadmium	<0.004	<0.004	<0.004	<0.004	NA	NA	<0.003	<0.003	4.46	<0.005
chromium	<0.02	<0.02	<0.01	<0.01	NA	NA	<0.010	<0.010	0.089	<0.008
copper	<0.01	<0.01	<0.01	<0.01	NA	NA	<0.009	<0.009	0.05	<0.008
lead	<0.07	<0.07	<0.07	<0.07	NA	NA	<0.06	<0.06	0.012	<0.06
mercury	<0.0003	<0.0003	<0.0002	<0.0002	NA	NA	<0.0002	<0.0002	<0.0004	<0.0003
nickel	<0.01	<0.01	<0.02	<0.02	NA	NA	<0.01	<0.01	0.084	<0.01
selenium	<0.006	<0.006	<0.005	<0.005	NA	NA	<0.01	<0.01	<0.001	<0.005
silver	<0.008	<0.008	<0.009	<0.009	NA	NA	<0.01	<0.01	0.001	<0.008
thallium	<0.005	<0.005	<0.01	<0.01	NA	NA	<0.005	<0.30	0.013	<0.005
zinc	0.02	0.02	<0.01	<0.01	NA	NA	0.03	0.04	0.036	<0.008
Miscellaneous Parameters										
pH (units)	6.8	6.8	7.8	7.8	6.9	6.9	7.0	7.0	7.2	7.0
spec. conductance (umhos/cm)	3,000	3,000	1,050	1,050	9,800	9,800	3,125	3,125	1,400	1,400
temperature (deg./centigrade)	12	12	16	16	16	16	12	12	18	13
TOC	NA	NA	NA	NA	NA	NA	NA	NA	14	NA
total phenols	<0.05	0.062	0.069	0.055	0.251	0.189	0.0561	0.0637	NA	<0.05
TOX	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
total dissolved solids (TDS)	NA	NA	NA	NA	NA	NA	NA	NA	816	NA
bicarbonate, as CACO3	NA	NA	NA	NA	1090	850	NA	NA	NA	NA
calcium	NA	NA	NA	NA	524	514	NA	NA	NA	NA
chloride	NA	NA	NA	NA	1,610	1,070	NA	NA	109	NA
cyanide	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	NA	<0.025
iron	NA	NA	NA	NA	39.6	44.8	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	129	127	NA	NA	NA	NA
potassium	NA	NA	NA	NA	11.4	11.2	NA	NA	NA	NA
sodium	NA	NA	NA	NA	1,250	1,230	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	930	910	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, W6 Krumrich Plant, Sauget, Il.

Well Number:	GM-12B	GM-12C	GM-12C	GM-12C	GM-12C	GM-13	GM-13	GM-13	GM-14	GM-15
Date:	11/85	2/85	2/85*	5/85	5/85*	9/84	11/85	2/86	9/84	9/84
USEPA Priority Pollutant Metals (concentrations are in ug/L, except where noted)										
antimony	NA	<0.1	<0.1	<0.07	<0.07	0.042	NA	<0.05	0.187	0.021
arsenic	NA	<0.01	<0.01	<0.01	<0.01	0.003	NA	0.04	<0.001	<0.001
beryllium	NA	<0.001	<0.001	<0.001	<0.001	<0.01	NA	<0.001	<0.010	<0.01
cadmium	NA	<0.004	<0.004	<0.004	<0.004	16.1	NA	<0.003	25.8	9.16
chromium	NA	<0.02	<0.02	<0.01	<0.01	<0.04	NA	<0.01	<0.04	<0.04
copper	NA	<0.01	<0.01	<0.01	<0.01	0.02	NA	<0.009	0.03	0.02
lead	NA	<0.01	<0.07	<0.07	<0.07	0.021	NA	<0.06	0.10	0.018
mercury	NA	<0.0003	<0.0003	<0.0002	<0.0002	<0.0002	NA	<0.0002	<0.0004	<0.0002
nickel	NA	<0.01	<0.01	<0.02	<0.02	0.038	NA	0.03	0.111	0.038
selenium	NA	<0.006	<0.006	0.005	<0.005	<0.001	NA	<0.005	<0.001	<0.001
silver	NA	<0.008	<0.009	<0.009	<0.009	<0.002	NA	<0.01	<0.007	0.002
thallium	NA	<0.005	<0.005	<0.02	<0.010	0.014	NA	<0.005	0.04	0.011
zinc	NA	<0.006	<0.006	0.02	0.020	0.073	NA	0.04	0.221	0.018
Miscellaneous Parameters										
pH (units)	6.6	8.8	9.0	7.2	7.2	6.5	7.0	7.2	6.9	7.8
spec. conductance (umhos/cm)	2,800	2,500	2,500	780	780	2,500	1,100	1,170	3,400	2,400
perature (deg./centigrade)	14	15	15	16	16	22	15	18	20	20
	NA	NA	NA	NA	NA	101	NA	NA	328	16
total phenols	0.0744	0.18	0.23	<0.05	<0.05	NA	16.1	1.330	NA	NA
TOX	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
total dissolved solids (TDS)	NA	NA	NA	NA	NA	1,648	NA	NA	4,938	1,024
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	710	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	69	NA	NA	NA
chloride	NA	NA	NA	NA	NA	470	46.3	NA	54	395
cyanide	<0.025	<0.025	0.034	<0.025	<0.025	NA	<0.025	<0.025	NA	NA
iron	NA	NA	NA	NA	NA	NA	6.8	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	10	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	174	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	71.5	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	16	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, Il.

Well Number:	GM-16A	GM-16A	GM-16A	GM-16B	GM-16B	GM-16B	GM-16B	GM-17A	GM-17A	GM-17A
Date:	9/84	5/85	11/85	9/84	5/85	11/85	2/86	9/84	11/84	11/85
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	0.056	<0.09	NA	0.018	<0.09	NA	NA	0.015	<0.08	NA
arsenic	<0.001	<0.01	NA	<0.001	<0.01	NA	NA	0.002	<0.01	NA
beryllium	<0.002	<0.002	NA	<0.002	<0.002	NA	NA	<0.002	<0.005	NA
cadmium	<0.002	<0.004	NA	<0.002	<0.004	NA	NA	<0.002	<0.005	NA
chromium	<0.004	<0.02	NA	<0.004	<0.02	NA	NA	<0.004	<0.02	NA
copper	0.008	<0.01	NA	<0.004	<0.01	NA	NA	<0.004	<0.01	NA
lead	<0.004	<0.1	NA	<0.004	<0.1	NA	NA	<0.004	<0.06	NA
mercury	0.00023	<0.0003	NA	<0.0004	<0.0003	NA	NA	<0.0002	<0.0003	NA
nickel	0.013	<0.03	NA	0.004	<0.03	NA	NA	0.023	<0.01	NA
selenium	<0.001	<0.005	NA	<0.001	<0.005	NA	NA	<0.001	<0.005	NA
silver	0.004	<0.01	NA	0.002	<0.01	NA	NA	<0.01	<0.007	NA
thallium	0.019	<0.005	NA	0.008	<0.005	NA	NA	0.17	<0.005	NA
zinc	0.04	0.02	NA	0.057	0.06	NA	NA	0.091	<0.01	NA
Miscellaneous Parameters										
pH (units)	6.9	6.9	6.9	7.8	7.2	7.0	7.1	6.4	6.6	6.7
spec. conductance (umhos/cm)	1,430	580	2,200	800	750	2,500	830	1,150	1,650	1,500
temperature (deg./centigrade)	20	16	13	20	16	13	13.5	20	16	16
TOC	5	NA	NA	10	NA	NA	NA	15	NA	NA
total phenols	NA	<0.050	<0.050	NA	0.057	0.0534	NA	NA	0.2	0.157
TOX	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
total dissolved solids (TDS)	914	NA	NA	354	NA	NA	NA	880	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	145	NA	NA	40	NA	NA	NA	120	NA	NA
cyanide	NA	<0.025	<0.025	NA	<0.025	<0.025	NA	NA	<0.025	<0.025
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, W6 Krumwich Plant, Sauget, Il.

Well Number:	GM-17B	GM-17B	GM-17B	GM-17C	GM-17C	GM-17C	GM-18A	GM-18A	GM-18A	GM-18B
Date:	9/84	11/84	11/85	9/84	11/84	11/85	9/84	5/85	11/85	9/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	0.044	<0.08	NA	0.060	<0.08	NA	0.017	<0.09	NA	0.035
arsenic	0.001	<0.01	NA	<0.001	<0.005	NA	<0.001	<0.01	NA	0.001
beryllium	<0.002	<0.005	NA	<0.002	<0.005	NA	<0.002	<0.002	NA	<0.002
cadmium	<0.002	<0.005	NA	<0.002	<0.005	NA	<0.002	<0.004	NA	0.003
chromium	<0.004	<0.02	NA	<0.004	<0.02	NA	<0.004	<0.02	NA	<0.004
copper	<0.004	<0.01	NA	<0.004	<0.01	NA	<0.004	<0.01	NA	<0.004
lead	<0.004	<0.06	NA	<0.004	<0.06	NA	<0.004	<0.1	NA	<0.004
mercury	<0.0002	<0.0006	NA	<0.0002	<0.0003	NA	<0.0004	<0.0003	NA	<0.0002
nickel	0.008	<0.01	NA	0.009	<0.01	NA	<0.004	<0.03	NA	0.004
selenium	<0.001	<0.005	NA	<0.001	<0.005	NA	0.002	<0.005	NA	<0.001
silver	<0.01	<0.007	NA	<0.01	<0.007	NA	<0.010	<0.01	NA	<0.010
thallium	0.327	<0.005	NA	0.533	<0.005	NA	0.195	<0.005	NA	0.321
zinc	0.053	<0.01	NA	0.047	<0.01	NA	0.067	<0.01	NA	0.075
Miscellaneous Parameters										
pH (units)	6.6	6.9	7.4	6.3	6.8	7.3	6.5	6.6	7.0	6.4
spec. conductance (umhos/cm)	3,000	4,300	4,000	4,500	6,300	5,500	800	600	1,150	2,000
perature (deg./centigrade)	20	18	16	20	18	16	18	16	12	18
	56	NA	NA	17	NA	NA	4	NA	NA	4
total phenols	NA	0.82	1.69	NA	0.05	<0.05	NA	0.16	<0.05	NA
TOX	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
total dissolved solids (TDS)	2,516	NA	NA	3,384	NA	NA	663	NA	NA	1,644
bicarbonate, as CACO3	NA	NA	1,400	NA	NA	930	NA	NA	NA	NA
calcium	NA	NA	136	NA	NA	198	NA	NA	NA	NA
chloride	425	NA	633	1,265	NA	856	15	NA	NA	70
cyanide	NA	<0.025	<0.025	NA	<0.025	<0.025	NA	<0.025	<0.025	NA
iron	NA	NA	1	NA	NA	3.6	NA	NA	NA	NA
magnesium	NA	NA	28.5	NA	NA	64	NA	NA	NA	NA
potassium	NA	NA	16.4	NA	NA	406	NA	NA	NA	NA
sodium	NA	NA	825	NA	NA	785	NA	NA	NA	NA
sulfate, as SO4	NA	NA	21	NA	NA	700	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, Il.

Well Number:	GM-18B	GM-18B	GM-25A	GM-25A	GM-25B	GM-25B	GM-25B	GM-27B	GM-27B	GM-27B
Date:	5/85	11/85	9/84	11/84	9/84	11/84	11/85	9/84	11/85	2/86
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	<0.09	NA	0.011	<0.08	0.011	<0.07	NA	0.012	NA	<0.06
arsenic	<0.01	NA	<0.001	<0.005	<0.001	<0.005	NA	<0.001	NA	<0.01
beryllium	<0.002	NA	<0.002	<0.005	<0.002	<0.005	NA	<0.002	NA	<0.0009
cadmium	<0.004	NA	<0.002	<0.005	<0.002	<0.005	NA	<0.002	NA	<0.003
chromium	<0.02	NA	0.004	<0.02	<0.004	<0.008	NA	<0.004	NA	<0.008
copper	<0.01	NA	0.006	<0.01	<0.004	<0.008	NA	<0.004	NA	<0.006
lead	<0.1	NA	<0.004	<0.06	<0.004	<0.06	NA	<0.004	NA	<0.06
mercury	<0.0003	NA	<0.0002	<0.0003	<0.0002	<0.0003	NA	<0.0002	NA	<0.0002
nickel	<0.03	NA	<0.004	<0.01	<0.004	<0.01	NA	<0.004	NA	<0.009
selenium	<0.005	NA	0.002	<0.005	<0.001	<0.005	NA	<0.001	NA	<0.005
silver	<0.01	NA	<0.01	<0.007	<0.010	<0.008	NA	<0.01	NA	<0.010
thallium	<0.005	NA	0.127	<0.005	0.172	<0.01	NA	0.051	NA	<0.005
zinc	0.02	NA	0.07	<0.01	0.059	<0.008	NA	0.032	NA	0.02
Miscellaneous Parameters										
pH (units)	6.8	6.9	7.0	6.8	7.4	7.0	7.0	7.1	8.4	NA
spec. conductance (umhos/cm)	1,075	2,500	550	1,600	800	1,120	1,450	420	550	410
temperature (deg./centigrade)	16	15	19	14	18	13	12	18	12	12
TOC	NA	NA	3	NA	7	NA	NA	10	10.44	NA
total phenols	0.056	0.0506	NA	<0.05	NA	<0.05	<0.05	NA	<0.05	0.0536
TOX	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
total dissolved solids (TDS)	NA	NA	332	NA	628	NA	NA	294	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	NA	NA	10	NA	35	NA	NA	35	NA	NA
cyanide	<0.025	<0.025	NA	<0.025	NA	<0.025	<0.025	NA	<0.025	<0.025
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, IL.

Well Number:	GM-27C	GM-27C	GM-27C	GM-28B	GM-28B	GM-28B	GM-28C	GM-28C	GM-29C	GM-29
Date:	9/84	11/85	2/86	9/84	11/85	2/86	9/84	11/85	2/86	9/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	0.011	NA	<0.06	0.015	NA	<0.06	0.039	NA	<0.06	0.183
arsenic	<0.001	NA	<0.01	<0.001	NA	<0.01	0.002	NA	<0.01	0.002
beryllium	<0.002	NA	<0.0009	<0.002	NA	<0.0009	<0.002	NA	<0.0009	<0.002
cadmium	<0.002	NA	<0.003	<0.002	NA	<0.003	0.003	NA	<0.003	0.014
chromium	<0.004	NA	<0.008	<0.004	NA	<0.008	<0.004	NA	<0.008	<0.004
copper	<0.004	NA	<0.006	<0.004	NA	<0.006	<0.004	NA	<0.006	0.016
lead	<0.004	NA	<0.06	<0.004	NA	<0.06	<0.004	NA	<0.06	0.007
mercury	<0.0002	NA	<0.0002	<0.0002	NA	<0.0002	<0.0002	NA	<0.0002	<0.0004
nickel	<0.004	NA	0.01	<0.004	NA	0.01	0.007	NA	<0.009	0.006
selenium	<0.001	NA	<0.005	<0.001	NA	<0.005	<0.001	NA	<0.005	<0.001
silver	<0.01	NA	<0.01	<0.01	NA	<0.01	<0.01	NA	<0.01	0.011
thallium	0.102	NA	<0.005	0.106	NA	<0.005	0.279	NA	<0.005	0.027
zinc	0.07	NA	0.058	0.038	NA	0.04	0.043	NA	0.16	0.079
Miscellaneous Parameters										
pH (units)	7.1	6.8	7.0	7.2	6.7	NA	6.9	7.3	NA	6.8
spec. conductance (umhos/cm)	700	1,600	1,000	1,100	2,500	1,230	2,500	2,500	1,290	2,300
rature (deg./centigrade)	20	12	12	19	NA	13	19	NA	10	20	
	18	113.4#	NA	114	182#	NA	252	189#	NA	16
total phenols	NA	0.346	0.152	NA	5.5	3.76	NA	1.036	1.980	NA
TOX	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
total dissolved solids (TDS)	482	NA	NA	832	NA	NA	2,250	NA	NA	4,236
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	820	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	228	NA	NA
chloride	55	NA	NA	175	NA	NA	705	394	NA	1,105
cyanide	NA	NA	<0.025	NA	<0.025	<0.025	NA	<0.025	<0.025	NA
iron	NA	NA	NA	NA	NA	NA	NA	85.2	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	66.6	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	11.9	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	232	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	16	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, W6 Krummrich Plant, Sauget, Il.

Well Number:	GM-29	GM-30	GM-30	GM-30	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A	GM-31A
Date:	11/85	9/84	11/85	2/86	2/85	5/85	11/85	11/85*	2/86	2/86*
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	NA	0.211	NA	<0.06	<0.08	<0.09	NA	NA	NA	NA
arsenic	NA	0.001	NA	<0.01	<0.01	<0.01	NA	NA	NA	NA
beryllium	NA	<0.01	NA	<0.0009	<0.001	<0.002	NA	NA	NA	NA
cadmium	NA	<0.01	NA	0.005	<0.005	<0.004	NA	NA	NA	NA
chromium	NA	<0.04	NA	<0.008	<0.02	<0.02	NA	NA	NA	NA
copper	NA	0.04	NA	<0.006	<0.02	<0.01	NA	NA	NA	NA
lead	NA	0.17	NA	<0.06	<0.1	<0.1	NA	NA	NA	NA
mercury	NA	<0.00095	NA	0.0002	<0.0003	<0.0003	NA	NA	NA	NA
nickel	NA	0.584	NA	1.4	<0.03	<0.03	NA	NA	NA	NA
selenium	NA	<0.001	NA	0.06	<0.006	<0.005	NA	NA	NA	NA
silver	NA	0.004	NA	<0.01	<0.01	<0.01	NA	NA	NA	NA
thallium	NA	0.354	NA	<0.05	<0.005	<0.005	NA	NA	NA	NA
zinc	NA	0.558	NA	0.420	<0.03	0.1	NA	NA	NA	NA
Miscellaneous Parameters										
pH (units)	6.9	6.5	6.6	NA	7.4	6.4	7.0	7.0	7.3	7.3
spec. conductance (umhos/cm)	1,400	5,000	10,500	4,000	1,100	1,420	1,600	1,600	925	925
temperature (deg./centigrade)	15	24	14	11	11	16	16	16	11	11
TOC	NA	14	NA	NA	NA	NA	NA	NA	NA	NA
total phenols	0.0629	NA	0.0945	<0.05	89	19	10.6	10.5	NA	NA
TOX	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
total dissolved solids (TDS)	NA	10,422	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	NA	4,200	NA	NA	NA	NA	NA	NA	NA	NA
cyanide	<0.025	NA	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, Il.

Well Number:	GM-31B	GM-31B	GM-31B	GM-31B	GM-31C	GM-31C	GM-31C	GM-31C	B-21B	B-21B
Date:	2/85	5/85	11/85	11/85*	2/85	5/85	11/85	11/85*	1/84	2/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	<0.07	<0.09	NA	NA	<0.07	<0.09	NA	NA	NA	NA
arsenic	<0.01	<0.01	NA	NA	<0.01	<0.01	NA	NA	NA	NA
beryllium	<0.001	<0.002	NA	NA	<0.001	<0.002	NA	NA	NA	NA
cadmium	<0.003	<0.004	NA	NA	<0.003	<0.004	NA	NA	NA	NA
chromium	<0.01	<0.02	NA	NA	<0.01	<0.02	NA	NA	NA	NA
copper	<0.02	<0.01	NA	NA	<0.02	<0.01	NA	NA	NA	NA
lead	<0.06	<0.1	NA	NA	<0.06	<0.1	NA	NA	NA	NA
mercury	<0.0003	<0.0003	NA	NA	<0.0003	<0.0003	NA	NA	NA	NA
nickel	<0.04	<0.03	NA	NA	<0.04	<0.03	NA	NA	NA	NA
selenium	<0.006	<0.005	NA	NA	<0.006	<0.005	NA	NA	NA	NA
silver	<0.008	<0.01	NA	NA	<0.008	<0.01	NA	NA	NA	NA
thallium	<0.005	<0.005	NA	NA	<0.005	<0.005	NA	NA	NA	NA
zinc	0.06	0.04	NA	NA	<0.05	0.02	NA	NA	NA	NA
Miscellaneous Parameters										
pH (units)	6.4	7.3	7.0	7.0	7.2	7.1	6.8	6.8	6.0	6.6
spec. conductance (umhos/cm)	1,450	2,000	3,000	3,000	1,400	1,850	3,750	3,750	4,100	1,650
temperature (deg./centigrade)	11	16	12	12	11	16	12	12	14.5	16.5
	NA	NA	NA	NA	NA	NA	NA	NA	630	750
total phenols	<0.05	<0.05	<0.05	0.0591	0.069	<0.05	<0.05	0.077	530#	630
TOX	NA	NA	NA	NA	NA	NA	NA	NA	260	490
total dissolved solids (TDS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cyanide	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	NA	NA
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, Il.

Well Number:	B-21B	B-21B	B-22A	B-22A	B-22A	B-22A	B-22B	B-22B	B-22B	B-22B
Date:	3/84	5/84	1/84	2/84	3/84	5/84	1/84	2/84	3/84	5/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
arsenic	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
beryllium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cadmium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
copper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
lead	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
mercury	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
nickel	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
selenium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
silver	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
thallium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous Parameters										
pH (units)	6.6	7.0	6.5	6.7	6.5	6.5	6.0	6.6	6.4	6.5
spec. conductance (umhos/cm)	3,150	3,350	2,750	1,300	3,200	4,200	2,050	1,000	1,950	1,850
temperature (deg./centigrade)	15.5	16	13.0	14	15	14.0	16.0	17	15	16.5
TOC	1,600	1,600	NA	130	390	300	230	180	1,000	420
total phenols	380	380	21	35	28.5#	59	150	100	210	47#
TOX	440	540	330	92#	70	130	120	5.3	38	80
total dissolved solids (TDS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cyanide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, W6 Krumrich Plant, Sauget, Il.

Well Number:	B-23B	B-23B	B-23B	B-23B	B-24A	B-24A	B-24A	B-24A	B-24A	B-24B
Date:	1/84	2/84	3/84	5/84	1/84	2/84	3/84	5/84	2/86	1/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	NA	NA	NA	NA	NA	NA	NA	NA	<0.06	NA
arsenic	NA	NA	NA	NA	NA	NA	NA	NA	0.01	NA
beryllium	NA	NA	NA	NA	NA	NA	NA	NA	0.002	NA
cadmium	NA	NA	NA	NA	NA	NA	NA	NA	<0.003	NA
chromium	NA	NA	NA	NA	NA	NA	NA	NA	0.11	NA
copper	NA	NA	NA	NA	NA	NA	NA	NA	<0.006	NA
lead	NA	NA	NA	NA	NA	NA	NA	NA	<0.06	NA
mercury	NA	NA	NA	NA	NA	NA	NA	NA	<0.0002	NA
nickel	NA	NA	NA	NA	NA	NA	NA	NA	0.05	NA
selenium	NA	NA	NA	NA	NA	NA	NA	NA	0.01	NA
silver	NA	NA	NA	NA	NA	NA	NA	NA	<0.01	NA
thallium	NA	NA	NA	NA	NA	NA	NA	NA	<0.1	NA
zinc	NA	NA	NA	NA	NA	NA	NA	NA	0.14	NA
Miscellaneous Parameters										
pH (units)	7.4	6.4	6.5	6.5	6.0	7.2	6.4	7.0	NA	6.0
spec. conductance (umhos/cm)	2,250	1,550	3,950	3,950	9,750	1,700	5,500	11,500	2,750	3,050
temperature (deg./centigrade)	NA	15.0	15	14.0	7	16.5	10	16	11	12.0
[illegible]	640	1,300	1,100	2,200	920	1,300	3,700	3,600	NA	330
total phenols	850	1,100#	1,000	900#	1,200	1,360	1,500	1,400	520	230
TOX	260	460	500	410	1,500	800	840	980	NA	310
total dissolved solids (TDS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cyanide	NA	NA	NA	NA	NA	NA	NA	NA	0.0638	NA
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, W6 Krumarich Plant, Sauget, Il.

Well Number:	B-24B	B-24B	B-24B	B-24C	B-24C	B-24C	B-24C	B-25A	B-25A	B-25A
Date:	2/84	3/84	5/84	1/84	2/84	3/84	5/84	1/84	2/84	3/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
arsenic	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
beryllium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cadmium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
copper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
lead	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
mercury	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
nickel	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
selenium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
silver	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
thallium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous Parameters										
pH (units)	6.6	6.4	6.0	7.0	6.4	6.4	6.5	6.2	6.3	5.9
spec. conductance (umhos/cm)	330	1,500	1,600	3,630	570	2,700	1,900	9,000	1,250	11,500
temperature (deg./centigrade)	14	12.5	14.5	12.5	14.5	14	15.0	NA	14	13.5
TOC	360	380	600	520	360	1,000	670	1,000	540	4,900
total phenols	300	90	39#	390	360	800	68.5#	1,500	460	1,400
TOX	430	98	190	1,300	480	340	640	1,500	540	990
total dissolved solids (TDS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cyanide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, W6 Krummrich Plant, Sauget, Il.

Well Number:	B-25A	B-25A	B-25A	B-25B	9-25B	B-25B	B-25B	B-25B	B-25B	B-26A
Date:	5/84	6/84	11/85	1/84	2/84	3/84	5/84	6/84	11/85	1/84
USEPA Priority Pollutant Metals (concentrations are in ug/L, except where noted)										
antimony	NA	0.68	NA	NA	NA	NA	NA	<0.06	NA	NA
arsenic	NA	<0.001	NA	NA	NA	NA	NA	<0.001	NA	NA
beryllium	NA	<0.01	NA	NA	NA	NA	NA	0.002	NA	NA
cadmium	NA	0.074	NA	NA	NA	NA	NA	0.008	NA	NA
chromium	NA	0.06	NA	NA	NA	NA	NA	0.150	NA	NA
copper	NA	0.03	NA	NA	NA	NA	NA	0.009	NA	NA
lead	NA	0.027	NA	NA	NA	NA	NA	0.041	NA	NA
mercury	NA	0.0052	NA	NA	NA	NA	NA	0.0006	NA	NA
nickel	NA	2.21	NA	NA	NA	NA	NA	0.091	NA	NA
selenium	NA	<0.001	NA	NA	NA	NA	NA	<0.001	NA	NA
silver	NA	0.018	NA	NA	NA	NA	NA	0.004	NA	NA
thallium	NA	0.108	NA	NA	NA	NA	NA	<0.002	NA	NA
zinc	NA	3.21	NA	NA	NA	NA	NA	0.054	NA	NA
Miscellaneous Parameters										
pH (units)	6.5	6.4	6.0	6.3	6.3	6.3	6.5	7.0	6.7	6.0
spec. conductance (umhos/cm)	1,250	16,000	5,500	3,150	1,500	1,250	2,900	2,600	4,500	1,370
temperature (deg./centigrade)	14.0	14	13	10.0	14	13.5	14.5	14	13	NA
	3,400	NA	NA	370	590	980	820	NA	NA	4
total phenols	1,400	720	1,500	380	425#	280	160	95	410	0.46
TOX	780	NA	NA	380	430	310	180	NA	NA	14
total dissolved solids (TDS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cyanide	NA	<0.005	<0.025	NA	NA	NA	NA	<0.005	<0.025	NA
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, Il.

Well Number:	B-26A	B-26A	B-26A	B-26B	B-26B	B-26B	B-26B	B-27B	B-27B	B-27B
Date:	2/84	3/84	5/84	1/84	2/84	3/84	5/84	1/84	2/84	3/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
arsenic	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
beryllium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cadmium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
copper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
lead	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
mercury	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
nickel	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
selenium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
silver	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
thallium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous Parameters										
pH (units)	6.9	6.8	6.5	6.0	6.8	6.6	6.5	6.6	6.2	6.5
spec. conductance (umhos/cm)	440	1,000	1,600	2,030	490	1,100	1,050	3,000	1,200	2,000
temperature (deg./centigrade)	13	15	15.0	13.0	13.5	14.0	13.0	NA	13	14.5
TOC	19	76	13	2	41	310	220	270	330	430
total phenols	0.36#	0.34	0.155#	2.65#	2.85#	1.7	1.55#	190	200	130
TOX	1.8	0.35	1.8	20	8.4	0.85	2.0	190	140	74
total dissolved solids (TDS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cyanide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, IL.

Well Number:	B-27B	B-27B	B-27B	B-28A	B-28A	B-28A	B-28A	B-28A	B-28B	B-28B
Date:	5/84	9/84	9/84*	1/84	2/84	3/84	5/84	2/86	1/84	2/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	NA	0.056	NA	NA	NA	NA	NA	<0.06	NA	NA
arsenic	NA	<0.001	NA	NA	NA	NA	NA	0.11	NA	NA
beryllium	NA	<0.002	NA	NA	NA	NA	NA	<0.0009	NA	NA
cadmium	NA	0.003	NA	NA	NA	NA	NA	<0.003	NA	NA
chromium	NA	0.008	NA	NA	NA	NA	NA	<0.008	NA	NA
copper	NA	<0.004	NA	NA	NA	NA	NA	<0.006	NA	NA
lead	NA	<0.004	NA	NA	NA	NA	NA	<0.06	NA	NA
mercury	NA	<0.0002	NA	NA	NA	NA	NA	<0.0002	NA	NA
nickel	NA	0.054	NA	NA	NA	NA	NA	0.01	NA	NA
selenium	NA	<0.001	NA	NA	NA	NA	NA	0.01	NA	NA
silver	NA	<0.01	NA	NA	NA	NA	NA	<0.01	NA	NA
thallium	NA	0.125	NA	NA	NA	NA	NA	0.005	NA	NA
zinc	NA	0.185	NA	NA	NA	NA	NA	0.04	NA	NA
Miscellaneous Parameters										
pH (units)	6.5	6.3	6.3	7.0	7.1	6.9	6.5	NA	6.9	6.6
spec. conductance (umhos/cm)	3,100	2,200	2,200	1,950	380	1,750	2,500	1,300	1,450	390
perature (deg./centigrade)	14	20	20	12.0	13	17.0	15.0	13	12.5	13
	520	575	NA	NA	12	20	24	NA	80	30
total phenols	150	NA	NA	0.48	0.3	0.5	0.70#	<0.05	0.705#	0.41#
TOX	78	NA	NA	530	1.1	1.8	1.6	NA	6.7	1.1
total dissolved solids (TDS)	NA	3,658	485	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	NA	450	NA	NA	NA	NA	NA	NA	NA	NA
cyanide	NA	NA	NA	NA	NA	NA	NA	<0.025	NA	NA
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, Il.

Well Number:	B-28B	B-28B	B-29A	B-29A	B-29A	B-29A	B-29A	B-29A	B-29B	B-29B
Date:	3/84	5/84	1/84	2/84	3/84	5/84	6/84	11/85	1/84	2/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	NA	NA	NA	NA	NA	NA	2.6	NA	NA	NA
arsenic	NA	NA	NA	NA	NA	NA	0.001	NA	NA	NA
beryllium	NA	NA	NA	NA	NA	NA	<0.01	NA	NA	NA
cadmium	NA	NA	NA	NA	NA	NA	0.012	NA	NA	NA
chromium	NA	NA	NA	NA	NA	NA	<0.04	NA	NA	NA
copper	NA	NA	NA	NA	NA	NA	0.02	NA	NA	NA
lead	NA	NA	NA	NA	NA	NA	<0.1	NA	NA	NA
mercury	NA	NA	NA	NA	NA	NA	0.0069	NA	NA	NA
nickel	NA	NA	NA	NA	NA	NA	0.185	NA	NA	NA
selenium	NA	NA	NA	NA	NA	NA	<0.001	NA	NA	NA
silver	NA	NA	NA	NA	NA	NA	<0.02	NA	NA	NA
thallium	NA	NA	NA	NA	NA	NA	0.042	NA	NA	NA
zinc	NA	NA	NA	NA	NA	NA	0.069	NA	NA	NA
Miscellaneous Parameters										
pH (units)	6.6	6.5	6.8	6.5	6.7	6.5	6.8	6.9	6.9	6.9
spec. conductance (umhos/cm)	1,100	1,250	8,000	2,900	8,500	9,000	7,000	11,500	4,550	1,500
temperature (deg./centigrade)	15	14.0	12.0	9.0	15.0	13.0	14	13	12.5	14
TOC	30	30	5,400	7,000	380	7,900	NA	NA	4,400	3,100
total phenols	0.44#	0.375#	7,200	7,600	8,800	6,800	2.0	10000	5,100	3,400
TOX	0.85	1.5	390	645#	630#	580	NA	NA	1,200	410
total dissolved solids (TDS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cyanide	NA	NA	NA	NA	NA	NA	<0.005	<0.025	NA	NA
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, Il.

Well Number:	B-29B	B-29B	B-29B	B-29B	B-29B	B-29B	B-29B	B-30B	B-30B	B-30B
Date:	3/84	5/84	6/84	6/84*	6/84**	11/84	11/85	1/84	2/84	3/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	NA	NA	0.15	<0.14	<0.1	<0.07	NA	NA	NA	NA
arsenic	NA	NA	0.003	<0.001	<0.005	0.019	NA	NA	NA	NA
beryllium	NA	NA	<0.01	<0.010	<0.005	<0.005	NA	NA	NA	NA
cadmium	NA	NA	<0.01	<0.010	<0.007	<0.005	NA	NA	NA	NA
chromium	NA	NA	<0.04	<0.050	<0.020	<0.008	NA	NA	NA	NA
copper	NA	NA	<0.04	<0.040	<0.010	<0.008	NA	NA	NA	NA
lead	NA	NA	<0.01	<0.1	<0.1	<0.06	NA	NA	NA	NA
mercury	NA	NA	0.0064	<0.0051	<0.003	<0.002	NA	NA	NA	NA
nickel	NA	NA	0.076	0.079	0.04	0.031	NA	NA	NA	NA
selenium	NA	NA	<0.001	<0.001	0.009	<0.01	NA	NA	NA	NA
silver	NA	NA	<0.02	0.020	<0.01	<0.008	NA	NA	NA	NA
thallium	NA	NA	0.025	0.021	<0.005	<0.01	NA	NA	NA	NA
zinc	NA	NA	0.049	0.071	0.02	0.013	NA	NA	NA	NA
Miscellaneous Parameters										
pH (units)	6.7	6.5	6.8	6.8	6.8	7.2	6.9	6.8	6.7	6.6
spec. conductance (umhos/cm)	4,000	4,300	4,100	4,100	4100	5,000	5,400	8,000	1,850	2,200
t rature (deg./centigrade)	13.5	14.0	13.5	13.5	13.5	14	14	12.0	14.0	13.5
	2,200#	4,500	NA	NA	NA	NA	NA	1,400	680	730
total phenols	5,000	4,400	5,100	2,000	3040	3,300	10,000	1,800	630	420
TOX	300	400	NA	NA	NA	NA	NA	310	420	270
total dissolved solids (TDS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	1,300	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	53.5	NA	NA	NA
chloride	NA	NA	NA	NA	NA	NA	351	NA	NA	NA
cyanide	NA	NA	<0.005	<0.005	<0.025	<0.025	<0.025	NA	NA	NA
iron	NA	NA	NA	NA	NA	NA	0.6	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	20.5	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	11.5	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	1,150	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	730	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, W6 Krusarich Plant, Sauget, Il.

Well Number:	B-30B	B-30B	B-31B	B-31B	B-31B	B-31B	B-31C	B-31C	B-31C	B-31C
Date:	5/84	9/84	3/84	5/84	11/85	2/86	1/84	2/84	3/84	5/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	NA	0.072	NA	NA	<0.08	<0.06	NA	NA	NA	NA
arsenic	NA	0.006	NA	NA	<0.01	<0.01	NA	NA	NA	NA
beryllium	NA	<0.002	NA	NA	<0.0009	<0.0006	NA	NA	NA	NA
cadaium	NA	0.003	NA	NA	<0.002	<0.004	NA	NA	NA	NA
chromium	NA	<0.004	NA	NA	<0.02	0.040	NA	NA	NA	NA
copper	NA	0.004	NA	NA	<0.008	<0.020	NA	NA	NA	NA
lead	NA	0.005	NA	NA	<0.07	<0.060	NA	NA	NA	NA
mercury	NA	0.00091	NA	NA	<0.0003	<0.0003	NA	NA	NA	NA
nickel	NA	0.033	NA	NA	0.02	0.010	NA	NA	NA	NA
selenium	NA	<0.001	NA	NA	<0.005	<0.005	NA	NA	NA	NA
silver	NA	<0.01	NA	NA	<0.01	<0.030	NA	NA	NA	NA
thallium	NA	0.41	NA	NA	<0.005	<0.005	NA	NA	NA	NA
zinc	NA	0.12	NA	NA	0.04	0.05	NA	NA	NA	NA
Miscellaneous Parameters										
pH (units)	7.0	6.9	6.6	7.0	7.1	6.7	6.9	6.9	7.0	7.0
spec. conductance (umhos/cm)	4,950	3,500	950	1,050	2,500	1,375	1,050	350	900	975
temperature (deg./centigrade)	15.0	19	15.0	13.0	15	14	13	15	15	13.5
TOC	1,100	127	48	65	NA	NA	8	14	21	13
total phenols	410#	NA	0.31	0.08#	<0.05	<0.05	0.2	0.23	0.76	0.285#
TOX	240	NA	1.4	0.14	NA	NA	1.2	0.4	0.28	0.48
total dissolved solids (TDS)	NA	4,704	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	NA	990	NA	NA	NA	NA	NA	NA	NA	NA
cyanide	NA	NA	NA	NA	<0.025	<0.025	NA	NA	NA	NA
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, W6 Krumwich Plant, Sauget, Il.

Well Number:	B-31C	B-31C	B-31C	B-31C	B-101	B-102	GM-106	GM-106	GM-106	P-1
Date:	9/84	9/84*	11/85	2/86	9/84	9/84	11/85	2/86	2/86*	1/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	0.074	NA	<0.08	<0.06	0.019	0.078	<0.06	<0.050	<0.050	NA
arsenic	<0.001	NA	<0.01	<0.01	<0.001	<0.001	<0.01	<0.010	<0.010	NA
beryllium	<0.002	NA	<0.0009	<0.0009	<0.002	<0.002	<0.001	<0.001	<0.001	NA
cadaium	<0.002	NA	<0.002	<0.003	<0.002	<0.002	<0.004	<0.003	<0.003	NA
chromium	<0.004	NA	<0.02	<0.008	<0.004	<0.004	<0.02	<0.010	<0.010	NA
copper	<0.004	NA	<0.008	<0.006	<0.004	<0.004	<0.01	<0.009	<0.009	NA
lead	<0.004	NA	<0.07	<0.06	0.013	0.009	<0.05	<0.06	<0.060	NA
mercury	<0.0004	NA	<0.0003	<0.0002	<0.0004	<0.0004	<0.0002	<0.0002	<0.0002	NA
nickel	0.014	NA	<0.01	<0.009	<0.004	0.007	<0.02	<0.01	<0.010	NA
selenium	<0.001	NA	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	NA
silver	0.003	NA	<0.01	<0.010	<0.002	0.003	<0.008	<0.010	<0.010	NA
thallium	0.011	NA	<0.005	<0.005	0.018	0.02	<0.005	<0.010	<0.005	NA
zinc	0.039	NA	0.05	0.064	0.26	0.561	<0.02	0.030	0.050	NA
Miscellaneous Parameters										
pH (units)	7.0	7.0	7.4	7.0	6.9	6.6	7.5	7.6	7.6	7.0
spec. conductance (umhos/cm)	400	400	2,750	950	1,050	1,620	1,300	1,060	1,060	850
temperature (deg./centigrade)	20	20	15	11	21	19	12	14	14	NA
	8.1	NA	NA	NA	257	8	100#	NA	NA	9
total phenols	NA	NA	<0.05	<0.05	NA	NA	0.19	0.4	0.4	0.179
TOX	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9
total dissolved solids (TDS)	774	NA	NA	NA	876	1,276	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	29	NA	NA	NA	200	350	NA	NA	NA	NA
cyanide	NA	NA	<0.025	<0.025	NA	NA	0.24	0.172	0.179	NA
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krumarich Plant, Sauget, Il.

Well Number:	P-1	P-1	P-1
Date:	2/84	3/84	5/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)			
antimony	NA	NA	NA
arsenic	NA	NA	NA
beryllium	NA	NA	NA
cadmium	NA	NA	NA
chromium	NA	NA	NA
copper	NA	NA	NA
lead	NA	NA	NA
mercury	NA	NA	NA
nickel	NA	NA	NA
selenium	NA	NA	NA
silver	NA	NA	NA
thallium	NA	NA	NA
zinc	NA	NA	NA
Miscellaneous Parameters			
pH (units)	7.3	7.0	6.0
spec. conductance (umhos/cm)	NA	650	750
temperature (deg./centigrade)	12.0	14.0	13.5
TOC	26	15	32
total phenols	0.11	0.16#	0.22
TOX	2.0	0.35	1.1
total dissolved solids (TDS)	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA
calcium	NA	NA	NA
chloride	NA	NA	NA
cyanide	NA	NA	NA
iron	NA	NA	NA
magnesium	NA	NA	NA
potassium	NA	NA	NA
sodium	NA	NA	NA
sulfate, as SO4	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krumarich Plant, Sauget, Il.

Well Number:	P-1	P-2	P-2	P-2	P-2	P-2	P-2	P-3	P-3	P-3
Date:	9/84	1/84	2/84	3/84	5/84	6/84	11/85	1/84	2/84	3/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	0.065	NA	NA	NA	NA	0.004	NA	NA	NA	NA
arsenic	0.007	NA	NA	NA	NA	0.041	NA	NA	NA	NA
beryllium	<0.002	NA	NA	NA	NA	0.098	NA	NA	NA	NA
cadmium	<0.002	NA	NA	NA	NA	0.002	NA	NA	NA	NA
chromium	<0.004	NA	NA	NA	NA	0.005	NA	NA	NA	NA
copper	<0.004	NA	NA	NA	NA	0.007	NA	NA	NA	NA
lead	<0.004	NA	NA	NA	NA	<0.004	NA	NA	NA	NA
mercury	<0.0004	NA	NA	NA	NA	<0.0002	NA	NA	NA	NA
nickel	0.006	NA	NA	NA	NA	0.007	NA	NA	NA	NA
selenium	<0.001	NA	NA	NA	NA	<0.001	NA	NA	NA	NA
silver	<0.002	NA	NA	NA	NA	<0.01	NA	NA	NA	NA
thallium	0.013	NA	NA	NA	NA	<0.02	NA	NA	NA	NA
zinc	0.124	NA	NA	NA	NA	0.034	NA	NA	NA	NA
Miscellaneous Parameters										
pH (units)	7.3	7.1	7.2	7.0	6.0	6.9	7.0	6.5	6.7	6.6
sp conductance (umhos/cm)	650	600	340	550	675	600	2,300	950	340	950
te ature (deg./centigrade)	20	NA	12	15.0	13.0	15	14	12.5	12	15.0
TOC	13	22	25	9	110	NA	NA	50	72	76
total phenols	NA	0.29	0.168	0.34	0.17	0.036	0.0959	0.43	0.565	0.40
TOX	NA	0.88	1.5	0.39	1.6	NA	NA	2.6	8.9	0.25
total dissolved solids (TDS)	510	NA	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	29	NA	NA	NA	NA	NA	NA	NA	NA	NA
cyanide	NA	NA	NA	NA	NA	<0.005	<0.025	NA	NA	NA
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, Il.

Well Number:	P-3	P-4	P-4	P-4	P-4	P-5	P-5	P-5	P-5	P-6
Date:	5/84	1/84	2/84	3/84	5/84	1/84	2/84	3/84	5/84	1/84
USEPA Priority Pollutant Metals (concentrations are in ug/L, except where noted)										
antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
arsenic	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
beryllium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cadmium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chromium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
copper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
lead	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
mercury	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
nickel	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
selenium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
silver	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
thallium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous Parameters										
pH (units)	7.0	6.0	7.0	6.9	6.5	6.0	7.0	6.9	6.5	6.0
spec. conductance (umhos/cm)	1,300	1,250	390	600	900	875	350	350	390	850
temperature (deg./centigrade)	13.5	NA	13.5	13.0	13	11.5	13	14.0	13.0	NA
TOC	280	3	86	70	55	7	90	34	24	16
total phenols	0.48	1.08	0.855#	0.73	0.46	1.72#	1.44	0.56#	0.52#	0.225#
TOX	0.29	10	7.2	0.68	0.42	3.5	4.5	0.29	1.7	1.5
total dissolved solids (TDS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cyanide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, Il.

Well Number:	P-6	P-6	P-6	P-6	P-6	P-7	P-7	P-7	P-7	P-7
Date:	2/84	3/84	5/84	6/84	11/85	1/84	2/84	3/84	5/84	6/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antiamony	NA	NA	NA	<0.003	NA	NA	NA	NA	NA	0.004
arsenic	NA	NA	NA	0.074	NA	NA	NA	NA	NA	0.004
beryllium	NA	NA	NA	0.020	NA	NA	NA	NA	NA	0.005
cadaium	NA	NA	NA	0.003	NA	NA	NA	NA	NA	0.007
chromium	NA	NA	NA	0.008	NA	NA	NA	NA	NA	0.023
copper	NA	NA	NA	0.028	NA	NA	NA	NA	NA	<0.004
lead	NA	NA	NA	0.006	NA	NA	NA	NA	NA	0.014
mercury	NA	NA	NA	<0.0002	NA	NA	NA	NA	NA	0.0047
nickel	NA	NA	NA	0.009	NA	NA	NA	NA	NA	0.177
seleniua	NA	NA	NA	<0.001	NA	NA	NA	NA	NA	<0.001
silver	NA	NA	NA	<0.01	NA	NA	NA	NA	NA	<0.01
thallium	NA	NA	NA	<0.02	NA	NA	NA	NA	NA	<0.02
zinc	NA	NA	NA	0.043	NA	NA	NA	NA	NA	0.120
Miscellaneous Parameters										
pH (units)	7.3	6.9	6.5	6.9	7.1	6.0	6.3	7.4	7.0	6.6
...c. conductance (umhos/cm)	550	1,250	1,700	1,500	3,000	4,300	800	4,200	4,700	4,650
...erature (deg./centigrade)	14	13.0	15.0	14	15	11	14	13.0	15.0	14
TOC	20	38	24	NA	NA	330	360	260	690	NA
total phenols	0.555#	1.6	0.44	0.045	0.0791	260	260	360	270	130
TOX	2.6	1.35#	0.62	NA	NA	670	370	500	280	NA
total dissolved solids (TDS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calciua	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cyanide	NA	NA	NA	<0.005	<0.025	NA	NA	NA	NA	<0.005
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesiua	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassiua	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodiua	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krumarich Plant, Sauget, Il.

Well Number:	P-7	P-8	P-8	P-8	P-8	P-8	P-8	P-9	P-9	P-9
Date:	11/85	1/84	2/84	3/84	5/84	6/84	11/85	1/84	2/84	3/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	NA	NA	NA	NA	NA	<0.03	NA	NA	NA	NA
arsenic	NA	NA	NA	NA	NA	0.015	NA	NA	NA	NA
beryllium	NA	NA	NA	NA	NA	0.001	NA	NA	NA	NA
cadmium	NA	NA	NA	NA	NA	0.002	NA	NA	NA	NA
chromium	NA	NA	NA	NA	NA	<0.2	NA	NA	NA	NA
copper	NA	NA	NA	NA	NA	0.009	NA	NA	NA	NA
lead	NA	NA	NA	NA	NA	0.011	NA	NA	NA	NA
mercury	NA	NA	NA	NA	NA	<0.0002	NA	NA	NA	NA
nickel	NA	NA	NA	NA	NA	0.01	NA	NA	NA	NA
selenium	NA	NA	NA	NA	NA	<0.001	NA	NA	NA	NA
silver	NA	NA	NA	NA	NA	0.002	NA	NA	NA	NA
thallium	NA	NA	NA	NA	NA	<0.002	NA	NA	NA	NA
zinc	NA	NA	NA	NA	NA	0.05	NA	NA	NA	NA
Miscellaneous Parameters										
pH (units)	6.4	6.0	6.6	6.7	6.5	6.8	6.9	6.0	6.7	7.0
spec. conductance (umhos/cm)	4,500	3,250	490	1,500	900	800	2,300	2,340	NA	775
temperature (deg./centigrade)	14	11.0	13	12.0	14.5	13.5	14	11.5	13	12.5
TOC	NA	885	140	140	120	NA	NA	NA	150	91
total phenols	134.5	10.8	10.8	3.6	1.2	<0.005	0.34	1.46	1.04	0.88
TOX	NA	74	77	22	0.46	NA	NA	330	9.2	0.45
total dissolved solids (TDS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cyanide	0.035	NA	NA	NA	NA	<0.005	0.033	NA	NA	NA
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, W6 Krummrich Plant, Sauget, Il.

Well Number:	P-9	P-10	P-10	P-10	P-10	P-10	P-11	P-11	P-11	P-11
Date:	5/84	1/84	2/84	3/84	5/84	9/84	1/84	2/84	3/84	5/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	NA	NA	NA	NA	NA	0.018	NA	NA	NA	NA
arsenic	NA	NA	NA	NA	NA	0.004	NA	NA	NA	NA
beryllium	NA	NA	NA	NA	NA	<0.002	NA	NA	NA	NA
cadsium	NA	NA	NA	NA	NA	<0.002	NA	NA	NA	NA
chromium	NA	NA	NA	NA	NA	<0.004	NA	NA	NA	NA
copper	NA	NA	NA	NA	NA	<0.004	NA	NA	NA	NA
lead	NA	NA	NA	NA	NA	<0.004	NA	NA	NA	NA
mercury	NA	NA	NA	NA	NA	<0.0002	NA	NA	NA	NA
nickel	NA	NA	NA	NA	NA	<0.004	NA	NA	NA	NA
selenium	NA	NA	NA	NA	NA	<0.001	NA	NA	NA	NA
silver	NA	NA	NA	NA	NA	<0.01	NA	NA	NA	NA
thallium	NA	NA	NA	NA	NA	0.067	NA	NA	NA	NA
zinc	NA	NA	NA	NA	NA	0.066	NA	NA	NA	NA
Miscellaneous Parameters										
pH (units)	6.5	6.0	6.3	6.9	6.5	7.1	6.0	5.6	6.9	6.0
...c. conductance (uahos/cm)	900	1,450	440	700	750	850	1,550	550	900	650
...erature (deg./centigrade)	14.0	9.5	14	13.0	13.0	19.5	12.5	13.5	12.5	13.0
TOC	42	330	160	35	39	52	230	81	91	55
total phenols	0.46	5.8	2.0#	1.15#	0.61	NA	0.74#	1.00	0.50	0.31
TOX	0.33	7.4	9.5	6.1	0.39	NA	17	13	0.59	0.46
total dissolved solids (TDS)	NA	NA	NA	NA	NA	570	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	NA	NA	NA	NA	NA	110	NA	NA	NA	NA
cyanide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, Il.

Well Number:	P-11	P-12	P-12	P-12	P-12	P-12	P-13	P-13	P-13	P-13
Date:	9/84	1/84	2/84	3/84	5/84	9/84	1/84	2/84	3/84	5/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	0.022	NA	NA	NA	NA	0.017	NA	NA	NA	NA
arsenic	0.008	NA	NA	NA	NA	0.009	NA	NA	NA	NA
beryllium	<0.002	NA	NA	NA	NA	<0.002	NA	NA	NA	NA
cadmium	<0.002	NA	NA	NA	NA	<0.002	NA	NA	NA	NA
chromium	<0.004	NA	NA	NA	NA	<0.004	NA	NA	NA	NA
copper	<0.004	NA	NA	NA	NA	<0.004	NA	NA	NA	NA
lead	<0.004	NA	NA	NA	NA	<0.004	NA	NA	NA	NA
mercury	<0.0002	NA	NA	NA	NA	<0.0002	NA	NA	NA	NA
nickel	0.012	NA	NA	NA	NA	<0.004	NA	NA	NA	NA
selenium	<0.001	NA	NA	NA	NA	<0.001	NA	NA	NA	NA
silver	<0.01	NA	NA	NA	NA	<0.01	NA	NA	NA	NA
thallium	0.07	NA	NA	NA	NA	0.043	NA	NA	NA	NA
zinc	0.049	NA	NA	NA	NA	0.056	NA	NA	NA	NA
Miscellaneous Parameters										
pH (units)	7.3	6.7	5.3	6.6	6.5	7.2	6.9	6.9	6.8	6.5
spec. conductance (umhos/cm)	800	1,000	440	500	580	600	1,500	1,100	950	950
temperature (deg./centigrade)	18	11.0	14	12.5	11.0	18	5.0	14.0	13.0	12.5
TOC	48	76	120	12	22	27	69	46	57	30
total phenols	NA	19	5.0	1.4	1.3	NA	0.94	0.15	0.19	0.22
TOX	NA	320	0.8	2.3	0.47	NA	300	2.5	0.36	0.30
total dissolved solids (TDS)	576	NA	NA	NA	NA	482	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	90	NA	NA	NA	NA	70	NA	NA	NA	NA
cyanide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, W6 Krumrich Plant, Sauget, IL.

Well Number:	P-13	P-13	P-13	P-13	P-14	P-14	P-14	P-14	P-14	P-14
Date:	6/84	6/84*	6/84**	11/85	1/84	2/84	3/84	5/84	6/84	11/85
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	0.004	0.004	<0.1	NA	NA	NA	NA	NA	0.018	NA
arsenic	0.093	0.013	0.14	NA	NA	NA	NA	NA	0.101	NA
beryllium	0.134	0.192	<0.005	NA	NA	NA	NA	NA	0.057	NA
cadmium	0.002	0.002	<0.007	NA	NA	NA	NA	NA	0.006	NA
chromium	0.005	0.006	<0.02	NA	NA	NA	NA	NA	0.01	NA
copper	0.006	<0.004	<0.01	NA	NA	NA	NA	NA	0.008	NA
lead	0.005	0.004	<0.1	NA	NA	NA	NA	NA	<0.004	NA
mercury	<0.0002	<0.0002	<0.003	NA	NA	NA	NA	NA	<0.0002	NA
nickel	0.004	0.005	<0.01	NA	NA	NA	NA	NA	<0.01	NA
selenium	0.001	<0.001	<0.005	NA	NA	NA	NA	NA	<0.001	NA
silver	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA	<0.01	NA
thallium	<0.02	<0.02	<0.005	NA	NA	NA	NA	NA	<0.02	NA
zinc	0.020	0.06	<0.01	NA	NA	NA	NA	NA	0.04	NA
Miscellaneous Parameters										
pH (units)	7.0	7.0	7.0	6.9	6.7	6.8	6.7	6.5	6.8	NA
spec. conductance (umhos/cm)	1,000	1,000	1,100	2,000	2,850	1,200	2,700	3,100	2,900	NA
temperature (deg./centigrade)	14	14	14	14	12	15.5	14.0	13	14	NA
TOC	NA	NA	NA	NA	160	44	87	42	NA	NA
total phenols	0.06	0.06	<0.05	0.099	1.41#	0.64	0.48	0.38	0.06	0.143
TOX	NA	NA	NA	NA	300	14	0.65	1.8	NA	NA
total dissolved solids (TDS)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cyanide	<0.005	<0.025	<0.005	<0.025	NA	NA	NA	NA	<0.005	<0.025
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, Il.

Well Number:	DW-1	DW-1	DW-4	DW-7	DW-7	DW-10	DW-18	DW-18	DW-19	DW-23
Date:	9/84	11/85	9/84	11/85	2/86	9/84	9/84	9/84*	11/85	9/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	0.018	NA	0.13	<0.09	<0.05	0.038	0.18	NA	NA	0.065
arsenic	<0.001	NA	0.002	0.01	<0.01	0.004	<0.001	NA	NA	0.002
beryllium	<0.01	NA	0.018	<0.002	<0.001	<0.01	<0.002	NA	NA	<0.002
cadmium	1.97	NA	62.5	<0.002	<0.003	15.8	<0.002	NA	NA	<0.002
chromium	<0.04	NA	0.105	<0.01	<0.01	<0.04	<0.004	NA	NA	<0.004
copper	<0.001	NA	0.033	<0.006	<0.009	0.003	<0.004	NA	NA	<0.004
lead	0.018	NA	0.024	<0.04	<0.06	0.026	<0.004	NA	NA	<0.004
mercury	<0.0002	NA	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004	NA	NA	<0.0004
nickel	0.024	NA	0.294	0.03	0.02	0.067	0.005	NA	NA	0.02
selenium	<0.001	NA	<0.001	<0.01	<0.005	<0.001	<0.001	NA	NA	<0.001
silver	0.003	NA	0.008	<0.007	<0.01	0.006	<0.002	NA	NA	0.004
thallium	0.019	NA	0.127	<0.01	<0.005	0.024	0.009	NA	NA	0.013
zinc	0.037	NA	0.206	0.091	0.054	0.106	0.02	NA	NA	0.028
Miscellaneous Parameters										
pH (units)	6.9	6.9	6.5	7.2	6.8	6.2	6.5	6.5	7.5	6.3
spec. conductance (umhos/cm)	1,060	3,000	2,600	2,000	950	1,300	450	450	700	850
temperature (deg./centigrade)	21	15	22	NA	17.5	21	19	18	15	20
TOC	12	NA	8	NA	NA	75	8.6	14	NA	12
total phenols	NA	1.220	NA	0.179	0.478	NA	NA	NA	0.098	NA
TOX	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
total dissolved solids (TDS)	1,226	NA	3,274	NA	NA	1,930	400	NA	NA	914
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	386	NA	403	NA	NA	1,063	33	33	NA	43
cyanide	NA	<0.025	NA	<0.025	<0.025	NA	NA	NA	<0.025	NA
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, W6 Krummrich Plant, Sauget, Il.

Well Number:	DW-1-85	BK-3	BK-3	BK-3	W8-6	W8-6	W8-6	W8-7	W8-7	Field Blank
Date:	2/86	9/84	11/85	2/86	9/84	11/85	2/86	9/84	11/85	11/83
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	<0.060	0.062	NA	<0.050	0.033	NA	<0.05	0.022	NA	NA
arsenic	<0.010	<0.001	NA	<0.010	0.018	NA	0.07	<0.001	NA	NA
beryllium	<0.0009	<0.002	NA	<0.001	<0.002	NA	<0.001	<0.002	NA	NA
cadmium	<0.003	0.008	NA	<0.003	<0.002	NA	<0.003	<0.002	NA	NA
chromium	<0.008	<0.004	NA	<0.010	<0.004	NA	<0.01	<0.004	NA	NA
copper	<0.006	<0.004	NA	<0.009	<0.004	NA	<0.009	<0.004	NA	NA
lead	<0.060	0.006	NA	<0.06	0.004	NA	<0.06	<0.004	NA	NA
mercury	<0.0002	<0.0004	NA	<0.0002	<0.0002	NA	<0.0002	<0.0002	NA	NA
nickel	<0.009	0.010	NA	<0.01	<0.004	NA	<0.01	<0.004	NA	NA
selenium	<0.005	<0.001	NA	<0.005	<0.001	NA	<0.005	<0.001	NA	NA
silver	<0.01	0.004	NA	<0.01	0.002	NA	<0.01	<0.01	NA	NA
thallium	<0.005	0.016	NA	<0.005	0.025	NA	<0.005	0.143	NA	NA
zinc	0.04	0.035	NA	0.030	0.024	NA	0.054	0.097	NA	NA
Miscellaneous Parameters										
pH (units)	NA	7.7	7.5	7.7	6.9	6.7	7.1	6.6	7.0	NA
spec. conductance (umhos/cm)	1,350	2,500	3,100	1,625	850	1,090	630	850	925	<50
temperature (deg./centigrade)	13	19	15	16	18	15	14	15	17	16
TOC	NA	36	NA	NA	16	NA	NA	3	NA	2
total phenols	<0.05	NA	0.101	<0.050	NA	0.13	0.138	NA	<0.05	0.002
TOX	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.005
total dissolved solids (TDS)	NA	1,814	NA	NA	524	NA	NA	602	NA	NA
bicarbonate, as CACO3	NA	NA	870	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	70.4	NA	NA	NA	NA	NA	NA	NA
chloride	NA	930	714	NA	124	NA	NA	40	NA	NA
cyanide	<0.025	NA	<0.025	<0.025	NA	<0.025	<0.025	NA	<0.025	NA
iron	NA	NA	0.2	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	104	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	343	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	328	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	35	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, Il.

Well Number:	DW-24	DW-24	DW-29	DW-29	DW-30	DW-33	DW-34	DW-34	DW-34	DW-I-85
Date:	9/84	9/84*	9/84	9/84*	11/85	9/84	9/84	11/85	2/86	11/85
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)										
antimony	0.876	NA	0.086	NA	<0.09	0.02	0.026	NA	<0.050	<0.08
arsenic	0.004	NA	0.019	NA	<0.01	0.003	0.077	NA	0.170	<0.01
beryllium	<0.002	NA	<0.002	NA	<0.002	0.02	<0.010	NA	<0.001	<0.0009
cadmium	<0.002	NA	<0.002	NA	<0.002	2.84	0.93	NA	0.003	<0.002
chromium	<0.004	NA	<0.004	NA	<0.01	<0.04	0.031	NA	<0.010	<0.02
copper	<0.004	NA	<0.004	NA	<0.006	0.012	0.008	NA	<0.009	<0.008
lead	<0.004	NA	<0.004	NA	<0.04	0.021	0.016	NA	<0.060	<0.07
mercury	<0.0004	NA	0.0004	NA	<0.0002	<0.0002	<0.0002	NA	<0.0002	<0.0003
nickel	0.004	NA	0.01	NA	<0.01	0.22	0.087	NA	<0.010	<0.01
selenium	<0.001	NA	<0.001	NA	<0.005	<0.001	<0.001	NA	<0.005	<0.005
silver	0.002	NA	0.004	NA	<0.007	0.002	0.002	NA	<0.010	<0.01
thallium	0.021	NA	0.018	NA	<0.005	0.021	0.021	NA	<0.005	<0.005
zinc	0.024	NA	0.035	NA	<0.006	0.077	0.071	NA	0.056	0.01
Miscellaneous Parameters										
pH (units)	6.3	6.3	6.5	6.5	6.8	6.9	6.4	6.8	7.0	7.2
spec. conductance (umhos/cm)	700	700	1,100	1,100	1,250	900	1,000	1,500	760	3,250
temperature (deg./centigrade)	21	21	20	20	16	20	21	18	12	18
TOC	7.9	NA	49	46	NA	8.2	23	NA	NA	NA
total phenols	NA	NA	NA	NA	<0.05	NA	NA	0.0722	<0.050	0.155
TOX	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
total dissolved solids (TDS)	634	NA	1,170	1,184	NA	1,064	3,294	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chloride	38	NA	95	96	NA	247	186	NA	NA	NA
cyanide	NA	NA	NA	NA	<0.025	NA	NA	<0.025	<0.025	<0.025
iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E-5. Summary of Metals and Miscellaneous Parameters in Ground Water, Monsanto Company, WG Krummrich Plant, Sauget, Il.

Well Number:	Field Blank	Field Blank	Field Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Lab Blank
Date:	2/84	5/84	6/84	11/83	2/84	5/84	6/84	2/84
USEPA Priority Pollutant Metals (concentrations are in mg/L, except where noted)								
antimony	NA	NA	<0.03	NA	NA	NA	<0.004	NA
arsenic	NA	NA	<0.001	NA	NA	NA	<0.001	NA
beryllium	NA	NA	<0.001	NA	NA	NA	<0.001	NA
cadmium	NA	NA	0.001	NA	NA	NA	<0.001	NA
chromium	NA	NA	<0.004	NA	NA	NA	<0.004	NA
copper	NA	NA	0.008	NA	NA	NA	<0.004	NA
lead	NA	NA	<0.01	NA	NA	NA	<0.004	NA
mercury	NA	NA	<0.0002	NA	NA	NA	<0.0002	NA
nickel	NA	NA	0.005	NA	NA	NA	<0.004	NA
selenium	NA	NA	<0.001	NA	NA	NA	<0.001	NA
silver	NA	NA	<0.002	NA	NA	NA	<0.01	NA
thallium	NA	NA	<0.002	NA	NA	NA	<0.02	NA
zinc	NA	NA	0.013	NA	NA	NA	<0.002	NA
Miscellaneous Parameters								
pH (units)	7.0	7.0	7	NA	NA	NA	NA	NA
conductance (umhos/cm)	110	60	30	NA	NA	NA	NA	NA
ature (deg./centigrade)	10	17	30	NA	NA	NA	NA	NA
TOC	<5	6	NA	2	<5	<5	NA	<5
total phenols	<0.002	<0.002	<0.005	<0.002	<0.002	0.006	<0.005	<0.002
TOX	0.019	NA	NA	0.013	0.009	0.025	NA	0.009
total dissolved solids (TDS)	NA	NA	NA	NA	NA	NA	NA	NA
bicarbonate, as CACO3	NA	NA	NA	NA	NA	NA	NA	NA
calcium	NA	NA	NA	NA	NA	NA	NA	NA
chloride	35	NA	NA	NA	NA	NA	NA	NA
cyanide	NA	<0.005	<0.005	NA	NA	NA	<0.005	NA
iron	NA	NA	NA	NA	NA	NA	NA	NA
magnesium	NA	NA	NA	NA	NA	NA	NA	NA
potassium	NA	NA	NA	NA	NA	NA	NA	NA
sodium	NA	NA	NA	NA	NA	NA	NA	NA
sulfate, as SO4	NA	NA	NA	NA	NA	NA	NA	NA

* - Replicate Analyses
** - Replicate analysis performed by ETC.
NA - Not analyzed.
- Average of two analyses.
< - Indicates that the compound was not detected at the detection limit which is the value shown next to the symbol.

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krumarich Plant, Sauget, Il

Well Number:	GM-1	GM-1	GM-2	GM-2	GM-3	GM-3	GM-3	GM-4A	GM-4A
Date:	11/83	5/84	11/83	5/84	11/83	5/84	5/84*	11/83	5/84
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<1	<1	<1	<1	<1	<1	<1	<1	<1
acenapthylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
anthracene	<1	<1	<1	<1	<1	<1	<1	<1	<1
benzidine	<1	<1	<1	<1	<1	<1	<1	<1	<1
benzo (a) anthracene	<1	<1	<1	<1	<1	<1	<1	<1	<1
benzo (a) pyrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
benzo (b) fluoroanthene	<1	<1	<1	<1	<1	<1	<1	<1	<1
benzo (ghi) perylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
benzo (k) fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1
bis (2-chloroethoxy) methane	<1	<1	<1	<1	<1	<1	<1	<1	<1
bis (2-chloroethyl) ether	<1	<1	<1	<1	<1	<1	<1	<1	<1
bis (2-chloroisopropyl) ether	<1	<1	<1	<1	<1	<1	<1	<1	<1
bis (2-ethylhexyl) phthalate	<1	<1	13	<1	1	<1	<1	<1	2
4-bromophenyl phenyl ether	<1	<1	<1	<1	<1	<1	<1	<1	<1
butyl benzyl phthalate	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-chloronaphthalene	<1	<1	<1	<1	<1	<1	<1	<1	<1
4-chlorophenyl phenyl ether	<1	<1	<1	<1	<1	<1	<1	<1	<1
chrysene	<1	<1	<1	<1	<1	<1	<1	<1	<1
dibenzo (a,h) anthracene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
3,3-dichlorobenzidine	<1	<1	<1	<1	<1	<1	<1	<1	<1
diethyl phthalate	<1	3	<1	2	<1	1	1	<1	1
dimethyl phthalate	<1	<1	<1	<1	<1	<1	<1	<1	<1
di-n-butyl phthalate	1	2	2	3	2	3	2	2	<1
2,4-dinitrotoluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,6-dinitrotoluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
di-n-octyl phthalate	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-diphenylhydrazine	<1	<1	<1	<1	<1	<1	<1	<1	<1
fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1
fluorene	<1	<1	<1	<1	<1	<1	<1	<1	<1
hexachlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
hexachlorobutadiene	<1	<1	<1	<1	<1	<1	<1	<1	<1
hexachlorocyclopentadiene	<1	<1	<1	<1	<1	<1	<1	<1	<1
hexachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
indeno (1,2,3-c,d) pyrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
isophorone	<1	<1	<1	<1	<1	<1	<1	<1	<1
naphthalene	<1	<1	<1	<1	<1	<1	<1	<1	<1
nitrobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-nitrosodimethylamine	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-nitrosodi-n-propylamine	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-nitrosodiphenylamine	<1	<1	<1	<1	<1	<1	<1	<1	<1
phenanthrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
pyrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-trichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sub Total 1	1	5	15	5	3	4	3	2	3

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-1	GM-1	GM-2	GM-2	GM-3	GM-3	GM-3	GM-4A	GM-4A
Date:	11/83	5/84	11/83	5/84	11/83	5/84	5/84*	11/83	5/84
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrochlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-nitrochlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-and 3,4-dinitrochlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-nitrodiphenylaaine	NA	NA	NA	NA	NA	NA	NA	NA	NA
triphenyl phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-nitrobiphenyl	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Base/Neutral Compounds Analyzed	1	5	15	5	3	4	3	2	3

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-4B	GM-4B	GM-4B	GM-4B	GM-4B	GM-4B	GM-4C	GM-4C	GM-5
Date:	9/84	11/84	11/84*	2/85	11/85	11/85*	2/85	5/85	11/83
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<4	<10	<10	<1.9	<1.9	<1.9	<1.9	<1.9	<1
acenapthylene	<3	<10	<10	<3.5	<3.5	<3.5	<3.5	<3.5	<1
anthracene	<4	<10	<10	<1.9	<1.9	10.6	<1.9	<1.9	<1
benzidine	<60	<10	<10	<44	<44	<44	<44	<44	<1
benzo (a) anthracene	<9	<10	<10	<7.8	<7.9	<7.8	<7.8	<7.8	<1
benzo (a) pyrene	<12	<10	<10	<2.5	<2.5	<2.5	<2.5	<2.5	<1
benzo (b) fluoroanthene	<11	<10	<10	<4.8	<4.8	<4.8	<4.8	<4.8	<1
benzo (ghi) perylene	<14	<10	<10	<4.1	<4.1	<4.1	<4.1	<4.1	<1
benzo (k) fluoranthene	<11	<10	<10	<2.5	<3.5	<3.5	<2.5	<2.5	<1
bis (2-chloroethoxy) methane	<4	<10	<10	<5.3	<5.4	<5.3	<5.3	<5.3	<1
bis (2-chloroethyl) ether	<4	<10	<10	<5.7	<5.8	<5.7	<5.7	<5.7	<1
bis (2-chloroisopropyl) ether	<3	<10	<10	<5.7	<5.8	<5.7	<10	<6	<1
bis (2-ethylhexyl) phthalate	24	<10	<10	<10	<10	10.9	<1.9	<10	<1
4-bromophenyl phenyl ether	<16	<10	<10	<1.9	<1.9	<1.9	<10	<1.9	<1
butyl benzyl phthalate	8	<10	<10	<10	<10	<10	<1.9	<10	<1
2-chloronaphthalene	<4	<10	<10	<1.9	<1.9	<1.9	<1.9	<1.9	<1
4-chlorophenyl phenyl ether	<9	<10	<10	<4.2	<4.2	<4.2	<4.2	<4.2	<1
ysene	<9	<10	<10	<2.5	<2.5	<2.5	<2.5	<2.5	<1
enzo (a,h) anthracene	<16	<10	<10	<2.5	<10	<10	<2.5	<2.5	<1
1,2-dichlorobenzene	159	258	123	105	85.6	99.2	91.7	40	<1
1,3-dichlorobenzene	12	56	37	31.6	82.8	42.4	73.3	24	<1
1,4-dichlorobenzene	681	1220	333	963	336	463	1,030	295	<1
3,3-dichlorobenzidine	<161	<10	<10	<16.5	<17	<17	<16.5	<16.5	<1
diethyl phthalate	<4	<10	<10	<10	<10	<10	<10	<10	<1
dimethyl phthalate	<4	<10	<10	<10	<10	<10	<10	<10	<1
di-n-butyl phthalate	14	<10	<10	<10	<10	<10	<10	<10	1
2,4-dinitrotoluene	<14	<10	<10	<5.7	<5.8	<5.7	<5.7	<5.7	<1
2,6-dinitrotoluene	<16	<10	<10	<1.9	<1.9	<1.9	<1.9	<1.9	<1
di-n-octyl phthalate	<6	<10	<10	<10	<10	<10	<10	<10	<1
1,2-diphenylhydrazine	<10	<10	<10	<10	<10	<10	<10	<10	<1
fluoranthene	<5	<10	<10	<2.2	<2.2	<2.2	<2.2	<2.2	<1
fluorene	<4	<10	<10	<1.9	<1.9	<1.9	<1.9	<1.9	<1
hexachlorobenzene	<15	<10	<10	<1.9	<1.9	<1.9	<1.9	<1.9	<1
hexachlorobutadiene	<13	<10	<10	<0.9	<0.9	<0.9	<0.9	<0.9	<1
hexachlorocyclopentadiene	<12	<10	<10	<10	<10	<10	<10	<10	<1
hexachloroethane	<10	<10	<10	<1.6	<1.6	<1.6	<1.6	<1.6	<1
indeno (1,2,3-c,d) pyrene	<7	<10	<10	<3.7	<4.7	<4.7	<3.7	<3.7	<1
isophorone	<2	<10	<10	<2.2	<2.2	<2.2	<2.2	<2.2	<1
naphthalene	<2	<10	<10	<1.6	<1.6	<1.6	<1.6	<1.6	<1
nitrobenzene	<5	<10	<10	<1.9	<1.9	<1.9	<1.9	<1.9	<1
n-nitrosodimethylamine	<10	<10	<10	<10	<10	<10	<10	<10	<1
n-nitrosodi-n-propylamine	<6	<10	<10	<10	<10	<10	<10	<10	<1
n-nitrosodiphenylamine	25	<10	<10	<1.9	<1.9	<1.9	72.4	<1.9	<1
nanthrene	<4	<10	<10	<5.4	<5.5	<5.4	<5.4	<5.4	<1
rene	<5	<10	<10	<1.9	<1.9	<1.9	<1.9	<1.9	<1
1,2,4-trichlorobenzene	<7	<10	<10	<1.9	<1.9	<1.9	<1.9	<1.9	<1
Sub Total 1	923	1534	493	1099.6	504.4	626.1	1267.4	359	1

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-4B	GM-4B	GM-4B	GM-4B	GM-4B	GM-4B	GM-4C	GM-4C	GM-5
Date:	9/84	11/84	11/84*	2/85	11/85	11/85*	2/85	5/85	11/83
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	<25-30	<10	<10	<10	<10	<10	<10	<10	NA
4-nitroaniline	<25-30	<10	<10	<10	<10	<10	<10	<10	NA
2-nitrochlorobenzene	<10	<10	<10	<10	<10	19.9	<10	<10	NA
4-nitrochlorobenzene	<10	<10	<10	<10	<10	23.6	<10	<10	NA
2,4-and 3,4-dinitrochlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	NA
4-nitrodiphenylamine	<10	<10	<10	<10	<10	<10	<10	<10	NA
triphenyl phosphate	<10	<10	<30	<10	<10	<10	<10	<10	NA
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-nitrobiphenyl	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	43.5	0	0	NA
Total Base/Neutral Compounds Analyzed	923	1534	493	1099.6	504.4	669.6	1267.4	359	1

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-5	GM-6A	GM-6A	GM-6A	GM-6B	GM-6B	GM-6B	GM-7	GM-7
Date:	5/84	11/83	5/84	11/84	9/84**	11/84	11/85	11/83	5/84
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<1	<1	<1	<10	<4	<10	<1.9	<1	<1
acenapthylene	<1	<1	<1	<10	<3	<10	<3.5	<1	<1
anthracene	<1	<1	<1	<10	<4	<10	<1.9	<1	<1
benzidine	<1	<1	<1	<10	<60	<10	<44	<1	<1
benzo (a) anthracene	<1	<1	<1	<10	<9	<10	<7.8	<1	<1
benzo (a) pyrene	<1	<1	<1	<10	<12	<10	<2.5	<1	<1
benzo (b) fluoroanthene	<1	<1	<1	<10	<11	<10	<4.8	<1	<1
benzo (ghi) perylene	<1	<1	<1	<10	<14	<10	<4.1	<1	<1
benzo (k) fluoranthene	<1	<1	<1	<10	<11	<10	<3.5	<1	<1
bis (2-chloroethoxy) methane	<1	<1	<1	<10	<4	<10	<5.3	<1	<1
bis (2-chloroethyl) ether	<1	<1	<1	<10	<4	<10	<5.7	<1	<1
bis (2-chloroisopropyl) ether	<1	<1	<1	<10	<3	<10	<5.7	<1	<1
bis (2-ethylhexyl) phthalate	<1	<1	5	<10	12	<10	<10	1	2
4-bromophenyl phenyl ether	<1	<1	<1	<10	<16	<10	<1.9	<1	<1
butyl benzyl phthalate	<1	<1	<1	<10	<13	<10	<10	<1	<1
2-chloronaphthalene	<1	<1	<1	<10	<4	<10	<1.9	<1	<1
4-chlorophenyl phenyl ether	<1	<1	<1	<10	<9	<10	<4.2	<1	<1
chrysene	<1	<1	<1	<10	<9	<10	<2.5	<1	<1
dibenzo (a,h) anthracene	<1	<1	<1	<10	<16	<10	<10	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<10	37	25	31.5	<1	<1
1,3-dichlorobenzene	<1	<1	<1	<10	<6	<10	10	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<10	55	24	161	<1	<1
3,3-dichlorobenzidine	<1	<1	<1	<10	<161	<10	<17	<1	<1
diethyl phthalate	1	<1	1	<10	<4	<10	<10	<1	2
dimethyl phthalate	<1	<1	<1	<10	<4	<10	<10	<1	<1
di-n-butyl phthalate	1	2	2	<10	2	<10	<10	2	3
2,4-dinitrotoluene	<1	<1	<1	<10	<14	<10	<5.7	<1	<1
2,6-dinitrotoluene	<1	<1	<1	<10	<16	<10	<1.9	<1	<1
di-n-octyl phthalate	<1	<1	<1	<10	<6	<10	<10	<1	<1
1,2-diphenylhydrazine	<1	<1	<1	<10	<10	<10	<10	<1	<1
fluoranthene	<1	<1	<1	<10	<5	<10	<2.2	<1	<1
fluorene	<1	<1	<1	<10	<4	<10	<1.9	<1	<1
hexachlorobenzene	<1	<1	<1	<10	<15	<10	<1.9	<1	<1
hexachlorobutadiene	<1	<1	<1	<10	<13	<10	<0.9	<1	<1
hexachlorocyclopentadiene	<1	<1	<1	<10	<12	<10	<10	<1	<1
hexachloroethane	<1	<1	<1	<10	<10	<10	<1.6	<1	<1
indeno (1,2,3-c,d) pyrene	<1	<1	<1	<10	<7	<10	<4.7	<1	<1
isophorone	<1	<1	<1	<10	<2	<10	<2.2	<1	<1
naphthalene	<1	<1	<1	<10	<2	<10	<1.6	<1	<1
nitrobenzene	<1	<1	<1	<10	<5	<10	<1.9	<1	<1
n-nitrosodimethylamine	<1	<1	<1	<10	<10	<10	<10	<1	<1
n-nitrosodi-n-propylamine	<1	<1	<1	<10	<6	<10	<10	<1	<1
n-nitrosodiphenylamine	<1	<1	<1	<10	15	<10	<1.9	<1	<1
phenanthrene	1	<1	<1	<10	<4	<10	<5.4	<1	<1
pyrene	<1	<1	<1	<10	<5	<10	<1.9	<1	<1
1,2,4-trichlorobenzene	<1	<1	<1	<10	<7	<10	<1.9	<1	<1
Sub Total 1	3	2	8	0	121	49	202.5	3	7

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-5	GM-6A	GM-6A	GM-6A	GM-6B	GM-6B	GM-6B	GM-7	GM-7
Date:	5/84	11/83	5/84	11/84	9/84**	11/84	11/85	11/83	5/84
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	NA	NA	NA	<10	<25-30	<10	<10	NA	NA
4-nitroaniline	NA	NA	NA	<10	<25-30	<10	<10	NA	NA
2-nitrochlorobenzene	NA	NA	NA	<10	<10	<10	<10	NA	NA
4-nitrochlorobenzene	NA	NA	NA	<10	<10	<10	<10	NA	NA
2,4-and 3,4-dinitrochlorobenzene	NA	NA	NA	<10	<10	<10	<10	NA	NA
4-nitrodiphenylamine	NA	NA	NA	<10	<10	<10	<10	NA	NA
triphenyl phosphate	NA	NA	NA	<10	<10	<10	<10	NA	NA
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	NA	NA	NA	NA	<10	NA	NA	NA	NA
4-nitrobiphenyl	NA	NA	NA	NA	<10	NA	NA	NA	NA
Sub Total 2	NA	NA	NA	0	0	0	0	NA	NA
Total Base/Neutral Compounds Analyzed	3	2	8	0	121	49	202.5	3	7

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-8	GM-8	GM-8	GM-8	GM-8	GM-9A	GM-9A	GM-9B	GM-9B
Date:	11/83	5/84	11/84	2/85	11/85	11/83	5/84	9/84**	5/85
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<1	<1	<10	<1.9	<2.0	<1	<1	<4	<1.9
acenapthylene	<1	<1	<10	<3.5	<3.7	<1	<1	<3	<3.5
anthracene	<1	<1	<10	<1.9	<2.0	<1	<1	<4	<1.9
benzidine	<1	<1	<10	<44	<46	<1	<1	<60	<44
benzo (a) anthracene	<1	<1	<10	<7.8	<8.2	<1	<1	<9	<7.8
benzo (a) pyrene	<1	<1	<10	<2.5	<2.6	<1	<1	<12	<2.5
benzo (b) fluoroanthene	<1	<1	<10	<4.8	<5.1	<1	<1	<11	<4.8
benzo (ghi) perylene	<1	<1	<10	<4.1	<4.3	<1	<1	<14	<4.1
benzo (k) fluoranthene	<1	<1	<10	<2.5	<3.7	<1	<1	<11	<2.5
bis (2-chloroethoxy) methane	<1	<1	<10	<5.3	<5.6	<1	<1	<4	<5.3
bis (2-chloroethyl) ether	<1	<1	<10	<5.7	<6.0	<1	<1	<4	<5.7
bis (2-chloroisopropyl) ether	<1	<1	<10	<5.7	<6.0	<1	<1	<3	<6
bis (2-ethylhexyl) phthalate	1	3	<10	<10	<11	<1	3	89	<10
4-bromophenyl phenyl ether	<1	<1	<10	<1.9	<2	<1	<1	<16	<1.9
butyl benzyl phthalate	<1	<1	<10	<10	<11	<1	14	<13	<10
2-chloronaphthalene	<1	<1	<10	<1.9	<2	<1	<1	<4	<1.9
4-chlorophenyl phenyl ether	<1	<1	<10	<4.2	<4.4	<1	<1	<9	<4.2
[illegible]ysene	<1	<1	<10	<2.5	<2.6	<1	<1	<9	<2.5
[illegible]enzo (a,h) anthracene	<1	<1	<10	<2.5	<11	<1	<1	<16	<2.5
1,2-dichlorobenzene	<1	<1	<10	<1.9	<2	33	30	30	<1.9
1,3-dichlorobenzene	<1	<1	<10	<1.9	<2	<1	2	<6	<1.9
1,4-dichlorobenzene	<1	<1	<10	<4.4	<4.6	38	40	<5	0.5
3,3-dichlorobenzidine	<1	<1	<10	<16.5	<17	<1	<1	<161	<16.5
diethyl phthalate	<1	1	<10	<10	<11	<1	<1	<4	<10
dimethyl phthalate	<1	<1	<10	<10	<11	<1	<1	<4	<10
di-n-butyl phthalate	1	3	<10	<10	<11	1	2	4	<10
2,4-dinitrotoluene	<1	<1	<10	<5.7	<6.0	<1	<1	<14	<5.7
2,6-dinitrotoluene	<1	<1	<10	<1.9	<2.0	<1	<1	<16	<1.9
di-n-octyl phthalate	<1	<1	<10	<10	<11	<1	<1	<6	<10
1,2-diphenylhydrazine	<1	<1	<10	<10	<11	<1	<1	<10	<10
fluoranthene	<1	<1	<10	<2.2	<2.3	<1	<1	<5	<2.2
fluorene	<1	<1	<10	<1.9	<2	<1	<1	<4	<1.9
hexachlorobenzene	<1	<1	<10	<1.9	<2	<1	<1	<15	<1.9
hexachlorobutadiene	<1	<1	<10	<0.9	<1	<1	<1	<13	<0.9
hexachlorocyclopentadiene	<1	<1	<10	<10	<11	<1	<1	<12	<10
hexachloroethane	<1	<1	<10	<1.6	<1.7	<1	<1	<10	<1.6
indeno (1,2,3-c,d) pyrene	<1	<1	<10	<3.7	<4.9	<1	<1	<7	<3.7
isophorone	<1	<1	<10	<2.2	<2.3	<1	<1	<2	<2.2
naphthalene	<1	<1	<10	<1.6	<1.7	<1	<1	<2	<1.6
nitrobenzene	8	1	<10	2.2	<2	<1	<1	<5	<1.9
n-nitrosodimethylamine	<1	<1	<10	<10	<11	<1	<1	<10	<10
n-nitrosodi-n-propylamine	<1	<1	<10	<10	<11	<1	<1	<6	<10
n-nitrosodiphenylamine	<1	<1	<10	<1.9	<2	<1	<1	<82	<1.9
[illegible]nanthrene	<1	<1	<10	<5.4	<5.7	<1	<1	<4	<5.4
[illegible]ene	<1	<1	<10	<1.9	<2	<1	<1	<5	<1.9
1,2,4-trichlorobenzene	<1	<1	<10	<1.9	<2	<1	<1	<7	<1.9
Sub Total 1	10	8	0	2.2	0	72	91	123	0.5

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-8	GM-8	GM-8	GM-8	GM-8	GM-9A	GM-9A	GM-9B	GM-9B
Date:	11/83	5/84	11/84	2/85	11/85	11/83	5/84	9/84**	5/85
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	NA	NA	<10	<10	<11	NA	NA	<25-30	<10
4-nitroaniline	NA	NA	<10	<10	<11	NA	NA	<25-30	<10
2-nitrochlorobenzene	NA	NA	<10	<10	<10.5	NA	NA	<10	<10
4-nitrochlorobenzene	NA	NA	<10	<10	<10.5	NA	NA	<10	<10
2,4-and 3,4-dinitrochlorobenzene	NA	NA	<10	<10	<10.5	NA	NA	<10	<10
4-nitrodiphenylamine	NA	NA	<10	<10	<10.5	NA	NA	<10	<10
triphenyl phosphate	NA	NA	<10	<10	<10.5	NA	NA	<10	<10
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	NA	NA	<25	<25	<10.5	NA	NA	<10	NA
4-nitrobiphenyl	NA	NA	<25	<25	<10.5	NA	NA	<10	NA
Sub Total 2	NA	NA	0	0	0	NA	NA	0	0
Total Base/Neutral Compounds Analyzed	10	8	0	2.2	0	72	91	123	0.5

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-9B	GM-9C	GM-9C	GM-9C	GM-10A	GM-10A	GM-10B	GM-10B	GM-10C
Date:	11/85	9/84**	5/85	11/85	11/83	5/84	2/85	5/85	2/85
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<2.0	<4	2.2	<2.1	<1	<1	<2.1	<1.9	<1.9
acenapthylene	<3.7	<3	<3.5	<3.8	<1	<1	<3.8	<3.5	<3.5
anthracene	<2.0	<4	<1.9	<2.1	<1	<1	<2.1	<1.9	<1.9
benzidine	<46	<60	<44	<48	<1	<1	<48.4	<44	<44
benzo (a) anthracene	<8.2	<9	<7.8	<8.4	<1	<1	<8.6	<7.8	<7.8
benzo (a) pyrene	<2.6	<12	<2.5	<2.7	<1	<1	<2.8	<2.5	<2.5
benzo (b) fluoroanthene	<5.1	<11	<4.8	<5.2	<1	<1	<5.3	<4.8	<4.8
benzo (ghi) perylene	<4.3	<14	<4.1	<4.4	<1	<1	<4.5	<4.1	<4.1
benzo (k) fluoranthene	<3.7	<11	<2.5	<3.8	<1	<1	<2.8	<2.5	<2.5
bis (2-chloroethoxy) methane	<5.6	<4	<5.3	<5.7	<1	<1	<5.8	<5.3	<5.3
bis (2-chloroethyl) ether	<6.0	<4	<5.7	<6.2	<1	<1	<6.3	<5.7	<5.7
bis (2-chloroisopropyl) ether	<6.0	<3	<6.0	<6.2	<1	<1	<6.3	<6.0	<5.7
bis (2-ethylhexyl) phthalate	<11	8	<10	<11	<1	4	<11	<10	<10
4-bromophenyl phenyl ether	<2	<16	<1.9	<2.1	<1	<1	<2.1	<1.9	<1.9
butyl benzyl phthalate	<11	<13	<10	<11	1	<1	<11	<10	<10
2-chloronaphthalene	<2	<4	<1.9	<2.1	<1	<1	<2.1	<1.9	<1.9
4-chlorophenyl phenyl ether	<4.4	<9	<4.2	<4.5	<1	<1	<4.6	<4.2	<4.2
chrysene	<2.6	<9	<2.5	<2.7	<1	<1	<2.8	<2.5	<2.5
dibenzo (a,h) anthracene	<11	<16	<2.5	<11	<1	<1	<2.8	<2.5	<2.5
1,2-dichlorobenzene	<2	<5	5.0	4.4	<1	<1	55.7	13.5	4.9
1,3-dichlorobenzene	<2	64	2.4	<2.1	<1	<1	156	34	4
1,4-dichlorobenzene	<4.6	<5	49.9	50	<1	<1	1,080	188	22.1
3,3-dichlorobenzidine	<17	<161	<16.5	<18	<1	<1	<18.2	<16.5	<16.5
diethyl phthalate	<11	<4	<10	<11	<1	1	<11	<10	<10
dimethyl phthalate	<11	<4	<10	<11	<1	<1	<11	<10	<10
di-n-butyl phthalate	<11	3	<10	<11	1	3	<11	<10	<10
2,4-dinitrotoluene	<6.0	<14	<5.7	<6.2	<1	<1	<6.3	<5.7	<5.7
2,6-dinitrotoluene	<2.0	<16	<1.9	<2.1	<1	<1	<2.1	<1.9	<1.9
di-n-octyl phthalate	<11	<6	<10	<11	<1	<1	<11	<10	<10
1,2-diphenylhydrazine	<11	<10	<10	<11	<1	<1	<11	<10	<10
fluoranthene	<2.3	<5	<2.2	<2.4	<1	<1	<2.4	<2.2	<2.2
fluorene	<2	<4	<1.9	<2.1	<1	<1	<2.1	<1.9	<1.9
hexachlorobenzene	<2	<15	<1.9	<2.1	<1	<1	<2.1	<1.9	<1.9
hexachlorobutadiene	<0.95	<13	<0.9	<0.9	<1	<1	<1	<0.9	<0.9
hexachlorocyclopentadiene	<11	<12	<10	<11	<1	<1	<10	<10	<10
hexachloroethane	<1.7	<10	<1.6	<1.7	<1	<1	<1.8	<1.6	<1.6
indeno (1,2,3-c,d) pyrene	<4.9	<7	<3.7	<5.1	<1	<1	<4.1	<3.7	<3.7
isophorone	<2.3	<2	<2.2	<2.4	<1	<1	<2.4	<2.2	<2.2
naphthalene	<1.7	<2	<1.6	<1.7	<1	<1	<1.8	<1.6	<1.6
nitrobenzene	<2	<5	<1.9	<2	<1	<1	<2.1	<1.9	<1.9
n-nitrosodimethylamine	<11	<10	<10	<11	<1	<1	<11	<10	<10
n-nitrosodi-n-propylamine	<11	<6	<10	<11	<1	<1	<11	<10	<10
n-nitrosodiphenylamine	<2	<82	<2.0	<2.1	<1	<1	3.9	<1.9	<1.9
phenanthrene	<5.7	<4	<5.4	<5.8	<1	<1	<5.9	<5.4	<5.4
pyrene	<2	<5	<1.9	<2.1	<1	<1	<2.1	<1.9	<1.9
1,2,4-trichlorobenzene	<2	<7	<1.9	<2.1	<1	<1	<2.1	<1.9	<1.9
Sub Total 1	0	75	59.5	54.5	2	8	1295.6	235.5	31

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-9B	GM-9C	GM-9C	GM-9C	GM-10A	GM-10A	GM-10B	GM-10B	GM-10C
Date:	11/85	9/84**	5/85	11/85	11/83	5/84	2/85	5/85	2/85
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	<11	<25-30	<10	<11	NA	NA	<10	<10	<10
4-nitroaniline	<11	<25-30	<10	<11	NA	NA	<10	<10	<10
2-nitrochlorobenzene	<10.5	<10	<10	<10.8	NA	NA	<10	<10	<10
4-nitrochlorobenzene	<10.5	<10	<10	<10.8	NA	NA	<10	<10	<10
2,4-and 3,4-dinitrochlorobenzene	<10.5	<10	<10	<10.8	NA	NA	<10	<10	<10
4-nitrodiphenylamine	<10.5	<10	<10	<10.8	NA	NA	<10	<10	<10
triphenyl phosphate	<10.5	<10	<10	<10.8	NA	NA	<10	<10	<10
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	NA	<10	NA	NA	NA	NA	NA	NA	NA
4-nitrobiphenyl	NA	<10	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	0	NA	NA	0	0	0
Total Base/Neutral Compounds Analyzed	0	75	59.5	54.5	2	8	1295.6	235.5	31

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-10C	GM-11	GM-11	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A
Date:	5/85	11/83	5/84	11/83	11/83*	5/84	5/84*	11/84	11/84*
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<1.9	<1	<1	<1	<1	<1	<1	<10	<10
acenapthylene	<3.5	<1	<1	<1	<1	<1	<1	<10	<10
anthracene	<1.9	<1	<1	<1	<1	<1	<1	<10	<10
benzidine	<44	<1	<1	<1	<1	<1	<1	<10	<10
benzo (a) anthracene	<7.8	<1	<1	<1	<1	<1	<1	<10	<10
benzo (a) pyrene	<2.5	<1	<1	<1	<1	<1	<1	<10	<10
benzo (b) fluoroanthene	<4.8	<1	<1	<1	<1	<1	<1	<10	<10
benzo (ghi) perylene	<4.1	<1	<1	<1	<1	<1	<1	<10	<10
benzo (k) fluoranthene	<2.5	<1	<1	<1	<1	<1	<1	<10	<10
bis (2-chloroethoxy) methane	<5.3	<1	<1	<1	<1	<1	<1	<10	<10
bis (2-chloroethyl) ether	<5.7	<1	<1	<1	<1	<1	<1	<10	<10
bis (2-chloroisopropyl) ether	<6.0	<1	<1	<1	<1	<1	<1	<10	<10
bis (2-ethylhexyl) phthalate	<10	<1	<1	<1	<1	211	2	<10	<10
4-bromophenyl phenyl ether	<1.9	<1	<1	<1	<1	<1	<1	<10	<10
butyl benzyl phthalate	<10	<1	3	<1.	<1	<1	<1	<10	<10
2-chloronaphthalene	<1.9	<1	<1	<1	<1	<1	<1	<10	<10
4-chlorophenyl phenyl ether	<4.2	<1	<1	<1	<1	<1	<1	<10	<10
[illegible]ysene	<2.5	<1	<1	<1	<1	<1	<1	<10	<10
[illegible]nzo (a,h) anthracene	<2.5	<1	<1	<1	<1	<1	<1	<10	<10
1,2-dichlorobenzene	4.3	<1	<1	366	357	344	364	539	473
1,3-dichlorobenzene	3	<1	<1	<1	<1	<1	<1	<10	<10
1,4-dichlorobenzene	15.3	<1	<1	<1	<1	<1	1	<10	<10
3,3-dichlorobenzidine	<16.5	<1	<1	<1	<1	<1	<1	<10	<10
diethyl phthalate	<10	<1	1	<1	<1	2	2	<10	<10
dimethyl phthalate	<10	<1	<1	<1	<1	<1	<1	<10	<10
di-n-butyl phthalate	<10	1	2	2	1	3	3	<10	<10
2,4-dinitrotoluene	<5.7	<1	<1	<1	<1	<1	<1	<10	<10
2,6-dinitrotoluene	<1.9	<1	<1	<1	<1	<1	<1	<10	<10
di-n-octyl phthalate	<10	<1	<1	<1	<1	<1	<1	<10	<10
1,2-diphenylhydrazine	<10	<1	<1	<1	<1	<1	<1	<10	<10
fluoranthene	<2.2	<1	<1	<1	<1	<1	<1	<10	<10
fluorene	<1.9	<1	<1	<1	<1	<1	<1	<10	<10
hexachlorobenzene	<1.9	<1	<1	<1	<1	<1	<1	<10	<10
hexachlorobutadiene	<0.9	<1	<1	<1	<1	<1	<1	<10	<10
hexachlorocyclopentadiene	<10	<1	<1	<1	<1	<1	<1	<10	<10
hexachloroethane	<1.6	<1	<1	<1	<1	<1	<1	<10	<10
indeno (1,2,3-c,d) pyrene	<3.7	<1	<1	<1	<1	<1	<1	<10	<10
isophorone	<2.2	<1	<1	<1	<1	<1	<1	<10	<10
naphthalene	<1.6	<1	<1	<1	<1	4	4	<10	<10
nitrobenzene	<1.9	<1	<1	<1	<1	<1	<1	<10	<10
n-nitrosodimethylamine	<10	<1	<1	<1	<1	<1	<1	<10	<10
n-nitrosodi-n-propylamine	<10	<1	<1	<1	<1	<1	<1	<10	<10
n-nitrosodiphenylamine	<1.9	<1	<1	<1	<1	<1	<1	<10	<10
[illegible]anthrene	<5.4	<1	<1	<1	<1	<1	<1	<10	<10
[illegible]ene	<1.9	<1	<1	<1	<1	<1	<1	<10	<10
1,2,4-trichlorobenzene	<1.9	<1	<1	<1	<1	<1	<1	<10	<10
Sub Total 1	22.6	1	6	368	358	564	376	539	473

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-10C	GM-11	GM-11	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A
Date:	5/85	11/83	5/84	11/83	11/83*	5/84	5/84*	11/84	11/84*
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	<10	NA	NA	NA	NA	NA	NA	<10	<10
4-nitroaniline	<10	NA	NA	NA	NA	NA	NA	<10	<10
2-nitrochlorobenzene	<10	NA	NA	NA	NA	NA	NA	<10	<10
4-nitrochlorobenzene	<10	NA	NA	NA	NA	NA	NA	<10	<10
2,4-and 3,4-dinitrochlorobenzene	<10	NA	NA	NA	NA	NA	NA	<10	<10
4-nitrodiphenylamine	<10	NA	NA	NA	NA	NA	NA	<10	<10
triphenyl phosphate	<10	NA	NA	NA	NA	NA	NA	<10	<10
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-nitrobiphenyl	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	NA	NA	NA	NA	NA	NA	0	0
Total Base/Neutral Compounds Analyzed	22.6	1	6	368	358	564	376	539	473

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12B
Date:	2/85	2/85*	5/85	5/85*	11/85	11/85*	2/86	2/86*	9/84**
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<1.9	<1.9	<1.9	<1.9	<2.0	<2.0	<2.0	<1.9	<4
acenapthylene	<3.5	<3.5	<3.5	<3.5	<3.7	<3.7	<3.7	<3.5	<3
anthracene	<1.9	<1.9	<1.9	<1.9	<2.0	<2.0	<2.0	<1.9	<4
benzidine	<44	<44	<44	<44	<46	<46	<47	<44	<60
benzo (a) anthracene	<7.8	<7.8	<7.8	<7.8	<8.2	<8.2	<8.3	<7.9	<9
benzo (a) pyrene	<2.5	<2.5	<2.5	<2.5	<2.6	<2.6	<2.7	<2.5	<12
benzo (b) fluoroanthene	<4.8	<4.8	<4.8	<4.8	<5.1	<5.1	<5.1	<4.8	<11
benzo (ghi) perylene	<4.1	<4.1	<4.1	<4.1	<4.3	<4.3	<4.4	<4.1	<14
benzo (k) fluoranthene	<2.5	<2.5	<2.5	<2.5	<3.7	<3.7	<3.7	<3.5	<11
bis (2-chloroethoxy) methane	<5.3	<5.3	<5.3	<5.3	<5.6	<5.6	<5.6	<5.4	<4
bis (2-chloroethyl) ether	<5.7	<5.7	<5.7	<5.7	<6.0	<6.0	<6.1	<5.8	<4
bis (2-chloroisopropyl) ether	<5.7	<5.7	<5.7	<5.7	<6.0	<6.0	<6.1	<5.8	<3
bis (2-ethylhexyl) phthalate	<10	434	<10	13.8	<11	<11	<11	<10	<10
4-bromophenyl phenyl ether	<1.9	<1.9	<1.9	<1.9	<2	<2	<2	<1.9	<16
butyl benzyl phthalate	<10	<10	<10	<10	<11	<11	<11	<10	<13
2-chloronaphthalene	<1.9	<1.9	<1.9	<1.9	<2	<2	<2	<1.9	<4
4-chlorophenyl phenyl ether	<4.2	<4.2	<4.2	<4.2	<4.4	<4.4	<4.5	<4.2	<9
chrysene	<2.5	<2.5	<2.5	<2.5	<2.6	<2.6	<2.7	<2.5	<9
dibenzo (a,h) anthracene	<2.5	<2.5	<2.5	<2.5	<11	<11	<11	<10	<16
1,2-dichlorobenzene	295	213	164.4	201	235	250	248	255	3
1,3-dichlorobenzene	<1.9	<1.9	<1.9	<1.9	<2	<2	<2	<1.9	<6
1,4-dichlorobenzene	<4.4	<4.4	<4.4	<4.4	<4.6	<4.6	<4.7	<4.4	<5
3,3-dichlorobenzidine	<16.5	<16.5	<16.5	<16.5	<17	<17	<18	<17	<161
diethyl phthalate	<10	<10	<10	<10	<11	<11	<11	<10	2
dimethyl phthalate	<10	<10	<10	<10	<11	<11	<11	<10	<4
di-n-butyl phthalate	<10	<10	<10	<10	<11	<11	<11	<10	<3
2,4-dinitrotoluene	<5.7	<5.7	<5.7	<5.7	<6.0	<6.0	<6.1	<5.8	<14
2,6-dinitrotoluene	<1.9	<1.9	<1.9	<1.9	<2.0	<2.0	<2.0	<1.9	<16
di-n-octyl phthalate	<10	<10	<10	<10	<11	<11	<11	<10	<6
1,2-diphenylhydrazine	<10	<10	<10	<10	<11	<11	<11	<10	<10
fluoranthene	<2.2	<2.2	<2.2	<2.2	<2.3	<2.3	<2.3	<2.2	<5
fluorene	<1.9	<1.9	<1.9	<1.9	<2.0	<2.0	<2.0	<1.9	<4
hexachlorobenzene	<1.9	<1.9	<1.9	<1.9	<2.0	<2.0	<2.0	<1.9	<15
hexachlorobutadiene	<0.9	<0.9	<0.9	<0.9	<0.95	<0.95	<1	<0.9	<13
hexachlorocyclopentadiene	<10	<10	<10	<10	<11	<11	<11	<10	<12
hexachloroethane	<1.6	<1.6	<1.6	<1.6	<1.7	<1.7	<1.7	<1.6	<10
indeno (1,2,3-c,d) pyrene	<3.7	<3.7	<3.7	<3.7	<4.9	<4.9	<5	<4.7	<7
isophorone	<2.2	<2.2	<2.2	<2.2	<2.3	<2.3	<2.3	<2.2	<2
naphthalene	1.8	1.9	1.8	2.3	<1.7	<1.7	<1.7	<1.6	<2
nitrobenzene	<1.9	<1.9	<1.9	<1.9	<2.0	<2.0	<2.0	<1.9	<5
n-nitrosodimethylamine	<10	<10	<10	<10	<11	<11	<11	<10	<10
n-nitrosodi-n-propylamine	<10	<10	<10	<10	<11	<11	<11	<10	<6
n-nitrosodiphenylamine	<1.9	<1.9	<1.9	<1.9	<2.0	<2.0	<2.0	<1.9	<82
phenanthrene	<5.4	<5.4	<5.4	<5.4	<5.7	<5.7	<5.7	<5.5	<4
pyrene	<1.9	<1.9	<1.9	<1.9	<2.0	<2.0	<2.0	<1.9	<5
1,2,4-trichlorobenzene	<1.9	<1.9	<1.9	<1.9	<2.0	<2.0	<2.0	<1.9	2
Sub Total 1	296.8	648.9	166.2	217.1	235	250	248	255	7

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12B
Date:	2/85	2/85*	5/85	5/85*	11/85	11/85*	2/86	2/86*	9/84**
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	<10	<10	<10	<10	<11	<11	<11	<10	<25-30
4-nitroaniline	<10	<10	<10	<10	<11	<11	<11	<10	<25-30
2-nitrochlorobenzene	<10	<10	<10	<10	<10.5	<10.5	<11	<10	<10
4-nitrochlorobenzene	<10	<10	<10	<10	<10.5	<10.5	<11	<10	<10
2,4-and 3,4-dinitrochlorobenzene	<10	<10	<10	<10	<10.5	<10.5	<11	<10	<10
4-nitrodiphenylamine	<10	<10	<10	<10	<10.5	<10.5	<11	<10	<10
triphenyl phosphate	<10	<10	<10	<10	<10.5	<10.5	<11	<10	<10
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	NA	NA	NA	NA	NA	NA	NA	NA	<10
4-nitrobiphenyl	NA	NA	NA	NA	NA	NA	NA	NA	<10
Sub Total 2	0	0	0	0	0	0	0	0	0
Total Base/Neutral Compounds Analyzed	296.8	648.9	166.2	217.1	235	250	248	255	7

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-12B	GM-12B	GM-12C	GM-12C	GM-12C	GM-12C	GM-13	GM-13	GM-13
Date:	11/84	11/85	2/85	2/85*	5/85	5/85*	9/84**	11/85	2/86
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<10	<2.0	<1.9	<1.9	<1.9	<1.9	<4	<42	<100
acenapthylene	<10	<3.7	<3.5	<3.5	<3.5	<3.5	<3	<77	<180
anthracene	<10	<2.0	<1.9	<1.9	<1.9	<1.9	<4	<42	<100
benzidine	<10	<46	<44	<44	<44	<44	<60	<970	<2300
benzo (a) anthracene	<10	<8.2	<7.8	<7.8	<7.8	<7.8	<9	<170	<410
benzo (a) pyrene	<10	<2.6	<2.5	<2.5	<2.5	<2.5	<12	<55	<130
benzo (b) fluoroanthene	<10	<5.1	<4.8	<4.8	<4.8	<4.8	<11	<110	<250
benzo (ghi) perylene	<10	<4.3	<4.1	<4.1	<4.1	<4.1	<14	<90	<220
benzo (k) fluoranthene	<10	<3.7	<2.5	<2.5	<2.5	<2.5	<11	<77	<180
bis (2-chloroethoxy) methane	<10	<5.6	<5.3	<5.3	<5.3	<5.3	<4	<120	<280
bis (2-chloroethyl) ether	<10	<6.0	<5.7	<5.7	<5.7	<5.7	<4	<130	<300
bis (2-chloroisopropyl) ether	<10	<6.0	<5.7	<5.7	<5.7	<5.7	<3	<130	<300
bis (2-ethylhexyl) phthalate	10	<11	<10	<10	<10	<10	<10	<220	<530
4-bromophenyl phenyl ether	<10	<2	<1.9	<1.9	<1.9	<1.9	<16	<42	<100
butyl benzyl phthalate	<10	<11	<10	<10	<10	<10	<13	<220	<530
2-chloronaphthalene	<10	<2	<1.9	<1.9	<1.9	<1.9	<4	<42	<100
4-chlorophenyl phenyl ether	<10	<4.4	<4.2	<4.2	<4.2	<4.2	<9	<92	<220
ysene	<10	<2.6	<2.5	<2.5	<2.5	<2.5	<9	<55	<130
enzo (a,h) anthracene	<10	<11	<2.5	<2.5	<2.5	<2.5	<16	<220	<530
1,2-dichlorobenzene	<10	74.2	124	97.4	54	49.7	347	3,630	4,020
1,3-dichlorobenzene	<10	27.8	<2	<1.9	<1.9	<1.9	<6	97.3	126
1,4-dichlorobenzene	<10	27.1	<4	<4.4	<4.4	<4.4	31	1,310	2,260
3,3-dichlorobenzidine	<10	<17	<16.5	<16.5	<16.5	<16.5	<161	<360	<870
diethyl phthalate	<10	<11	<10	<10	<10	<10	<4	<220	<530
dimethyl phthalate	<10	<11	<10	<10	<10	<10	<4	<220	<530
di-n-butyl phthalate	<10	<11	<10	<10	<10	<10	<3	<220	<530
2,4-dinitrotoluene	<10	<6.0	<5.7	<5.7	<5.7	<5.7	<14	<130	<300
2,6-dinitrotoluene	<10	<2.0	<1.9	<1.9	<1.9	<1.9	<16	<42	<100
di-n-octyl phthalate	<10	<11	<10	<10	<10	<10	<6	<220	<530
1,2-diphenylhydrazine	<10	<11	<10	<10	<10	<10	<10	<220	<530
fluoranthene	<10	<2.3	<2.2	<2.2	<2.2	<2.2	<5	<48	<120
fluorene	<10	<2.0	<1.9	<1.9	<1.9	<1.9	<4	<42	<100
hexachlorobenzene	<10	<2.0	<1.9	<1.9	<1.9	<1.9	<15	<42	<100
hexachlorobutadiene	<10	<1	<0.9	<0.9	<0.9	<0.9	<13	<20	<47
hexachlorocyclopentadiene	<10	<11	<10	<10	<10	<10	<12	<220	<530
hexachloroethane	<10	<1.7	<1.6	<1.6	<1.6	<1.6	<10	<35	<84
indeno (1,2,3-c,d) pyrene	<10	<4.9	<3.7	<3.7	<3.7	<3.7	11	<100	<250
isophorone	<10	<2.3	<2.2	<2.2	<2.2	<2.2	<2	<48	<120
naphthalene	<10	<1.7	4.1	3.1	<1.6	1.8	<2	<35	<84
nitrobenzene	<10	<2.0	<1.9	<1.9	<1.9	<1.9	<5	<42	<100
n-nitrosodimethylamine	<10	<11	<10	<10	<10	<10	<10	<220	<530
n-nitrosodi-n-propylamine	<10	<11	<10	<10	<10	<10	<6	<220	<530
n-nitrosodiphenylamine	<10	<2.0	<1.9	<1.9	<1.9	<1.9	18	<42	<100
nanthrene	<10	<5.7	<5.4	<5.4	<5.4	<5.4	<4	<120	<280
rene	<10	<2.0	<1.9	<1.9	<1.9	<1.9	<5	<42	<100
1,2,4-trichlorobenzene	<10	<2.0	<1.9	<1.9	<1.9	<1.9	18	<42	<100
Sub Total 1	10	129.1	128.1	100.5	54	51.5	425	5037.3	6406

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-12B	GM-12B	GM-12C	GM-12C	GM-12C	GM-12C	GM-13	GM-13	GM-13
Date:	11/84	11/85	2/85	2/85*	5/85	5/85*	9/84**	11/85	2/86
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	<10	21.5	<10	<10	<10	<10	<25-30	771	<530
4-nitroaniline	<10	<11	<10	<10	<10	<10	<25-30	346	<530
2-nitrochlorobenzene	<10	<10.5	<10	<10	<10	<10	<10	<220	<530
4-nitrochlorobenzene	<10	23.7	<10	<10	<10	<10	<10	1,290	<530
2,4-and 3,4-dinitrochlorobenzene	<10	<10.5	<10	<10	<10	<10	<10	<220	<530
4-nitrodiphenylamine	<10	<10.5	<10	<10	<10	<10	<10	<220	<530
triphenyl phosphate	<10	<10.5	<10	<10	<10	<10	<10	<220	<530
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	NA	NA	NA	NA	NA	NA	<10	NA	NA
4-nitrobiphenyl	NA	NA	NA	NA	NA	NA	<10	NA	NA
Sub Total 2	0	45.2	0	0	0	0	0	2407	0
Total Base/Neutral Compounds Analyzed	10	174.3	128.1	100.5	54	51.5	425	7444.3	6406

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-14	GM-15	GM-16A	GM-16A	GM-16A	GM-16B	GM-16B	GM-16B	GM-17A
Date:	9/84**	9/84**	9/84**	5/85	11/85	9/84**	5/85	11/85	9/84
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	NA	<4	<4	<1.9	<1.9	<4	1.9	<2.0	<4
acenapthylene	NA	<3	<3	<3.5	<3.6	<3	<3.5	<3.8	<3
anthracene	NA	<4	<4	<1.9	<1.9	<4	<1.9	<2.0	<4
benzidine	NA	<60	<60	<44	<45	<60	<44	<47	<60
benzo (a) anthracene	NA	<9	<9	<7.8	<8.0	<9	<7.8	<8.4	<9
benzo (a) pyrene	NA	<12	<12	<2.5	<2.6	<12	<2.5	<2.7	<12
benzo (b) fluoroanthene	NA	<11	<11	<4.8	<4.9	<11	<4.8	<5.2	<11
benzo (ghi) perylene	NA	<14	<14	<4.1	<4.2	<14	<4.1	<4.4	<14
benzo (k) fluoranthene	NA	<11	<11	<2.5	<3.6	<11	<2.5	<3.8	<11
bis (2-chloroethoxy) methane	NA	<4	<4	<5.3	<5.4	<4	<5.3	<5.7	<4
bis (2-chloroethyl) ether	NA	<4	<4	<5.7	<5.8	<4	<5.7	<6.1	<4
bis (2-chloroisopropyl) ether	NA	<3	<3	<6.0	<5.8	<3	<5.7	<6.1	<3
bis (2-ethylhexyl) phthalate	NA	<10	6	<10	<10	8	<10	24.7	2
4-bromophenyl phenyl ether	NA	<16	<16	<1.9	<1.9	<16	<1.9	<2	<16
butyl benzyl phthalate	NA	<13	<13	<10	<10	<13	<10	<11	<13
2-chloronaphthalene	NA	<4	<4	<1.9	<1.9	<4	<1.9	<2	<4
4-chlorophenyl phenyl ether	NA	<9	<9	<4.2	<4.3	<9	<4.2	<4.5	<9
chrysene	NA	<9	<9	<2.5	<2.6	<9	<2.5	<2.7	<9
dibenzo (a,h) anthracene	NA	<16	<16	<2.5	<10	<16	<2.5	<11	<16
1,2-dichlorobenzene	NA	185	<5	<1.9	<1.9	<5	<1.9	<2	<5
1,3-dichlorobenzene	NA	35	<6	<1.9	<1.9	<6	<1.9	<2	<6
1,4-dichlorobenzene	NA	<5	<5	<4.4	<4.5	<5	<4.4	<4.7	6
3,3-dichlorobenzidine	NA	<161	<161	<16.5	<17	<161	<16.5	<18	<161
diethyl phthalate	NA	1	<4	<10	<10	<4	<10	<11	<4
dimethyl phthalate	NA	<4	<4	<10	<10	<4	<10	<11	<4
di-n-butyl phthalate	NA	3	3	<10	<10	2	<10	<11	5
2,4-dinitrotoluene	NA	<14	<14	<5.7	<5.8	<14	<5.7	<6.1	<14
2,6-dinitrotoluene	NA	<16	<16	<1.9	<1.9	<16	<1.9	<2.0	<16
di-n-octyl phthalate	NA	<6	<6	<10	<10	<6	<10	<11	<6
1,2-diphenylhydrazine	NA	<10	<10	<10	<10	<10	<10	<11	<10
fluoranthene	NA	<5	<5	<2.2	<2.2	<5	<2.2	<2.4	<5
fluorene	NA	<4	<4	<1.9	<1.9	<4	<1.9	<2.0	<4
hexachlorobenzene	NA	<15	<15	<1.9	<1.9	<15	<1.9	<2.0	<15
hexachlorobutadiene	NA	<13	<13	<0.9	<0.9	<13	<0.9	<0.97	<13
hexachlorocyclopentadiene	NA	<12	<12	<10	<10	<12	<10	<11	<12
hexachloroethane	NA	<10	<10	<1.6	<1.6	<10	<1.6	<1.7	<10
indeno (1,2,3-c,d) pyrene	NA	<7	<7	<3.7	<4.8	<7	<3.7	<5.1	<7
isophorone	NA	<2	<2	<2.2	<2.2	<2	<2.2	<2.4	<2
naphthalene	NA	<2	<2	<1.6	<1.6	<2	<1.6	<1.7	<2
nitrobenzene	NA	8	<5	<1.9	<1.9	<5	<1.9	<2.0	<5
n-nitrosodimethylamine	NA	<10	<10	<10	<10	<10	<10	<11	<10
n-nitrosodi-n-propylamine	NA	<6	<6	<10	<10	<6	<10	<11	<6
n-nitrosodiphenylamine	NA	<82	<82	<1.9	<1.9	<82	<1.9	<2.0	<82
phenanthrene	NA	<4	<4	<5.4	<5.5	<4	<5.4	<5.8	<4
pyrene	NA	<5	<5	<1.9	<1.9	<5	<1.9	<2.0	<5
1,2,4-trichlorobenzene	NA	12	<7	<1.9	<1.9	<7	<1.9	<2.0	<7
Sub Total 1	NA	244	9	0	0	10	1.9	24.7	13

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-14	GM-15	GM-16A	GM-16A	GM-16A	GM-16B	GM-16B	GM-16B	GM-17A
Date:	9/84**	9/84**	9/84**	5/85	11/85	9/84**	5/85	11/85	9/84
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	NA	<25-30	<25-30	<10	<10	<25-30	<10	<11	<25-30
4-nitroaniline	NA	<25-30	<25-30	<10	<10	<25-30	<10	<11	<25-30
2-nitrochlorobenzene	NA	<10	<10	<10	<10.2	<10	<10	<10.8	<10
4-nitrochlorobenzene	NA	<10	<10	<10	<10.2	<10	<10	<10.8	<10
2,4-and 3,4-dinitrochlorobenzene	NA	<10	<10	<10	<10.2	<10	<10	<10.8	<10
4-nitrodiphenylamine	NA	<10	<10	<10	<10.2	<10	<10	<10.8	<10
triphenyl phosphate	NA	<10	<10	<10	<10.2	<10	<10	<10.8	<10
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	<0.00034	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	NA	<10	<10	NA	NA	<10	NA	NA	<10
4-nitrobiphenyl	NA	<10	<10	NA	NA	<10	NA	NA	<10
Sub Total 2	NA	0	0	0	0	0	0	0	0
Total Base/Neutral Compounds Analyzed	NA	244	9	0	0	10	1.9	24.7	13

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-17A	GM-17A	GM-17B	GM-17B	GM-17B	GM-17C	GM-17C	GM-17C	GM-18A
Date:	11/84	11/85	9/84**	11/84	11/85	9/84**	11/84	11/85	9/84**
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<10	<1.9	<4	<10	<3.8	1	<10	<1.9	<4
acenapthylene	<10	<3.5	<3	<10	<7.0	<3	<10	<3.5	<3
anthracene	<10	<1.9	<4	<10	<3.8	<4	<10	<1.9	<4
benzidine	<10	<44	<60	<10	<88	<60	<10	<44	<60
benzo (a) anthracene	<10	<7.8	<9	<10	<16	<9	<10	<7.9	<9
benzo (a) pyrene	<10	<2.5	<12	<10	<5	<12	<10	<2.5	<12
benzo (b) fluoroanthene	<10	<4.8	<11	<10	<9.6	<11	<10	<4.8	<11
benzo (ghi) perylene	<10	<4.1	<14	<10	<8.2	<14	<10	<4.1	<14
benzo (k) fluoranthene	<10	<3.5	<11	<10	<7	<11	<10	<3.5	<11
bis (2-chloroethoxy) methane	<10	<5.3	<4	<10	<11	<4	<10	<5.4	<4
bis (2-chloroethyl) ether	<10	<5.7	<4	<10	<11	<4	<10	<5.8	<4
bis (2-chloroisopropyl) ether	<10	<5.7	<3	<10	<11	<3	<10	<5.8	<3
bis (2-ethylhexyl) phthalate	<10	<10	<10	<10	<20	10	<10	<10	4
4-bromophenyl phenyl ether	<10	<1.9	<16	<10	<3.8	<16	<10	<1.9	<16
butyl benzyl phthalate	<10	<10	<13	<10	<20	<13	<10	<10	<13
2-chloronaphthalene	<10	<1.9	<4	<10	<3.8	<4	<10	<1.9	<4
4-chlorophenyl phenyl ether	<10	<4.2	<9	<10	<8.4	<9	<10	<4.2	<9
[illegible]ysene	<10	<2.5	<9	<10	<5.0	<9	<10	<2.5	<9
[illegible]enzo (a,h) anthracene	<10	<10	<16	<10	<20	<16	<10	<10	<16
1,2-dichlorobenzene	<10	<1.9	<5	<10	4.57	113	147	286	<5
1,3-dichlorobenzene	<10	<1.9	5	<10	<3.8	776	57	126	<6
1,4-dichlorobenzene	<10	<4.4	47	70	64	<5	1,560	945	<5
3,3-dichlorobenzidine	<10	<17	<161	<10	<33	<161	<10	<17	<161
diethyl phthalate	<10	<10	<4	<10	<20	<4	<10	<10	<4
dimethyl phthalate	<10	<10	<4	<10	<20	<4	<10	<10	<4
di-n-butyl phthalate	<10	<10	<3	<10	<20	5	<10	<10	5
2,4-dinitrotoluene	<10	<5.7	<14	<10	<11	<14	<10	<5.8	<14
2,6-dinitrotoluene	<10	<1.9	<16	<10	<3.8	<16	<10	<1.9	<16
di-n-octyl phthalate	<10	<10	<6	<10	<20	<6	<10	<10	<6
1,2-diphenylhydrazine	<10	<10	<10	<10	<20	<10	<10	<10	<10
fluoranthene	<10	<2.2	<5	<10	<4.4	<5	<10	<2.2	<5
fluorene	<10	<1.9	<4	<10	<3.8	<4	<10	<1.9	<4
hexachlorobenzene	<10	<1.9	<15	<10	<3.8	<15	<10	<1.9	<15
hexachlorobutadiene	<10	<0.9	<13	<10	<1.8	<13	<10	<0.9	<13
hexachlorocyclopentadiene	<10	<10	<12	<10	<20	<12	<10	<10	<12
hexachloroethane	<10	<1.6	<10	<10	<3.2	<10	<10	<1.6	<10
indeno (1,2,3-c,d) pyrene	<10	<4.7	<7	<10	<9.4	<7	<10	<4.7	<7
isophorone	<10	<2.2	<2	<10	<4.4	<2	<10	<2.2	<2
naphthalene	<10	<1.6	<2	<10	<3.2	<2	<10	<1.6	<2
nitrobenzene	<10	<1.9	<5	<10	<3.8	<5	<10	<1.9	<5
n-nitrosodimethylamine	<10	<10	<10	<10	<20	<10	<10	<10	<10
n-nitrosodi-n-propylamine	<10	<10	<6	<10	<20	<6	<10	<10	<6
n-nitrosodiphenylamine	<10	<1.9	<82	<10	<3.8	<82	<10	<1.9	<82
[illegible]anthrene	<10	<5.4	<4	<10	<11	<4	<10	<5.5	<4
[illegible]rene	<10	<1.9	<5	<10	<3.8	<5	<10	<1.9	<5
1,2,4-trichlorobenzene	<10	<1.9	<7	<10	<3.8	10	<10	<1.9	<7
Sub Total 1	0	0	52	70	68.57	915	1764	1357	9

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-17A	GM-17A	GM-17B	GM-17B	GM-17B	GM-17C	GM-17C	GM-17C	GM-18A
Date:	11/84	11/85	9/84**	11/84	11/85	9/84**	11/84	11/85	9/84**
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	<10	<10	<25-30	<10	<20	<25-30	<10	<10	<25-30
4-nitroaniline	<10	<10	<25-30	<10	<20	<25-30	<10	<10	<25-30
2-nitrochlorobenzene	<10	<10	<10	<10	<20	<10	<10	<10	<10
4-nitrochlorobenzene	<10	<10	<10	<10	<20	<10	<10	<10	<10
2,4-and 3,4-dinitrochlorobenzene	<10	<10	<10	<10	<20	<10	<10	<10	<10
4-nitrodiphenylamine	<10	<10	<10	<10	<20	<10	<10	<10	<10
triphenyl phosphate	<10	<10	<10	<10	<20	<10	<10	<10	<10
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	NA	NA	<10	NA	NA	<10	NA	NA	<10
4-nitrobiphenyl	NA	NA	<10	NA	NA	<10	NA	NA	<10
Sub Total 2	0	0	0	0	0	0	0	0	0
Total Base/Neutral Compounds Analyzed	0	.0	52	70	68.57	915	1764	1357	9

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-18A	GM-18A	GM-18B	GM-18B	GM-18B	GM-25A	GM-25A	GM-25B	GM-25B
Date:	5/85	11/85	9/84**	5/85	11/85	9/84	11/84	9/84	11/84
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<1.9	<2.0	<4	<1.9	<2.1	<4	<10	<4	<10
acenapthylene	<3.5	<3.7	<3	<3.5	<3.8	<3	<10	<3	<10
anthracene	<1.9	<2.0	<4	<1.9	<2.1	<4	<10	<4	<10
benzidine	<44	<46	<60	<44	<48	<60	<10	<60	<10
benzo (a) anthracene	<7.8	<8.2	<9	<7.8	<8.5	<9	<10	<9	<10
benzo (a) pyrene	<2.5	<2.6	<12	<2.5	<2.7	<12	<10	<12	<10
benzo (b) fluoroanthene	<4.8	<5.1	<11	<4.8	<5.2	<11	<10	<11	<10
benzo (ghi) perylene	<4.1	<4.3	<14	<4.1	<4.5	<14	<10	<14	<10
benzo (k) fluoranthene	<2.5	<3.7	<11	<2.5	<3.8	<11	<10	<11	<10
bis (2-chloroethoxy) methane	<5.3	<5.6	<4	<5.3	<5.8	<4	<10	<4	<10
bis (2-chloroethyl) ether	<5.7	<6.0	<4	<5.7	<6.2	<4	<10	<4	<10
bis (2-chloroisopropyl) ether	<6.0	<6.0	<3	<5.7	<6.2	<3	<10	<3	<10
bis (2-ethylhexyl) phthalate	<10	<11	3	<10	<11	19	22	14	<10
4-bromophenyl phenyl ether	<1.9	<2.0	<16	<1.9	<2.1	<16	<10	<16	<10
butyl benzyl phthalate	<10	<11	<13	<10	<11	<13	<10	<13	<10
2-chloronaphthalene	<1.9	<2.0	<4	<1.9	<2.1	<4	<10	<4	<10
4-chlorophenyl phenyl ether	<4.2	<4.4	<9	<4.2	<4.6	<9	<10	<9	<10
chrysene	<2.5	<2.6	<9	<2.5	<2.7	<9	<10	<9	<10
dibenzo (a,h) anthracene	<2.5	<11	<16	<2.5	<11	<16	<10	<16	<10
1,2-dichlorobenzene	<1.9	<2.0	<5	<1.9	<2.1	<5	<10	<5	<10
1,3-dichlorobenzene	<1.9	<2.0	<6	<1.9	<2.1	<6	<10	<6	<10
1,4-dichlorobenzene	<4.4	<4.6	<5	<4.4	<4.8	<5	<10	<5	<10
3,3-dichlorobenzidine	<16.5	<17	<161	<16.5	<18	<161	<10	<161	<10
diethyl phthalate	<10	<11	1	<10	<11	<4	<10	2	<10
dimethyl phthalate	<10	<11	<4	<10	<11	<4	<10	<4	<10
di-n-butyl phthalate	<10	<11	7	<10	<11	5	<10	10	<10
2,4-dinitrotoluene	<5.7	<6.0	<14	<5.7	<6.2	<14	<10	<14	<10
2,6-dinitrotoluene	<1.9	<2.0	<16	<1.9	<2.1	<16	<10	<16	<10
di-n-octyl phthalate	<10	<11	<6	<10	<11	<6	<10	<6	<10
1,2-diphenylhydrazine	<10	<11	<10	<10	<11	<10	<10	<10	<10
fluoranthene	<2.2	<2.3	<5	<2.2	<2.4	<5	<10	<5	<10
fluorene	<1.9	<2.0	<4	<1.9	<2.1	<4	<10	<4	<10
hexachlorobenzene	<1.9	<2	<15	<1.9	<2.1	<15	<10	<15	<10
hexachlorobutadiene	<0.9	<0.95	<13	<0.9	<1	<13	<10	<13	<10
hexachlorocyclopentadiene	<10	<11	<12	<10	<11	<12	<10	<12	<10
hexachloroethane	<1.6	<1.7	<10	<1.6	<1.7	<10	<10	<10	<10
indeno (1,2,3-c,d) pyrene	<3.7	<4.9	<7	<3.7	<5.1	<7	<10	<7	<10
isophorone	<2.2	<2.3	<2	<2.2	<2.4	<2	<10	<2	<10
naphthalene	<1.6	<1.7	<2	<1.6	<1.7	<2	<10	<2	<10
nitrobenzene	<1.9	<2.0	<5	<1.9	<2.1	<5	<10	<5	<10
n-nitrosodimethylamine	<10	<11	<10	<10	<11	<10	<10	<10	<10
n-nitrosodi-n-propylamine	<10	<11	<6	<10	<11	<6	<10	<6	<10
n-nitrosodiphenylamine	<1.9	<2.0	<82	<1.9	<2.1	<82	<10	<82	<10
phenanthrene	<5.4	<5.7	<4	<5.4	<5.9	<4	<10	<4	<10
pyrene	<1.9	<2.0	<5	<1.9	<2.1	<5	<10	<5	<10
1,2,4-trichlorobenzene	<1.9	<2.0	<7	<1.9	<2.1	<7	<10	<7	<10
Sub Total 1	0	0	11	0	0	24	22	26	0

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-18A	GM-18A	GM-18B	GM-18B	GM-18B	GM-25A	GM-25A	GM-25B	GM-25B
Date:	5/85	11/85	9/84**	5/85	11/85	9/84	11/84	9/84	11/84
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	<10	<11	<25-30	<10	<11	<25-30	<10	<25-30	<10
4-nitroaniline	<10	<11	<25-30	<10	<11	<25-30	<10	<25-30	<10
2-nitrochlorobenzene	<10	<10.5	<10	<10	<10.9	<10	<10	<10	<10
4-nitrochlorobenzene	<10	<10.5	<10	<10	<10.9	<10	<10	<10	<10
2,4-and 3,4-dinitrochlorobenzene	<10	<10.5	<10	<10	<10.9	<10	<10	<10	<10
4-nitrodiphenylamine	<10	<10.5	<10	<10	<10.9	<10	<10	<10	<10
triphenyl phosphate	<10	<10.5	<10	<10	<10.9	<10	<10	<10	<10
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	NA	NA	<10	NA	NA	<10	NA	<10	NA
4-nitrobiphenyl	NA	NA	<10	NA	NA	<10	NA	<10	NA
Sub Total 2	0	0	0	0	0	0	0	0	0
Total Base/Neutral Compounds Analyzed	0	0	11	0	0	24	22	26	0

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-25B	GM-27B	GM-27B	GM-27B	GM-27C	GM-27C	GM-27C	GM-28B	GM-28B
Date:	11/85	9/84**	11/85	2/86	9/84**	11/85	2/86	9/84**	11/85
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<3.7	<4	<1.9	<2.0	<4	<1.9	<1.9	<4	<2.0
acenapthylene	<6.9	<3	<3.5	<3.6	<3	<3.5	<3.6	<3	<3.8
anthracene	<3.7	<4	<1.9	<2.0	<4	<1.9	<1.9	<4	<2.0
benzidine	<86	<60	<44	<45	<60	<44	<45	<60	<47
benzo (a) anthracene	<15	<9	<7.8	<8	<9	<7.8	<8	<9	<8.4
benzo (a) pyrene	<4.9	<12	<2.5	<2.6	<12	<2.5	<2.6	<12	<2.7
benzo (b) fluoroanthene	<9.4	<11	<4.8	<4.9	<11	<4.8	<4.9	<11	<5.2
benzo (ghi) perylene	<8.0	<14	<4.1	<4.2	<14	<4.1	<4.2	<14	<4.4
benzo (k) fluoranthene	<6.9	<11	<3.5	<3.6	<11	<3.5	<3.6	<11	<3.8
bis (2-chloroethoxy) methane	<10	<4	<5.3	<5.5	<4	<5.3	<5.4	<4	<5.7
bis (2-chloroethyl) ether	<11	<4	<5.7	<5.9	<4	<5.7	<5.8	<4	<6.1
bis (2-chloroisopropyl) ether	<11	<3	<5.7	<5.9	<3	<5.7	<5.8	<3	<6.1
bis (2-ethylhexyl) phthalate	36.3	9	<10	11.7	4	54	<10	11	<11
4-bromophenyl phenyl ether	<3.7	<16	<1.9	<2	<16	<1.9	<1.9	<16	<2.0
butyl benzyl phthalate	<20	<13	<10	<10	<13	<10	<10	<13	<11
2-chloronaphthalene	<3.7	<4	<1.9	<2	<4	<1.9	<1.9	<4	<2.0
4-chlorophenyl phenyl ether	<8.2	<9	<4.2	<4.3	<9	<4.2	<4.3	<9	<4.5
[illegible]sene	<4.9	<9	<2.5	<2.6	<9	<2.5	<2.6	<9	<2.7
[illegible]nzo (a,h) anthracene	<20	<16	<10	<10	<16	<10	<10	<16	<11
1,2-dichlorobenzene	<3.7	3	2.6	<2	3	72.8	103	<5	102
1,3-dichlorobenzene	<3.7	<6	<1.9	<2	<6	5.5	3.1	<6	<2.0
1,4-dichlorobenzene	<8.6	11	13.3	27.6	2	52	76.5	127	18.8
3,3-dichlorobenzidine	<32	<161	<17	<17	<161	<17	<17	<161	<18
diethyl phthalate	<20	<4	<10	<10	<4	<10	<10	<4	<11
dimethyl phthalate	<20	<4	<10	<10	<4	<10	<10	<4	<11
di-n-butyl phthalate	<20	6	<10	<10	8	<10	<10	7	<11
2,4-dinitrotoluene	<11	<14	<5.7	<5.9	<14	<5.7	<5.8	<14	<6.1
2,6-dinitrotoluene	<3.7	<16	<1.9	<2.0	<16	<1.9	<1.9	<16	<2.0
di-n-octyl phthalate	<20	<6	<10	<10	<6	<10	<10	<6	<11
1,2-diphenylhydrazine	<20	<10	<10	<10	<10	<10	<10	<10	<11
fluoranthene	<4.3	<5	<2.2	<2.3	<5	<2.2	<2.2	<5	<2.4
fluorene	<3.7	<4	<1.9	<2.0	<4	<1.9	<1.9	<4	<2.0
hexachlorobenzene	<3.7	<15	<1.9	<2.0	<15	<1.9	<1.9	<15	<2.0
hexachlorobutadiene	<1.8	<13	<0.9	<0.9	<13	<0.9	<0.9	<13	<1
hexachlorocyclopentadiene	<20	<12	<10	<10	<12	<10	<10	<12	<11
hexachloroethane	<3.1	<10	<1.6	<1.6	<10	<1.6	<1.6	<10	<1.7
indeno (1,2,3-c,d) pyrene	<9.2	<7	<4.7	<4.8	<7	<4.7	<4.8	<7	<5.1
isophorone	<4.3	<2	<2.2	<2.3	<2	<2.2	<2.2	<2	<2.4
naphthalene	<3.1	<2	<1.6	<1.6	<2	5.2	<1.6	<2	2.3
nitrobenzene	<3.7	<5	<1.9	<2.0	<5	<1.9	<1.9	<5	<2.0
n-nitrosodimethylamine	<20	<10	<10	<10	<10	<10	<10	<10	<11
n-nitrosodi-n-propylamine	<20	<6	<10	<10	<6	<10	<10	<6	<11
n-nitrosodiphenylamine	<3.7	<82	<1.9	<2.0	<82	<1.9	<1.9	<82	<2.0
[illegible]anthrene	<11	<4	<5.4	<5.6	<4	<5.4	<5.5	<4	<5.8
[illegible]ene	<3.7	<5	<1.9	<2.0	<5	<1.9	<1.9	<5	<2.0
1,2,4-trichlorobenzene	<3.7	<7	<1.9	<2.0	<7	<1.9	<1.9	<7	<10.5
Sub Total 1	36.3	29	15.9	39.3	17	189.5	182.6	145	123.1

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-25B	GM-27B	GM-27B	GM-27B	GM-27C	GM-27C	GM-27C	GM-28B	GM-29B
Date:	11/85	9/84**	11/85	2/86	9/84**	11/85	2/86	9/84**	11/85
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	<20	<25-30	<10	<10	<25-30	<10	<10	<25-30	<11
4-nitroaniline	<20	<25-30	<10	<10	<25-30	<10	<10	<25-30	<11
2-nitrochlorobenzene	<20	<10	<10	<10	<10	<10	<10	<10	<11
4-nitrochlorobenzene	<20	<10	<10	<10	<10	<10	<10	<10	<11
2,4-and 3,4-dinitrochlorobenzene	<20	<10	<10	<10	<10	<10	<10	<10	<11
4-nitrodiphenylamine	<20	<10	<10	<10	<10	<10	<10	<10	<11
triphenyl phosphate	<20	<10	<10	<10	<10	<10	<10	<10	<11
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	<0.001	NA	NA	NA	NA	NA	<0.0016	NA
2-nitrobiphenyl	NA	<10	NA	NA	<10	NA	NA	<10	NA
4-nitrobiphenyl	NA	<10	NA	NA	<10	NA	NA	<10	NA
Sub Total 2	0	0	0	0	0	0	0	0	0
Total Base/Neutral Compounds Analyzed	36.3	29	15.9	39.3	17	189.5	182.6	145	123.1

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-28B	GM-28C	GM-28C	GM-28C	GM-29	GM-29	GM-30	GM-30	GM-30
Date:	2/86	9/84**	11/85	2/86	9/84**	11/85	9/84**	11/85	2/86
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<1.9	NA	<1.9	<1.9	<4	<2.3	<4	<2.1	<2.3
acenapthylene	<3.6	NA	<3.5	<3.5	<3	<4.2	<3	<3.9	<4.2
anthracene	<1.9	NA	<1.9	<1.9	<4	<2.3	<4	<2.1	<2.3
benzidine	<45	NA	<44	<44	<60	<52	<60	<49	<52
benzo (a) anthracene	<8	NA	<7.8	<7.9	<9	<9.3	<9	<8.7	<9.3
benzo (a) pyrene	<2.6	NA	<2.5	<2.5	<12	<3.0	<12	<2.8	<3.0
benzo (b) fluoroanthene	<4.9	NA	<4.8	<4.8	<11	<5.7	<11	<5.3	<5.7
benzo (ghi) perylene	<4.2	NA	<4.1	<4.1	<14	<4.9	<14	<4.6	<4.9
benzo (k) fluoranthene	<3.6	NA	<3.5	<3.5	<11	<4.2	<11	<3.9	<4.2
bis (2-chloroethoxy) methane	<5.4	NA	<5.3	<5.4	<4	<6.3	<4	<5.9	<6.3
bis (2-chloroethyl) ether	<5.8	NA	<5.7	<5.8	<4	<6.8	<4	<6.3	<6.8
bis (2-chloroisopropyl) ether	<5.8	NA	<5.7	<5.8	<3	<6.8	<3	<6.3	<6.8
bis (2-ethylhexyl) phthalate	<10	NA	<10	<10	17	<12	<10	<11	<12
4-bromophenyl phenyl ether	<1.9	NA	<1.9	<1.9	<16	<2.3	<16	<2.1	<2.3
butyl benzyl phthalate	<10	NA	<10	<10	<13	<12	<13	<11	<12
2-chloronaphthalene	<1.9	NA	<1.9	<1.9	<4	<2.3	<4	<2.1	<2.3
4-chlorophenyl phenyl ether	<4.3	NA	<4.2	<4.2	<9	<5.0	<9	<4.7	<5.0
ysene	<2.6	NA	<2.5	<2.5	<9	<3.0	<9	<2.8	<3.0
enzo (a,h) anthracene	<10	NA	<10	<10	<16	<12	<16	<11	<12
1,2-dichlorobenzene	1,720	NA	38	3,270	<5	5	<5	3.7	4.7
1,3-dichlorobenzene	5.4	NA	<1.9	14.7	<6	<2.3	<6	<2.1	<2.3
1,4-dichlorobenzene	231	NA	10	103	<5	<5.2	<5	179	123
3,3-dichlorobenzidine	<17	NA	<17	<17	<161	<20	<161	<18	<20
diethyl phthalate	<10	NA	<10	<10	<4	<12	<4	<11	<12
dimethyl phthalate	<10	NA	<10	<10	<4	<12	<4	<11	<12
di-n-butyl phthalate	<10	NA	<10	<10	3	<12	3	<11	<12
2,4-dinitrotoluene	<5.8	NA	<5.7	<5.8	<14	<6.8	<14	<6.3	<6.8
2,6-dinitrotoluene	<1.9	NA	<1.9	<1.9	<16	<2.3	<16	<2.1	<2.3
di-n-octyl phthalate	<10	NA	<10	<10	<6	<12	<6	<11	<12
1,2-diphenylhydrazine	<10	NA	<10	<10	<10	<12	<10	<11	<12
fluoranthene	<2.3	NA	<2.2	<2.2	<5	<2.6	<5	<2.4	<2.6
fluorene	<1.9	NA	<1.9	<1.9	<4	<2.3	<4	<2.1	<2.3
hexachlorobenzene	<1.9	NA	<1.9	<1.9	<15	<2.3	<15	<2.1	<2.3
hexachlorobutadiene	<0.9	NA	<0.9	<0.9	<13	<1.1	<13	<1.0	<1.1
hexachlorocyclopentadiene	<10	NA	<10	<10	<12	<12	<12	<11	<12
hexachloroethane	<1.6	NA	<1.6	<1.6	<10	<1.9	<10	<1.8	<1.9
indeno (1,2,3-c,d) pyrene	<4.8	NA	<4.7	<4.7	<7	<5.6	<7	<5.2	<5.6
isophorone	<2.3	NA	<2.2	<2.2	<2	<2.6	<2	<2.4	<2.6
naphthalene	<1.6	NA	<1.6	<1.6	<2	3.8	<2	<1.8	<1.9
nitrobenzene	<1.9	NA	<1.9	<1.9	<5	<2.3	<5	<2.1	<2.3
n-nitrosodimethylamine	<10	NA	<10	<10	<10	<12	<10	<11	<12
n-nitrosodi-n-propylamine	<10	NA	<10	<10	<6	<12	<6	<11	<12
n-nitrosodiphenylamine	<1.9	NA	<1.9	<1.9	<82	<2.3	<82	<2.1	<2.3
nanthrene	<5.5	NA	<5.4	<5.5	<4	<6.4	<4	<6.0	<6.4
rene	<1.9	NA	<1.9	<1.9	<5	<2.3	<5	<2.1	<2.3
1,2,4-trichlorobenzene	29.6	NA	16.2	20.3	<7	<2.3	<7	<2.1	<2.3
Sub Total 1	1986	NA	64.2	3408	20	8.8	3	182.7	127.7

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-28B	GM-28C	GM-28C	GM-28C	GM-29	GM-29	GM-30	GM-30	GM-30
Date:	2/86	9/84**	11/85	2/86	9/84**	11/85	9/84**	11/85	2/86
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	<10	NA	<10	<10	<25-30	<12	<25-30	<11	<12
4-nitroaniline	<10	NA	<10	<10	<25-30	<12	<25-30	<11	<12
2-nitrochlorobenzene	180	NA	<10	494	<10	<12	<10	<11.1	<12
4-nitrochlorobenzene	36.6	NA	<10	1,460	<10	<12	<10	<11.1	<12
2,4-and 3,4-dinitrochlorobenzene	<10	NA	<10	<10	<10	<12	<10	<11.1	<12
4-nitrodiphenylamine	<10	NA	<10	<10	<10	<12	<10	<11.1	<12
triphenyl phosphate	<10	NA	<10	<10	<10	<12	<10	<11.1	<12
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	NA	NA	NA	NA	<10	NA	<10	NA	NA
4-nitrobiphenyl	NA	NA	NA	NA	<10	NA	<10	NA	NA
Sub Total 2	216.6	NA	0	1954	0	0	0	0	0
Total Base/Neutral Compounds Analyzed	2202.6	NA	64.2	5362	20	8.8	3	182.7	127.7

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-31A	GM-31A	GM-31A	GM-31A	GM-31Aa)	GM-31Ab)	GM-31B	GM-31B	GM-31B
Date:	2/85	5/85	11/85	11/85*	2/86	2/86	2/85	5/85	11/85
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<1.9	<1.9	<2.0	<2.0	<2.1	<2.0	<1.9	<1.9	<1.9
acenapthylene	<3.5	<3.5	<3.7	<3.7	<3.9	<3.7	<3.5	<3.5	<3.5
anthracene	<1.9	<1.9	<2.0	<2.0	<2.1	<2.0	<1.9	<1.9	<1.9
benzidine	<44	<44	<47	<46	<49	<46	<44	<44	<44
benzo (a) anthracene	<7.8	<7.8	<8.3	<8.2	<8.7	<8.2	<7.8	<7.8	<7.8
benzo (a) pyrene	<2.5	<2.5	<2.7	<2.6	<2.8	<2.6	<2.5	<2.5	<2.5
benzo (b) fluoroanthene	<4.8	<4.8	<5.1	<5.1	<11	<10	<4.8	<4.8	<4.8
benzo (ghi) perylene	<4.1	<4.1	<4.4	<4.3	<4.6	<4.3	<4.1	<4.1	<4.1
benzo (k) fluoranthene	<2.5	<2.5	<3.7	<3.7	<3.9	<3.7	<2.5	<2.5	<3.5
bis (2-chlorbethoxy) methane	<5.3	<5.3	<5.6	<5.6	<5.9	<5.6	<5.3	<5.3	<5.3
bis (2-chloroethyl) ether	<5.7	<5.7	<6.1	<6.0	<6.3	<6.0	<5.7	<5.7	<5.7
bis (2-chloroisopropyl) ether	<5.7	<6.0	<6.1	<6.0	<6.3	<6.0	<5.7	<6.0	<5.7
bis (2-ethylhexyl) phthalate	<10	<10	<11	<11	<11	<11	<10	<10	33.9
4-bromophenyl phenyl ether	<1.9	<1.9	<2	<2	<2.1	<2	<1.9	<1.9	<1.9
butyl benzyl phthalate	<10	<10	<11	<11	<11	<11	<10	<10	<10
2-chloronaphthalene	<1.9	<1.9	<2	<2	<2.1	<2	<1.9	<1.9	<1.9
4-chlorophenyl phenyl ether	<4.2	<4.2	<4.5	<4.4	<4.7	<4.4	<3.5	<4.2	<4.2
[illegible]sene	<2.5	<2.5	<2.7	<2.6	<2.8	<2.6	<1.9	<2.5	<2.5
[illegible]enzo (a,h) anthracene	<2.5	<2.5	<11	<11	<11	<11	<44	<2.5	<10
1,2-dichlorobenzene	3.9	3	17.6	16.8	25.5	10.4	<7.8	<1.9	<1.9
1,3-dichlorobenzene	<1.9	<1.9	<2	<2	<2.1	<2	<2.5	<1.9	<1.9
1,4-dichlorobenzene	<4.4	<4.4	8.0	7.9	11.7	<4.6	<4.8	<4.4	<4.4
3,3-dichlorobenzidine	<16.5	<16.5	<18	<17	<18	<17	<4.1	<16.5	<17
diethyl phthalate	<10	<10	<11	<11	<11	<11	<2.5	<10	<10
dimethyl phthalate	<10	<10	<11	<11	<11	<11	<5.3	<10	<10
di-n-butyl phthalate	<10	<10	<11	<11	<11	<11	<5.7	<10	<10
2,4-dinitrotoluene	<5.7	<5.7	<6.1	<6.0	<6.3	<6.0	<5.7	<5.7	<5.7
2,6-dinitrotoluene	<1.9	<1.9	<2.0	<2.0	<2.1	<2.0	<10	<1.9	<1.9
di-n-octyl phthalate	<10	<10	<11	<11	<11	<11	<1.9	<10	<10
1,2-diphenylhydrazine	<10	<10	<11	<11	<11	<11	<10	<10	<10
fluoranthene	<2.2	<2.2	<2.3	<2.3	<2.4	<2.3	<2.2	<2.2	<2.2
fluorene	<1.9	<1.9	<2.0	<2.0	<2.1	<2.0	<1.9	<1.9	<1.9
hexachlorobenzene	<1.9	<1.9	<2.0	<2.0	<2.1	<2.0	<1.9	<1.9	<1.9
hexachlorobutadiene	<0.9	<0.9	<1.0	<1.0	<1.0	<1.0	<0.9	<0.9	<0.9
hexachlorocyclopentadiene	<10	<10	<11	<11	<11	<11	<10	<10	<10
hexachloroethane	<1.6	<1.6	<1.7	<1.7	<1.8	<1.7	<1.6	<1.6	<1.6
indeno (1,2,3-c,d) pyrene	<3.7	<3.7	<5.0	<4.9	<5.2	<4.9	<3.7	<3.7	<4.7
isophorone	<2.2	<2.2	<2.3	<2.3	<2.4	<2.3	<2.2	<2.2	<2.2
naphthalene	<1.6	<1.6	<1.7	<1.7	<1.8	<1.7	<1.6	<1.6	<1.6
nitrobenzene	21.7	15	87.8	93.5	168	130	<1.9	<1.9	<1.9
n-nitrosodimethylamine	<10	<10	<11	<11	<11	<11	<10	<10	<10
n-nitrosodi-n-propylamine	<10	<10	<11	<11	<11	<11	<10	<10	<10
n-nitrosodiphenylamine	2.8	<1.9	<2.0	<2.0	<2.1	<2.0	<1.9	<1.9	<1.9
[illegible]anthrene	<5.4	<5.4	<5.7	<5.7	<6.0	<5.7	<5.4	<5.4	<5.4
[illegible]ene	<1.9	<1.9	<2.0	<2.0	<2.1	<2.0	<1.9	<1.9	<1.9
1,2,4-trichlorobenzene	<1.9	<1.9	<2.0	<2.0	<2.1	<2.0	<1.9	<1.9	<1.9
Sub Total 1	28.4	18	113.4	118.2	205.2	140.4	0	0	33.9

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-31A	GM-31A	GM-31A	GM-31A	GM-31Aa)	GM-31Ab)	GM-31B	GM-31B	GM-31B
Date:	2/85	5/85	11/85	11/85*	2/86	2/86	2/85	5/85	11/85
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	<10	<10	<11	<11	NA	NA	<10	<10	<10
4-nitroaniline	<10	<10	<11	<11	NA	NA	<10	<10	<10
2-nitrochlorobenzene	<10	<10	579	542	NA	NA	<10	<10	<10
4-nitrochlorobenzene	122	<10	<11	<11	NA	NA	<10	<10	<10
2,4-and 3,4-dinitrochlorobenzene	<10	222	<11	<11	NA	NA	<10	<10	<10
4-nitrodiphenylamine	<10	<10	<11	<11	NA	NA	<10	<10	<10
triphenyl phosphate	<10	<10	<11	<11	NA	NA	<10	<10	<10
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	<25	<25	41.8	42.9	<11	<11	<25	<25	<10
4-nitrobiphenyl	<25	<25	<11	<11	<11	<11	<25	<25	<10
Sub Total 2	122	222	620.8	584.9	0	0	0	0	0
Total Base/Neutral Compounds Analyzed	150.4	240	734.2	703.1	205.2	140.4	0	0	33.9

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-31B	GM-31C	GM-31C	GM-31C	GM-31C	B-24A	B-25A	B-25A	B-25B
Date:	11/85*	2/85	5/85	11/85	11/85*	2/86	6/84	11/85	6/84
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<1.9	<1.9	<1.9	<1.9	<1.9	<2.0	<80	<3.7	<80
acenapthylene	<3.5	<3.5	<3.5	<3.5	<3.5	<3.6	<60	<6.9	<60
anthracene	<1.9	<1.9	<1.9	<1.9	<1.9	<2.0	<80	<3.7	<80
benzidine	<44	<44	<44	<44	<44	<45	<1,200	<86	<1,200
benzo (a) anthracene	<7.8	<7.8	<7.8	<7.8	<7.8	<8	<180	<15	<180
benzo (a) pyrene	<2.5	<2.5	<2.5	<2.5	<2.5	<2.6	<240	<4.9	<240
benzo (b) fluoroanthene	<4.8	<4.8	<4.8	<4.8	<4.8	<10	<220	<9.4	<220
benzo (ghi) perylene	<4.1	<4.1	<4.1	<4.1	<4.1	<4.2	<280	<8.0	<280
benzo (k) fluoranthene	<3.5	<2.5	<2.5	<3.5	<3.5	<3.6	<220	<6.9	<220
bis (2-chloroethoxy) methane	<5.3	<5.3	<5.3	<5.3	<5.3	<5.5	<80	<10	<80
bis (2-chloroethyl) ether	<5.7	<5.7	<5.7	<5.7	<5.7	<5.9	<80	<11	<80
bis (2-chloroisopropyl) ether	<5.7	<5.7	<6.0	<5.7	<5.7	<5.9	<60	<11	<60
bis (2-ethylhexyl) phthalate	55.6	55.2	<10	84	<10	<10	<200	61.9	<200
4-bromophenyl phenyl ether	<1.9	<1.9	<1.9	<1.9	<1.9	<2	<320	<3.7	<320
butyl benzyl phthalate	<10	<10	<10	<10	<10	<10	<260	<20	<260
2-chloronaphthalene	<1.9	<1.9	<1.9	<1.9	<1.9	<2	<80	<3.7	<80
4-chlorophenyl phenyl ether	<4.2	<4.2	<4.2	<4.2	<4.2	<4.3	<180	<8.2	<180
vsene	<2.5	<2.5	<2.5	<2.5	<2.5	<2.6	<180	<4.9	<180
enzo (a,h) anthracene	<10	<2.5	<2.5	<10	<10	<10	<320	<20	<320
1,2-dichlorobenzene	<1.9	<1.9	<1.9	<1.9	<1.9	180	<100	3,790	<100
1,3-dichlorobenzene	<1.9	<1.9	<1.9	<1.9	<1.9	2.5	<120	12.6	<120
1,4-dichlorobenzene	<4.4	<4.4	<4.4	<4.4	<4.4	114	35	190	<100
3,3-dichlorobenzidine	<17	<16.5	<16.5	<17	<17	<17	<3,220	<32	<3,220
diethyl phthalate	<10	<10	<10	<10	<10	<10	<80	<20	<80
dimethyl phthalate	<10	<10	<10	<10	<10	<10	<80	<20	<80
di-n-butyl phthalate	<10	<10	<10	<10	<10	<10	<60	<20	91
2,4-dinitrotoluene	<5.7	<5.7	<5.7	<5.7	<5.7	<5.9	<280	<11	<280
2,6-dinitrotoluene	<1.9	<1.9	<1.9	<1.9	<1.9	<2.0	<320	<3.7	<320
di-n-octyl phthalate	<10	<10	<10	<10	<10	<10	<120	<20	<120
1,2-diphenylhydrazine	<10	<10	<10	<10	<10	<10	<200	<20	<200
fluoranthene	<2.2	<2.2	<2.2	<2.2	<2.2	<2.3	<100	<4.3	<100
fluorene	<1.9	<1.9	<1.9	<1.9	<1.9	<2.0	<80	<3.7	<80
hexachlorobenzene	<1.9	<1.9	<1.9	<1.9	<1.9	<2.0	<300	<3.7	<300
hexachlorobutadiene	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9	<260	<1.8	<260
hexachlorocyclopentadiene	<10	<10	<10	<10	<10	<10	<240	<20	<240
hexachloroethane	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<200	<3.1	<200
indeno (1,2,3-c,d) pyrene	<4.7	<3.7	<3.7	<4.7	<4.7	<4.8	<140	<9.2	<140
isophorone	<2.2	<2.2	<2.2	<2.2	<2.2	<2.3	<40	<4.3	<40
naphthalene	<1.6	<1.6	<1.6	<1.6	<1.6	15.7	2,350	193	<40
nitrobenzene	<1.9	<1.9	<1.9	<1.9	<1.9	2,850	<100	8,080	<100
n-nitrosodimethylamine	<10	<10	<10	<10	<10	<10	<200	<20	<200
n-nitrosodi-n-propylamine	<10	<10	<10	<10	<10	<10	<120	<20	<120
n-nitrosodiphenylamine	<1.9	<1.9	<1.9	<1.9	<1.9	<2.0	<1,640	<3.7	<1,640
nanthrene	<5.4	<5.4	<5.4	<5.4	<5.4	<5.6	<80	<11	<80
rene	<1.9	<1.9	<1.9	<1.9	<1.9	<2.0	<100	<3.7	<100
1,2,4-trichlorobenzene	<1.9	<1.9	<1.9	<1.9	<1.9	17.2	<140	929	<140
Sub Total 1	55.6	55.2	0	84	0	3179.4	2385	13256.4	91

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	GM-31B	GM-31C	GM-31C	GM-31C	GM-31C	B-24A	B-25A	B-25A	B-25B
Date:	11/85*	2/85	5/85	11/85	11/85*	2/86	6/84	11/85	6/84
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	<10	<10	<10	<10	<10	<10	NA	570	NA
4-nitroaniline	<10	<10	<10	<10	<10	<10	NA	79.2	NA
2-nitrochlorobenzene	<10	<10	<10	<10	<10	368,000	NA	226,000	NA
4-nitrochlorobenzene	<10	<10	<10	<10	<10	108,000	NA	102,000	NA
2,4-and 3,4-dinitrochlorobenzene	<10	<10	<10	<10	<10	<10	NA	<20	NA
4-nitrodiphenylamine	<10	<10	<10	<10	<10	161	NA	255	NA
triphenyl phosphate	<10	<10	<10	<10	<10	<10	NA	412	NA
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	<10	<25	<25	<10	<10	NA	NA	NA	NA
4-nitrobiphenyl	<10	<25	<25	<10	<10	NA	NA	NA	NA
Sub Total 2	0	0	0	0	0	476161	NA	329316.2	NA
Total Base/Neutral Compounds Analyzed	55.6	55.2	0	84	0	479340.4	2385	342572.6	91

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	B-25B	B-27B	B-27B	B-28A	B-29A	B-29A	B-29B	B-29B	B-29B
Date:	11/85	9/84**	9/84*	2/86	6/84	11/85	6/84	6/84*	6/84#
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<2.0	NA	NA	<2.0	<80	<3.7	<800	<80	<100
acenapthylene	<3.7	NA	NA	<3.7	<60	<6.9	<600	<60	<100
anthracene	<2.0	NA	NA	<2.0	<80	<3.7	<800	<80	<100
benzidine	<47	NA	NA	<47	<1,200	<86	<12,000	<1,200	<100
benzo (a) anthracene	<8.3	NA	NA	<8.3	<180	<15	<1,800	<180	<100
benzo (a) pyrene	<2.7	NA	NA	<2.7	<240	<4.9	<2,400	<240	<100
benzo (b) fluoroanthene	<5.1	NA	NA	<5.1	<220	<9.4	<2,200	<220	<100
benzo (ghi) perylene	<4.4	NA	NA	<4.4	<280	<8.0	<2,800	<280	<100
benzo (k) fluoranthene	<3.7	NA	NA	<3.7	<220	<6.9	<2,200	<220	<100
bis (2-chloroethoxy) methane	<5.6	NA	NA	<5.6	<80	<10	<800	<80	<100
bis (2-chloroethyl) ether	<6.1	NA	NA	<6.1	<80	<11	<800	<80	<100
bis (2-chloroisopropyl) ether	<6.1	NA	NA	<6.1	<60	<11	<600	<60	<100
bis (2-ethylhexyl) phthalate	<11	NA	NA	<11	<200	<20	591	<200	<100
4-bromophenyl phenyl ether	<2	NA	NA	<2	<320	<3.7	<3,200	<320	<100
butyl benzyl phthalate	<11	NA	NA	<11	<260	<20	<2,600	<260	<100
2-chloronaphthalene	<2	NA	NA	<2	<80	<3.7	<800	<80	<100
4-chlorophenyl phenyl ether	<4.5	NA	NA	<4.5	<180	<8.2	<1,800	<180	<100
chrysene	<2.7	NA	NA	<2.7	<180	<4.9	<1,800	<180	<100
dibenzo (a,h) anthracene	<11	NA	NA	<11	<320	<20	<3,200	<320	<100
1,2-dichlorobenzene	124	NA	NA	<2	<100	221	1,070	<100	13,500
1,3-dichlorobenzene	2.7	NA	NA	<2	<120	24	<1,200	<120	<100
1,4-dichlorobenzene	31	NA	NA	<4.7	<100	73.1	<1,000	240	<100
3,3-dichlorobenzidine	<18	NA	NA	<18	<3,220	<33.3	<32,200	<3,220	<100
diethyl phthalate	<11	NA	NA	<11	<80	<20	<800	<80	<100
dimethyl phthalate	<11	NA	NA	<11	<80	<20	<800	<80	<100
di-n-butyl phthalate	<11	NA	NA	<11	127	<20	304	<60	<100
2,4-dinitrotoluene	<6.1	NA	NA	<6.1	<280	<11	<2,800	<280	<100
2,6-dinitrotoluene	<2.0	NA	NA	<2.0	<320	<3.7	<3,200	<320	<100
di-n-octyl phthalate	<11	NA	NA	<11	<120	<20	<1,200	<120	<100
1,2-diphenylhydrazine	<11	NA	NA	<11	<200	<20	<2,000	<200	<100
fluoranthene	<2.3	NA	NA	<2.3	<100	<4.3	<1,000	<100	<100
fluorene	<2.0	NA	NA	<2.0	<80	<3.7	<800	<80	<100
hexachlorobenzene	<2.0	NA	NA	<2.0	<300	<3.7	<3,000	<300	<100
hexachlorobutadiene	<1	NA	NA	<1	<260	<1.8	<2,600	<260	<100
hexachlorocyclopentadiene	<11	NA	NA	<11	<240	<20	<2,400	<240	<100
hexachloroethane	<1.7	NA	NA	<1.7	<200	<3.1	<2,000	<200	<100
indeno (1,2,3-c,d) pyrene	<5.0	NA	NA	<5.0	<140	<9.2	<1,400	<140	<100
isophorone	<2.3	NA	NA	<2.3	<40	27.5	<400	<40	<100
naphthalene	31.7	NA	NA	<1.7	<40	<3.1	<400	11,600	<100
nitrobenzene	4,030	NA	NA	<2.0	<100	1,650	<1,000	<100	<100
n-nitrosodimethylamine	<11	NA	NA	<11	<200	<20	<2,000	<200	<100
n-nitrosodi-n-propylamine	<11	NA	NA	<11	<120	<20	<1,200	<120	<100
n-nitrosodiphenylamine	<2.0	NA	NA	<2.0	<1,640	<3.7	<16,400	<1,640	<100
phenanthrene	<5.7	NA	NA	<5.7	<80	<11	<800	<80	<100
pyrene	<2.0	NA	NA	<2.0	<100	<3.7	<1,000	<100	<100
1,2,4-trichlorobenzene	37.8	NA	NA	<2.0	<140	25.5	<1,400	<140	<100
Sub Total 1	4257.2	NA	NA	0	127	2021.1	1965	11840	13500

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	B-25B	B-27B	B-27B	B-28A	B-29A	B-29A	B-29B	B-29B	B-29B
Date:	11/85	9/84**	9/84*	2/86	6/84	11/85	6/84	6/84*	6/84#
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	3,280	NA	NA	<11	NA	<20	NA	NA	NA
4-nitroaniline	1,780	NA	NA	<11	NA	189	NA	NA	NA
2-nitrochlorobenzene	25,600	NA	NA	<11	NA	<20	NA	NA	NA
4-nitrochlorobenzene	15,500	NA	NA	<11	NA	<20	NA	NA	NA
2,4-and 3,4-dinitrochlorobenzene	<11	NA	NA	<11	NA	<20	NA	NA	NA
4-nitrodiphenylamine	34.5	NA	NA	<11	NA	628	NA	NA	NA
triphenyl phosphate	<11	NA	NA	<11	NA	132	NA	NA	NA
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-nitrobiphenyl	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	46194.5	NA	NA	0	NA	949	NA	NA	NA
Total Base/Neutral Compounds Analyzed	50451.7	NA	NA	0	127	2970.1	1965	11840	13500

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krumarich Plant, Sauget, Il

Well Number:	B-29B	B-29B	B-30B	B-31B	B-31B	B-31C	B-31C	B-31C	B-31C
Date:	11/84	11/85	9/84**	11/85	2/86	9/84**	9/84*	11/85	2/86
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<50	<3.8	NA	<1.9	<1.9	<4	<4	<1.9	<2.0
acenapthylene	<50	<7.0	NA	<3.5	<3.5	<3	<3	<3.5	<3.7
anthracene	<50	<3.8	NA	<1.9	<1.9	<4	<4	<1.9	<2.0
benzidine	<50	<88	NA	<44	<44	<60	<60	<45	<46
benzo (a) anthracene	<50	<16	NA	<7.8	<7.9	<9	<9	<8.0	<8.2
benzo (a) pyrene	<50	<5.0	NA	<2.5	<2.5	<12	<12	<2.6	<2.6
benzo (b) fluoroanthene	<50	<9.6	NA	<4.8	<4.8	<11	<11	<4.9	<5.1
benzo (ghi) perylene	<50	<8.2	NA	<4.1	<4.1	<14	<14	<4.2	<4.3
benzo (k) fluoranthene	<50	<7.0	NA	<3.5	<3.5	<11	<11	<3.6	<3.7
bis (2-chloroethoxy) methane	<50	<11	NA	<5.3	<5.4	<4	<4	<5.4	<5.6
bis (2-chloroethyl) ether	<50	<11	NA	<5.7	<5.8	<4	<4	<5.8	<6.0
bis (2-chloroisopropyl) ether	<50	<11	NA	<5.7	<5.8	<3	<3	<5.8	<6.0
bis (2-ethylhexyl) phthalate	<50	<20	NA	101	<10	<10	<10	<10	<11
4-bromophenyl phenyl ether	<50	<3.8	NA	<1.9	<1.9	<16	<16	<1.9	<2
butyl benzyl phthalate	<50	<20	NA	<10	<10	<13	<13	<10	<11
2-chloronaphthalene	<50	<3.8	NA	<1.9	<1.9	<4	<4	<1.9	<2
4-chlorophenyl phenyl ether	<50	<8.4	NA	<4.2	<4.2	<9	<9	<4.3	<4.4
ysene	<50	<5.0	NA	<2.5	<2.5	<9	<9	<2.6	<2.6
enzo (a,h) anthracene	<50	<20	NA	<10	<10	<16	<16	<10	<11
1,2-dichlorobenzene	4,200	779	NA	<1.9	<1.9	4	6	31.9	40.3
1,3-dichlorobenzene	<50	<3.8	NA	<1.9	<1.9	<6	<6	<1.9	<2
1,4-dichlorobenzene	<50	<8.8	NA	<4.4	<4.4	4	5	19.4	22.2
3,3-dichlorobenzidine	<50	<34	NA	<17	<17	<161	<161	<17	<17
diethyl phthalate	<50	<20	NA	<10	<10	<4	<4	<10	<11
dimethyl phthalate	<50	<20	NA	<10	<10	<4	<4	<10	<11
di-n-butyl phthalate	<50	<20	NA	4.5	<10	<3	<3	<10	<11
2,4-dinitrotoluene	<50	<11	NA	<5.7	<5.8	<14	<14	<5.8	<6.0
2,6-dinitrotoluene	<50	<3.8	NA	<1.9	<1.9	<16	<16	<1.9	<2.0
di-n-octyl phthalate	<50	<20	NA	<10	<10	<6	<6	<10	<11
1,2-diphenylhydrazine	<50	<20	NA	<10	<10	<10	<10	<10	<11
fluoranthene	<50	<4.4	NA	<2.2	<2.2	<5	<5	<2.2	<2.3
fluorene	<50	<3.8	NA	<1.9	<1.9	<4	<4	<1.9	<2.0
hexachlorobenzene	<50	<3.8	NA	<1.9	<1.9	<15	<15	<1.9	<2.0
hexachlorobutadiene	<50	<1.8	NA	<0.9	<0.9	<13	<13	<0.9	<1
hexachlorocyclopentadiene	<50	<20	NA	<10	<10	<12	<12	<10	<11
hexachloroethane	<50	<3.2	NA	<1.6	<1.6	<10	<10	<1.6	<1.7
indeno (1,2,3-c,d) pyrene	<50	<9.4	NA	<4.7	<4.7	<7	<7	<4.8	<4.9
isophorone	55	76.6	NA	<2.2	<2.2	<2	<2	<2.2	<2.3
naphthalene	125	58.6	NA	<1.6	<1.6	<2	<2	<1.6	<1.7
nitrobenzene	2,170	1,060	NA	<1.9	<1.9	<5	<5	<1.9	<2.0
n-nitrosodimethylamine	<50	<20	NA	<10	<10	<10	<10	<10	<11
n-nitrosodi-n-propylamine	<50	<20	NA	<10	<10	<6	<6	<10	<11
n-nitrosodiphenylamine	<50	<3.8	NA	<1.9	<1.9	<82	<82	<1.9	<2.0
anthrene	<50	<11	NA	<5.4	<5.5	<4	<4	<5.5	<5.7
rene	<50	<3.8	NA	<1.9	<1.9	<5	<5	<1.9	<2.0
1,2,4-trichlorobenzene	520	65.5	NA	<1.9	<1.9	<7	<7	<1.9	<2.0
Sub Total 1	7070	2039.7	NA	105.5	0	8	11	51.3	62.5

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	B-29B	B-29B	B-30B	B-31B	B-31B	B-31C	B-31C	B-31C	B-31C
Date:	11/84	11/85	9/84**	11/85	2/86	9/84**	9/84*	11/85	2/86
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	<50	<20	NA	<10	<10	<25-30	<25-30	<10	<11
4-nitroaniline	375	601	NA	<10	<10	<25-30	<25-30	<10	<11
2-nitrochlorobenzene	e)	282	NA	<10	<10	<10	<10	<10	<11
4-nitrochlorobenzene	e)	<20	NA	<10	<10	<10	<10	<10	<11
2,4-and 3,4-dinitrochlorobenzene	<50	<20	NA	<10	<10	<10	<10	<10	<11
4-nitrodiphenylamine	601	949	NA	<10	<10	<10	<10	<10	<11
triphenyl phosphate	607	548	NA	<10	<10	<10	<10	<10	<11
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	NA	NA	NA	NA	NA	<10	<10	NA	NA
4-nitrobiphenyl	NA	NA	NA	NA	NA	<10	<10	NA	NA
Sub Total 2	1583	2380	NA	0	0	0	0	0	0
Total Base/Neutral Compounds Analyzed	8653	4419.7	NA	105.5	0	8	11	51.3	62.5

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krumarich Plant, Sauget, Il

Well Number:	B-101	B-102	GM-106	GM-106	GM-106	P-1	P-2	P-2	P-6
Date:	9/84**	9/84**	11/85	2/86	2/86*	9/84**	6/84	11/85	6/84
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<4	<4	<1.9	<2.0	<1.9	<4	<1	<1.9	<1
acenapthylene	<3	<3	<3.5	<3.6	<3.6	<3	<1	<3.5	<1
anthracene	<4	<4	<1.9	<2.0	<1.9	<4	<1	<1.9	<1
benzidine	<60	<60	<44	<45	<45	<60	<1	<44	<1
benzo (a) anthracene	<9	<9	<7.9	<8	<8	<9	<1	<7.8	<1
benzo (a) pyrene	<12	<12	<2.5	<2.6	<2.6	<12	<1	<2.5	<1
benzo (b) fluoroanthene	<11	<11	<4.8	<4.9	<4.9	<11	<1	<4.8	<1
benzo (ghi) perylene	<14	<14	<4.1	<4.2	<4.2	<14	<1	<4.1	<1
benzo (k) fluoranthene	<11	<11	<3.5	<3.6	<3.6	<11	<1	<3.5	<1
bis (2-chloroethoxy) methane	<4	<4	<5.4	<5.5	<5.4	<4	<1	<5.3	<1
bis (2-chloroethyl) ether	<4	<4	<5.8	<5.9	<5.8	<4	<1	<5.7	<1
bis (2-chloroisopropyl) ether	<3	<3	<5.8	<5.9	<5.8	<3	<1	<5.7	<1
bis (2-ethylhexyl) phthalate	109	3	<10	<10	<10	4	1	<10	<1
4-bromophenyl phenyl ether	<16	<16	<1.9	<2	<1.9	<16	<1	<1.9	<1
butyl benzyl phthalate	<13	<13	<10	<10	<10	<13	<1	<10	<1
2-chloronaphthalene	<4	<4	<1.9	<2	<1.9	<4	<1	<1.9	<1
4-chlorophenyl phenyl ether	<9	<9	<4.2	<4.3	<4.3	<9	<1	<4.2	<1
[illegible]ysene	<9	<9	<2.5	<2.6	<2.6	<9	<1	<2.5	<1
[illegible]enzo (a,h) anthracene	<16	<16	<10	<10	<10	<16	<1	<10	<1
1,2-dichlorobenzene	<5	<5	<1.9	4.9	4.8	9	1	<1.9	<1
1,3-dichlorobenzene	28,500	<6	<1.9	<2	<1.9	<6	<1	<1.9	<1
1,4-dichlorobenzene	<5	<5	<4.4	<4.5	<4.5	1	7	21.4	<1
3,3-dichlorobenzidine	<161	<161	<17	<17	<17	<161	<1	<17	<1
diethyl phthalate	<4	<4	<10	<10	<10	<4	<1	<10	<1
dimethyl phthalate	<4	<4	<10	<10	<10	<4	<1	<10	<1
di-n-butyl phthalate	<3	1	<10	<10	<10	2	1	<10	<1
2,4-dinitrotoluene	65,700	<14	<5.8	<5.9	<5.8	<14	<1	<5.7	<1
2,6-dinitrotoluene	<16	<16	<1.9	<2.0	<1.9	<16	<1	<1.9	<1
di-n-octyl phthalate	<6	<6	<10	<10	<10	<6	<1	<10	<1
1,2-diphenylhydrazine	<10	<10	<10	<10	<10	<10	<1	<10	<1
fluoranthene	<5	<5	<2.2	<2.3	<2.2	<5	<1	<2.2	<1
fluorene	<4	<4	<1.9	<2.0	<1.9	<4	<1	<1.9	<1
hexachlorobenzene	<15	<15	<1.9	<2.0	<1.9	<15	<1	<1.9	<1
hexachlorobutadiene	<13	<13	<0.9	<0.9	<0.9	<13	<1	<0.9	<1
hexachlorocyclopentadiene	<12	<12	<10	<10	<10	<12	<1	<10	<1
hexachloroethane	<10	<10	<1.6	<1.6	<1.6	<10	<1	<1.6	<1
indeno (1,2,3-c,d) pyrene	<7	<7	<4.7	<4.8	<4.8	<7	<1	<4.7	<1
isophorone	<2	<2	<2.2	<2.3	<2.2	<2	<1	<2.2	<1
naphthalene	<2	<2	<1.6	<1.6	<1.6	<2	<1	<1.6	<1
nitrobenzene	<5	<5	3.3	7.9	8.2	<5	<1	<1.9	<1
n-nitrosodimethylamine	<10	<10	<10	<10	<10	<10	<1	<10	<1
n-nitrosodi-n-propylamine	<6	<6	<10	<10	<10	<6	<1	<10	<1
n-nitrosodiphenylamine	<82	<82	<1.9	<2.0	<1.9	<82	<1	<1.9	<1
[illegible]anthrene	<4	<4	<5.5	<5.6	<5.5	<4	<1	<5.4	<1
[illegible]ene	<5	<5	<1.9	<2.0	<1.9	<5	<1	<1.9	<1
1,2,4-trichlorobenzene	<7	<7	<1.9	<2.0	<1.9	1	<1	<1.9	<1
Sub Total 1	94309	4	3.3	12.8	13	17	10	21.4	0

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	B-101	B-102	GM-106	GM-106	GM-106	P-1	P-2	P-2	P-6
Date:	9/84**	9/84**	11/85	2/86	2/86*	9/84**	6/84	11/85	6/84
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	<25-30	<25-30	<10	<10	<10	<25-30	NA	<10	NA
4-nitroaniline	<25-30	<25-30	<10	<10	<10	<25-30	NA	<10	NA
2-nitrochlorobenzene	<10	<10	598	115	99.9	c)	NA	<10	NA
4-nitrochlorobenzene	<10	<10	108	353	398	c)	NA	<10	NA
2,4-and 3,4-dinitrochlorobenzene	<10	<10	<10	<10	<10	<10	NA	<10	NA
4-nitrodiphenylamine	<10	<10	<10	<10	<10	<10	NA	<10	NA
triphenyl phosphate	<10	<10	<10	<10	<10	<10	NA	<10	NA
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	<10	<10	NA	NA	NA	<10	NA	NA	NA
4-nitrobiphenyl	<10	<10	NA	NA	NA	<10	NA	NA	NA
Sub Total 2	0	0	706	468	497.9	0	NA	0	NA
Total Base/Neutral Compounds Analyzed	94309	4	709.3	480.8	510.9	17	10	21.4	0

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	P-6	P-7	P-7	P-8	P-8	P-10	P-11	P-12	P-13
Date:	11/85	6/84	11/85	6/84	11/85	9/84**	9/84**	9/84**	6/84
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<2.0	<80	<380	<1	<1.9	<4	<4	<4	<1
acenapthylene	<3.7	<60	<710	<1	<3.5	<3	<3	<3	<1
anthracene	<2.0	<80	<380	<1	<1.9	<4	<4	<4	<1
benzidine	<47	1,940	<8900	1	<44	<60	<60	<60	<1
benzo (a) anthracene	<8.3	<180	<1600	<1	<7.8	<9	<9	<9	<1
benzo (a) pyrene	<2.7	<240	<510	<1	<2.5	<12	<12	<12	<1
benzo (b) fluoroanthene	<5.1	<220	<970	<1	<4.8	<11	<11	<11	<1
benzo (ghi) perylene	<4.4	<280	<830	<1	<4.1	<14	<14	<14	<1
benzo (k) fluoranthene	<3.7	<220	<710	<1	<3.5	<11	<11	<11	<1
bis (2-chloroethoxy) methane	<5.6	<80	<1100	<1	<5.3	<4	<4	<4	<1
bis (2-chloroethyl) ether	<6.1	<80	<1200	<1	<5.7	<4	<4	<4	<1
bis (2-chloroisopropyl) ether	<6.1	<60	<1200	<1	<5.7	<3	<3	<3	<1
bis (2-ethylhexyl) phthalate	<11	21	<2000	19	12.7	3	15	<10	<1
4-bromophenyl phenyl ether	<2	<320	<380	<1	<1.9	<16	<16	<16	<1
butyl benzyl phthalate	<11	<260	<2000	<1	<10	<13	<13	<13	<1
2-chloronaphthalene	<2	<80	<380	<1	<1.9	<4	<4	<4	<1
4-chlorophenyl phenyl ether	<4.5	<180	<850	<1	<4.2	<9	<9	<9	<1
chrysene	<2.7	<180	<510	<1	<2.5	<9	<9	<9	<1
dibenzo (a,h) anthracene	<11	<320	<2000	<1	<10	<16	<16	<16	<1
1,2-dichlorobenzene	<2	73	531	1	45.4	<5	<5	61	<1
1,3-dichlorobenzene	<2	<120	<380	<1	<1.9	<6	<6	<6	<1
1,4-dichlorobenzene	<4.7	64	<890	12	121	<5	74	77	1
3,3-dichlorobenzidine	<18	<3,220	<3300	<1	<17	<161	<161	<161	<1
diethyl phthalate	<11	<80	<2000	<1	<10	<4	<4	<4	<1
dimethyl phthalate	<11	<80	<2000	<1	<10	<4	<4	<4	<1
di-n-butyl phthalate	<11	72	<2000	1	<10	5	6	6	<1
2,4-dinitrotoluene	<6.1	<280	<1200	<1	<5.7	<14	<14	<14	<1
2,6-dinitrotoluene	<2.0	<320	<380	<1	<1.9	<16	<16	<16	<1
di-n-octyl phthalate	<11	<120	<2000	<1	<10	<6	<6	<6	<1
1,2-diphenylhydrazine	<11	<200	<2000	<1	<10	<10	<10	<10	<1
fluoranthene	<2.3	<100	<440	<1	<2.2	<5	<5	<5	<1
fluorene	<2.0	<80	<380	<1	<1.9	<4	<4	<4	<1
hexachlorobenzene	<2.0	<300	<380	<1	<1.9	<15	<15	<15	<1
hexachlorobutadiene	<1.0	<260	<180	<1	<0.9	<13	<13	<13	<1
hexachlorocyclopentadiene	<11	<240	<2000	<1	<10	<12	<12	<12	<1
hexachloroethane	<1.7	<200	<320	<1	<1.6	<10	<10	<10	<1
indeno (1,2,3-c,d) pyrene	<5.0	<140	<950	<1	<4.7	<7	<7	<7	<1
isophorone	<2.3	<40	<440	<1	<2.2	<2	<2	<2	<1
naphthalene	<1.7	<40	<320	<1	<1.6	<2	<2	<2	<1
nitrobenzene	<2.0	<100	714	<1	<1.9	<5	<5	<5	<1
n-nitrosodimethylamine	<11	<200	<2000	<1	<10	<10	<10	<10	<1
n-nitrosodi-n-propylamine	<11	<120	<2000	<1	<10	<6	<6	<6	<1
n-nitrosodiphenylamine	<2.0	<1,640	<380	<1	<1.9	<82	11	<82	<1
phenanthrene	<5.7	<80	<1100	<1	<5.4	<4	<4	<4	<1
pyrene	<2.0	<100	<380	<1	<1.9	<5	<5	<5	<1
1,2,4-trichlorobenzene	<2.0	<140	<380	<1	<1.9	<7	<7	<7	<1
Sub Total 1	0	2170	1245	34	179.1	8	106	144	1

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	P-6	P-7	P-7	P-8	P-8	P-10	P-11	P-12	P-13
Date:	11/85	6/84	11/85	6/84	11/85	9/84**	9/84**	9/84**	6/84
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	<11	NA	<2000	NA	<10	<25-30	<25-30	<25-30	NA
4-nitroaniline	<11	NA	<2000	NA	<10	<25-30	<25-30	<25-30	NA
2-nitrochlorobenzene	<11	NA	303,000	NA	<10	<10	<10	<10	NA
4-nitrochlorobenzene	<11	NA	75,000	NA	<10	<10	<10	<10	NA
2,4-and 3,4-dinitrochlorobenzene	<11	NA	<2000	NA	<10	<10	<10	<10	NA
4-nitrodiphenylamine	<11	NA	<2000	NA	<10	<10	<10	<10	NA
triphenyl phosphate	<11	NA	<2000	NA	<10	<10	<10	<10	NA
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	NA	NA	NA	NA	NA	<10	<10	<10	NA
4-nitrobiphenyl	NA	NA	NA	NA	NA	<10	<10	<10	NA
Sub Total 2	0	NA	378000	NA	0	0	0	0	NA
Total Base/Neutral Compounds Analyzed	0	2170	379245	34	179.1	8	106	144	1

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	P-13	P-13	P-13	P-14	P-14	DW-1	DW-1	DW-4	DW-7
Date:	6/84*	6/84@	11/85	6/84	11/85	9/84**	11/85	9/84**	11/85
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<1	<10	<1.9	<1	<2.0	<4	<1.9	<4	<1.9
acenapthylene	<1	<10	<3.5	<1	<3.6	<3	<3.5	<3	<3.5
anthracene	<1	<10	<1.9	<1	<2.0	<4	<1.9	<4	<1.9
benzidine	<1	<10	<44	<1	<45	<60	<44	<60	<44
benzo (a) anthracene	<1	<10	<7.8	<1	<8.0	<9	<7.8	<9	<7.8
benzo (a) pyrene	<1	<10	<2.5	<1	<2.6	<12	<2.5	<12	<2.5
benzo (b) fluoranthene	<1	<10	<4.8	<1	<4.9	<11	<4.8	<11	<4.8
benzo (ghi) perylene	<1	<10	<4.1	<1	<4.2	<14	<4.1	<14	<4.1
benzo (k) fluoranthene	<1	<10	<3.5	<1	<3.6	<11	<3.5	<11	<3.5
bis (2-chloroethoxy) methane	<1	<10	<5.3	<1	<5.5	<4	<5.3	<4	<5.3
bis (2-chloroethyl) ether	<1	<10	<5.7	<1	<5.9	<4	<5.7	<4	<5.7
bis (2-chloroisopropyl) ether	<1	<10	<5.7	<1	<5.9	<3	<5.7	<3	<5.7
bis (2-ethylhexyl) phthalate	779	<10	<10	<1	<10	<10	<10	<10	<10
4-bromophenyl phenyl ether	<1	<10	<1.9	<1	<2	<16	<1.9	<16	<1.9
butyl benzyl phthalate	<1	<10	<10	<1	<10	<13	<10	<13	<10
2-chloronaphthalene	<1	<10	<1.9	<1	<2	<4	<1.9	<4	<1.9
4-chlorophenyl phenyl ether	<1	<10	<4.2	<1	<4.3	<9	<4.2	<9	<4.2
ysene	<1	<10	<2.5	<1	<2.6	<9	<2.5	<9	<2.5
enzo (a,h) anthracene	<1	<10	<2.5	<1	<10	<16	<10	<16	<10
1,2-dichlorobenzene	<1	<10	<1.9	2	18.7	<5	195	64	123
1,3-dichlorobenzene	<1	<10	<1.9	<1	<2	<6	35.7	14	16.5
1,4-dichlorobenzene	4	<10	15.9	6	34	124	704	324	370
3,3-dichlorobenzidine	<1	<10	<17	<1	<17	<161	<17	<161	<17
diethyl phthalate	<1	<10	<10	<1	<10	<4	<10	<4	<10
dimethyl phthalate	<1	<10	<10	<1	<10	<4	<10	<4	76.6
di-n-butyl phthalate	16	<10	<10	2	<10	3	<10	3	<10
2,4-dinitrotoluene	<1	<10	<5.7	<1	<5.9	<14	<5.7	<14	<5.7
2,6-dinitrotoluene	<1	<10	<1.9	<1	<2.0	<16	<1.9	<16	<1.9
di-n-octyl phthalate	<1	<10	<10	<1	<10	<6	<10	<6	<10
1,2-diphenylhydrazine	<1	<10	<10	<1	<10	<10	<10	<10	<10
fluoranthene	<1	<10	<2.2	<1	<2.3	<5	<2.2	<5	<2.2
fluorene	<1	<10	<1.9	<1	<2.0	<4	<1.9	<4	<1.9
hexachlorobenzene	<1	<10	<1.9	<1	<2.0	<15	<1.9	<15	<1.9
hexachlorobutadiene	<1	<10	<0.9	<1	<0.9	<13	<0.9	<13	<0.9
hexachlorocyclopentadiene	<1	<10	<10	<1	<10	<12	<10	<12	<10
hexachloroethane	<1	<10	<1.6	<1	<1.6	<10	<1.6	<10	<1.6
indeno (1,2,3-c,d) pyrene	<1	<10	<4.7	<1	<4.8	<7	<4.7	<7	<4.7
isophorone	<1	<10	<2.2	<1	<2.3	<2	<2.2	<2	<2.2
naphthalene	<1	<10	<1.6	<1	2.9	<2	<1.6	<2	<1.6
nitrobenzene	<1	<10	<1.9	<1	<2.0	<5	<1.9	<5	<1.9
n-nitrosodimethylamine	<1	<10	<10	<1	<10	<10	<10	<10	<10
n-nitrosodi-n-propylamine	<1	<10	<10	<1	<10	<6	<10	<6	<10
n-nitrosodiphenylamine	<1	<10	4.9	<1	<2.0	<82	<1.9	6	<1.9
nanthrene	1	<10	<5.4	<1	<5.6	<4	<5.4	<4	<5.4
rene	<1	<10	<1.9	<1	<2.0	<5	<1.9	<5	<1.9
1,2,4-trichlorobenzene	<1	<10	<1.9	<1	<2.0	<7	<1.9	<7	3.4
Sub Total 1	800	0	20.8	10	55.6	127	934.7	411	589.5

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	P-13	P-13	P-13	P-14	P-14	DW-1	DW-1	DW-4	DW-7
Date:	6/84*	6/84#	11/85	6/84	11/85	9/84**	11/85	9/84**	11/85
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	NA	NA	<10	NA	<10	<25-30	<10	<25-30	<10
4-nitroaniline	NA	NA	<10	NA	<10	<25-30	<10	<25-30	1,090
2-nitrochlorobenzene	NA	NA	<10	NA	<10	<10	<10	<10	357
4-nitrochlorobenzene	NA	NA	<10	NA	<10	<10	<10	<10	<10
2,4-and 3,4-dinitrochlorobenzene	NA	NA	<10	NA	<10	<10	<10	<10	<10
4-nitrodiphenylamine	NA	NA	<10	NA	<10	<10	<10	<10	<10
triphenyl phosphate	NA	NA	<10	NA	<10	<10	<10	<10	<10
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	NA	NA	NA	NA	NA	<10	NA	<10	NA
4-nitrobiphenyl	NA	NA	NA	NA	NA	<10	NA	<10	NA
Sub Total 2	NA	NA	0	0	0	0	0	0	1447
Total Base/Neutral Compounds Analyzed	800	0	20.8	10	55.6	127	934.7	411	2036.5

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	DW-7	DW-10	DW-18	DW-18	DW-18	DW-23	DW-24	DW-24	DW-29
Date:	2/86	9/84**	9/84**	9/84*	11/85	9/84**	9/84**	9/84*	9/84**
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<1.9	<4	<4	NA	<2.0	<4	<4	<4	<4
acenapthylene	<3.6	<3	<3	NA	<3.7	<3	<3	<3	<3
anthracene	<1.9	<4	<4	NA	<2.0	<4	<4	<4	<4
benzidine	<45	<60	<60	NA	<46	<60	<60	<60	<60
benzo (a) anthracene	<8	<9	<9	NA	<8.2	<9	<9	<9	<9
benzo (a) pyrene	<2.6	<12	<12	NA	<2.6	<12	<12	<12	<12
benzo (b) fluoroanthene	<4.9	<11	<11	NA	<5.1	<11	<11	<11	<11
benzo (ghi) perylene	<4.2	<14	<14	NA	<4.3	<14	<14	<14	<14
benzo (k) fluoranthene	<3.6	<11	<11	NA	<3.7	<11	<11	<11	<11
bis (2-chloroethoxy) methane	<5.4	<4	<4	NA	<5.6	<4	<4	<4	<4
bis (2-chloroethyl) ether	<5.8	<4	<4	NA	<6.0	<4	<4	<4	<4
bis (2-chloroisopropyl) ether	<5.8	<3	<3	NA	<6.0	<3	<3	<3	<3
bis (2-ethylhexyl) phthalate	<10	<10	<10	NA	<11	188	<10	<10	<10
4-bromophenyl phenyl ether	<1.9	<16	<16	NA	<2	<16	<16	<16	<16
butyl benzyl phthalate	<10	<13	<13	NA	<11	<13	<13	<13	<13
2-chloronaphthalene	<1.9	<4	<4	NA	<2	<4	<4	<4	<4
4-chlorophenyl phenyl ether	<4.3	<9	<9	NA	<4.4	<9	<9	<9	<9
chrysene	<2.6	<9	<9	NA	<2.6	<9	<9	<9	<9
dibenzo (a,h) anthracene	<10	<16	<16	NA	<11	<16	<16	<16	<16
1,2-dichlorobenzene	20.7	965	1	NA	23.8	<5	<5	<5	<5
1,3-dichlorobenzene	<1.9	<6	<6	NA	<2	<6	<6	<6	<6
1,4-dichlorobenzene	37.9	<5	3	NA	71.9	<5	<5	<5	<5
3,3-dichlorobenzidine	<17	<161	<161	NA	<17	<161	<161	<161	<161
diethyl phthalate	<10	<4	<4	NA	<11	<4	<4	<4	<4
dimethyl phthalate	15.7	<4	<4	NA	<11	<4	<4	<4	<4
di-n-butyl phthalate	<10	<3	1	NA	<11	1	2	<3	3
2,4-dinitrotoluene	<5.8	<14	<14	NA	<6.0	<14	<14	<14	<14
2,6-dinitrotoluene	<1.9	<16	<16	NA	<2.0	<16	<16	<16	<16
di-n-octyl phthalate	<10	<6	<6	NA	<11	<6	<6	<6	<6
1,2-diphenylhydrazine	<10	<10	<10	NA	<11	<10	<10	<10	<10
fluoranthene	<2.2	<5	<5	NA	<2.3	<5	<5	<5	<5
fluorene	<1.9	<4	<4	NA	<2.0	<4	<4	<4	<4
hexachlorobenzene	<1.9	<15	<15	NA	<2.0	<15	<15	<15	<15
hexachlorobutadiene	<0.9	<13	<13	NA	<1.0	<13	<13	<13	<13
hexachlorocyclopentadiene	<10	<12	<12	NA	<11	<12	<12	<12	<12
hexachloroethane	<1.6	<10	<10	NA	<1.7	<10	<10	<10	<10
indeno (1,2,3-c,d) pyrene	<4.8	<7	<7	NA	<4.9	<7	<7	<7	<7
isophorone	<2.2	<2	<2	NA	<2.3	<2	<2	<2	<2
naphthalene	<1.6	<2	<2	NA	7.0	<2	<2	<2	<2
nitrobenzene	<1.9	<5	<5	NA	<2.0	<5	<5	<5	<5
n-nitrosodimethylamine	<10	<10	<10	NA	<11	<10	<10	<10	<10
n-nitrosodi-n-propylamine	<10	<6	<6	NA	<11	<6	<6	<6	<6
n-nitrosodiphenylamine	<1.9	42	<82	NA	3.7	<82	<82	<82	<82
phenanthrene	<5.5	<4	<4	NA	<5.7	<4	<4	<4	<4
pyrene	<1.9	<5	<5	NA	<2.0	<5	<5	<5	<5
1,2,4-trichlorobenzene	<1.9	<7	<7	NA	<2.0	<7	<7	<7	<7
Sub Total 1	74.3	1007	5	NA	106.4	189	2	0	3

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	DW-7	DW-10	DW-18	DW-18	DW-18	DW-23	DW-24	DW-24	DW-29
Date:	2/86	9/84**	9/84**	9/84*	11/85	9/84**	9/84**	9/84*	9/84**
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	<10	<25-30	<25-30	NA	<11	<25-30	<25-30	<25-30	<25-30
4-nitroaniline	138	<25-30	<25-30	NA	<11	<25-30	<25-30	<25-30	<25-30
2-nitrochlorobenzene	<10	d)	<10	NA	<11	<10	<10	<10	<10
4-nitrochlorobenzene	<10	d)	<10	NA	<11	<10	<10	<10	<10
2,4-and 3,4-dinitrochlorobenzene	<10	<10	<10	NA	<11	<10	<10	<10	<10
4-nitrodiphenylamine	<10	<10	<10	NA	<11	<10	<10	<10	<10
triphenyl phosphate	<10	<10	<10	NA	<11	<10	<10	<10	<10
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	NA	<10	<10	NA	NA	<10	<10	<10	<10
4-nitrobiphenyl	NA	<10	<10	NA	NA	<10	<10	<10	<10
Sub Total 2	138	0	0	NA	0	0	0	0	0
Total Base/Neutral Compounds Analyzed	212.3	1007	5	NA	106.4	189	2	0	3

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	DW-29	DW-30	DW-33	DW-34	DW-34	DW-34	DW-1-85	DW-1-85	BK-3
Date:	9/84*	11/85	9/84**	9/84**	11/85	2/86	11/85	2/86	9/84**
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	NA	<2.0	<4	<4	<3.8	<1.9	<3.8	<2.0	<4
acenapthylene	NA	<3.6	<3	<3	<7.0	<3.5	<7.0	<3.7	<3
anthracene	NA	<2.0	<4	<4	<3.8	<1.9	<3.8	<2.0	<4
benzidine	NA	<45	<60	<60	<88	<44	<88	<47	<60
benzo (a) anthracene	NA	<8.0	<9	<9	<16	<7.9	<16	<8.3	<9
benzo (a) pyrene	NA	<2.6	<12	<12	<5.0	<2.5	<5.0	<2.7	<12
benzo (b) fluoroanthene	NA	<4.9	<11	<11	<9.6	<4.8	<9.6	<5.1	<11
benzo (ghi) perylene	NA	<4.2	<14	<14	<8.2	<4.1	<8.2	<4.4	<14
benzo (k) fluoranthene	NA	<3.6	<11	<11	<7.0	<3.5	<7.0	<3.7	<11
bis (2-chloroethoxy) methane	NA	<5.5	<4	<4	<11	<5.4	<11	<5.6	<4
bis (2-chloroethyl) ether	NA	<5.9	<4	<4	<11	<5.8	<11	<6.1	<4
bis (2-chloroisopropyl) ether	NA	<5.9	<3	<3	<11	<5.8	<11	<6.1	<3
bis (2-ethylhexyl) phthalate	NA	<10	1	1	<20	<10	<20	<11	<10
4-bromophenyl phenyl ether	NA	<2	<16	<16	<3.8	<1.9	<3.8	<2	<16
butyl benzyl phthalate	NA	<10	<13	<13	<20	<10	<20	<11	<13
2-chloronaphthalene	NA	<2	<4	<4	<3.8	<1.9	<3.8	<2	<4
4-chlorophenyl phenyl ether	NA	<4.3	<9	<9	<8.4	<4.2	<8.4	<4.5	<9
ene	NA	<2.6	<9	<9	<5.0	<2.5	<5.0	<2.7	<9
[illegible]zo (a,h) anthracene	NA	<10	<16	<16	<20	<10	<20	<11	<16
1,2-dichlorobenzene	NA	8.4	<5	2	<3.8	<1.9	47.5	12.6	27
1,3-dichlorobenzene	NA	<2	<6	3	<3.8	<1.9	22.3	6.2	17
1,4-dichlorobenzene	NA	<4.5	<5	<5	<3.8	<4.4	515	255	128
3,3-dichlorobenzidine	NA	<17	<161	<161	<33	<17	<33	<18	<161
diethyl phthalate	NA	<10	<4	3	<20	<10	<20	<11	<4
dimethyl phthalate	NA	<10	<4	<4	<20	<10	<20	<11	<4
di-n-butyl phthalate	NA	<10	3	2	<20	<10	<20	<11	3
2,4-dinitrotoluene	NA	<5.9	<14	<14	<11	<5.8	<11	<6.1	<14
2,6-dinitrotoluene	NA	<2.0	<16	<16	<3.8	<1.9	<3.8	<2.0	<16
di-n-octyl phthalate	NA	<10	<6	<6	<20	<10	<20	<11	<6
1,2-diphenylhydrazine	NA	<10	<10	<10	<20	<10	<20	<11	<10
fluoranthene	NA	<2.3	<5	<5	<4.4	<2.2	<4.4	<2.3	<5
fluorene	NA	<2.0	<4	<4	<3.8	<1.9	<3.8	<2.0	<4
hexachlorobenzene	NA	<2.0	<15	<15	<3.8	<1.9	<3.8	<2.0	<15
hexachlorobutadiene	NA	<0.9	<13	<13	<1.8	<0.9	<1.8	<1.0	<13
hexachlorocyclopentadiene	NA	<10	<12	<12	<20	<10	<20	<11	<12
hexachloroethane	NA	<1.6	<10	<10	<3.2	<1.6	<3.2	<1.7	<10
indeno (1,2,3-c,d) pyrene	NA	<4.8	<7	<7	<9.4	<4.7	<9.4	<5	<7
isophorone	NA	<2.3	<2	<2	<4.4	<2.2	<4.4	<2.3	<2
naphthalene	NA	<1.6	<2	<2	<3.2	<1.6	<3.2	<1.7	<2
nitrobenzene	NA	<2.0	<5	<5	<3.8	<1.9	<3.8	<2.0	<5
n-nitrosodimethylamine	NA	<10	<10	<10	<20	<10	<20	<11	<10
n-nitrosodi-n-propylamine	NA	<10	<6	<6	<20	<10	<20	<11	<6
n-nitrosodiphenylamine	NA	<2.0	<82	<82	<3.8	<1.9	<3.8	<2.0	2
anthrene	NA	<5.6	<4	<4	<11	<5.5	<11	<5.7	<4
pyrene	NA	<2.0	<5	<5	<3.8	<1.9	<3.8	<2.0	<5
1,2,4-trichlorobenzene	NA	<2.0	<7	<7	<3.8	<1.9	<3.8	<2.0	<7
Sub Total 1	NA	8.4	4	11	0	0	584.8	273.8	177

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	DW-29	DW-30	DW-33	DW-34	DW-34	DW-34	DW-1-85	DW-1-85	BK-3
Date:	9/84*	11/85	9/84**	9/84**	11/85	2/86	11/85	2/86	9/84**
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	NA	<10	<25-30	<25-30	<20	<10	<20	<11	<25-30
4-nitroaniline	NA	<10	<25-30	<25-30	<20	<10	<20	<11	<25-30
2-nitrochlorobenzene	NA	<10	<10	<10	<20	<10	<20	<11	<10
4-nitrochlorobenzene	NA	38.8	<10	<10	<20	<10	<20	<11	<10
2,4-and 3,4-dinitrochlorobenzene	NA	<10	<10	<10	<20	<10	<20	<11	<10
4-nitrodiphenylamine	NA	<10	<10	<10	<20	<10	<20	<11	<10
triphenyl phosphate	NA	<10	<10	<10	<20	<10	<20	<11	<10
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	NA	NA	<10	<10	NA	NA	NA	NA	<10
4-nitrobiphenyl	NA	NA	<10	<10	NA	NA	NA	NA	<10
Sub Total 2	NA	38.8	0	0	0	0	0	0	0
Total Base/Neutral Compounds Analyzed	NA	47.2	4	11	0	0	584.8	273.8	177

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	BK-3	BK-3	WB-6	WB-6	WB-6	WB-7	WB-7	Field Blank	Field Blank
Date:	11/85	2/86	9/84**	11/85	2/86	9/84	11/85	6/84	6/84
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<1.9	<1.9	<4	27.3	6.4	<4	5.1	<4	<1
acenapthylene	<3.5	<3.6	<3	<3.5	<3.6	<3	<3.6	<3	<1
anthracene	<1.9	<1.9	<4	<1.9	<2.0	<4	<2.0	<4	<1
benzidine	<44	<45	<60	<44	<46	<60	<45	<60	<1
benzo (a) anthracene	<7.9	<8.0	<9	<7.9	<8	<9	<8.0	<9	<1
benzo (a) pyrene	<2.5	<2.6	<12	<2.5	<2.6	<12	<2.6	<12	<1
benzo (b) fluoroanthene	<4.8	<4.9	<11	<4.8	<5	<11	<4.9	<11	<1
benzo (ghi) perylene	<4.1	<4.2	<14	<4.1	<4.3	<14	<4.2	<14	<1
benzo (k) fluoranthene	<3.5	<3.6	<11	<3.5	<3.6	<11	<3.6	<11	<1
bis (2-chloroethoxy) methane	<5.4	<5.4	<4	<5.4	<5.5	<4	<5.4	<4	<1
bis (2-chloroethyl) ether	<5.8	<5.8	<4	<5.8	<5.9	<4	<5.8	<4	<1
bis (2-chloroisopropyl) ether	<5.8	<5.8	<3	<5.8	<5.9	<3	<5.8	<3	<1
bis (2-ethylhexyl) phthalate	<10	<10	<10	<10	<10	<10	<10	<10	<1
4-bromophenyl phenyl ether	<1.9	<1.9	<16	<1.9	<2	<16	<1.9	<16	<1
butyl benzyl phthalate	<10	<10	<13	<10	<10	<13	<10	<13	<1
2-chloronaphthalene	<1.9	<1.9	<4	<1.9	<2	<4	<1.9	<4	<1
4-chlorophenyl phenyl ether	<4.2	<4.3	<9	<4.2	<4.4	<9	<4.3	<9	<1
·ysene	<2.5	<2.6	<9	<2.5	<2.6	<9	<2.6	<9	<1
enzo (a,h) anthracene	<10	<10	<16	<10	<10	<16	<10	<16	<1
1,2-dichlorobenzene	46.3	3.6	<5	<1.9	<2	<5	<1.9	<5	<1
1,3-dichlorobenzene	26.1	3.4	<6	<1.9	<2	<6	<1.9	<6	<1
1,4-dichlorobenzene	211	100	<5	<4.4	<4.6	<5	<4.5	<5	<1
3,3-dichlorobenzidine	<17	<17	<161	<17	<17	<161	<17	<161	<1
diethyl phthalate	<10	<10	<4	<10	<10	<4	<10	<4	<1
dimethyl phthalate	<10	<10	<4	<10	<10	<4	<10	<4	<1
di-n-butyl phthalate	<10	<10	2	<10	<10	3	<10	<3	<1
2,4-dinitrotoluene	<5.8	<5.8	<14	<5.8	<5.9	<14	<5.8	<14	<1
2,6-dinitrotoluene	<1.9	<1.9	<16	<1.9	<2.0	<16	<1.9	<16	<1
di-n-octyl phthalate	<10	<10	<6	<10	<10	<6	<10	<6	<1
1,2-diphenylhydrazine	<10	<10	<10	<10	<10	<10	<10	<10	<1
fluoranthene	<2.2	<2.2	<5	<2.2	<2.3	<5	<2.2	<5	<1
fluorene	<1.9	<1.9	<4	<1.9	<2.0	<4	<1.9	<4	<1
hexachlorobenzene	<1.9	<1.9	<15	<1.9	<2.0	<15	<1.9	<15	<1
hexachlorobutadiene	<0.9	<0.92	<13	<0.9	<0.9	<13	<0.9	<13	<1
hexachlorocyclopentadiene	<10	<10	<12	<10	<10	<12	<10	<12	<1
hexachloroethane	<1.6	<1.6	<10	<1.6	<1.7	<10	<1.6	<10	<1
indeno (1,2,3-c,d) pyrene	<4.7	<4.8	<7	<4.7	<4.9	<7	<4.8	<7	<1
isophorone	<2.2	<2.2	<2	<2.2	<2.3	<2	<2.2	<2	<1
naphthalene	17.5	14.4	<2	1,080	1,140	<2	<1.6	<2	<1
nitrobenzene	<1.9	<1.9	<5	<1.9	<2.0	<5	<1.9	<5	<1
n-nitrosodimethylamine	<10	<10	<10	<10	<10	<10	<10	<10	<1
n-nitrosodi-n-propylamine	<10	<10	<6	<10	<10	<6	<10	<6	<1
n-nitrosodiphenylamine	3.8	<1.9	<82	<1.9	<2.0	<82	<1.9	<82	<1
nanthrene	<5.5	<5.5	<4	<5.5	<5.6	<4	<5.5	<4	<1
ene	<1.9	<1.9	<5	<1.9	<2.0	<5	<1.9	<5	<1
1,2,4-trichlorobenzene	<1.9	<1.9	<7	<1.9	<2.0	<7	<1.9	<7	<1
Sub Total 1	304.7	273.8	2	1107.3	1146.4	3	5.1	0	0

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	BK-3	BK-3	MB-6	MB-6	MB-6	MB-7	MB-7	Field Blank	Field Blank
Date:	11/85	2/86	9/84**	11/85	2/86	9/84	11/85	6/84	6/84
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	<10	<10	<25-30	<10	<10	<25-30	<10	NA	NA
4-nitroaniline	<10	<10	<25-30	<10	<10	<25-30	<10	NA	NA
2-nitrochlorobenzene	<10	<10	<10	<10	<10	<10	<10	NA	NA
4-nitrochlorobenzene	<10	<10	<10	<10	<10	<10	<10	NA	NA
2,4-and 3,4-dinitrochlorobenzene	<10	<10	<10	<10	<10	<10	<10	NA	NA
4-nitrodiphenylamine	<10	<10	<10	<10	<10	<10	<10	NA	NA
triphenyl phosphate	<10	<10	<10	<10	<10	<10	<10	NA	NA
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	<10	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	NA	NA	<10	NA	NA	<10	NA	NA	NA
4-nitrobiphenyl	NA	NA	<10	NA	NA	<10	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	NA	NA
Total Base/Neutral Compounds Analyzed	304.7	273.8	2	1107.3	1146.4	3	5.1	0	0

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	Trip Blank	Trip Blank	Trip Blank	Lab Blank	Lab Blank	Lab Blank	Lab Blank	Lab Blank	Lab Blank
Date:	5/84	6/84	9/84	11/83	11/83	5/84	5/84	9/84	9/84
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
acenaphthene	<1	<4	<4	<1	<1	<1	<1	<4	<4
acenapthylene	<1	<3	<3	<1	<1	<1	<1	<3	<3
anthracene	<1	<4	<4	<1	<1	<1	<1	<4	<4
benzidine	<1	<60	<60	<1	<1	<1	<1	<60	<60
benzo (a) anthracene	<1	<9	<9	<1	<1	<1	<1	<9	<9
benzo (a) pyrene	<1	<12	<12	<1	<1	<1	<1	<12	<12
benzo (b) fluoroanthene	<1	<11	<11	<1	<1	<1	<1	<11	<11
benzo (ghi) perylene	<1	<14	<14	<1	<1	<1	<1	<14	<14
benzo (k) fluoranthene	<1	<11	<11	<1	<1	<1	<1	<11	<11
bis (2-chloroethoxy) methane	<1	<4	<4	<1	<1	<1	<1	<4	<4
bis (2-chloroethyl) ether	<1	<4	<4	<1	<1	<1	<1	<4	<4
bis (2-chloroisopropyl) ether	<1	<3	<3	<1	<1	<1	<1	<3	<3
bis (2-ethylhexyl) phthalate	<1	<10	<10	<1	<1	3	1	1	4
4-bromophenyl phenyl ether	<1	<16	<16	<1	<1	<1	<1	<16	<16
butyl benzyl phthalate	<1	<13	<13	<1	<1	<1	<1	<13	<13
2-chloronaphthalene	<1	<4	<4	<1	<1	<1	<1	<4	<4
4-chlorophenyl phenyl ether	<1	<9	<9	<1	<1	<1	<1	<9	<9
chrysene	<1	<9	<9	<1	<1	<1	<1	<9	<9
benzo (a,h) anthracene	<1	<16	<16	<1	<1	<1	<1	<16	<16
1,2-dichlorobenzene	<1	<5	<5	<1	<1	<1	<1	<5	<5
1,3-dichlorobenzene	<1	<6	<6	<1	<1	<1	<1	<6	<6
1,4-dichlorobenzene	<1	<5	<5	<1	<1	<1	<1	<5	<5
3,3-dichlorobenzidine	<1	<161	<161	<1	<1	<1	<1	<161	<161
diethyl phthalate	<1	<4	<4	<1	<1	1	1	<4	<4
dimethyl phthalate	<1	<4	<4	<1	<1	<1	<1	<4	<4
di-n-butyl phthalate	<1	<3	4	1	<1	<1	2	6	4
2,4-dinitrotoluene	<1	<14	<14	<1	<1	<1	<1	<14	<14
2,6-dinitrotoluene	<1	<16	<16	<1	<1	<1	<1	<16	<16
di-n-octyl phthalate	<1	<6	<6	<1	<1	<1	<1	<6	<6
1,2-diphenylhydrazine	<1	<10	<10	<1	<1	<1	<1	<10	<10
fluoranthene	<1	<5	<5	<1	<1	<1	<1	<5	<5
fluorene	<1	<4	<4	<1	<1	<1	<1	<4	<4
hexachlorobenzene	<1	<15	<15	<1	<1	<1	<1	<15	<15
hexachlorobutadiene	<1	<13	<13	<1	<1	<1	<1	<13	<13
hexachlorocyclopentadiene	<1	<12	<12	<1	<1	<1	<1	<12	<12
hexachloroethane	<1	<10	<10	<1	<1	<1	<1	<10	<10
indeno (1,2,3-c,d) pyrene	<1	<7	<7	<1	<1	<1	<1	<7	<7
isophorone	<1	<2	<2	<1	<1	<1	<1	<2	<2
naphthalene	<1	<2	<2	<1	<1	<1	<1	<2	<2
nitrobenzene	<1	<5	<5	<1	<1	<1	<1	<5	<5
n-nitrosodimethylamine	<1	<10	<10	<1	<1	<1	<1	<10	<10
n-nitrosodi-n-propylamine	<1	<6	<6	<1	<1	<1	<1	<6	<6
n-nitrosodiphenylamine	<1	<82	<82	<1	<1	<1	<1	<82	<82
phenanthrene	<1	<4	<4	<1	<1	<1	<1	<4	<4
pyrene	<1	<5	<5	<1	<1	<1	<1	<5	<5
1,2,4-trichlorobenzene	<1	<7	<7	<1	<1	<1	<1	<7	<7
Sub Total 1	0	0	4	1	0	4	4	7	8

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	Trip Blank	Trip Blank	Trip Blank	Lab Blank	Lab Blank	Lab Blank	Lab Blank	Lab Blank	Lab Blank
Date:	5/84	6/84	9/84	11/83	11/83	5/84	5/84	9/84	9/84
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L									
2-nitroaniline	NA	NA	NA	NA	NA	NA	NA	<25-30	<25-30
4-nitroaniline	NA	NA	NA	NA	NA	NA	NA	<25-30	<25-30
2-nitrochlorobenzene	NA	NA	NA	NA	NA	NA	NA	<10	<10
4-nitrochlorobenzene	NA	NA	NA	NA	NA	NA	NA	<10	<10
2,4-and 3,4-dinitrochlorobenzene	NA	NA	NA	NA	NA	NA	NA	<10	<10
4-nitrodiphenylamine	NA	NA	NA	NA	NA	NA	NA	<10	<10
triphenyl phosphate	NA	NA	NA	NA	NA	NA	NA	<10	<10
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-nitrobiphenyl	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-nitrobiphenyl	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	NA	NA	NA	NA	NA	NA	NA	0	0
Total Base/Neutral Compounds Analyzed	0	0	4	1	0	4	4	7	8

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	Lab Blank	Lab Blank
Date:	9/84	9/84
USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds concentrations are in ug/L		
acenaphthene	<4	<4
acenapthylene	<3	<3
anthracene	<4	<4
benzidine	<60	<60
benzo (a) anthracene	<9	<9
benzo (a) pyrene	<12	<12
benzo (b) fluoroanthene	<11	<11
benzo (ghi) perylene	<14	<14
benzo (k) fluoranthene	<11	<11
bis (2-chloroethoxyl) methane	<4	<4
bis (2-chloroethyl) ether	<4	<4
bis (2-chloroisopropyl) ether	<3	<3
bis (2-ethylhexyl) phthalate	<10	<10
4-bromophenyl phenyl ether	<16	<16
butyl benzyl phthalate	<13	<13
2-chloronaphthalene	<4	<4
4-chlorophenyl phenyl ether	<9	<9
chrysene	<9	<9
dibenzo (a,h) anthracene	<16	<16
1,2-dichlorobenzene	<5	<5
1,3-dichlorobenzene	<6	<6
1,4-dichlorobenzene	<5	<5
3,3-dichlorobenzidine	<161	<161
diethyl phthalate	<4	<4
dimethyl phthalate	<4	<4
di-n-butyl phthalate	23	<3
2,4-dinitrotoluene	<14	<14
2,6-dinitrotoluene	<16	<16
di-n-octyl phthalate	<6	<6
1,2-diphenylhydrazine	<10	<10
fluoranthene	<5	<5
fluorene	<4	<4
hexachlorobenzene	<15	<15
hexachlorobutadiene	<13	<13
hexachlorocyclopentadiene	<12	<12
hexachloroethane	<10	<10
indeno (1,2,3-c,d) pyrene	<7	<7
isophorone	<2	<2
naphthalene	<2	<2
nitrobenzene	<5	<5
n-nitrosodimethylamine	<10	<10
n-nitrosodi-n-propylamine	<6	<6
n-nitrosodiphenylamine	<82	<82
phenanthrene	<4	<4
pyrene	<5	<5
1,2,4-trichlorobenzene	<7	<7
Sub Total 1	23	0

Table E-3. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il

Well Number:	Lab Blank	Lab Blank
Date:	9/84	9/84
Miscellaneous Base/Neutral Extractable Organic Compounds concentrations are in ug/L		
2-nitroaniline	<25-30	<25-30
4-nitroaniline	<25-30	<25-30
2-nitrochlorobenzene	<10	<10
4-nitrochlorobenzene	<10	<10
2,4-and 3,4-dinitrochlorobenzene	<10	<10
4-nitrodiphenylamine	<10	<10
triphenyl phosphate	<10	<10
2,3,7,8-tetrachloro-dibenzo-p-dioxin	NA	NA
2-nitrobiphenyl	NA	NA
4-nitrobiphenyl	NA	NA
Sub Total 2	0	0
Total Base/Neutral Compounds Analyzed	23	0

NA - Not analyzed.
* - Replicate Analyses
** - Prior to analysis, this sample was held by Envirodyne Engineers, Inc. longer than the maximum allowable USEPA holding time.
\$ - Replicate analysis was performed by ETC.
a) - This sample was collected (unfiltered) for nitrobiphenyl analysis.
b) - This sample was collected (filtered) for nitrobiphenyl analysis.
c) - Envirodyne Engineers, Inc. reported 16 ug/L; however the result did not differentiate between the nitrochlorobenzene compounds.
d) - Envirodyne Engineers, Inc. reported 228 ug/L; however the result did not differentiate between the nitrochlorobenzene compounds.
e) - ETC reported 124,000 ug/L for 2-NCB, 3-NCB, and 4-NCB. The laboratory could not distinguish between these compounds, however they occur in roughly equal proportions.
< - Indicates that the compound was not detected at the detection limit which is the value shown next to the symbol.

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il. ***

Well Number:	GM-1	GM-1	GM-2	GM-2	GM-3	GM-3	GM-3	GM-4A	GM-4A	GM-4B
Date:	11/83	5/84	11/83	5/84	11/83	5/84	5/84*	11/83	5/84	9/84
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	31
2,4-dichlorophenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8
2,4-diaethylphenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10
4,6-dinitro-o-cresol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<38
2,4-dinitrophenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<52
2-nitrophenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<11
4-nitrophenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<35
p-chloro-m-cresol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8
pentachlorophenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	7
phenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	9
2,4,6-trichlorophenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<12
Sub Total 1	0	0	0	0	0	0	0	0	0	47
Miscellaneous Acid Extractable Organic Compounds										
ilorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1>
Sub Total 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
Total Acid Compounds Analyzed	0	0	0	0	0	0	0	0	0	47

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il. ***

Well Number:	GM-4B	GM-4B	GM-4B	GM-4B	GM-4B	GM-4C	GM-4C	GM-5	GM-5	GM-6A
Date:	11/84	11/84*	2/85	11/85	11/85*	2/85	5/85	11/83	5/84	11/83
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	60	51	14.8	19.6	24	<3.3	67	<1	<1	<1
2,4-dichlorophenol	<25	<25	<2.7	<2.7	<2.7	4.7	16.7	<1	<1	<1
2,4-dimethylphenol	<25	<25	<2.7	<2.7	<2.7	<2.7	<2.7	<1	<1	<1
4,6-dinitro-o-cresol	<250	<250	<24	<24	<24	<24	<24	<1	<1	<1
2,4-dinitrophenol	<250	<250	<42	<42	<42	<42	<42	<1	<1	<1
2-nitrophenol	<25	<25	<3.6	<3.6	<3.6	<3.6	<3.6	<1	<1	<1
4-nitrophenol	<25	<25	<2.4	<2.4	<2.4	<2.4	<2.4	<1	<1	<1
p-chloro-m-cresol	<25	<25	<3	<3	<3	<3	<3	<1	<1	<1
pentachlorophenol	<25	<25	<3.6	<3.6	<3.6	<3.6	<3.6	<1	<1	<1
phenol	<25	<25	6	<1.5	<1.5	<1.5	<1.5	<1	<1	<1
2,4,6-trichlorophenol	<25	<25	<2.7	<2.7	<2.7	<2.7	<2.7	<1	<1	<1
Sub Total 1	60	51	20.8	19.6	24	4.7	83.7	0	0	0
Miscellaneous Acid Extractable Organic Compounds										
4-chlorophenol	77	40	22	<10	44.6	<3.3	115	NA	NA	NA
Sub Total 2	77	40	22	0	44.6	0	115	NA	NA	NA
Total Acid Compounds Analyzed	137	91	42.8	19.6	68.6	4.7	198.7	0	0	0

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, IL. ***

Well Number:	GM-6A	GM-6A	GM-6B	GM-6B	GM-6B	GM-7	GM-7	GM-8	GM-8	GM-8
Date:	5/84	11/84	9/84**	11/84	11/85	11/83	5/84	11/83	5/84	11/84
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	<1	<25	<6	<25	<3.3	<1	<1	<1	<1	<25
2,4-dichlorophenol	<1	<25	<8	<25	4.6	<1	<1	<1	<1	<25
2,4-dimethylphenol	<1	<25	<10	<25	<2.7	<1	<1	<1	<1	<25
4,6-dinitro-o-cresol	<1	<250	<38	<250	<24	<1	<1	<1	<1	<250
2,4-dinitrophenol	<1	<250	<52	<250	<42	<1	<1	<1	<1	<250
2-nitrophenol	<1	<25	<11	<25	<3.6	<1	<1	<1	<1	<25
4-nitrophenol	<1	<25	<35	<25	<2.4	<1	<1	<1	<1	<25
p-chloro-m-cresol	<1	<25	<8	<25	<3	<1	<1	<1	<1	<25
pentachlorophenol	<1	<25	<34	<25	<3.6	<1	<1	<1	<1	<25
phenol	<1	<25	<4	<25	<1.5	<1	<1	<1	<1	<25
2,4,6-trichlorophenol	<1	<25	<12	<25	<2.7	<1	<1	<1	<1	<25
Sub Total 1	0	0	0	0	4.6	0	0	0	0	0
Miscellaneous Acid Extractable Organic Compounds										
ılorophenol	NA	<25	<10	<25	<10	NA	NA	NA	NA	<25
Sub Total 2	NA	0	0	0	0	NA	NA	NA	NA	0
Total Acid Compounds Analyzed	0	0	0	0	4.6	0	0	0	0	0

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krumarich Plant, Sauget, Il. ***

Well Number:	GM-8	GM-8	GM-9A	GM-9A	GM-9B	GM-9B	GM-9B	GM-9C	GM-9C	GM-9C
Date:	2/85	11/85	11/83	5/84	9/84**	5/85	11/85	9/84**	5/85	11/85
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	<3.7	<3.4	55	58	<6	<3.3	3.7	1	<3.3	<3.6
2,4-dichlorophenol	<3	<2.8	21	7	<8	<2.7	<2.7	<8	<2.7	<2.9
2,4-dimethylphenol	<3	<2.8	<1	<1	<10	<2.7	<2.7	<10	<2.7	<2.9
4,6-dinitro-o-cresol	<27	<25	<1	<1	<38	<24	<24	<38	<24	<26
2,4-dinitrophenol	<47.2	<43	<1	<1	<52	<42	<42	<52	<42	<45
2-nitrophenol	<4	<3.7	<1	<1	<11	<3.6	<3.6	<11	<3.6	<3.9
4-nitrophenol	<2.2	<2.5	<1	<1	<35	<2.4	<2.4	<35	<2.4	<2.6
p-chloro-m-cresol	<3.4	<3.1	<1	<1	<8	<3	<3	<8	<3	<3.2
pentachlorophenol	<4	<3.7	58	12	2	<3.6	<3.6	4	<3.6	<3.9
phenol	<1.7	<1.5	<1	<1	<4	<1.5	<1.5	<4	<1.5	<1.6
2,4,6-trichlorophenol	<3	<2.8	<1	<1	<12	<2.7	<2.7	<12	<2.7	<2.9
Sub Total 1	0	0	134	77	2	0	3.7	5	0	0
Miscellaneous Acid Extractable Organic Compounds										
4-chlorophenol	<3.7	<10	NA	NA	<10	<25	<25	<10	<10	11
Sub Total 2	0	0	NA	NA	0	0	0	0	0	11
Total Acid Compounds Analyzed	0	0	134	77	2	0	3.7	5	0	11

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krumarich Plant, Sauget, Il. ***

Well Number:	GM-10A	GM-10A	GM-10B	GM-10B	GM-10C	GM-10C	GM-11	GM-11	GM-12A	GM-12A
Date:	11/83	5/84	2/85	5/85	2/85	5/85	11/83	5/84	11/83	11/83*
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	<1	<1	<3.6	29.5	<3.7	<3.3	<1	<1	182	160
2,4-dichlorophenol	<1	<1	8.9	154.2	<3	<2.7	<1	<1	<1	<1
2,4-dimethylphenol	<1	<1	<2.9	<2.7	<3	<2.7	<1	<1	<1	<1
4,6-dinitro-o-cresol	<1	<1	<26	<24	<26.7	<24	<1	<1	<1	<1
2,4-dinitrophenol	<1	<1	<45.7	<42	<46.7	<42	<1	<1	<1	<1
2-nitrophenol	<1	<1	<3.9	<3.6	<4	<3.6	<1	<1	<1	<1
4-nitrophenol	<1	<1	<2.6	<2.4	<2.7	<2.4	<1	<1	<1	<1
p-chloro-m-cresol	<1	<1	<3.3	<3	<3.3	<3	<1	<1	<1	<1
pentachlorophenol	<1	<1	<3.9	<3.6	<4	<3.6	<1	<1	147	115
phenol	<1	<1	<1.6	18.9	<1.7	<1.5	<1	<1	40	38
2,4,6-trichlorophenol	<1	<1	<2.9	<2.7	<3	<2.7	<1	<1	<1	<1
Sub Total 1	0	0	8.9	202.6	0	0	0	0	369	313
Miscellaneous Acid Extractable Organic Compounds										
chlorophenol	NA	NA	18.7	26	<3.7	<25	NA	NA	NA	NA
Sub Total 2	NA	NA	18.7	26	0	0	NA	NA	NA	NA
Total Acid Compounds Analyzed	0	0	27.6	228.6	0	0	0	0	369	313

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il. ***

Well Number:	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A
Date:	5/84	5/84*	11/84	11/84*	2/85	2/85*	5/85	5/85*	11/85	11/85*
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	29	31	34	<25	30.8	30.3	19	17.3	17	20.9
2,4-dichlorophenol	<1	<1	<25	<25	<2.7	<2.7	<2.7	<2.7	<2.8	<2.8
2,4-diaethylphenol	<1	<1	<25	<25	<2.7	<2.7	<2.7	<2.7	<2.8	<2.8
4,6-dinitro-o-cresol	<1	<1	<250	<250	<24	<24	<24	<24	<25	<25
2,4-dinitrophenol	<1	<1	<250	<250	<42	<42	<42	<42	<44	<44
2-nitrophenol	<1	<1	<25	<25	<3.6	<3.6	<3.6	<3.6	<3.8	<3.8
4-nitrophenol	<1	<1	<25	<25	<2.4	<2.4	<2.4	<2.4	<2.5	<2.5
p-chloro-m-cresol	<1	<1	<25	<25	<3	<3	<3	<3	<3.2	<3.2
pentachlorophenol	<1	<1	<25	<25	<3.6	<3.6	<3.6	<3.6	<3.8	<3.9
phenol	18	15	43	27	90.4	93.6	54	46	15.9	19.9
2,4,6-trichlorophenol	<1	<1	<25	<25	<2.7	<2.7	<2.7	<2.7	<2.8	<2.8
Sub Total 1	47	46	77	27	121.2	123.9	73	63.3	32.9	40.8
Miscellaneous Acid Extractable Organic Compounds										
4-chlorophenol	NA	NA	<25	<25	6	7	<10	<10	<11	<11
Sub Total 2	NA	NA	0	0	6	7	0	0	0	0
Total Acid Compounds Analyzed	47	46	77	27	127.2	130.9	73	63.3	32.9	40.9

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il. ***

Well Number:	GM-12A	GM-12A	GM-12B	GM-12B	GM-12B	GM-12C	GM-12C	GM-12C	GM-12C	GM-13
Date:	2/86	2/86*	9/84**	11/84	11/85	2/85	2/85*	5/85	5/85*	9/84**
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	42	24	2	<25	<3.5	108	114	<3.3	<3.3	<6
2,4-dichlorophenol	<2.9	<2.7	1	<25	<2.8	<2.7	<2.7	<2.7	<2.7	<8
2,4-dimethylphenol	<2.9	<2.7	<10	<25	<2.8	<2.7	<2.7	<2.7	<2.7	<10
4,6-dinitro-o-cresol	<26	<24	<38	<250	<25	<24	<24	<24	<24	<38
2,4-dinitrophenol	<45	<42	<52	<250	<44	<42	<42	<42	<42	<52
2-nitrophenol	<3.8	<3.6	<11	<25	<3.8	33.4	55	<3.6	<3.6	<11
4-nitrophenol	<2.6	<2.4	<35	<25	<2.5	33.3	372	<2.4	<2.4	<35
p-chloro-m-cresol	<3.2	<3	<8	<25	<3.2	<3	<3	<3	<3	<8
pentachlorophenol	<3.8	<3.6	4	<25	<3.8	<3.6	<3.6	<3.6	<3.6	25
phenol	28.6	16.3	7	33	17.3	<1.5	2.9	<1.5	<1.5	230
2,4,6-trichlorophenol	<2.9	<2.7	<12	<25	<2.8	<2.7	<2.7	<2.7	<2.7	<12
Sub Total 1	70.6	40.3	14	33	17.3	174.7	543.9	0	0	255
Miscellaneous Acid Extractable Organic Compounds										
lorophenol	<11	<10	<10	<25	<11	<3.3	<3.3	<10	<10	<10
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total Acid Compounds Analyzed	70.6	40.3	14	33	17.3	174.7	543.9	0	0	255

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il. ***

Well Number:	GM-13	GM-13	GM-14	GM-15	GM-16A	GM-16A	GM-16A	GM-16B	GM-16B	GM-16B
Date:	11/85	2/86	9/84**	9/84**	9/84**	5/85	11/85	9/84**	5/85	11/85
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	134	75.3	NA	<6	<6	<3.3	<3.5	<6	<3.3	<6.6
2,4-dichlorophenol	141	18	NA	<8	<8	<2.7	<2.8	<8	<2.7	<5.4
2,4-dimethylphenol	210	210	NA	<10	<10	<3	<2.8	<10	<2.7	<5.4
4,6-dinitro-o-cresol	<26	<25	NA	<38	<38	<24	<25	<38	<24	<48
2,4-dinitrophenol	<46	<44	NA	<52	<52	<42	<44	<52	<42	<84
2-nitrophenol	<4	<3.8	NA	<11	<11	<3.6	<3.8	<11	<3.6	<7.2
4-nitrophenol	53	<2.5	NA	<35	<35	<2.4	<2.5	<35	<2.4	<4.8
p-chloro-m-cresol	<3.3	7.1	NA	<8	<8	<3	<3.2	<8	<3	<6
pentachlorophenol	31	3.9	NA	1	<1	<3.6	<3.8	6	<3.6	<7.2
phenol	1,950	319	NA	<4	<4	<1.5	<1.6	<4	<1.5	<3
2,4,6-trichlorophenol	32.3	3.7	NA	<12	<12	<2.7	<2.8	<12	<2.7	<5.4
Sub Total 1	2551.3	637	NA	1	0	0	0	6	0	0
Miscellaneous Acid Extractable Organic Compounds										
4-chlorophenol	619	150	NA	<10	<10	<10	<11	<10	<10	<20
Sub Total 2	619	150	NA	0	0	0	0	0	0	0
Total Acid Compounds Analyzed	3170.3	787	NA	1	0	0	0	6	0	0

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il. ***

Well Number:	GM-17A	GM-17A	GM-17A	GM-17B	GM-17B	GM-17B	GM-17C	GM-17C	GM-17C	GM-18A
Date:	9/84	11/84	11/85	9/84**	11/84	11/85	9/84**	11/84	11/85	9/84**
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	38	27	<3.3	<6	<25	31.6	37	86	15	<6
2,4-dichlorophenol	<8	<25	<2.7	<8	<25	<5.4	<8	<25	<2.7	<8
2,4-dimethylphenol	<10	<25	<2.7	<10	<25	<5.4	<10	<25	<2.7	<10
4,6-dinitro-o-cresol	<38	<250	<24	<38	<250	<48	<38	<250	<24	<38
2,4-dinitrophenol	<52	<250	<42	<52	<250	<84	<52	<250	<42	<52
2-nitrophenol	<11	<25	<3.6	<11	<25	<7.2	<11	<25	<3.6	<11
4-nitrophenol	184	<25	<2.4	<35	<25	<4.8	<35	<25	<2.4	<35
p-chloro-m-cresol	<8	<25	<3	<8	<25	<6	<8	<25	<3	<8
pentachlorophenol	<34	<25	<3.6	2	<25	<7.2	2	<25	<3.6	<34
phenol	472	43	3.3	131	208	234	7	38	<1.5	<4
2,4,6-trichlorophenol	<12	<25	<2.7	<12	<25	<5.4	<12	<25	<2.7	<12
Sub Total 1	694	70	3.3	133	208	265.6	46	124	15	0
Miscellaneous Acid Extractable Organic Compounds										
.lorophenol	<10	<25	<10	<10	53	<20	<10	78	<10	<10
Sub Total 2	0	0	0	0	53	0	0	78	0	0
Total Acid Compounds Analyzed	694	70	3.3	133	261	265.6	46	202	15	0

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il. ***

Well Number:	GM-18A	GM-18A	GM-18B	GM-18B	GM-18B	GM-25A	GM-25A	GM-25B	GM-25B	GM-25B
Date:	5/85	11/85	9/84**	5/85	11/85	9/84	11/84	9/84	11/84	11/85
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	<3.3	<3.4	<6	<3.3	7.44	<6	<25	<6	<25	<6.5
2,4-dichlorophenol	<2.7	<2.8	<8	<2.7	<5.4	<8	<25	<8	<25	<5.3
2,4-diaethylphenol	<2.7	<2.8	<10	<3.0	<5.4	<10	<25	<10	<25	<5.3
4,6-dinitro-o-cresol	<24	<25	<38	<24	<48	<38	<250	<38	<250	<47
2,4-dinitrophenol	<42	<44	<52	<42	<84	<52	<250	<52	<250	<82
2-nitrophenol	<3.6	<3.8	<11	<3.6	<7.2	<11	<25	<11	<25	<7.1
4-nitrophenol	<2.4	<2.5	<35	<2.4	<4.8	<35	<25	<35	<25	<4.7
p-chloro-m-cresol	<3	<3.1	<8	<3	<6	<8	<25	<8	<25	<5.9
pentachlorophenol	<3.6	<3.8	<34	<3.6	<7.2	<34	<25	<34	<25	<7.1
phenol	<1.5	<1.6	<4	<1.5	<3	<4	<25	2	<25	<2.9
2,4,6-trichlorophenol	<2.7	<2.8	<12	<2.7	<5.4	<12	<25	<12	<25	<5.3
Sub Total 1	0	0	0	0	7.44	0	0	2	0	0
Miscellaneous Acid Extractable Organic Compounds										
4-chlorophenol	<10	<10	<10	<10	<20	<10	<25	<10	<25	<20
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total Acid Compounds Analyzed	0	0	0	0	7.44	0	0	2	0	0

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, IL. ***

Well Number:	GM-27B	GM-27B	GM-27B	GM-27C	GM-27C	GM-27C	GM-28B	GM-28B	GM-28B	GM-28C
Date:	9/84**	11/85	2/86	9/84**	11/85	2/86	9/84**	11/85	2/86	9/84**
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	12	<3.3	<3.4	<6	9.8	6.9	24	256	481	NA
2,4-dichlorophenol	115	3.3	<2.8	<8	<2.7	<2.8	<8	13.3	767	NA
2,4-dimethylphenol	<10	<2.7	<2.8	<10	<2.7	<2.8	<10	134	224	NA
4,6-dinitro-o-cresol	<38	<24	<25	<38	<24	<24	<38	<26	<25	NA
2,4-dinitrophenol	<52	<42	<43	<52	<42	<43	<52	<45	<43	NA
2-nitrophenol	<11	<3.6	<3.7	<11	<3.6	<3.7	<11	<3.9	<3.7	NA
4-nitrophenol	<35	<2.4	<2.5	<35	<2.4	<2.4	<35	<2.6	<2.5	NA
p-chloro-m-cresol	<8	<3	<3.1	<8	<3	<3.1	<8	<3.2	<3.1	NA
pentachlorophenol	170	<3.6	<3.7	<34	<3.6	<3.7	9	<3.9	33.1	NA
phenol	6	<1.5	2.2	<4	158	<1.5	<4	264	224	NA
2,4,6-trichlorophenol	77	<2.7	<2.8	<12	<2.7	<2.8	8	<2.9	310	NA
Sub Total 1	380	3.3	2.2	0	167.8	6.9	41	667.3	2039.1	NA
Miscellaneous Acid Extractable Organic Compounds										
chlorophenol	<10	<10	<10	<10	164	111	<10	2,490	3,440	NA
Sub Total 2	0	0	0	0	164	111	0	2,490	3,440	NA
Total Acid Compounds Analyzed	380	3.3	2.2	0	331.8	117.9	41	3157.3	5479.1	NA

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il. ***

Well Number:	GM-28C	GM-28C	GM-29	GM-29	GM-30	GM-30	GM-30	GM-31A	GM-31A	GM-31A
Date:	11/85	2/86	9/84**	11/85	9/84**	11/85	2/86	2/85	5/85	11/85
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	107	237	<6	10.2	<6	<3.3	<3.6	<3.3	<3.3	<3.5
2,4-dichlorophenol	153	818	<8	<3.1	<8	<2.7	<2.9	<2.7	4.5	12.9
2,4-dimethylphenol	150	186	<10	<3.1	<10	<2.7	<2.9	<2.7	<2.7	<2.9
4,6-dinitro-o-cresol	<24	<24	<38	<28	<38	<24	<26	<24	<24	<26
2,4-dinitrophenol	<42	<42	<52	<49	<52	<42	<46	44.6	1,299.9	158
2-nitrophenol	<3.6	<3.6	<11	<4.2	<11	<3.6	<3.9	134	269.7	686
4-nitrophenol	<2.4	<2.4	<35	<2.8	<35	<2.4	<2.6	<2.4	201.3	175
p-chloro-m-cresol	<3	<3	<8	<3.5	<8	<3	<3.3	<3	<3	<3.2
pentachlorophenol	<3.6	26.4	<34	<4.2	<34	<3.6	<3.9	<3.6	<3.6	<3.8
phenol	16.6	67.9	<4	<1.7	<4	<1.5	<1.6	43,600	3,530	2,980
2,4,6-trichlorophenol	14.6	149	<12	<3.1	<12	<2.7	<2.9	23.7	51.9	136
Sub Total 1	441.2	1484.3	0	10.2	0	0	0	43802.3	5357.3	4147.9
Miscellaneous Acid Extractable Organic Compounds										
4-chlorophenol	1,240	1,920	<10	12.8	<10	<10	<11	80.2	<25	10.6
Sub Total 2	1,240	1,920	0	12.8	0	0	0	80.2	0	10.6
Total Acid Compounds Analyzed	1681.2	3404.3	0	23	0	0	0	43882.5	5357.3	4158.5

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il. ***

Well Number:	GM-31A	GM-31B	GM-31B	GM-31B	GM-31B	GM-31C	GM-31C	GM-31C	GM-31C	B-24A
Date:	11/85*	2/85	5/85	11/85	11/85*	2/85	5/85	11/85	11/85*	2/86
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	<3.5	<3.3	<3.3	<3.3	<3.3	<3.7	<3.3	6.8	5.6	202,000
2,4-dichlorophenol	13.2	<2.7	<2.7	<2.7	<2.7	<3	<2.7	<2.7	<2.7	62,400
2,4-dimethylphenol	<2.8	<2.7	<2.7	<2.7	<2.7	<3	<2.7	<2.7	<2.7	<1,100
4,6-dinitro-o-cresol	<25	<24	<24	<24	<24	<26.7	<24	<24	<24	<10,000
2,4-dinitrophenol	396	<42	<42	<42	<42	<46.7	<42	<42	<42	<18,000
2-nitrophenol	729	<3.6	<3.6	<3.6	<3.6	<4	<3.6	<3.6	<3.6	<1,500
4-nitrophenol	186	<2.4	<2.4	<2.4	<2.4	<2.7	<2.4	<2.4	<2.4	<1,000
p-chloro-m-cresol	<3.2	<3	<3	<3	<3	<3.3	<3	<3	<3	<1,300
pentachlorophenol	<3.8	<3.6	<3.6	<3.6	<3.6	<4	<3.6	<3.6	<3.6	<1,500
phenol	8,410	<1.5	<1.5	<1.5	<1.5	<1.7	153.4	<1.5	<1.5	280,000
2,4,6-trichlorophenol	184	<2.7	<2.7	<2.7	<2.7	<3	<2.7	<2.7	<2.7	21,900
Sub Total 1	9918.2	0	0	0	0	0	153.4	6.8	5.6	566300
Miscellaneous Acid Extractable Organic Compounds										
ılorophenol	<10.5	<3.3	<25	<10	<10	<3.7	19	<10	<10	37,200
Sub Total 2	0	0	0	0	0	0	19	0	0	37,200
Total Acid Compounds Analyzed	9918.2	0	0	0	0	0	172.4	6.8	5.6	603500

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il. ***

Well Number:	B-25A	B-25A	B-25B	B-25B	B-27B	B-27B	B-28A	B-29A	B-29A	B-29B
Date:	6/84	11/85	6/84	11/85	9/84**	9/84*	2/86	6/84	11/85	6/84
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	14,900	89,200	10,200	23,300	NA	NA	<3.5	176,000	718,000	103,000
2,4-dichlorophenol	13,300	1,520,000	34,800	52,100	NA	NA	<2.9	12,900	44,700	33,800
2,4-dimethylphenol	<200	<26	<200	48.6	NA	NA	<2.9	7,740	44,500	38,300
4,6-dinitro-o-cresol	<760	<240	<760	<240	NA	NA	<26	<760	<2,400	<7,600
2,4-dinitrophenol	<1,040	<410	<1,040	<420	NA	NA	<45	<1,040	<4,200	<10,400
2-nitrophenol	<220	<35	<220	<36	NA	NA	<3.8	<220	<360	<2,200
4-nitrophenol	<700	167	497	2,320	NA	NA	<2.6	<700	<240	7,590
p-chloro-m-cresol	<160	<29	<160	<30	NA	NA	<3.2	<160	<300	<1,600
pentachlorophenol	<680	546	<680	<36	NA	NA	<3.8	9,280	10,600	1,700
phenol	34,900	965,000	39,400	32,700	NA	NA	<1.6	657,000	771,000	609,000
2,4,6-trichlorophenol	5,160	13,900	<240	6,870	NA	NA	<2.9	11,300	15,300	31,200
Sub Total 1	68260	2588813	84897	117338.6	NA	NA	0	874220	1604100	824590
Miscellaneous Acid Extractable Organic Compounds										
4-chlorophenol	NA	42,500	NA	22,600	NA	NA	<11	NA	299,000	NA
Sub Total 2	NA	42,500	NA	22,600	NA	NA	0	NA	299,000	NA
Total Acid Compounds Analyzed	68260	2631313	84897	139938.6	NA	NA	0	874220	1903100	824590

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il. ***

Well Number:	B-29B	B-29B	B-29B	B-29B	B-30B	B-31B	B-31B	B-31C	B-31C	B-31C
Date:	6/84*	6/84#	11/84	11/85	9/84**	11/85	2/86	9/84**	9/84*	11/85
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	116,000	27,400	953	70,900	NA	<3.3	<3.3	<6	<6	<3.4
2,4-dichlorophenol	97,400	68,100	<250	37,500	NA	<2.7	<2.7	<8	<8	<2.8
2,4-diaethylphenol	13,500	18,700	<250	21,200	NA	<2.7	<2.7	<10	<10	<2.8
4,6-dinitro-o-cresol	<760	<25,000	<2500	<480	NA	<24	<24	<38	<38	<24
2,4-dinitrophenol	<1,040	<25,000	<2500	<840	NA	<42	<42	<52	<52	<43
2-nitrophenol	<220	<2,500	<250	<72	NA	<3.6	<3.6	<11	<11	<3.7
4-nitrophenol	<700	3,690	<250	1,860	NA	<2.4	<2.4	<35	<35	<2.4
p-chloro-m-cresol	<160	<2,500	<250	<60	NA	<3	<3	<8	<8	<3.1
pentachlorophenol	<680	3,690	<250	3,090	NA	<3.6	<3.6	<34	<34	<3.7
phenol	1,070,000	19,800	5,010	133,000	NA	<1.5	<1.5	<4	<4	<1.5
2,4,6-trichlorophenol	16,000	16,000	<250	11,800	NA	<2.7	<2.7	<12	<12	<2.8
Sub Total 1	1312900	157380	5963	279350	NA	0	0	0	0	0
Miscellaneous Acid Extractable Organic Compounds										
hlorophenol	NA	NA	<250	49,900	NA	<10	<10	<10	<10	<10
Sub Total 2	NA	NA	0	49,900	NA	0	0	0	0	0
Total Acid Compounds Analyzed	1312900	157380	5963	329250	NA	0	0	0	0	0

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krumrich Plant, Sauget, Il. ***

Well Number:	B-31C	B-101	B-102	GM-106	GM-106	GM-106	P-1	P-2	P-2	P-6
Date:	2/86	9/84**	9/84**	11/85	2/86	2/86*	9/84**	6/84	11/85	6/84
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	6.2	5,630	<6	15.7	52.1	40.9	<6	16	8.5	<1
2,4-dichlorophenol	<2.8	31,200	<8	22	133	128	2	40	<2.7	<1
2,4-dimethylphenol	<2.8	<10	<10	<2.7	4.8	4.5	<10	<1	<2.7	<1
4,6-dinitro-o-cresol	<25	<38	<38	<24	<25	<24	<38	<1	<24	<1
2,4-dinitrophenol	<44	<52	<52	<42	<43	<43	<52	<1	<42	<1
2-nitrophenol	<3.8	<11	<11	<3.6	<3.7	<3.7	<11	<1	<3.6	<1
4-nitrophenol	<2.5	<35	<35	<2.4	<2.5	3	<35	<1	<2.4	<1
p-chloro-m-cresol	<3.2	<8	<8	<3	<3.1	<3.1	<8	<1	<3	<1
pentachlorophenol	<3.8	1,360	<34	<3.6	<3.7	<3.7	1	1	<3.6	<1
phenol	<1.6	<4	<4	35.9	65.2	53.5	<4	291	<1.5	6
2,4,6-trichlorophenol	<2.8	14,600	<12	52.9	207	181	1	7	<2.7	<1
Sub Total 1	6.2	52790	0	126.5	462.1	410.9	4	355	8.5	6
Miscellaneous Acid Extractable Organic Compounds										
4-chlorophenol	<11	<10	<10	<10	37.1	36.3	<10	NA	<10	NA
Sub Total 2	0	0	0	0	37.1	36.3	0	NA	0	NA
Total Acid Compounds Analyzed	6.2	52790	0	126.5	499.2	447.2	4	355	8.5	6

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il. ***

Well Number:	P-6	P-7	P-7	P-8	P-8	P-10	P-11	P-12	P-13	P-13
Date:	11/85	6/84	11/85	6/84	11/85	9/84**	9/84**	9/84**	6/84	6/84*
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	<3.7	10,200	2,660	1	27.2	<6	<6	<6	<1	<1
2,4-dichlorophenol	<3.1	8,180	7,790	<1	<2.7	<8	<8	<8	<1	<1
2,4-dimethylphenol	<3.1	1,930	<5.5	1	32.1	<10	<10	<10	<1	<1
4,6-dinitro-o-cresol	<27	<760	<48	<1	<24	<38	<38	<38	<1	<1
2,4-dinitrophenol	<47	<1,040	<85	<1	<42	<52	<52	<52	<1	<1
2-nitrophenol	<4.1	<220	<7.3	<1	<3.6	<11	<11	<11	<1	<1
4-nitrophenol	<2.7	<700	133	<1	<2.4	<35	<35	<35	<1	<1
p-chloro-m-cresol	<3.4	<160	<6.1	<1	<3	<8	<8	<8	<1	<1
pentachlorophenol	<4.1	<680	<7.3	<1	<3.6	<34	<34	<34	<1	<1
phenol	<1.7	123,000	22,300	9	<1.5	<4	<4	<4	<1	4
2,4,6-trichlorophenol	<3.1	1,920	3,430	<1	<2.7	<12	<12	<12	<1	<1
Sub Total 1	0	145230	36313	11	59.3	0	0	0	0	4
Miscellaneous Acid Extractable Organic Compounds										
lorophenol	<11	NA	13,100	NA	182	<10	<10	<10	NA	NA
Sub Total 2	0	NA	13,100	NA	182	0	0	0	NA	NA
Total Acid Compounds Analyzed	0	145230	49413	11	241.3	0	0	0	0	4

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il. ***

Well Number:	P-13	P-13	P-14	P-14	DW-1	DW-1	DW-4	DW-7	DW-7	DW-10
Date:	6/84#	11/85	6/84	11/85	9/84##	11/85	9/84##	11/85	2/86	9/84##
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	<25	<3.3	<1	74.5	<6	22.1	42	19.3	36.4	<6
2,4-dichlorophenol	<25	<2.7	<1	<2.8	<8	<5.2	24	23.6	12.6	<8
2,4-dimethylphenol	<25	<2.7	<1	<2.8	<10	<5.2	<10	<5.4	<2.8	<10
4,6-dinitro-o-cresol	<250	<24	<1	<25	<38	<46	<38	<48	<24	<38
2,4-dinitrophenol	<250	<42	<1	<43	<52	<81	<52	<84	<43	<52
2-nitrophenol	<25	<3.6	<1	<3.7	<11	<6.9	<11	<7.2	<3.7	<11
4-nitrophenol	<25	<2.4	<1	<2.5	<35	<4.6	<35	<4.8	<2.4	<35
p-chloro-m-cresol	<25	<3	<1	<3.1	<8	<5.8	<8	<6.0	<3.1	<8
pentachlorophenol	<25	<3.6	<1	<3.7	<34	<6.9	1,340	80.5	<3.7	39
phenol	<25	4.3	1	<1.5	29	210	<4	<3	25.9	<4
2,4,6-trichlorophenol	<25	<2.7	<1	<2.8	<12	<5.2	529	44.8	117	3
Sub Total 1	0	4.3	1	74.5	29	232.1	1935	168.2	191.9	42
Miscellaneous Acid Extractable Organic Compounds										
4-chlorophenol	NA	<10	NA	29.4	<10	189	<10	58.6	200	<10
Sub Total 2	NA	0	NA	29.4	0	189	0	58.6	200	0
Total Acid Compounds Analyzed	0	4.3	1	103.9	29	421.1	1935	226.8	391.9	42

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il. ***

Well Number:	DW-18	DW-18	DW-18	DW-23	DW-24	DW-24	DW-29	DW-29	DW-30	DW-33
Date:	9/84**	9/84*	11/85	9/84**	9/84**	9/84*	9/84**	9/84*	11/85	9/84**
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	<6	NA	<3.5	<6	<6	<6	<6	NA	4.2	<6
2,4-dichlorophenol	<8	NA	<2.8	<8	<8	<8	52	NA	<2.8	<8
2,4-dimethylphenol	<10	NA	<2.8	<10	<10	<10	<10	NA	<2.8	<10
4,6-dinitro-o-cresol	<38	NA	<25	<38	<38	<38	<38	NA	<25	<38
2,4-dinitrophenol	<52	NA	<44	<52	<52	<52	<52	NA	<43	<52
2-nitrophenol	<11	NA	<3.8	<11	<11	<11	<11	NA	<3.7	<11
4-nitrophenol	<35	NA	<2.5	<35	<35	<35	<35	NA	<2.5	<35
p-chloro-m-cresol	<8	NA	<3.2	<8	<8	<8	<8	NA	<3.1	<8
pentachlorophenol	<34	NA	<3.8	<34	<34	<34	<34	NA	<3.7	4
phenol	1	NA	<1.6	<4	<4	<4	<4	NA	<1.5	<4
2,4,6-trichlorophenol	<12	NA	<2.8	<12	<12	<12	<12	NA	<2.8	<12
Sub Total 1	1	NA	0	0	0	0	52	NA	4.2	4
Miscellaneous Acid Extractable Organic Compounds										
.hlorophenol	<10	NA	<11	<10	<10	<10	<10	NA	<10	<10
Sub Total 2	0	NA	0	0	0	0	0	NA	0	0
Total Acid Compounds Analyzed	1	NA	0	0	0	0	52	NA	4.2	4

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il. ***

Well Number:	DW-34	DW-34	DW-34	DW-1-85	DW-1-85	BK-3	BK-3	BK-3	MB-6	MB-6
Date:	9/84**	11/85	2/86	11/85	2/86	9/84**	11/85	2/86	9/84**	11/85
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	<6	<6.6	<3.5	36.2	15.2	<6	<3.3	13.2	<6	<3.3
2,4-dichlorophenol	<8	<5.4	<2.9	<5.4	<2.9	6	<2.7	<2.8	<8	<2.7
2,4-dimethylphenol	<10	<5.4	<2.9	<5.4	<2.9	<10	<2.7	<2.8	<10	3.7
4,6-dinitro-o-cresol	<38	<48	<26	<48	<26	<38	<24	<24	<38	<24
2,4-dinitrophenol	<52	<84	<45	<84	<45	<52	<42	<43	<52	<42
2-nitrophenol	<11	<7.2	<3.9	<7.2	<3.8	<11	<3.6	<3.7	<11	<3.6
4-nitrophenol	<35	<4.8	<2.6	<4.8	<2.6	<35	<2.4	<2.4	<35	<2.4
p-chloro-m-cresol	<8	<6.0	<3.2	<6.0	<3.2	<8	<3	<3.1	<8	<3
pentachlorophenol	<34	<7.2	<3.9	<7.9	<3.8	<34	<3.6	<3.7	<34	<3.6
phenol	158	15.6	70.2	16.9	<1.6	<4	<1.5	6	<4	<1.5
2,4,6-trichlorophenol	<12	<5.4	<2.9	<5.4	<2.9	<12	<2.7	<2.8	<12	<2.7
Sub Total 1	158	15.6	70.2	53.1	15.2	6	0	19.2	0	3.7
Miscellaneous Acid Extractable Organic Compounds										
4-chlorophenol	<10	<20	<11	<20	<11	<10	<10	13.4	<10	<10
Sub Total 2	0	0	0	0	0	0	0	13.4	0	0
Total Acid Compounds Analyzed	158	15.6	70.2	53.1	15.2	6	0	32.6	0	3.7

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il. ***

Well Number:	MB-6	MB-7	MB-7	Field Blank	Trip Blank	Trip Blank	Trip Blank	Lab Blank	Lab Blank	Lab Blank
Date:	2/86	9/84	11/85	6/84	5/84	6/84	9/84	11/83	11/83	9/84
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L										
2-chlorophenol	<3.4	<6	<3.8	<6	<1	<6	<6	<1	<1	<6
2,4-dichlorophenol	<2.8	<8	<2.8	<8	<1	<8	<8	<1	<1	<8
2,4-dimethylphenol	59.5	<10	<2.8	<10	<1	<10	<10	<1	<1	<10
4,6-dinitro-o-cresol	<25	<38	<24	<38	<1	<38	<38	<1	<1	<38
2,4-dinitrophenol	<43	<52	<43	<52	<1	<52	<52	<1	<1	<52
2-nitrophenol	<3.7	<11	<3.7	<11	<1	<11	<11	<1	<1	<11
4-nitrophenol	<2.5	<35	<2.4	<35	<1	<35	<35	<1	<1	<35
p-chloro-a-cresol	<3.1	<8	<3.1	<8	<1	<8	<8	<1	<1	<8
pentachlorophenol	<3.7	<34	<3.7	<34	<1	<34	<34	<1	<1	9
phenol	<1.5	<4	<1.5	<4	<1	<4	<4	<1	<1	<4
2,4,6-trichlorophenol	<2.8	<12	<2.8	<12	<1	<12	<12	<1	<1	<12
Sub Total 1	59.5	0	0	0	0	0	0	0	0	9
Miscellaneous Acid Extractable Organic Compounds										
ilorophenol	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	0	0	NA	NA	NA	NA	NA	NA	NA
Total Acid Compounds Analyzed	59.5	0	0	0	0	0	0	0	0	9

Table E-2. Summary of Acid Extractable Compounds in Ground Water, Monsanto Company, W.G. Krummrich Plant, Sauget, Il. ***

Well Number:	Lab Blank	Lab Blank	Lab Blank
Date:	9/84	9/84	9/84
USEPA Priority Pollutant Acid Extractable Organic Compounds concentrations are in ug/L			
2-chlorophenol	<6	<6	<6
2,4-dichlorophenol	<8	<8	<8
2,4-dimethylphenol	<10	<10	<10
4,6-dinitro-o-cresol	<38	<38	<38
2,4-dinitrophenol	<52	<52	<52
2-nitrophenol	<11	<11	<11
4-nitrophenol	<35	<35	<35
p-chloro-m-cresol	<8	<8	<8
pentachlorophenol	<34	<34	19
phenol	<4	<4	<4
2,4,6-trichlorophenol	<12	<12	<12
Sub Total 1	0	0	19
Miscellaneous Acid Extractable Organic Compounds			
4-chlorophenol	NA	NA	NA
Sub Total 2	NA	NA	NA
Total Acid Compounds Analyzed	0	0	19

NA - Not Analyzed.
* - Replicate Analyses
** - Prior to analysis, this sample was held by Envirodyne Engineers, Inc. longer than the maximum allowable USEPA holding time.
*** - Envirodyne Engineers, Inc. (St. Louis, MO.) provided the laboratory services for the September 1984 sampling round. ETC (Edison, New Jersey) performed the analyses for the November 1984 through February 1986 sampling programs.
< - Indicates that the compound was not detected at the detection limit which is the value shown next to the symbol.

Water Quality Data (1983-1986)

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, Il. ***

Well Number:	GM-1	GM-1	GM-2	GM-2	GM-3	GM-3	GM-3	GM-4A	GM-4A	GM-4B
Date:	11/83	5/84	11/83	5/84	11/83	5/84	5/84*	11/83	5/84	9/84
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
acrylonitrile	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	176
bis (chloromethyl) ether	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.5
bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3.2
carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.5
chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	2,340
chlorodibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2.0
chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2.4
2-chloroethylvinyl ether	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.9
chloroform	2	<1	28	<1	11	<1	<1	<1	<1	23
dichlorobromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.1
dichlorodifluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.8
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.5
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.9
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.5
cis-1,3-dichloropropylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.5
trans-1,3-dichloropropylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.5
ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	8
methyl bromide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.5
methyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.6
methylene chloride	18	32	12	74	12	51	53	9	38	<1.1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	4
tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.5
toluene	<1	1	<1	1	<1	1	2	<1	2	2
1,2-trans-dichloroethylene	<1	<1	<1	4	<1	<1	<1	<1	<1	2
1,1,1-trichloroethane	5	<1	<1	<1	<1	3	<1	<1	<1	<1.2
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.6
trichloroethylene	6	<1	6	3	<1	<1	<1	<1	<1	<1.3
trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.2
vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.2
Sub Total 1	31	33	46	82	23	55	55	9	40	2555
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5
methyl isoamyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5
m-xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5
o-xylene/p-xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5
Sub Total 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	0
Total VOC's Analyzed	31	33	46	82	23	55	55	9	40	2555

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, Il. ***

Well Number:	GM-4B	GM-4B	GM-4B	GM-4B	GM-4B	GM-4C	GM-4C	GM-5	GM-5	GM-6A
Date:	11/84	11/84*	2/85	11/85	11/85*	2/85	5/85	11/83	5/84	11/83
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	<5,000	<5,000	<100	<1,000	<100	<100	<1,000	<1	<1	<1
acrylonitrile	<5,000	<5,000	<100	<1,000	<100	<100	<1,000	<1	<1	<1
benzene	500	<500	142	<44	28.3	97.7	<44	<1	2	<1
bis (chloromethyl) ether	<500	<500	<10	<100	<10	<10	<100	<1	<1	<1
bromoform	<500	<500	<4.7	<47	<4.7	<4.7	<47	<1	<1	<1
carbon tetrachloride	<500	<500	<2.8	<28	<2.8	<2.8	<28	<1	<1	<1
chlorobenzene	15,900	15,900	13,600	4,360	5,400	9,210	4,515.3	<1	<1	<1
chlorodibromomethane	<500	<500	<3.1	<31	<3.1	<3.1	<31	<1	<1	<1
chloroethane	<500	<500	<10	<100	<10	<10	<100	<1	<1	<1
2-chloroethylvinyl ether	<500	<500	<10	<100	<10	<10	<100	<1	<1	<1
chloroform	<500	<500	<1.6	<16	<1.6	<1.6	<16	1	<1	3
dichlorobromomethane	<500	<500	<2.2	<22	<2.2	<2.2	<22	<1	<1	<1
dichlorodifluoromethane	<500	<500	<10	<100	<10	<10	<100	<1	<1	<1
1,1-dichloroethane	<500	<500	<4.7	<47	<4.7	<4.7	<47	<1	<1	29
1,2-dichloroethane	<500	<500	<2.8	<28	<2.8	<2.8	<28	<1	<1	<1
1,1-dichloroethylene	<500	<500	<2.8	<28	<2.8	<2.8	<28	<1	<1	<1
1,2-dichloropropane	<500	<500	<6	<60	<6	<6	<60	<1	<1	<1
cis-1,3-dichloropropylene	<500	<500	<5	<50	<5	<5	<50	<1	<1	<1
trans-1,3-dichloropropylene	<500	<500	<10	<100	<10	<10	<100	<1	<1	<1
ethylbenzene	<500	<500	<7.2	<72	<7.2	<7.2	<72	<1	<1	<1
methyl bromide	<500	<500	<10	<100	<10	<10	<100	<1	<1	<1
methyl chloride	<500	<500	<10	<100	<10	<10	<100	<1	<1	<1
methylene chloride	<500	<500	<2.8	<28	<2.8	<2.8	<28	10	102	18
1,1,2,2-tetrachloroethane	<500	<500	<6.9	<69	<6.9	<6.9	<69	<1	<1	<1
tetrachloroethylene	<500	<500	<4.1	<41	<4.1	<4.1	<41	<1	<1	<1
toluene	<500	<500	<6	<60	<6	<6	<60	2	2	1
1,2-trans-dichloroethylene	<500	<500	<3.1	<16	<1.6	<1.6	<16	<1	<1	<1
1,1,1-trichloroethane	<500	<500	<3.8	<38	<3.8	<3.8	66	<1	<1	2
1,1,2-trichloroethane	<500	<500	<5	<50	<5	<5	<50	<1	<1	<1
trichloroethylene	<500	<500	<1.9	<19	<1.9	<1.9	<19	<1	<1	2
trichlorofluoromethane	<500	<500	<10	<100	<10	<10	<100	<1	<1	<1
vinyl chloride	<500	<500	<10	<100	<10	<10	<100	<1	<1	<1
Sub Total 1	16400	15900	13742	4360	5428.3	9307.7	4581.3	13	106	55
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	<500	<500	<10	<100	<10	<10	<100	NA	NA	NA
methyl isoamyl ketone	<500	<500	<10	<100	<10	<10	<100	NA	NA	NA
m-xylene	<500	<500	<10	<100	<10	<10	<100	NA	NA	NA
o-xylene/p-xylene	<500	<500	<10	<100	<10	<10	<100	NA	NA	NA
Sub Total 2	0	0	0	0	0	0	0	NA	NA	NA
Total VOC's Analyzed	16400	15900	13742	4360	5428.3	9307.7	4581.3	13	106	55

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, Il. ***

Well Number:	GM-6A	GM-6A	GM-6B	GM-6B	GM-6B	GM-7	GM-7	GM-8	GM-8	GM-8
Date:	5/84	11/84	9/84**	11/84	11/85	11/83	5/84	11/83	5/84	11/84
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	<1	<100	NA	<100	<1,000	<1	<1	<1	<1	<100
acrylonitrile	<1	<100	NA	<100	<1,000	<1	<1	<1	<1	<100
benzene	1	<10	28	71	71.8	1	<1	3	.2	<10
bis (chloromethyl) ether	<1	<10	<1.5	<10	<100	<1	<1	<1	<1	<10
bromoform	<1	<10	<3.2	<10	<47	<1	<1	<1	<1	<10
carbon tetrachloride	<1	<10	<1.5	<10	<28	<1	<1	<1	<1	<10
chlorobenzene	<1	<10	2,620	326	379.0	<1	<1	<1	<1	<10
chlorodibromomethane	<1	<10	<2.0	<10	<31	<1	<1	<1	<1	<10
chloroethane	<1	<10	437	<10	<100	<1	<1	<1	<1	<10
2-chloroethylvinyl ether	<1	<10	<5.9	<10	<100	<1	<1	<1	<1	<10
chloroform	<1	<10	<0.8	<10	<16	<1	<1	8	<1	<10
dichlorobromomethane	<1	<10	<1.1	<10	<22	<1	<1	<1	<1	<10
dichlorodifluoromethane	<1	<10	NA	<10	<100	<1	<1	<1	<1	<10
1,1-dichloroethane	<1	13	224	184	75.7	<1	<1	<1	<1	<10
1,2-dichloroethane	<1	<10	<1.5	<10	<28	<1	<1	<1	<1	<10
1,1-dichloroethylene	<1	<10	24	15	<28	<1	<1	<1	<1	<10
1,2-dichloropropane	<1	<10	<1.5	<10	<60	<1	<1	<1	<1	<10
cis-1,3-dichloropropylene	<1	<10	<1.5	<10	<50	<1	<1	<1	<1	<10
trans-1,3-dichloropropylene	<1	<10	<1.5	<10	<100	<1	<1	<1	<1	<10
ethylbenzene	<1	<10	5	<10	<72	<1	<1	<1	<1	<10
methyl bromide	<1	<10	<1.5	<10	<100	<1	<1	<1	<1	<10
methyl chloride	<1	<10	<1.6	<10	<100	<1	<1	<1	<1	<10
methylene chloride	451	<10	326	<10	<28	11	53	16	161	<10
1,1,2,2-tetrachloroethane	<1	<10	<1.4	<10	<69	<1	<1	<1	<1	<10
tetrachloroethylene	<1	<10	<1.5	<10	<41	<1	<1	<1	<1	<10
toluene	2	<10	15	<10	<60	<1	2	<1	2	<10
1,2-trans-dichloroethylene	<1	<10	750	537	201	<1	<1	<1	<1	<10
1,1,1-trichloroethane	7	<10	<1.2	<10	<38	<1	6	6	4	19
1,1,2-trichloroethane	<1	<10	<1.6	<10	<50	<1	<1	<1	<1	<10
trichloroethylene	1	<10	3	<10	<19	<1	<1	<1	<1	<10
trichlorofluoromethane	<1	<10	<1.2	<10	<100	<1	<1	<1	<1	<10
vinyl chloride	<1	<10	<1.2	258	116	<1	<1	<1	<1	<10
Sub Total 1	462	13	4432	1391	843.5	12	61	33	169	19
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	NA	<10	<5	<10	<100	NA	NA	NA	NA	<100
methyl isoamyl ketone	NA	<10	<5	<10	<100	NA	NA	NA	NA	<100
m-xylene	NA	<10	<5	<10	<100	NA	NA	NA	NA	<10
o-xylene/p-xylene	NA	<10	<5	<10	<100	NA	NA	NA	NA	<10
Sub Total 2	NA	0	0	0	0	NA	NA	NA	NA	0
Total VOC's Analyzed	462	13	4432	1391	843.5	12	61	33	169	19

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, Il. ***

Well Number:	GM-8	GM-8	GM-9A	GM-9A	GM-9B	GM-9B	GM-9B	GM-9C	GM-9C	GM-9C
Date:	2/85	11/85	11/83	5/84	9/84**	5/85	11/85	9/84**	5/85	11/85
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	<100	<100	<1	<1	NA	<100	<1,000	NA	<100	<100
acrylonitrile	<100	<100	<1	<1	NA	<100	<1,000	NA	<100	<100
benzene	<4.4	<4.4	331	449	276	378.4	<44	35	<4.4	<4.4
bis (chloromethyl) ether	<10	<10	<1	<1	<1.5	<10	<100	<1.5	<10	<10
bromoform	<4.7	<4.7	<1	<1	<3.2	<4.7	<47	<3.2	<4.7	<4.7
carbon tetrachloride	<2.8	<2.8	<1	<1	<1.5	<2.8	<28	<1.5	<2.8	<2.8
chlorobenzene	<6	<6	1,270	701	272	1,780.5	229	216	34.7	99.6
chlorodibromomethane	<3.1	<3.1	<1	<1	<2.0	<3.1	<31	<2.0	<3.1	<3.1
chloroethane	<10	<10	<1	<1	<2.4	<10	<100	<2.4	<10	<10
2-chloroethylvinyl ether	<10	<10	<1	<1	<5.9	<10	<100	<5.9	<10	<10
chloroform	<1.6	<1.6	3	2	<0.8	<1.6	<16	1	<1.6	<1.6
dichlorobromomethane	<2.2	<2.2	<1	<1	<1.1	<2.2	<22	<1.1	<2.2	<2.2
dichlorodifluoromethane	<10	<10	<1	<1	NA	<10	<100	NA	<10	<10
1,1-dichloroethane	<4.7	<4.7	<1	<1	<0.8	<4.7	<47	<0.8	<4.7	<4.7
1,2-dichloroethane	<2.8	<2.8	<1	<1	<1.5	<2.8	<28	<1.5	<2.8	<2.8
1,1-dichloroethylene	<2.8	<2.8	<1	<1	7	<2.8	<28	1	<2.8	<2.8
1,2-dichloropropane	<6	<6	<1	<1	<1.5	<6	<60	<1.5	<6	<6
cis-1,3-dichloropropylene	<5	<5	<1	<1	<1.5	<5	<50	<1.5	<5	<5
trans-1,3-dichloropropylene	<10	<10	<1	<1	<1.5	<10	<100	<1.5	<10	<10
ethylbenzene	<7.2	<7.2	<1	3	<0.4	<7.2	<72	1	<7.2	<7.2
methyl bromide	<10	<10	<1	<1	<1.5	<10	<100	<1.5	<10	<10
methyl chloride	<10	<10	<1	<1	<1.6	<10	<100	<1.6	<10	<10
methylene chloride	<2.8	<2.8	10	22	211	<2.8	584	35	<2.8	53.8
1,1,2,2-tetrachloroethane	<6.9	<6.9	<1	<1	<1.4	<6.9	<69	<1.4	<6.9	<6.9
tetrachloroethylene	<4.1	<4.1	3	2	<1.5	<4.1	<41	<1.5	<4.1	<4.1
toluene	<6	<6	2	2	6	<6	<60	1.5	<6	<6
1,2-trans-dichloroethylene	<1.6	<1.6	<1	<1	<1.5	<1.6	<16	<1.5	<1.6	<1.6
1,1,1-trichloroethane	<3.8	<3.8	3	4	<1.2	<3.8	<38	<1.2	<3.8	<3.8
1,1,2-trichloroethane	<5	<5	<1	<1	<1.6	<5	<50	<1.6	<5	<5
trichloroethylene	<1.9	<1.9	<1	<1	<1.3	<1.9	<19	<1.3	<1.9	<1.9
trichlorofluoromethane	<10	<10	<1	<1	<1.2	<10	<100	<1.2	<10	<10
vinyl chloride	<10	<10	<1	<1	<1.2	<10	<100	<1.2	<10	<10
Sub Total 1	0	0	1622	1185	772	2158.9	813	290.5	34.7	153.4
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	<10	<10	NA	NA	<5	<10	<100	<5	<10	<10
methyl isoamyl ketone	<10	<10	NA	NA	<5	<10	<100	<5	<10	<10
m-xylene	<10	<10	NA	NA	<5	<10	<100	<5	<10	<10
o-xylene/p-xylene	<10	<10	NA	NA	<5	<10	<100	<5	<10	<10
Sub Total 2	0	0	NA	NA	0	0	0	0	0	0
Total VOC's Analyzed	0	0	1622	1185	772	2158.9	813	290.5	34.7	153.4

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krumerich Plant, Monsanto Company, Sauget, Il. ***

Well Number:	GM-10A	GM-10A	GM-10B	GM-10B	GM-10C	GM-10C	GM-11	GM-11	GM-12A	GM-12A
Date:	11/83	5/84	2/85	5/85	2/85	5/85	11/83	5/84	11/83	11/83*
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	<1	<1	<100	<100	<100	<100	<1	<1	<1	<1
acrylonitrile	<1	<1	<100	<100	<100	<100	<1	<1	<1	<1
benzene	2	<1	317	143.9	<4.4	<4.4	<1	<1	425	433
bis (chloromethyl) ether	<1	<1	<10	<10	<10	<10	<1	<1	<1	<1
bromoform	<1	<1	<4.7	<4.7	<4.7	<4.7	<1	<1	<1	<1
carbon tetrachloride	<1	<1	<2.8	<2.8	<2.8	<2.8	<1	<1	<1	<1
chlorobenzene	<1	<1	1,540	119	107	29.6	<1	<1	350	296
chlorodibromomethane	<1	<1	<3.1	<3.1	<3.1	<3.1	<1	<1	<1	<1
chloroethane	<1	<1	<10	<10	<10	<10	<1	<1	<1	<1
2-chloroethylvinyl ether	<1	<1	<10	<10	<10	<10	<1	<1	<1	<1
chloroform	<1	<1	<1.6	<1.6	<1.6	<1.6	5	<1	18	21
dichlorobromomethane	<1	<1	<2.2	<2.2	<2.2	<2.2	<1	<1	<1	<1
dichlorodifluoromethane	<1	<1	<10	<10	<10	<10	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<4.7	<4.7	<4.7	<4.7	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<2.8	<2.8	<2.8	<2.8	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<2.8	<2.8	<2.8	<2.8	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<6	<6	<6	<6	<1	<1	<1	<1
cis-1,3-dichloropropylene	<1	<1	<5	<5	<5	<5	<1	<1	<1	<1
trans-1,3-dichloropropylene	<1	<1	<10	<10	<10	<10	<1	<1	<1	<1
ethylbenzene	<1	<1	<7.2	<7.2	<7.2	<7.2	<1	<1	4	4
methyl bromide	<1	<1	<10	<10	<10	<10	<1	<1	<1	<1
methyl chloride	<1	<1	<10	<10	<10	<10	<1	<1	<1	<1
methylene chloride	21	53	<2.8	<2.8	<2.8	<2.8	16	53	49	64
1,1,2,2-tetrachloroethane	<1	<1	<6.9	<6.9	<6.9	<6.9	<1	<1	<1	<1
tetrachloroethylene	<1	<1	<4.1	<4.1	<4.1	<4.1	<1	<1	<1	<1
toluene	<1	2	<6	<6	<6	<6	<1	2	4	4
1,2-trans-dichloroethylene	<1	<1	<1.6	1.9	<1.6	<1.6	<1	<1	<1	<1
1,1,1-trichloroethane	1	<1	<3.8	<3.8	<3.8	<3.8	<1	<1	8	7
1,1,2-trichloroethane	<1	<1	<5	<5	<5	<5	<1	<1	<1	<1
trichloroethylene	<1	<1	<1.9	<1.9	<1.9	<1.9	<1	<1	<1	<1
trichlorofluoromethane	<1	<1	<10	<10	<10	<10	<1	<1	<1	<1
vinyl chloride	<1	<1	<10	<10	<10	<10	<1	<1	<1	<1
Sub Total 1	24	55	1857	264.7	107	29.6	21	55	858	829
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	NA	NA	<10	<10	<10	<10	NA	NA	NA	NA
methyl isoamyl ketone	NA	NA	<10	<10	<10	<10	NA	NA	NA	NA
m-xylene	NA	NA	<10	<10	<10	<10	NA	NA	NA	NA
o-xylene/p-xylene	NA	NA	<10	<10	<10	<10	NA	NA	NA	NA
Sub Total 2	NA	NA	0	0	0	0	NA	NA	NA	NA
Total VOC's Analyzed	24	55	1857	264.7	107	29.6	21	55	858	829

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, Il. ***

Well Number:	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A	GM-12A
Date:	5/84	5/84*	11/84	11/84*	2/85	2/85*	5/85	5/85*	11/85	11/85*
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	<1	<1	<100	<1000	<100	<100	<100	<100	<1,000	<1,000
acrylonitrile	<1	<1	<100	<1000	<100	<100	<100	<100	<1,000	<1,000
benzene	3,263	4,819	1,790	3,590	1,030	1,160	2,270.3	1,819.1	1,730	1,540
bis (chloromethyl) ether	<1	<1	<10	<100	<10	<10	<10	<10	<100	<100
bromoform	<1	<1	<10	<100	<4.7	<4.7	<4.7	<4.7	<47	<47
carbon tetrachloride	<1	<1	<10	<100	<2.8	<2.8	<2.8	<2.8	<28	<28
chlorobenzene	304	399	286	565	349.3	399.3	453.4	471.9	428	403
chlorodibromomethane	<1	<1	<10	<100	<3.1	<3.1	<3.1	<3.1	<31	<31
chloroethane	<1	<1	<10	<100	<10	<10	<10	<10	<100	<100
2-chloroethylvinyl ether	<1	<1	<10	<100	<10	<10	<10	<10	<100	<100
chloroform	<1	<1	<10	<100	<1.6	<1.6	<1.6	<1.6	<16	<16
dichlorobromomethane	<1	<1	<10	<100	<2.2	<2.2	<2.2	<2.2	<22	<22
dichlorodifluoromethane	<1	<1	<10	<100	<10	<10	<10	<10	<100	<100
1,1-dichloroethane	<1	<1	<10	<100	<4.7	<4.7	<4.7	<4.7	<47	<47
1,2-dichloroethane	<1	<1	<10	<100	<2.8	<2.8	<2.8	<2.8	<28	<28
1,1-dichloroethylene	<1	<1	<10	<100	<2.8	<2.8	<2.8	<2.8	<28	<28
1,2-dichloropropane	<1	<1	<10	<100	<6	<6	<6	<6	<60	<60
cis-1,3-dichloropropylene	<1	<1	<10	<100	<5	<5	<5	<5	<50	<50
trans-1,3-dichloropropylene	<1	<1	<10	<100	<10	<10	<10	<10	<100	<100
ylbenzene	17	17	17	<100	20.2	22	13.9	14.6	<72	<72
ethyl bromide	<1	<1	<10	<100	<10	<10	<10	<10	<100	<100
ethyl chloride	<1	<1	<10	<100	<10	<10	<10	<10	<100	<100
ethylene chloride	23	31	<10	<100	<2.8	<2.8	<2.8	<2.8	599	443
1,1,2,2-tetrachloroethane	<1	<1	<10	<100	<6.9	<6.9	<6.9	<6.9	<69	<69
tetrachloroethylene	<1	<1	<10	<100	<4.1	<4.1	<4.1	<4.1	<41	<41
toluene	17	22	26	<100	31.2	29	12.2	12.3	<60	<60
1,2-trans-dichloroethylene	<1	<1	<10	<100	<1.6	<1.6	<1.6	<1.6	<16	<16
1,1,1-trichloroethane	<1	<1	<10	<100	<3.8	<3.8	<3.8	<3.8	<38	<38
1,1,2-trichloroethane	<1	<1	<10	<100	<5	<5	<5	<5	<50	<50
trichloroethylene	<1	<1	<10	<100	<1.9	<1.9	<1.9	<1.9	<19	<19
trichlorofluoroethane	<1	<1	<10	<100	<10	<10	<10	<10	<100	<100
vinyl chloride	<1	<1	<10	<100	<10	<10	<10	<10	<100	<100
Sub Total 1	3624	5288	2119	4155	1430.7	1610.3	2749.8	2317.9	2757	2386
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	NA	NA	<10	<100	<10	<10	<10	<10	<100	<100
methyl isoamyl ketone	NA	NA	<10	<100	<10	<10	<10	<10	<100	<100
m-xylene	NA	NA	17	<100	17.1	18.5	11	12.6	<100	<100
o-xylene/p-xylene	NA	NA	49	<100	55.3	59.5	43	49.7	<100	<100
Sub Total 2	NA	NA	66	0	72.4	78	54	62.3	0	0
Total VOC's Analyzed	3624	5288	2185	4155	1503.1	1688.3	2803.8	2380.2	2757	2386

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krumarich Plant, Monsanto Company, Sauget, Il. ***

Well Number:	GM-12A	GM-12A	GM-12B	GM-12B	GM-12B	GM-12C	GM-12C	GM-12C	GM-12C	GM-13
Date:	2/86	2/86*	9/84**	11/84	11/85	2/85	2/85*	5/85	5/85*	9/84**
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	<100	<100	NA	<1,000	<1,000	<100	<100	<100	<100	NA
acrylonitrile	<100	<100	NA	<1,000	<1,000	<100	<100	<100	<100	NA
benzene	1,170	1,160	700	2,090	2,100	66.7	54.7	27.4	26	1,400
bis (chloromethyl) ether	<10	<10	<150	<100	<100	<10	<10	<10	<10	<300
bromoform	<4.7	<4.7	<320	<100	<47	<4.7	<4.7	<4.7	<4.7	<640
carbon tetrachloride	<2.8	<2.8	<150	<100	<28	<2.8	<2.8	<2.8	<2.8	<300
chlorobenzene	499	394	<60	<100	<60	<6	10.4	<6	<6	850
chlorodibromomethane	<3.1	<3.1	<200	<100	<31	<3.1	<3.1	<3.1	<3.1	<400
chloroethane	<10	<10	<240	<100	<100	<10	<10	<10	<10	<480
2-chloroethylvinyl ether	<10	<10	<590	<100	<100	<10	<10	<10	<10	<1,180
chloroform	<1.6	<1.6	<80	<100	<16	<1.6	<1.6	<1.6	<1.6	<160
dichlorobromomethane	<2.2	<2.2	<110	<100	<22	<2.2	<2.2	<2.2	<2.2	<220
dichlorodifluoromethane	<10	<10	NA	<100	<100	<10	<10	<10	<10	NA
1,1-dichloroethane	<4.7	<4.7	<80	<100	<47	<4.7	<4.7	<4.7	<4.7	<160
1,2-dichloroethane	<2.8	<2.8	<150	<100	<28	<2.8	<2.8	<2.8	<2.8	<300
1,1-dichloroethylene	<2.8	<2.8	<190	<100	<28	<2.8	<2.8	<2.8	<2.8	<380
1,2-dichloropropane	<6	<6	<150	<100	<60	<6	<6	<6	<6	<300
cis-1,3-dichloropropylene	<5	<5	<150	<100	<50	<5	<5	<5	<5	<300
trans-1,3-dichloropropylene	<10	<10	<150	<100	<100	<10	<10	<10	<10	<300
ethylbenzene	11.3	7.9	230	<100	<72	40	37.4	<7.2	<7.2	25,000
methyl bromide	<10	<10	<150	<100	<100	<10	<10	<10	<10	<300
methyl chloride	<10	<10	<160	<100	<100	<10	<10	<10	<10	<320
methylene chloride	<2.8	6.5	200	<100	410	<2.8	<2.8	<2.8	<2.8	360
1,1,2,2-tetrachloroethane	<6.9	<6.9	<140	<100	<69	<6.9	<6.9	<6.9	<6.9	<280
tetrachloroethylene	<4.1	<4.1	<150	<100	<41	<4.1	<4.1	<4.1	<4.1	<300
toluene	<6	<6	100	112	63.3	125	113	16.2	14.4	1,200
1,2-trans-dichloroethylene	<1.6	<1.6	<150	<100	<16	<1.6	<1.6	<1.6	<1.6	<300
1,1,1-trichloroethane	<3.8	<3.8	<120	<100	<38	<3.8	<3.8	<3.8	<3.8	<240
1,1,2-trichloroethane	<5	<5	<160	<100	<50	<5	<5	<5	<5	<320
trichloroethylene	<1.9	<1.9	<130	<100	<19	<1.9	<1.9	<1.9	<1.9	<260
trichlorofluoromethane	<10	<10	<120	<100	<100	<10	<10	<10	<10	<240
vinyl chloride	<10	<10	<120	<100	<100	<10	<10	<10	<10	<240
Sub Total 1	1680.3	1568.4	1230	2202	2573.3	231.7	215.5	43.6	40.4	28810
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	<10	<10	<500	<100	<100	<10	<10	<10	<10	<1,000
methyl isoamyl ketone	<10	<10	<500	<100	<100	<10	<10	<10	<10	<1,000
m-xylene	<10	<10	<500	<100	<100	75.8	70.9	19	<10	<1,000
o-xylene/p-xylene	20	16.9	<500	<100	<100	74	68.2	21.9	17.3	<1,000
Sub Total 2	20	16.9	0	0	0	149.8	139.1	40.9	17.3	0
Total VOC's Analyzed	1700.3	1585.3	1230	2202	2573.3	381.5	354.6	84.5	57.7	28810

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, IL. ***

Well Number:	GM-13	GM-13	GM-14	GM-15	GM-16A	GM-16A	GM-16A	GM-16B	GM-16B	GM-16B
Date:	11/85	2/86	9/84**	9/84**	9/84**	5/85	11/85	9/84**	5/85	11/85
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	<2,000	<5,000	NA	NA	NA	<100	<100	NA	<100	<100
acrylonitrile	<2,000	<5,000	NA	NA	NA	<100	<100	NA	<100	<100
benzene	1,180	925	1,400	8	<0.5	<4.4	<4.4	<0.5	<4.4	<4.4
bis (chloroethyl) ether	<200	<500	<300	<1.5	<1.5	<10	<10	<1.5	<10	<10
bromoform	<94	<240	<640	<3.2	<3.2	<4.7	<4.7	<3.2	<4.7	<4.7
carbon tetrachloride	<56	<140	<300	<1.5	<1.5	<2.8	<2.8	<1.5	4.5	<2.8
chlorobenzene	3,900	18,600	152,000	103	<0.6	<6	<6	2	<6	<6
chlorodibromomethane	<62	<160	<400	<2.0	<2.0	<3.1	<3.1	<2.0	<3.1	<3.1
chloroethane	<200	<500	<480	<2.4	<2.4	<10	<10	<2.4	<10	<10
2-chloroethylvinyl ether	<200	<500	<1,180	<5.9	<5.9	<10	<10	<5.9	<10	<10
chloroform	<32	<80	<160	<0.8	2	<1.6	<1.6	58	<1.6	<1.6
dichlorobromomethane	<44	<110	<220	<1.1	<1.1	<2.2	<2.2	<1.1	<2.2	<2.2
dichlorodifluoromethane	<200	<500	NA	NA	NA	<10	<10	NA	<10	<10
1,1-dichloroethane	<94	<240	<160	<0.8	<0.8	<4.7	<4.7	<0.8	<4.7	<4.7
1,2-dichloroethane	<56	<140	<300	<1.5	<1.5	<2.8	<2.8	<1.5	<2.8	<2.8
1,1-dichloroethylene	<56	<140	<380	<1.9	<1.9	<2.8	<2.8	<1.9	<2.8	<2.8
1,2-dichloropropane	<120	<300	<300	<1.5	<1.5	<6	<6	<1.5	<6	<6
cis-1,3-dichloropropylene	<100	<250	<300	<1.5	<1.5	<5	<5	<1.5	<5	<5
trans-1,3-dichloropropylene	<200	<500	<300	<1.5	<1.5	<10	<10	<1.5	<10	<10
Ethylbenzene	20,000	18,900	480	9	<0.4	<7.2	<7.2	<0.4	<7.2	<7.2
methyl bromide	<200	<500	<300	<1.5	<1.5	<10	<10	<1.5	<10	<10
methyl chloride	<200	<500	<320	<1.6	<1.6	<10	<10	<1.6	<10	<10
methylene chloride	1,310	<140	800	24	10	5.4	<2.8	5	<2.8	<2.8
1,1,2,2-tetrachloroethane	<140	<350	<280	<1.4	<1.4	<6.9	<6.9	<1.4	<6.9	<6.9
tetrachloroethylene	<82	<210	<300	<1.5	<1.5	<4.1	<4.1	<1.5	<4.1	<4.1
toluene	1,120	845	204	9	2	<6	<6	<0.4	<6	<6
1,2-trans-dichloroethylene	<32	<80	<300	<1.5	<1.5	<1.6	<1.6	<1.5	<1.6	<1.6
1,1,1-trichloroethane	<76	<190	<240	<1.2	<1.2	<3.8	<3.8	<1.2	<3.8	<3.8
1,1,2-trichloroethane	<100	<250	<320	<1.6	<1.6	<5	<5	<1.6	<5	<5
trichloroethylene	<38	<95	<260	<1.3	<1.3	<1.9	<1.9	<1.3	<1.9	<1.9
trichlorofluoromethane	<200	<500	<240	<1.2	<1.2	<10	<10	<1.2	<10	<10
vinyl chloride	<200	<500	<240	<1.2	<1.2	<10	<10	<1.2	<10	<10
Sub Total 1	27510	39270	154884	153	14	5.4	0	65	4.5	0
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	<200	7,470	<1,000	<5	<5	<10	<10	<5	<10	<10
methyl isoamyl ketone	<200	5,130	<1,000	<5	<5	<10	<10	<5	<10	<10
o-xylene	50,900	39,100	<1,000	<5	a)	<10	<10	a)	<10	<10
o-xylene/p-xylene	35,800	30,400	<1,000	<5	a)	<10	<10	a)	<10	<10
Sub Total 2	86700	82100	0	0	0	0	0	0	0	0
Total VOC's Analyzed	114210	121370	154884	153	14	5.4	0	65	4.5	0

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, IL. ***

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Well Number:	GM-17A	GM-17A	GM-17A	GM-17B	GM-17B	GM-17B	GM-17C	GM-17C	GM-17C	GM-18A
Date:	9/84**	11/84	11/85	9/84**	11/84	11/85	9/84**	11/84	11/85	9/84**
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	NA	<10,000	<10,000	NA	<10,000	<100	NA	<100	<1,000	NA
acrylonitrile	NA	<10,000	<10,000	NA	<10,000	<100	NA	<100	<1,000	NA
benzene	NA	41,900	51,900	26,000	69,200	47,400	4,940	1,880	552	34
bis (chloromethyl) ether	<1.5	<1,000	<1,000	<300	<1,000	<10	<300	<10	<100	<1.5
bromoform	<3.2	<1,000	<470	<640	<1,000	<4.7	<640	<10	<47	<3.2
carbon tetrachloride	<1.5	<1,000	<280	<300	<1,000	<2.8	<300	<10	<28	<1.5
chlorobenzene	NA	57,500	56,500	5,300	17,600	376	13,900	9,510	3,500	<0.6
chlorodibromomethane	<2.0	<1,000	<310	<400	<1,000	<3.1	<400	<10	<31	<2.0
chloroethane	<2.4	<1,000	<1,000	<480	<1,000	<10	<480	<10	<100	<2.5
2-chloroethylvinyl ether	<5.9	<1,000	<1,000	<1,180	<1,000	<10	<1,180	<10	<100	<5.9
chloroform	<0.8	<1,000	<160	<160	<1,000	<1.6	<160	<10	<16	2
dichlorobromomethane	<1.1	<1,000	<220	<220	<1,000	<2.2	<220	<10	<22	<1.1
dichlorodifluoromethane	NA	<1,000	<1,000	NA	<1,000	<10	NA	<10	<100	NA
1,1-dichloroethane	<0.8	<1,000	<470	170	<1,000	<4.7	<160	<10	<47	<0.8
1,2-dichloroethane	<1.5	<1,000	<280	<300	<1,000	<2.8	<300	<10	<28	<1.5
1,1-dichloroethylene	<1.9	<1,000	<280	<380	<1,000	<2.8	205	<10	<28	1
1,2-dichloropropane	<1.5	<1,000	<600	<300	<1,000	<6	<300	<10	<60	<1.5
cis-1,3-dichloropropylene	<1.5	<1,000	<500	<300	<1,000	<5	<300	<10	<50	<1.5
trans-1,3-dichloropropylene	<1.5	<1,000	<1,000	<300	<1,000	<10	<300	<10	<100	<1.5
ethylbenzene	<0.4	<1,000	<720	250	<1,000	11	<80	<10	<72	<0.4
methyl bromide	<1.5	<1,000	<1,000	120	<1,000	<10	<300	<10	<100	<1.5
methyl chloride	<1.6	<1,000	<1,000	120	<1,000	<10	<320	<10	<100	<1.6
methylene chloride	3	3,060	<280	540	3,740	<2.8	7,140	<10	<28	39
1,1,2,2-tetrachloroethane	<1.4	<1,000	<690	<280	<1,000	<6.9	<280	<10	<69	<1.4
tetrachloroethylene	<1.5	<1,000	<410	<300	<1,000	<4.1	<300	<10	<41	<1.5
toluene	6	<1,000	<600	220	<1,000	9.1	194	<10	<60	<0.4
1,2-trans-dichloroethylene	<1.5	<1,000	<160	<300	<1,000	<1.6	<300	<10	<16	<1.5
1,1,1-trichloroethane	<1.2	<1,000	<380	<240	<1,000	<3.8	<240	<10	<38	<1.2
1,1,2-trichloroethane	<1.6	<1,000	<500	<320	<1,000	<5	<320	<10	<50	<1.6
trichloroethylene	<1.3	<1,000	<190	<260	<1,000	<1.9	<260	<10	<19	<1.3
trichlorofluoromethane	<1.2	<1,000	<1,000	<240	<1,000	<10	<240	<10	<100	<1.2
vinyl chloride	<1.2	<1,000	<1,000	130	<1,000	<10	<240	<10	<100	<1.2
Sub Total 1	9	102460	108400	32850	90540	47796.1	26379	11390	4052	76
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	<5	<10,000	<1,000	<1,000	<10,000	<10	<1,000	<100	<100	<5
methyl isoamyl ketone	<5	<10,000	<1,000	<1,000	<10,000	<10	<1,000	<100	<100	<5
m-xylene	<5	<1,000	<1,000	<1,000	<1,000	<10	<1,000	<10	<100	<5
o-xylene/p-xylene	<5	<1,000	<1,000	<1,000	<1,000	<10	<1,000	<10	<100	<5
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOC's Analyzed	9	102460	108400	32850	90540	47796.1	26379	11390	4052	76

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krumrich Plant, Monsanto Company, Sauget, Il. ***

Well Number:	GM-18A	GM-18A	GM-18B	GM-18B	GM-18B	GM-25A	GM-25A	GM-25B**	GM-25B	GM-25B
Date:	5/85	11/85	9/84**	5/85	11/85	9/84	11/84	9/84	11/84	11/85
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	<100	<100	NA	<100	<100	NA	<100	NA	<100	<100
acrylonitrile	<100	<100	NA	<100	<100	NA	<100	NA	<100	<100
benzene	<4.4	<4.4	35	63.3	24.1	1	<10	<0.5	<10	<4.4
bis (chloroethyl) ether	<10	<10	<1.5	<10	<10	<1.5	<10	<1.5	<10	<10
bromoform	<4.7	<4.7	<3.2	<4.7	<4.7	<3.2	<10	<3.2	<10	<4.7
carbon tetrachloride	<2.8	<2.8	<1.5	<2.8	<2.8	<1.5	<10	<1.5	<10	<2.8
chlorobenzene	<6	<6	100	285.1	174	14	<10	<0.6	<10	<6
chlorodibromomethane	<3.1	<3.1	<2.0	<3.1	<3.1	<2.0	<10	<2.0	<10	<3.1
chloroethane	<10	<10	22	<10	<10	<2.4	<10	<2.4	<10	<10
2-chloroethylvinyl ether	<10	<10	<5.9	<10	<10	<5.9	<10	<5.9	<10	<10
chloroform	<1.6	<1.6	<0.8	<1.6	<1.6	3	<10	3	<10	<1.6
dichlorobromomethane	<2.2	<2.2	<1.1	<2.2	<2.2	<1.1	<10	<1.1	<10	<2.2
dichlorodifluoromethane	<10	<10	NA	<10	<10	NA	<10	NA	<10	<10
1,1-dichloroethane	<4.7	<4.7	<0.8	<4.7	<4.7	<0.8	<10	<0.8	<10	<4.7
1,2-dichloroethane	<2.8	<2.8	<1.5	<2.8	<2.8	<1.5	<10	<1.5	<10	<2.8
1,1-dichloroethylene	<2.8	<2.8	1	<2.8	<2.8	<1.9	<10	<1.9	<10	<2.8
1,2-dichloropropane	<6	<6	<1.5	<6	<6	<1.5	<10	<1.5	<10	<6
cis-1,3-dichloropropylene	<5	<5	<1.5	<5	<5	<1.5	<10	<1.5	<10	<5
trans-1,3-dichloropropylene	<10	<10	<1.5	<10	<10	<1.5	<10	<1.5	<10	<10
ethylbenzene	<7.2	<7.2	<0.4	<7.2	<7.2	<0.4	<10	<0.4	<10	<7.2
methyl bromide	<10	<10	<1.5	<10	<10	<1.5	<10	<1.5	<10	<10
methyl chloride	<10	<10	<1.6	<10	<10	<1.6	<10	<1.6	<10	<10
methylene chloride	<2.8	<2.8	37	<2.8	<2.8	5	<10	2	<10	<2.8
1,1,2,2-tetrachloroethane	<6.9	<6.9	<1.4	<6.9	<6.9	<1.4	<10	<1.4	<10	<6.9
tetrachloroethylene	<4.1	<4.1	<1.5	<4.1	<4.1	<1.5	<10	<1.5	<10	<4.1
toluene	<6	<6	1	<6	<6	1	<10	<0.4	<10	<6
1,2-trans-dichloroethylene	<1.6	<1.6	1	1.7	<1.6	<1.5	<10	<1.5	<10	<1.6
1,1,1-trichloroethane	<3.8	<3.8	<1.2	<3.8	<3.8	<1.2	<10	<1.2	<10	<3.8
1,1,2-trichloroethane	<5	<5	<1.6	<5	<5	<1.6	<10	<1.6	<10	<5
trichloroethylene	<1.9	<1.9	<1.3	<1.9	<1.9	<1.3	<10	<1.3	<10	<1.9
trichlorofluoromethane	<10	<10	<1.2	<10	<10	<1.2	<10	<1.2	<10	<10
vinyl chloride	<10	<10	<1.2	34.3	31.4	<1.2	<10	<1.2	<10	<10
Sub Total 1	0	0	197	384.4	229.5	24	0	5	0	0
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	<10	<10	<5	<10	<10	<5	<100	<5	<10	<10
methyl isoamyl ketone	<10	<10	<5	<10	<10	<5	<100	<5	<10	<10
m-xylene	<10	<10	<5	<10	<10	<5	<10	b)	<10	<10
o-xylene/p-xylene	<10	<10	<5	<10	<10	<5	<10	b)	<10	<10
Sub Total 2	0	0	0	0	0	0	0	0	0	0
Total VOC's Analyzed	0	0	197	384.4	229.5	24	0	5	0	0

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, Il. ***

Well Number:	GM-27B	GM-27B	GM-27B	GM-27C	GM-27C	GM-27C	GM-28B	GM-28B	GM-28B	GM-28C
Date:	9/84**	11/85	2/86	9/84**	11/85	2/86	9/84**	11/85	2/86	9/84**
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	NA	<100	<100	NA	<1,000	<1,000	NA	<5,000	<1,000	NA
acrylonitrile	NA	<100	<100	NA	<1,000	<1,000	NA	<5,000	<1,000	NA
benzene	36	35.6	619	160	554	765	410	934	644	1,000
bis (chloromethyl) ether	<1.5	<10	<10	<1.5	<100	<100	<1.5	<500	<100	<1.5
bromoform	<3.2	<4.7	<4.7	<3.2	<47	<47	<3.2	<240	<47	<3.2
carbon tetrachloride	<1.5	<2.8	<2.8	<1.5	<28	<28	<1.5	<140	<28	<1.5
chlorobenzene	80	143	459	275	1,220	1,950	2,804	6,120	6,130	3,800
chlorodibromomethane	<2.0	<3.1	<3.1	<2.0	<31	<31	<2.0	<160	<31	<2.0
chloroethane	<2.4	<10	<10	<2.4	<100	<100	<2.4	<500	<100	<2.4
2-chloroethylvinyl ether	<5.9	<10	<10	<5.9	<100	<100	<5.9	<500	<100	<5.9
chloroform	<0.8	<1.6	<1.6	<0.8	<16	<16	<0.8	<80	<16	<0.8
dichlorobromomethane	<1.1	<2.2	<2.2	<1.1	<22	<22	<1.1	<110	<22	<1.1
dichlorodifluoromethane	NA	<10	<10	NA	<100	<100	NA	<500	<100	NA
1,1-dichloroethane	<0.8	<4.7	<4.7	<0.8	<47	<47	<0.8	<240	<47	<0.8
1,2-dichloroethane	<1.5	<2.8	<2.8	<1.5	<28	<28	<1.5	<140	<28	<1.5
1,1-dichloroethylene	<1.9	<2.8	<2.8	1	<28	<28	1	<140	<28	2
1,2-dichloropropane	<1.5	<6	<6	<1.5	<60	<60	<1.5	<300	<60	<1.5
cis-1,3-dichloropropylene	<1.5	<5	<5	<1.5	<50	<50	<1.5	<250	<50	<1.5
trans-1,3-dichloropropylene	<1.5	<10	<10	<1.5	<100	<100	<1.5	<500	<100	<1.5
ethylbenzene	6	<7.2	<7.2	1	<72	<72	12	<360	<72	18
methyl bromide	<1.5	<10	<10	<1.5	<100	<100	<1.5	<500	<100	<1.5
methyl chloride	<1.6	<10	<10	<1.6	<100	<100	<1.6	<500	<100	<1.6
methylene chloride	40	<2.8	13	38	<28	<28	71	<140	<28	45
1,1,2,2-tetrachloroethane	<1.4	<6.9	<6.9	<1.4	<69	<69	<1.4	<350	<69	<1.4
tetrachloroethylene	<1.5	<4.1	<4.1	<1.5	<41	<41	<1.5	<210	<41	<1.5
toluene	4	<6	6	2	<60	<60	18	<300	<60	35
1,2-trans-dichloroethylene	<1.5	<1.6	<1.6	<1.5	<16	<16	<1.5	<80	<16	2
1,1,1-trichloroethane	<1.2	<3.8	<3.8	<1.2	<38	<38	<1.2	<190	<38	<1.2
1,1,2-trichloroethane	<1.6	<5	<5	<1.6	<50	<50	<1.6	<250	<50	<1.6
trichloroethylene	<1.3	<1.9	<1.9	<1.3	<19	<19	<1.3	<95	<19	<1.3
trichlorofluoromethane	<1.2	<10	<10	<1.2	<100	<100	<1.2	<500	<100	<1.2
vinyl chloride	<1.2	<10	<10	<1.2	<100	<100	<1.2	<500	<100	<1.2
Sub Total 1	166	178.6	1097	477	1774	2715	3316	7054	6774	4902
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	<5	<10	<10	<5	<100	<100	2	<500	<100	<5
methyl isoamyl ketone	<5	<10	<10	<5	<100	<100	<5	<500	<100	<5
m-xylene	b)	<10	<10	b)	<100	<100	c)	<500	<100	c)
o-xylene/p-xylene	b)	<10	<10	b)	<100	<100	c)	<500	<100	c)
Sub Total 2	0	0	0	0	0	0	2	0	0	0
Total VOC's Analyzed	166	178.6	1097	477	1774	2715	3318	7054	6774	4902

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, Il. ***

Well Number:	GM-28C	GM-28C	GM-29	GM-29	GM-30	GM-30	GM-30	GM-31A	GM-31A	GM-31A
Date:	11/85	2/86	9/84**	11/85	9/84**	11/85	2/86	2/85	5/85	11/85
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	<5,000	<1,000	NA	<100	NA	<100	<100	<100	<100	<100
acrylonitrile	<5,000	<1,000	NA	<100	NA	<100	<100	<100	<100	<100
benzene	516	470	<0.5	<4.4	735	<4.4	<4.4	20.9	461.8	36
bis (chloromethyl) ether	<500	<100	<1.5	<10	<1.5	<10	<10	<10	<10	<10
bromoform	<240	<47	<3.2	<4.7	<3.2	<4.7	<4.7	<4.7	<4.7	<4.7
carbon tetrachloride	<140	<28	<1.5	<2.8	<1.5	<2.8	<2.8	<2.8	<2.8	<2.8
chlorobenzene	5,130	4,890	<0.6	<6	<0.6	<6	7.14	8.4	6.4	15.1
chlorodibromomethane	<160	<31	<2.0	<3.1	<2.0	<3.1	<3.1	<3.1	<3.1	<3.1
chloroethane	<500	<100	<2.4	<10	<2.4	<10	<10	<10	<10	<10
2-chloroethylvinyl ether	<500	<100	<5.9	<10	<5.9	<10	<10	<10	<10	<10
chloroform	<80	<16	2	<1.6	12	11.2	9.24	<1.6	<1.6	<1.6
dichlorobromomethane	<110	<22	<1.1	<2.2	<1.1	<2.2	<2.2	<2.2	<2.2	<2.2
dichlorodifluoromethane	<500	<100	NA	<10	NA	<10	<10	<10	<10	<10
1,1-dichloroethane	<240	<47	<0.8	<4.7	<0.8	<4.7	<4.7	<4.7	<4.7	<4.7
1,2-dichloroethane	<140	<28	<1.5	<2.8	<1.5	<2.8	<2.8	<2.8	<2.8	<2.8
1,1-dichloroethylene	<140	<28	<1.9	<2.8	<1.9	<2.8	<2.8	<2.8	<2.8	<2.8
1,2-dichloropropane	<300	<60	<1.5	<6	<1.5	<6	<6	<6	<6	<6
cis-1,3-dichloropropylene	<250	<50	<1.5	<5	<1.5	<5	<5	<5	<5	<5
s-1,3-dichloropropylene	<500	<100	<1.5	<10	<1.5	<10	<10	<10	<10	<10
,lbenzene	<360	<72	<0.4	<7.2	<0.4	<7.2	<7.2	<7.2	<7.2	<7.2
methyl bromide	<500	<100	<1.5	<10	<1.5	<10	<10	<10	<10	<10
methyl chloride	<500	<100	8	<10	<1.6	<10	<10	<10	<10	<10
methylene chloride	178	<28	<1.1	<2.8	185	<2.8	<2.8	<2.8	<2.8	5.3
1,1,2,2-tetrachloroethane	<350	<69	<1.4	<6.9	<1.4	<6.9	<6.9	<6.9	<6.9	<6.9
tetrachloroethylene	<210	<41	<1.5	<4.1	<1.5	4.31	<4.1	<4.1	<4.1	<4.1
toluene	<300	<60	<0.4	<6	<0.4	<6	<6	<6	<6	<6
1,2-trans-dichloroethylene	<80	<16	<1.5	<1.6	<1.5	<1.6	<1.6	<1.6	<1.6	<1.6
1,1,1-trichloroethane	<190	<38	<1.2	<3.8	<1.2	<3.8	<3.8	<3.8	<3.8	<3.8
1,1,2-trichloroethane	<250	<50	<1.6	<5	<1.6	<5	<5	<5	<5	<5
trichloroethylene	<95	<19	2	<1.9	<1.3	3.99	<1.9	<1.9	<1.9	<1.9
trichlorofluoroethane	<500	<100	<1.2	<10	<1.2	<10	<10	<10	<10	<10
vinyl chloride	<500	<100	<1.2	<10	<1.2	<10	<10	<10	<10	<10
Sub Total 1	5824	5360	12	0	932	19.5	16.38	29.3	468.2	56.4
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	<500	<100	<5	<10	<5	18	<10	<10	<10	<10
methyl isoamyl ketone	<500	<100	<5	<10	<5	14.6	<10	<10	<10	<10
m-xylene	<500	<100	<5	<10	c)	<10	<10	<10	<10	<10
o-xylene/p-xylene	<500	<100	<5	<10	c)	<10	<10	<10	<10	<10
Sub Total 2	0	0	0	0	0	32.6	0	0	0	0
Total VOC's Analyzed	5824	5360	12	0	932	52.1	16.38	29.3	468.2	56.4

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, IL. ***

Well Number:	GM-31A	GM-31B	GM-31B	GM-31B	GM-31B	GM-31C	GM-31C	GM-31C	GM-31C	B-24A
Date:	11/85*	2/85	5/85	11/85	11/85*	2/85	5/85	11/85	11/85*	2/86
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	<100	<100	<100	<100	<100	<100	<100	<100	<100	<10,000
acrylonitrile	<100	<100	<100	<100	<100	<100	<100	<100	<100	<10,000
benzene	36.5	<4.4	15	<4.4	<4.4	79.4	75.2	25.9	27.1	2,360
bis (chloromethyl) ether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<1,000
bromoform	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<470
carbon tetrachloride	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<280
chlorobenzene	12.5	8.2	132.6	<6	<6	437	487.6	495	511	6,180
chlorodibromomethane	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<310
chloroethane	<10	<10	<10	<10	<10	20.6	<10	<10	<10	<1,000
2-chloroethylvinyl ether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<1,000
chloroform	<1.6	<1.6	<1.6	<1.6	<1.6	12.9	<1.6	<1.6	<1.6	<160
dichlorobromomethane	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<220
dichlorodifluoromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<1,000
1,1-dichloroethane	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7	<470
1,2-dichloroethane	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	2,100
1,1-dichloroethylene	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<280
1,2-dichloropropane	<6	<6	<6	<6	<6	<6	<6	<6	<6	<600
cis-1,3-dichloropropylene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<500
trans-1,3-dichloropropylene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<1,000
ethylbenzene	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<7.2	<720
methyl bromide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<1,000
methyl chloride	<10	<10	<10	<10	<10	<10	<10	<10	<10	<1,000
methylene chloride	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	1,160
1,1,2,2-tetrachloroethane	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	<690
tetrachloroethylene	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	4.2	<4.1	<4.1	<410
toluene	<6	<6	<6	<6	<6	<6	<6	<6	<6	1,140
1,2-trans-dichloroethylene	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	2.7	<1.6	<1.6	<160
1,1,1-trichloroethane	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<380
1,1,2-trichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5	<500
trichloroethylene	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<190
trichlorofluoromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<1,000
vinyl chloride	<10	<10	<10	<10	<10	32.2	47.2	42.6	45.2	<1,000
Sub Total 1	49	8.2	147.6	0	0	582.1	616.9	563.5	583.3	12940
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	<10	<10	<10	<10	<10	<10	<10	<10	<10	3,170
methyl isoamyl ketone	<10	<10	<10	<10	<10	<10	<10	<10	<10	<1,000
m-xylene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<1,000
o-xylene/p-xylene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<1,000
Sub Total 2	0	0	0	0	0	0	0	0	0	3170
Total VOC's Analyzed	49	8.2	147.6	0	0	582.1	616.9	563.5	583.3	16110

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, Il. ***

Well Number:	B-25A	B-25A	B-25B	B-25B	B-27B	B-27B	B-28A	B-29A	B-29A	B-29B
Date:	6/84	11/85	6/84	11/85	9/84**	9/84*	2/86	6/84	11/85	6/84
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	<1	<10,000	<1	<10,000	NA	NA	<1,000	<1	<1,000	<1
acrylonitrile	<1	<10,000	<1	<10,000	NA	NA	<1,000	<1	<1,000	<1
benzene	<1	<440	51	<440	3,420	7,058	<44	18	<44	20
bis (chloromethyl) ether	<1	<1,000	<1	<1,000	<1.5	<300	<100	<1	<100	<1
bromoform	<1	<470	<1	<470	<3.2	<640	<47	<1	<47	<1
carbon tetrachloride	<1	<280	<1	<280	<1.5	<300	<28	<1	<28	<1
chlorobenzene	8,520	18,900	9,930	13,100	4,160	5,320	1,510	1,970	1,280	769
chlorodibromomethane	<1	<310	<1	<310	<2.0	<400	<31	<1	<31	<1
chloroethane	309	<1,000	42	<1,000	<2.4	<480	<100	<1	<100	<1
2-chloroethylvinyl ether	<1	<1,000	<1	<1,000	<5.9	<1,180	<100	<1	<100	<1
chloroform	77	<160	9	<160	<0.8	<160	<16	18	28.9	39
dichlorobromomethane	<1	<220	<1	<220	<1.1	<220	<22	<1	<22	<1
dichlorodifluoromethane	<1	<1,000	<1	<1,000	NA	NA	<100	<1	<100	<1
1,1-dichloroethane	<1	<470	<1	<470	<0.8	<160	<47	<1	<47	<1
1,2-dichloroethane	10,000	18,500	1,430	3,510	<1.5	<300	<28	<1	<28	<1
1,1-dichloroethylene	<1	<280	<1	<280	<1.9	260	<28	<1	<28	<1
1,2-dichloropropane	<1	<600	<1	<600	<1.5	<300	<60	<1	<60	<1
cis-1,3-dichloropropylene	<1	<500	<1	<500	<1.5	<300	<50	<1	<50	<1
trans-1,3-dichloropropylene	<1	<1,000	<1	<1,000	<1.5	<300	<100	<1	<100	<1
ethylbenzene	11	<720	4	<720	<0.4	<80	<72	14	<72	33
methyl bromide	<1	<1,000	<1	<1,000	<1.5	<300	<100	<1	<100	<1
methyl chloride	30	<1,000	29	<1,000	<1.6	<320	<100	<1	<100	<1
methylene chloride	204	<280	<1	<280	1,740	8,100	<28	50	<28	19
1,1,2,2-tetrachloroethane	<1	<690	<1	<690	<1.4	<280	<69	<1	<69	<1
tetrachloroethylene	19	<410	15	<410	<1.5	<300	<41	<1	<41	<1
toluene	316	736	269	<600	16,200	18,500	<60	195	532	225
1,2-trans-dichloroethylene	<1	<160	2	<160	<1.5	<300	<16	<1	<16	<1
1,1,1-trichloroethane	<1	<380	<1	<380	<1.2	<240	<38	<1	<38	<1
1,1,2-trichloroethane	<1	<500	<1	<500	<1.6	<320	<50	<1	<50	<1
trichloroethylene	7	<190	4	<190	<1.3	<260	<19	2	40.2	<1
trichlorofluoromethane	<1	<1,000	<1	<1,000	<1.2	<240	<100	<1	<100	<1
vinyl chloride	4	<1,000	7	<1,000	<1.2	<240	<100	<1	<100	<1
Sub Total 1	19497	38136	11792	16610	25520	39238	1510	2267	1881.1	1105
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	NA	<1,000	NA	<1,000	<5	40,400	<100	NA	248	NA
methyl isoamyl ketone	NA	<1,000	NA	<1,000	<5	<1,000	<100	NA	<100	NA
m-xylene	NA	<1,000	NA	<1,000	<5	<1,000	<100	NA	<100	NA
o-xylene/p-xylene	NA	<1,000	NA	<1,000	<5	<1,000	<100	NA	<100	NA
Sub Total 2	NA	0	NA	0	0	40400	0	NA	248	NA
Total VOC's Analyzed	19497	38136	11792	16610	25520	79638	1510	2267	2129.1	1105

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, IL. ***

Well Number:	B-29B	B-29B	B-29B	B-29B	B-30B	B-31B	B-31B	B-31C	B-31C	B-31C
Date:	6/84*	6/84#	11/84	11/85	9/84**	11/85	2/86	9/84**	11/85	2/86
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	<1	<50,000	<10,000	<1,000	NA	<100	<100	NA	<100	<100
acrylonitrile	<1	<50,000	<10,000	<1,000	NA	<100	<100	NA	<100	<100
benzene	16	<5,000	<1,000	<44	176	<4.4	<4.4	<0.5	10.7	62.9
bis (chloromethyl) ether	<1	<5,000	<1,000	<100	<1.5	<10	<10	<1.5	<10	<10
bromoform	<1	<5,000	<1,000	<47	<3.2	<4.7	<4.7	<3.2	<4.7	<4.7
carbon tetrachloride	<1	<5,000	<1,000	<28	<1.5	<2.8	<2.8	<1.5	<2.8	<2.8
chlorobenzene	828	<5,000	1,500	1,710	2,350	<6	<6	<0.6	104	483
chlorodibromomethane	<1	<5,000	<1,000	<31	<2.0	<3.1	<3.1	<2.0	<3.1	<3.1
chloroethane	<1	<5,000	<1,000	<100	<2.4	<10	<10	<2.4	<10	<10
2-chloroethylvinyl ether	<1	<5,000	<1,000	<100	<5.9	<10	<10	<5.9	<10	<10
chloroform	38	<5,000	<1,000	48.7	64	<1.6	<1.6	3	<1.6	<1.6
dichlorobromomethane	<1	<5,000	<1,000	<22	<1.1	<2.2	<2.2	<1.1	<2.2	<2.2
dichlorodifluoromethane	<1	<5,000	<1,000	<100	NA	<10	<10	NA	<10	<10
1,1-dichloroethane	<1	<5,000	<1,000	<47	3	<4.7	<4.7	<0.8	<4.7	<4.7
1,2-dichloroethane	<1	<5,000	<1,000	<28	142	<2.8	<2.8	<1.5	<2.8	<2.8
1,1-dichloroethylene	<1	<5,000	<1,000	<28	<1.9	<2.8	<2.8	<1.9	<2.8	<2.8
1,2-dichloropropane	<1	<5,000	<1,000	<60	<1.5	<6	<6	<1.5	<6	<6
cis-1,3-dichloropropylene	<1	<5,000	<1,000	<50	<1.5	<5	<5	<1.5	<5	<5
trans-1,3-dichloropropylene	<1	<5,000	<1,000	<100	<1.5	<10	<10	<1.5	<10	<10
ethylbenzene	30	<5,000	<1,000	<72	359	<7.2	<7.2	<0.4	<7.2	<7.2
methyl bromide	<1	<5,000	<1,000	<100	<1.5	<10	<10	<1.5	<10	<10
methyl chloride	<1	57,000	<1,000	<100	<1.6	<10	<10	<1.6	<10	<10
methylene chloride	17	127,000	<1,000	<28	48	<2.8	<2.8	6	<2.8	<2.8
1,1,2,2-tetrachloroethane	<1	<5,000	<1,000	<69	<1.4	<6.9	<6.9	<1.4	<6.9	<6.9
tetrachloroethylene	<1	<5,000	<1,000	<41	940	<4.1	<4.1	<1.5	<4.1	<4.1
toluene	227	<5,000	<1,000	491	228	<6	<6	1	<6	<6
1,2-trans-dichloroethylene	<1	<5,000	<1,000	<16	163	<1.6	<1.6	<1.5	<1.6	<1.6
1,1,1-trichloroethane	<1	<5,000	<1,000	<38	<1.2	<3.8	<3.8	<1.2	<3.8	<3.8
1,1,2-trichloroethane	<1	<5,000	<1,000	<50	<1.6	<5	<5	<1.6	<5	<5
trichloroethylene	<1	<5,000	<1,000	<19	36	<1.9	<1.9	<1.3	<1.9	<1.9
trichlorofluoromethane	<1	<5,000	<1,000	<100	<1.2	<10	<10	<1.2	<10	<10
vinyl chloride	<1	<5,000	<1,000	<100	<1.2	<10	<10	<1.2	<10	<10
Sub Total 1	1156	184000	1500	2249.7	4509	0	0	10	114.7	545.9
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	NA	NA	<1,000	177	2,640	<10	<10	<5	<10	<10
methyl isoamyl ketone	NA	NA	<1,000	<100	<5	<10	<10	<5	<10	<10
m-xylene	NA	NA	<1,000	218	d)	<10	<10	d)	<10	<10
o-xylene/p-xylene	NA	NA	<1,000	146	d)	<10	<10	d)	<10	<10
Sub Total 2	NA	NA	0	541	2640	0	0	0	0	0
Total VOC's Analyzed	1156	184000	1500	2790.7	7149	0	0	10	114.7	545.9

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krumerich Plant, Monsanto Company, Sauget, Il. ***

Well Number:	B-101	B-102	GM-106	GM-106	GM-106	P-1	P-2	P-2	P-6	P-6
Date:	9/84**	9/84**	11/85	2/86	2/86*	9/84**	6/84	11/85	6/84	11/85
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	NA	NA	<100	<1,000	<1,000	NA	<1	<1,000	<1	<100
acrylonitrile	NA	NA	<100	<1,000	<1,000	NA	<1	<1,000	<1	<100
benzene	<50	23	<4.4	<44	<44	<0.5	54	106	31	24.3
bis (chloromethyl) ether	<150	<1.5	<10	<100	<100	<1.5	<1	<100	<1	<10
bromoform	<320	<3.2	<4.7	<47	<47	<3.2	<1	<47	<1	<4.7
carbon tetrachloride	<150	<1.5	<2.8	<28	<28	<1.5	<1	<28	<1	<2.8
chlorobenzene	14,400	<0.6	21.4	201	<60	<0.6	687	764	130	98.1
chlorodibromomethane	<200	<2.0	<3.1	<31	<31	<2.0	<1	<31	<1	<3.1
chloroethane	<240	<2.4	<10	<100	<100	<2.4	<1	<100	<1	<10
2-chloroethylvinyl ether	<590	<5.9	<10	<100	<100	<5.9	<1	<100	<1	<10
chloroform	<80	0.8	<1.6	<16	<16	<0.8	<1	<16	<1	<1.6
dichlorobromomethane	<110	<1.1	<2.2	<22	<22	<1.1	<1	<22	<1	<2.2
dichlorodifluoromethane	NA	NA	<10	<100	<100	NA	<1	<100	<1	<10
1,1-dichloroethane	<80	<0.8	<4.7	<47	<47	<0.8	<1	<47	<1	<4.7
1,2-dichloroethane	<150	<1.5	<2.8	<28	<28	<1.5	<1	<28	<1	<2.8
1,1-dichloroethylene	<190	<1.9	<2.8	<28	<28	<1.9	<1	<28	<1	<2.8
1,2-dichloropropane	<150	<1.5	<6	<60	<60	<1.5	<1	<60	<1	<6
cis-1,3-dichloropropylene	<150	<1.5	<5	<50	<50	<1.5	<1	<50	<1	<5
trans-1,3-dichloropropylene	<150	<1.5	<10	<100	<100	<1.5	<1	<100	<1	<10
ethylbenzene	<40	<0.4	<7.2	<72	<72	<0.4	1	<72	1	<7.2
methyl bromide	<150	<1.5	<10	<100	<100	<1.5	<1	<100	<1	<10
methyl chloride	<160	<1.6	<10	<100	<100	<1.6	<1	<100	<1	<10
methylene chloride	400	2	<2.8	<28	<28	4	81	<28	99	<2.8
1,1,2,2-tetrachloroethane	<140	<1.4	<6.9	<69	<69	<1.4	<1	<69	<1	<6.9
tetrachloroethylene	<150	<1.5	<4.1	<41	<41	<1.5	<1	<41	<1	<4.1
toluene	1,180	1	15	104	<60	<0.4	4	<60	5	<6
1,2-trans-dichloroethylene	<150	<1.5	<1.6	<16	<16	<1.5	<1	<16	<1	<1.6
1,1,1-trichloroethane	<120	<1.2	<3.8	<38	<38	<1.2	<1	<38	<1	<3.8
1,1,2-trichloroethane	<160	<1.6	<5	<50	<50	<1.6	<1	<50	<1	<5
trichloroethylene	<130	<1.3	<1.9	<19	<19	<1.3	<1	<19	<1	<1.9
trichlorofluoromethane	<120	<1.2	<10	<100	<100	<1.2	<1	<100	<1	<10
vinyl chloride	<120	<1.2	<10	<100	<100	<1.2	<1	<100	<1	<10
Sub Total 1	15980	26.8	36.4	305	0	4	827	870	266	122.4
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	<500	<5	<10	<100	<100	<5	NA	<100	NA	<10
methyl isoamyl ketone	<500	<5	<10	<100	<100	<5	NA	<100	NA	<10
m-xylene	<500	<5	<10	100	<100	<5	NA	<100	NA	<10
o-xylene/p-xylene	<500	<5	<10	<100	<100	<5	NA	<100	NA	<10
Sub Total 2	0	0	0	100	0	0	NA	0	NA	0
Total VOC's Analyzed	15980	26.8	36.4	405	0	4	827	870	266	122.4

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, IL. ***

Well Number:	P-7	P-7	P-8	P-8	P-10	P-11	P-12	P-13	P-13	P-13
Date:	6/84	11/85	6/84	11/85	9/84**	9/84**	9/84**	6/84	6/84*	6/84§
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	<1	<25,000	<1	<1,000	NA	NA	NA	<1	<1	<50,000
acrylonitrile	<1	<25,000	<1	<1,000	NA	NA	NA	<1	<1	<50,000
benzene	2,080	1,810	162	531	132	113	560	61	60	<5,000
bis (chloromethyl) ether	<1	<2,500	<1	<100	<1.5	<1.5	<1.5	<1	<1	<5,000
bromoform	<1	<1,200	<1	<47	<3.2	<3.2	<3.2	<1	<1	<5,000
carbon tetrachloride	<1	<700	<1	<28	<1.5	<1.5	<1.5	<1	<1	<5,000
chlorobenzene	4,040	5,110	585	2,490	2,000	842	690	81	75	<5,000
chlorodibromomethane	<1	<780	<1	<31	<2.0	<2.0	<2.0	<1	<1	<5,000
chloroethane	<1	<2,500	<1	<100	<2.4	<2.4	<2.4	<1	<1	<5,000
2-chloroethylvinyl ether	<1	<2,500	<1	<100	<5.9	<5.9	<5.9	<1	<1	<5,000
chloroform	7	<400	<1	<16	<0.8	<0.8	<0.8	<1	<1	<5,000
dichlorobromomethane	<1	<550	<1	<22	<1.1	<1.1	<1.1	<1	<1	<5,000
dichlorodifluoromethane	<1	<2,500	<1	<100	NA	NA	NA	<1	<1	<5,000
1,1-dichloroethane	<1	<1,200	<1	<47	<0.8	<0.8	<0.8	<1	<1	<5,000
1,2-dichloroethane	<1	700	<1	<28	<1.5	<1.5	<1.5	<1	<1	<5,000
1,1-dichloroethylene	<1	<700	<1	<28	2	<1.9	<1.9	<1	<1	<5,000
1,2-dichloropropane	<1	<1,500	<1	<60	<1.5	<1.5	<1.5	<1	<1	<5,000
cis-1,3-dichloropropylene	<1	<1,300	<1	<50	<1.5	<1.5	<1.5	<1	<1	<5,000
trans-1,3-dichloropropylene	<1	<2,500	<1	<100	<1.5	<1.5	<1.5	<1	<1	<5,000
ethylbenzene	12	<1,800	13	74.6	<0.4	5	32	16	<1	<5,000
methyl bromide	<1	<2,500	<1	<100	<1.5	<1.5	<1.5	<1	<1	<5,000
methyl chloride	<1	<2,500	<1	<100	<1.6	<1.6	<1.6	<1	<1	138,000
methylene chloride	68	<700	19	<28	41	21	42	33	26	37,100
1,1,2,2-tetrachloroethane	<1	<1,700	<1	<69	<1.4	<1.4	<1.4	<1	<1	<5,000
tetrachloroethylene	<1	<1,000	<1	<41	<1.5	<1.5	<1.5	<1	<1	<5,000
toluene	322	<1,500	56	<60	24	10	19	5	4	19,200
1,2-trans-dichloroethylene	<1	<400	<1	<16	<1.5	<1.5	<1.5	<1	<1	<5,000
1,1,1-trichloroethane	<1	<950	<1	<38	<1.2	<1.2	<1.2	<1	<1	<5,000
1,1,2-trichloroethane	<1	<1,300	<1	<50	<1.6	<1.6	<1.6	<1	<1	<5,000
trichloroethylene	<1	<480	<1	<19	<1.3	<1.3	<1.3	<1	<1	<5,000
trichlorofluoromethane	<1	<2,500	<1	<100	<1.2	<1.2	<1.2	<1	<1	<5,000
vinyl chloride	<1	<2,500	<1	<100	<1.2	<1.2	<1.2	<1	<1	<5,000
Sub Total 1	6529	7620	835	3095.6	2199	991	1343	196	165	194300
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	NA	<2,500	NA	<100	<5	<5	<5	NA	NA	NA
methyl isoamyl ketone	NA	<2,500	NA	<100	<5	<5	<5	NA	NA	NA
m-xylene	NA	<2,500	NA	<100	<5	<5	<5	NA	NA	NA
o-xylene/p-xylene	NA	<2,500	NA	<100	<5	<5	<5	NA	NA	NA
Sub Total 2	NA	0	NA	0	0	0	0	NA	NA	NA
Total VOC's Analyzed	6529	7620	835	3095.6	2199	991	1343	196	165	194300

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, Il. ***

Well Number:	P-13	P-14	P-14	DW-1	DW-1	DW-4	DW-7	DW-7	DW-10	DW-18
Date:	11/85	6/84	11/85	9/84**	11/85	9/84**	11/85	2/86	9/84**	9/84**
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	<1,000	<1	<10,000	NA	<10,000	NA	<100	<5,000	NA	NA
acrylonitrile	<1,000	<1	<10,000	NA	<10,000	NA	<100	<5,000	NA	NA
benzene	89.4	269	<440	23,400	157,000	940	6.9	<220	6,240	<0.5
bis (chloroethyl) ether	<100	<1	<1,000	<300	<1,000	<300	<10	<500	<300	<1.5
bromoform	<47	<1	<470	<640	<470	<640	<4.7	<240	<640	<3.2
carbon tetrachloride	<28	<1	<280	<300	<280	<300	<2.8	<140	<300	<1.5
chlorobenzene	265	23,480	16,000	6,600	35,700	11,040	183	1,080	9,960	<0.6
chlorodibromomethane	<31	<1	<310	<400	<310	<400	<3.1	<160	<400	<2.0
chloroethane	<100	<1	<1,000	<480	<1,000	<480	<10	<500	<480	<2.4
2-chloroethylvinyl ether	<100	<1	<1,000	<1,180	<1,000	<1,180	<10	<500	<1,180	<5.9
chloroform	<16	<1	<160	<160	<160	<160	2.3	<80	<160	<0.8
dichlorobromomethane	<22	<1	<220	<220	<220	<220	<2.2	<110	<220	<1.1
dichlorodifluoromethane	<100	<1	<1,000	NA	<1,000	NA	<10	<500	NA	NA
1,1-dichloroethane	<47	<1	<470	<160	<470	<160	<4.7	<240	<160	<0.8
1,2-dichloroethane	<28	<1	<280	<300	<280	<300	<2.8	<140	<300	<1.5
1,1-dichloroethylene	<28	<1	<280	<380	<280	<380	<2.8	<140	<380	<1.9
1,2-dichloropropane	<60	<1	<600	<300	<600	<300	<6	<300	<300	<1.5
cis-1,3-dichloropropylene	<50	<1	<500	<300	<500	<300	<5	<250	<300	<1.5
trans-1,3-dichloropropylene	<100	<1	<1,000	<300	<1,000	<300	<10	<500	<300	<1.5
ylbenzene	<72	4	<720	<80	<720	<80	<7.2	<360	200	<0.4
ethyl bromide	<100	<1	<1,000	<300	<1,000	<300	<10	<500	<300	<1.5
ethyl chloride	<100	<1	<1,000	<320	<1,000	<320	<10	<500	<320	<1.6
ethylene chloride	<28	53	<280	2,020	<280	2,140	5	<140	2,380	5
1,1,2,2-tetrachloroethane	<69	<1	<690	<280	<690	<280	<6.9	<350	<280	<1.4
tetrachloroethylene	<41	<1	<410	<300	<410	<300	<4.1	<210	<300	<1.5
toluene	<60	6	<600	<80	<600	<80	8.5	<300	<80	<0.4
1,2-trans-dichloroethylene	<16	<1	<160	<300	<160	<300	7.4	<80	<300	<1.5
1,1,1-trichloroethane	<38	<1	<380	<240	<380	<240	<3.8	<190	<240	<1.2
1,1,2-trichloroethane	<50	<1	<500	<320	<500	<320	<5	<250	<320	<1.6
trichloroethylene	<19	<1	<190	<260	<190	<260	<1.9	<95	<260	<1.3
trichlorofluoromethane	<100	<1	<1,000	<240	<1,000	<240	<10	<500	<240	<1.2
vinyl chloride	<100	<1	<1,000	<240	<1,000	<240	<10	<500	<240	<1.2
Sub Total 1	354.4	23812	16000	32020	192700	14120	213.1	1080	18780	5
Miscellaneous Volatile Organic Compounds										
ethyl-iso-butyl ketone	<100	NA	<1,000	<1,000	<1,000	<1,000	<10	<500	<1,000	<5
ethyl isoamyl ketone	<100	NA	<1,000	<1,000	<1,000	<1,000	42.4	<500	<1,000	<5
m-xylene	<100	NA	<1,000	<1,000	<1,000	<1,000	<10	<500	<1,000	<5
o-xylene/p-xylene	<100	NA	<1,000	<1,000	<1,000	<1,000	<10	<500	<1,000	<5
Sub Total 2	0	NA	0	0	0	0	42.4	0	0	0
Total VOC's Analyzed	354.4	23812	16000	32020	192700	14120	255.5	1080	18780	5

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, Il. ***

Well Number:	DW-18	DW-18	DW-23	DW-24	DW-29	DW-29	DW-30	DW-33	DW-34	DW-34
Date:	9/84*	11/85	9/84**	9/84**	9/84**	9/84*	11/85	9/84**	9/84**	11/85
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	NA	<100	NA	NA	NA	NA	<100	NA	NA	<100
acrylonitrile	NA	<100	NA	NA	NA	NA	<100	NA	NA	<100
benzene	<0.5	184	<0.5	<0.5	<0.5	<25	22.7	<0.5	596,000	867
bis (chloromethyl) ether	<1.5	<10	<1.5	<1.5	<1.5	<75	<10	<1.5	<1,500	<10
bromoform	<3.2	<4.7	<3.2	<3.2	<3.2	<160	<4.7	<3.2	<3,200	<4.7
carbon tetrachloride	<1.5	<2.8	<1.5	<1.5	<1.5	<75	<2.8	<1.5	<1,500	<2.8
chlorobenzene	<0.6	980	<0.6	<0.6	32	760	149	<0.6	366	18
chlorodibromomethane	<2.0	<3.1	<2.0	<2.0	<2.0	<100	<3.1	<2.0	<2,000	<3.1
chloroethane	<2.4	<10	<2.4	<2.4	<2.4	<120	<10	<2.4	<2,400	<10
2-chloroethylvinyl ether	<5.9	<10	<5.9	<5.9	<5.9	<295	<10	<5.9	<5,900	<10
chloroform	<0.8	<1.6	<0.8	<0.8	<0.8	<40	<1.6	<0.8	<800	<1.6
dichlorobromomethane	<1.1	<2.2	<1.1	<1.1	<1.1	<55	<2.2	<1.1	<1,100	<2.2
dichlorodifluoromethane	NA	<10	NA	NA	NA	NA	<10	NA	NA	<10
1,1-dichloroethane	<0.8	<4.7	<0.8	<0.8	<0.8	<40	<4.7	<0.8	<800	<4.7
1,2-dichloroethane	<1.5	<2.8	2	<1.5	3	<75	<2.8	<1.5	<1,500	<2.8
1,1-dichloroethylene	<1.9	<2.8	<1.9	<1.9	<1.9	<95	<2.8	<1.9	<1,900	<2.8
1,2-dichloropropane	<1.5	<6	<1.5	<1.5	<1.5	<75	<6	<1.5	<1,500	<6
cis-1,3-dichloropropylene	<1.5	<5	<1.5	<1.5	<1.5	<75	<5	<1.5	<1,500	<5
trans-1,3-dichloropropylene	<1.5	<10	<1.5	<1.5	<1.5	<75	<10	<1.5	<1,500	<10
ethylbenzene	<0.4	15.5	<0.4	<0.4	<0.4	<20	<7.2	<0.4	<400	<7.2
methyl bromide	<1.5	<10	<1.5	<1.5	<1.5	<75	<10	<1.5	<1,500	<10
methyl chloride	<1.6	<10	<1.6	<1.6	<1.6	<80	<10	<1.6	4,060	<10
methylene chloride	4	<2.8	3	6	3	525	<2.8	9	<1,100	<2.8
1,1,2,2-tetrachloroethane	<1.4	<6.9	<1.4	<1.4	<1.4	<70	<6.9	<1.4	<1,400	<6.9
tetrachloroethylene	<1.5	<4.1	<1.5	<1.5	<1.5	<75	<4.1	<1.5	<1,500	<4.1
toluene	2	16.4	1	<0.4	<0.4	<20	<6	<0.4	1,280	<6
1,2-trans-dichloroethylene	<1.5	4	<1.5	<1.5	<1.5	<75	<1.6	<1.5	129	<1.6
1,1,1-trichloroethane	<1.2	<3.8	<1.2	<1.2	<1.2	<60	<3.8	<1.2	<1,200	<3.8
1,1,2-trichloroethane	<1.6	<5	<1.6	<1.6	<1.6	<80	<5	<1.6	<1,600	<5
trichloroethylene	<1.3	<1.9	<1.3	<1.3	<1.3	<65	<1.9	<1.3	<1,300	<1.9
trichlorofluoromethane	<1.2	<10	<1.2	<1.2	<1.2	<60	<10	<1.2	<1,200	<10
vinyl chloride	<1.2	<10	<1.2	<1.2	<1.2	<60	<10	<1.2	<1,200	<10
Sub Total 1	6	1199.9	6	6	38	1285	171.7	9	601835	885
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	NA	<10	<5	<5	<5	NA	<10	<5	<5,000	<10
methyl isoamyl ketone	NA	<10	<5	<5	<5	NA	<10	<5	<5,000	<10
m-xylene	NA	<10	e)	<5	<5	NA	<10	<5	<5,000	<10
o-xylene/p-xylene	NA	<10	e)	<5	<5	NA	<10	<5	<5,000	<10
Sub Total 2	NA	0	0	0	0	NA	0	0	0	0
Total VOC's Analyzed	6	1199.9	6	6	38	1285	171.7	9	601835	885

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, Il. ***

Well Number:	DW-34	DW-1-85	DW-1-85	BK-3	BK-3	BK-3	WB-6	WB-6	WB-6	WB-7
Date:	2/86	11/85	2/86	9/84**	11/85	2/86	9/84**	11/85	2/86	9/84
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	<100	<100	<500	NA	<1,000	<10,000	NA	<100	<1,000	NA
acrylonitrile	<100	<100	<500	NA	<1,000	<10,000	NA	<100	<1,000	NA
benzene	623	1,700	472	208	3,980	<440	<0.5	31.1	<44	0.5
bis (chloroethyl) ether	<10	<10	<50	<1.5	<100	<1,000	<1.5	<10	<100	<1.5
bromoform	<4.7	<4.7	<24	<3.2	<47	<470	<3.2	<4.7	<47	<3.2
carbon tetrachloride	<2.8	<2.8	<14	<1.5	<28	<280	<1.5	<2.8	<28	<1.5
chlorobenzene	6.6	6,680	3,650	1,172	4,610	972	<0.6	<6	210	150
chlorodibromomethane	<3.1	<3.1	<16	<2.0	<31	<310	<2.0	<3.1	<31	<2.0
chloroethane	<10	<10	<50	<2.4	<100	<1,000	<2.4	<10	<100	<2.4
2-chloroethylvinyl ether	<10	<10	<50	<5.9	<100	<1,000	<5.9	<10	<100	<5.9
chloroform	<1.6	<1.6	<8	<0.8	<16	<160	<0.8	<1.6	<16	<0.8
dichlorobromomethane	<2.2	<2.2	<11	<1.1	<22	<220	<1.1	<2.2	<22	<1.1
dichlorodifluoromethane	<10	<10	<50	NA	<100	<1,000	NA	<10	<100	NA
1,1-dichloroethane	<4.7	<4.7	50.6	<0.8	<47	<470	<0.8	<4.7	<47	<0.8
1,2-dichloroethane	<2.8	<2.8	<14	<1.5	<28	<280	<1.5	<2.8	<28	<1.5
1,1-dichloroethylene	<2.8	<2.8	192	<1.9	<28	<280	<1.9	<2.8	<28	<1.9
1,2-dichloropropane	<6	<6	<30	<1.5	<60	<600	<1.5	<6	<60	<1.5
cis-1,3-dichloropropylene	<5	<5	<25	<1.5	<50	<500	<1.5	<5	<50	<1.5
trans-1,3-dichloropropylene	<10	<10	<50	<1.5	<100	<1,000	<1.5	<10	<100	<1.5
ylbenzene	<7.2	<7.2	<36	7	<72	<720	<0.4	15	<72	<0.4
methyl bromide	<10	<10	<50	8	<100	<1,000	<1.5	<10	<100	<1.5
methyl chloride	<10	<10	<50	<1.6	<100	<1,000	<1.6	<10	<100	<1.6
methylene chloride	<2.8	8.3	<14	<1.1	55	<280	5	<2.8	29	<1.1
1,1,2,2-tetrachloroethane	<6.9	<6.9	<35	<1.4	<69	<690	<1.4	<6.9	<69	<1.4
tetrachloroethylene	<4.1	<4.1	<21	<1.5	<41	<410	<1.5	<4.1	<41	<1.5
toluene	<6	<6	<30	2	<60	<600	<0.4	<6	107	<0.4
1,2-trans-dichloroethylene	<1.6	<1.6	202	<1.5	<16	<160	<1.5	<1.6	<16	<1.5
1,1,1-trichloroethane	<3.8	<3.8	<19	<1.2	<38	<380	<1.2	<3.8	<38	<1.2
1,1,2-trichloroethane	<5	<5	<25	<1.6	<50	<500	<1.6	<5	<50	<1.6
trichloroethylene	<1.9	<1.9	<9.5	<1.3	<19	<190	<1.3	<1.9	<19	<1.3
trichlorofluoromethane	<10	<10	<50	<1.2	<100	<1,000	<1.2	<10	<100	<1.2
vinyl chloride	<10	<10	96.2	<1.2	<100	<1,000	<1.2	<10	<100	<1.2
Sub Total 1	629.6	8388.3	4662.8	1397	8645	972	5	46.1	346	150.5
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	<10	<10	<50	<5	<100	<1,000	<5	<10	<100	<5
methyl isoamyl ketone	<10	<10	<50	<5	<100	<1,000	<5	<10	<100	<5
m-xylene	<10	<10	<50	<5	<100	<1,000	<5	12.3	105	<5
o-xylene/p-xylene	<10	<10	<50	<5	<100	<1,000	<5	19.5	<100	<5
Sub Total 2	0	0	0	0	0	0	0	31.8	105	0
Total VOC's Analyzed	629.6	8388.3	4662.8	1397	8645	972	5	77.9	451	150.5

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, Il. ***

Well Number:	WB-7	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank	Field Blank	Trip Blank
Date:	11/85	6/84	9/84	9/84	11/84	2/85	5/85	11/85	2/86	5/84
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	<100	NA	NA	NA	<100	<100	<100	<100	<100	<1
acrylonitrile	<100	NA	NA	NA	<100	<100	<100	<100	<100	<1
benzene	<4.4	<0.5	<0.5	<0.5	28	<4.4	<4.4	<4.4	<4.4	<1
bis (chloromethyl) ether	<10	<1.5	<1.5	<1.5	<10	<10	<10	<10	<10	<1
bromoform	<4.7	<3.2	<3.2	<3.2	<10	<4.7	<4.7	<4.7	<4.7	<1
carbon tetrachloride	<2.8	<1.5	<1.5	<1.5	<10	<2.8	<2.8	<2.8	<2.8	<1
chlorobenzene	<6	<0.6	53	1	24	<6	<6	<6	<6	<1
chlorodibromomethane	<3.1	<2.0	<2.0	<2.0	<10	<3.1	<3.1	<3.1	<3.1	<1
chloroethane	<10	<2.4	<2.4	<2.4	<10	<10	<10	<10	<10	<1
2-chloroethylvinyl ether	<10	<5.9	<5.9	<5.9	<10	<10	<10	<10	<10	<1
chloroform	<1.6	<0.8	<0.8	<0.8	<10	<1.6	<1.6	<1.6	<1.6	<1
dichlorobromomethane	<2.2	<1.1	<1.1	<1.1	<10	<2.2	<2.2	<2.2	<2.2	<1
dichlorodifluoromethane	<10	NA	NA	NA	<10	<10	<10	<10	<10	<1
1,1-dichloroethane	<4.7	<0.8	<0.8	<0.8	<10	<4.7	<4.7	<4.7	<4.7	<1
1,2-dichloroethane	<2.8	<1.5	<1.5	<1.5	<10	<2.8	<2.8	<2.8	<2.8	<1
1,1-dichloroethylene	<2.8	<1.9	<1.9	<1.9	<10	<2.8	<2.8	<2.8	<2.8	<1
1,2-dichloropropane	<6	<1.5	<1.5	<1.5	<10	<6	<6	<6	<6	<1
cis-1,3-dichloropropylene	<5	<1.5	<1.5	<1.5	<10	<5	<5	<5	<5	<1
trans-1,3-dichloropropylene	<10	<1.5	<1.5	<1.5	<10	<10	<10	<10	<10	<1
ethylbenzene	<7.2	<0.4	1	<0.4	<10	<7.2	<7.2	<7.2	<7.2	<1
methyl bromide	<10	<1.5	<1.5	<1.5	<10	<10	<10	<10	<10	<1
methyl chloride	<10	<1.6	<1.6	<1.6	<10	<10	<10	<10	<10	<1
methylene chloride	<2.8	20	39	15	<10	<2.8	3.8	<2.8	6.5	53
1,1,2,2-tetrachloroethane	<6.9	<1.4	<1.4	<1.4	<10	<6.9	<6.9	<6.9	<6.9	<1
tetrachloroethylene	<4.1	<1.5	<1.5	<1.5	<10	<4.1	<4.1	<4.1	<4.1	<1
toluene	<6	3	1	<0.4	<10	<6	<6	<6	<6	2
1,2-trans-dichloroethylene	<1.6	<1.5	<1.5	<1.5	<10	<1.6	<1.6	<1.6	<1.6	<1
1,1,1-trichloroethane	<3.8	<1.2	<1.2	<1.2	<10	<3.8	<3.8	<3.8	<3.8	<1
1,1,2-trichloroethane	<5	<1.6	<1.6	<1.6	<10	<5	<5	<5	<5	<1
trichloroethylene	<1.9	<1.3	<1.3	<1.3	<10	<1.9	<1.9	<1.9	<1.9	<1
trichlorofluoromethane	<10	<1.2	<1.2	<1.2	<10	<10	<10	<10	<10	<1
vinyl chloride	<10	<1.2	<1.2	<1.2	<10	<10	<10	<10	<10	<1
Sub Total 1	0	23	94	16	52	0	3.8	0	6.5	55
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
methyl isoamyl ketone	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
m-xylene	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-xylene/p-xylene	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total VOC's Analyzed	0	23	94	16	52	0	3.8	0	6.5	55

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, Il. ***

Well Number:	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Lab Blank
Date:	6/84	9/84	9/84	9/84	11/84	2/85	5/85	11/85	2/86	11/83
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	NA	NA	NA	NA	<100	<100	<100	<100	NA	<1
acrylonitrile	NA	NA	NA	NA	<100	<100	<100	<100	NA	<1
benzene	<0.5	1	31	30	<10	<4.4	<4.4	<4.4	NA	<1
bis (chloromethyl) ether	<1.5	<1.5	<1.5	<1.5	<10	<10	<10	<10	NA	<1
bromoform	<3.2	<3.2	<3.2	<3.2	<10	<4.7	<4.7	<4.7	NA	<1
carbon tetrachloride	<1.5	<1.5	<1.5	<1.5	<10	<2.8	<2.8	<2.8	NA	<1
chlorobenzene	2	<0.6	<0.6	<0.6	<10	<6	<6	<6	NA	<1
chlorodibromomethane	<2.0	<2.0	<2.0	<2.0	<10	<3.1	<3.1	<3.1	NA	<1
chloroethane	<2.4	4	<2.4	<2.4	<10	<10	<10	<10	NA	<1
2-chloroethylvinyl ether	<5.9	<5.9	<5.9	<5.9	<10	<10	<10	<10	NA	<1
chloroform	<0.8	2	<0.8	<0.8	<10	<1.6	<1.6	<1.6	NA	<1
dichlorobromomethane	<1.1	<1.1	<1.1	<1.1	<10	<2.2	<2.2	<2.2	NA	<1
dichlorodifluoromethane	NA	NA	NA	NA	<10	<10	<10	<10	NA	<1
1,1-dichloroethane	<0.8	<0.8	<0.8	<0.8	<10	<4.7	<4.7	<4.7	NA	<1
1,2-dichloroethane	<1.5	<1.5	<1.5	<1.5	<10	<2.8	<2.8	<2.8	NA	<1
1,1-dichloroethylene	<1.9	4	2	2	<10	<2.8	<2.8	<2.8	NA	<1
1,2-dichloropropane	<1.5	<1.5	<1.5	<1.5	<10	<6	<6	<6	NA	<1
cis-1,3-dichloropropylene	<1.5	<1.5	<1.5	<1.5	<10	<5	<5	<5	NA	<1
s-1,3-dichloropropylene	<1.5	<1.5	<1.5	<1.5	<10	<10	<10	<10	NA	<1
benzene	<0.4	<0.4	<0.4	<0.4	<10	<7.2	<7.2	<7.2	NA	<1
methyl bromide	<1.5	3	<1.5	<1.5	<10	<10	<10	<10	NA	<1
methyl chloride	<1.6	5	<1.6	<1.6	<10	<10	<10	<10	NA	<1
methylene chloride	18	130	44	32	<10	4	3.4	<2.8	NA	34
1,1,2,2-tetrachloroethane	<1.4	<1.4	<1.4	<1.4	<10	<6.9	<6.9	<6.9	NA	<1
tetrachloroethylene	<1.5	<1.5	<1.5	<1.5	<10	<4.1	<4.1	<4.1	NA	<1
toluene	3	1	1	1	<10	<6	<6	<6	NA	<1
1,2-trans-dichloroethylene	<1.5	2	<1.5	<1.5	<10	<1.6	<1.6	<1.6	NA	<1
1,1,1-trichloroethane	<1.2	<1.2	<1.2	<1.2	<10	<3.8	<3.8	<3.8	NA	<1
1,1,2-trichloroethane	<1.6	<1.6	<1.6	<1.6	<10	<5	<5	<5	NA	<1
trichloroethylene	<1.3	<1.3	<1.3	<1.3	<10	<1.9	<1.9	<1.9	NA	<1
trichlorofluoromethane	<1.2	<1.2	<1.2	<1.2	<10	<10	<10	<10	NA	<1
vinyl chloride	<1.2	6	<1.2	<1.2	<10	<10	<10	<10	NA	<1
Sub Total 1	23	158	78	65	0	4	3.4	0	NA	34
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
methyl isoamyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m-xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-xylene/p-xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total VOC's Analyzed	23	158	78	65	0	4	3.4	0	0	34

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, Il. ***

Well Number:	Lab Blank	Lab Blank	Lab Blank	Lab Blank	Lab Blank	Lab Blank	Lab Blank	Lab Blank	Lab Blank	Lab Blank
Date:	11/83	5/84	5/84	9/84	9/84	9/84	9/84	9/84	9/84	9/84
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L										
acrolein	<1	<1	<1	NA	NA	NA	NA	NA	NA	NA
acrylonitrile	<1	<1	<1	NA	NA	NA	NA	NA	NA	NA
benzene	<1	.2	<1	<0.5	29	21	19	<0.5	<0.5	<0.5
bis (chloromethyl) ether	<1	<1	<1	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
bromoform	<1	<1	<1	<3.2	<3.2	<3.2	<3.2	<3.2	<3.2	<3.2
carbon tetrachloride	<1	<1	<1	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
chlorobenzene	<1	<1	<1	<0.6	<0.6	1	1	<0.6	<0.6	1
chlorodibromomethane	<1	<1	<1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
chloroethane	<1	<1	<1	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4
2-chloroethylvinyl ether	<1	<1	<1	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
chloroform	1	<1	<1	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
dichlorobromomethane	<1	<1	<1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
dichlorodifluoromethane	<1	<1	<1	NA	NA	NA	NA	NA	NA	NA
1,1-dichloroethane	<1	<1	<1	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
1,2-dichloroethane	<1	<1	<1	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
1,1-dichloroethylene	<1	<1	<1	<1.9	1	1	1	<1.9	<1.9	<1.9
1,2-dichloropropane	<1	<1	<1	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
cis-1,3-dichloropropylene	<1	<1	<1	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
trans-1,3-dichloropropylene	<1	<1	<1	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
ethylbenzene	<1	<1	<1	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
methyl bromide	<1	<1	<1	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
methyl chloride	<1	<1	<1	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
methylene chloride	26	27	14	<1.1	33	42	35	2	3	15
1,1,2,2-tetrachloroethane	<1	<1	<1	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4
tetrachloroethylene	<1	<1	<1	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
toluene	<1	2	2	<0.4	1	1	1	<0.4	<0.4	<0.4
1,2-trans-dichloroethylene	<1	<1	<1	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
1,1,1-trichloroethane	<1	5	<1	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
1,1,2-trichloroethane	<1	<1	<1	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
trichloroethylene	<1	2	1	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3
trichlorofluoromethane	<1	<1	<1	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
vinyl chloride	<1	<1	<1	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
Sub Total 1	27	38	17	0	64	66	57	2	3	16
Miscellaneous Volatile Organic Compounds										
methyl-iso-butyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
methyl isoamyl ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m-xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-xylene/p-xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sub Total 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total VOC's Analyzed	27	38	17	0	64	66	57	2	3	16

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, IL. ***

Well Number:	Lab Blank	Lab Blank	Lab Blank	Lab Blank	Lab Blank	Lab Blank
Date:	9/84	9/84	9/84	9/84	9/84	9/84
USEPA Priority Pollutant Volatile Organic Compounds concentrations are in ug/L						
acrolein	NA	NA	NA	NA	NA	NA
acrylonitrile	NA	NA	NA	NA	NA	NA
benzene	4	3	8	<0.5	<0.5	34
bis (chloromethyl) ether	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
bromoform	<3.2	<3.2	<3.2	<3.2	<3.2	<3.2
carbon tetrachloride	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
chlorobenzene	<0.6	<0.6	<0.6	53	<0.6	<0.6
chlorodibromomethane	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
chloroethane	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4
2-chloroethylvinyl ether	<5.9	<5.9	<5.9	<5.9	<5.9	<5.9
chloroform	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
dichlorobromomethane	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
dichlorodifluoromethane	NA	NA	NA	NA	NA	NA
1,1-dichloroethane	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
1,2-dichloroethane	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
1,1-dichloroethylene	<1.9	<1.9	<1.9	<1.9	<1.9	2
1,2-dichloropropane	15	<1.5	<1.5	<1.5	<1.5	<1.5
cis-1,3-dichloropropylene	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
trans-1,3-dichloropropylene	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
ethylbenzene	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
methyl bromide	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
methyl chloride	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
methylene chloride	15	<1.1	24	39	6	50
1,1,2,2-tetrachloroethane	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4
tetrachloroethylene	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
toluene	1	1	1	1	<0.4	1
1,2-trans-dichloroethylene	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
1,1,1-trichloroethane	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
1,1,2-trichloroethane	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
trichloroethylene	<1.3	<1.3	1	<1.3	<1.3	<1.3
trichlorofluoromethane	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
vinyl chloride	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
Sub Total 1	35	4	34	93	6	87
Miscellaneous Volatile Organic Compounds						
methyl-iso-butyl ketone	NA	NA	NA	NA	NA	NA
methyl isoamyl ketone	NA	NA	NA	NA	NA	NA
m-xylene	NA	NA	NA	NA	NA	NA
o-xylene/p-xylene	NA	NA	NA	NA	NA	NA
Sub Total 2	NA	NA	NA	NA	NA	NA
Total VOC's Analyzed	35	4	34	93	6	87

Table E-1. Summary of Volatile Organic Compounds in Ground Water, W.G. Krummrich Plant, Monsanto Company, Sauget, Il. ***

NA - Not analyzed.

* - Replicate Analyses

** - Prior to analysis, this sample was held by Envirodyne Engineers, Inc. longer than the maximum allowable USEPA holding time.

*** - Envirodyne Engineers, Inc. (St. Louis, MO.) provided the laboratory services for the sampling rounds conducted between November, 1983 and September, 1984, with the exception of the January through May, 1984 sampling rounds conducted in the W.G. Krummrich Landfill. These wells are designated as the "B" series (i.e. B-22A) and the "P" series (i.e. P-7) and D'Appolonia (currently IT Corporation), Pittsburgh, Pa., provided the chemical results. ETC (Edison, NJ) performed the analyses for the November 1984 through February 1986 sampling programs.

† - Replicate analysis was performed by ETC.

a) - Envirodyne Engineers, Inc. reported 10 ug/L and 2 ug/L for wells GM-16A and GM-16B, respectively. Their results did not differentiate between the xylene compounds.

b) - Envirodyne Engineers, Inc. reported 4 ug/L, 18 ug/L and 10 ug/L for wells GM-25B, GM-27B and GM-27C, respectively. Their results did not differentiate between the xylene compounds.

c) - Envirodyne Engineers, Inc. reported 66 ug/L, greater than 119 ug/L and 1 ug/L for wells GM-28B, GM-28C and GM-30, respectively. Their results did not differentiate between the xylene compounds.

d) - Envirodyne Engineers, Inc. reported 1,630 ug/L and 12 ug/L for wells B-30B and B-31C, respectively. Their results did not differentiate between the xylene compounds.

e) - Envirodyne Engineers, Inc. reported 8 ug/L for well GM-23. The result did not differentiate between the xylene compounds.

< - Indicates that the compound was not detected at the detection limit which is the value shown next to the symbol.

Appendix 14

Historical Groundwater Data

Table 4
Site Data Summary Statistics

CHEMICAL NAME	Count	Min	Max	ArithMean	GeoMean	*std. Dev*	95% CI
1,1,1,2-Tetrachloroethane	55	0	0	0	0	0	0
1,1,1-Trichloroethane	113	0	0	0	0	0	0
1,1,2,2-Tetrachloroethane	113	0	0	0	0	0	0
1,1,2-Trichloroethane	113	0	0	0	0	0	0
1,1-Dichloroethane	113	0	0	0	0	0	0
1,1-Dichloroethene	113	0	0	0	0	0	0
1,1-Dichloropropylene	55	0	0	0	0	0	0
1,2,3-Trichlorobenzene	55	0	260000	31215	155	158671	41934
1,2,3-Trichloropropane	55	0	0	0	0	0	0
1,2,4-Trichlorobenzene	163	0	7200000	92846	481	609577	93580
1,2,4-Trimethylbenzene	55	0	0	0	0	0	0
1,2-Dibromo-3-chloropropane	55	0	0	0	0	0	0
1,2-Dibromoethane (EDB)	55	0	0	0	0	0	0
1,2-Dichlorobenzene	108	0	420000	20804	1710	64972	12254
1,2-Dichloroethane	113	0	5000	21390	304	118235	21800
1,2-Dichloropropane	113	0	0	0	0	0	0
1,3,5-Trimethylbenzene	55	0	0	0	0	0	0
1,3-Dichlorobenzene	108	0	5000000	6607	625	42801	8072
1,3-Dichloropropane	55	0	0	0	0	0	0
1,4-Dichlorobenzene	108	0	4000000	58079	1991	541585	102141
2,2-Dichloropropane	55	0	0	0	0	0	0
2,2'-Oxybis(1-Chloropropane) (bis-2-chlor	53	0	0	0	0	0	0
2,4,5-Trichlorophenol	108	0	350	6451	573	42814	8075
2,4,6-Trichlorophenol	108	0	2400	6476	590	42811	8074
2,4-Dichlorophenol	108	0	490	6454	579	42813	8074
2,4-Dimethylphenol	108	0	610	6452	574	42814	8075
2,4-Dinitrophenol	108	0	0	0	0	0	0
2,4-Dinitrotoluene	108	0	0	0	0	0	0
2,6-Dinitrotoluene	108	0	0	0	0	0	0
2-Butanone (MEK)	113	0	415	109793	1338	626269	115470
2-Chloronaphthalene	108	0	0	0	0	0	0
2-Chlorophenol	108	0	3600	6481	584	42811	8074
2-Chlorotoluene	55	0	12000	27402	175	155489	41093
2-Hexanone	58	0	0	0	0	0	0
2-Methyl-4,6-dinitrophenol	55	0	0	0	0	0	0
2-Methylnaphthalene	108	0	10000	6624	605	42807	8073
2-Methylphenol (o-cresol)	108	0	0	0	0	0	0
2-Nitroaniline	108	0	0	0	0	0	0
2-Nitrophenol	108	0	0	0	0	0	0
3&4-Methylphenol (m&p-cresol)	55	0	0	0	0	0	0
3,3'-Dichlorobenzidine	108	0	0	0	0	0	0
3-Methylphenol/4-Methylphenol (m&p-Cre	53	0	0	0	0	0	0
3-Nitroaniline	108	0	0	0	0	0	0
4,6-Dinitro-2-methylphenol	53	0	0	0	0	0	0
4-Bromophenyl phenyl ether	55	0	0	0	0	0	0
4-Bromophenylphenyl ether	53	0	0	0	0	0	0
4-Chloro-3-methylphenol	108	0	0	0	0	0	0
4-Chloroaniline	108	0	16000	13362	1216	87553	16512
4-Chlorophenylphenyl ether	108	0	0	0	0	0	0
4-Chlorotoluene	55	0	4300	27173	168	155519	41101
4-Methyl-2-pentanone (MIBK)	113	0	1100	109793	1293	612552	112941
4-Nitroaniline	108	0	0	0	0	0	0
4-Nitrophenol	108	0	0	0	0	0	0
Acenaphthene	108	0	480	6451	571	42814	8075

Table 4
Site Data Summary Statistics

CHEMICAL NAME	Count	Min	Max	ArithMean	GeoMean	*std. Dev*	95% CI
Acenaphthylene	108	0	0	0	0	0	0
Acetone	113	0	460	215097	2399	1208760	222868
Anthracene	108	0	1200	7877	584	42812	8074
Aroclor-1016	33	0	0	0	0	0	0
Aroclor-1221	33	0	0	0	0	0	0
Aroclor-1232	33	0	0	0	0	0	0
Aroclor-1242	33	0	5000000	160127	84	870206	296902
Aroclor-1254	33	0	2300000	74746	157	400115	136513
Aroclor-1260	33	0	1900000	61148	151	330440	112741
Benzene	113	0	1200000	60110	712	186482	34383
Benzidine	55	0	0	0	0	0	0
Benzo(a)anthracene	108	0	1900	6480	596	42810	8074
Benzo(a)pyrene	108	0	2200	6482	601	42810	8074
Benzo(b)fluoranthene	108	0	2400	6496	613	42808	8073
Benzo(g,h,i)perylene	108	0	1800	6463	584	42812	8074
Benzo(k)fluoranthene	108	0	730	6459	584	42813	8074
Benzoic acid	55	0	0	0	0	0	0
Benzyl alcohol	55	0	6200	10045	653	59373	15691
bis(2-Chloroethoxy)methane	108	0	0	0	0	0	0
bis(2-Chloroethyl)ether	108	0	0	0	0	0	0
bis(2-Chloroisopropyl)ether	55	0	0	0	0	0	0
bis(2-Ethylhexyl)phthalate	108	0	1800	6478	605	42810	8074
Bromobenzene	55	0	0	0	0	0	0
Bromochloromethane	55	0	0	0	0	0	0
Bromodichloromethane	113	0	0	0	0	0	0
Bromoform	113	0	0	0	0	0	0
Bromomethane	55	0	0	0	0	0	0
Bromomethane (Methyl bromide)	58	0	0	0	0	0	0
Butylbenzylphthalate	108	0	2500	6470	581	42812	8074
Carbazole	53	0	0	0	0	0	0
Carbon disulfide	58	0	16	15868	565	67034	17252
Carbon tetrachloride	113	0	0	0	0	0	0
Chlorobenzene	113	0	30000000	749230	1709	3633868	670004
Chlorodibromomethane	55	0	0	0	0	0	0
Chloroethane	113	0	0	0	0	0	0
Chloroform	113	0	240	21334	297	118244	21802
Chloromethane	113	0	0	0	0	0	0
Chrysene	108	0	2100	6469	588	42811	8074
Cis/Trans-1,2-Dichloroethene	58	0	0	0	0	0	0
cis-1,2-Dichloroethene	55	0	0	0	0	0	0
cis-1,3-Dichloropropene	58	0	0	0	0	0	0
Dibenzo(a,h)anthracene	108	0	540	6451	573	42814	8075
Dibenzofuran	108	0	0	0	0	0	0
Dibromochloromethane	58	0	0	0	0	0	0
Dibromomethane	55	0	0	0	0	0	0
Dichlorodifluoromethane	55	0	0	0	0	0	0
Diethylphthalate	108	0	0	0	0	0	0
Dimethylphthalate	108	0	0	0	0	0	0
Di-n-butylphthalate	108	0	0	0	0	0	0
Di-n-octylphthalate	108	0	3900	6483	562	42811	8074
Ethylbenzene	113	0	3300000	43032	358	313388	57782
Fluoranthene	108	0	2800	6515	623	42806	8073
Fluorene	108	0	560	6451	572	42814	8075
Hexachlorobenzene	108	0	1100	6467	593	42812	8074

Table 4
Site Data Summary Statistics

CHEMICAL NAME	Count	Min	Max	ArithMean	GeoMean	*std. Dev*	95% CI
Hexachlorobutadiene	163	0	260	13416	341	96798	14860
Hexachlorocyclopentadiene	108	0	0	0	0	0	0
Hexachloroethane	108	0	0	0	0	0	0
Indeno(1,2,3-cd)pyrene	108	0	2200	6464	579	42812	8074
Isophorone	108	0	0	0	0	0	0
Isopropylbenzene	55	0	29	27097	155	155531	41104
m&p-Xylene	55	0	15000000	279685	176	2021751	534311
Methylene chloride (Dichloromethane)	113	0	350	21334	294	118244	21802
Naphthalene	163	0	6900	13464	340	96793	14859
n-Butylbenzene	55	0	0	0	0	0	0
Nitrobenzene	108	0	0	0	0	0	0
N-Nitrosodimethylamine	55	0	0	0	0	0	0
n-Nitrosodi-n-propylamine	55	0	0	0	0	0	0
N-Nitroso-di-n-propylamine	53	0	0	0	0	0	0
N-Nitrosodiphenylamine/Diphenylamine	108	0	0	0	0	0	0
n-Propylbenzene	55	0	0	0	0	0	0
o-Xylene	55	0	38000000	697993	191	5122989	1353909
Pentachlorophenol	108	0	1900000	65579	4536	315050	59418
Phenanthrene	108	0	4700	6512	607	42807	8073
Phenol	108	0	1700	6490	612	42809	8074
p-Isopropyltoluene	55	0	0	0	0	0	0
Pyrene	108	0	3800	6515	616	42806	8073
sec-Butylbenzene	55	0	0	0	0	0	0
Styrene	113	0	0	0	0	0	0
tert-Butylbenzene	55	0	980	27109	152	155529	41103
Tetrachloroethene	113	0	830	21341	309	118243	21801
Toluene	113	0	220000	23864	327	119646	22060
trans-1,2-Dichloroethene	55	0	0	0	0	0	0
trans-1,3-Dichloropropene	58	0	0	0	0	0	0
Trichloroethene	113	0	4.4	21333	293	118244	21802
Trichlorofluoromethane	55	0	1600000	0	0	0	0
Vinyl chloride	113	0	0	42106	#NUM!	231960	42768
Xylenes, Total	58	0	1600000	110506	2143	323533	83263

Table 4
Site Soil Data Summary

	BBU-B1 (6-8')		BBU-B10 (6-8')		BBU-B11 (6-8')	
1,1,1,2-Tetrachloroethane	27	U	33	U	270	U
1,1,1-Trichloroethane	27	U	33	U	270	U
1,1,2,2-Tetrachloroethane	27	U	33	U	270	U
1,1,2-Trichloroethane	27	U	33	U	270	U
1,1-Dichloroethane	27	U	33	U	270	U
1,1-Dichloroethene	27	U	33	U	270	U
1,1-Dichloropropylene	27	U	33	U	270	U
1,2,3-Trichlorobenzene	27	U	33	U	270	U
1,2,3-Trichloropropane	27	U	33	U	270	U
1,2,4-Trichlorobenzene	27	U	33	U	270	U
1,2,4-Trichlorobenzene	420	U	440	U	440	U
1,2,4-Trimethylbenzene	27	U	33	U	270	U
1,2-Dibromo-3-chloropropane	27	U	33	U	270	U
1,2-Dibromoethane (EDB)	27	U	33	U	270	U
1,2-Dichlorobenzene	420	U	440	U	440	U
1,2-Dichloroethane	27	U	33	U	270	U
1,2-Dichloropropane	27	U	33	U	270	U
1,3,5-Trimethylbenzene	27	U	33	U	270	U
1,3-Dichlorobenzene	420	U	440	U	440	U
1,3-Dichloropropane	27	U	33	U	270	U
1,4-Dichlorobenzene	420	U	580		440	U
2,2-Dichloropropane	27	U	33	U	270	U
2,2'-Oxybis(1-Chloropropane)	NA		NA		NA	
2,4,5-Trichlorophenol	420	U	440	U	440	U
2,4,6-Trichlorophenol	420	U	440	U	440	U
2,4-Dichlorophenol	420	U	440	U	440	U
2,4-Dimethylphenol	420	U	440	U	440	U
2,4-Dinitrophenol	2200	U	2300	U	2300	U
2,4-Dinitrotoluene	420	U	440	U	440	U
2,6-Dinitrotoluene	420	U	440	U	440	U
2-Butanone (MEK)	140	U	415		1400	U
2-Chloronaphthalene	420	U	440	U	440	U
2-Chlorophenol	420	U	440	U	440	U
2-Chlorotoluene	27	U	33	U	270	U
2-Hexanone	NA		NA		NA	
2-Methyl-4,6-dinitrophenol	2200	U	2300	U	2300	U
2-Methylnaphthalene	420	U	440	U	440	U
2-Methylphenol (o-cresol)	420	U	440	U	440	U
2-Nitroaniline	2200	U	2300	U	2300	U
2-Nitrophenol	420	U	440	U	440	U
3&4-Methylphenol (m&p-cresol)	420	U	440	U	440	U
3,3'-Dichlorobenzidine	850	U	890	U	890	U
3-Nitroaniline	2200	U	2300	U	2300	U
4,6-Dinitro-2-methylphenol	NA		NA		NA	
4-Bromophenyl phenyl ether	420	U	440	U	440	U
4-Chloro-3-methylphenol	420	U	440	U	440	U
4-Chloroaniline	850	U	890	U	890	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B1 (6-8')		BBU-B10 (6-8')		BBU-B11 (6-8')	
4-Chlorophenylphenyl ether	420	U	440	U	440	U
4-Chlorotoluene	27	U	33	U	270	U
4-Methyl-2-pentanone (MIBK)	140	U	160	U	1400	U
4-Nitroaniline	2200	U	2300	U	2300	U
4-Nitrophenol	2200	U	2300	U	2300	U
Acenaphthene	420	U	440	U	440	U
Acenaphthylene	420	U	440	U	440	U
Acetone	270	U	260		2700	U
Anthracene	420	U	440	U	440	U
Aroclor-1016	NA		NA		NA	
Aroclor-1221	NA		NA		NA	
Aroclor-1232	NA		NA		NA	
Aroclor-1242	NA		NA		NA	
Aroclor-1248	NA		NA		NA	
Aroclor-1254	NA		NA		NA	
Aroclor-1260	NA		NA		NA	
Benzene	27	U	33	U	270	U
Benzidine	3500	U	3600	U	3600	U
Benzo(a)anthracene	420	U	440	U	440	U
Benzo(a)pyrene	420	U	440	U	440	U
Benzo(b)fluoranthene	420	U	440	U	440	U
Benzo(g,h,i)perylene	420	U	440	U	440	U
Benzo(k)fluoranthene	420	U	440	U	440	U
Benzoic acid	2200	U	2300	U	2300	U
Benzyl alcohol	420	U	440	U	440	U
bis(2-Chloroethoxy)methane	420	U	440	U	440	U
bis(2-Chloroethyl)ether	420	U	440	U	440	U
bis(2-Chloroisopropyl)ether	420	U	440	U	440	U
bis(2-Ethylhexyl)phthalate	420	U	440	U	540	
Bromobenzene	27	U	33	U	270	U
Bromochloromethane	27	U	33	U	270	U
Bromodichloromethane	27	U	33	U	270	U
Bromoform	27	U	33	U	270	U
Bromomethane	54	U	67	U	540	U
Butylbenzylphthalate	420	U	440	U	440	U
Carbazole	NA		NA		NA	
Carbon disulfide	NA		NA		NA	
Carbon tetrachloride	27	U	33	U	270	U
Chlorobenzene	71		94		270	U
Chlorodibromomethane	27	U	33	U	270	U
Chloroethane	54	U	67	U	540	U
Chloroform	27	U	33	U	270	U
Chloromethane	54	U	67	U	540	U
Chrysene	420	U	440	U	440	U
cis-1,2-Dichloroethene	27	U	33	U	270	U
cis-1,3-Dichloropropene	NA		NA		NA	
Dibenzo(a,h)anthracene	420	U	440	U	440	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B1 (6-8')		BBU-B10 (6-8')		BBU-B11 (6-8')	
Dibenzofuran	420	U	440	U	440	U
Dibromomethane	27	U	33	U	270	U
Dichlorodifluoromethane	27	U	33	U	270	U
Dibromochloromethane	NA		NA		NA	
Diethylphthalate	420	U	440	U	440	U
Dimethylphthalate	420	U	440	U	440	U
Di-n-butylphthalate	420	U	440	U	440	U
Di-n-octylphthalate	420	U	440	U	440	U
Ethylbenzene	27	U	33	U	270	U
Fluoranthene	420	U	440	U	440	U
Fluorene	420	U	440	U	440	U
Hexachlorobenzene	420	U	440	U	440	U
Hexachlorobutadiene	27	U	33	U	270	U
Hexachlorocyclopentadiene	420	U	440	U	440	U
Hexachloroethane	420	U	440	U	440	U
Indeno(1,2,3-cd)pyrene	420	U	440	U	440	U
Isophorone	420	U	440	U	440	U
Isopropylbenzene	27	U	33	U	270	U
m&p-Xylene	27	U	33	U	270	U
Methylene chloride (Dichloromethane)	27	U	33	U	270	U
Naphthalene	27	U	33	U	270	U
Naphthalene	420	U	440	U	440	U
n-Butylbenzene	27	U	33	U	270	U
Nitrobenzene	420	U	440	U	440	U
N-Nitrosodimethylamine	420	U	440	U	440	U
n-Nitrosodi-n-propylamine	420	U	440	U	440	U
N-Nitrosodiphenylamine/Diphenylamine	420	U	440	U	440	U
n-Propylbenzene	27	U	33	U	270	U
o-Xylene	27	U	33	U	270	U
Pentachlorophenol	2200	U	2300	U	2300	U
Phenanthrene	420	U	440	U	440	U
Phenol	420	U	440	U	440	U
p-Isopropyltoluene	27	U	33	U	270	U
Pyrene	420	U	440	U	440	U
sec-Butylbenzene	27	U	33	U	270	U
Styrene	27	U	33	U	270	U
tert-Butylbenzene	27	U	33	U	270	U
Tetrachloroethene	27	U	33	U	270	U
Toluene	27	U	33	U	270	U
trans-1,2-Dichloroethene	27	U	33	U	270	U
trans-1,3-Dichloropropene	NA		NA		NA	
Trichloroethene	27	U	33	U	270	U
Trichlorofluoromethane	27	U	33	U	270	U
Vinyl chloride	54	U	NA		540	U
Xylenes, Total	NA		NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B12 (6-8')		BBU-B14 (6-8')		BBU-B15 (5-7')	
1,1,1,2-Tetrachloroethane	270	U	6.4	U	6.4	U
1,1,1-Trichloroethane	270	U	6.4	U	6.4	U
1,1,2,2-Tetrachloroethane	270	U	6.4	U	6.4	U
1,1,2-Trichloroethane	270	U	6.4	U	6.4	U
1,1-Dichloroethane	270	U	6.4	U	6.4	U
1,1-Dichloroethene	270	U	6.4	U	6.4	U
1,1-Dichloropropylene	270	U	6.4	U	6.4	U
1,2,3-Trichlorobenzene	270	U	6.4	U	6.4	U
1,2,3-Trichloropropane	270	U	6.4	U	6.4	U
1,2,4-Trichlorobenzene	440		6.4	U	6.4	U
1,2,4-Trichlorobenzene	8900	U	440	U	420	U
1,2,4-Trimethylbenzene	270	U	6.4	U	6.4	U
1,2-Dibromo-3-chloropropane	270	U	6.4	U	6.4	U
1,2-Dibromoethane (EDB)	270	U	6.4	U	6.4	U
1,2-Dichlorobenzene	8900	U	440	U	420	U
1,2-Dichloroethane	270	U	6.4	U	6.4	U
1,2-Dichloropropane	270	U	6.4	U	6.4	U
1,3,5-Trimethylbenzene	270	U	6.4	U	6.4	U
1,3-Dichlorobenzene	8900	U	440	U	420	U
1,3-Dichloropropane	270	U	6.4	U	6.4	U
1,4-Dichlorobenzene	8900	U	440	U	900	
2,2-Dichloropropane	270	U	6.4	U	6.4	U
2,2'-Oxybis(1-Chloropropane)	NA		NA		NA	
2,4,5-Trichlorophenol	8900	U	440	U	420	U
2,4,6-Trichlorophenol	8900	U	440	U	420	U
2,4-Dichlorophenol	8900	U	440	U	420	U
2,4-Dimethylphenol	8900	U	440	U	420	U
2,4-Dinitrophenol	46000	U	2300	U	2200	U
2,4-Dinitrotoluene	8900	U	440	U	420	U
2,6-Dinitrotoluene	8900	U	440	U	420	U
2-Butanone (MEK)	1400	U	32	U	32	U
2-Chloronaphthalene	8900	U	440	U	420	U
2-Chlorophenol	8900	U	440	U	420	U
2-Chlorotoluene	270	U	6.4	U	6.4	U
2-Hexanone	NA		NA		NA	
2-Methyl-4,6-dinitrophenol	46000	U	2300	U	2200	U
2-Methylnaphthalene	8900	U	440	U	420	U
2-Methylphenol (o-cresol)	8900	U	440	U	420	U
2-Nitroaniline	46000	U	2300	U	2200	U
2-Nitrophenol	8900	U	440	U	420	U
3&4-Methylphenol (m&p-cresol)	8900	U	440	U	420	U
3,3'-Dichlorobenzidine	18000	U	880	U	840	U
3-Nitroaniline	46000	U	2300	U	2200	U
4,6-Dinitro-2-methylphenol	NA		NA		NA	
4-Bromophenyl phenyl ether	8900	U	440	U	420	U
4-Chloro-3-methylphenol	8900	U	440	U	420	U
4-Chloroaniline	18000	U	880	U	840	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B12 (6-8')		BBU-B14 (6-8')		BBU-B15 (5-7')	
4-Chlorophenylphenyl ether	8900	U	440	U	420	U
4-Chlorotoluene	270	U	6.4	U	6.4	U
4-Methyl-2-pentanone (MIBK)	1400	U	32	U	32	U
4-Nitroaniline	46000	U	2300	U	2200	U
4-Nitrophenol	46000	U	2300	U	2200	U
Acenaphthene	8900	U	440	U	420	U
Acenaphthylene	8900	U	440	U	420	U
Acetone	2700	U	110		64	U
Anthracene	8900	U	440	U	420	U
Aroclor-1016	NA		NA		NA	
Aroclor-1221	NA		NA		NA	
Aroclor-1232	NA		NA		NA	
Aroclor-1242	NA		NA		NA	
Aroclor-1248	NA		NA		NA	
Aroclor-1254	NA		NA		NA	
Aroclor-1260	NA		NA		NA	
Benzene	3100		6.4	U	6.4	U
Benzidine	73000	U	3600	U	3400	U
Benzo(a)anthracene	8900	U	440	U	420	U
Benzo(a)pyrene	8900	U	440	U	420	U
Benzo(b)fluoranthene	8900	U	440	U	420	U
Benzo(g,h,i)perylene	8900	U	440	U	420	U
Benzo(k)fluoranthene	8900	U	440	U	420	U
Benzoic acid	46000	U	2300	U	2200	U
Benzyl alcohol	8900	U	440	U	420	U
bis(2-Chloroethoxy)methane	8900	U	440	U	420	U
bis(2-Chloroethyl)ether	8900	U	440	U	420	U
bis(2-Chloroisopropyl)ether	8900	U	440	U	420	U
bis(2-Ethylhexyl)phthalate	8900	U	440	U	6.4	U
Bromobenzene	270	U	6.4	U	6.4	U
Bromochloromethane	270	U	6.4	U	6.4	U
Bromodichloromethane	270	U	6.4	U	6.4	U
Bromoform	270	U	6.4	U	13	U
Bromomethane	540	U	13	U	420	U
Butylbenzylphthalate	8900	U	440	U	6.4	U
Carbazole	NA		NA		NA	
Carbon disulfide	NA		NA		NA	
Carbon tetrachloride	270	U	6.4	U	6.4	U
Chlorobenzene	270	U	34		6.4	U
Chlorodibromomethane	270	U	6.4	U	13	U
Chloroethane	540	U	13	U	6.4	U
Chloroform	270	U	6.4	U	13	U
Chloromethane	540	U	13	U	420	U
Chrysene	8900	U	440	U	6.4	U
cis-1,2-Dichloroethene	270	U	6.4	U	420	U
cis-1,3-Dichloropropene	NA		NA		NA	
Dibenzo(a,h)anthracene	8900	U	440	U	420	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B12 (6-8')		BBU-B14 (6-8')		BBU-B15 (5-7')	
Dibenzofuran	8900	U	440	U	6.4	U
Dibromomethane	270	U	6.4	U	6.4	U
Dichlorodifluoromethane	270	U	6.4	U	420	U
Dibromochloromethane	NA		NA		NA	
Diethylphthalate	8900	U	440	U	420	U
Dimethylphthalate	8900	U	440	U	420	U
Di-n-butylphthalate	8900	U	440	U	420	U
Di-n-octylphthalate	8900	U	440	U	6.4	U
Ethylbenzene	270	U	6.4	U	420	U
Fluoranthene	8900	U	440	U	420	U
Fluorene	8900	U	440	U	420	U
Hexachlorobenzene	8900	U	440	U	6.4	U
Hexachlorobutadiene	270	U	6.4	U	420	U
Hexachlorocyclopentadiene	8900	U	440	U	420	U
Hexachloroethane	8900	U	440	U	420	U
Indeno(1,2,3-cd)pyrene	8900	U	440	U	420	U
Isophorone	8900	U	440	U	6.4	U
Isopropylbenzene	270	U	6.4	U	6.4	U
m&p-Xylene	270	U	6.4	U	6.4	U
Methylene chloride (Dichloromethane)	270	U	6.4	U	6.4	U
Naphthalene	270	U	6.4	U	420	U
Naphthalene	8900	U	440	U	6.4	U
n-Butylbenzene	270	U	6.4	U	420	U
Nitrobenzene	8900	U	440	U	420	U
N-Nitrosodimethylamine	8900	U	440	U	420	U
n-Nitrosodi-n-propylamine	8900	U	440	U	420	U
N-Nitrosodiphenylamine/Diphenylamine	8900	U	440	U	6.4	U
n-Propylbenzene	270	U	6.4	U	6.4	U
o-Xylene	270	U	6.4	U	2200	U
Pentachlorophenol	82000		2300	U	420	U
Phenanthrene	8900	U	440	U	420	U
Phenol	8900	U	440	U	6.4	U
p-Isopropyltoluene	270	U	6.4	U	420	U
Pyrene	8900	U	440	U	6.4	U
sec-Butylbenzene	270	U	6.4	U	6.4	U
Styrene	270	U	6.4	U	6.4	U
tert-Butylbenzene	270	U	6.4	U	6.4	U
Tetrachloroethene	270	U	6.4	U	6.4	U
Toluene	270	U	6.4	U	6.4	U
trans-1,2-Dichloroethene	270	U	6.4	U	6.4	U
trans-1,3-Dichloropropene	NA		NA		NA	
Trichloroethene	270	U	6.4	U	6.4	U
Trichlorofluoromethane	270	U	6.4	U	NA	
Vinyl chloride	NA		NA		NA	
Xylenes, Total	NA		NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B16 (4-6')		BBU-B17 (3-5')		BBU-B18 (2-4')	
1,1,1,2-Tetrachloroethane	6.3	U	5.9	U	6	U
1,1,1-Trichloroethane	6.3	U	5.9	U	6	U
1,1,2,2-Tetrachloroethane	6.3	U	5.9	U	6	U
1,1,2-Trichloroethane	6.3	U	5.9	U	6	U
1,1-Dichloroethane	6.3	U	5.9	U	6	U
1,1-Dichloroethene	6.3	U	5.9	U	6	U
1,1-Dichloropropylene	6.3	U	5.9	U	6	U
1,2,3-Trichlorobenzene	6.3	U	5.9	U	6	U
1,2,3-Trichloropropane	6.3	U	5.9	U	6	U
1,2,4-Trichlorobenzene	6.3	U	5.9	U	6	U
1,2,4-Trichlorobenzene	420	U	380	U	1300	
1,2,4-Trimethylbenzene	6.3	U	5.9	U	6	U
1,2-Dibromo-3-chloropropane	6.3	U	5.9	U	6	U
1,2-Dibromoethane (EDB)	6.3	U	5.9	U	6	U
1,2-Dichlorobenzene	420	U	380	U	3900	
1,2-Dichloroethane	6.3	U	5.9	U	6	U
1,2-Dichloropropane	6.3	U	5.9	U	6	U
1,3,5-Trimethylbenzene	6.3	U	5.9	U	6	U
1,3-Dichlorobenzene	420	U	380	U	800	U
1,3-Dichloropropane	6.3	U	5.9	U	6	U
1,4-Dichlorobenzene	420	U	380	U	5900	
2,2-Dichloropropane	6.3	U	5.9	U	6	U
2,2'-Oxybis(1-Chloropropane)	NA		NA		NA	
2,4,5-Trichlorophenol	420	U	380	U	800	U
2,4,6-Trichlorophenol	420	U	380	U	800	U
2,4-Dichlorophenol	420	U	380	U	800	U
2,4-Dimethylphenol	420	U	380	U	800	U
2,4-Dinitrophenol	2200	U	1900	U	4100	U
2,4-Dinitrotoluene	420	U	380	U	800	U
2,6-Dinitrotoluene	420	U	380	U	800	U
2-Butanone (MEK)	32	U	30	U	30	U
2-Chloronaphthalene	420	U	380	U	800	U
2-Chlorophenol	420	U	380	U	800	U
2-Chlorotoluene	6.3	U	5.9	U	6	U
2-Hexanone	NA		NA		NA	
2-Methyl-4,6-dinitrophenol	2200	U	1900	U	4100	U
2-Methylnaphthalene	420	U	380	U	800	U
2-Methylphenol (o-cresol)	420	U	380	U	800	U
2-Nitroaniline	2200	U	1900	U	4100	U
2-Nitrophenol	420	U	380	U	800	U
3&4-Methylphenol (m&p-cresol)	420	U	380	U	800	U
3,3'-Dichlorobenzidine	850	U	750	U	1600	U
3-Nitroaniline	2200	U	1900	U	4100	U
4,6-Dinitro-2-methylphenol	NA		NA		NA	
4-Bromophenyl phenyl ether	420	U	380	U	800	U
4-Chloro-3-methylphenol	420	U	380	U	800	U
4-Chloroaniline	850	U	750	U	1600	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B16 (4-6')		BBU-B17 (3-5')		BBU-B18 (2-4')	
4-Chlorophenylphenyl ether	420	U	380	U	800	U
4-Chlorotoluene	6.3	U	5.9	U	6	U
4-Methyl-2-pentanone (MIBK)	32	U	30	U	30	U
4-Nitroaniline	2200	U	1900	U	4100	U
4-Nitrophenol	2200	U	1900	U	4100	U
Acenaphthene	420	U	380	U	800	U
Acenaphthylene	420	U	380	U	800	U
Acetone	63	U	59	U	60	U
Anthracene	420	U	380	U	800	U
Aroclor-1016	NA		NA		NA	
Aroclor-1221	NA		NA		NA	
Aroclor-1232	NA		NA		NA	
Aroclor-1242	NA		NA		NA	
Aroclor-1248	NA		NA		NA	
Aroclor-1254	NA		NA		NA	
Aroclor-1260	NA		NA		NA	
Benzene	6.3	U	5.9	U	6	U
Benzidine	3500	U	3100	U	6600	U
Benzo(a)anthracene	420	U	380	U	800	U
Benzo(a)pyrene	420	U	380	U	800	U
Benzo(b)fluoranthene	420	U	380	U	800	U
Benzo(g,h,i)perylene	420	U	380	U	800	U
Benzo(k)fluoranthene	420	U	380	U	800	U
Benzoic acid	2200	U	1900	U	4100	U
Benzyl alcohol	420	U	380	U	800	U
bis(2-Chloroethoxy)methane	420	U	380	U	800	U
bis(2-Chloroethyl)ether	420	U	380	U	800	U
bis(2-Chloroisopropyl)ether	420	U	380	U	800	U
bis(2-Ethylhexyl)phthalate	420	U	380	U	800	U
Bromobenzene	6.3	U	5.9	U	6	U
Bromochloromethane	6.3	U	5.9	U	6	U
Bromodichloromethane	6.3	U	5.9	U	6	U
Bromoform	6.3	U	5.9	U	6	U
Bromomethane	12	U	12	U	12	U
Butylbenzylphthalate	420	U	380	U	800	U
Carbazole	NA		NA		NA	
Carbon disulfide	NA		NA		NA	
Carbon tetrachloride	6.3	U	5.9	U	6	U
Chlorobenzene	9.6		5.9		13	
Chlorodibromomethane	6.3	U	5.9	U	6	U
Chloroethane	12	U	12	U	12	U
Chloroform	6.3	U	5.9	U	6	U
Chloromethane	12	U	12	U	12	U
Chrysene	420	U	380	U	800	U
cis-1,2-Dichloroethene	6.3	U	5.9	U	6	U
cis-1,3-Dichloropropene	NA		NA		NA	
Dibenzo(a,h)anthracene	420	U	380	U	800	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B16 (4-6')		BBU-B17 (3-5')		BBU-B18 (2-4')	
Dibenzofuran	420	U	380	U	800	U
Dibromomethane	6.3	U	5.9	U	6	U
Dichlorodifluoromethane	6.3	U	5.9	U	6	U
Dibromochloromethane	NA		NA		NA	
Diethylphthalate	420	U	380	U	800	U
Dimethylphthalate	420	U	380	U	800	U
Di-n-butylphthalate	420	U	380	U	800	U
Di-n-octylphthalate	420	U	380	U	800	U
Ethylbenzene	6.3	U	5.9	U	6	U
Fluoranthene	420	U	380	U	800	U
Fluorene	420	U	380	U	800	U
Hexachlorobenzene	420	U	380	U	800	U
Hexachlorobutadiene	6.3	U	5.9	U	6	U
Hexachlorocyclopentadiene	420	U	380	U	800	U
Hexachloroethane	420	U	380	U	800	U
Indeno(1,2,3-cd)pyrene	420	U	380	U	800	U
Isophorone	420	U	380	U	800	U
Isopropylbenzene	6.3	U	5.9	U	6	U
m&p-Xylene	6.3	U	5.9	U	6	U
Methylene chloride (Dichloromethane)	6.3	U	5.9	U	6	U
Naphthalene	6.3	U	5.9	U	6	U
Naphthalene	420	U	380	U	800	U
n-Butylbenzene	6.3	U	5.9	U	6	U
Nitrobenzene	420	U	380	U	800	U
N-Nitrosodimethylamine	420	U	380	U	800	U
n-Nitrosodi-n-propylamine	420	U	380	U	800	U
N-Nitrosodiphenylamine/Diphenylamine	420	U	380	U	800	U
n-Propylbenzene	6.3	U	5.9	U	6	U
o-Xylene	6.3	U	5.9	U	6	U
Pentachlorophenol	2200	U	1900	U	5800	
Phenanthrene	420	U	380	U	800	U
Phenol	420	U	380	U	800	U
p-Isopropyltoluene	6.3	U	5.9	U	6	U
Pyrene	420	U	380	U	800	U
sec-Butylbenzene	6.3	U	5.9	U	6	U
Styrene	6.3	U	5.9	U	6	U
tert-Butylbenzene	6.3	U	5.9	U	6	U
Tetrachloroethene	6.3	U	5.9	U	6	U
Toluene	6.3	U	5.9	U	6	U
trans-1,2-Dichloroethene	6.3	U	5.9	U	6	U
trans-1,3-Dichloropropene	NA		NA		NA	
Trichloroethene	6.3	U	5.9	U	6	U
Trichlorofluoromethane	6.3	U	5.9	U	6	U
Vinyl chloride	NA		12	U	12	U
Xylenes, Total	NA		NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B18 (5-7')		BBU-B2(4-6')		BBU-B3(4-6')	
1,1,1,2-Tetrachloroethane	6800	U	6	U	11	U
1,1,1-Trichloroethane	6800	U	6	U	11	U
1,1,2,2-Tetrachloroethane	6800	U	6	U	11	U
1,1,2-Trichloroethane	6800	U	6	U	11	U
1,1-Dichloroethane	6800	U	6	U	11	U
1,1-Dichloroethene	6800	U	6	U	11	U
1,1-Dichloropropylene	6800	U	6	U	11	U
1,2,3-Trichlorobenzene	6800	U	6	U	11	U
1,2,3-Trichloropropane	6800	U	6	U	11	U
1,2,4-Trichlorobenzene	36000		6	U	11	U
1,2,4-Trichlorobenzene	8900	U	410	U	1800	U
1,2,4-Trimethylbenzene	6800	U	6	U	11	U
1,2-Dibromo-3-chloropropane	6800	U	6	U	11	U
1,2-Dibromoethane (EDB)	6800	U	6	U	11	U
1,2-Dichlorobenzene	21000		410	U	5800	
1,2-Dichloroethane	6800	U	6	U	11	U
1,2-Dichloropropane	6800	U	6	U	11	U
1,3,5-Trimethylbenzene	6800	U	6	U	11	U
1,3-Dichlorobenzene	8900	U	410	U	1800	U
1,3-Dichloropropane	6800	U	6	U	11	U
1,4-Dichlorobenzene	69000		410	U	16000	
2,2-Dichloropropane	6800	U	6	U	11	U
2,2'-Oxybis(1-Chloropropane)	NA		NA		NA	
2,4,5-Trichlorophenol	8900	U	410	U	1800	U
2,4,6-Trichlorophenol	8900	U	410	U	1800	U
2,4-Dichlorophenol	8900	U	410	U	1800	U
2,4-Dimethylphenol	8900	U	410	U	1800	U
2,4-Dinitrophenol	46000	U	2100	U	9400	U
2,4-Dinitrotoluene	8900	U	410	U	1800	U
2,6-Dinitrotoluene	8900	U	410	U	1800	U
2-Butanone (MEK)	34000	U	30	U	55	U
2-Chloronaphthalene	8900	U	410	U	1800	U
2-Chlorophenol	8900	U	410	U	1800	U
2-Chlorotoluene	6800	U	6	U	11	U
2-Hexanone	NA		NA		NA	
2-Methyl-4,6-dinitrophenol	46000	U	2100	U	9400	U
2-Methylnaphthalene	8900	U	410	U	1800	U
2-Methylphenol (o-cresol)	8900	U	410	U	1800	U
2-Nitroaniline	46000	U	2100	U	9400	U
2-Nitrophenol	8900	U	410	U	1800	U
3&4-Methylphenol (m&p-cresol)	8900	U	410	U	1800	U
3,3'-Dichlorobenzidine	18000	U	820	U	3700	U
3-Nitroaniline	46000	U	2100	U	9400	U
4,6-Dinitro-2-methylphenol	NA		NA		NA	
4-Bromophenyl phenyl ether	8900	U	410	U	1800	U
4-Chloro-3-methylphenol	8900	U	410	U	1800	U
4-Chloroaniline	18000	U	820	U	3700	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B18 (5-7')		BBU-B2(4-6')		BBU-B3(4-6')	
4-Chlorophenylphenyl ether	8900	U	410	U	1800	U
4-Chlorotoluene	6800	U	6	U	11	U
4-Methyl-2-pentanone (MIBK)	34000	U	30	U	55	U
4-Nitroaniline	46000	U	2100	U	9400	U
4-Nitrophenol	46000	U	2100	U	9400	U
Acenaphthene	8900	U	410	U	1800	U
Acenaphthylene	8900	U	410	U	1800	U
Acetone	68000	U	280		110	U
Anthracene	8900	U	410	U	1800	U
Aroclor-1016	NA		NA		92	U
Aroclor-1221	NA		NA		180	U
Aroclor-1232	NA		NA		92	U
Aroclor-1242	NA		NA		92	U
Aroclor-1248	NA		NA		210	
Aroclor-1254	NA		NA		420	
Aroclor-1260	NA		NA		860	
Benzene	240000		6	U	11	U
Benzidine	73000	U	3400	U	15000	U
Benzo(a)anthracene	8900	U	410	U	1900	
Benzo(a)pyrene	8900	U	410	U	1800	U
Benzo(b)fluoranthene	8900	U	410	U	2400	
Benzo(g,h,i)perylene	8900	U	410	U	1800	U
Benzo(k)fluoranthene	8900	U	410	U	1800	U
Benzoic acid	46000	U	2100	U	9400	U
Benzyl alcohol	8900	U	410	U	1800	U
bis(2-Chloroethoxy)methane	8900	U	410	U	1800	U
bis(2-Chloroethyl)ether	8900	U	410	U	1800	U
bis(2-Chloroisopropyl)ether	8900	U	410	U	1800	U
bis(2-Ethylhexyl)phthalate	8900	U	410	U	1800	U
Bromobenzene	6800	U	6	U	11	U
Bromochloromethane	6800	U	6	U	11	U
Bromodichloromethane	6800	U	6	U	11	U
Bromoform	6800	U	6	U	11	U
Bromomethane	14000	U	12	U	23	U
Butylbenzylphthalate	8900	U	410	U	1800	U
Carbazole	NA		NA		NA	
Carbon disulfide	NA		NA		NA	
Carbon tetrachloride	6800	U	6	U	11	U
Chlorobenzene	20000		28		11	U
Chlorodibromomethane	6800	U	6	U	11	U
Chloroethane	14000	U	12	U	23	U
Chloroform	6800	U	6	U	11	U
Chloromethane	14000	U	12	U	23	U
Chrysene	8900	U	410	U	2100	
cis-1,2-Dichloroethene	6800	U	6	U	11	U
cis-1,3-Dichloropropene	NA		NA		NA	
Dibenzo(a,h)anthracene	8900	U	410	U	1800	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B18 (5-7')		BBU-B2(4-6')		BBU-B3(4-6')	
Dibenzofuran	8900	U	410	U	1800	U
Dibromomethane	6800	U	6	U	11	U
Dichlorodifluoromethane	6800	U	6	U	11	U
Dibromochloromethane	NA		NA		NA	
Diethylphthalate	8900	U	410	U	1800	U
Dimethylphthalate	8900	U	410	U	1800	U
Di-n-butylphthalate	8900	U	410	U	1800	U
Di-n-octylphthalate	8900	U	410	U	1800	U
Ethylbenzene	6800	U	6	U	11	U
Fluoranthene	8900	U	410	U	2200	
Fluorene	8900	U	410	U	1800	U
Hexachlorobenzene	8900	U	410	U	1800	U
Hexachlorobutadiene	6800	U	6	U	11	U
Hexachlorocyclopentadiene	8900	U	410	U	1800	U
Hexachloroethane	8900	U	410	U	1800	U
Indeno(1,2,3-cd)pyrene	8900	U	410	U	1800	U
Isophorone	8900	U	410	U	1800	U
Isopropylbenzene	6800	U	6	U	11	U
m&p-Xylene	6800	U	6	U	11	U
Methylene chloride (Dichloromethane)	6800	U	6	U	11	U
Naphthalene	6800	U	6	U	11	U
Naphthalene	8900	U	410	U	1800	U
n-Butylbenzene	6800	U	6	U	11	U
Nitrobenzene	8900	U	410	U	1800	U
N-Nitrosodimethylamine	8900	U	410	U	1800	U
n-Nitrosodi-n-propylamine	8900	U	410	U	1800	U
N-Nitrosodiphenylamine/Diphenylamine	8900	U	410	U	1800	U
n-Propylbenzene	6800	U	6	U	11	U
o-Xylene	6800	U	6	U	11	U
Pentachlorophenol	46000	U	2100	U	9400	U
Phenanthrene	8900	U	410	U	1800	U
Phenol	8900	U	410	U	1800	U
p-Isopropyltoluene	6800	U	6	U	11	U
Pyrene	8900	U	410	U	2100	
sec-Butylbenzene	6800	U	6	U	11	U
Styrene	6800	U	6	U	11	U
tert-Butylbenzene	6800	U	6	U	11	U
Tetrachloroethene	6800	U	6	U	11	U
Toluene	6800	U	6	U	11	U
trans-1,2-Dichloroethene	6800	U	6	U	11	U
trans-1,3-Dichloropropene	NA		NA		NA	
Trichloroethene	6800	U	6	U	11	U
Trichlorofluoromethane	6800	U	6	U	11	U
Vinyl chloride	14000	U	12	U	23	U
Xylenes, Total	NA		NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B3(6-8")		BBU-B4(6-8")		BBU-B52(2-2.5')	
1,1,1,2-Tetrachloroethane	33	U	28	U	NA	
1,1,1-Trichloroethane	33	U	28	U	13	U
1,1,2,2-Tetrachloroethane	33	U	28	U	13	U
1,1,2-Trichloroethane	33	U	28	U	13	U
1,1-Dichloroethane	33	U	28	U	13	U
1,1-Dichloroethene	33	U	28	U	13	U
1,1-Dichloropropylene	33	U	28	U	NA	
1,2,3-Trichlorobenzene	33	U	28	U	NA	
1,2,3-Trichloropropane	33	U	28	U	NA	
1,2,4-Trichlorobenzene	33	U	28	U	NA	
1,2,4-Trichlorobenzene	460	U	440	U	NA	
1,2,4-Trimethylbenzene	33	U	28	U	NA	
1,2-Dibromo-3-chloropropane	33	U	28	U	NA	
1,2-Dibromoethane (EDB)	33	U	28	U	NA	
1,2-Dichlorobenzene	460	U	440	U	NA	
1,2-Dichloroethane	33	U	28	U	13	U
1,2-Dichloropropane	33	U	28	U	13	U
1,3,5-Trimethylbenzene	33	U	28	U	NA	
1,3-Dichlorobenzene	460	U	440	U	NA	
1,3-Dichloropropane	33	U	28	U	NA	
1,4-Dichlorobenzene	460		440	U	NA	
2,2-Dichloropropane	33	U	28	U	NA	
2,2'-Oxybis(1-Chloropropane)	NA		NA		NA	
2,4,5-Trichlorophenol	460	U	440	U	NA	
2,4,6-Trichlorophenol	460	U	440	U	NA	
2,4-Dichlorophenol	460	U	440	U	NA	
2,4-Dimethylphenol	460	U	440	U	NA	
2,4-Dinitrophenol	2400	U	2200	U	NA	
2,4-Dinitrotoluene	460	U	440	U	NA	
2,6-Dinitrotoluene	460	U	440	U	NA	
2-Butanone (MEK)	160	U	140	U	65	U
2-Chloronaphthalene	460	U	440	U	NA	
2-Chlorophenol	460	U	440	U	NA	
2-Chlorotoluene	33	U	28	U	NA	
2-Hexanone	NA		NA		65	U
2-Methyl-4,6-dinitrophenol	2400	U	2200	U	NA	
2-Methylnaphthalene	460	U	440	U	NA	
2-Methylphenol (o-cresol)	460	U	440	U	NA	
2-Nitroaniline	2400	U	2200	U	NA	
2-Nitrophenol	460	U	440	U	NA	
3&4-Methylphenol (m&p-cresol)	460	U	440	U	NA	
3,3'-Dichlorobenzidine	920	U	880	U	NA	
3-Nitroaniline	2400	U	2200	U	NA	
4,6-Dinitro-2-methylphenol	NA		NA		NA	
4-Bromophenyl phenyl ether	460	U	440	U	NA	
4-Chloro-3-methylphenol	460	U	440	U	NA	
4-Chloroaniline	920	U	880	U	NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B3(6-8")		BBU-B4(6-8")		BBU-B52(2-2.5')	
4-Chlorophenylphenyl ether	460	U	440	U	NA	
4-Chlorotoluene	33	U	28	U	NA	
4-Methyl-2-pentanone (MIBK)	160	U	140	U	65	U
4-Nitroaniline	2400	U	2200	U	NA	
4-Nitrophenol	2400	U	2200	U	NA	
Acenaphthene	460	U	440	U	NA	
Acenaphthylene	460	U	440	U	NA	
Acetone	330	U	280	U	130	U
Anthracene	460	U	440	U	NA	
Aroclor-1016	NA		NA		NA	
Aroclor-1221	NA		NA		NA	
Aroclor-1232	NA		NA		NA	
Aroclor-1242	NA		NA		NA	
Aroclor-1248	NA		NA		NA	
Aroclor-1254	NA		NA		NA	
Aroclor-1260	NA		NA		NA	
Benzene	33	U	28	U	13	U
Benzidine	3800	U	3600	U	NA	
Benzo(a)anthracene	460	U	440	U	NA	
Benzo(a)pyrene	460	U	440	U	NA	
Benzo(b)fluoranthene	460	U	440	U	NA	
Benzo(g,h,i)perylene	460	U	440	U	NA	
Benzo(k)fluoranthene	460	U	440	U	NA	
Benzoic acid	2400	U	2200	U	NA	
Benzyl alcohol	460	U	440	U	NA	
bis(2-Chloroethoxy)methane	460	U	440	U	NA	
bis(2-Chloroethyl)ether	460	U	440	U	NA	
bis(2-Chloroisopropyl)ether	460	U	440	U	NA	
bis(2-Ethylhexyl)phthalate	460	U	450		NA	
Bromobenzene	33	U	28	U	NA	
Bromochloromethane	33	U	28	U	NA	
Bromodichloromethane	33	U	28	U	13	U
Bromoform	33	U	28	U	13	U
Bromomethane	67	U	56	U	26	U
Butylbenzylphthalate	460	U	440	U	NA	
Carbazole	NA		NA		NA	
Carbon disulfide	NA		NA		16	
Carbon tetrachloride	33	U	28	U	13	U
Chlorobenzene	160		50		13	U
Chlorodibromomethane	33	U	28	U	NA	
Chloroethane	67	U	56	U	26	U
Chloroform	33	U	28	U	13	U
Chloromethane	67	U	56	U	26	U
Chrysene	460	U	440	U	NA	
cis-1,2-Dichloroethene	33	U	28	U	13	U
cis-1,3-Dichloropropene	NA		NA		13	U
Dibenzo(a,h)anthracene	460	U	440	U	NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B3(6-8")		BBU-B4(6-8")		BBU-B52(2-2.5')	
Dibenzofuran	460	U	440	U	NA	
Dibromomethane	33	U	28	U	NA	
Dichlorodifluoromethane	33	U	28	U	13	U
Dibromochloromethane	NA		NA		NA	
Diethylphthalate	460	U	440	U	NA	
Dimethylphthalate	460	U	440	U	NA	
Di-n-butylphthalate	460	U	440	U	NA	
Di-n-octylphthalate	460	U	440	U	NA	
Ethylbenzene	33	U	28	U	13	U
Fluoranthene	460	U	440	U	NA	
Fluorene	460	U	440	U	NA	
Hexachlorobenzene	460	U	440	U	NA	
Hexachlorobutadiene	33	U	28	U	NA	
Hexachlorocyclopentadiene	460	U	440	U	NA	
Hexachloroethane	460	U	440	U	NA	
Indeno(1,2,3-cd)pyrene	460	U	440	U	NA	
Isophorone	460	U	440	U	NA	
Isopropylbenzene	33	U	28	U	NA	
m&p-Xylene	33	U	28	U	NA	
Methylene chloride (Dichloromethane)	33	U	28	U	13	U
Naphthalene	33	U	28	U	NA	
Naphthalene	460	U	440	U	NA	
n-Butylbenzene	33	U	28	U	NA	
Nitrobenzene	460	U	440	U	NA	
N-Nitrosodimethylamine	460	U	440	U	NA	
n-Nitrosodi-n-propylamine	460	U	440	U	NA	
N-Nitrosodiphenylamine/Diphenylamine	460	U	440	U	NA	
n-Propylbenzene	33	U	28	U	NA	
o-Xylene	33	U	28	U	NA	
Pentachlorophenol	2400	U	2200	U	NA	
Phenanthrene	460	U	440	U	NA	
Phenol	460	U	440	U	NA	
p-Isopropyltoluene	33	U	28	U	NA	
Pyrene	460	U	440	U	NA	
sec-Butylbenzene	33	U	28	U	NA	
Styrene	33	U	28	U	13	U
tert-Butylbenzene	33	U	28	U	NA	
Tetrachloroethene	33	U	28	U	13	U
Toluene	33	U	28	U	13	U
trans-1,2-Dichloroethene	33	U	28	U	NA	
trans-1,3-Dichloropropene	NA		NA		13	U
Trichloroethene	33	U	28	U	13	U
Trichlorofluoromethane	33	U	28	U	NA	
Vinyl chloride	67	U	56	U	26	U
Xylenes, Total	NA		NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B52(3.5-4')		B53-11-13'		-B53-13-13.5'	
1,1,1,2-Tetrachloroethane	NA		NA		NA	
1,1,1-Trichloroethane	NA		NA		7	U
1,1,2,2-Tetrachloroethane	NA		NA		7	U
1,1,2-Trichloroethane	NA		NA		7	U
1,1-Dichloroethane	NA		NA		7	U
1,1-Dichloroethene	NA		NA		7	U
1,1-Dichloropropylene	NA		NA		NA	
1,2,3-Trichlorobenzene	NA		NA		NA	
1,2,3-Trichloropropane	NA		NA		NA	
1,2,4-Trichlorobenzene	410	U	2600		NA	
1,2,4-Trichlorobenzene	NA		NA		NA	
1,2,4-Trimethylbenzene	NA		NA		NA	
1,2-Dibromo-3-chloropropane	NA		NA		NA	
1,2-Dibromoethane (EDB)	NA		NA		NA	
1,2-Dichlorobenzene	410	U	360	U	NA	
1,2-Dichloroethane	NA		NA		7	U
1,2-Dichloropropane	NA		NA		7	U
1,3,5-Trimethylbenzene	NA		NA		NA	
1,3-Dichlorobenzene	410	U	360	U	NA	
1,3-Dichloropropane	NA		NA		NA	
1,4-Dichlorobenzene	410	U	360	U	NA	
2,2-Dichloropropane	NA		NA		NA	
2,2'-Oxybis(1-Chloropropane)	410	U	360	U	NA	
2,4,5-Trichlorophenol	410	U	360	U	NA	
2,4,6-Trichlorophenol	410	U	360	U	NA	
2,4-Dichlorophenol	410	U	360	U	NA	
2,4-Dimethylphenol	410	U	360	U	NA	
2,4-Dinitrophenol	2100	U	1900	U	NA	
2,4-Dinitrotoluene	410	U	360	U	NA	
2,6-Dinitrotoluene	410	U	360	U	NA	
2-Butanone (MEK)	NA		NA		35	U
2-Chloronaphthalene	410	U	360	U	NA	
2-Chlorophenol	410	U	360	U	NA	
2-Chlorotoluene	NA		NA		NA	
2-Hexanone	NA		NA		35	U
2-Methyl-4,6-dinitrophenol	NA		NA		NA	
2-Methylnaphthalene	410	U	360	U	NA	
2-Methylphenol (o-cresol)	410	U	360	U	NA	
2-Nitroaniline	2100	U	1900	U	NA	
2-Nitrophenol	410	U	360	U	NA	
3&4-Methylphenol (m&p-cresol)	410	U	360	U	NA	
3,3'-Dichlorobenzidine	820	U	730	U	NA	
3-Nitroaniline	2100	U	1900	U	NA	
4,6-Dinitro-2-methylphenol	2100	U	1900	U	NA	
4-Bromophenyl phenyl ether	410	U	360	U	NA	
4-Chloro-3-methylphenol	410	U	360	U	NA	
4-Chloroaniline	820	U	730	U	NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B52(3.5-4')		B53-11-13'		-B53-13-13.5'	
4-Chlorophenylphenyl ether	410	U	360	U	NA	
4-Chlorotoluene	NA		NA		NA	
4-Methyl-2-pentanone (MIBK)	NA		NA		35	U
4-Nitroaniline	2100	U	1900	U	NA	
4-Nitrophenol	2100	U	1900	U	NA	
Acenaphthene	410	U	360	U	NA	
Acenaphthylene	410	U	360	U	NA	
Acetone	NA		NA		70	U
Anthracene	410	U	360	U	NA	
Aroclor-1016	NA		NA		NA	
Aroclor-1221	NA		NA		NA	
Aroclor-1232	NA		NA		NA	
Aroclor-1242	NA		NA		NA	
Aroclor-1248	NA		NA		NA	
Aroclor-1254	NA		NA		NA	
Aroclor-1260	NA		NA		NA	
Benzene	NA		NA		7	U
Benzidine	NA		NA		NA	
Benzo(a)anthracene	410	U	360	U	NA	
Benzo(a)pyrene	410	U	360	U	NA	
Benzo(b)fluoranthene	410	U	360	U	NA	
Benzo(g,h,i)perylene	410	U	360	U	NA	
Benzo(k)fluoranthene	410	U	360	U	NA	
Benzoic acid	NA		NA		NA	
Benzyl alcohol	NA		NA		NA	
bis(2-Chloroethoxy)methane	410	U	360	U	NA	
bis(2-Chloroethyl)ether	410	U	360	U	NA	
bis(2-Chloroisopropyl)ether	NA		NA		NA	
bis(2-Ethylhexyl)phthalate	410	U	360	U	NA	
Bromobenzene	NA	U	NA		NA	
Bromochloromethane	NA	U	NA		NA	
Bromodichloromethane	NA	U	NA		7	U
Bromoform	NA	U	NA		7	U
Bromomethane	NA	U	NA		14	U
Butylbenzylphthalate	410	U	360	U	NA	
Carbazole	410	U	360	U	NA	
Carbon disulfide	NA		NA		7	U
Carbon tetrachloride	NA		NA		7	U
Chlorobenzene	NA		NA		5	
Chlorodibromomethane	NA		NA		NA	
Chloroethane	NA		NA		14	U
Chloroform	NA		NA		7	U
Chloromethane	NA		NA		14	U
Chrysene	410	U	360	U	NA	
cis-1,2-Dichloroethene	NA		NA		7	U
cis-1,3-Dichloropropene	NA		NA		7	U
Dibenzo(a,h)anthracene	410	U	360	U	NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B52(3.5-4')		B53-11-13'		-B53-13-13.5'	
Dibenzofuran	410	U	360	U	NA	
Dibromomethane	NA		NA		NA	
Dichlorodifluoromethane	NA		NA		7	U
Dibromochloromethane	NA		NA		NA	
Diethylphthalate	410	U	360	U	NA	
Dimethylphthalate	410	U	360	U	NA	
Di-n-butylphthalate	410	U	360	U	NA	
Di-n-octylphthalate	410	U	360	U	NA	
Ethylbenzene	NA		NA		7	U
Fluoranthene	410	U	360	U	NA	
Fluorene	410	U	360	U	NA	
Hexachlorobenzene	410	U	360	U	NA	
Hexachlorobutadiene	410	U	360	U	NA	
Hexachlorocyclopentadiene	410	U	360	U	NA	
Hexachloroethane	410	U	360	U	NA	
Indeno(1,2,3-cd)pyrene	410	U	360	U	NA	
Isophorone	410	U	360	U	NA	
Isopropylbenzene	NA		NA		NA	
m&p-Xylene	NA		NA		NA	
Methylene chloride (Dichloromethane)	NA		NA		7	U
Naphthalene	410	U	360	U	NA	
Naphthalene	NA		NA		NA	
n-Butylbenzene	NA		NA		NA	
Nitrobenzene	410	U	360	U	NA	
N-Nitrosodimethylamine	NA		NA		NA	
n-Nitrosodi-n-propylamine	410	U	360	U	NA	
N-Nitrosodiphenylamine/Diphenylamine	410		360	U	NA	
n-Propylbenzene	NA		NA		NA	
o-Xylene	NA		NA		NA	
Pentachlorophenol	2100		3200		NA	
Phenanthrene	410		360	U	NA	
Phenol	410		360	U	NA	
p-Isopropyltoluene	NA		NA		NA	
Pyrene	410		360	U	NA	
sec-Butylbenzene	NA		NA		NA	
Styrene	NA		NA		7	U
tert-Butylbenzene	NA		NA		NA	
Tetrachloroethene	NA		NA		7	U
Toluene	NA		NA		7	U
trans-1,2-Dichloroethene	NA		NA		NA	
trans-1,3-Dichloropropene	NA		NA		7	U
Trichloroethene	NA		NA		7	U
Trichlorofluoromethane	NA		NA		NA	
Vinyl chloride	NA		NA		14	U
Xylenes, Total	NA		NA		14	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B53-2-2.5'		B54-12-14'		BBU-B54-2-2.5'	
1,1,1,2-Tetrachloroethane	NA		NA		NA	
1,1,1-Trichloroethane	8.6	U	NA		7.2	U
1,1,2,2-Tetrachloroethane	8.6	U	360	U	7.2	U
1,1,2-Trichloroethane	8.6	U	360	U	7.2	U
1,1-Dichloroethane	8.6	U	360	U	7.2	U
1,1-Dichloroethene	8.6	U	360	U	7.2	U
1,1-Dichloropropylene	NA		NA		NA	
1,2,3-Trichlorobenzene	NA		NA		NA	
1,2,3-Trichloropropane	NA		NA		NA	
1,2,4-Trichlorobenzene	NA		450	U	NA	
1,2,4-Trichlorobenzene	NA		NA		NA	
1,2,4-Trimethylbenzene	NA		NA		NA	
1,2-Dibromo-3-chloropropane	NA		NA		NA	
1,2-Dibromoethane (EDB)	NA		NA		NA	
1,2-Dichlorobenzene	NA		450	U	NA	
1,2-Dichloroethane	8.6	U	360	U	7.2	U
1,2-Dichloropropane	8.6	U	360	U	7.2	U
1,3,5-Trimethylbenzene	NA		NA		NA	
1,3-Dichlorobenzene	NA		450	U	NA	
1,3-Dichloropropane	NA		NA		NA	
1,4-Dichlorobenzene	NA		450	U	NA	
2,2-Dichloropropane	NA		NA		NA	
2,2'-Oxybis(1-Chloropropane)	NA		450	U	NA	
2,4,5-Trichlorophenol	NA		450	U	NA	
2,4,6-Trichlorophenol	NA		450	U	NA	
2,4-Dichlorophenol	NA		450	U	NA	
2,4-Dimethylphenol	NA		450	U	NA	
2,4-Dinitrophenol	NA		2300	U	NA	
2,4-Dinitrotoluene	NA		450	U	NA	
2,6-Dinitrotoluene	NA		450	U	NA	
2-Butanone (MEK)	43	U	1800	U	36	U
2-Chloronaphthalene	NA		450	U	NA	
2-Chlorophenol	NA		450	U	NA	
2-Chlorotoluene	NA		NA		NA	
2-Hexanone	43	U	1800	U	36	U
2-Methyl-4,6-dinitrophenol	NA		NA		NA	
2-Methylnaphthalene	NA		450	U	NA	
2-Methylphenol (o-cresol)	NA		450	U	NA	
2-Nitroaniline	NA		2300	U	NA	
2-Nitrophenol	NA		450	U	NA	
3&4-Methylphenol (m&p-cresol)	NA		450	U	NA	
3,3'-Dichlorobenzidine	NA		900	U	NA	
3-Nitroaniline	NA		2300	U	NA	
4,6-Dinitro-2-methylphenol	NA		2300	U	NA	
4-Bromophenyl phenyl ether	NA		450	U	NA	
4-Chloro-3-methylphenol	NA		450	U	NA	
4-Chloroaniline	NA		900	U	NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B53-2-2.5'		B54-12-14'		BBU-B54-2-2.5'	
4-Chlorophenylphenyl ether	NA		450	U	NA	
4-Chlorotoluene	NA		NA		NA	
4-Methyl-2-pentanone (MIBK)	43	U	1800	U	36	U
4-Nitroaniline	NA		2300	U	NA	
4-Nitrophenol	NA		2300	U	NA	
Acenaphthene	NA		450	U	NA	
Acenaphthylene	NA		450	U	NA	
Acetone	86	U	3600	U	72	U
Anthracene	NA	U	450	U	NA	
Aroclor-1016	NA	U	NA		NA	
Aroclor-1221	NA	U	NA		NA	
Aroclor-1232	NA	U	NA		NA	
Aroclor-1242	NA	U	NA		NA	
Aroclor-1248	NA	U	NA		NA	
Aroclor-1254	NA	U	NA		NA	
Aroclor-1260	NA	U	NA		NA	
Benzene	8.6	U	5100		7.2	U
Benzidine	NA		NA		NA	
Benzo(a)anthracene	NA		450	U	NA	
Benzo(a)pyrene	NA		450	U	NA	
Benzo(b)fluoranthene	NA		450	U	NA	
Benzo(g,h,i)perylene	NA		450	U	NA	
Benzo(k)fluoranthene	NA		450	U	NA	
Benzoic acid	NA		NA		NA	
Benzyl alcohol	NA		NA		NA	
bis(2-Chloroethoxy)methane	NA		450	U	NA	
bis(2-Chloroethyl)ether	NA		450	U	NA	
bis(2-Chloroisopropyl)ether	NA		NA		NA	
bis(2-Ethylhexyl)phthalate	NA		450	U	NA	
Bromobenzene	NA		NA		NA	
Bromochloromethane	NA		NA		NA	
Bromodichloromethane	8.6	U	360	U	7.2	U
Bromoform	8.6	U	360	U	7.2	U
Bromomethane	17	U	720	U	14	U
Butylbenzylphthalate	NA		450	U	NA	
Carbazole	NA		450	U	NA	
Carbon disulfide	8.6	U	360	U	7.2	U
Carbon tetrachloride	8.6	U	360	U	7.2	U
Chlorobenzene	8.6	U	190		7.2	U
Chlorodibromomethane	NA		NA		NA	
Chloroethane	17	U	720	U	14	U
Chloroform	8.6	U	360	U	7.2	U
Chloromethane	17	U	720	U	14	U
Chrysene	NA		450	U	NA	
cis-1,2-Dichloroethene	8.6	U	360	U	7.2	U
cis-1,3-Dichloropropene	8.6	U	360	U	7.2	U
Dibenzo(a,h)anthracene	NA		450	U	NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B53-2-2.5'		B54-12-14'		BBU-B54-2-2.5'	
Dibenzofuran	NA		450	U	NA	
Dibromomethane	NA		NA		NA	
Dichlorodifluoromethane	NA		360	U	NA	
Dibromochloromethane	8.6	U	450	U	7.2	U
Diethylphthalate	NA		450	U	NA	
Dimethylphthalate	NA		NA		NA	
Di-n-butylphthalate	NA		450	U	NA	
Di-n-octylphthalate	NA		450	U	NA	
Ethylbenzene	8.6	U	360	U	7.2	U
Fluoranthene	NA		450	U	NA	
Fluorene	NA		450	U	NA	
Hexachlorobenzene	NA		450	U	NA	
Hexachlorobutadiene	NA		450	U	NA	
Hexachlorocyclopentadiene	NA		450	U	NA	
Hexachloroethane	NA		450	U	NA	
Indeno(1,2,3-cd)pyrene	NA		450	U	NA	
Isophorone	NA		450	U	NA	
Isopropylbenzene	NA		NA		NA	
m&p-Xylene	NA		NA		NA	
Methylene chloride (Dichloromethane)	8.6		360	U	7.2	U
Naphthalene	NA		450	U	NA	
Naphthalene	NA		NA		NA	
n-Butylbenzene	NA		NA		NA	
Nitrobenzene	NA		450	U	NA	
N-Nitrosodimethylamine	NA		NA		NA	
n-Nitrosodi-n-propylamine	NA		450	U	NA	
N-Nitrosodiphenylamine/Diphenylamine	NA		450	U	NA	
n-Propylbenzene	NA		NA		NA	
o-Xylene	NA		NA		NA	
Pentachlorophenol	NA		2300	U	NA	
Phenanthrene	NA		450	U	NA	
Phenol	NA		450	U	NA	
p-Isopropyltoluene	NA		NA		NA	
Pyrene	NA		450	U	NA	
sec-Butylbenzene	NA		NA		NA	
Styrene	8.6		360	U	7.2	U
tert-Butylbenzene	NA		NA		NA	
Tetrachloroethene	8.6		360	U	37	
Toluene	8.6		360	U	7.2	U
trans-1,2-Dichloroethene	NA		NA		NA	
trans-1,3-Dichloropropene	8.6		360	U	7.2	U
Trichloroethene	8.6		360	U	7.2	U
Trichlorofluoromethane	NA		NA		NA	
Vinyl chloride	17		720	U	14	U
Xylenes, Total	17		720	U	14	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B54-2-4'		BBU-B56-3'		BBU-B56-4-6'	
1,1,1,2-Tetrachloroethane	NA		NA		NA	
1,1,1-Trichloroethane	NA		6.7	U	300	U
1,1,2,2-Tetrachloroethane	NA		6.7	U	300	U
1,1,2-Trichloroethane	NA		6.7	U	300	U
1,1-Dichloroethane	NA		6.7	U	300	U
1,1-Dichloroethene	NA		6.7	U	300	U
1,1-Dichloropropylene	NA		NA		NA	
1,2,3-Trichlorobenzene	NA		NA		NA	
1,2,3-Trichloropropane	NA		NA		NA	
1,2,4-Trichlorobenzene	NA		17000	U	810	U
1,2,4-Trichlorobenzene	67000		NA		NA	
1,2,4-Trimethylbenzene	NA		NA		NA	
1,2-Dibromo-3-chloropropane	NA		NA		NA	
1,2-Dibromoethane (EDB)	NA		NA		NA	
1,2-Dichlorobenzene	7300		17000	U	810	U
1,2-Dichloroethane	NA		6.7	U	300	U
1,2-Dichloropropane	NA		6.7	U	300	U
1,3,5-Trimethylbenzene	NA		NA		NA	
1,3-Dichlorobenzene	8400	U	17000	U	810	U
1,3-Dichloropropane	NA		NA		NA	
1,4-Dichlorobenzene	27000		17000	U	650	
2,2-Dichloropropane	NA		NA		NA	
2,2'-Oxybis(1-Chloropropane)	8400	U	17000	U	810	U
2,4,5-Trichlorophenol	8400	U	17000	U	810	U
2,4,6-Trichlorophenol	8400	U	17000	U	810	U
2,4-Dichlorophenol	8400	U	17000	U	810	U
2,4-Dimethylphenol	8400	U	17000	U	810	U
2,4-Dinitrophenol	43000	U	89000	U	4200	U
2,4-Dinitrotoluene	8400	U	17000	U	810	U
2,6-Dinitrotoluene	8400	U	17000	U	810	U
2-Butanone (MEK)	NA		34	U	1500	U
2-Chloronaphthalene	8400	U	17000	U	810	U
2-Chlorophenol	8400	U	17000	U	810	U
2-Chlorotoluene	NA		NA		NA	
2-Hexanone	NA		34	U	1500	U
2-Methyl-4,6-dinitrophenol	NA		NA		NA	
2-Methylnaphthalene	8400	U	17000	U	810	U
2-Methylphenol (o-cresol)	8400	U	17000	U	810	U
2-Nitroaniline	43000	U	89000	U	4200	U
2-Nitrophenol	8400	U	17000	U	810	U
3&4-Methylphenol (m&p-cresol)	8400	U	17000	U	810	U
3,3'-Dichlorobenzidine	17000	U	35000	U	1600	U
3-Nitroaniline	43000	U	89000	U	4200	U
4,6-Dinitro-2-methylphenol	43000	U	89000	U	4200	U
4-Bromophenyl phenyl ether	8400	U	17000	U	810	U
4-Chloro-3-methylphenol	8400	U	17000	U	810	U
4-Chloroaniline	17000	U	35000	U	1600	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B54-2-4'		BBU-B56-3'		BBU-B56-4-6'	
4-Chlorophenylphenyl ether	8400	U	17000	U	810	U
4-Chlorotoluene	NA		NA		NA	
4-Methyl-2-pentanone (MIBK)	NA		34	U	1500	U
4-Nitroaniline	43000	U	89000	U	4200	U
4-Nitrophenol	43000	U	89000	U	4200	U
Acenaphthene	8400	U	17000	U	810	U
Acenaphthylene	8400	U	17000	U	810	U
Acetone	NA		44	J	3000	U
Anthracene	8400	U	17000	U	810	U
Aroclor-1016	NA		NA		NA	
Aroclor-1221	NA		NA		NA	
Aroclor-1232	NA		NA		NA	
Aroclor-1242	NA		NA		NA	
Aroclor-1248	NA		NA		NA	
Aroclor-1254	NA		NA		NA	
Aroclor-1260	NA		NA		NA	
Benzene	NA		13		5600	
Benzidine	NA		NA		NA	
Benzo(a)anthracene	8400	U	17000	U	810	U
Benzo(a)pyrene	8400	U	17000	U	810	U
Benzo(b)fluoranthene	8400	U	17000	U	810	U
Benzo(g,h,i)perylene	8400	U	17000	U	810	U
Benzo(k)fluoranthene	8400	U	17000	U	810	U
Benzoic acid	NA		NA		NA	
Benzyl alcohol	NA		NA		NA	
bis(2-Chloroethoxy)methane	8400	U	17000	U	810	U
bis(2-Chloroethyl)ether	8400	U	17000	U	810	U
bis(2-Chloroisopropyl)ether	NA		NA		NA	
bis(2-Ethylhexyl)phthalate	8400	U	17000	U	810	U
Bromobenzene	NA		NA		NA	
Bromochloromethane	NA		NA		NA	
Bromodichloromethane	NA		6.7	U	300	U
Bromoform	NA		6.7	U	300	U
Bromomethane	NA		13	U	610	U
Butylbenzylphthalate	8400	U	17000	U	810	U
Carbazole	8400	U	17000	U	810	U
Carbon disulfide	NA		6.7	U	300	U
Carbon tetrachloride	NA		6.7	U	300	U
Chlorobenzene	NA		6.7	U	670	
Chlorodibromomethane	NA		NA		NA	
Chloroethane	NA		13	U	610	U
Chloroform	NA		6.7	U	240	
Chloromethane	NA		13	U	610	U
Chrysene	8400	U	17000	U	810	U
cis-1,2-Dichloroethene	NA		6.7	U	300	U
cis-1,3-Dichloropropene	NA		6.7	U	300	U
Dibenzo(a,h)anthracene	8400	U	17000	U	810	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B54-2-4'		BBU-B56-3'		BBU-B56-4-6'	
Dibenzofuran	8400	U	17000	U	810	U
Dibromomethane	NA		NA		NA	
Dichlorodifluoromethane	NA		6.7	U	300	U
Dibromochloromethane	NA		NA		NA	
Diethylphthalate	8400	U	17000	U	810	U
Dimethylphthalate	8400	U	17000	U	810	U
Di-n-butylphthalate	8400	U	17000	U	810	U
Di-n-octylphthalate	8400	U	17000	U	810	U
Ethylbenzene	NA		6.7	U	300	U
Fluoranthene	8400	U	17000	U	810	U
Fluorene	8400	U	17000	U	810	U
Hexachlorobenzene	8400	U	17000	U	810	U
Hexachlorobutadiene	8400	U	17000	U	810	U
Hexachlorocyclopentadiene	8400	U	17000	U	810	U
Hexachloroethane	8400	U	17000	U	810	U
Indeno(1,2,3-cd)pyrene	8400	U	17000	U	810	U
Isophorone	8400	U	17000	U	810	U
Isopropylbenzene	NA		NA		NA	
m&p-Xylene	NA		NA		NA	
Methylene chloride (Dichloromethane)	NA		6.7	U	300	U
Naphthalene	NA		17000	U	810	U
Naphthalene	8400	U	NA		NA	
n-Butylbenzene	NA		NA		NA	
Nitrobenzene	8400	U	17000	U	810	U
N-Nitrosodimethylamine	NA		NA		NA	
n-Nitrosodi-n-propylamine	8400	U	NA		NA	
N-Nitrosodiphenylamine/Diphenylamine	8400	U	17000	U	810	U
n-Propylbenzene	NA		NA		NA	
o-Xylene	NA		NA		NA	
Pentachlorophenol	43000	U	89000	U	4200	U
Phenanthrene	8400	U	17000	U	810	U
Phenol	8400	U	17000	U	810	U
p-Isopropyltoluene	NA		NA		NA	
Pyrene	8400	U	17000	U	810	U
sec-Butylbenzene	NA		NA		NA	
Styrene	NA		6.7	U	300	U
tert-Butylbenzene	NA		NA		NA	
Tetrachloroethene	NA		6.7	U	350	
Toluene	NA		6.7	U	300	U
trans-1,2-Dichloroethene	NA		NA		NA	
trans-1,3-Dichloropropene	NA		6.7	U	300	U
Trichloroethene	NA		4.4		300	U
Trichlorofluoromethane	NA		NA		NA	
Vinyl chloride	NA		13	U	610	U
Xylenes, Total	NA		13	U	610	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B57-8-9'		BBU-B59-2-4'		BBU-B59-6-8'	
1,1,1,2-Tetrachloroethane	NA		NA		NA	
1,1,1-Trichloroethane	240	U	380	U	600	U
1,1,2,2-Tetrachloroethane	240	U	380	U	600	U
1,1,2-Trichloroethane	240	U	380	U	600	U
1,1-Dichloroethane	240	U	380	U	600	U
1,1-Dichloroethene	240	U	380	U	600	U
1,1-Dichloropropylene	NA		NA		NA	
1,2,3-Trichlorobenzene	NA		NA		NA	
1,2,3-Trichloropropane	NA		NA		NA	
1,2,4-Trichlorobenzene	440	U	1500000		430	U
1,2,4-Trichlorobenzene	NA		NA		NA	
1,2,4-Trimethylbenzene	NA		NA		NA	
1,2-Dibromo-3-chloropropane	NA		NA		NA	
1,2-Dibromoethane (EDB)	NA		NA		NA	
1,2-Dichlorobenzene	440	U	76000	U	430	U
1,2-Dichloroethane	240	U	380	U	600	U
1,2-Dichloropropane	240	U	380	U	600	U
1,3,5-Trimethylbenzene	NA		NA		NA	
1,3-Dichlorobenzene	440	U	76000	U	430	U
1,3-Dichloropropane	NA		NA		NA	
1,4-Dichlorobenzene	440	U	410000		430	U
2,2-Dichloropropane	NA		NA		NA	
2,2'-Oxybis(1-Chloropropane)	440	U	76000	U	430	U
2,4,5-Trichlorophenol	440	U	76000	U	430	U
2,4,6-Trichlorophenol	440	U	76000	U	430	U
2,4-Dichlorophenol	440	U	76000	U	430	U
2,4-Dimethylphenol	440	U	76000	U	430	U
2,4-Dinitrophenol	2300	U	390000	U	2200	U
2,4-Dinitrotoluene	440	U	76000	U	430	U
2,6-Dinitrotoluene	440	U	76000	U	430	U
2-Butanone (MEK)	1200	U	1900	U	3000	U
2-Chloronaphthalene	440	U	76000	U	430	U
2-Chlorophenol	440	U	76000	U	430	U
2-Chlorotoluene	NA		NA		NA	
2-Hexanone	1200	U	1900	U	3000	U
2-Methyl-4,6-dinitrophenol	NA		NA		NA	
2-Methylnaphthalene	440	U	76000	U	430	U
2-Methylphenol (o-cresol)	440	U	76000	U	430	U
2-Nitroaniline	2300	U	390000	U	2200	U
2-Nitrophenol	440	U	76000	U	430	U
3&4-Methylphenol (m&p-cresol)	440	U	76000	U	430	U
3,3'-Dichlorobenzidine	880	U	150000	U	870	U
3-Nitroaniline	2300	U	390000	U	2200	U
4,6-Dinitro-2-methylphenol	2300	U	390000	U	2200	U
4-Bromophenyl phenyl ether	440	U	76000	U	430	U
4-Chloro-3-methylphenol	440	U	76000	U	430	U
4-Chloroaniline	880	U	150000	U	870	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B57-8-9'		BBU-B59-2-4'		BBU-B59-6-8'	
4-Chlorophenylphenyl ether	440	U	76000	U	430	U
4-Chlorotoluene	NA		NA		NA	
4-Methyl-2-pentanone (MIBK)	1200	U	1900	U	3000	U
4-Nitroaniline	2300	U	390000	U	2200	U
4-Nitrophenol	2300	U	390000	U	2200	U
Acenaphthene	440	U	76000	U	430	U
Acenaphthylene	440	U	76000	U	430	U
Acetone	2400	U	3800	U	6000	U
Anthracene	440	U	76000	U	430	U
Aroclor-1016	NA		NA		NA	
Aroclor-1221	NA		NA		NA	
Aroclor-1232	NA		NA		NA	
Aroclor-1242	NA		NA		NA	
Aroclor-1248	NA		NA		NA	
Aroclor-1254	NA		NA		NA	
Aroclor-1260	NA		NA		NA	
Benzene	540		3000		12000	
Benzidine	NA		NA		NA	
Benzo(a)anthracene	440	U	76000	U	430	U
Benzo(a)pyrene	440	U	76000	U	430	U
Benzo(b)fluoranthene	440	U	76000	U	430	U
Benzo(g,h,i)perylene	440	U	76000	U	430	U
Benzo(k)fluoranthene	440	U	76000	U	430	U
Benzoic acid	NA		NA		NA	
Benzyl alcohol	NA		NA		NA	
bis(2-Chloroethoxy)methane	440	U	76000	U	430	U
bis(2-Chloroethyl)ether	440	U	76000	U	430	U
bis(2-Chloroisopropyl)ether	NA		NA		NA	
bis(2-Ethylhexyl)phthalate	440	U	76000	U	430	U
Bromobenzene	NA		NA		NA	
Bromochloromethane	NA		NA		NA	
Bromodichloromethane	240	U	380	U	600	U
Bromoform	240	U	380	U	600	U
Bromomethane	480	U	750	U	1200	U
Butylbenzylphthalate	440	U	76000	U	430	U
Carbazole	440	U	76000	U	430	U
Carbon disulfide	240	U	380	U	600	U
Carbon tetrachloride	240	U	380	U	600	U
Chlorobenzene	700		540		640	
Chlorodibromomethane	NA		NA		NA	
Chloroethane	480	U	750	U	1200	U
Chloroform	240	U	380	U	600	U
Chloromethane	480	U	750	U	1200	U
Chrysene	440	U	76000	U	430	U
cis-1,2-Dichloroethene	240	U	380	U	600	U
cis-1,3-Dichloropropene	240	U	380	U	600	U
Dibenzo(a,h)anthracene	440	U	76000	U	430	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B57-8-9'		BBU-B59-2-4'		BBU-B59-6-8'	
Dibenzofuran	440	U	76000	U	430	U
Dibromomethane	NA		NA		NA	
Dichlorodifluoromethane	240	U	NA		NA	
Dibromochloromethane	NA		380	U	600	U
Diethylphthalate	440	U	76000	U	430	U
Dimethylphthalate	440	U	76000	U	430	U
Di-n-butylphthalate	440	U	76000	U	430	U
Di-n-octylphthalate	440	U	76000	U	430	U
Ethylbenzene	240	U	380	U	600	U
Fluoranthene	440	U	76000	U	430	U
Fluorene	440	U	76000	U	430	U
Hexachlorobenzene	440	U	76000	U	430	U
Hexachlorobutadiene	440	U	76000	U	430	U
Hexachlorocyclopentadiene	440	U	76000	U	430	U
Hexachloroethane	440	U	76000	U	430	U
Indeno(1,2,3-cd)pyrene	440	U	76000	U	430	U
Isophorone	440	U	76000	U	430	U
Isopropylbenzene	NA		NA		NA	
m&p-Xylene	NA		NA		NA	
Methylene chloride (Dichloromethane)	240	U	380	U	600	U
Naphthalene	440	U	76000	U	430	U
Naphthalene	NA		NA		NA	
n-Butylbenzene	NA		NA		NA	
Nitrobenzene	440	U	76000	U	430	U
N-Nitrosodimethylamine	NA		76000	U	430	U
n-Nitrosodi-n-propylamine	440	U	NA		NA	
N-Nitrosodiphenylamine/Diphenylamine	440	U	76000	U	430	U
n-Propylbenzene	NA		NA		NA	
o-Xylene	NA		NA		NA	
Pentachlorophenol	2300	U	390000	U	2200	U
Phenanthrene	440	U	76000	U	430	U
Phenol	440	U	76000	U	560	
p-Isopropyltoluene	NA		NA		NA	
Pyrene	440	U	76000	U	430	U
sec-Butylbenzene	NA		NA		NA	
Styrene	240	U	380	U	600	U
tert-Butylbenzene	NA		380	U	600	U
Tetrachloroethene	240	U	NA		NA	
Toluene	240	U	380	U	600	U
trans-1,2-Dichloroethene	NA		NA		NA	
trans-1,3-Dichloropropene	240	U	380	U	600	U
Trichloroethene	240	U	380	U	600	U
Trichlorofluoromethane	NA		NA		NA	
Vinyl chloride	480	U	750	U	1200	U
Xylenes, Total	480	U	750	U	1200	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B6 (6-8')		BBU-B7 (6-8')		BBU-B8 (6-8')		BBU-B9 (6-8')	
1,1,1,2-Tetrachloroethane	6.5	U	34	U	3400	U	26	U
1,1,1-Trichloroethane	6.5	U	34	U	3400	U	26	U
1,1,2,2-Tetrachloroethane	6.5	U	34	U	3400	U	26	U
1,1,2-Trichloroethane	6.5	U	34	U	3400	U	26	U
1,1-Dichloroethane	6.5	U	34	U	3400	U	26	U
1,1-Dichloroethene	6.5	U	34	U	3400	U	26	U
1,1-Dichloropropylene	6.5	U	34	U	3400	U	26	U
1,2,3-Trichlorobenzene	6.5	U	34	U	3400	U	26	U
1,2,3-Trichloropropane	6.5	U	34	U	3400	U	26	U
1,2,4-Trichlorobenzene	6.5	U	34	U	9800		26	U
1,2,4-Trichlorobenzene	430	U	440	U	450	U	430	U
1,2,4-Trimethylbenzene	6.5	U	34	U	3400	U	26	U
1,2-Dibromo-3-chloropropane	6.5	U	34	U	3400	U	26	U
1,2-Dibromoethane (EDB)	6.5	U	34	U	3400	U	26	U
1,2-Dichlorobenzene	430	U	440	U	450	U	430	U
1,2-Dichloroethane	6.5	U	34	U	3400	U	26	U
1,2-Dichloropropane	6.5	U	34	U	3400	U	26	U
1,3,5-Trimethylbenzene	6.5	U	34	U	3400	U	26	U
1,3-Dichlorobenzene	430	U	440	U	450	U	430	U
1,3-Dichloropropane	6.5	U	34	U	3400	U	26	U
1,4-Dichlorobenzene	430	U	440	U	450	U	430	U
2,2-Dichloropropane	6.5	U	34	U	3400	U	26	U
2,2'-Oxybis(1-Chloropropane)	NA		NA		NA		NA	
2,4,5-Trichlorophenol	430	U	440	U	450	U	430	U
2,4,6-Trichlorophenol	430	U	440	U	450	U	430	U
2,4-Dichlorophenol	430	U	440	U	450	U	430	U
2,4-Dimethylphenol	430	U	440	U	450	U	430	U
2,4-Dinitrophenol	2200	U	2300	U	2300	U	2200	U
2,4-Dinitrotoluene	430	U	440	U	450	U	430	U
2,6-Dinitrotoluene	430	U	440	U	450	U	430	U
2-Butanone (MEK)	46		170	U	17000	U	120	
2-Chloronaphthalene	430	U	440	U	450	U	430	U
2-Chlorophenol	430	U	440	U	450	U	430	U
2-Chlorotoluene	6.5	U	34	U	3400	U	26	U
2-Hexanone	NA		NA		NA		NA	
2-Methyl-4,6-dinitrophenol	2201	U	2301	U	2301	U	2201	U
2-Methylnaphthalene	430	U	440	U	450	U	430	U
2-Methylphenol (o-cresol)	430	U	440	U	450	U	430	U
2-Nitroaniline	2200	U	2300	U	2300	U	2200	U
2-Nitrophenol	430	U	440	U	450	U	430	U
3&4-Methylphenol (m&p-cresol)	430	U	440	U	450	U	430	U
3,3'-Dichlorobenzidine	860	U	880	U	900	U	860	U
3-Nitroaniline	2200	U	2300	U	2300	U	2200	U
4,6-Dinitro-2-methylphenol	NA		NA		NA		NA	
4-Bromophenyl phenyl ether	430	U	440	U	450	U	430	U
4-Chloro-3-methylphenol	430	U	440	U	450	U	430	U
4-Chloroaniline	860	U	880	U	900	U	860	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B6 (6-8')		BBU-B7 (6-8')		BBU-B8 (6-8')		BBU-B9 (6-8')	
4-Chlorophenylphenyl ether	430	U	440	U	450	U	430	U
4-Chlorotoluene	6.5	U	34	U	3400	U	26	U
4-Methyl-2-pentanone (MIBK)	32	U	170	U	17000	U	130	U
4-Nitroaniline	2200	U	2300	U	2300	U	2200	U
4-Nitrophenol	2200	U	2300	U	2300	U	2200	U
Acenaphthene	430	U	440	U	450	U	430	U
Acenaphthylene	430	U	440	U	450	U	430	U
Acetone	280		260		34000	U	460	
Anthracene	430	U	440	U	450	U	430	U
Aroclor-1016	NA		NA		NA		NA	
Aroclor-1221	NA		NA		NA		NA	
Aroclor-1232	NA		NA		NA		NA	
Aroclor-1242	NA		NA		NA		NA	
Aroclor-1248	NA		NA		NA		NA	
Aroclor-1254	NA		NA		NA		NA	
Aroclor-1260	NA		NA		NA		NA	
Benzene	6.5	U	34	U	16000		26	U
Benzidine	3500	U	3600	U	3700	U	3500	U
Benzo(a)anthracene	430	U	440	U	450	U	430	U
Benzo(a)pyrene	430	U	440	U	450	U	430	U
Benzo(b)fluoranthene	430	U	440	U	450	U	430	U
Benzo(g,h,i)perylene	430	U	440	U	450	U	430	U
Benzo(k)fluoranthene	430	U	440	U	450	U	430	U
Benzoic acid	2200	U	2300	U	2300	U	2200	U
Benzyl alcohol	430	U	440	U	450	U	430	U
bis(2-Chloroethoxy)methane	430	U	440	U	450	U	430	U
bis(2-Chloroethyl)ether	430	U	440	U	450	U	430	U
bis(2-Chloroisopropyl)ether	430	U	440	U	450	U	430	U
bis(2-Ethylhexyl)phthalate	430	U	440	U	450	U	430	U
Bromobenzene	6.5	U	34	U	3400	U	26	U
Bromochloromethane	6.5	U	34	U	3400	U	26	U
Bromodichloromethane	6.5	U	34	U	3400	U	26	U
Bromoform	6.5	U	34	U	3400	U	26	U
Bromomethane	13	U	69	U	6800	U	52	U
Butylbenzylphthalate	430	U	440	U	450	U	430	U
Carbazole	NA		NA		NA		NA	
Carbon disulfide	NA		NA		NA		NA	
Carbon tetrachloride	6.5	U	34	U	3400	U	26	U
Chlorobenzene	34		71		19000		210	
Chlorodibromomethane	6.5	U	34	U	3400	U	26	U
Chloroethane	13	U	69	U	6800	U	52	U
Chloroform	6.5	U	34	U	3400	U	26	U
Chloromethane	13	U	69	U	6800	U	52	U
Chrysene	430	U	440	U	450	U	430	U
cis-1,2-Dichloroethene	6.5	U	34	U	3400	U	26	U
cis-1,3-Dichloropropene	NA		NA		NA		NA	
Dibenzo(a,h)anthracene	430	U	440	U	450	U	430	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B6 (6-8')		BBU-B7 (6-8')		BBU-B8 (6-8')		BBU-B9 (6-8')	
Dibenzofuran	430	U	440	U	450	U	430	U
Dibromomethane	6.5	U	34	U	3400	U	26	U
Dichlorodifluoromethane	6.5	U	34	U	3400	U	26	U
Dibromochloromethane	NA		NA		NA		NA	
Diethylphthalate	430	U	440	U	450	U	430	U
Dimethylphthalate	430	U	440	U	450	U	430	U
Di-n-butylphthalate	430	U	440	U	450	U	430	U
Di-n-octylphthalate	430	U	440	U	450	U	430	U
Ethylbenzene	6.5	U	34	U	3400	U	26	U
Fluoranthene	430	U	440	U	450	U	430	U
Fluorene	430	U	440	U	450	U	430	U
Hexachlorobenzene	430	U	440	U	450	U	430	U
Hexachlorobutadiene	430	U	440	U	450	U	430	U
Hexachlorocyclopentadiene	430	U	440	U	450	U	430	U
Hexachloroethane	430	U	440	U	450	U	430	U
Indeno(1,2,3-cd)pyrene	430	U	440	U	450	U	430	U
Isophorone	430	U	440	U	450	U	430	U
Isopropylbenzene	6.5	U	34	U	3400	U	26	U
m&p-Xylene	6.5	U	34	U	3400	U	26	U
Methylene chloride (Dichloromethane)	6.5	U	34	U	3400	U	26	U
Naphthalene	6.5	U	34	U	3400	U	26	U
Naphthalene	430	U	440	U	450	U	430	U
n-Butylbenzene	6.5	U	34	U	3400	U	26	U
Nitrobenzene	430	U	440	U	450	U	430	U
N-Nitrosodimethylamine	430	U	440	U	450	U	430	U
n-Nitrosodi-n-propylamine	430	U	440	U	450	U	430	U
N-Nitrosodiphenylamine/Diphenylamine	430	U	440	U	450	U	430	U
n-Propylbenzene	6.5	U	34	U	3400	U	26	U
o-Xylene	6.5	U	34	U	3400	U	26	U
Pentachlorophenol	2200	U	2300	U	2300	U	2200	U
Phenanthrene	430	U	440	U	450	U	430	U
Phenol	430	U	440	U	450	U	430	U
p-Isopropyltoluene	6.5	U	34	U	3400	U	26	U
Pyrene	430	U	440	U	450	U	430	U
sec-Butylbenzene	6.5	U	34	U	3400	U	26	U
Styrene	6.5	U	34	U	3400	U	26	U
tert-Butylbenzene	6.5	U	34	U	3400	U	26	U
Tetrachloroethene	6.5	U	34	U	3400	U	26	U
Toluene	6.5	U	34	U	3400	U	26	U
trans-1,2-Dichloroethene	6.5	U	34	U	3400	U	26	U
trans-1,3-Dichloropropene	NA		NA		NA		NA	
Trichloroethene	6.5	U	34	U	3400	U	26	U
Trichlorofluoromethane	6.5	U	34	U	3400	U	26	U
Vinyl chloride	13	U	69	U	6800	U	52	U
Xylenes, Total	NA		NA		NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-NE Entrance (3-9')		BBU-NW Entrance (3-9')	
1,1,1,2-Tetrachloroethane	5.4	U	5.6	U
1,1,1-Trichloroethane	5.4	U	5.6	U
1,1,2,2-Tetrachloroethane	5.4	U	5.6	U
1,1,2-Trichloroethane	5.4	U	5.6	U
1,1-Dichloroethane	5.4	U	5.6	U
1,1-Dichloroethene	5.4	U	5.6	U
1,1-Dichloropropylene	5.4	U	5.6	U
1,2,3-Trichlorobenzene	5.4	U	5.6	U
1,2,3-Trichloropropane	5.4	U	5.6	U
1,2,4-Trichlorobenzene	5.4	U	5.6	U
1,2,4-Trichlorobenzene	350	U	9900	
1,2,4-Trimethylbenzene	5.4	U	5.6	U
1,2-Dibromo-3-chloropropane	5.4	U	5.6	U
1,2-Dibromoethane (EDB)	5.4	U	5.6	U
1,2-Dichlorobenzene	350	U	11000	
1,2-Dichloroethane	5.4	U	5.6	U
1,2-Dichloropropane	5.4	U	5.6	U
1,3,5-Trimethylbenzene	5.4	U	5.6	U
1,3-Dichlorobenzene	350	U	1500	U
1,3-Dichloropropane	5.4	U	5.6	U
1,4-Dichlorobenzene	350	U	1500	U
2,2-Dichloropropane	5.4	U	5.6	U
2,2'-Oxybis(1-Chloropropane)	NA		NA	
2,4,5-Trichlorophenol	350	U	1500	U
2,4,6-Trichlorophenol	350	U	1500	U
2,4-Dichlorophenol	350	U	1500	U
2,4-Dimethylphenol	350	U	1500	U
2,4-Dinitrophenol	1800	U	7900	U
2,4-Dinitrotoluene	350	U	1500	U
2,6-Dinitrotoluene	350	U	1500	U
2-Butanone (MEK)	27	U	28	U
2-Chloronaphthalene	350	U	1500	U
2-Chlorophenol	350	U	1500	U
2-Chlorotoluene	5.4	U	5.6	U
2-Hexanone	NA		NA	
2-Methyl-4,6-dinitrophenol	1801	U	7901	U
2-Methylnaphthalene	350	U	1500	U
2-Methylphenol (o-cresol)	350	U	1500	U
2-Nitroaniline	1800	U	7900	U
2-Nitrophenol	350	U	1500	U
3&4-Methylphenol (m&p-cresol)	350	U	1500	U
3,3'-Dichlorobenzidine	710	U	3000	U
3-Nitroaniline	1800	U	7900	U
4,6-Dinitro-2-methylphenol	NA		NA	
4-Bromophenyl phenyl ether	350	U	1500	U
4-Chloro-3-methylphenol	350	U	1500	U
4-Chloroaniline	710	U	3000	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-NE Entrance (3-9')		BBU-NW Entrance (3-9')	
4-Chlorophenylphenyl ether	350	U	1500	U
4-Chlorotoluene	5.4	U	5.6	U
4-Methyl-2-pentanone (MIBK)	27	U	28	U
4-Nitroaniline	1800	U	7900	U
4-Nitrophenol	1800	U	7900	U
Acenaphthene	350	U	1500	U
Acenaphthylene	350	U	1500	U
Acetone	54	U	56	U
Anthracene	350	U	1500	U
Aroclor-1016	NA		NA	
Aroclor-1221	NA		NA	
Aroclor-1232	NA		NA	
Aroclor-1242	NA		NA	
Aroclor-1248	NA		NA	
Aroclor-1254	NA		NA	
Aroclor-1260	NA		NA	
Benzene	5.4	U	5.6	U
Benzidine	2900	U	12000	U
Benzo(a)anthracene	780		1500	U
Benzo(a)pyrene	720		1500	U
Benzo(b)fluoranthene	1200		1500	U
Benzo(g,h,i)perylene	350	U	1500	U
Benzo(k)fluoranthene	550		1500	U
Benzoic acid	1800	U	7900	U
Benzyl alcohol	350	U	1500	U
bis(2-Chloroethoxy)methane	350	U	1500	U
bis(2-Chloroethyl)ether	350	U	1500	U
bis(2-Chloroisopropyl)ether	350	U	1500	U
bis(2-Ethylhexyl)phthalate	350	U	1500	U
Bromobenzene	5.4	U	5.6	U
Bromochloromethane	5.4	U	5.6	U
Bromodichloromethane	5.4	U	5.6	U
Bromoform	5.4	U	5.6	U
Bromomethane	11	U	11	U
Butylbenzylphthalate	350	U	1500	U
Carbazole	NA		NA	
Carbon disulfide	NA		NA	
Carbon tetrachloride	5.4	U	5.6	U
Chlorobenzene	5.4	U	25	
Chlorodibromomethane	5.4	U	5.6	U
Chloroethane	11	U	11	U
Chloroform	5.4	U	6.7	
Chloromethane	11	U	11	U
Chrysene	940		1500	U
cis-1,2-Dichloroethene	5.4	U	5.6	U
cis-1,3-Dichloropropene	NA		NA	
Dibenzo(a,h)anthracene	350	U	1500	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-NE Entrance (3-9')		BBU-NW Entrance (3-9')	
Dibenzofuran	350	U	1500	U
Dibromomethane	5.4	U	5.6	U
Dichlorodifluoromethane	5.4	U	5.6	U
Dibromochloromethane	NA		NA	
Diethylphthalate	350	U	1500	U
Dimethylphthalate	350	U	1500	U
Di-n-butylphthalate	350	U	1500	U
Di-n-octylphthalate	350	U	1500	U
Ethylbenzene	5.4	U	5.6	U
Fluoranthene	1700		1500	U
Fluorene	350	U	1500	U
Hexachlorobenzene	350	U	1500	U
Hexachlorobutadiene	350	U	1500	U
Hexachlorocyclopentadiene	350	U	1500	U
Hexachloroethane	350	U	1500	U
Indeno(1,2,3-cd)pyrene	350	U	1500	U
Isophorone	350	U	1500	U
Isopropylbenzene	5.4	U	5.6	U
m&p-Xylene	5.4	U	5.6	U
Methylene chloride (Dichloromethane)	5.4	U	5.6	U
Naphthalene	5.4	U	5.6	U
Naphthalene	350	U	1500	U
n-Butylbenzene	5.4	U	5.6	U
Nitrobenzene	350	U	1500	U
N-Nitrosodimethylamine	350	U	1500	U
n-Nitrosodi-n-propylamine	350	U	1500	U
N-Nitrosodiphenylamine/Diphenylamine	350	U	1500	U
n-Propylbenzene	5.4	U	5.6	U
o-Xylene	5.4	U	5.6	U
Pentachlorophenol	1800	U	7900	U
Phenanthrene	1400		1500	U
Phenol	350	U	1500	U
p-Isopropyltoluene	5.4	U	5.6	U
Pyrene	1600		1500	U
sec-Butylbenzene	5.4	U	5.6	U
Styrene	5.4	U	5.6	U
tert-Butylbenzene	5.4	U	5.6	U
Tetrachloroethene	5.4	U	5.6	U
Toluene	5.4	U	5.6	U
trans-1,2-Dichloroethene	5.4	U	5.6	U
trans-1,3-Dichloropropene	NA		NA	
Trichloroethene	5.4	U	5.6	U
Trichlorofluoromethane	5.4	U	15	
Vinyl chloride	11	U	11	U
Xylenes, Total	NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	KR/BC-34 (4-6')		KR/BC-B1 (4-6')		KR/BC-B29 (6-8')	
1,1,1,2-Tetrachloroethane	8900	U	3000	U	600	U
1,1,1-Trichloroethane	8900	U	3000	U	600	U
1,1,2,2-Tetrachloroethane	8900	U	3000	U	600	U
1,1,2-Trichloroethane	8900	U	3000	U	600	U
1,1-Dichloroethane	8900	U	3000	U	600	U
1,1-Dichloroethene	8900	U	3000	U	600	U
1,1-Dichloropropylene	8900	U	3000	U	600	U
1,2,3-Trichlorobenzene	8900	U	3000	U	600	U
1,2,3-Trichloropropane	8900	U	3000	U	600	U
1,2,4-Trichlorobenzene	8900	U	3000	U	600	U
1,2,4-Trichlorobenzene	5800	U	20000	U	2000	U
1,2,4-Trimethylbenzene	8900	U	3000	U	600	U
1,2-Dibromo-3-chloropropane	8900	U	3000	U	600	U
1,2-Dibromoethane (EDB)	8900	U	3000	U	600	U
1,2-Dichlorobenzene	59000		200000		5400	
1,2-Dichloroethane	8900	U	3000	U	600	U
1,2-Dichloropropane	8900	U	3000	U	600	U
1,3,5-Trimethylbenzene	8900	U	3000	U	600	U
1,3-Dichlorobenzene	5800	U	20000	U	2000	U
1,3-Dichloropropane	8900	U	3000	U	600	U
1,4-Dichlorobenzene	14000		45000		2000	U
2,2-Dichloropropane	8900	U	3000	U	600	U
2,2'-Oxybis(1-Chloropropane)	NA		NA		NA	
2,4,5-Trichlorophenol	5800	U	20000	U	2000	U
2,4,6-Trichlorophenol	5800	U	20000	U	2000	U
2,4-Dichlorophenol	5800	U	20000	U	2000	U
2,4-Dimethylphenol	5800	U	20000	U	2000	U
2,4-Dinitrophenol	30000	U	100000	U	10000	U
2,4-Dinitrotoluene	5800	U	20000	U	2000	U
2,6-Dinitrotoluene	5800	U	20000	U	2000	U
2-Butanone (MEK)	44000	U	15000	U	3000	U
2-Chloronaphthalene	5800	U	20000	U	2000	U
2-Chlorophenol	5800	U	20000	U	2000	U
2-Chlorotoluene	8900	U	3000	U	600	U
2-Hexanone	NA		NA		NA	
2-Methyl-4,6-dinitrophenol	30001	U	100001	U	10001	U
2-Methylnaphthalene	5800	U	20000	U	2000	U
2-Methylphenol (o-cresol)	5800	U	20000	U	2000	U
2-Nitroaniline	30000	U	100000	U	10000	U
2-Nitrophenol	5800	U	20000	U	2000	U
3&4-Methylphenol (m&p-cresol)	5800	U	20000	U	2000	U
3,3'-Dichlorobenzidine	12000	U	39000	U	3900	U
3-Nitroaniline	30000	U	100000	U	10000	U
4,6-Dinitro-2-methylphenol	NA		NA		NA	
4-Bromophenyl phenyl ether	5800	U	20000	U	2000	U
4-Chloro-3-methylphenol	5800	U	20000	U	2000	U
4-Chloroaniline	12000	U	39000	U	3900	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	KR/BC-34 (4-6')		KR/BC-B1 (4-6')		KR/BC-B29 (6-8')	
4-Chlorophenylphenyl ether	5800	U	20000	U	2000	U
4-Chlorotoluene	8900	U	3000	U	600	U
4-Methyl-2-pentanone (MIBK)	44000	U	15000	U	3000	U
4-Nitroaniline	30000	U	100000	U	10000	U
4-Nitrophenol	30000	U	100000	U	10000	U
Acenaphthene	5800	U	20000	U	2000	U
Acenaphthylene	5800	U	20000	U	2000	U
Acetone	89000	U	30000	U	6000	U
Anthracene	5800	U	20000	U	2000	U
Aroclor-1016	NA		NA		NA	
Aroclor-1221	NA		NA		NA	
Aroclor-1232	NA		NA		NA	
Aroclor-1242	NA		NA		NA	
Aroclor-1248	NA		NA		NA	
Aroclor-1254	NA		NA		NA	
Aroclor-1260	NA		NA		NA	
Benzene	8900	U	3000	U	600	U
Benzidine	48000	U	160000	U	16000	U
Benzo(a)anthracene	5800	U	20000	U	2000	U
Benzo(a)pyrene	5800	U	20000	U	2000	U
Benzo(b)fluoranthene	5800	U	20000	U	2000	U
Benzo(g,h,i)perylene	5800	U	20000	U	2000	U
Benzo(k)fluoranthene	5800	U	20000	U	2000	U
Benzoic acid	30000	U	100000	U	10000	U
Benzyl alcohol	5800	U	20000	U	2000	U
bis(2-Chloroethoxy)methane	5800	U	20000	U	2000	U
bis(2-Chloroethyl)ether	5800	U	20000	U	2000	U
bis(2-Chloroisopropyl)ether	5800	U	20000	U	2000	U
bis(2-Ethylhexyl)phthalate	5800	U	20000	U	2000	U
Bromobenzene	8900	U	3000	U	600	U
Bromochloromethane	8900	U	3000	U	600	U
Bromodichloromethane	8900	U	3000	U	600	U
Bromoform	8900	U	3000	U	600	U
Bromomethane	18000	U	6000	U	1200	U
Butylbenzylphthalate	5800	U	20000	U	2000	U
Carbazole	NA		NA		NA	
Carbon disulfide	NA		NA		NA	
Carbon tetrachloride	8900	U	3000	U	600	U
Chlorobenzene	240000		38000		22000	
Chlorodibromomethane	8900	U	3000	U	600	U
Chloroethane	18000	U	6000	U	1200	U
Chloroform	8900	U	3000	U	600	U
Chloromethane	18000	U	6000	U	1200	U
Chrysene	5800	U	20000	U	2000	U
cis-1,2-Dichloroethene	8900	U	3000	U	600	U
cis-1,3-Dichloropropene	NA		NA		NA	
Dibenzo(a,h)anthracene	5800	U	20000	U	2000	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	KR/BC-34 (4-6')		KR/BC-B1 (4-6')		KR/BC-B29 (6-8')	
Dibenzofuran	5800	U	20000	U	2000	U
Dibromomethane	8900	U	3000	U	600	U
Dichlorodifluoromethane	8900	U	3000	U	600	U
Dibromochloromethane	NA		NA		NA	
Diethylphthalate	5800	U	20000	U	2000	U
Dimethylphthalate	5800	U	20000	U	2000	U
Di-n-butylphthalate	5800	U	20000	U	2000	U
Di-n-octylphthalate	5800	U	20000	U	2000	U
Ethylbenzene	8900	U	3000	U	600	U
Fluoranthene	5800	U	20000	U	2000	U
Fluorene	5800	U	20000	U	2000	U
Hexachlorobenzene	5800	U	20000	U	2000	U
Hexachlorobutadiene	5800	U	20000	U	2000	U
Hexachlorocyclopentadiene	5800	U	20000	U	2000	U
Hexachloroethane	5800	U	20000	U	2000	U
Indeno(1,2,3-cd)pyrene	5800	U	20000	U	2000	U
Isophorone	5800	U	20000	U	2000	U
Isopropylbenzene	8900	U	3000	U	600	U
m&p-Xylene	8900	U	3000	U	600	U
Methylene chloride (Dichloromethane)	8900	U	3000	U	600	U
Naphthalene	8900	U	3000	U	600	U
Naphthalene	5800	U	20000	U	2000	U
n-Butylbenzene	8900	U	3000	U	600	U
Nitrobenzene	5800	U	20000	U	2000	U
N-Nitrosodimethylamine	5800	U	20000	U	2000	U
n-Nitrosodi-n-propylamine	5800	U	20000	U	2000	U
N-Nitrosodiphenylamine/Diphenylamine	5800	U	20000	U	2000	U
n-Propylbenzene	8900	U	3000	U	600	U
o-Xylene	8900	U	3000	U	780	
Pentachlorophenol	30000	U	100000	U	10000	U
Phenanthrene	5800	U	20000	U	2000	U
Phenol	5800	U	20000	U	2000	U
p-Isopropyltoluene	8900	U	3000	U	600	U
Pyrene	5800	U	20000	U	2000	U
sec-Butylbenzene	8900	U	3000	U	600	U
Styrene	8900	U	3000	U	600	U
tert-Butylbenzene	8900	U	3000	U	980	
Tetrachloroethene	8900	U	3000	U	600	U
Toluene	8900	U	3000	U	600	U
trans-1,2-Dichloroethene	8900	U	3000	U	600	U
trans-1,3-Dichloropropene	NA		NA		NA	
Trichloroethene	8900	U	3000	U	600	U
Trichlorofluoromethane	8900	U	3000	U	600	U
Vinyl chloride	18000	U	6000	U	1200	U
Xylenes, Total	NA		NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	KR/BC-B30-4-6		KR/BC-B31 (2-4')		KR/BC-B32 (2-4')	
1,1,1,2-Tetrachloroethane	3100	U	31	U	1500	U
1,1,1-Trichloroethane	3100	U	31	U	1500	U
1,1,2,2-Tetrachloroethane	3100	U	31	U	1500	U
1,1,2-Trichloroethane	3100	U	31	U	1500	U
1,1-Dichloroethane	3100	U	31	U	1500	U
1,1-Dichloroethene	3100	U	31	U	1500	U
1,1-Dichloropropylene	3100	U	31	U	1500	U
1,2,3-Trichlorobenzene	3100	U	31	U	1500	U
1,2,3-Trichloropropane	3100	U	31	U	1500	U
1,2,4-Trichlorobenzene	3100	U	31	U	4700	
1,2,4-Trichlorobenzene	4100	U	560		810	
1,2,4-Trimethylbenzene	3100	U	31	U	1500	U
1,2-Dibromo-3-chloropropane	3100	U	31	U	1500	U
1,2-Dibromoethane (EDB)	3100	U	31	U	1500	U
1,2-Dichlorobenzene	21000		1600		1100	
1,2-Dichloroethane	3100	U	31	U	1500	U
1,2-Dichloropropane	3100	U	31	U	1500	U
1,3,5-Trimethylbenzene	3100	U	31	U	1500	U
1,3-Dichlorobenzene	4100	U	410	U	440	
1,3-Dichloropropane	3100	U	31	U	1500	U
1,4-Dichlorobenzene	4100	U	1500		1500	
2,2-Dichloropropane	3100	U	31	U	1500	U
2,2'-Oxybis(1-Chloropropane)	NA		NA		NA	
2,4,5-Trichlorophenol	4100	U	410	U	400	U
2,4,6-Trichlorophenol	4100	U	410	U	400	U
2,4-Dichlorophenol	4100	U	410	U	400	U
2,4-Dimethylphenol	4100	U	410	U	400	U
2,4-Dinitrophenol	21000	U	2100	U	2100	U
2,4-Dinitrotoluene	4100	U	410	U	400	U
2,6-Dinitrotoluene	4100	U	410	U	400	U
2-Butanone (MEK)	16000	U	160	U	7500	U
2-Chloronaphthalene	4100	U	410	U	400	U
2-Chlorophenol	4100	U	410	U	400	U
2-Chlorotoluene	3100	U	31	U	1500	U
2-Hexanone	NA		NA		NA	
2-Methyl-4,6-dinitrophenol	21001	U	2101	U	2101	U
2-Methylnaphthalene	4100	U	410	U	400	U
2-Methylphenol (o-cresol)	4100	U	410	U	400	U
2-Nitroaniline	21000	U	2100	U	2100	U
2-Nitrophenol	4100	U	410	U	400	U
3&4-Methylphenol (m&p-cresol)	4100	U	410	U	400	U
3,3'-Dichlorobenzidine	8200	U	820	U	800	U
3-Nitroaniline	21000	U	2100	U	2100	U
4,6-Dinitro-2-methylphenol	NA		NA		NA	
4-Bromophenyl phenyl ether	4100	U	410	U	400	U
4-Chloro-3-methylphenol	4100	U	410	U	400	U
4-Chloroaniline	8200	U	820	U	800	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	KR/BC-B30-4-6		KR/BC-B31 (2-4')		KR/BC-B32 (2-4')	
4-Chlorophenylphenyl ether	4100	U	410	U	400	U
4-Chlorotoluene	3100	U	31	U	1500	U
4-Methyl-2-pentanone (MIBK)	16000	U	160	U	7500	U
4-Nitroaniline	21000	U	2100	U	2100	U
4-Nitrophenol	21000	U	2100	U	2100	U
Acenaphthene	4100	U	410	U	400	U
Acenaphthylene	4100	U	410	U	400	U
Acetone	31000	U	310	U	15000	U
Anthracene	4100	U	410	U	400	U
Aroclor-1016	NA		NA		NA	
Aroclor-1221	NA		NA		NA	
Aroclor-1232	NA		NA		NA	
Aroclor-1242	NA		NA		NA	
Aroclor-1248	NA		NA		NA	
Aroclor-1254	NA		NA		NA	
Aroclor-1260	NA		NA		NA	
Benzene	3100	U	31	U	1500	U
Benzidine	34000	U	3400	U	3300	U
Benzo(a)anthracene	4100	U	410	U	400	U
Benzo(a)pyrene	4100	U	410	U	400	U
Benzo(b)fluoranthene	4100	U	410	U	400	U
Benzo(g,h,i)perylene	4100	U	410	U	400	U
Benzo(k)fluoranthene	4100	U	410	U	400	U
Benzoic acid	21000	U	2100	U	2100	U
Benzyl alcohol	4100	U	410	U	400	U
bis(2-Chloroethoxy)methane	4100	U	410	U	400	U
bis(2-Chloroethyl)ether	4100	U	410	U	400	U
bis(2-Chloroisopropyl)ether	4100	U	410	U	400	U
bis(2-Ethylhexyl)phthalate	4100	U	410	U	400	U
Bromobenzene	3100	U	31	U	1500	U
Bromochloromethane	3100	U	31	U	1500	U
Bromodichloromethane	3100	U	31	U	1500	U
Bromoform	3100	U	31	U	1500	U
Bromomethane	6200	U	62	U	3000	U
Butylbenzylphthalate	4100	U	410	U	400	U
Carbazole	NA		NA		NA	
Carbon disulfide	NA		NA		NA	
Carbon tetrachloride	3100	U	31	U	1500	U
Chlorobenzene	56000		470		38000	
Chlorodibromomethane	3100	U	31	U	1500	U
Chloroethane	6200	U	62	U	3000	U
Chloroform	3100	U	31	U	1500	U
Chloromethane	6200	U	62	U	3000	U
Chrysene	4100	U	410	U	400	U
cis-1,2-Dichloroethene	3100	U	31	U	1500	U
cis-1,3-Dichloropropene	NA		NA		NA	
Dibenzo(a,h)anthracene	4100	U	410	U	400	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	KR/BC-B30-4-6		KR/BC-B31 (2-4')		KR/BC-B32 (2-4')	
Dibenzofuran	4100	U	410	U	400	U
Dibromomethane	3100	U	31	U	1500	U
Dichlorodifluoromethane	3100	U	31	U	1500	U
Dibromochloromethane	NA		NA		NA	
Diethylphthalate	4100	U	410	U	400	U
Dimethylphthalate	4100	U	410	U	400	U
Di-n-butylphthalate	4100	U	410	U	400	U
Di-n-octylphthalate	4100	U	2.9		400	U
Ethylbenzene	3100	U	31	U	1500	U
Fluoranthene	4100	U	410	U	400	U
Fluorene	4100	U	410	U	400	U
Hexachlorobenzene	4100	U	410	U	400	U
Hexachlorobutadiene	4100	U	410	U	400	U
Hexachlorocyclopentadiene	4100	U	410	U	400	U
Hexachloroethane	4100	U	410	U	400	U
Indeno(1,2,3-cd)pyrene	4100	U	410	U	400	U
Isophorone	4100	U	410	U	400	U
Isopropylbenzene	3100	U	31	U	1500	U
m&p-Xylene	3100	U	31	U	1500	U
Methylene chloride (Dichloromethane)	3100	U	31	U	1500	U
Naphthalene	3100	U	31	U	1500	U
Naphthalene	4100	U	410	U	400	U
n-Butylbenzene	3100	U	31	U	1500	U
Nitrobenzene	4100	U	410	U	400	U
N-Nitrosodimethylamine	4100	U	410	U	400	U
n-Nitrosodi-n-propylamine	4100	U	410	U	400	U
N-Nitrosodiphenylamine/Diphenylamine	4100	U	410	U	400	U
n-Propylbenzene	3100	U	31	U	1500	U
o-Xylene	3100	U	31	U	1500	U
Pentachlorophenol	21000	U	2100	U	2100	U
Phenanthrene	4100	U	410	U	400	U
Phenol	4100	U	410	U	400	U
p-Isopropyltoluene	3100	U	31	U	1500	U
Pyrene	4100	U	410	U	400	U
sec-Butylbenzene	3100	U	31	U	1500	U
Styrene	3100	U	31	U	1500	U
tert-Butylbenzene	3100	U	31	U	1500	U
Tetrachloroethene	3100	U	31	U	1500	U
Toluene	3100	U	31	U	1500	U
trans-1,2-Dichloroethene	3100	U	31	U	1500	U
trans-1,3-Dichloropropene	NA		NA		NA	
Trichloroethene	3100	U	31	U	1500	U
Trichlorofluoromethane	3100	U	31	U	1500	U
Vinyl chloride	6200	U	62	U	3000	U
Xylenes, Total	NA		NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	KR/BC-B33 (6-8')		KR/BC-B35 (2-4'(		KR/BC-B36 (0-2')	
1,1,1,2-Tetrachloroethane	6700	U	6100	U	5300	U
1,1,1-Trichloroethane	6700	U	6100	U	5300	U
1,1,2,2-Tetrachloroethane	6700	U	6100	U	5300	U
1,1,2-Trichloroethane	6700	U	6100	U	5300	U
1,1-Dichloroethane	6700	U	6100	U	5300	U
1,1-Dichloroethene	6700	U	6100	U	5300	U
1,1-Dichloropropylene	6700	U	6100	U	5300	U
1,2,3-Trichlorobenzene	6700	U	6100	U	5300	U
1,2,3-Trichloropropane	6700	U	6100	U	5300	U
1,2,4-Trichlorobenzene	6700	U	6100	U	5300	U
1,2,4-Trichlorobenzene	4400	U	2000	U	350	U
1,2,4-Trimethylbenzene	6700	U	6100	U	5300	U
1,2-Dibromo-3-chloropropane	6700	U	6100	U	5300	U
1,2-Dibromoethane (EDB)	6700	U	6100	U	5300	U
1,2-Dichlorobenzene	4400	U	2200		370	
1,2-Dichloroethane	6700	U	6100	U	5300	U
1,2-Dichloropropane	6700	U	6100	U	5300	U
1,3,5-Trimethylbenzene	6700	U	6100	U	5300	U
1,3-Dichlorobenzene	4400	U	2000	U	350	U
1,3-Dichloropropane	6700	U	6100	U	5300	U
1,4-Dichlorobenzene	4400		5300		580	
2,2-Dichloropropane	6700	U	6100	U	5300	U
2,2'-Oxybis(1-Chloropropane)	NA		NA		NA	
2,4,5-Trichlorophenol	4400	U	2000	U	350	U
2,4,6-Trichlorophenol	4400	U	2000	U	350	U
2,4-Dichlorophenol	4400	U	2000	U	350	U
2,4-Dimethylphenol	4400	U	2000	U	350	U
2,4-Dinitrophenol	22000	U	10000	U	1800	U
2,4-Dinitrotoluene	4400	U	2000	U	350	U
2,6-Dinitrotoluene	4400	U	2000	U	350	U
2-Butanone (MEK)	34000	U	30000	U	220000	U
2-Chloronaphthalene	4400	U	2000	U	350	U
2-Chlorophenol	4400	U	2000	U	350	U
2-Chlorotoluene	8200		6100	U	5300	U
2-Hexanone	NA		NA		NA	
2-Methyl-4,6-dinitrophenol	22001	U	10001	U	1801	U
2-Methylnaphthalene	4400	U	2000	U	970	
2-Methylphenol (o-cresol)	4400	U	2000	U	350	U
2-Nitroaniline	22000	U	10000	U	1800	U
2-Nitrophenol	4400	U	2000	U	350	U
3&4-Methylphenol (m&p-cresol)	4400	U	2000	U	350	U
3,3'-Dichlorobenzidine	8800	U	4000	U	700	U
3-Nitroaniline	22000	U	10000	U	1800	U
4,6-Dinitro-2-methylphenol	NA		NA		NA	
4-Bromophenyl phenyl ether	4400	U	2000	U	350	U
4-Chloro-3-methylphenol	4400	U	2000	U	350	U
4-Chloroaniline	8800	U	9100		700	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	KR/BC-B33 (6-8')		KR/BC-B35 (2-4'(		KR/BC-B36 (0-2')	
4-Chlorophenylphenyl ether	4400	U	2000	U	350	U
4-Chlorotoluene	6700	U	6100	U	5300	U
4-Methyl-2-pentanone (MIBK)	34000	U	30000	U	220000	U
4-Nitroaniline	22000	U	10000	U	1800	U
4-Nitrophenol	22000	U	10000	U	1800	U
Acenaphthene	4400	U	2000	U	350	U
Acenaphthylene	4400	U	2000	U	350	U
Acetone	67000	U	61000	U	450000	U
Anthracene	4400	U	2000	U	350	U
Aroclor-1016	NA		NA		NA	
Aroclor-1221	NA		NA		NA	
Aroclor-1232	NA		NA		NA	
Aroclor-1242	NA		NA		NA	
Aroclor-1248	NA		NA		NA	
Aroclor-1254	NA		NA		NA	
Aroclor-1260	NA		NA		NA	
Benzene	6700	U	6100	U	5300	U
Benzidine	36000	U	16000	U	2900	U
Benzo(a)anthracene	4400	U	2000	U	350	U
Benzo(a)pyrene	4400	U	2000	U	350	U
Benzo(b)fluoranthene	4400	U	2000	U	350	U
Benzo(g,h,i)perylene	4400	U	2000	U	350	U
Benzo(k)fluoranthene	4400	U	2000	U	350	U
Benzoic acid	22000	U	10000	U	1800	U
Benzyl alcohol	6200		2000	U	640	
bis(2-Chloroethoxy)methane	4400	U	2000	U	350	U
bis(2-Chloroethyl)ether	4400	U	2000	U	350	U
bis(2-Chloroisopropyl)ether	4400	U	2000	U	350	U
bis(2-Ethylhexyl)phthalate	4400	U	2000	U	350	U
Bromobenzene	6700	U	6100	U	5300	U
Bromochloromethane	6700	U	6100	U	5300	U
Bromodichloromethane	6700	U	6100	U	5300	U
Bromoform	6700	U	6100	U	5300	U
Bromomethane	13000	U	12000	U	11000	U
Butylbenzylphthalate	4400	U	2000	U	350	U
Carbazole	NA		NA		NA	
Carbon disulfide	NA		NA		NA	
Carbon tetrachloride	6700	U	6100	U	5300	U
Chlorobenzene	30000		210000		5300	U
Chlorodibromomethane	6700	U	6100	U	5300	U
Chloroethane	13000	U	12000	U	11000	U
Chloroform	6700	U	6100	U	5300	U
Chloromethane	13000	U	12000	U	11000	U
Chrysene	4400	U	2000	U	350	U
cis-1,2-Dichloroethene	6700	U	6100	U	5300	U
cis-1,3-Dichloropropene	NA		NA		NA	
Dibenzo(a,h)anthracene	4400	U	2000	U	350	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	KR/BC-B33 (6-8')		KR/BC-B35 (2-4'(		KR/BC-B36 (0-2')	
Dibenzofuran	4400	U	2000	U	350	U
Dibromomethane	6700	U	6100	U	5300	U
Dichlorodifluoromethane	6700	U	6100	U	5300	U
Dibromochloromethane	NA		NA		NA	
Diethylphthalate	4400	U	2000	U	350	U
Dimethylphthalate	4400	U	2000	U	350	U
Di-n-butylphthalate	4400	U	2000	U	350	U
Di-n-octylphthalate	4400	U	2000	U	350	U
Ethylbenzene	6700	U	6100	U	5300	U
Fluoranthene	4400	U	2000	U	350	U
Fluorene	4400	U	2000	U	350	U
Hexachlorobenzene	4400	U	2000	U	350	U
Hexachlorobutadiene	4400	U	2000	U	350	U
Hexachlorocyclopentadiene	4400	U	2000	U	350	U
Hexachloroethane	4400	U	2000	U	350	U
Indeno(1,2,3-cd)pyrene	4400	U	2000	U	350	U
Isophorone	4400	U	2000	U	350	U
Isopropylbenzene	6700	U	6100	U	5300	U
m&p-Xylene	6700	U	6100	U	45000	
Methylene chloride (Dichloromethane)	6700	U	6100	U	5300	U
Naphthalene	6700	U	6100	U	5300	U
Naphthalene	4400	U	2000	U	350	U
n-Butylbenzene	6700	U	6100	U	5300	U
Nitrobenzene	4400	U	2000	U	350	U
N-Nitrosodimethylamine	4400	U	2000	U	350	U
n-Nitrosodi-n-propylamine	4400	U	2000	U	350	U
N-Nitrosodiphenylamine/Diphenylamine	4400	U	2000	U	350	U
n-Propylbenzene	6700	U	6100	U	5300	U
o-Xylene	6700	U	6100	U	51000	
Pentachlorophenol	22000	U	10000	U	1800	U
Phenanthrene	4400	U	2000	U	350	U
Phenol	4400	U	2000	U	350	U
p-Isopropyltoluene	6700	U	6100	U	5300	U
Pyrene	4400	U	2000	U	360	
sec-Butylbenzene	6700	U	6100	U	5300	U
Styrene	6700	U	6100	U	5300	U
tert-Butylbenzene	6700	U	6100	U	5300	U
Tetrachloroethene	6700	U	6100	U	5300	U
Toluene	220000		17000		5300	U
trans-1,2-Dichloroethene	6700	U	6100	U	5300	U
trans-1,3-Dichloropropene	NA		NA		NA	
Trichloroethene	6700	U	6100	U	5300	U
Trichlorofluoromethane	6700	U	6100	U	5300	U
Vinyl chloride	13000	U	12000	U	11000	U
Xylenes, Total	NA		NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	KR/BC-B36 (6-8')		KR/BC-B37 (2-4')		KR/BC-B38 (4-6')	
1,1,1,2-Tetrachloroethane	1600	U	6400	U	15000	U
1,1,1-Trichloroethane	1600	U	6400	U	15000	U
1,1,2,2-Tetrachloroethane	1600	U	6400	U	15000	U
1,1,2-Trichloroethane	1600	U	6400	U	15000	U
1,1-Dichloroethane	1600	U	6400	U	15000	U
1,1-Dichloroethene	1600	U	6400	U	15000	U
1,1-Dichloropropylene	1600	U	6400	U	15000	U
1,2,3-Trichlorobenzene	1600	U	6400	U	15000	U
1,2,3-Trichloropropane	1600	U	6400	U	15000	U
1,2,4-Trichlorobenzene	1600	U	6400	U	15000	U
1,2,4-Trichlorobenzene	1300		2100	U	9700	U
1,2,4-Trimethylbenzene	1600	U	6400	U	15000	U
1,2-Dibromo-3-chloropropane	1600	U	6400	U	15000	U
1,2-Dibromoethane (EDB)	1600	U	6400	U	15000	U
1,2-Dichlorobenzene	7600		6000		79000	
1,2-Dichloroethane	1600	U	6400	U	15000	U
1,2-Dichloropropane	1600	U	6400	U	15000	U
1,3,5-Trimethylbenzene	1600	U	6400	U	15000	U
1,3-Dichlorobenzene	830	U	2100	U	9700	U
1,3-Dichloropropane	1600	U	6400	U	15000	U
1,4-Dichlorobenzene	1700		17000		19000	
2,2-Dichloropropane	1600	U	6400	U	15000	U
2,2'-Oxybis(1-Chloropropane)	NA		NA		NA	
2,4,5-Trichlorophenol	830	U	2100	U	9700	U
2,4,6-Trichlorophenol	830	U	2100	U	9700	U
2,4-Dichlorophenol	830	U	2100	U	9700	U
2,4-Dimethylphenol	830	U	2100	U	9700	U
2,4-Dinitrophenol	4300	U	11000	U	50000	U
2,4-Dinitrotoluene	830	U	2100	U	9700	U
2,6-Dinitrotoluene	830	U	2100	U	9700	U
2-Butanone (MEK)	8000	U	32000	U	75000	U
2-Chloronaphthalene	830	U	2100	U	9700	U
2-Chlorophenol	830	U	2100	U	9700	U
2-Chlorotoluene	1600	U	6400	U	15000	U
2-Hexanone	NA		NA		NA	
2-Methyl-4,6-dinitrophenol	4301	U	11001	U	50001	U
2-Methylnaphthalene	830	U	2100	U	9700	U
2-Methylphenol (o-cresol)	830	U	2100	U	9700	U
2-Nitroaniline	4300	U	11000	U	50000	U
2-Nitrophenol	830	U	2100	U	9700	U
3&4-Methylphenol (m&p-cresol)	830	U	2100	U	9700	U
3,3'-Dichlorobenzidine	1700	U	4200	U	19000	U
3-Nitroaniline	4300	U	11000	U	50000	U
4,6-Dinitro-2-methylphenol	NA		NA		NA	
4-Bromophenyl phenyl ether	830	U	2100	U	9700	U
4-Chloro-3-methylphenol	830	U	2100	U	9700	U
4-Chloroaniline	1700	U	4200	U	19000	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	KR/BC-B36 (6-8')		KR/BC-B37 (2-4')		KR/BC-B38 (4-6')	
4-Chlorophenylphenyl ether	830	U	2100	U	9700	U
4-Chlorotoluene	1600	U	6400	U	15000	U
4-Methyl-2-pentanone (MIBK)	8000	U	32000	U	75000	U
4-Nitroaniline	4300	U	11000	U	50000	U
4-Nitrophenol	4300	U	11000	U	50000	U
Acenaphthene	830	U	2100	U	9700	U
Acenaphthylene	830	U	2100	U	9700	U
Acetone	16000	U	64000	U	150000	U
Anthracene	830	U	2100	U	9700	U
Aroclor-1016	NA		NA		NA	
Aroclor-1221	NA		NA		NA	
Aroclor-1232	NA		NA		NA	
Aroclor-1242	NA		NA		NA	
Aroclor-1248	NA		NA		NA	
Aroclor-1254	NA		NA		NA	
Aroclor-1260	NA		NA		NA	
Benzene	1600	U	6400	U	15000	U
Benzidine	6800	U	17000	U	79000	U
Benzo(a)anthracene	830	U	2100	U	9700	U
Benzo(a)pyrene	830	U	2100	U	9700	U
Benzo(b)fluoranthene	830	U	2100	U	9700	U
Benzo(g,h,i)perylene	830	U	2100	U	9700	U
Benzo(k)fluoranthene	830	U	2100	U	9700	U
Benzoic acid	4300	U	11000	U	50000	U
Benzyl alcohol	830	U	2100	U	9700	U
bis(2-Chloroethoxy)methane	830	U	2100	U	9700	U
bis(2-Chloroethyl)ether	830	U	2100	U	9700	U
bis(2-Chloroisopropyl)ether	830	U	2100	U	9700	U
bis(2-Ethylhexyl)phthalate	830	U	2100	U	9700	U
Bromobenzene	1600	U	6400	U	15000	U
Bromochloromethane	1600	U	6400	U	15000	U
Bromodichloromethane	1600	U	6400	U	15000	U
Bromoform	1600	U	6400	U	15000	U
Bromomethane	3200	U	13000	U	29000	U
Butylbenzylphthalate	830	U	2100	U	9700	U
Carbazole	NA		NA		NA	
Carbon disulfide	NA		NA		NA	
Carbon tetrachloride	1600	U	6400	U	15000	U
Chlorobenzene	26000		200000		500000	
Chlorodibromomethane	1600	U	6400	U	15000	U
Chloroethane	3200	U	13000	U	29000	U
Chloroform	1600	U	6400	U	15000	U
Chloromethane	3200	U	13000	U	29000	U
Chrysene	830	U	2100	U	9700	U
cis-1,2-Dichloroethene	1600	U	6400	U	15000	U
cis-1,3-Dichloropropene	NA		NA		NA	
Dibenzo(a,h)anthracene	830	U	2100	U	9700	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	KR/BC-B36 (6-8')		KR/BC-B37 (2-4')		KR/BC-B38 (4-6')	
Dibenzofuran	830	U	2100	U	9700	U
Dibromomethane	1600	U	6400	U	15000	U
Dichlorodifluoromethane	1600	U	6400	U	15000	U
Dibromochloromethane	NA		NA		NA	
Diethylphthalate	830	U	2100	U	9700	U
Dimethylphthalate	830	U	2100	U	9700	U
Di-n-butylphthalate	830	U	2100	U	9700	U
Di-n-octylphthalate	830	U	2100	U	9700	U
Ethylbenzene	1600	U	6400	U	15000	U
Fluoranthene	830	U	2100	U	9700	U
Fluorene	830	U	2100	U	9700	U
Hexachlorobenzene	830	U	2100	U	9700	U
Hexachlorobutadiene	830	U	2100	U	9700	U
Hexachlorocyclopentadiene	830	U	2100	U	9700	U
Hexachloroethane	830	U	2100	U	9700	U
Indeno(1,2,3-cd)pyrene	830	U	2100	U	9700	U
Isophorone	830	U	2100	U	9700	U
Isopropylbenzene	1600	U	6400	U	15000	U
m&p-Xylene	1600	U	6400	U	15000	U
Methylene chloride (Dichloromethane)	1600	U	6400	U	15000	U
Naphthalene	1600	U	6400	U	15000	U
Naphthalene	830	U	2100	U	9700	U
n-Butylbenzene	1600	U	6400	U	15000	U
Nitrobenzene	830	U	2100	U	9700	U
N-Nitrosodimethylamine	830	U	2100	U	9700	U
n-Nitrosodi-n-propylamine	830	U	2100	U	9700	U
N-Nitrosodiphenylamine/Diphenylamine	830	U	2100	U	9700	U
n-Propylbenzene	1600	U	6400	U	15000	U
o-Xylene	1600	U	6400	U	15000	U
Pentachlorophenol	4300	U	11000	U	50000	U
Phenanthrene	830	U	2100	U	9700	U
Phenol	830	U	2100	U	9700	U
p-Isopropyltoluene	1600	U	6400	U	15000	U
Pyrene	830	U	2100	U	9700	U
sec-Butylbenzene	1600	U	6400	U	15000	U
Styrene	1600	U	6400	U	15000	U
tert-Butylbenzene	1600	U	6400	U	15000	U
Tetrachloroethene	1600	U	6400	U	15000	U
Toluene	1600	U	6400	U	15000	U
trans-1,2-Dichloroethene	1600	U	6400	U	15000	U
trans-1,3-Dichloropropene	NA		NA		NA	
Trichloroethene	1600	U	6400	U	15000	U
Trichlorofluoromethane	1600	U	6400	U	15000	U
Vinyl chloride	3200	U	13000	U	29000	U
Xylenes, Total	NA		NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	KR/BC-B39 (4-6')		KR/BC-B40 (6-8')		KR/BC-B42 (2-4')	
1,1,1,2-Tetrachloroethane	16000	U	30000	U	15000	U
1,1,1-Trichloroethane	16000	U	30000	U	15000	U
1,1,2,2-Tetrachloroethane	16000	U	30000	U	15000	U
1,1,2-Trichloroethane	16000	U	30000	U	15000	U
1,1-Dichloroethane	16000	U	30000	U	15000	U
1,1-Dichloroethene	16000	U	30000	U	15000	U
1,1-Dichloropropylene	16000	U	30000	U	15000	U
1,2,3-Trichlorobenzene	16000	U	30000	U	15000	U
1,2,3-Trichloropropane	16000	U	30000	U	15000	U
1,2,4-Trichlorobenzene	16000	U	30000	U	15000	U
1,2,4-Trichlorobenzene	4200	U	4000	U	4000	U
1,2,4-Trimethylbenzene	16000	U	30000	U	15000	U
1,2-Dibromo-3-chloropropane	16000	U	30000	U	15000	U
1,2-Dibromoethane (EDB)	16000	U	30000	U	15000	U
1,2-Dichlorobenzene	25000		45000		46000	
1,2-Dichloroethane	16000	U	30000	U	15000	U
1,2-Dichloropropane	16000	U	30000	U	15000	U
1,3,5-Trimethylbenzene	16000	U	30000	U	15000	U
1,3-Dichlorobenzene	4200	U	4000	U	4000	U
1,3-Dichloropropane	16000	U	30000	U	15000	U
1,4-Dichlorobenzene	5500		9400		12000	
2,2-Dichloropropane	16000	U	30000	U	15000	U
2,2'-Oxybis(1-Chloropropane)	NA		NA		NA	
2,4,5-Trichlorophenol	4200	U	4000	U	4000	U
2,4,6-Trichlorophenol	4200	U	4000	U	4000	U
2,4-Dichlorophenol	4200	U	4000	U	4000	U
2,4-Dimethylphenol	4200	U	4000	U	4000	U
2,4-Dinitrophenol	22000	U	20000	U	20000	U
2,4-Dinitrotoluene	4200	U	4000	U	4000	U
2,6-Dinitrotoluene	4200	U	4000	U	4000	U
2-Butanone (MEK)	80000	U	150000	U	75000	U
2-Chloronaphthalene	4200	U	4000	U	4000	U
2-Chlorophenol	4200	U	4000	U	4000	U
2-Chlorotoluene	16000	U	30000	U	15000	U
2-Hexanone	NA		NA		NA	
2-Methyl-4,6-dinitrophenol	22000	U	20000	U	20000	U
2-Methylnaphthalene	4200	U	4000	U	4000	U
2-Methylphenol (o-cresol)	4200	U	4000	U	4000	U
2-Nitroaniline	22000	U	20000	U	20000	U
2-Nitrophenol	4200	U	4000	U	4000	U
3&4-Methylphenol (m&p-cresol)	4200	U	4000	U	4000	U
3,3'-Dichlorobenzidine	8400	U	8000	U	8000	U
3-Nitroaniline	22000	U	20000	U	20000	U
4,6-Dinitro-2-methylphenol	NA		NA		NA	
4-Bromophenyl phenyl ether	4200	U	4000	U	4000	U
4-Chloro-3-methylphenol	4200	U	4000	U	4000	U
4-Chloroaniline	8400	U	8000	U	12000	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	KR/BC-B39 (4-6')		KR/BC-B40 (6-8')		KR/BC-B42 (2-4')	
4-Chlorophenylphenyl ether	4200	U	4000	U	4000	U
4-Chlorotoluene	16000	U	30000	U	15000	U
4-Methyl-2-pentanone (MIBK)	80000	U	150000	U	75000	U
4-Nitroaniline	22000	U	20000	U	20000	U
4-Nitrophenol	22000	U	20000	U	20000	U
Acenaphthene	4200	U	4000	U	4000	U
Acenaphthylene	4200	U	4000	U	4000	U
Acetone	160000	U	300000	U	150000	U
Anthracene	4200	U	4000	U	4000	U
Aroclor-1016	2100	U	400	U	NA	
Aroclor-1221	4300	U	800	U	NA	
Aroclor-1232	2100	U	400	U	NA	
Aroclor-1242	2100	U	400	U	NA	
Aroclor-1248	25000		2000		NA	
Aroclor-1254	6200		1800		NA	
Aroclor-1260	3100		2600		NA	
Benzene	16000	U	30000	U	15000	U
Benzidine	34000	U	32000	U	32000	U
Benzo(a)anthracene	4200	U	4000	U	4000	U
Benzo(a)pyrene	4200	U	4000	U	4000	U
Benzo(b)fluoranthene	4200	U	4000	U	4000	U
Benzo(g,h,i)perylene	4200	U	4000	U	4000	U
Benzo(k)fluoranthene	4200	U	4000	U	4000	U
Benzoic acid	22000	U	20000	U	20000	U
Benzyl alcohol	4200	U	4000	U	4000	U
bis(2-Chloroethoxy)methane	4200	U	4000	U	4000	U
bis(2-Chloroethyl)ether	4200	U	4000	U	4000	U
bis(2-Chloroisopropyl)ether	4200	U	4000	U	4000	U
bis(2-Ethylhexyl)phthalate	4200	U	4000	U	4000	U
Bromobenzene	16000	U	30000	U	15000	U
Bromochloromethane	16000	U	30000	U	15000	U
Bromodichloromethane	16000	U	30000	U	15000	U
Bromoform	16000	U	30000	U	15000	U
Bromomethane	32000	U	60000	U	30000	U
Butylbenzylphthalate	4200	U	4000	U	4000	U
Carbazole	NA		NA		NA	
Carbon disulfide	NA		NA		NA	
Carbon tetrachloride	16000	U	30000	U	15000	U
Chlorobenzene	240000		1000000		360000	
Chlorodibromomethane	16000	U	30000	U	15000	U
Chloroethane	32000	U	60000	U	30000	U
Chloroform	16000	U	30000	U	15000	U
Chloromethane	32000	U	60000	U	30000	U
Chrysene	4200	U	100		4000	U
cis-1,2-Dichloroethene	16000	U	30000	U	15000	U
cis-1,3-Dichloropropene	NA		NA		NA	
Dibenzo(a,h)anthracene	4200	U	4000	U	4000	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	KR/BC-B39 (4-6')		KR/BC-B40 (6-8')		KR/BC-B42 (2-4')	
Dibenzofuran	4200	U	4000	U	4000	U
Dibromomethane	16000	U	30000	U	15000	U
Dichlorodifluoromethane	16000	U	30000	U	15000	U
Dibromochloromethane	NA		NA		NA	
Diethylphthalate	4200	U	4000	U	4000	U
Dimethylphthalate	4200	U	4000	U	4000	U
Di-n-butylphthalate	4200	U	4000	U	4000	U
Di-n-octylphthalate	4200	U	4000	U	4000	U
Ethylbenzene	16000	U	30000	U	15000	U
Fluoranthene	4200	U	4000	U	4000	U
Fluorene	4200	U	4000	U	4000	U
Hexachlorobenzene	4200	U	4000	U	4000	U
Hexachlorobutadiene	16000	U	30000	U	4000	U
Hexachlorocyclopentadiene	4200	U	4000	U	4000	U
Hexachloroethane	4200	U	4000	U	4000	U
Indeno(1,2,3-cd)pyrene	4200	U	4000	U	4000	U
Isophorone	4200	U	4000	U	4000	U
Isopropylbenzene	16000	U	30000	U	15000	U
m&p-Xylene	16000	U	30000	U	15000	U
Methylene chloride (Dichloromethane)	16000	U	30000	U	15000	U
Naphthalene	16000	U	30000	U	15000	U
Naphthalene	4200	U	4000	U	4000	U
n-Butylbenzene	16000	U	30000	U	15000	U
Nitrobenzene	4200	U	4000	U	4000	U
N-Nitrosodimethylamine	4200	U	4000	U	4000	U
n-Nitrosodi-n-propylamine	4200	U	4000	U	4000	U
N-Nitrosodiphenylamine/Diphenylamine	4200	U	4000	U	4000	U
n-Propylbenzene	16000	U	30000	U	15000	U
o-Xylene	16000	U	30000	U	15000	U
Pentachlorophenol	22000	U	20000	U	20000	U
Phenanthrene	4200	U	4000	U	4000	U
Phenol	4200	U	4000	U	4000	U
p-Isopropyltoluene	16000	U	30000	U	15000	U
Pyrene	4200	U	4000	U	4000	U
sec-Butylbenzene	16000	U	30000	U	15000	U
Styrene	16000	U	30000	U	15000	U
tert-Butylbenzene	16000	U	30000	U	15000	U
Tetrachloroethene	16000	U	30000	U	15000	U
Toluene	16000	U	30000	U	15000	U
trans-1,2-Dichloroethene	16000	U	30000	U	15000	U
trans-1,3-Dichloropropene	NA		NA		NA	
Trichloroethene	16000	U	30000	U	15000	U
Trichlorofluoromethane	16000	U	30000	U	15000	U
Vinyl chloride	32000	U	60000	U	30000	U
Xylenes, Total	NA		NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	KR/BC-B40 (0-2)		KR/BC-B43-4-6		KR-BC-B28 (6-8')	
1,1,1,2-Tetrachloroethane	15000	U	1200	U	15000	U
1,1,1-Trichloroethane	15000	U	1200	U	15000	U
1,1,2,2-Tetrachloroethane	15000	U	1200	U	15000	U
1,1,2-Trichloroethane	15000	U	1200	U	15000	U
1,1-Dichloroethane	15000	U	1200	U	15000	U
1,1-Dichloroethene	15000	U	1200	U	15000	U
1,1-Dichloropropylene	15000	U	1200	U	15000	U
1,2,3-Trichlorobenzene	15000	U	1200	U	15000	U
1,2,3-Trichloropropane	15000	U	1200	U	15000	U
1,2,4-Trichlorobenzene	15000	U	1200	U	15000	U
1,2,4-Trichlorobenzene	8000	U	3900	U	1600	U
1,2,4-Trimethylbenzene	15000	U	1200	U	15000	U
1,2-Dibromo-3-chloropropane	15000	U	1200	U	15000	U
1,2-Dibromoethane (EDB)	15000	U	1200	U	15000	U
1,2-Dichlorobenzene	39000		19000		3400	
1,2-Dichloroethane	15000	U	1200	U	15000	U
1,2-Dichloropropane	15000	U	1200	U	15000	U
1,3,5-Trimethylbenzene	15000	U	1200	U	15000	U
1,3-Dichlorobenzene	8000	U	3900	U	1600	U
1,3-Dichloropropane	15000	U	1200	U	15000	U
1,4-Dichlorobenzene	20000		3900	U	1600	U
2,2-Dichloropropane	15000	U	1200	U	15000	U
2,2'-Oxybis(1-Chloropropane)	NA		NA		NA	
2,4,5-Trichlorophenol	8000	U	3900	U	1600	U
2,4,6-Trichlorophenol	8000	U	3900	U	1600	U
2,4-Dichlorophenol	8000	U	3900	U	1600	U
2,4-Dimethylphenol	8000	U	3900	U	1600	U
2,4-Dinitrophenol	41000	U	20000	U	8100	U
2,4-Dinitrotoluene	8000	U	3900	U	1600	U
2,6-Dinitrotoluene	8000	U	3900	U	1600	U
2-Butanone (MEK)	75000	U	6000	U	75000	U
2-Chloronaphthalene	8000	U	3900	U	1600	U
2-Chlorophenol	8000	U	3900	U	1600	U
2-Chlorotoluene	15000	U	1200	U	15000	U
2-Hexanone	NA		NA		NA	
2-Methyl-4,6-dinitrophenol	41000	U	20000	U	8100	U
2-Methylnaphthalene	8000	U	3900	U	1600	U
2-Methylphenol (o-cresol)	8000	U	3900	U	1600	U
2-Nitroaniline	41000	U	20000	U	8100	U
2-Nitrophenol	8000	U	3900	U	1600	U
3&4-Methylphenol (m&p-cresol)	8000	U	3900	U	1600	U
3,3'-Dichlorobenzidine	16000	U	7800	U	3100	U
3-Nitroaniline	41000	U	20000	U	8100	U
4,6-Dinitro-2-methylphenol	NA		NA		NA	
4-Bromophenyl phenyl ether	8000	U	3900	U	1600	U
4-Chloro-3-methylphenol	8000	U	3900	U	1600	U
4-Chloroaniline	16000		7800	U	3100	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	KR/BC-B40 (0-2)		KR/BC-B43-4-6		KR-BC-B28 (6-8')	
4-Chlorophenylphenyl ether	8000	U	3900	U	1600	U
4-Chlorotoluene	15000	U	1200	U	15000	U
4-Methyl-2-pentanone (MIBK)	75000	U	6000	U	75000	U
4-Nitroaniline	41000	U	20000	U	8100	U
4-Nitrophenol	41000	U	20000	U	8100	U
Acenaphthene	8000	U	3900	U	1600	U
Acenaphthylene	8000	U	3900	U	1600	U
Acetone	150000	U	12000	U	150000	U
Anthracene	8000	U	3900	U	1600	U
Aroclor-1016	NA		NA		NA	
Aroclor-1221	NA		NA		NA	
Aroclor-1232	NA		NA		NA	
Aroclor-1242	NA		NA		NA	
Aroclor-1248	NA		NA		NA	
Aroclor-1254	NA		NA		NA	
Aroclor-1260	NA		NA		NA	
Benzene	15000	U	1200	U	15000	U
Benzidine	65000	U	32000	U	13000	U
Benzo(a)anthracene	8000	U	3900	U	1600	U
Benzo(a)pyrene	8000	U	3900	U	1600	U
Benzo(b)fluoranthene	8000	U	3900	U	1600	U
Benzo(g,h,i)perylene	8000	U	3900	U	1600	U
Benzo(k)fluoranthene	8000	U	3900	U	1600	U
Benzoic acid	41000	U	20000	U	8100	U
Benzyl alcohol	8000	U	3900	U	1600	U
bis(2-Chloroethoxy)methane	8000	U	3900	U	1600	U
bis(2-Chloroethyl)ether	8000	U	3900	U	1600	U
bis(2-Chloroisopropyl)ether	8000	U	3900	U	1600	U
bis(2-Ethylhexyl)phthalate	8000	U	3900	U	1600	U
Bromobenzene	15000	U	1200	U	15000	U
Bromochloromethane	15000	U	1200	U	15000	U
Bromodichloromethane	15000	U	1200	U	15000	U
Bromoform	15000	U	1200	U	15000	U
Bromomethane	30000	U	2400	U	30000	U
Butylbenzylphthalate	8000	U	3900	U	1600	U
Carbazole	NA		NA		NA	
Carbon disulfide	NA		NA		NA	
Carbon tetrachloride	15000	U	1200	U	15000	U
Chlorobenzene	500000		12000		420000	
Chlorodibromomethane	15000	U	1200	U	15000	U
Chloroethane	30000	U	2400	U	30000	U
Chloroform	15000	U	1200	U	15000	U
Chloromethane	30000	U	2400	U	30000	U
Chrysene	8000	U	3900	U	1600	U
cis-1,2-Dichloroethene	15000	U	1200	U	15000	U
cis-1,3-Dichloropropene	NA		NA		NA	
Dibenzo(a,h)anthracene	8000	U	3900	U	1600	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	KR/BC-B40 (0-2)		KR/BC-B43-4-6		KR-BC-B28 (6-8')	
Dibenzofuran	8000	U	3900	U	1600	U
Dibromomethane	15000	U	1200	U	15000	U
Dichlorodifluoromethane	15000	U	1200	U	15000	U
Dibromochloromethane	NA		NA		NA	
Diethylphthalate	8000	U	3900	U	1600	U
Dimethylphthalate	8000	U	3900	U	1600	U
Di-n-butylphthalate	8000	U	3900	U	1600	U
Di-n-octylphthalate	8000	U	3900	U	1600	U
Ethylbenzene	15000	U	1200	U	15000	U
Fluoranthene	8000	U	3900	U	1600	U
Fluorene	8000	U	3900	U	1600	U
Hexachlorobenzene	8000	U	3900	U	1600	U
Hexachlorobutadiene	8000	U	3900	U	1600	U
Hexachlorocyclopentadiene	8000	U	3900	U	1600	U
Hexachloroethane	8000	U	3900	U	1600	U
Indeno(1,2,3-cd)pyrene	8000	U	3900	U	1600	U
Isophorone	8000	U	3900	U	1600	U
Isopropylbenzene	15000	U	1200	U	15000	U
m&p-Xylene	15000	U	1200	U	15000	U
Methylene chloride (Dichloromethane)	15000	U	1200	U	15000	U
Naphthalene	15000	U	1200	U	15000	U
Naphthalene	8000	U	3900	U	1600	U
n-Butylbenzene	15000	U	1200	U	15000	U
Nitrobenzene	8000	U	3900	U	1600	U
N-Nitrosodimethylamine	8000	U	3900	U	1600	U
n-Nitrosodi-n-propylamine	8000	U	3900	U	1600	U
N-Nitrosodiphenylamine/Diphenylamine	8000	U	3900	U	1600	U
n-Propylbenzene	15000	U	1200	U	15000	U
o-Xylene	15000	U	1200	U	15000	U
Pentachlorophenol	41000	U	20000	U	8100	U
Phenanthrene	8000	U	3900	U	1600	U
Phenol	8000	U	3900	U	1600	U
p-Isopropyltoluene	15000	U	1200	U	15000	U
Pyrene	8000	U	3900	U	1600	U
sec-Butylbenzene	15000	U	1200	U	15000	U
Styrene	15000	U	1200	U	15000	U
tert-Butylbenzene	15000	U	1200	U	15000	U
Tetrachloroethene	15000	U	1200	U	15000	U
Toluene	15000	U	1200	U	15000	U
trans-1,2-Dichloroethene	15000	U	1200	U	15000	U
trans-1,3-Dichloropropene	NA		NA		NA	
Trichloroethene	15000	U	1200	U	15000	U
Trichlorofluoromethane	15000	U	1200	U	15000	U
Vinyl chloride	30000	U	2400	U	30000	U
Xylenes, Total	NA		NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	NTF-B72-4-6'		NTF-B73-2-4'		NTF-B74-6-8'	
1,1,1,2-Tetrachloroethane	NA		NA		NA	
1,1,1-Trichloroethane	210	U	560	U	7100	U
1,1,2,2-Tetrachloroethane	210	U	560	U	7100	U
1,1,2-Trichloroethane	210	U	560	U	7100	U
1,1-Dichloroethane	210	U	560	U	7100	U
1,1-Dichloroethene	210	U	560	U	7100	U
1,1-Dichloropropylene	NA		NA		NA	
1,2,3-Trichlorobenzene	NA		NA		NA	
1,2,3-Trichloropropane	NA		NA		NA	
1,2,4-Trichlorobenzene	830	U	410	U	470	U
1,2,4-Trichlorobenzene	NA		NA		NA	
1,2,4-Trimethylbenzene	NA		NA		NA	
1,2-Dibromo-3-chloropropane	NA		NA		NA	
1,2-Dibromoethane (EDB)	NA		NA		NA	
1,2-Dichlorobenzene	830	U	410	U	470	U
1,2-Dichloroethane	210	U	560	U	7100	U
1,2-Dichloropropane	210	U	560	U	7100	U
1,3,5-Trimethylbenzene	NA		NA		NA	
1,3-Dichlorobenzene	830	U	410	U	470	U
1,3-Dichloropropane	NA		NA		NA	
1,4-Dichlorobenzene	830	U	410	U	470	U
2,2-Dichloropropane	NA		NA		NA	
2,2'-Oxybis(1-Chloropropane)	830	U	410	U	470	U
2,4,5-Trichlorophenol	830	U	410	U	470	U
2,4,6-Trichlorophenol	830	U	410	U	470	U
2,4-Dichlorophenol	830	U	410	U	470	U
2,4-Dimethylphenol	830	U	410	U	470	U
2,4-Dinitrophenol	4300	U	2100	U	2400	U
2,4-Dinitrotoluene	830	U	410	U	470	U
2,6-Dinitrotoluene	830	U	410	U	470	U
2-Butanone (MEK)	1100	U	2800	U	36000	U
2-Chloronaphthalene	830	U	410	U	470	U
2-Chlorophenol	830	U	410	U	470	U
2-Chlorotoluene	NA		NA		NA	
2-Hexanone	1100	U	2800	U	36000	U
2-Methyl-4,6-dinitrophenol	NA		NA		NA	
2-Methylnaphthalene	830	U	410	U	470	U
2-Methylphenol (o-cresol)	830	U	410	U	470	U
2-Nitroaniline	4300	U	2100	U	2400	U
2-Nitrophenol	830	U	410	U	470	U
3&4-Methylphenol (m&p-cresol)	NA		NA		NA	
3,3'-Dichlorobenzidine	1600	U	810	U	940	U
3-Nitroaniline	4300	U	2100	U	2400	U
4,6-Dinitro-2-methylphenol	4300	U	2100	U	2400	U
4-Bromophenyl phenyl ether	830	U	410	U	470	U
4-Chloro-3-methylphenol	830	U	410	U	470	U
4-Chloroaniline	1600	U	810	U	940	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	NTF-B72-4-6'		NTF-B73-2-4'		NTF-B74-6-8'	
4-Chlorophenylphenyl ether	830	U	410	U	470	U
4-Chlorotoluene	NA		NA		NA	
4-Methyl-2-pentanone (MIBK)	1100	U	2800	U	36000	U
4-Nitroaniline	4300	U	2100	U	2400	U
4-Nitrophenol	4300	U	2100	U	2400	U
Acenaphthene	830	U	410	U	470	U
Acenaphthylene	830	U	410	U	470	U
Acetone	2100	U	5600	U	71000	U
Anthracene	830	U	410	U	470	U
Aroclor-1016	250	U	41	U	47	U
Aroclor-1221	510	U	83	U	96	U
Aroclor-1232	250	U	41	U	47	U
Aroclor-1242	250	U	41	U	47	U
Aroclor-1248	250	U	41	U	47	U
Aroclor-1254	250	U	41	U	47	U
Aroclor-1260	250	U	41	U	47	U
Benzene	210	U	560	U	7100	U
Benzidine	NA		NA		NA	
Benzo(a)anthracene	830	U	410	U	470	U
Benzo(a)pyrene	830	U	410	U	470	U
Benzo(b)fluoranthene	830	U	410	U	470	U
Benzo(g,h,i)perylene	830	U	410	U	470	U
Benzo(k)fluoranthene	830	U	410	U	470	U
Benzoic acid	NA		NA		NA	
Benzyl alcohol	NA		NA		NA	
bis(2-Chloroethoxy)methane	830	U	410	U	470	U
bis(2-Chloroethyl)ether	830	U	410	U	470	U
bis(2-Chloroisopropyl)ether	NA		NA		NA	
bis(2-Ethylhexyl)phthalate	830	U	410	U	470	U
Bromobenzene	NA		NA		NA	
Bromochloromethane	NA		NA		NA	
Bromodichloromethane	210	U	560	U	7100	U
Bromoform	210	U	560	U	7100	U
Bromomethane	430	U	1100	U	14000	U
Butylbenzylphthalate	830	U	410	U	470	U
Carbazole	830	U	410	U	470	U
Carbon disulfide	210	U	560	U	7100	U
Carbon tetrachloride	210	U	560	U	7100	U
Chlorobenzene	520		13000		210000	
Chlorodibromomethane	NA		NA		NA	
Chloroethane	430	U	1100	U	14000	U
Chloroform	210	U	560	U	7100	U
Chloromethane	430	U	1100	U	14000	U
Chrysene	830	U	410	U	470	U
cis-1,2-Dichloroethene	210	U	560	U	7100	U
cis-1,3-Dichloropropene	210	U	560	U	7100	U
Dibenzo(a,h)anthracene	830	U	410	U	470	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	NTF-B72-4-6'		NTF-B73-2-4'		NTF-B74-6-8'	
Dibenzofuran	830	U	410	U	470	U
Dibromomethane	NA		NA		NA	
Dichlorodifluoromethane	NA		NA		NA	
Dibromochloromethane	210	U	560	U	7100	U
Diethylphthalate	830	U	410	U	470	U
Dimethylphthalate	830	U	410	U	470	U
Di-n-butylphthalate	830	U	410	U	470	U
Di-n-octylphthalate	830	U	410	U	470	U
Ethylbenzene	210	U	560	U	7100	U
Fluoranthene	830	U	410	U	470	U
Fluorene	830	U	410	U	470	U
Hexachlorobenzene	830	U	410	U	470	U
Hexachlorobutadiene	830	U	410	U	470	U
Hexachlorocyclopentadiene	830	U	410	U	470	U
Hexachloroethane	830	U	410	U	470	U
Indeno(1,2,3-cd)pyrene	830	U	410	U	470	U
Isophorone	830	U	410	U	470	U
Isopropylbenzene	NA		NA		NA	
m&p-Xylene	NA		NA		NA	
Methylene chloride (Dichloromethane)	210	U	560	U	7100	U
Naphthalene	NA		NA		NA	
Naphthalene	830	U	410	U	470	U
n-Butylbenzene	NA		NA		NA	
Nitrobenzene	830	U	410	U	470	U
N-Nitrosodimethylamine	NA		NA		NA	
n-Nitrosodi-n-propylamine	830	U	410	U	470	U
N-Nitrosodiphenylamine/Diphenylamine	830	U	410	U	470	U
n-Propylbenzene	NA		NA		NA	
o-Xylene	NA		NA		NA	
Pentachlorophenol	4300	U	2100	U	2400	U
Phenanthrene	830	U	410	U	470	U
Phenol	830	U	410	U	470	U
p-Isopropyltoluene	NA		NA		NA	
Pyrene	830	U	410	U	470	U
sec-Butylbenzene	NA		NA		NA	
Styrene	210	U	560	U	7100	U
tert-Butylbenzene	NA		NA		NA	
Tetrachloroethene	210	U	560	U	7100	U
Toluene	210	U	560	U	7100	U
trans-1,2-Dichloroethene	NA		NA		NA	
trans-1,3-Dichloropropene	210	U	560	U	7100	U
Trichloroethene	210	U	560	U	7100	U
Trichlorofluoromethane	NA		NA		NA	
Vinyl chloride	430	U	1100	U	14000	U
Xylenes, Total	430	U	1100	U	14000	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	NTF-B75-16-20'		NTF-B77-16-18'		NTF-B78-16-18'	
1,1,1,2-Tetrachloroethane	NA		NA		NA	
1,1,1-Trichloroethane	260	U	220	U	5.8	U
1,1,2,2-Tetrachloroethane	260	U	220	U	5.8	U
1,1,2-Trichloroethane	260	U	220	U	5.8	U
1,1-Dichloroethane	260	U	220	U	5.8	U
1,1-Dichloroethene	260	U	220	U	5.8	U
1,1-Dichloropropylene	NA		NA		NA	
1,2,3-Trichlorobenzene	NA		NA		NA	
1,2,3-Trichloropropane	NA		NA		NA	
1,2,4-Trichlorobenzene	4200	U	3700	U	340	U
1,2,4-Trichlorobenzene	NA		NA		NA	
1,2,4-Trimethylbenzene	NA		NA		NA	
1,2-Dibromo-3-chloropropane	NA		NA		NA	
1,2-Dibromoethane (EDB)	NA		NA		NA	
1,2-Dichlorobenzene	4200	U	3700	U	340	U
1,2-Dichloroethane	260	U	220	U	5.8	U
1,2-Dichloropropane	260	U	220	U	5.8	U
1,3,5-Trimethylbenzene	NA		NA		NA	
1,3-Dichlorobenzene	4200	U	3700	U	340	U
1,3-Dichloropropane	NA		NA		NA	
1,4-Dichlorobenzene	4200	U	3700	U	340	U
2,2-Dichloropropane	NA		NA		NA	
2,2'-Oxybis(1-Chloropropane)	4200	U	3700	U	340	U
2,4,5-Trichlorophenol	4200	U	3700	U	340	U
2,4,6-Trichlorophenol	4200	U	3700	U	340	U
2,4-Dichlorophenol	4200	U	3700	U	340	U
2,4-Dimethylphenol	4200	U	3700	U	340	U
2,4-Dinitrophenol	22000	U	19000	U	1800	U
2,4-Dinitrotoluene	4200	U	3700	U	340	U
2,6-Dinitrotoluene	4200	U	3700	U	340	U
2-Butanone (MEK)	1300	U	1100	U	29	U
2-Chloronaphthalene	4200	U	3700	U	340	U
2-Chlorophenol	4200	U	3700	U	340	U
2-Chlorotoluene	NA		NA		NA	
2-Hexanone	1300	U	1100	U	29	U
2-Methyl-4,6-dinitrophenol	NA		NA		NA	
2-Methylnaphthalene	6800		6800		340	U
2-Methylphenol (o-cresol)	4200	U	3700	U	340	U
2-Nitroaniline	22000	U	19000	U	1800	U
2-Nitrophenol	4200	U	3700	U	340	U
3&4-Methylphenol (m&p-cresol)	NA		NA		NA	
3,3'-Dichlorobenzidine	8500	U	7400	U	690	U
3-Nitroaniline	22000	U	19000	U	1800	U
4,6-Dinitro-2-methylphenol	22000	U	19000	U	1800	U
4-Bromophenyl phenyl ether	4200	U	3700	U	340	U
4-Chloro-3-methylphenol	4200	U	3700	U	340	U
4-Chloroaniline	8500	U	7400	U	690	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	NTF-B75-16-20'		NTF-B77-16-18'		NTF-B78-16-18'	
4-Chlorophenylphenyl ether	4200	U	3700	U	340	U
4-Chlorotoluene	NA		NA		NA	
4-Methyl-2-pentanone (MIBK)	1300	U	1100	U	29	U
4-Nitroaniline	22000	U	19000	U	1800	U
4-Nitrophenol	22000	U	19000	U	1800	U
Acenaphthene	4200	U	3700	U	340	U
Acenaphthylene	4200	U	3700	U	340	U
Acetone	2600	U	2200	U	58	U
Anthracene	4200	U	3700	U	340	U
Aroclor-1016	42	U	33	U	34	U
Aroclor-1221	86	U	67	U	70	U
Aroclor-1232	42	U	33	U	34	U
Aroclor-1242	42	U	33	U	34	U
Aroclor-1248	42	U	33	U	34	U
Aroclor-1254	42	U	33	U	34	U
Aroclor-1260	42	U	33	U	34	U
Benzene	320		220	U	5.8	U
Benzidine	NA		NA		NA	
Benzo(a)anthracene	4200	U	3700	U	340	U
Benzo(a)pyrene	4200	U	3700	U	340	U
Benzo(b)fluoranthene	4200	U	3700	U	340	U
Benzo(g,h,i)perylene	4200	U	3700	U	340	U
Benzo(k)fluoranthene	4200	U	3700	U	340	U
Benzoic acid	NA		NA		NA	
Benzyl alcohol	NA		NA		NA	
bis(2-Chloroethoxy)methane	4200	U	3700	U	340	U
bis(2-Chloroethyl)ether	4200	U	3700	U	340	U
bis(2-Chloroisopropyl)ether	NA		NA		NA	
bis(2-Ethylhexyl)phthalate	4200	U	3700	U	340	U
Bromobenzene	NA		NA		NA	
Bromochloromethane	NA		NA		NA	
Bromodichloromethane	260	U	220	U	5.8	U
Bromoform	260	U	220	U	5.8	U
Bromomethane	510	U	450	U	12	U
Butylbenzylphthalate	4200	U	3700	U	340	U
Carbazole	4200	U	3700	U	340	U
Carbon disulfide	260	U	220	U	3.2	
Carbon tetrachloride	260	U	220	U	5.8	U
Chlorobenzene	260	U	600		10	
Chlorodibromomethane	NA		NA		NA	
Chloroethane	510	U	450	U	12	U
Chloroform	260	U	220	U	5.8	U
Chloromethane	510	U	450	U	12	U
Chrysene	4200	U	3700	U	340	U
cis-1,2-Dichloroethene	260	U	220	U	5.8	U
cis-1,3-Dichloropropene	260	U	220	U	5.8	U
Dibenzo(a,h)anthracene	4200	U	3700	U	340	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	NTF-B75-16-20'		NTF-B77-16-18'		NTF-B78-16-18'	
Dibenzofuran	4200	U	3700	U	340	U
Dibromomethane	NA		NA		NA	
Dichlorodifluoromethane	NA		NA		NA	
Dibromochloromethane	260	U	220	U	5.8	U
Diethylphthalate	4200	U	3700	U	340	U
Dimethylphthalate	4200	U	3700	U	340	U
Di-n-butylphthalate	4200	U	3700	U	340	U
Di-n-octylphthalate	4200	U	3700	U	340	U
Ethylbenzene	260	U	220	U	5.8	U
Fluoranthene	4200	U	3700	U	340	U
Fluorene	4200	U	3700	U	340	U
Hexachlorobenzene	4200	U	3700	U	340	U
Hexachlorobutadiene	4200	U	3700	U	340	U
Hexachlorocyclopentadiene	4200	U	3700	U	340	U
Hexachloroethane	4200	U	3700	U	340	U
Indeno(1,2,3-cd)pyrene	4200	U	3700	U	340	U
Isophorone	4200	U	3700	U	340	U
Isopropylbenzene	NA		NA		NA	
m&p-Xylene	NA		NA		NA	
Methylene chloride (Dichloromethane)	260	U	220	U	5.8	U
Naphthalene	NA		NA		NA	
Naphthalene	3000		3700	U	340	U
n-Butylbenzene	NA		NA		NA	
Nitrobenzene	4200	U	3700	U	340	U
N-Nitrosodimethylamine	NA		NA		NA	
n-Nitrosodi-n-propylamine	4200	U	3700	U	340	U
N-Nitrosodiphenylamine/Diphenylamine	4200	U	3700	U	340	U
n-Propylbenzene	NA		NA		NA	
o-Xylene	NA		NA		NA	
Pentachlorophenol	22000	U	19000	U	1800	U
Phenanthrene	4200	U	2100		340	U
Phenol	4200	U	3700	U	340	U
p-Isopropyltoluene	NA		NA		NA	
Pyrene	4200	U	3700	U	340	U
sec-Butylbenzene	NA		NA		NA	
Styrene	260	U	220	U	5.8	U
tert-Butylbenzene	NA		NA		NA	
Tetrachloroethene	260	U	220	U	5.8	U
Toluene	260	U	220	U	5.8	U
trans-1,2-Dichloroethene	NA		NA		NA	
trans-1,3-Dichloropropene	260	U	220	U	5.8	U
Trichloroethene	260	U	220	U	5.8	U
Trichlorofluoromethane	NA		NA		NA	
Vinyl chloride	510	U	450	U	12	U
Xylenes, Total	510	U	450	U	12	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	PCB-B19 (4-6')		PCB-B20 (4-6')		PCB-B21 (4-6')	
1,1,1,2-Tetrachloroethane	4.9	U	6.2	U	5.2	U
1,1,1-Trichloroethane	4.9	U	6.2	U	5.2	U
1,1,2,2-Tetrachloroethane	4.9	U	6.2	U	5.2	U
1,1,2-Trichloroethane	4.9	U	6.2	U	5.2	U
1,1-Dichloroethane	4.9	U	6.2	U	5.2	U
1,1-Dichloroethene	4.9	U	6.2	U	5.2	U
1,1-Dichloropropylene	4.9	U	6.2	U	5.2	U
1,2,3-Trichlorobenzene	4.9	U	6.2	U	5.2	U
1,2,3-Trichloropropane	4.9	U	6.2	U	5.2	U
1,2,4-Trichlorobenzene	4.9	U	6.2	U	5.2	U
1,2,4-Trichlorobenzene	370	U	410	U	350	U
1,2,4-Trimethylbenzene	4.9	U	6.2	U	5.2	U
1,2-Dibromo-3-chloropropane	4.9	U	6.2	U	5.2	U
1,2-Dibromoethane (EDB)	4.9	U	6.2	U	5.2	U
1,2-Dichlorobenzene	370	U	410	U	350	U
1,2-Dichloroethane	4.9	U	6.2	U	5.2	U
1,2-Dichloropropane	4.9	U	6.2	U	5.2	U
1,3,5-Trimethylbenzene	4.9	U	6.2	U	5.2	U
1,3-Dichlorobenzene	370	U	410	U	350	U
1,3-Dichloropropane	4.9	U	6.2	U	5.2	U
1,4-Dichlorobenzene	370	U	410	U	350	U
2,2-Dichloropropane	4.9	U	6.2	U	5.2	U
2,2'-Oxybis(1-Chloropropane)	NA		NA		NA	
2,4,5-Trichlorophenol	370	U	410	U	350	U
2,4,6-Trichlorophenol	370	U	410	U	350	U
2,4-Dichlorophenol	370	U	410	U	350	U
2,4-Dimethylphenol	370	U	410	U	350	U
2,4-Dinitrophenol	1900	U	2100	U	1800	U
2,4-Dinitrotoluene	370	U	410	U	350	U
2,6-Dinitrotoluene	370	U	410	U	350	U
2-Butanone (MEK)	24	U	31	U	26	U
2-Chloronaphthalene	370	U	410	U	350	U
2-Chlorophenol	370	U	410	U	350	U
2-Chlorotoluene	4.9	U	6.2	U	5.2	U
2-Hexanone	NA		NA		NA	
2-Methyl-4,6-dinitrophenol	1900	U	2100	U	1800	U
2-Methylnaphthalene	370	U	410	U	350	U
2-Methylphenol (o-cresol)	370	U	410	U	350	U
2-Nitroaniline	1900	U	2100	U	1800	U
2-Nitrophenol	370	U	410	U	350	U
3&4-Methylphenol (m&p-cresol)	370	U	410	U	350	U
3,3'-Dichlorobenzidine	730	U	810	U	690	U
3-Nitroaniline	1900	U	2100	U	1800	U
4,6-Dinitro-2-methylphenol	NA		NA		NA	
4-Bromophenyl phenyl ether	370	U	410	U	350	U
4-Chloro-3-methylphenol	370	U	410	U	350	U
4-Chloroaniline	730	U	810	U	690	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	PCB-B19 (4-6')		PCB-B20 (4-6')		PCB-B21 (4-6')	
4-Chlorophenylphenyl ether	370	U	410	U	350	U
4-Chlorotoluene	4.9	U	6.2	U	5.2	U
4-Methyl-2-pentanone (MIBK)	24	U	31	U	26	U
4-Nitroaniline	1900	U	2100	U	1800	U
4-Nitrophenol	1900	U	2100	U	1800	U
Acenaphthene	370	U	410	U	350	U
Acenaphthylene	370	U	410	U	350	U
Acetone	49	U	62	U	52	U
Anthracene	370	U	410	U	350	U
Aroclor-1016	36	U	41	U	35	U
Aroclor-1221	74	U	83	U	70	U
Aroclor-1232	36	U	41	U	35	U
Aroclor-1242	36	U	41	U	35	U
Aroclor-1248	36	U	41	U	150	
Aroclor-1254	36	U	41	U	100	
Aroclor-1260	36	U	41	U	72	
Benzene	4.9	U	6.2	U	5.2	U
Benzidine	3000	U	3300	U	2800	U
Benzo(a)anthracene	370	U	410	U	350	U
Benzo(a)pyrene	370	U	410	U	350	U
Benzo(b)fluoranthene	370	U	410	U	350	U
Benzo(g,h,i)perylene	370	U	410	U	350	U
Benzo(k)fluoranthene	370	U	410	U	350	U
Benzoic acid	1900	U	2100	U	1800	U
Benzyl alcohol	370	U	410	U	350	U
bis(2-Chloroethoxy)methane	370	U	410	U	350	U
bis(2-Chloroethyl)ether	370	U	410	U	350	U
bis(2-Chloroisopropyl)ether	370	U	410	U	350	U
bis(2-Ethylhexyl)phthalate	370	U	410	U	350	U
Bromobenzene	4.9	U	6.2	U	5.2	U
Bromochloromethane	4.9	U	6.2	U	5.2	U
Bromodichloromethane	4.9	U	6.2	U	5.2	U
Bromoform	4.9	U	6.2	U	5.2	U
Bromomethane	9.8	U	12	U	10	U
Butylbenzylphthalate	370	U	410	U	350	U
Carbazole	NA		NA		NA	
Carbon disulfide	NA		NA		NA	
Carbon tetrachloride	4.9	U	6.2	U	5.2	U
Chlorobenzene	4.9	U	90		5.2	U
Chlorodibromomethane	4.9	U	6.2	U	5.2	U
Chloroethane	9.8	U	12	U	10	U
Chloroform	4.9	U	6.2	U	5.2	U
Chloromethane	9.8	U	12	U	10	U
Chrysene	370	U	410	U	350	U
cis-1,2-Dichloroethene	4.9	U	6.2	U	5.2	U
cis-1,3-Dichloropropene	NA		NA		NA	
Dibenzo(a,h)anthracene	370	U	410	U	350	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	PCB-B19 (4-6')		PCB-B20 (4-6')		PCB-B21 (4-6')	
Dibenzofuran	370	U	410	U	350	U
Dibromomethane	4.9	U	6.2	U	5.2	U
Dichlorodifluoromethane	4.9	U	6.2	U	5.2	U
Dibromochloromethane	NA		NA		NA	
Diethylphthalate	370	U	410	U	350	U
Dimethylphthalate	370	U	410	U	350	U
Di-n-butylphthalate	370	U	410	U	350	U
Di-n-octylphthalate	370	U	410	U	350	U
Ethylbenzene	4.9	U	6.2	U	5.2	U
Fluoranthene	370	U	410	U	350	U
Fluorene	370	U	410	U	350	U
Hexachlorobenzene	370	U	410	U	350	U
Hexachlorobutadiene	4.9	U	6.2	U	5.2	U
Hexachlorocyclopentadiene	370	U	410	U	350	U
Hexachloroethane	370	U	410	U	350	U
Indeno(1,2,3-cd)pyrene	370	U	410	U	350	U
Isophorone	370	U	410	U	350	U
Isopropylbenzene	4.9	U	6.2	U	5.2	U
m&p-Xylene	4.9	U	6.5		5.2	U
Methylene chloride (Dichloromethane)	4.9	U	6.2	U	5.2	U
Naphthalene	4.9	U	6.2	U	5.2	U
Naphthalene	370	U	410	U	350	U
n-Butylbenzene	4.9	U	6.2	U	5.2	U
Nitrobenzene	370	U	410	U	350	U
N-Nitrosodimethylamine	370	U	410	U	350	U
n-Nitrosodi-n-propylamine	370	U	410	U	350	U
N-Nitrosodiphenylamine/Diphenylamine	370	U	410	U	350	U
n-Propylbenzene	4.9	U	6.2	U	5.2	U
o-Xylene	4.9	U	6.2	U	5.2	U
Pentachlorophenol	1900	U	2100	U	1800	U
Phenanthrene	370	U	410	U	350	U
Phenol	370	U	410	U	350	U
p-Isopropyltoluene	4.9	U	6.2	U	5.2	U
Pyrene	370	U	410	U	350	U
sec-Butylbenzene	4.9	U	6.2	U	5.2	U
Styrene	4.9	U	6.2	U	5.2	U
tert-Butylbenzene	4.9	U	6.2	U	5.2	U
Tetrachloroethene	4.9	U	6.2	U	5.2	U
Toluene	4.9	U	6.2	U	5.2	U
trans-1,2-Dichloroethene	4.9	U	6.2	U	5.2	U
trans-1,3-Dichloropropene	NA		NA		NA	
Trichloroethene	4.9	U	6.2	U	5.2	U
Trichlorofluoromethane	4.9	U	6.2	U	5.2	U
Vinyl chloride	9.8	U	12	U	10	U
Xylenes, Total	NA		NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	PCB-B23 (4-6')		PCB-B24 (6-8')		PCB-B25 (4-6')	
1,1,1,2-Tetrachloroethane	5.8	U	5.6	U	6.6	U
1,1,1-Trichloroethane	5.8	U	5.6	U	6.6	U
1,1,2,2-Tetrachloroethane	5.8	U	5.6	U	6.6	U
1,1,2-Trichloroethane	5.8	U	5.6	U	6.6	U
1,1-Dichloroethane	5.8	U	5.6	U	6.6	U
1,1-Dichloroethene	5.8	U	5.6	U	6.6	U
1,1-Dichloropropylene	5.8	U	5.6	U	6.6	U
1,2,3-Trichlorobenzene	5.8	U	5.6	U	6.6	U
1,2,3-Trichloropropane	5.8	U	5.6	U	6.6	U
1,2,4-Trichlorobenzene	5.8	U	5.6	U	6.6	U
1,2,4-Trichlorobenzene	390	U	410	U	440	U
1,2,4-Trimethylbenzene	5.8	U	5.6	U	6.6	U
1,2-Dibromo-3-chloropropane	5.8	U	5.6	U	6.6	U
1,2-Dibromoethane (EDB)	5.8	U	5.6	U	6.6	U
1,2-Dichlorobenzene	390	U	410	U	440	U
1,2-Dichloroethane	5.8	U	5.6	U	6.6	U
1,2-Dichloropropane	5.8	U	5.6	U	6.6	U
1,3,5-Trimethylbenzene	5.8	U	5.6	U	6.6	U
1,3-Dichlorobenzene	390	U	410	U	440	U
1,3-Dichloropropane	5.8	U	5.6	U	6.6	U
1,4-Dichlorobenzene	390	U	410	U	440	U
2,2-Dichloropropane	5.8	U	5.6	U	6.6	U
2,2'-Oxybis(1-Chloropropane)	NA		NA		NA	
2,4,5-Trichlorophenol	390	U	410	U	440	U
2,4,6-Trichlorophenol	390	U	410	U	440	U
2,4-Dichlorophenol	390	U	410	U	440	U
2,4-Dimethylphenol	390	U	410	U	440	U
2,4-Dinitrophenol	2000	U	2100	U	2300	U
2,4-Dinitrotoluene	390	U	410	U	440	U
2,6-Dinitrotoluene	390	U	410	U	440	U
2-Butanone (MEK)	29	U	28	U	33	U
2-Chloronaphthalene	390	U	410	U	440	U
2-Chlorophenol	390	U	410	U	440	U
2-Chlorotoluene	5.8	U	5.6	U	6.6	U
2-Hexanone	NA		NA		NA	
2-Methyl-4,6-dinitrophenol	2000	U	2100	U	2300	U
2-Methylnaphthalene	390	U	410	U	440	U
2-Methylphenol (o-cresol)	390	U	410	U	440	U
2-Nitroaniline	2000	U	2100	U	2300	U
2-Nitrophenol	390	U	410	U	440	U
3&4-Methylphenol (m&p-cresol)	390	U	410	U	440	U
3,3'-Dichlorobenzidine	780	U	820	U	890	U
3-Nitroaniline	2000	U	2100	U	2300	U
4,6-Dinitro-2-methylphenol	NA		NA		NA	
4-Bromophenyl phenyl ether	390	U	410	U	440	U
4-Chloro-3-methylphenol	390	U	410	U	440	U
4-Chloroaniline	780	U	820	U	890	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	PCB-B23 (4-6')		PCB-B24 (6-8')		PCB-B25 (4-6')	
4-Chlorophenylphenyl ether	390	U	410	U	440	U
4-Chlorotoluene	5.8	U	5.6	U	6.6	U
4-Methyl-2-pentanone (MIBK)	29	U	28	U	33	U
4-Nitroaniline	2000	U	2100	U	2300	U
4-Nitrophenol	2000	U	2100	U	2300	U
Acenaphthene	390	U	410	U	440	U
Acenaphthylene	390	U	410	U	440	U
Acetone	58	U	56	U	66	U
Anthracene	390	U	410	U	440	U
Aroclor-1016	39	U	2100	U	44	U
Aroclor-1221	79	U	4200	U	90	U
Aroclor-1232	39	U	2100	U	44	U
Aroclor-1242	220		2100	U	44	U
Aroclor-1248	39	U	7400		44	U
Aroclor-1254	100		4400		44	U
Aroclor-1260	84		2400		44	U
Benzene	5.8	U	5.6	U	6.6	U
Benzidine	3200	U	3400	U	3600	U
Benzo(a)anthracene	390	U	410	U	440	U
Benzo(a)pyrene	390	U	410	U	440	U
Benzo(b)fluoranthene	390	U	410	U	440	U
Benzo(g,h,i)perylene	390	U	410	U	440	U
Benzo(k)fluoranthene	390	U	410	U	440	U
Benzoic acid	2000	U	2100	U	2300	U
Benzyl alcohol	390	U	410	U	440	U
bis(2-Chloroethoxy)methane	390	U	410	U	440	U
bis(2-Chloroethyl)ether	390	U	410	U	440	U
bis(2-Chloroisopropyl)ether	390	U	410	U	440	U
bis(2-Ethylhexyl)phthalate	390	U	410	U	440	U
Bromobenzene	5.8	U	5.6	U	6.6	U
Bromochloromethane	5.8	U	5.6	U	6.6	U
Bromodichloromethane	5.8	U	5.6	U	6.6	U
Bromoform	5.8	U	5.6	U	6.6	U
Bromomethane	12	U	11	U	13	U
Butylbenzylphthalate	390	U	410	U	440	U
Carbazole	NA		NA		NA	
Carbon disulfide	NA		NA		NA	
Carbon tetrachloride	5.8	U	5.6	U	6.6	U
Chlorobenzene	20		19		9.4	
Chlorodibromomethane	5.8	U	5.6	U	6.6	U
Chloroethane	12	U	11	U	13	U
Chloroform	5.8	U	5.6	U	6.6	U
Chloromethane	12	U	11	U	13	U
Chrysene	390	U	410	U	440	U
cis-1,2-Dichloroethene	5.8	U	5.6	U	6.6	U
cis-1,3-Dichloropropene	NA		NA		NA	
Dibenzo(a,h)anthracene	390	U	410	U	440	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	PCB-B23 (4-6')		PCB-B24 (6-8')		PCB-B25 (4-6')	
Dibenzofuran	390	U	410	U	440	U
Dibromomethane	5.8	U	5.6	U	6.6	U
Dichlorodifluoromethane	5.8	U	5.6	U	6.6	U
Dibromochloromethane	NA		NA		NA	
Diethylphthalate	390	U	410	U	440	U
Dimethylphthalate	390	U	410	U	440	U
Di-n-butylphthalate	390	U	410	U	440	U
Di-n-octylphthalate	390	U	410	U	440	U
Ethylbenzene	5.8	U	5.6	U	6.6	U
Fluoranthene	390	U	410	U	440	U
Fluorene	390	U	410	U	440	U
Hexachlorobenzene	390	U	410	U	440	U
Hexachlorobutadiene	5.8	U	5.6	U	6.6	U
Hexachlorocyclopentadiene	390	U	410	U	440	U
Hexachloroethane	390	U	410	U	440	U
Indeno(1,2,3-cd)pyrene	390	U	410	U	440	U
Isophorone	390	U	410	U	440	U
Isopropylbenzene	5.8	U	5.6	U	6.6	U
m&p-Xylene	5.8	U	5.6	U	6.6	U
Methylene chloride (Dichloromethane)	5.8	U	5.6	U	6.6	U
Naphthalene	5.8	U	5.6	U	6.6	U
Naphthalene	390	U	410	U	440	U
n-Butylbenzene	5.8	U	5.6	U	6.6	U
Nitrobenzene	390	U	410	U	440	U
N-Nitrosodimethylamine	390	U	410	U	440	U
n-Nitrosodi-n-propylamine	390	U	410	U	440	U
N-Nitrosodiphenylamine/Diphenylamine	390	U	410	U	440	U
n-Propylbenzene	5.8	U	5.6	U	6.6	U
o-Xylene	5.8	U	5.6	U	6.6	U
Pentachlorophenol	2000	U	2100	U	2300	U
Phenanthrene	390	U	410	U	440	U
Phenol	390	U	410	U	440	U
p-Isopropyltoluene	5.8	U	5.6	U	6.6	U
Pyrene	390	U	410	U	440	U
sec-Butylbenzene	5.8	U	5.6	U	6.6	U
Styrene	5.8	U	5.6	U	6.6	U
tert-Butylbenzene	5.8	U	5.6	U	6.6	U
Tetrachloroethene	5.8	U	5.6	U	6.6	U
Toluene	5.8	U	5.6	U	6.6	U
trans-1,2-Dichloroethene	5.8	U	5.6	U	6.6	U
trans-1,3-Dichloropropene	NA		NA		NA	
Trichloroethene	5.8	U	5.6	U	6.6	U
Trichlorofluoromethane	5.8	U	5.6	U	6.6	U
Vinyl chloride	12	U	11	U	13	U
Xylenes, Total	NA		NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	PCB-B26 (2-4')		PCB-B27 (4-6')		PCB-B60-0-2'	
1,1,1,2-Tetrachloroethane	67000	U	6.6	U	NA	
1,1,1-Trichloroethane	67000	U	6.6	U	NA	
1,1,2,2-Tetrachloroethane	67000	U	6.6	U	NA	
1,1,2-Trichloroethane	67000	U	6.6	U	NA	
1,1-Dichloroethane	67000	U	6.6	U	NA	
1,1-Dichloroethene	67000	U	6.6	U	NA	
1,1-Dichloropropylene	67000	U	6.6	U	NA	
1,2,3-Trichlorobenzene	260000		6.6	U	NA	
1,2,3-Trichloropropane	67000	U	6.6	U	NA	
1,2,4-Trichlorobenzene	590000		6.6	U	350	U
1,2,4-Trichlorobenzene	7200000		460	U	NA	
1,2,4-Trimethylbenzene	67000	U	6.6	U	NA	
1,2-Dibromo-3-chloropropane	67000	U	6.6	U	NA	
1,2-Dibromoethane (EDB)	67000	U	6.6	U	NA	
1,2-Dichlorobenzene	880000	U	460	U	350	U
1,2-Dichloroethane	67000	U	6.6	U	NA	
1,2-Dichloropropane	67000	U	6.6	U	NA	
1,3,5-Trimethylbenzene	67000	U	6.6	U	NA	
1,3-Dichlorobenzene	880000	U	460	U	350	U
1,3-Dichloropropane	67000	U	6.6	U	NA	
1,4-Dichlorobenzene	4000000		460	U	350	U
2,2-Dichloropropane	67000	U	6.6	U	NA	
2,2'-Oxybis(1-Chloropropane)	NA		NA		350	U
2,4,5-Trichlorophenol	880000	U	460	U	350	U
2,4,6-Trichlorophenol	880000	U	460	U	350	U
2,4-Dichlorophenol	880000	U	460	U	350	U
2,4-Dimethylphenol	880000	U	460	U	350	U
2,4-Dinitrophenol	4500000	U	2400	U	1800	U
2,4-Dinitrotoluene	880000	U	460	U	350	U
2,6-Dinitrotoluene	880000	U	460	U	350	U
2-Butanone (MEK)	340000	U	33	U	NA	
2-Chloronaphthalene	880000	U	460	U	350	U
2-Chlorophenol	880000	U	460	U	350	U
2-Chlorotoluene	67000	U	6.6	U	NA	
2-Hexanone	NA		NA		NA	
2-Methyl-4,6-dinitrophenol	4500000	U	2400	U	NA	
2-Methylnaphthalene	880000	U	460	U	350	U
2-Methylphenol (o-cresol)	880000	U	460	U	350	U
2-Nitroaniline	4500000	U	2400	U	1800	U
2-Nitrophenol	880000	U	460	U	350	U
3&4-Methylphenol (m&p-cresol)	880000	U	460	U	700	U
3,3'-Dichlorobenzidine	1800000	U	910	U	350	U
3-Nitroaniline	4500000	U	2400	U	1800	U
4,6-Dinitro-2-methylphenol	NA		NA		1800	U
4-Bromophenyl phenyl ether	880000	U	460	U	350	U
4-Chloro-3-methylphenol	880000	U	460	U	350	U
4-Chloroaniline	1800000	U	910	U	700	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	PCB-B26 (2-4')		PCB-B27 (4-6')		PCB-B60-0-2'	
4-Chlorophenylphenyl ether	880000	U	460	U	350	U
4-Chlorotoluene	67000	U	6.6	U	NA	
4-Methyl-2-pentanone (MIBK)	340000	U	33	U	NA	
4-Nitroaniline	4500000	U	2400	U	1800	U
4-Nitrophenol	4500000	U	2400	U	1800	U
Acenaphthene	880000	U	480		350	U
Acenaphthylene	880000	U	460	U	350	U
Acetone	670000	U	66	U	NA	
Anthracene	880000	U	1200		200	
Aroclor-1016	440000	U	45	U	700	U
Aroclor-1221	890000	U	92	U	1400	U
Aroclor-1232	440000	U	45	U	700	U
Aroclor-1242	5000000		45	U	700	U
Aroclor-1248	440000	U	210		9500	
Aroclor-1254	2300000		170		18000	
Aroclor-1260	1900000		220		20000	
Benzene	67000	U	6.6	U	NA	
Benzidine	7200000	U	3700	U	NA	
Benzo(a)anthracene	880000	U	1700		460	
Benzo(a)pyrene	880000	U	1400		440	
Benzo(b)fluoranthene	880000	U	1700		650	
Benzo(g,h,i)perylene	880000	U	510		350	
Benzo(k)fluoranthene	880000	U	730		350	U
Benzoic acid	4500000	U	2400	U	NA	
Benzyl alcohol	880000	U	460	U	NA	
bis(2-Chloroethoxy)methane	880000	U	460	U	350	U
bis(2-Chloroethyl)ether	880000	U	460	U	350	U
bis(2-Chloroisopropyl)ether	880000	U	460	U	NA	
bis(2-Ethylhexyl)phthalate	880000	U	460	U	210	
Bromobenzene	67000	U	6.6	U	NA	
Bromochloromethane	67000	U	6.6	U	NA	
Bromodichloromethane	67000	U	6.6	U	NA	
Bromoform	67000	U	6.6	U	NA	
Bromomethane	130000	U	13	U	NA	
Butylbenzylphthalate	880000	U	460	U	350	U
Carbazole	NA		NA		350	U
Carbon disulfide	NA		NA		NA	
Carbon tetrachloride	67000	U	6.6	U	NA	
Chlorobenzene	67000	U	50		NA	
Chlorodibromomethane	67000	U	6.6	U	NA	
Chloroethane	130000	U	13	U	NA	
Chloroform	67000	U	6.6	U	NA	
Chloromethane	130000	U	13	U	NA	
Chrysene	880000	U	1600		560	
cis-1,2-Dichloroethene	67000	U	7		NA	
cis-1,3-Dichloropropene	NA		NA		NA	
Dibenzo(a,h)anthracene	880000	U	460	U	350	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	PCB-B26 (2-4')		PCB-B27 (4-6')		PCB-B60-0-2'	
Dibenzofuran	880000	U	460	U	350	U
Dibromomethane	67000	U	6.6	U	NA	
Dichlorodifluoromethane	67000	U	6.6	U	NA	
Dibromochloromethane	NA		NA		NA	
Diethylphthalate	880000	U	460	U	350	U
Dimethylphthalate	880000	U	460	U	350	U
Di-n-butylphthalate	880000	U	460	U	350	U
Di-n-octylphthalate	880000	U	460	U	350	U
Ethylbenzene	67000	U	6.6	U	NA	
Fluoranthene	880000	U	2800		1100	
Fluorene	880000	U	560		350	U
Hexachlorobenzene	880000	U	460	U	350	U
Hexachlorobutadiene	67000	U	6.6	U	350	U
Hexachlorocyclopentadiene	880000	U	460	U	350	U
Hexachloroethane	880000	U	460	U	350	U
Indeno(1,2,3-cd)pyrene	880000	U	460	U	240	
Isophorone	880000	U	460	U	350	U
Isopropylbenzene	67000	U	6.6	U	NA	
m&p-Xylene	67000	U	6.6	U	NA	
Methylene chloride (Dichloromethane)	67000	U	6.6	U	NA	
Naphthalene	67000	U	6.6	U	350	U
Naphthalene	880000	U	460	U	NA	
n-Butylbenzene	67000	U	6.6	U	NA	
Nitrobenzene	880000	U	460	U	350	U
N-Nitrosodimethylamine	880000	U	460	U	NA	
n-Nitrosodi-n-propylamine	880000	U	460	U	350	U
N-Nitrosodiphenylamine/Diphenylamine	880000	U	460	U	350	U
n-Propylbenzene	67000	U	6.6	U	NA	
o-Xylene	67000	U	6.6	U	NA	
Pentachlorophenol	4500000	U	2400	U	1800	U
Phenanthrene	880000	U	4700		850	
Phenol	880000	U	1000		350	U
p-Isopropyltoluene	67000	U	6.6	U	NA	
Pyrene	880000	U	3800		780	
sec-Butylbenzene	67000	U	6.6	U	NA	
Styrene	67000	U	6.6	U	NA	
tert-Butylbenzene	67000	U	6.6	U	NA	
Tetrachloroethene	67000	U	6.6	U	NA	
Toluene	67000	U	6.6	U	NA	
trans-1,2-Dichloroethene	67000	U	6.6	U	NA	
trans-1,3-Dichloropropene	NA		NA		NA	
Trichloroethene	67000	U	6.6	U	NA	
Trichlorofluoromethane	67000	U	6.6	U	NA	
Vinyl chloride	130000	U	13	U	NA	
Xylenes, Total	NA		NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	PCB-B60-4-6'		PCB-B61-0-2'	
1,1,1,2-Tetrachloroethane	NA		NA	
1,1,1-Trichloroethane	NA		NA	
1,1,2,2-Tetrachloroethane	NA		NA	
1,1,2-Trichloroethane	NA		NA	
1,1-Dichloroethane	NA		NA	
1,1-Dichloroethene	NA		NA	
1,1-Dichloropropylene	NA		NA	
1,2,3-Trichlorobenzene	NA		NA	
1,2,3-Trichloropropane	NA		NA	
1,2,4-Trichlorobenzene	450	U	390	U
1,2,4-Trichlorobenzene	NA		NA	
1,2,4-Trimethylbenzene	NA		NA	
1,2-Dibromo-3-chloropropane	NA		NA	
1,2-Dibromoethane (EDB)	NA		NA	
1,2-Dichlorobenzene	450	U	390	U
1,2-Dichloroethane	NA		NA	
1,2-Dichloropropane	NA		NA	
1,3,5-Trimethylbenzene	NA		NA	
1,3-Dichlorobenzene	450	U	390	U
1,3-Dichloropropane	NA		NA	
1,4-Dichlorobenzene	450	U	390	U
2,2-Dichloropropane	NA		NA	
2,2'-Oxybis(1-Chloropropane)	450	U	390	U
2,4,5-Trichlorophenol	450	U	390	U
2,4,6-Trichlorophenol	450	U	390	U
2,4-Dichlorophenol	450	U	390	U
2,4-Dimethylphenol	450	U	390	U
2,4-Dinitrophenol	2300	U	2000	U
2,4-Dinitrotoluene	450	U	390	U
2,6-Dinitrotoluene	450	U	390	U
2-Butanone (MEK)	NA		NA	
2-Chloronaphthalene	450	U	390	U
2-Chlorophenol	450	U	390	U
2-Chlorotoluene	NA		NA	
2-Hexanone	NA		NA	
2-Methyl-4,6-dinitrophenol	NA		NA	
2-Methylnaphthalene	450	U	390	U
2-Methylphenol (o-cresol)	450	U	390	U
2-Nitroaniline	2300	U	2000	U
2-Nitrophenol	450	U	390	U
3&4-Methylphenol (m&p-cresol)	900	U	780	U
3,3'-Dichlorobenzidine	450	U	390	U
3-Nitroaniline	2300	U	2000	U
4,6-Dinitro-2-methylphenol	2300	U	2000	U
4-Bromophenyl phenyl ether	450	U	390	U
4-Chloro-3-methylphenol	450	U	390	U
4-Chloroaniline	900	U	780	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	PCB-B60-4-6'		PCB-B61-0-2'	
4-Chlorophenylphenyl ether	450	U	390	U
4-Chlorotoluene	NA		NA	
4-Methyl-2-pentanone (MIBK)	NA		NA	
4-Nitroaniline	2300	U	2000	U
4-Nitrophenol	2300	U	2000	U
Acenaphthene	450	U	390	U
Acenaphthylene	450	U	390	U
Acetone	NA		NA	
Anthracene	450	U	390	U
Aroclor-1016	45	U	780	U
Aroclor-1221	92	U	1600	U
Aroclor-1232	45	U	780	U
Aroclor-1242	87		780	U
Aroclor-1248	45	U	780	U
Aroclor-1254	68		4200	
Aroclor-1260	63		3200	
Benzene	NA		NA	
Benzidine	NA		NA	
Benzo(a)anthracene	450	U	390	U
Benzo(a)pyrene	450	U	390	U
Benzo(b)fluoranthene	450	U	390	U
Benzo(g,h,i)perylene	450	U	390	U
Benzo(k)fluoranthene	450	U	390	U
Benzoic acid	NA		NA	
Benzyl alcohol	NA		NA	
bis(2-Chloroethoxy)methane	450	U	390	U
bis(2-Chloroethyl)ether	450	U	390	U
bis(2-Chloroisopropyl)ether	NA		NA	
bis(2-Ethylhexyl)phthalate	450	U	390	U
Bromobenzene	NA		NA	
Bromochloromethane	NA		NA	
Bromodichloromethane	NA		NA	
Bromoform	NA		NA	
Bromomethane	NA		NA	
Butylbenzylphthalate	450	U	390	U
Carbazole	450	U	390	U
Carbon disulfide	NA		NA	
Carbon tetrachloride	NA		NA	
Chlorobenzene	NA		NA	
Chlorodibromomethane	NA		NA	
Chloroethane	NA		NA	
Chloroform	NA		NA	
Chloromethane	NA		NA	
Chrysene	450	U	390	U
cis-1,2-Dichloroethene	NA		NA	
cis-1,3-Dichloropropene	NA		NA	
Dibenzo(a,h)anthracene	450	U	390	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	PCB-B60-4-6'		PCB-B61-0-2'	
Dibenzofuran	450	U	390	U
Dibromomethane	NA		NA	
Dichlorodifluoromethane	NA		NA	
Dibromochloromethane	NA		NA	
Diethylphthalate	450	U	390	U
Dimethylphthalate	450	U	390	U
Di-n-butylphthalate	450	U	390	U
Di-n-octylphthalate	450	U	390	U
Ethylbenzene	NA		NA	
Fluoranthene	450	U	390	U
Fluorene	450	U	390	U
Hexachlorobenzene	450	U	390	U
Hexachlorobutadiene	450	U	390	U
Hexachlorocyclopentadiene	450	U	390	U
Hexachloroethane	450	U	390	U
Indeno(1,2,3-cd)pyrene	450	U	390	U
Isophorone	450	U	390	U
Isopropylbenzene	NA		NA	
m&p-Xylene	NA		NA	
Methylene chloride (Dichloromethane)	NA		NA	
Naphthalene	450	U	390	U
Naphthalene	NA		NA	
n-Butylbenzene	NA		NA	
Nitrobenzene	450	U	390	U
N-Nitrosodimethylamine	NA		NA	
n-Nitrosodi-n-propylamine	450	U	390	U
N-Nitrosodiphenylamine/Diphenylamine	450	U	390	U
n-Propylbenzene	NA		NA	
o-Xylene	NA		NA	
Pentachlorophenol	2300	U	2000	U
Phenanthrene	450	U	390	U
Phenol	450	U	390	U
p-Isopropyltoluene	NA		NA	
Pyrene	450	U	390	U
sec-Butylbenzene	NA		NA	
Styrene	NA		NA	
tert-Butylbenzene	NA		NA	
Tetrachloroethene	NA		NA	
Toluene	NA		NA	
trans-1,2-Dichloroethene	NA		NA	
trans-1,3-Dichloropropene	NA		NA	
Trichloroethene	NA		NA	
Trichlorofluoromethane	NA		NA	
Vinyl chloride	NA		NA	
Xylenes, Total	NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	PCB-B61-4-6'		PCB-B62-2-4'	
1,1,1,2-Tetrachloroethane	NA		NA	
1,1,1-Trichloroethane	NA		NA	
1,1,2,2-Tetrachloroethane	NA		NA	
1,1,2-Trichloroethane	NA		NA	
1,1-Dichloroethane	NA		NA	
1,1-Dichloroethene	NA		NA	
1,1-Dichloropropylene	NA		NA	
1,2,3-Trichlorobenzene	NA		NA	
1,2,3-Trichloropropane	NA		NA	
1,2,4-Trichlorobenzene	460	U	440	U
1,2,4-Trichlorobenzene	NA		NA	
1,2,4-Trimethylbenzene	NA		NA	
1,2-Dibromo-3-chloropropane	NA		NA	
1,2-Dibromoethane (EDB)	NA		NA	
1,2-Dichlorobenzene	460	U	440	U
1,2-Dichloroethane	NA		NA	
1,2-Dichloropropane	NA		NA	
1,3,5-Trimethylbenzene	NA		NA	
1,3-Dichlorobenzene	460	U	440	U
1,3-Dichloropropane	NA		NA	
1,4-Dichlorobenzene	460	U	440	U
2,2-Dichloropropane	NA		NA	
2,2'-Oxybis(1-Chloropropane)	460	U	440	U
2,4,5-Trichlorophenol	460	U	440	U
2,4,6-Trichlorophenol	460	U	440	U
2,4-Dichlorophenol	460	U	440	U
2,4-Dimethylphenol	460	U	440	U
2,4-Dinitrophenol	2400	U	2300	U
2,4-Dinitrotoluene	460	U	440	U
2,6-Dinitrotoluene	460	U	440	U
2-Butanone (MEK)	NA		NA	
2-Chloronaphthalene	460	U	440	U
2-Chlorophenol	460	U	440	U
2-Chlorotoluene	NA		NA	
2-Hexanone	NA		NA	
2-Methyl-4,6-dinitrophenol	NA		NA	
2-Methylnaphthalene	460	U	440	U
2-Methylphenol (o-cresol)	460	U	440	U
2-Nitroaniline	2400	U	2300	U
2-Nitrophenol	460	U	440	U
3&4-Methylphenol (m&p-cresol)	930	U	890	U
3,3'-Dichlorobenzidine	460	U	440	U
3-Nitroaniline	2400	U	2300	U
4,6-Dinitro-2-methylphenol	2400	U	2300	U
4-Bromophenyl phenyl ether	460	U	440	U
4-Chloro-3-methylphenol	460	U	440	U
4-Chloroaniline	930	U	890	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	PCB-B61-4-6'		PCB-B62-2-4'	
4-Chlorophenylphenyl ether	460	U	440	U
4-Chlorotoluene	NA		NA	
4-Methyl-2-pentanone (MIBK)	NA		NA	
4-Nitroaniline	2400	U	2300	U
4-Nitrophenol	2400	U	2300	U
Acenaphthene	460	U	440	U
Acenaphthylene	460	U	440	U
Acetone	NA		NA	
Anthracene	460	U	440	U
Aroclor-1016	46	U	44	U
Aroclor-1221	94	U	90	U
Aroclor-1232	46	U	44	U
Aroclor-1242	46	U	44	U
Aroclor-1248	46	U	21	J
Aroclor-1254	46	U	33	J
Aroclor-1260	46	U	44	U
Benzene	NA		NA	
Benzidine	NA		NA	
Benzo(a)anthracene	460	U	440	U
Benzo(a)pyrene	460	U	440	U
Benzo(b)fluoranthene	460	U	380	J
Benzo(g,h,i)perylene	460	U	440	U
Benzo(k)fluoranthene	460	U	440	U
Benzoic acid	NA		NA	
Benzyl alcohol	NA		NA	
bis(2-Chloroethoxy)methane	460	U	440	U
bis(2-Chloroethyl)ether	460	U	440	U
bis(2-Chloroisopropyl)ether	NA		NA	
bis(2-Ethylhexyl)phthalate	300	J	440	U
Bromobenzene	NA		NA	
Bromochloromethane	NA		NA	
Bromodichloromethane	NA		NA	
Bromoform	NA		NA	
Bromomethane	NA		NA	
Butylbenzylphthalate	460	U	440	U
Carbazole	460	U	440	U
Carbon disulfide	NA		NA	
Carbon tetrachloride	NA		NA	
Chlorobenzene	NA		NA	
Chlorodibromomethane	NA		NA	
Chloroethane	NA		NA	
Chloroform	NA		NA	
Chloromethane	NA		NA	
Chrysene	460	U	300	J
cis-1,2-Dichloroethene	NA		NA	
cis-1,3-Dichloropropene	NA		NA	
Dibenzo(a,h)anthracene	460	U	440	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	PCB-B61-4-6'		PCB-B62-2-4'	
Dibenzofuran	460	U	440	U
Dibromomethane	NA		NA	
Dichlorodifluoromethane	NA		NA	
Dibromochloromethane	NA		NA	
Diethylphthalate	460	U	440	U
Dimethylphthalate	460	U	440	U
Di-n-butylphthalate	460	U	440	U
Di-n-octylphthalate	460	U	440	U
Ethylbenzene	NA		NA	
Fluoranthene	460	U	330	J
Fluorene	460	U	440	U
Hexachlorobenzene	460	U	440	U
Hexachlorobutadiene	460	U	440	U
Hexachlorocyclopentadiene	460	U	440	U
Hexachloroethane	460	U	440	U
Indeno(1,2,3-cd)pyrene	460	U	440	U
Isophorone	460	U	440	U
Isopropylbenzene	NA		NA	
m&p-Xylene	NA		NA	
Methylene chloride (Dichloromethane)	NA		NA	
Naphthalene	460	U	440	U
Naphthalene	NA		NA	
n-Butylbenzene	NA		NA	
Nitrobenzene	460	U	440	U
N-Nitrosodimethylamine	NA		NA	
n-Nitrosodi-n-propylamine	460	U	440	U
N-Nitrosodiphenylamine/Diphenylamine	460	U	440	U
n-Propylbenzene	NA		NA	
o-Xylene	NA		NA	
Pentachlorophenol	2400	U	2300	U
Phenanthrene	460	U	440	U
Phenol	460	U	440	U
p-Isopropyltoluene	NA		NA	
Pyrene	460	U	440	U
sec-Butylbenzene	NA		NA	
Styrene	NA		NA	
tert-Butylbenzene	NA		NA	
Tetrachloroethene	NA		NA	
Toluene	NA		NA	
trans-1,2-Dichloroethene	NA		NA	
trans-1,3-Dichloropropene	NA		NA	
Trichloroethene	NA		NA	
Trichlorofluoromethane	NA		NA	
Vinyl chloride	NA		NA	
Xylenes, Total	NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	PCB-B62-6-8'		SCT-B44-4-6		SCT-B45-4-6	
1,1,1,2-Tetrachloroethane	NA		6.5	U	2300000	U
1,1,1-Trichloroethane	NA		6.5	U	2300000	U
1,1,2,2-Tetrachloroethane	NA		6.5	U	2300000	U
1,1,2-Trichloroethane	NA		6.5	U	2300000	U
1,1-Dichloroethane	NA		6.5	U	2300000	U
1,1-Dichloroethene	NA		6.5	U	2300000	U
1,1-Dichloropropylene	NA		6.5	U	2300000	U
1,2,3-Trichlorobenzene	NA		6.5	U	2300000	U
1,2,3-Trichloropropane	NA		6.5	U	2300000	U
1,2,4-Trichlorobenzene	410	U	16		2300000	U
1,2,4-Trichlorobenzene	NA		660		370	U
1,2,4-Trimethylbenzene	NA		6.5	U	2300000	U
1,2-Dibromo-3-chloropropane	NA		6.5	U	2300000	U
1,2-Dibromoethane (EDB)	NA		6.5	U	2300000	U
1,2-Dichlorobenzene	410	U	780		370	U
1,2-Dichloroethane	NA		6.5	U	2300000	U
1,2-Dichloropropane	NA		6.5	U	2300000	U
1,3,5-Trimethylbenzene	NA		6.5	U	2300000	U
1,3-Dichlorobenzene	410	U	380	U	370	U
1,3-Dichloropropane	NA		6.5	U	2300000	U
1,4-Dichlorobenzene	410	U	490		370	U
2,2-Dichloropropane	NA		6.5	U	2300000	U
2,2'-Oxybis(1-Chloropropane)	410	U	NA		NA	
2,4,5-Trichlorophenol	410	U	380	U	370	U
2,4,6-Trichlorophenol	410	U	380	U	370	U
2,4-Dichlorophenol	410	U	490		370	U
2,4-Dimethylphenol	410	U	380	U	610	
2,4-Dinitrophenol	2100	U	2000	U	1900	U
2,4-Dinitrotoluene	410	U	380	U	370	U
2,6-Dinitrotoluene	410	U	380	U	370	U
2-Butanone (MEK)	NA		32	U	12000000	U
2-Chloronaphthalene	410	U	380	U	370	U
2-Chlorophenol	410	U	380	U	370	U
2-Chlorotoluene	NA		6.5	U	2300000	U
2-Hexanone	NA		NA		NA	
2-Methyl-4,6-dinitrophenol	NA		2000	U	1900	U
2-Methylnaphthalene	410	U	380	U	370	U
2-Methylphenol (o-cresol)	410	U	380	U	370	U
2-Nitroaniline	2100	U	2000	U	1900	U
2-Nitrophenol	410	U	380	U	370	U
3&4-Methylphenol (m&p-cresol)	820	U	380	U	370	U
3,3'-Dichlorobenzidine	410	U	760	U	740	U
3-Nitroaniline	2100	U	2000	U	1900	U
4,6-Dinitro-2-methylphenol	2100	U	NA		NA	
4-Bromophenyl phenyl ether	410	U	380	U	370	U
4-Chloro-3-methylphenol	410	U	380	U	370	U
4-Chloroaniline	820	U	760	U	740	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	PCB-B62-6-8'		SCT-B44-4-6		SCT-B45-4-6	
4-Chlorophenylphenyl ether	410	U	380	U	370	U
4-Chlorotoluene	NA		6.5	U	2300000	U
4-Methyl-2-pentanone (MIBK)	NA		32	U	12000000	U
4-Nitroaniline	2100	U	2000	U	1900	U
4-Nitrophenol	2100	U	2000	U	1900	U
Acenaphthene	410	U	380	U	370	U
Acenaphthylene	410	U	380	U	370	U
Acetone	NA		65	U	23000000	U
Anthracene	410	U	380	U	370	U
Aroclor-1016	41	U	NA		43	U
Aroclor-1221	84	U	NA		87	U
Aroclor-1232	41	U	NA		43	U
Aroclor-1242	41	U	NA		38	U
Aroclor-1248	41	U	NA		43	U
Aroclor-1254	41	U	NA		86	
Aroclor-1260	41	U	NA		190	
Benzene	NA		6.5	U	2300000	U
Benzidine	NA		3100	U	3000	U
Benzo(a)anthracene	410	U	380	U	370	U
Benzo(a)pyrene	410	U	380	U	370	U
Benzo(b)fluoranthene	410	U	380	U	370	U
Benzo(g,h,i)perylene	410	U	380	U	370	U
Benzo(k)fluoranthene	410	U	380	U	370	U
Benzoic acid	NA		2000	U	1900	U
Benzyl alcohol	NA		380	U	370	U
bis(2-Chloroethoxy)methane	410	U	380	U	370	U
bis(2-Chloroethyl)ether	410	U	380	U	370	U
bis(2-Chloroisopropyl)ether	NA		380	U	370	U
bis(2-Ethylhexyl)phthalate	410	U	380	U	370	U
Bromobenzene	NA		6.5	U	2300000	U
Bromochloromethane	NA		6.5	U	2300000	U
Bromodichloromethane	NA		6.5	U	2300000	U
Bromoform	NA		6.5	U	2300000	U
Bromomethane	NA		13	U	4500000	U
Butylbenzylphthalate	410	U	2500		370	U
Carbazole	410	U	NA		NA	
Carbon disulfide	NA		NA		NA	
Carbon tetrachloride	NA		6.5	U	2300000	U
Chlorobenzene	NA		200		2300000	U
Chlorodibromomethane	NA		6.5	U	2300000	U
Chloroethane	NA		13	U	4500000	U
Chloroform	NA		6.5	U	2300000	U
Chloromethane	NA		13	U	4500000	U
Chrysene	410	U	380	U	370	U
cis-1,2-Dichloroethene	NA		6.5	U	2300000	U
cis-1,3-Dichloropropene	NA		NA		NA	
Dibenzo(a,h)anthracene	410	U	380	U	370	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	PCB-B62-6-8'		SCT-B44-4-6		SCT-B45-4-6	
Dibenzofuran	410	U	380	U	370	U
Dibromomethane	NA		6.5	U	2300000	U
Dichlorodifluoromethane	NA		6.5	U	2300000	U
Dibromochloromethane	NA		NA		NA	
Diethylphthalate	410	U	380	U	370	U
Dimethylphthalate	410	U	380	U	370	U
Di-n-butylphthalate	410	U	380	U	370	U
Di-n-octylphthalate	410	U	380	U	370	U
Ethylbenzene	NA		6.5	U	3300000	
Fluoranthene	410	U	380	U	370	U
Fluorene	410	U	380	U	370	U
Hexachlorobenzene	410	U	380	U	370	U
Hexachlorobutadiene	410	U	6.5	U	2300000	U
Hexachlorocyclopentadiene	410	U	380	U	370	U
Hexachloroethane	410	U	380	U	370	U
Indeno(1,2,3-cd)pyrene	410	U	380	U	370	U
Isophorone	410	U	380	U	370	U
Isopropylbenzene	NA		29		2300000	U
m&p-Xylene	NA		20		15000000	
Methylene chloride (Dichloromethane)	NA		6.5	U	2300000	U
Naphthalene	410	U	6.5	U	2300000	U
Naphthalene	NA		380	U	370	U
n-Butylbenzene	NA		6.5	U	2300000	U
Nitrobenzene	410	U	380	U	370	U
N-Nitrosodimethylamine	NA		380	U	370	U
n-Nitrosodi-n-propylamine	410	U	380	U	370	U
N-Nitrosodiphenylamine/Diphenylamine	410	U	380	U	370	U
n-Propylbenzene	NA		6.5	U	2300000	U
o-Xylene	NA		17		38000000	
Pentachlorophenol	2100	U	2000	U	1900	U
Phenanthrene	410	U	380	U	370	U
Phenol	410	U	380	U	370	U
p-Isopropyltoluene	NA		6.5	U	2300000	U
Pyrene	410	U	380	U	370	U
sec-Butylbenzene	NA		6.5	U	2300000	U
Styrene	NA		6.5	U	2300000	U
tert-Butylbenzene	NA		6.5	U	2300000	U
Tetrachloroethene	NA		6.5	U	2300000	U
Toluene	NA		6.5	U	2300000	U
trans-1,2-Dichloroethene	NA		6.5	U	2300000	U
trans-1,3-Dichloropropene	NA		NA		NA	
Trichloroethene	NA		6.5	U	2300000	U
Trichlorofluoromethane	NA		6.5	U	2300000	U
Vinyl chloride	NA		13	U	4500000	U
Xylenes, Total	NA		NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SCT-B46-4-6		SCT-B47-2-4		SCT-B48-2-4		SCT-B48-8-10	
Dibenzofuran	350	U	340	U	6500	U	90000	U
Dibromomethane	420	U	5.9	U	50000	U	140000	U
Dichlorodifluoromethane	420	U	5.9	U	50000	U	140000	U
Dibromochloromethane	NA		NA		NA		NA	
Diethylphthalate	350	U	340	U	6500	U	90000	U
Dimethylphthalate	350	U	340	U	6500	U	90000	U
Di-n-butylphthalate	350	U	340	U	6500	U	90000	U
Di-n-octylphthalate	350	U	340	U	6500	U	90000	U
Ethylbenzene	420	U	5.9	U	50000	U	140000	U
Fluoranthene	350	U	340	U	6500	U	90000	U
Fluorene	350	U	340	U	6500	U	90000	U
Hexachlorobenzene	350	U	340	U	6500	U	90000	U
Hexachlorobutadiene	420	U	5.9	U	50000	U	140000	U
Hexachlorocyclopentadiene	350	U	340	U	6500	U	90000	U
Hexachloroethane	350	U	340	U	6500	U	90000	U
Indeno(1,2,3-cd)pyrene	350	U	340	U	6500	U	90000	U
Isophorone	350	U	340	U	6500	U	90000	U
Isopropylbenzene	420	U	5.9	U	50000	U	140000	U
m&p-Xylene	420	U	8.9		50000	U	140000	U
Methylene chloride (Dichloromethane)	420	U	5.9	U	50000	U	140000	U
Naphthalene	420	U	5.9	U	50000	U	140000	U
Naphthalene	350	U	340	U	6500	U	90000	U
n-Butylbenzene	420	U	5.9	U	50000	U	140000	U
Nitrobenzene	350	U	340	U	6500	U	90000	U
N-Nitrosodimethylamine	350	U	340	U	6500	U	90000	U
n-Nitrosodi-n-propylamine	350	U	340	U	6500	U	90000	U
N-Nitrosodiphenylamine/Diphenylamine	350	U	340	U	6500	U	90000	U
n-Propylbenzene	420	U	5.9	U	50000	U	140000	U
o-Xylene	590		93		50000	U	140000	U
Pentachlorophenol	1800	U	1800	U	34000	U	470000	U
Phenanthrene	350	U	340	U	6500	U	90000	U
Phenol	350	U	340	U	6500	U	90000	U
p-Isopropyltoluene	420	U	5.9	U	50000	U	140000	U
Pyrene	350	U	340	U	6500	U	90000	U
sec-Butylbenzene	420	U	5.9	U	50000	U	140000	U
Styrene	420	U	5.9	U	50000	U	140000	U
tert-Butylbenzene	420	U	5.9	U	50000	U	140000	U
Tetrachloroethene	420	U	5.9	U	50000	U	140000	U
Toluene	420	U	5.9	U	50000	U	140000	U
trans-1,2-Dichloroethene	420	U	5.9	U	50000	U	140000	U
trans-1,3-Dichloropropene	NA		NA		NA		NA	
Trichloroethene	420	U	5.9	U	50000	U	140000	U
Trichlorofluoromethane	420	U	5.9	U	50000	U	140000	U
Vinyl chloride	850	U	12	U	100000	U	280000	U
Xylenes, Total	NA		NA		NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SCT-B46-4-6		SCT-B47-2-4		SCT-B48-2-4		SCT-B48-8-10	
4-Chlorophenylphenyl ether	350	U	340	U	6500	U	90000	U
4-Chlorotoluene	4300		100		50000	U	140000	U
4-Methyl-2-pentanone (MIBK)	2100	U	30	U	250000	U	700000	U
4-Nitroaniline	1800	U	1800	U	34000	U	470000	U
4-Nitrophenol	1800	U	1800	U	34000	U	470000	U
Acenaphthene	350	U	340	U	6500	U	90000	U
Acenaphthylene	350	U	340	U	6500	U	90000	U
Acetone	4200	U	120		500000	U	1400000	U
Anthracene	350	U	340	U	6500	U	90000	U
Aroclor-1016	NA		NA		NA		NA	
Aroclor-1221	NA		NA		NA		NA	
Aroclor-1232	NA		NA		NA		NA	
Aroclor-1242	NA		NA		NA		NA	
Aroclor-1248	NA		NA		NA		NA	
Aroclor-1254	NA		NA		NA		NA	
Aroclor-1260	NA		NA		NA		NA	
Benzene	420	U	5.9	U	50000	U	140000	U
Benzidine	2900	U	2800	U	53000	U	740000	U
Benzo(a)anthracene	350	U	340	U	6500	U	90000	U
Benzo(a)pyrene	350	U	340	U	6500	U	90000	U
Benzo(b)fluoranthene	350	U	340	U	6500	U	90000	U
Benzo(g,h,i)perylene	350	U	340	U	6500	U	90000	U
Benzo(k)fluoranthene	350	U	340	U	6500	U	90000	U
Benzoic acid	1800	U	1800	U	34000	U	470000	U
Benzyl alcohol	350	U	340	U	6500	U	90000	U
bis(2-Chloroethoxy)methane	350	U	340	U	6500	U	90000	U
bis(2-Chloroethyl)ether	350	U	340	U	6500	U	90000	U
bis(2-Chloroisopropyl)ether	350	U	340	U	6500	U	90000	U
bis(2-Ethylhexyl)phthalate	350	U	690		6500	U	90000	U
Bromobenzene	420	U	5.9	U	50000	U	140000	U
Bromochloromethane	420	U	5.9	U	50000	U	140000	U
Bromodichloromethane	420	U	5.9	U	50000	U	140000	U
Bromoform	420	U	5.9	U	50000	U	140000	U
Bromomethane	850	U	12	U	100000	U	280000	U
Butylbenzylphthalate	350	U	340	U	6500	U	90000	U
Carbazole	NA		NA		NA		NA	
Carbon disulfide	NA		NA		NA		NA	
Carbon tetrachloride	420	U	5.9	U	50000	U	140000	U
Chlorobenzene	520		12		1500000		5200000	
Chlorodibromomethane	420	U	5.9	U	50000	U	140000	U
Chloroethane	850	U	12	U	100000	U	280000	U
Chloroform	420	U	5.9	U	50000	U	140000	U
Chloromethane	850	U	12	U	100000	U	280000	U
Chrysene	350	U	340	U	6500	U	90000	U
cis-1,2-Dichloroethene	420	U	5.9	U	50000	U	140000	U
cis-1,3-Dichloropropene	NA		NA		NA		NA	
Dibenzo(a,h)anthracene	350	U	340	U	6500	U	90000	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SCT-B46-4-6		SCT-B47-2-4		SCT-B48-2-4		SCT-B48-8-10	
1,1,1,2-Tetrachloroethane	420	U	5.9	U	50000	U	140000	U
1,1,1-Trichloroethane	420	U	5.9	U	50000	U	140000	U
1,1,2,2-Tetrachloroethane	420	U	5.9	U	50000	U	140000	U
1,1,2-Trichloroethane	420	U	5.9	U	50000	U	140000	U
1,1-Dichloroethane	420	U	5.9	U	50000	U	140000	U
1,1-Dichloroethene	420	U	5.9	U	50000	U	140000	U
1,1-Dichloropropylene	420	U	5.9	U	50000	U	140000	U
1,2,3-Trichlorobenzene	420	U	5.9	U	50000	U	140000	U
1,2,3-Trichloropropane	420	U	5.9	U	50000	U	140000	U
1,2,4-Trichlorobenzene	420	U	5.9	U	150000		360000	
1,2,4-Trichlorobenzene	350	U	340	U	62000		300000	
1,2,4-Trimethylbenzene	420	U	5.9	U	50000	U	140000	U
1,2-Dibromo-3-chloropropane	420	U	5.9	U	50000	U	140000	U
1,2-Dibromoethane (EDB)	420	U	5.9	U	50000	U	140000	U
1,2-Dichlorobenzene	350	U	340	U	40000		420000	
1,2-Dichloroethane	420	U	5.9	U	50000	U	140000	U
1,2-Dichloropropane	420	U	5.9	U	50000	U	140000	U
1,3,5-Trimethylbenzene	420	U	5.9	U	50000	U	140000	U
1,3-Dichlorobenzene	350	U	340	U	6500	U	90000	U
1,3-Dichloropropane	420	U	5.9	U	50000	U	140000	U
1,4-Dichlorobenzene	350	U	340	U	64000		510000	
2,2-Dichloropropane	420	U	5.9	U	50000	U	140000	U
2,2'-Oxybis(1-Chloropropane)	NA		NA		NA		NA	
2,4,5-Trichlorophenol	350	U	340	U	6500	U	90000	U
2,4,6-Trichlorophenol	350	U	340	U	6500	U	90000	U
2,4-Dichlorophenol	350	U	340	U	6500	U	90000	U
2,4-Dimethylphenol	350	U	340	U	6500	U	90000	U
2,4-Dinitrophenol	1800	U	1800	U	34000	U	470000	U
2,4-Dinitrotoluene	350	U	340	U	6500	U	90000	U
2,6-Dinitrotoluene	350	U	340	U	6500	U	90000	U
2-Butanone (MEK)	2100	U	30	U	250000	U	700000	U
2-Chloronaphthalene	350	U	340	U	6500	U	90000	U
2-Chlorophenol	350	U	340	U	6500	U	90000	U
2-Chlorotoluene	12000		140		50000	U	140000	U
2-Hexanone	NA		NA		NA		NA	
2-Methyl-4,6-dinitrophenol	1800	U	1800	U	34000	U	470000	U
2-Methylnaphthalene	350	U	340	U	6500	U	90000	U
2-Methylphenol (o-cresol)	350	U	340	U	6500	U	90000	U
2-Nitroaniline	1800	U	1800	U	34000	U	470000	U
2-Nitrophenol	350	U	340	U	6500	U	90000	U
3&4-Methylphenol (m&p-cresol)	350	U	340	U	6500	U	90000	U
3,3'-Dichlorobenzidine	700	U	690	U	13000	U	180000	U
3-Nitroaniline	1800	U	1800	U	34000	U	470000	U
4,6-Dinitro-2-methylphenol	NA		NA		NA		NA	
4-Bromophenyl phenyl ether	350	U	340	U	6500	U	90000	U
4-Chloro-3-methylphenol	350	U	340	U	6500	U	90000	U
4-Chloroaniline	700	U	690	U	13000	U	180000	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SCT-B49-4-6		SCT-B50-6-8		SCT-B51-6-8		SCT-B68-2-4'	
1,1,1,2-Tetrachloroethane	430	U	1300	U	260000	U	NA	
1,1,1-Trichloroethane	430	U	1300	U	260000	U	5.3	U
1,1,2,2-Tetrachloroethane	430	U	1300	U	260000	U	5.3	U
1,1,2-Trichloroethane	430	U	1300	U	260000	U	5.3	U
1,1-Dichloroethane	430	U	1300	U	260000	U	5.3	U
1,1-Dichloroethene	430	U	1300	U	260000	U	5.3	U
1,1-Dichloropropylene	430	U	1300	U	260000	U	NA	
1,2,3-Trichlorobenzene	430	U	1300	U	260000	U	NA	
1,2,3-Trichloropropane	430	U	1300	U	260000	U	NA	
1,2,4-Trichlorobenzene	430	U	1300	U	260000	U	410	U
1,2,4-Trichlorobenzene	350	U	1300		8400	U	NA	
1,2,4-Trimethylbenzene	430	U	1300	U	260000	U	NA	
1,2-Dibromo-3-chloropropane	430	U	1300	U	260000	U	NA	
1,2-Dibromoethane (EDB)	430	U	1300	U	260000	U	NA	
1,2-Dichlorobenzene	350	U	2400		53000		240	
1,2-Dichloroethane	430	U	1300	U	260000	U	5.3	U
1,2-Dichloropropane	430	U	1300	U	260000	U	5.3	U
1,3,5-Trimethylbenzene	430	U	1300	U	260000	U	NA	
1,3-Dichlorobenzene	350	U	430	U	8400	U	410	U
1,3-Dichloropropane	430	U	1300	U	260000	U	NA	
1,4-Dichlorobenzene	350	U	1300		100000		410	U
2,2-Dichloropropane	430	U	1300	U	260000	U	NA	
2,2'-Oxybis(1-Chloropropane)	NA		NA		NA		410	U
2,4,5-Trichlorophenol	350	U	430	U	8400	U	410	U
2,4,6-Trichlorophenol	350	U	430	U	8400	U	410	U
2,4-Dichlorophenol	350	U	430	U	8400	U	410	U
2,4-Dimethylphenol	350	U	430	U	8400	U	410	U
2,4-Dinitrophenol	1800	U	2200	U	43000	U	2100	U
2,4-Dinitrotoluene	350	U	430	U	8400	U	410	U
2,6-Dinitrotoluene	350	U	430	U	8400	U	410	U
2-Butanone (MEK)	2200	U	8000	U	1300000	U	27	U
2-Chloronaphthalene	350	U	430	U	8400	U	410	U
2-Chlorophenol	350	U	430	U	8400	U	410	U
2-Chlorotoluene	430	U	1300	U	260000	U	NA	
2-Hexanone	NA		NA		NA		27	U
2-Methyl-4,6-dinitrophenol	1800	U	2200	U	43000	U	NA	
2-Methylnaphthalene	350	U	430	U	8400	U	410	U
2-Methylphenol (o-cresol)	350	U	430	U	8400	U	410	U
2-Nitroaniline	1800	U	2200	U	43000	U	2100	U
2-Nitrophenol	350	U	430	U	8400	U	410	U
3&4-Methylphenol (m&p-cresol)	350	U	430	U	8400	U	410	U
3,3'-Dichlorobenzidine	700	U	850	U	17000	U	810	U
3-Nitroaniline	1800	U	2200	U	43000	U	2100	U
4,6-Dinitro-2-methylphenol	NA		NA		NA		2100	U
4-Bromophenyl phenyl ether	350	U	430	U	8400	U	410	U
4-Chloro-3-methylphenol	350	U	430	U	8400	U	410	U
4-Chloroaniline	700	U	850	U	17000	U	810	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SCT-B49-4-6		SCT-B50-6-8		SCT-B51-6-8		SCT-B68-2-4'	
4-Chlorophenylphenyl ether	350	U	430	U	8400	U	410	U
4-Chlorotoluene	430	U	1300	U	260000	U	NA	
4-Methyl-2-pentanone (MIBK)	2200	U	8000	U	1300000	U	27	U
4-Nitroaniline	1800	U	2200	U	43000	U	2100	U
4-Nitrophenol	1800	U	2200	U	43000	U	2100	U
Acenaphthene	350	U	430	U	8400	U	410	U
Acenaphthylene	350	U	430	U	8400	U	410	U
Acetone	4300	U	13000	U	2600000	U	53	U
Anthracene	350	U	430	U	8400	U	410	U
Aroclor-1016	NA		NA		38	U	NA	
Aroclor-1221	NA		NA		76	U	NA	
Aroclor-1232	NA		NA		38	U	NA	
Aroclor-1242	NA		NA		250		NA	
Aroclor-1248	NA		NA		38	U	NA	
Aroclor-1254	NA		NA		56		NA	
Aroclor-1260	NA		NA		110		NA	
Benzene	430	U	1300	U	260000	U	5.3	U
Benzidine	2900	U	3500	U	69000	U	NA	
Benzo(a)anthracene	350	U	430	U	8400	U	410	U
Benzo(a)pyrene	350	U	430	U	8400	U	410	U
Benzo(b)fluoranthene	350	U	490		8400	U	410	U
Benzo(g,h,i)perylene	350	U	430	U	8400	U	410	U
Benzo(k)fluoranthene	350	U	430	U	8400	U	410	U
Benzoic acid	1800	U	2200	U	43000	U	NA	
Benzyl alcohol	350	U	430	U	8400	U	NA	
bis(2-Chloroethoxy)methane	350	U	430	U	8400	U	410	U
bis(2-Chloroethyl)ether	350	U	430	U	8400	U	410	U
bis(2-Chloroisopropyl)ether	350	U	430	U	8400	U	NA	
bis(2-Ethylhexyl)phthalate	350	U	430	U	8400	U	940	
Bromobenzene	430	U	1300	U	260000	U	NA	
Bromochloromethane	430	U	1300	U	260000	U	5.3	U
Bromodichloromethane	430	U	1300	U	260000	U	NA	
Bromoform	430	U	1300	U	260000	U	5.3	U
Bromomethane	860	U	2600	U	520000	U	11	U
Butylbenzylphthalate	350	U	430	U	8400	U	410	U
Carbazole	NA		NA		NA		410	U
Carbon disulfide	NA		NA		NA		5.3	U
Carbon tetrachloride	430	U	1300	U	260000	U	5.3	U
Chlorobenzene	1100		24000		7900000		13	
Chlorodibromomethane	430	U	1300	U	260000	U	NA	
Chloroethane	860	U	2600	U	520000	U	11	U
Chloroform	430	U	1300	U	260000	U	5.3	U
Chloromethane	860	U	2600	U	520000	U	11	U
Chrysene	350	U	430	U	8400	U	410	U
cis-1,2-Dichloroethene	430	U	1300	U	260000	U	5.3	U
cis-1,3-Dichloropropene	NA		NA		NA		5.3	U
Dibenzo(a,h)anthracene	350	U	430	U	8400	U	410	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SCT-B49-4-6		SCT-B50-6-8		SCT-B51-6-8		SCT-B68-2-4'	
Dibenzofuran	350	U	430	U	8400	U	410	U
Dibromomethane	430	U	1300	U	260000	U	NA	
Dichlorodifluoromethane	430	U	1300	U	260000	U	NA	
Dibromochloromethane	NA		NA		NA		5.3	U
Diethylphthalate	350	U	430	U	8400	U	410	U
Dimethylphthalate	350	U	430	U	8400	U	410	U
Di-n-butylphthalate	350	U	430	U	8400	U	410	U
Di-n-octylphthalate	350	U	430	U	8400	U	410	U
Ethylbenzene	430	U	1300	U	260000	U	5.3	U
Fluoranthene	350	U	520		8400	U	410	U
Fluorene	350	U	430	U	8400	U	410	U
Hexachlorobenzene	350	U	500		8400	U	260	
Hexachlorobutadiene	430	U	1300	U	260000	U	410	U
Hexachlorocyclopentadiene	350	U	430	U	8400	U	410	U
Hexachloroethane	350	U	430	U	8400	U	410	U
Indeno(1,2,3-cd)pyrene	350	U	430	U	8400	U	410	U
Isophorone	350	U	430	U	8400	U	410	U
Isopropylbenzene	430	U	1300	U	260000	U	NA	
m&p-Xylene	430	U	1300	U	260000	U	NA	
Methylene chloride (Dichloromethane)	430	U	1300	U	260000	U	5.3	U
Naphthalene	430	U	1300	U	260000	U	410	U
Naphthalene	350	U	430	U	8400	U	NA	
n-Butylbenzene	430	U	1300	U	260000	U	NA	
Nitrobenzene	350	U	430	U	8400	U	410	U
N-Nitrosodimethylamine	350	U	430	U	8400	U	NA	
n-Nitrosodi-n-propylamine	350	U	430	U	8400	U	410	U
N-Nitrosodiphenylamine/Diphenylamine	350	U	430	U	8400	U	410	U
n-Propylbenzene	430	U	1300	U	260000	U	NA	
o-Xylene	430	U	1300	U	260000	U	NA	
Pentachlorophenol	1800	U	2200	U	43000	U	2100	U
Phenanthrene	350	U	430	U	8400	U	410	U
Phenol	350	U	430	U	8400	U	410	U
p-Isopropyltoluene	430	U	1300	U	260000	U	NA	
Pyrene	350	U	430	U	8400	U	410	U
sec-Butylbenzene	430	U	1300	U	260000	U	NA	
Styrene	430	U	1300	U	260000	U	5.3	U
tert-Butylbenzene	430	U	1300	U	260000	U	NA	
Tetrachloroethene	430	U	1300	U	260000	U	8.4	
Toluene	430	U	1300	U	260000	U	5.3	U
trans-1,2-Dichloroethene	430	U	1300	U	260000	U	NA	
trans-1,3-Dichloropropene	NA		NA		NA		5.3	U
Trichloroethene	430	U	1300	U	260000	U	5.3	U
Trichlorofluoromethane	430	U	1300	U	260000	U	NA	
Vinyl chloride	860	U	2600	U	520000	U	11	U
Xylenes, Total	NA		NA		NA		11	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SCT-B69-2-4'		SCT-B69-6-8'		SOT-B64-6-8'		SOT-B66-16-18'	
1,1,1,2-Tetrachloroethane	NA		NA		NA		NA	
1,1,1-Trichloroethane	220	U	5800	U	11000	U	6	U
1,1,2,2-Tetrachloroethane	220	U	5800	U	11000	U	6	U
1,1,2-Trichloroethane	220	U	5800	U	11000	U	6	U
1,1-Dichloroethane	220	U	5800	U	11000	U	6	U
1,1-Dichloroethene	220	U	5800	U	11000	U	6	U
1,1-Dichloropropylene	NA		NA		NA		NA	
1,2,3-Trichlorobenzene	NA		NA		NA		NA	
1,2,3-Trichloropropane	NA		NA		NA		NA	
1,2,4-Trichlorobenzene	430	U	260	J	NA		NA	
1,2,4-Trichlorobenzene	NA		NA		NA		NA	
1,2,4-Trimethylbenzene	NA		NA		NA		NA	
1,2-Dibromo-3-chloropropane	NA		NA		NA		NA	
1,2-Dibromoethane (EDB)	NA		NA		NA		NA	
1,2-Dichlorobenzene	430	U	1300		NA		NA	
1,2-Dichloroethane	220	U	5800	U	11000	U	6	U
1,2-Dichloropropane	220	U	5800	U	11000	U	6	U
1,3,5-Trimethylbenzene	NA		NA		NA		NA	
1,3-Dichlorobenzene	430	U	360	U	NA		NA	
1,3-Dichloropropane	NA		NA		NA		NA	
1,4-Dichlorobenzene	430	U	2600		NA		NA	
2,2-Dichloropropane	NA		NA		NA		NA	
2,2'-Oxybis(1-Chloropropane)	430	U	360	U	NA		NA	
2,4,5-Trichlorophenol	430	U	360	U	NA		NA	
2,4,6-Trichlorophenol	430	U	360	U	NA		NA	
2,4-Dichlorophenol	430	U	360	U	NA		NA	
2,4-Dimethylphenol	430	U	360	U	NA		NA	
2,4-Dinitrophenol	2200	U	1900	U	NA		NA	
2,4-Dinitrotoluene	430	U	360	U	NA		NA	
2,6-Dinitrotoluene	430	U	360	U	NA		NA	
2-Butanone (MEK)	1100	U	29000	U	55000	U	30	U
2-Chloronaphthalene	430	U	360	U	NA		NA	
2-Chlorophenol	430	U	360	U	NA		NA	
2-Chlorotoluene	NA		NA		NA		NA	
2-Hexanone	1100	U	29000	U	55000	U	30	U
2-Methyl-4,6-dinitrophenol	NA		NA		NA		NA	
2-Methylnaphthalene	430	U	360	U	NA		NA	
2-Methylphenol (o-cresol)	430	U	360	U	NA		NA	
2-Nitroaniline	2200	U	1900	U	NA		NA	
2-Nitrophenol	430	U	360	U	NA		NA	
3&4-Methylphenol (m&p-cresol)	430	U	360	U	NA		NA	
3,3'-Dichlorobenzidine	860	U	730	U	NA		NA	
3-Nitroaniline	2200	U	1900	U	NA		NA	
4,6-Dinitro-2-methylphenol	2200	U	1900	U	NA		NA	
4-Bromophenyl phenyl ether	430	U	360	U	NA		NA	
4-Chloro-3-methylphenol	430	U	360	U	NA		NA	
4-Chloroaniline	860	U	730	U	NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SCT-B69-2-4'		SCT-B69-6-8'		SOT-B64-6-8'		SOT-B66-16-18'	
4-Chlorophenylphenyl ether	430	U	360	U	NA		NA	
4-Chlorotoluene	NA		NA		NA		NA	
4-Methyl-2-pentanone (MIBK)	1100	U	29000	U	55000	U	30	U
4-Nitroaniline	2200	U	1900	U	NA		NA	
4-Nitrophenol	2200	U	1900	U	NA		NA	
Acenaphthene	430	U	360	U	NA		NA	
Acenaphthylene	430	U	360	U	NA		NA	
Acetone	2200	U	58000	U	110000	U	60	U
Anthracene	430	U	360	U	NA		NA	
Aroclor-1016	NA		NA		NA		NA	
Aroclor-1221	NA		NA		NA		NA	
Aroclor-1232	NA		NA		NA		NA	
Aroclor-1242	NA		NA		NA		NA	
Aroclor-1248	NA		NA		NA		NA	
Aroclor-1254	NA		NA		NA		NA	
Aroclor-1260	NA		NA		NA		NA	
Benzene	220	U	5800	U	11000	U	6	U
Benzidine	NA		NA		NA		NA	
Benzo(a)anthracene	430	U	360	U	NA		NA	
Benzo(a)pyrene	430	U	360	U	NA		NA	
Benzo(b)fluoranthene	430	U	360	U	NA		NA	
Benzo(g,h,i)perylene	430	U	360	U	NA		NA	
Benzo(k)fluoranthene	430	U	360	U	NA		NA	
Benzoic acid	NA		NA		NA		NA	
Benzyl alcohol	NA		NA		NA		NA	
bis(2-Chloroethoxy)methane	430	U	360	U	NA		NA	
bis(2-Chloroethyl)ether	430	U	360	U	NA		NA	
bis(2-Chloroisopropyl)ether	NA		NA		NA		NA	
bis(2-Ethylhexyl)phthalate	430	U	360	U	NA		NA	
Bromobenzene	NA		NA		NA		NA	
Bromochloromethane	220	U	5800	U	NA		NA	
Bromodichloromethane	NA		NA		11000	U	6	U
Bromoform	220	U	5800	U	11000	U	6	U
Bromomethane	440	U	12000	U	22000	U	12	U
Butylbenzylphthalate	430	U	360	U	NA		NA	
Carbazole	430	U	360	U	NA		NA	
Carbon disulfide	220	U	5800	U	11000	U	6	U
Carbon tetrachloride	220	U	5800	U	11000	U	6	U
Chlorobenzene	1900		110000		11000	U	3	
Chlorodibromomethane	NA		NA		NA		NA	
Chloroethane	440	U	12000	U	22000	U	12	U
Chloroform	220	U	5800	U	11000	U	6	U
Chloromethane	440	U	12000	U	22000	U	12	U
Chrysene	430	U	360	U	NA		NA	
cis-1,2-Dichloroethene	220	U	5800	U	11000	U	6	U
cis-1,3-Dichloropropene	220	U	5800	U	11000	U	6	U
Dibenzo(a,h)anthracene	430	U	360	U	NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SCT-B69-2-4'		SCT-B69-6-8'		SOT-B64-6-8'		SOT-B66-16-18'	
Dibenzofuran	430	U	360	U	NA		NA	
Dibromomethane	NA		NA		NA		NA	
Dichlorodifluoromethane	NA		NA		NA		NA	
Dibromochloromethane	220	U	5800	U	11000	U	6	U
Diethylphthalate	430	U	360	U	NA		NA	
Dimethylphthalate	430	U	360	U	NA		NA	
Di-n-butylphthalate	430	U	360	U	NA		NA	
Di-n-octylphthalate	430	U	360	U	NA		NA	
Ethylbenzene	220	U	5800	U	48000		6	U
Fluoranthene	430	U	210		NA		NA	
Fluorene	430	U	360	U	NA		NA	
Hexachlorobenzene	480		360	U	NA		NA	
Hexachlorobutadiene	430	U	360	U	NA		NA	
Hexachlorocyclopentadiene	430	U	360	U	NA		NA	
Hexachloroethane	430	U	360	U	NA		NA	
Indeno(1,2,3-cd)pyrene	430	U	360	U	NA		NA	
Isophorone	430	U	360	U	NA		NA	
Isopropylbenzene	NA		NA		NA		NA	
m&p-Xylene	NA		NA		11000	U	6	U
Methylene chloride (Dichloromethane)	220	U	5800	U	NA		NA	
Naphthalene	430	U	360	U	NA		NA	
Naphthalene	NA		NA		NA		NA	
n-Butylbenzene	NA		NA		NA		NA	
Nitrobenzene	430	U	360	U	NA		NA	
N-Nitrosodimethylamine	NA		NA		NA		NA	
n-Nitrosodi-n-propylamine	430	U	360	U	NA		NA	
N-Nitrosodiphenylamine/Diphenylamine	430	U	360	U	NA		NA	
n-Propylbenzene	NA		NA		NA		NA	
o-Xylene	NA		NA		NA		NA	
Pentachlorophenol	2200	U	1900	U	NA		NA	
Phenanthrene	430	U	360	U	NA		NA	
Phenol	430	U	360	U	NA		NA	
p-Isopropyltoluene	NA		NA		NA		NA	
Pyrene	430	U	200		NA		NA	
sec-Butylbenzene	NA		NA		NA		NA	
Styrene	220	U	5800	U	11000	U	6	U
tert-Butylbenzene	NA		NA		NA		NA	
Tetrachloroethene	220	U	5800	U	11000	U	6	U
Toluene	220	U	5800	U	11000	U	6	U
trans-1,2-Dichloroethene	NA		NA		NA		NA	
trans-1,3-Dichloropropene	220	U	5800	U	11000	U	6	U
Trichloroethene	220	U	5800	U	11000	U	6	U
Trichlorofluoromethane	NA		NA		NA		NA	
Vinyl chloride	440	U	12000	U	22000	U	12	U
Xylenes, Total	440	U	12000	U	690000		39	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SOT-B66-2-4'		BBU-B52(14-16')		BBU-B53-3-3.5'	
1,1,1,2-Tetrachloroethane	NA		NA		NA	
1,1,1-Trichloroethane	190	U	240	U	NA	
1,1,2,2-Tetrachloroethane	190	U	240	U	NA	
1,1,2-Trichloroethane	190	U	240	U	NA	
1,1-Dichloroethane	190	U	240	U	NA	
1,1-Dichloroethene	190	U	420	U	NA	
1,1-Dichloropropylene	NA		NA		NA	
1,2,3-Trichlorobenzene	NA		NA		NA	
1,2,3-Trichloropropane	NA		NA		NA	
1,2,4-Trichlorobenzene	NA		NA		1400000	E
1,2,4-Trichlorobenzene	NA		420	U	NA	
1,2,4-Trimethylbenzene	NA		NA		NA	
1,2-Dibromo-3-chloropropane	NA		NA		NA	
1,2-Dibromoethane (EDB)	NA		NA		NA	
1,2-Dichlorobenzene	NA		950		15000	J
1,2-Dichloroethane	190	U	240	U	NA	
1,2-Dichloropropane	190	U	420	U	NA	
1,3,5-Trimethylbenzene	NA		NA		NA	
1,3-Dichlorobenzene	NA		420	U	23000	U
1,3-Dichloropropane	NA		NA		NA	
1,4-Dichlorobenzene	NA		420	U	23000	U
2,2-Dichloropropane	NA		NA		NA	
2,2'-Oxybis(1-Chloropropane)	NA		420	U	23000	U
2,4,5-Trichlorophenol	NA		420	U	23000	U
2,4,6-Trichlorophenol	NA		420	U	23000	U
2,4-Dichlorophenol	NA		420	U	23000	U
2,4-Dimethylphenol	NA		2200	U	23000	U
2,4-Dinitrophenol	NA		420	U	120000	U
2,4-Dinitrotoluene	NA		420	U	23000	U
2,6-Dinitrotoluene	NA		1200	U	23000	U
2-Butanone (MEK)	960	U	420	U	NA	
2-Chloronaphthalene	NA		420	U	23000	U
2-Chlorophenol	NA		1200	U	23000	U
2-Chlorotoluene	NA		NA		NA	
2-Hexanone	960	U	420	U	NA	
2-Methyl-4,6-dinitrophenol	NA		NA		NA	
2-Methylnaphthalene	NA		420	U	23000	U
2-Methylphenol (o-cresol)	NA		2200	U	23000	U
2-Nitroaniline	NA		420	U	120000	U
2-Nitrophenol	NA		840	U	23000	U
3&4-Methylphenol (m&p-cresol)	NA		2200	U	23000	U
3,3'-Dichlorobenzidine	NA		420	U	46000	U
3-Nitroaniline	NA		2200	U	120000	U
4,6-Dinitro-2-methylphenol	NA		420	U	120000	U
4-Bromophenyl phenyl ether	NA		420	U	23000	U
4-Chloro-3-methylphenol	NA		840	U	23000	U
4-Chloroaniline	NA		420	U	46000	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SOT-B66-2-4'		BBU-B52(14-16')		BBU-B53-3-3.5'	
4-Chlorophenylphenyl ether	NA		1200	U	23000	U
4-Chlorotoluene	NA		NA		NA	
4-Methyl-2-pentanone (MIBK)	960	U	2200	U	NA	
4-Nitroaniline	NA		2200	U	120000	U
4-Nitrophenol	NA		420	U	120000	U
Acenaphthene	NA		420	U	23000	U
Acenaphthylene	NA		2400	U	23000	U
Acetone	1900	U	420	U	NA	
Anthracene	NA		47000		23000	U
Aroclor-1016	NA		NA		NA	
Aroclor-1221	NA		NA		NA	
Aroclor-1232	NA		NA		NA	
Aroclor-1242	NA		NA		NA	
Aroclor-1248	NA		NA		NA	
Aroclor-1254	NA		NA		NA	
Aroclor-1260	NA		NA		NA	
Benzene	190	U	420	U	NA	
Benzidine	NA		NA		NA	
Benzo(a)anthracene	NA		420	U	23000	U
Benzo(a)pyrene	NA		420	U	23000	U
Benzo(b)fluoranthene	NA		420	U	23000	U
Benzo(g,h,i)perylene	NA		420	U	23000	U
Benzo(k)fluoranthene	NA		420	U	23000	U
Benzoic acid	NA		NA		NA	
Benzyl alcohol	NA		NA		NA	
bis(2-Chloroethoxy)methane	NA		420	U	23000	U
bis(2-Chloroethyl)ether	NA		420	U	23000	U
bis(2-Chloroisopropyl)ether	NA		NA		NA	
bis(2-Ethylhexyl)phthalate	NA		240	U	23000	U
Bromobenzene	NA		NA		NA	
Bromochloromethane	NA		NA		NA	
Bromodichloromethane	190	U	240	U	NA	
Bromoform	190	U	480	U	NA	
Bromomethane	380	U	420	U	NA	
Butylbenzylphthalate	NA		420	U	23000	U
Carbazole	NA		240	U	23000	U
Carbon disulfide	190	U	240	U	23000	U
Carbon tetrachloride	190	U	240	U	NA	
Chlorobenzene	230		480	U	NA	
Chlorodibromomethane	NA		NA		NA	
Chloroethane	380	U	240	U	NA	
Chloroform	190	U	480	U	NA	
Chloromethane	380	U	420	U	NA	
Chrysene	NA		240	U	NA	
cis-1,2-Dichloroethene	190	U	240	U	NA	
cis-1,3-Dichloropropene	190	U	420	U	NA	
Dibenzo(a,h)anthracene	NA		420	U	23000	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SOT-B66-2-4'		BBU-B52(14-16')		BBU-B53-3-3.5'	
Dibenzofuran	NA		240	U	23000	U
Dibromomethane	NA		NA		NA	U
Dichlorodifluoromethane	NA		NA		NA	U
Dibromochloromethane	190	U	420	U	NA	U
Diethylphthalate	NA		420	U	23000	U
Dimethylphthalate	NA		420	U	23000	U
Di-n-butylphthalate	NA		420	U	23000	U
Di-n-octylphthalate	NA		240	U	23000	U
Ethylbenzene	140		420	U	NA	
Fluoranthene	NA		420	U	23000	U
Fluorene	NA		420	U	23000	U
Hexachlorobenzene	NA		420	U	23000	U
Hexachlorobutadiene	NA		420	U	23000	U
Hexachlorocyclopentadiene	NA		420	U	23000	U
Hexachloroethane	NA		420	U	23000	U
Indeno(1,2,3-cd)pyrene	NA		420	U	23000	U
Isophorone	NA		240	U	23000	U
Isopropylbenzene	NA		NA		NA	
m&p-Xylene	190	U	NA		NA	
Methylene chloride (Dichloromethane)	NA		420	U	NA	
Naphthalene	NA		420	U	23000	U
Naphthalene	NA		NA		NA	
n-Butylbenzene	NA		NA		NA	
Nitrobenzene	NA		420	U	23000	E
N-Nitrosodimethylamine	NA		420	U	NA	
n-Nitrosodi-n-propylamine	NA		NA		23000	U
N-Nitrosodiphenylamine/Diphenylamine	NA		2200	U	23000	U
n-Propylbenzene	NA		NA		NA	
o-Xylene	NA		NA		NA	
Pentachlorophenol	NA		420	U	1500000	U
Phenanthrene	NA		420	U	23000	
Phenol	NA		420	U	23000	
p-Isopropyltoluene	NA		NA		NA	
Pyrene	NA		240	U	23000	
sec-Butylbenzene	NA		NA		NA	
Styrene	190	U	240	U	NA	
tert-Butylbenzene	NA		NA		NA	
Tetrachloroethene	190	U	240	U	NA	
Toluene	190	U	240	U	NA	
trans-1,2-Dichloroethene	NA		NA		NA	
trans-1,3-Dichloropropene	190	U	240	U	NA	
Trichloroethene	190	U	480	U	NA	
Trichlorofluoromethane	NA		NA		NA	
Vinyl chloride	380	U	480	U	NA	
Xylenes, Total	3000		4800	U	NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SOT-B65-2-4'		SOT-B64-6-8' DUP		BBU-B55-2-4	
1,1,1,2-Tetrachloroethane	NA		10000	U	280	U
1,1,1-Trichloroethane	230	U	10000	U	280	U
1,1,2,2-Tetrachloroethane	230	U	10000	U	280	U
1,1,2-Trichloroethane	230	U	10000	U	280	U
1,1-Dichloroethane	230	U	10000	U	280	U
1,1-Dichloroethene	230	U	NA		NA	
1,1-Dichloropropylene	NA		NA		NA	
1,2,3-Trichlorobenzene	NA		NA		NA	
1,2,3-Trichloropropane	NA		NA		6200	
1,2,4-Trichlorobenzene	NA		NA		NA	
1,2,4-Trichlorobenzene	NA		NA		NA	
1,2,4-Trimethylbenzene	NA		NA		NA	
1,2-Dibromo-3-chloropropane	NA		NA		NA	
1,2-Dibromoethane (EDB)	NA		NA		9000	
1,2-Dichlorobenzene	NA		10000	U	280	U
1,2-Dichloroethane	230	U	10000	U	280	U
1,2-Dichloropropane	230	U	NA		NA	
1,3,5-Trimethylbenzene	NA		NA		230	
1,3-Dichlorobenzene	NA		NA		NA	
1,3-Dichloropropane	NA		NA		26000	
1,4-Dichlorobenzene	NA		NA		NA	
2,2-Dichloropropane	NA		NA		420	U
2,2'-Oxybis(1-Chloropropane)	NA		NA		330	
2,4,5-Trichlorophenol	NA		NA		2400	
2,4,6-Trichlorophenol	NA		NA		420	
2,4-Dichlorophenol	NA		NA		420	U
2,4-Dimethylphenol	NA		NA		2200	U
2,4-Dinitrophenol	NA		NA		420	U
2,4-Dinitrotoluene	NA		NA		420	U
2,6-Dinitrotoluene	NA		51000	U	1400	U
2-Butanone (MEK)	1200	U	NA		420	U
2-Chloronaphthalene	NA		NA		420	U
2-Chlorophenol	NA		NA		NA	
2-Chlorotoluene	NA		51000	U	1400	U
2-Hexanone	1200	U	NA		290	
2-Methyl-4,6-dinitrophenol	1200	U	NA		420	U
2-Methylnaphthalene	NA		NA		NA	
2-Methylphenol (o-cresol)	NA		NA		2200	U
2-Nitroaniline	NA		NA		420	U
2-Nitrophenol	NA		NA		420	U
3&4-Methylphenol (m&p-cresol)	NA		NA		850	U
3,3'-Dichlorobenzidine	NA		NA		2200	U
3-Nitroaniline	NA		NA		2200	U
4,6-Dinitro-2-methylphenol	NA		NA		420	U
4-Bromophenyl phenyl ether	NA		NA		420	U
4-Chloro-3-methylphenol	NA		NA		850	U
4-Chloroaniline	NA		NA		420	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SOT-B65-2-4'		SOT-B64-6-8' DUP		BBU-B55-2-4	
4-Chlorophenylphenyl ether	NA		NA		NA	
4-Chlorotoluene	NA		51000	U	1400	U
4-Methyl-2-pentanone (MIBK)	NA		NA		2200	U
4-Nitroaniline	NA		NA		2200	U
4-Nitrophenol	NA		NA		420	U
Acenaphthene	NA		NA		420	U
Acenaphthylene	NA		100000	U	2800	U
Acetone	2300	U	NA		770	
Anthracene	NA		NA		NA	
Aroclor-1016	NA		NA		NA	
Aroclor-1221	NA		NA		NA	
Aroclor-1232	NA		NA		NA	
Aroclor-1242	NA		NA		NA	
Aroclor-1248	NA		NA		NA	
Aroclor-1254	NA		NA		NA	
Aroclor-1260	NA		10000	U	1100	
Benzene	230	U	NA		NA	
Benzidine	NA		NA		420	U
Benzo(a)anthracene	NA		NA		240	
Benzo(a)pyrene	NA		NA		420	U
Benzo(b)fluoranthene	NA		NA		420	U
Benzo(g,h,i)perylene	NA		NA		440	
Benzo(k)fluoranthene	NA		NA		NA	
Benzoic acid	NA		NA		NA	
Benzyl alcohol	NA		NA		420	U
bis(2-Chloroethoxy)methane	NA		NA		420	U
bis(2-Chloroethyl)ether	NA		NA		NA	
bis(2-Chloroisopropyl)ether	NA		NA		420	U
bis(2-Ethylhexyl)phthalate	NA		NA		NA	
Bromobenzene	NA		NA		NA	
Bromochloromethane	NA		10000	U	280	U
Bromodichloromethane	230	U	10000	U	280	U
Bromoform	230	U	20000	U	560	U
Bromomethane	460	U	NA		420	U
Butylbenzylphthalate	NA		NA		420	U
Carbazole	NA		10000	U	280	U
Carbon disulfide	230	U	10000	U	280	U
Carbon tetrachloride	230	U	10000	U	280	U
Chlorobenzene	840		20000	U	NA	
Chlorodibromomethane	NA		NA		560	U
Chloroethane	460	U	10000	U	170	
Chloroform	230	U	NA		560	U
Chloromethane	460	U	NA		420	U
Chrysene	NA		10000	U	280	U
cis-1,2-Dichloroethene	230	U	NA		280	U
cis-1,3-Dichloropropene	230	U	NA		420	U
Dibenzo(a,h)anthracene	NA		NA		420	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SOT-B65-2-4'		SOT-B64-6-8' DUP		BBU-B55-2-4	
Dibenzofuran	NA		NA		NA	
Dibromomethane	NA		NA		280	U
Dichlorodifluoromethane	230	U	10000	U	NA	
Dibromochloromethane	NA		NA		420	U
Diethylphthalate	NA		NA		420	U
Dimethylphthalate	NA		NA		420	U
Di-n-butylphthalate	NA		NA		420	U
Di-n-octylphthalate	NA		94000		280	U
Ethylbenzene	4800		NA		630	
Fluoranthene	NA		NA		420	U
Fluorene	NA		NA		1100	
Hexachlorobenzene	NA		NA		260	
Hexachlorobutadiene	NA		NA		420	U
Hexachlorocyclopentadiene	NA		NA		420	U
Hexachloroethane	NA		NA		420	U
Indeno(1,2,3-cd)pyrene	NA		NA		420	U
Isophorone	NA		NA		NA	
Isopropylbenzene	NA		NA		NA	
m&p-Xylene	NA		10000	U	280	U
Methylene chloride (Dichloromethane)	230	U	NA		420	U
Naphthalene	NA		NA		NA	
Naphthalene	NA		NA		NA	
n-Butylbenzene	NA		NA		420	U
Nitrobenzene	NA		NA		NA	
N-Nitrosodimethylamine	NA		NA		420	U
n-Nitrosodi-n-propylamine	NA		NA		420	U
N-Nitrosodiphenylamine/Diphenylamine	NA		NA		NA	
n-Propylbenzene	NA		NA		NA	
o-Xylene	NA		NA		130000	
Pentachlorophenol	NA		NA		420	U
Phenanthrene	NA		NA		420	U
Phenol	NA		NA		NA	
p-Isopropyltoluene	NA		NA		250	
Pyrene	NA		NA		NA	
sec-Butylbenzene	NA		10000	U	280	U
Styrene	230	U	NA		NA	
tert-Butylbenzene	NA		10000	U	830	
Tetrachloroethene	230	U	10000	U	280	U
Toluene	230	U	NA		280	U
trans-1,2-Dichloroethene	NA		10000	U	NA	
trans-1,3-Dichloropropene	230	U	10000	U	280	U
Trichloroethene	230	U	NA		NA	
Trichlorofluoromethane	NA		20000	U	560	U
Vinyl chloride	460	U	1500000	E	560	U
Xylenes, Total	23000		NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B55-6-8'		BBU-B57-3'		BBU-B58-7-8'	
1,1,1,2-Tetrachloroethane	250	U	NA		NA	
1,1,1-Trichloroethane	250	U	1400	U	7200	U
1,1,2,2-Tetrachloroethane	250	U	1400	U	7200	U
1,1,2-Trichloroethane	250	U	1400	U	7200	U
1,1-Dichloroethane	250	U	1400	U	7200	U
1,1-Dichloroethene	450	U	1400	U	7200	U
1,1-Dichloropropylene	NA		NA		NA	
1,2,3-Trichlorobenzene	NA		NA		NA	
1,2,3-Trichloropropane	NA		NA		NA	
1,2,4-Trichlorobenzene	450	U	16000		440	U
1,2,4-Trichlorobenzene	NA		NA		NA	
1,2,4-Trimethylbenzene	NA		NA		NA	
1,2-Dibromo-3-chloropropane	NA		NA		NA	
1,2-Dibromoethane (EDB)	NA		NA		NA	
1,2-Dichlorobenzene	250	U	180000		440	U
1,2-Dichloroethane	250	U	4700		7200	U
1,2-Dichloropropane	450	U	1400	U	7200	U
1,3,5-Trimethylbenzene	NA		NA		NA	
1,3-Dichlorobenzene	800		8600	U	440	U
1,3-Dichloropropane	NA		NA		NA	
1,4-Dichlorobenzene	450	U	300000		440	U
2,2-Dichloropropane	NA		NA		NA	
2,2'-Oxybis(1-Chloropropane)	450	U	8600	U	440	U
2,4,5-Trichlorophenol	250		8600	U	440	U
2,4,6-Trichlorophenol	450	U	8600	U	440	U
2,4-Dichlorophenol	450	U	8600	U	440	U
2,4-Dimethylphenol	2300	U	8600	U	440	U
2,4-Dinitrophenol	450	U	44000	U	2200	U
2,4-Dinitrotoluene	450	U	8600	U	440	U
2,6-Dinitrotoluene	1300	U	8600	U	440	U
2-Butanone (MEK)	450	U	6800	U	36000	U
2-Chloronaphthalene	450	U	8600	U	440	U
2-Chlorophenol	1300	U	8600	U	440	U
2-Chlorotoluene	NA		NA		NA	
2-Hexanone	450	U	6800	U	36000	U
2-Methyl-4,6-dinitrophenol	NA		NA		NA	
2-Methylnaphthalene	450	U	8600	U	440	U
2-Methylphenol (o-cresol)	2300	U	8600	U	440	U
2-Nitroaniline	450	U	44000	U	2200	U
2-Nitrophenol	900	U	8600	U	440	U
3&4-Methylphenol (m&p-cresol)	2300	U	8600	U	440	U
3,3'-Dichlorobenzidine	450	U	17000	U	880	U
3-Nitroaniline	2300	U	44000	U	2200	U
4,6-Dinitro-2-methylphenol	450	U	44000	U	2200	U
4-Bromophenyl phenyl ether	450	U	8600	U	440	U
4-Chloro-3-methylphenol	900	U	8600	U	440	U
4-Chloroaniline	450	U	17000	U	880	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B55-6-8'		BBU-B57-3'		BBU-B58-7-8'	
4-Chlorophenylphenyl ether	1300	U	8600	U	440	U
4-Chlorotoluene	NA		NA		NA	
4-Methyl-2-pentanone (MIBK)	2300	U	6800	U	36000	U
4-Nitroaniline	2300	U	44000	U	2200	U
4-Nitrophenol	450	U	44000	U	2200	U
Acenaphthene	450	U	8600	U	440	U
Acenaphthylene	2500	U	8600	U	440	U
Acetone	450	U	14000	U	72000	U
Anthracene	5900		8600	U	440	U
Aroclor-1016	NA		NA		NA	
Aroclor-1221	NA		NA		NA	
Aroclor-1232	NA		NA		NA	
Aroclor-1242	NA		NA		NA	
Aroclor-1248	NA		NA		NA	
Aroclor-1254	NA		NA		NA	
Aroclor-1260	NA		NA		NA	
Benzene	450	U	230000		640000	
Benzidine	NA		NA		NA	
Benzo(a)anthracene	450	U	8600	U	440	U
Benzo(a)pyrene	450	U	8600	U	440	U
Benzo(b)fluoranthene	450	U	8600	U	440	U
Benzo(g,h,i)perylene	450	U	8600	U	440	U
Benzo(k)fluoranthene	450	U	8600	U	440	U
Benzoic acid	NA		NA		NA	
Benzyl alcohol	NA		NA		NA	
bis(2-Chloroethoxy)methane	450	U	8600	U	440	U
bis(2-Chloroethyl)ether	250		8600	U	440	U
bis(2-Chloroisopropyl)ether	NA		NA		NA	
bis(2-Ethylhexyl)phthalate	250	U	8600	U	440	U
Bromobenzene	NA		NA		NA	
Bromochloromethane	NA		NA		NA	
Bromodichloromethane	250	U	1400	U	7200	U
Bromoform	510	U	1400	U	7200	U
Bromomethane	450	U	2700	U	14000	U
Butylbenzylphthalate	450	U	8600	U	440	U
Carbazole	250	U	8600	U	440	U
Carbon disulfide	250	U	1400	U	7200	U
Carbon tetrachloride	250	U	1400	U	7200	U
Chlorobenzene	510	U	70000		7200	U
Chlorodibromomethane	NA		NA		NA	
Chloroethane	250	U	2700	U	14000	U
Chloroform	510	U	1400	U	7200	U
Chloromethane	450	U	2700	U	14000	U
Chrysene	250	U	8600	U	440	U
cis-1,2-Dichloroethene	250	U	1400	U	7200	U
cis-1,3-Dichloropropene	450	U	1400	U	7200	U
Dibenzo(a,h)anthracene	450	U	8600	U	440	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B55-6-8'		BBU-B57-3'		BBU-B58-7-8'	
Dibenzofuran	250	U	8600	U	440	U
Dibromomethane	NA		NA		NA	
Dichlorodifluoromethane	NA		NA		NA	
Dibromochloromethane	450	U	1400	U	7200	U
Diethylphthalate	450	U	8600	U	440	U
Dimethylphthalate	450	U	8600	U	440	U
Di-n-butylphthalate	450	U	8600	U	440	U
Di-n-octylphthalate	250	U	8600	U	440	U
Ethylbenzene	450	U	1400	U	7200	U
Fluoranthene	450	U	8600	U	440	U
Fluorene	450	U	8600	U	440	U
Hexachlorobenzene	450	U	8600	U	440	U
Hexachlorobutadiene	450	U	8600	U	440	U
Hexachlorocyclopentadiene	450	U	8600	U	440	U
Hexachloroethane	450	U	8600	U	440	U
Indeno(1,2,3-cd)pyrene	450	U	8600	U	440	U
Isophorone	250	U	8600	U	440	U
Isopropylbenzene	NA		NA		NA	
m&p-Xylene	NA		NA		NA	
Methylene chloride (Dichloromethane)	450	U	1400	U	7200	U
Naphthalene	450	U	8600	U	440	U
Naphthalene	NA		NA		NA	
n-Butylbenzene	NA		NA		NA	
Nitrobenzene	450	U	8600	U	440	U
N-Nitrosodimethylamine	NA		NA		NA	
n-Nitrosodi-n-propylamine	450	U	8600	U	440	U
N-Nitrosodiphenylamine/Diphenylamine	36000		8600	U	440	U
n-Propylbenzene	NA		NA		NA	
o-Xylene	NA		NA		NA	
Pentachlorophenol	450	U	44000	U	2200	U
Phenanthrene	450	U	8600	U	440	U
Phenol	450	U	8600	U	460	
p-Isopropyltoluene	NA		NA		NA	
Pyrene	250	U	8600	U	440	U
sec-Butylbenzene	NA		NA		NA	
Styrene	250	U	1400	U	7200	U
tert-Butylbenzene	250	U	1400	U	7200	U
Tetrachloroethene	NA		NA		NA	
Toluene	250	U	1400	U	7200	U
trans-1,2-Dichloroethene	250	U	1400	U	7200	U
trans-1,3-Dichloropropene	NA		NA		NA	
Trichloroethene	510	U	1400	U	7200	U
Trichlorofluoromethane	NA		NA		NA	
Vinyl chloride	510	U	2700	U	14000	U
Xylenes, Total	NA		2700	U	14000	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B58-3-4'		BBU-B58-7-8'		NTF-B77-0-2'	
1,1,1,2-Tetrachloroethane	NA		NA		NA	
1,1,1-Trichloroethane	41000	U	7200	U	3000	U
1,1,2,2-Tetrachloroethane	41000	U	7200	U	3000	U
1,1,2-Trichloroethane	41000	U	7200	U	3000	U
1,1-Dichloroethane	41000	U	7200	U	3000	U
1,1-Dichloroethene	41000	U	7200	U	3000	U
1,1-Dichloropropylene	NA		NA		NA	
1,2,3-Trichlorobenzene	NA		NA		NA	
1,2,3-Trichloropropane	NA		NA		NA	
1,2,4-Trichlorobenzene	7800		440	U	3900	U
1,2,4-Trichlorobenzene	NA		NA		NA	
1,2,4-Trimethylbenzene	NA		NA		NA	
1,2-Dibromo-3-chloropropane	NA		NA		NA	
1,2-Dibromoethane (EDB)	NA		NA		NA	
1,2-Dichlorobenzene	3300		440	U	37000	
1,2-Dichloroethane	41000	U	7200	U	3000	U
1,2-Dichloropropane	41000	U	7200	U	3000	U
1,3,5-Trimethylbenzene	NA		NA		NA	
1,3-Dichlorobenzene	410	U	440	U	3900	U
1,3-Dichloropropane	NA		NA		NA	
1,4-Dichlorobenzene	11000		440	U	5900	
2,2-Dichloropropane	NA		NA		NA	
2,2'-Oxybis(1-Chloropropane)	410	U	440	U	3900	U
2,4,5-Trichlorophenol	350		440	U	3900	U
2,4,6-Trichlorophenol	1000		440	U	3900	U
2,4-Dichlorophenol	300		440	U	3900	U
2,4-Dimethylphenol	410	U	440	U	3900	U
2,4-Dinitrophenol	2100	U	2200	U	20000	U
2,4-Dinitrotoluene	410	U	440	U	3900	U
2,6-Dinitrotoluene	410	U	440	U	3900	U
2-Butanone (MEK)	200000	U	36000	U	15000	U
2-Chloronaphthalene	410	U	440	U	3900	U
2-Chlorophenol	410	U	440	U	3900	U
2-Chlorotoluene	NA		NA		NA	
2-Hexanone	200000	U	36000	U	15000	U
2-Methyl-4,6-dinitrophenol	NA		NA		NA	
2-Methylnaphthalene	410	U	440	U	3900	U
2-Methylphenol (o-cresol)	410	U	440	U	3900	U
2-Nitroaniline	2100	U	2200	U	20000	U
2-Nitrophenol	410	U	440	U	3900	U
3&4-Methylphenol (m&p-cresol)	410	U	440	U	3900	U
3,3'-Dichlorobenzidine	810	U	880	U	7800	U
3-Nitroaniline	2100	U	2200	U	20000	U
4,6-Dinitro-2-methylphenol	2100	U	2200	U	20000	U
4-Bromophenyl phenyl ether	410	U	440	U	3900	U
4-Chloro-3-methylphenol	410	U	440	U	3900	U
4-Chloroaniline	1000		880	U	7800	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B58-3-4'		BBU-B58-7-8'		NTF-B77-0-2'	
4-Chlorophenylphenyl ether	410	U	440	U	3900	U
4-Chlorotoluene	NA		NA		NA	
4-Methyl-2-pentanone (MIBK)	200000	U	36000	U	15000	U
4-Nitroaniline	2100	U	2200	U	20000	U
4-Nitrophenol	2100	U	2200	U	20000	U
Acenaphthene	410	U	440	U	3900	U
Acenaphthylene	410	U	440	U	3900	U
Acetone	410000	U	72000	U	30000	U
Anthracene	410	U	440	U	3900	U
Aroclor-1016	NA		NA		39	U
Aroclor-1221	NA		NA		80	U
Aroclor-1232	NA		NA		39	U
Aroclor-1242	NA		NA		39	U
Aroclor-1248	NA		NA		120	
Aroclor-1254	NA		NA		460	
Aroclor-1260	NA		NA		500	
Benzene	1200000		640000		3000	U
Benzidine	NA		NA		NA	
Benzo(a)anthracene	410	U	440	U	3900	U
Benzo(a)pyrene	410	U	440	U	3900	U
Benzo(b)fluoranthene	410	U	440	U	3900	U
Benzo(g,h,i)perylene	410	U	440	U	3900	U
Benzo(k)fluoranthene	410	U	440	U	3900	U
Benzoic acid	NA		NA		NA	
Benzyl alcohol	NA		NA		NA	
bis(2-Chloroethoxy)methane	410	U	440	U	3900	U
bis(2-Chloroethyl)ether	410	U	440	U	3900	U
bis(2-Chloroisopropyl)ether	NA		NA		NA	
bis(2-Ethylhexyl)phthalate	410	U	440	U	3900	U
Bromobenzene	NA		NA		NA	
Bromochloromethane	NA		NA		NA	
Bromodichloromethane	41000	U	7200	U	3000	U
Bromoform	41000	U	7200	U	3000	U
Bromomethane	81000	U	14000	U	6000	U
Butylbenzylphthalate	410	U	440	U	3900	U
Carbazole	410	U	440	U	3900	U
Carbon disulfide	41000	U	7200	U	3000	U
Carbon tetrachloride	41000	U	7200	U	3000	U
Chlorobenzene	41000	U	7200	U	160000	E
Chlorodibromomethane	NA		NA		NA	
Chloroethane	81000	U	14000	U	6000	U
Chloroform	41000	U	7200	U	3000	U
Chloromethane	81000	U	14000	U	6000	U
Chrysene	410	U	440	U	3900	U
cis-1,2-Dichloroethene	41000	U	7200	U	3000	U
cis-1,3-Dichloropropene	41000	U	7200	U	3000	U
Dibenzo(a,h)anthracene	410	U	440	U	3900	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	BBU-B58-3-4'		BBU-B58-7-8'		NTF-B77-0-2'	
Dibenzofuran	410	U	440	U	3900	U
Dibromomethane	NA		NA		NA	
Dichlorodifluoromethane	NA		NA		NA	
Dibromochloromethane	41000	U	7200	U	3000	U
Diethylphthalate	410	U	440	U	3900	U
Dimethylphthalate	410	U	440	U	3900	U
Di-n-butylphthalate	410	U	440	U	3900	U
Di-n-octylphthalate	410	U	440	U	3900	U
Ethylbenzene	41000	U	7200	U	3000	U
Fluoranthene	410	U	440	U	3900	U
Fluorene	410	U	440	U	3900	U
Hexachlorobenzene	720		440	U	3900	U
Hexachlorobutadiene	410	U	440	U	3900	U
Hexachlorocyclopentadiene	410	U	440	U	3900	U
Hexachloroethane	410	U	440	U	3900	U
Indeno(1,2,3-cd)pyrene	410	U	440	U	3900	U
Isophorone	410	U	440	U	3900	U
Isopropylbenzene	NA		NA		NA	
m&p-Xylene	NA		NA		NA	
Methylene chloride (Dichloromethane)	41000	U	7200	U	3000	U
Naphthalene	410	U	440	U	3900	U
Naphthalene	NA		NA		NA	
n-Butylbenzene	NA		NA		NA	
Nitrobenzene	410	U	440	U	3900	U
N-Nitrosodimethylamine	NA		NA		NA	
n-Nitrosodi-n-propylamine	410	U	440	U	3900	U
N-Nitrosodiphenylamine/Diphenylamine	410	U	440	U	3900	U
n-Propylbenzene	NA		NA		NA	
o-Xylene	NA		NA		NA	
Pentachlorophenol	19000		2200	U	20000	U
Phenanthrene	410	U	440	U	3900	U
Phenol	1700		460		3900	U
p-Isopropyltoluene	NA		NA		NA	
Pyrene	410	U	440	U	3900	U
sec-Butylbenzene	NA		NA		NA	
Styrene	41000	U	7200	U	3000	U
tert-Butylbenzene	41000	U	7200	U	NA	
Tetrachloroethene	NA		NA		3000	U
Toluene	41000	U	7200	U	3000	U
trans-1,2-Dichloroethene	41000	U	7200	U	NA	
trans-1,3-Dichloropropene	NA		NA		3000	U
Trichloroethene	41000	U	7200	U	3000	U
Trichlorofluoromethane	NA		NA		NA	
Vinyl chloride	81000	U	14000	U	6000	U
Xylenes, Total	81000	U	14000	U	6000	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	NTF-B73-6-8'		NTF-B74-2-4'	
1,1,1,2-Tetrachloroethane	NA		NA	
1,1,1-Trichloroethane	380	U	7600	U
1,1,2,2-Tetrachloroethane	380	U	7600	U
1,1,2-Trichloroethane	380	U	7600	U
1,1-Dichloroethane	380	U	7600	U
1,1-Dichloroethene	380	U	7600	U
1,1-Dichloropropylene	NA		NA	
1,2,3-Trichlorobenzene	NA		NA	
1,2,3-Trichloropropane	NA		NA	
1,2,4-Trichlorobenzene	450	U	900	U
1,2,4-Trichlorobenzene	NA		NA	
1,2,4-Trimethylbenzene	NA		NA	
1,2-Dibromo-3-chloropropane	NA		NA	
1,2-Dibromoethane (EDB)	NA		NA	
1,2-Dichlorobenzene	450	U	570	J
1,2-Dichloroethane	380	U	7600	U
1,2-Dichloropropane	380	U	7600	U
1,3,5-Trimethylbenzene	NA		NA	
1,3-Dichlorobenzene	450	U	900	U
1,3-Dichloropropane	NA		NA	
1,4-Dichlorobenzene	450	U	2400	
2,2-Dichloropropane	NA		NA	
2,2'-Oxybis(1-Chloropropane)	450	U	900	U
2,4,5-Trichlorophenol	450	U	900	U
2,4,6-Trichlorophenol	450	U	900	U
2,4-Dichlorophenol	450	U	900	U
2,4-Dimethylphenol	450	U	900	U
2,4-Dinitrophenol	2300	U	4600	U
2,4-Dinitrotoluene	450	U	900	U
2,6-Dinitrotoluene	450	U	900	U
2-Butanone (MEK)	1900	U	38000	U
2-Chloronaphthalene	450	U	900	U
2-Chlorophenol	450	U	3600	
2-Chlorotoluene	NA		NA	
2-Hexanone	1900	U	38000	U
2-Methyl-4,6-dinitrophenol	NA		NA	
2-Methylnaphthalene	450	U	890	J
2-Methylphenol (o-cresol)	450	U	900	U
2-Nitroaniline	2300	U	4600	U
2-Nitrophenol	450	U	900	U
3&4-Methylphenol (m&p-cresol)	450	U	900	U
3,3'-Dichlorobenzidine	910	U	1800	U
3-Nitroaniline	2300	U	4600	U
4,6-Dinitro-2-methylphenol	2300	U	4600	U
4-Bromophenyl phenyl ether	450	U	900	U
4-Chloro-3-methylphenol	450	U	900	U
4-Chloroaniline	910	U	1800	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	NTF-B73-6-8'		NTF-B74-2-4'	
4-Chlorophenylphenyl ether	450	U	900	U
4-Chlorotoluene	NA		NA	
4-Methyl-2-pentanone (MIBK)	1900	U	38000	U
4-Nitroaniline	2300	U	4600	U
4-Nitrophenol	2300	U	4600	U
Acenaphthene	450	U	900	U
Acenaphthylene	450	U	900	U
Acetone	3800	U	76000	U
Anthracene	450	U	900	U
Aroclor-1016	46	U	45	U
Aroclor-1221	93	U	92	U
Aroclor-1232	46	U	45	U
Aroclor-1242	46	U	45	U
Aroclor-1248	46	U	45	U
Aroclor-1254	46	U	45	U
Aroclor-1260	46	U	45	U
Benzene	380	U	7600	U
Benzidine	NA		NA	
Benzo(a)anthracene	450	U	900	U
Benzo(a)pyrene	450	U	900	U
Benzo(b)fluoranthene	450	U	900	U
Benzo(g,h,i)perylene	450	U	900	U
Benzo(k)fluoranthene	450	U	900	U
Benzoic acid	NA		NA	
Benzyl alcohol	NA		NA	
bis(2-Chloroethoxy)methane	450	U	900	U
bis(2-Chloroethyl)ether	450	U	900	U
bis(2-Chloroisopropyl)ether	NA		NA	
bis(2-Ethylhexyl)phthalate	450	U	900	U
Bromobenzene	NA		NA	
Bromochloromethane	NA		NA	
Bromodichloromethane	380	U	7600	U
Bromoform	380	U	7600	U
Bromomethane	750	U	15000	U
Butylbenzylphthalate	450	U	900	U
Carbazole	450	U	900	U
Carbon disulfide	380	U	7600	U
Carbon tetrachloride	380	U	7600	U
Chlorobenzene	20000		2300000	E
Chlorodibromomethane	NA		NA	
Chloroethane	750	U	15000	U
Chloroform	380	U	7600	U
Chloromethane	750	U	15000	U
Chrysene	450	U	900	U
cis-1,2-Dichloroethene	380	U	7600	U
cis-1,3-Dichloropropene	380	U	7600	U
Dibenzo(a,h)anthracene	450	U	900	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	NTF-B73-6-8'		NTF-B74-2-4'	
Dibenzofuran	450	U	900	U
Dibromomethane	NA		NA	
Dichlorodifluoromethane	NA		NA	
Dibromochloromethane	380	U	7600	U
Diethylphthalate	450	U	900	U
Dimethylphthalate	450	U	900	U
Di-n-butylphthalate	450	U	900	U
Di-n-octylphthalate	450	U	900	U
Ethylbenzene	380		7600	U
Fluoranthene	450	U	900	U
Fluorene	450	U	900	U
Hexachlorobenzene	450	U	900	U
Hexachlorobutadiene	450	U	900	U
Hexachlorocyclopentadiene	450	U	900	U
Hexachloroethane	450	U	900	U
Indeno(1,2,3-cd)pyrene	450	U	900	U
Isophorone	450	U	900	U
Isopropylbenzene	NA		NA	
m&p-Xylene	NA		NA	
Methylene chloride (Dichloromethane)	350		7600	U
Naphthalene	450	U	2300	
Naphthalene	NA		NA	
n-Butylbenzene	NA		NA	
Nitrobenzene	450	U	900	U
N-Nitrosodimethylamine	NA		NA	
n-Nitrosodi-n-propylamine	450	U	900	U
N-Nitrosodiphenylamine/Diphenylamine	450	U	900	U
n-Propylbenzene	NA		NA	
o-Xylene	NA		NA	
Pentachlorophenol	2300	U	4600	U
Phenanthrene	450	U	720	J
Phenol	450	U	900	U
p-Isopropyltoluene	NA		NA	
Pyrene	450	U	900	U
sec-Butylbenzene	NA		NA	
Styrene	380	U	7600	U
tert-Butylbenzene	NA		NA	
Tetrachloroethene	380	U	7600	U
Toluene	380	U	34000	
trans-1,2-Dichloroethene	NA		NA	
trans-1,3-Dichloropropene	380	U	7600	U
Trichloroethene	380	U	7600	U
Trichlorofluoromethane	NA		NA	
Vinyl chloride	750	U	15000	U
Xylenes, Total	980		15000	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	NTF-B75-0-2'		NTF-B76-18-20'	
1,1,1,2-Tetrachloroethane	NA		NA	
1,1,1-Trichloroethane	2800	U	2900	U
1,1,2,2-Tetrachloroethane	2800	U	2900	U
1,1,2-Trichloroethane	2800	U	2900	U
1,1-Dichloroethane	2800	U	2900	U
1,1-Dichloroethene	2800	U	2900	U
1,1-Dichloropropylene	NA		NA	
1,2,3-Trichlorobenzene	NA		NA	
1,2,3-Trichloropropane	NA		NA	
1,2,4-Trichlorobenzene	370	U	3900	U
1,2,4-Trichlorobenzene	NA		NA	
1,2,4-Trimethylbenzene	NA		NA	
1,2-Dibromo-3-chloropropane	NA		NA	
1,2-Dibromoethane (EDB)	NA		NA	
1,2-Dichlorobenzene	370	U	3900	U
1,2-Dichloroethane	2800	U	2900	U
1,2-Dichloropropane	2800	U	2900	U
1,3,5-Trimethylbenzene	NA		NA	
1,3-Dichlorobenzene	370	U	3900	U
1,3-Dichloropropane	NA		NA	
1,4-Dichlorobenzene	370	U	3900	U
2,2-Dichloropropane	NA		NA	
2,2'-Oxybis(1-Chloropropane)	370	U	3900	U
2,4,5-Trichlorophenol	370	U	3900	U
2,4,6-Trichlorophenol	370	U	3900	U
2,4-Dichlorophenol	370	U	3900	U
2,4-Dimethylphenol	370	U	3900	U
2,4-Dinitrophenol	1900	U	20000	U
2,4-Dinitrotoluene	370	U	3900	U
2,6-Dinitrotoluene	370	U	3900	U
2-Butanone (MEK)	14000	U	15000	U
2-Chloronaphthalene	370	U	3900	U
2-Chlorophenol	370	U	3900	U
2-Chlorotoluene	NA		NA	
2-Hexanone	14000	U	15000	U
2-Methyl-4,6-dinitrophenol	NA		NA	
2-Methylnaphthalene	370	U	10000	
2-Methylphenol (o-cresol)	370	U	3900	U
2-Nitroaniline	1900	U	20000	U
2-Nitrophenol	370	U	3900	U
3&4-Methylphenol (m&p-cresol)	370	U	3900	U
3,3'-Dichlorobenzidine	740	U	7800	U
3-Nitroaniline	1900	U	20000	U
4,6-Dinitro-2-methylphenol	1900	U	20000	U
4-Bromophenyl phenyl ether	370	U	3900	U
4-Chloro-3-methylphenol	370	U	3900	U
4-Chloroaniline	740	U	7800	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	NTF-B75-0-2'		NTF-B76-18-20'	
4-Chlorophenylphenyl ether	370	U	3900	U
4-Chlorotoluene	NA		NA	
4-Methyl-2-pentanone (MIBK)	14000	U	15000	U
4-Nitroaniline	1900	U	20000	U
4-Nitrophenol	1900	U	20000	U
Acenaphthene	370	U	3900	U
Acenaphthylene	370	U	3900	U
Acetone	28000	U	29000	U
Anthracene	370	U	3900	U
Aroclor-1016	37	U	39	U
Aroclor-1221	75	U	79	U
Aroclor-1232	37	U	39	U
Aroclor-1242	37	U	39	U
Aroclor-1248	37	U	39	U
Aroclor-1254	37	U	39	
Aroclor-1260	37	U	39	U
Benzene	2800	U	210000	
Benzidine	NA		NA	
Benzo(a)anthracene	370	U	3900	U
Benzo(a)pyrene	370	U	3900	U
Benzo(b)fluoranthene	370	U	3900	U
Benzo(g,h,i)perylene	370	U	3900	U
Benzo(k)fluoranthene	370	U	3900	U
Benzoic acid	NA		NA	
Benzyl alcohol	NA		NA	
bis(2-Chloroethoxy)methane	370	U	3900	U
bis(2-Chloroethyl)ether	370	U	3900	U
bis(2-Chloroisopropyl)ether	NA		NA	
bis(2-Ethylhexyl)phthalate	370	U	3900	U
Bromobenzene	NA		NA	
Bromochloromethane	NA		NA	
Bromodichloromethane	2800	U	2900	U
Bromoform	2800	U	2900	U
Bromomethane	5600	U	5900	U
Butylbenzylphthalate	370	U	3900	U
Carbazole	370	U	3900	U
Carbon disulfide	2800	U	2900	U
Carbon tetrachloride	2800	U	2900	U
Chlorobenzene	440000		2900	U
Chlorodibromomethane	NA		NA	
Chloroethane	5600	U	5900	U
Chloroform	2800	U	2900	U
Chloromethane	5600	U	5900	U
Chrysene	370	U	3900	U
cis-1,2-Dichloroethene	2800	U	2900	U
cis-1,3-Dichloropropene	2800	U	2900	U
Dibenzo(a,h)anthracene	370	U	3900	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	NTF-B75-0-2'		NTF-B76-18-20'	
Dibenzofuran	370	U	3900	U
Dibromomethane	NA		NA	
Dichlorodifluoromethane	NA		NA	
Dibromochloromethane	2800	U	2900	U
Diethylphthalate	370	U	3900	U
Dimethylphthalate	370	U	3900	U
Di-n-butylphthalate	370	U	3900	U
Di-n-octylphthalate	370	U	3900	U
Ethylbenzene	2800	U	2900	U
Fluoranthene	370	U	3900	U
Fluorene	370	U	3900	U
Hexachlorobenzene	370	U	3900	U
Hexachlorobutadiene	370	U	3900	U
Hexachlorocyclopentadiene	370	U	3900	U
Hexachloroethane	370	U	3900	U
Indeno(1,2,3-cd)pyrene	370	U	3900	U
Isophorone	370	U	3900	U
Isopropylbenzene	NA		NA	
m&p-Xylene	NA		NA	
Methylene chloride (Dichloromethane)	2800	U	2900	U
Naphthalene	370	U	6900	
Naphthalene	NA		NA	
n-Butylbenzene	NA		NA	
Nitrobenzene	370	U	3900	U
N-Nitrosodimethylamine	NA		NA	
n-Nitrosodi-n-propylamine	370	U	3900	U
N-Nitrosodiphenylamine/Diphenylamine	370	U	3900	U
n-Propylbenzene	NA		NA	
o-Xylene	NA		NA	
Pentachlorophenol	1900	U	20000	U
Phenanthrene	370	U	3900	U
Phenol	370	U	3900	U
p-Isopropyltoluene	NA		NA	
Pyrene	370	U	3900	U
sec-Butylbenzene	NA		NA	
Styrene	2800	U	2900	U
tert-Butylbenzene	NA		NA	
Tetrachloroethene	2800	U	2900	U
Toluene	2800	U	2900	U
trans-1,2-Dichloroethene	NA		NA	
trans-1,3-Dichloropropene	2800	U	2900	U
Trichloroethene	2800	U	2900	U
Trichlorofluoromethane	NA		NA	
Vinyl chloride	5600	U	5900	U
Xylenes, Total	5600	U	5900	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SCT-B67-10-12'		SCT-B68-4-6'		SCT-B70-6-8'	
1,1,1,2-Tetrachloroethane	NA		NA		NA	
1,1,1-Trichloroethane	7000	U	6000	U	5600	U
1,1,2,2-Tetrachloroethane	7000	U	6000	U	5600	U
1,1,2-Trichloroethane	7000	U	6000	U	5600	U
1,1-Dichloroethane	7000	U	6000	U	5600	U
1,1-Dichloroethene	7000	U	6000	U	5600	U
1,1-Dichloropropylene	NA		NA		NA	
1,2,3-Trichlorobenzene	NA		NA		NA	
1,2,3-Trichloropropane	NA		NA		NA	
1,2,4-Trichlorobenzene	20000		2000		2000	
1,2,4-Trichlorobenzene	NA		NA		NA	
1,2,4-Trimethylbenzene	NA		NA		NA	
1,2-Dibromo-3-chloropropane	NA		NA		NA	
1,2-Dibromoethane (EDB)	83000		4700		15000	
1,2-Dichlorobenzene	7000	U	6000	U	5600	U
1,2-Dichloroethane	7000	U	6000	U	5600	U
1,2-Dichloropropane	NA		NA		NA	
1,3,5-Trimethylbenzene	6100		250		750	
1,3-Dichlorobenzene	NA		NA		NA	
1,3-Dichloropropane	84000		4700		20000	
1,4-Dichlorobenzene	NA		NA		NA	
2,2-Dichloropropane	950	U	410	U	400	U
2,2'-Oxybis(1-Chloropropane)	950	U	410	U	400	U
2,4,5-Trichlorophenol	950	U	410	U	400	U
2,4,6-Trichlorophenol	950	U	410	U	220	
2,4-Dichlorophenol	950	U	410	U	400	U
2,4-Dimethylphenol	4900	U	2100	U	2100	U
2,4-Dinitrophenol	950	U	410	U	400	U
2,4-Dinitrotoluene	950	U	410	U	400	U
2,6-Dinitrotoluene	35000	U	30000	U	28000	U
2-Butanone (MEK)	4800	U	410	U	400	U
2-Chloronaphthalene	950	U	410	U	400	U
2-Chlorophenol	760		30000	U	28000	U
2-Chlorotoluene	35000	U	410	U	400	U
2-Hexanone	NA		NA		NA	
2-Methyl-4,6-dinitrophenol	950	U	NA		NA	
2-Methylnaphthalene	950	U	410	U	400	U
2-Methylphenol (o-cresol)	4900	U	2100	U	NA	
2-Nitroaniline	950	U	410	U	400	U
2-Nitrophenol	950	U	410	U	400	U
3&4-Methylphenol (m&p-cresol)	1900	U	810	U	800	U
3,3'-Dichlorobenzidine	4900	U	2100	U	2100	U
3-Nitroaniline	4900	U	2100	U	2100	U
4,6-Dinitro-2-methylphenol	950	U	410	U	400	U
4-Bromophenyl phenyl ether	950	U	410	U	400	U
4-Chloro-3-methylphenol	1900	U	810	U	800	U
4-Chloroaniline	950	U	410	U	400	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SCT-B67-10-12'		SCT-B68-4-6'		SCT-B70-6-8'	
4-Chlorophenylphenyl ether	NA		NA		NA	
4-Chlorotoluene	35000	U	30000	U	28000	U
4-Methyl-2-pentanone (MIBK)	4900	U	2100	U	2100	U
4-Nitroaniline	4900	U	2100	U	2100	U
4-Nitrophenol	950	U	410	U	400	U
Acenaphthene	950	U	410	U	400	U
Acenaphthylene	70000	U	60000	U	56000	U
Acetone	950	U	410	U	400	U
Anthracene	NA		NA		NA	
Aroclor-1016	NA		NA		NA	
Aroclor-1221	NA		NA		NA	
Aroclor-1232	NA		NA		NA	
Aroclor-1242	NA		NA		NA	
Aroclor-1248	NA		NA		NA	
Aroclor-1254	NA		NA		NA	
Aroclor-1260	170000		6000	U	40000	
Benzene	NA		NA		NA	
Benzidine	950	U	410	U	400	U
Benzo(a)anthracene	950	U	410	U	400	U
Benzo(a)pyrene	950	U	410	U	400	U
Benzo(b)fluoranthene	950	U	410	U	400	U
Benzo(g,h,i)perylene	950	U	410	U	400	U
Benzo(k)fluoranthene	NA		NA		NA	
Benzoic acid	NA		NA		NA	
Benzyl alcohol	950	U	410	U	400	U
bis(2-Chloroethoxy)methane	950	U	410	U	400	U
bis(2-Chloroethyl)ether	NA		NA		NA	
bis(2-Chloroisopropyl)ether	950	U	410	U	400	U
bis(2-Ethylhexyl)phthalate	NA		NA		NA	
Bromobenzene	NA		NA		NA	
Bromochloromethane	7000	U	6000	U	5600	U
Bromodichloromethane	7000	U	6000	U	5600	U
Bromoform	14000	U	12000	U	11000	U
Bromomethane	950	U	410	U	400	U
Butylbenzylphthalate	950	U	410	U	400	U
Carbazole	7000	U	6000	U	5600	U
Carbon disulfide	7000	U	6000	U	5600	U
Carbon tetrachloride	2500000		600000		470000	
Chlorobenzene	NA		NA		NA	
Chlorodibromomethane	14000	U	12000	U	11000	U
Chloroethane	7000	U	6000	U	5600	U
Chloroform	14000	U	12000	U	11000	U
Chloromethane	950	U	410	U	400	U
Chrysene	7000	U	6000	U	5600	U
cis-1,2-Dichloroethene	7000	U	6000	U	5600	U
cis-1,3-Dichloropropene	950	U	410	U	400	U
Dibenzo(a,h)anthracene	950	U	410	U	400	U

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SCT-B67-10-12'		SCT-B68-4-6'		SCT-B70-6-8'	
Dibenzofuran	NA		NA		NA	
Dibromomethane	NA		NA		NA	
Dichlorodifluoromethane	7000	U	6000	U	5600	U
Dibromochloromethane	950	U	410	U	400	U
Diethylphthalate	950	U	410	U	400	U
Dimethylphthalate	950	U	410	U	400	U
Di-n-butylphthalate	950	U	410	U	400	U
Di-n-octylphthalate	7000	U	6000	U	5600	U
Ethylbenzene	950	U	410	U	400	U
Fluoranthene	950	U	410	U	400	U
Fluorene	950	U	410	U	400	U
Hexachlorobenzene	950	U	410	U	400	U
Hexachlorobutadiene	950	U	410	U	400	U
Hexachlorocyclopentadiene	950	U	410	U	400	U
Hexachloroethane	950	U	410	U	400	U
Indeno(1,2,3-cd)pyrene	950	U	410	U	400	U
Isophorone	NA		NA		NA	
Isopropylbenzene	NA		NA		NA	
m&p-Xylene	7000	U	6000	U	5600	U
Methylene chloride (Dichloromethane)	500		410	U	400	U
Naphthalene	NA		NA		NA	
Naphthalene	950	U	410	U	400	U
n-Butylbenzene	NA		NA		NA	
Nitrobenzene	950	U	410	U	400	U
N-Nitrosodimethylamine	950	U	410	U	400	U
n-Nitrosodi-n-propylamine	NA		NA		NA	
N-Nitrosodiphenylamine/Diphenylamine	NA		NA		NA	
n-Propylbenzene	4900	U	2100	U	2100	U
o-Xylene	950	U	410	U	400	U
Pentachlorophenol	950	U	410	U	400	U
Phenanthrene	NA		NA		NA	
Phenol	950	U	410	U	400	U
p-Isopropyltoluene	NA		NA		NA	
Pyrene	7000	U	6000	U	5600	U
sec-Butylbenzene	NA		NA		NA	
Styrene	7000	U	6000	U	5600	U
tert-Butylbenzene	7000	U	6000	U	5600	U
Tetrachloroethene	NA		NA		NA	
Toluene	7000	U	6000	U	5600	U
trans-1,2-Dichloroethene	7000	U	6000	U	5600	U
trans-1,3-Dichloropropene	NA		NA		NA	
Trichloroethene	14000	U	12000	U	11000	U
Trichlorofluoromethane	14000	U	12000	U	11000	U
Vinyl chloride	NA		NA		NA	
Xylenes, Total	NA		NA		NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SCT-B71-6-8'		SOT-B64-12-14'	
1,1,1,2-Tetrachloroethane	NA		NA	
1,1,1-Trichloroethane	5100	U	4000	U
1,1,2,2-Tetrachloroethane	5100	U	4000	U
1,1,2-Trichloroethane	5100	U	4000	U
1,1-Dichloroethane	5100	U	4000	U
1,1-Dichloroethene	5100	U	4000	U
1,1-Dichloropropylene	NA		NA	
1,2,3-Trichlorobenzene	NA		NA	
1,2,3-Trichloropropane	NA		NA	
1,2,4-Trichlorobenzene	1000		NA	
1,2,4-Trichlorobenzene	NA		NA	
1,2,4-Trimethylbenzene	NA		NA	
1,2-Dibromo-3-chloropropane	NA		NA	
1,2-Dibromoethane (EDB)	14000		NA	
1,2-Dichlorobenzene	5100	U	4000	U
1,2-Dichloroethane	5100	U	4000	U
1,2-Dichloropropane	NA		NA	
1,3,5-Trimethylbenzene	220		NA	
1,3-Dichlorobenzene	NA		NA	
1,3-Dichloropropane	16000		NA	
1,4-Dichlorobenzene	NA		NA	
2,2-Dichloropropane	390	U	NA	
2,2'-Oxybis(1-Chloropropane)	390	U	NA	
2,4,5-Trichlorophenol	390	U	NA	
2,4,6-Trichlorophenol	390	U	NA	
2,4-Dichlorophenol	390	U	NA	
2,4-Dimethylphenol	2000	U	NA	
2,4-Dinitrophenol	390	U	NA	
2,4-Dinitrotoluene	390	U	NA	
2,6-Dinitrotoluene	25000	U	20000	U
2-Butanone (MEK)	390	U	NA	
2-Chloronaphthalene	320		NA	
2-Chlorophenol	25000	U	20000	U
2-Chlorotoluene	390	U	NA	
2-Hexanone	NA		NA	
2-Methyl-4,6-dinitrophenol	NA		NA	
2-Methylnaphthalene	390	U	NA	
2-Methylphenol (o-cresol)	NA		NA	
2-Nitroaniline	390	U	NA	
2-Nitrophenol	390	U	NA	
3&4-Methylphenol (m&p-cresol)	770	U	NA	
3,3'-Dichlorobenzidine	2000	U	NA	
3-Nitroaniline	2000	U	NA	
4,6-Dinitro-2-methylphenol	390	U	NA	
4-Bromophenyl phenyl ether	390	U	NA	
4-Chloro-3-methylphenol	770	U	NA	
4-Chloroaniline	390	U	NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SCT-B71-6-8'		SOT-B64-12-14'	
4-Chlorophenylphenyl ether	NA		NA	
4-Chlorotoluene	25000	U	20000	U
4-Methyl-2-pentanone (MIBK)	2000	U	NA	
4-Nitroaniline	2000	U	NA	
4-Nitrophenol	390	U	NA	
Acenaphthene	390	U	NA	
Acenaphthylene	51000	U	40000	U
Acetone	390	U	NA	
Anthracene	NA		NA	
Aroclor-1016	NA		NA	
Aroclor-1221	NA		NA	
Aroclor-1232	NA		NA	
Aroclor-1242	NA		NA	
Aroclor-1248	NA		NA	
Aroclor-1254	NA		NA	
Aroclor-1260	230000		4000	U
Benzene	NA		NA	
Benzidine	390	U	NA	
Benzo(a)anthracene	390	U	NA	
Benzo(a)pyrene	390	U	NA	
Benzo(b)fluoranthene	390	U	NA	
Benzo(g,h,i)perylene	390	U	NA	
Benzo(k)fluoranthene	NA		NA	
Benzoic acid	NA		NA	
Benzyl alcohol	390	U	NA	
bis(2-Chloroethoxy)methane	390	U	NA	
bis(2-Chloroethyl)ether	NA		NA	
bis(2-Chloroisopropyl)ether	390	U	NA	
bis(2-Ethylhexyl)phthalate	NA		NA	
Bromobenzene	NA		NA	
Bromochloromethane	5100	U	4000	U
Bromodichloromethane	5100	U	4000	U
Bromoform	10000	U	8000	U
Bromomethane	390	U	NA	
Butylbenzylphthalate	390	U	NA	
Carbazole	5100	U	4000	U
Carbon disulfide	5100	U	4000	U
Carbon tetrachloride	700000		4000	U
Chlorobenzene	NA		NA	
Chlorodibromomethane	10000	U	8000	U
Chloroethane	5100	U	4000	U
Chloroform	10000	U	8000	U
Chloromethane	390	U	NA	
Chrysene	5100	U	4000	U
cis-1,2-Dichloroethene	5100	U	4000	U
cis-1,3-Dichloropropene	390	U	NA	
Dibenzo(a,h)anthracene	390	U	NA	

NA= Not Analyzed.

Table 4
Site Soil Data Summary

	SCT-B71-6-8'		SOT-B64-12-14'	
Dibenzofuran	NA		NA	
Dibromomethane	NA		NA	
Dichlorodifluoromethane	5100	U	4000	U
Dibromochloromethane	390	U	NA	
Diethylphthalate	390	U	NA	
Dimethylphthalate	390	U	NA	
Di-n-butylphthalate	390	U	NA	
Di-n-octylphthalate	5100	U	42000	
Ethylbenzene	390	U	NA	
Fluoranthene	390	U	NA	
Fluorene	390	U	NA	
Hexachlorobenzene	390	U	NA	
Hexachlorobutadiene	390	U	NA	
Hexachlorocyclopentadiene	390	U	NA	
Hexachloroethane	390	U	NA	
Indeno(1,2,3-cd)pyrene	390	U	NA	
Isophorone	NA		NA	
Isopropylbenzene	NA		NA	
m&p-Xylene	5100	U	4000	U
Methylene chloride (Dichloromethane)	290		NA	
Naphthalene	NA		NA	
Naphthalene	390	U	NA	
n-Butylbenzene	NA		NA	
Nitrobenzene	390	U	NA	
N-Nitrosodimethylamine	390	U	NA	
n-Nitrosodi-n-propylamine	NA		NA	
N-Nitrosodiphenylamine/Diphenylamine	NA		NA	
n-Propylbenzene	2000	U	NA	
o-Xylene	390	U	NA	
Pentachlorophenol	350		NA	
Phenanthrene	NA		NA	
Phenol	390	U	NA	
p-Isopropyltoluene	NA		NA	
Pyrene	5100	U	4000	U
sec-Butylbenzene	NA		NA	
Styrene	5100	U	4000	U
tert-Butylbenzene	5100	U	16000	
Tetrachloroethene	NA		NA	
Toluene	5100	U	4000	U
trans-1,2-Dichloroethene	5100	U	4000	U
trans-1,3-Dichloropropene	NA		NA	
Trichloroethene	10000	U	8000	U
Trichlorofluoromethane	10000	U	420000	
Vinyl chloride	NA		NA	
Xylenes, Total	NA		NA	

NA= Not Analyzed.