Current Conditions Report

Cedar Chemical Corporation Facility
Helena - West Helena, Arkansas

Prepared for:

ExxonMobil Corporation and Helena Chemical Company

November 2007

Project No. 13636

Geomatrix

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GEOLOGY REGISTRATION STATE OF ARKANSAS

Geomatrix Consultants, Inc., has submitted an application for a temporary permit to practice geology in the state of Arkansas. According to A.C.A. 17-32-302(B)(i-ii), we may practice until the Arkansas Board of Registration has had an opportunity to review and make a decision on our application. If you have any questions regarding this clause or our application, please contact Ms. Connie Raper, Business Controller with the Board of Registration for Professional Geologist in Arkansas. She may be reached by calling 501.683.0150 or by email at connie.raper@arkansas.gov.

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Prepared by:

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LIST OF ACRONYMS

1,2-DCA	1, 2-Dichloroethane
ADEQ	Arkansas Department of Environmental Quality
ADPC&E	Arkansas Department of Pollution Control and Ecology
AGI	Agricultural
AOC	Area of concern
ASL	Above sea level
BGS	Below ground surface
BHAG	Black Hawk Agricultural
BHAI	Black Hawk Irrigation
CAO	Consent Administrative Order
CCR	Current Conditions Report
CEI	Comprehensive Evaluation Inspection
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code Federal Regulations
CMS	Corrective Measure Study
cm/s	Centimeters per Second
CWA	Clean Water Act
EI	Environmental Indicator
DPT	Direct Push Technique
DAF	Dilution Attentuation Factor
FI	Facility Investigation
GB	Geoprobe Boring
GE&H	Grubbs, Garner and Hoskyn, Inc.
GMP	Gallons per minute
HA	Hand Auger
HHRA	Human Health Risk Assessment
MBC	Methyl 2-benzamide Carbonate
MES	Methyl Ethyl Sulfide
Mg/kg	Milligram per Kilogram
MSSL	Medium Specific Screening Level
MW	Monitoring Well
NIOSH	National Institute of Occupational Safety and Health
NOV	Notice of Violation
NPDES	National Priority Discharge Elimination System
PID	Photo Ionization Detector
PR/VSI	Preliminary Review / Visual Site Inspection
QA	Quality Assurance
RAGs	Risk Assessment Guidance
RATFA	Arkansas Remedial Action Trust Fund Act
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation Recovery Information System
REL	Recommended Exposure Limit
RFA	RCRA Facility Assessment
SB	Soil Boring
SED	Sediment
SPLP	Synthetic Precipitation Leaching Procedure
SVOC	Semivolatile Organic Constituents
SWMU	Solid Waste Management Unit

LIST OF ACRONYMS
(Continued)

TCDD	Tetrachlorodibenzo(p)dioxin
USEPA	United States Environmental Protection Agency
VOCs	Volatile Organic Constituents

SECTION 1

Introduction

CURRENT CONDITIONS REPORT
Cedar Chemical Corporation
Helena-West Helena, Arkansas

1. INTRODUCTION

On March 22, 2007, the Arkansas Department of Environmental Quality (ADEQ) issued a Consent Administrative Order (CAO) to Ansul Incorporated, formerly known as Wormald US, Inc., Helena Chemical Company, and ExxonMobil Chemical Co., a division of ExxonMobil Corporation, pursuant to the authority of the Arkansas Remedial Action Trust Fund Act ("RATFA"). The subject of the CAO is the Cedar Chemical Corporation ("the Facility") located in Helena-West Helena, Phillips County, Arkansas. The basic objective of the CAO is to "address environmental concerns at the Facility to ensure protection of human health and the environment."

This Current Conditions Report (CCR) is being submitted on behalf of ExxonMobil Chemical Co., and Helena Chemical Company, which comprise the current membership of the Cedar Chemical Corporation Site Joint Defense Group ("the Group").

Geomatrix Consultants, Inc., (Geomatrix) prepared this report based on a review of previous investigation reports, regulatory correspondence, and the technical literature. Geomatrix has not performed a review of operational records for Cedar Chemical Corporation, ExxonMobil Corporation, Helena Chemical Company, or Ansul Incorporated, and information from these records has not been incorporated into this report.

This report was prepared to compile existing and available information concerning the Facility, its setting, and known impacts to environmental media. More specifically, it provides the following information regarding the Facility:

- A summary of the regulatory history;
- A summary of the historic operations;
- A description of the physical setting;
- A discussion of past environmental investigation and remediation work performed;
- A summary of environmental sampling data collected during past environmental work performed;

- A description of known conditions on and off site; and
- Identification of critical data gaps to be addressed during follow-on work.

This information is intended to provide the ADEQ with a current understanding of site conditions including needs for additional investigation to support an approach to future work, and to help facilitate review of future submittals and project planning.

SECTION 2

Site Description

2. SITE DESCRIPTION

2.1. LOCATION AND SETTING

The Facility is located just to the south of the city of Helena-West Helena, in Phillips County, Arkansas. The Facility consists of approximately 48 acres located within the Helena-West Helena Industrial Park, approximately 1.25 miles southwest of the intersection of U.S. Highway 49 and State Highway 242. A site location map is included as Figure 1. The Facility is bordered by farmland, State Highway 242, the Union-Pacific Railway, and industrial park properties.

The former operational portion of the property is divided into two major areas: (1) the manufacturing area, to the north of Industrial Park Road and (2) the wastewater treatment system area, to the south of Industrial Park Road. Of the 48 acres, approximately 40 acres comprise the former manufacturing area of the Facility, and are fenced. The remaining 8 acres contain the wastewater treatment ponds.

There is also a wooded area west of the wastewater treatment ponds and south of Industrial Park Road. It is not currently known if this parcel is a part of the Cedar Chemical property. Bermed areas on this wooded property reportedly received Facility wastewater at one time, and this area was identified as a potential area of concern (AOC) by Arkansas Department Pollution Control & Ecology (ADPC&E), now known as ADEQ, in a memorandum to the file dated December 12, 1991. In this memo, ADPC&E documented that the area was being used as a "reserve oxidation pond" for diverted wastewater from the plant and acknowledged that the area had been declared as a wetland by the Corps of Engineers. ADPC&E also stated that Cedar Chemical would be required to investigate this area during their investigations.

The surrounding area includes residential development along State Highway 242 to the southwest and Little Rock Road (Phillips County Road 300), located approximately 0.30 miles northeast of the site. During a previous well survey, several domestic wells and irrigation wells were identified within a one-mile radius of the site. All of the domestic wells identified in a door-to-door survey, however, were no longer used (Grubbs, Garner & Hoskyn, Inc, 1988).

2.2. PHYSIOGRAPHY AND TOPOGRAPHY

The Facility is located approximately 3.5 miles west of the Mississippi River, in part of a physiographic province and setting known as the Mississippi Embayment Region of the Gulf

Coastal Plain. The embayment is separable into two general physiographic areas, the lowland of the Mississippi River Valley alluvial plain and the Coastal Plain uplands (Cushing, et al., 1964). The Mississippi River Valley alluvial plain lies along the Mississippi River and covers the eastern third of Arkansas. The Facility lies within the alluvial plain, although it is reportedly not within the 100-year floodplain of the Mississippi River.

The topography of the terrain at the site and surrounding area is relatively flat, with some areas sloping gently toward the southeast. The Facility is located on a gentle drainage divide: to the north and west, regional surface water flow is generally southwest, connecting through a series of ditches, creeks, and bayous to the White River approximately 50 miles to the southwest. To the south and east, regional surface water flow is generally toward the Mississippi River.

Storm water at the Facility has historically been collected in a series of surface ditches, which flow to a storm water collection pond located at the southeast corner of the facility. After approximately the mid 1970s, storm water was pumped from this pond via an underground pipe to the Facility's wastewater treatment ponds south of Industrial Park Road. From there, the water was diverted to Outfall 001where it was discharged under National Pollutant Discharge Elimination System (NPDES) permit AR0036312. Additionally the letter stated that "effluent from the wastewater treatment system was pumped through a 4.5 mile pipeline and discharged directly into the Mississippi River from Outfall 002 under the same NPDES permit."

2.3. CLIMATE

Arkansas has a moderate climate with long spring and fall seasons. The average temperature in July is 81 degrees Fahrenheit. The winters are moderate, and Arkansas receives approximately 44 to 54 inches of rainfall annually (Arkansas Geography from NETSTATE October 9, 2007).

2.4. GEOLOGY AND HYDROGEOLOGY

The following sections discuss the regional and local geology and hydrogeology.

2.4.1. Regional Geology

Within the Mississippi Embayment region, sediments range in age from Jurassic to Quaternary and have a maximum thickness of about 18,000 feet. Units consist of gravel, sand, silt, clay, lignite, marl, chalk, and limestone. The Quaternary alluvium in eastern Arkansas is generally comprised of silt and clay overlying a layer of sand and gravel. The alluvial deposits are approximately 150 feet thick. The alluvium is typically a surface stratum in this region, except where Tertiary formations, such as Crowley's Ridge, outcrop.

The Jackson Group consists of gray, brown, and green silty clay with peat and lignite. In the vicinity of the site, the Jackson Clay is approximately 250 feet thick, and overlies the Sparta Sand. The Sparta Sand is a member of the Tertiary Period Claiborne Group and is comprised of primarily gray, very fine to medium sand with brown and gray sandy clay. This formation is likely to have been a beach deposit of a transgressing sea, and ranges in thickness from 300 to 400 feet (Cushing, et al., 1964).

2.4.2. Local Geology

The general stratigraphic succession beneath the site from surface to depth comprises surface soil and loess within fluvial alluvium, fluvial alluvium aquifer deposits (coarsening downward), the Jackson Clay Group, and Sparta Sand. Two cross sections were developed during the preparation of this report. The cross section areas are shown in Figure 2, and the cross sections are shown in Figures 3 and 4. A 1993 Facility investigation identified five stratigraphic units within the Quaternary alluvium at the site (EnSafe, 1996(a)):

1. Unit 1 extends from ground surface to approximately 32 feet below ground surface (bgs) and consists of silts, clays and sands. Unit 1 includes a perched groundwater-bearing zone referred to as the perched zone or perched aquifer.

2. Unit 2 extends from approximately 32 to 47 feet bgs, and consists of clays and silts. Unit 2 is referred to as the semi-confining unit.

3. Unit 3 extends from 47 to 116 feet bgs, and consists of a coarsening downward sand and gravel sequence with clay stringers. Unit 3 corresponds to the upper portion of the alluvial aquifer.

4. Unit 4 extends from 116 to 131 feet bgs, and consists of clay. Unit 4 is the middle section of the alluvial aquifer. This unit was not observed through lithologic sampling but identified by geophysical logging.

5. Unit 5 extends from 131 to 152 feet bgs, and consists of sand and gravel. Unit 5 is the lower section of the alluvial aquifer, and overlies the regional confining layer (Jackson clay). This unit was not observed through lithologic sampling, but was identified by geophysical logging.

2.4.3. Regional Hydrogeology

The Mississippi River Valley alluvial aquifer underlies the Mississippi River Valley alluvial plain that extends north from the apex of the Mississippi embayment aquifer system. The aquifer consists of 60 to 140 feet of Quaternary sands near the top, and underlies 32,000 square miles in parts of Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee. The alluvial aquifer is in hydraulic connection with many rivers and surface drainages. Hydraulic conductivity of the aquifer is typically about 200 feet per day ($7x10^{-2}$ cm/s), and storage coefficients are typically about 0.0001 for confined conditions and 0.30 for unconfined conditions. Throughout most of the area, the alluvial aquifer is underlain by the Mississippi River Valley confining unit: 10 to 50 feet of silt, clay, and fine-grained sand. It is underlain by less permeable aquifers and the confining units of the Mississippi embayment aquifer system, the Mcnairy-Nacatoch aquifer, and undifferentiated Paleozoic rocks.

Development of the Mississippi River Valley alluvial aquifer started in the early 1900s in central Arkansas, and water use has been primarily for agriculture, particularly the irrigation of rice. Large withdrawals generally began in 1950, with substantial increases in withdrawls between 1973 and 1982.

Pumping from the alluvial aquifer has caused a decrease in outflow to rivers, an increase of inflow from rivers, and an increase of inflow through the overlying Mississippi River Valley confining unit. The long-term excess of pumpage over net inflow has resulted in regional declines in water levels, reduction of water in storage, and decreases in well yields for some parts of the aquifer. In some areas the direction of flow has changed compared to the predevelopment flow system. Two areas north of the Arkansas River and west of Crowley's Ridge have large depressions in the potentiometric surface and pronounced changes in the direction of flow (Ackerman, 1996).

The alluvial deposits provide groundwater for irrigation wells in the areas surrounding Helena-West Helena, Arkansas. The irrigation wells are reportedly capable of producing approximately 1,000 gallons per minute (gpm). Domestic and municipal water supplies, in contrast, are typically obtained from the deeper Sparta Sand Aquifer system, which underlies the Jackson-Claiborne Group (i.e., the confining unit). Regional groundwater flow in the Sparta Sand is generally to the southeast toward the Mississippi River (EnSafe, 1996(a)).

2.4.4. Local Hydrogeology

The site is underlain by unconsolidated Quaternary and Tertiary age sedimentary deposits. Two aquifer regimes exist at the site, a discontinuous perched zone in the silt and clay surficial

sediments (ground surface to 32 feet bgs) and the alluvial aquifer. The alluvial aquifer, as discussed above, consists of an upper unit at approximately 47 to 131 feet bgs, and a lower unit at approximately 131 to 152 feet bgs. The two are separated by a silty clay stratum. Locally, the alluvial aquifer appears to be confined by the upper 40 feet of silt and clays.

The alluvial aquifer overlies the Jackson-Claiborne Group stratum of clay and lignite materials at approximately 150 feet bgs. The Jackson Clay is the basal confining unit for the alluvial aquifer in this region of Arkansas (Environmental and Safety Designs, 1995). All groundwater at the site has been classified by ADEQ as Class 1 under the U.S. Environmental Protection Agency (USEPA) Guidelines for Groundwater Classification under EPG Groundwater Protection Strategy; November, 1986. Class 1 groundwater is defined by the USEPA as "special groundwater usually of high value and irreplaceable sources of drinking water and/or ecologically vital."

SECTION 3

Site Historical Description

3. SITE HISTORICAL BACKGROUND

3.1. SITE OPERATIONS AND REGULATORY HISTORY

Prior to 1970, the land where the site now exists was used for agriculture purposes (EnSafe, 1996). The plant was constructed and initially operated by Helena Chemical. The construction date of the Facility is not documented in available records; however, several reports state that operations began at the site around 1970 with the manufacture of methoxychlor. In 1972, the plant was sold to Mr. Jerry Williams, who in turn sold the plant to Ansul later in 1972. The plant was subsequently used by Ansul for dinoseb production beginning in 1972. In 1973, the plant was repurchased by Mr. Williams. The plant subsequently operated under the name Eagle River Chemical and subsequently under the name Vertac, Inc. In 1986, the plant was sold to Cedar Chemical Corporation (Cedar Chemical) (A.T. Kearney, Inc. 1988).

During its operational life, the Facility manufactured various agricultural chemicals, including insecticides, herbicides, polymers, and organic intermediates. Plant processes were batch operations, with seasonal production fluctuations and the frequent introduction of new products. The plant also produced a variety of chemicals on a toll manufacturing basis for a number of customers. From 1970 to 2002, the plant employed approximately 100 people and operated 24 hours per day, seven days per week (EnSafe, September 1991).

During operation, the Facility consisted of six production units:

- Unit 1 was utilized for formulation of various custom chemicals such as permethrin and permethrin acid chloride, for other companies.

- Unit 2 was the propanil production unit.

- Unit 3 known as the Expansion Area was destroyed in a fire and explosion on September 26, 1989.

- Unit 4 was used for production of various custom products such as orfom D-8 and orfom CO300. Unit 4 was also contracted from time to time for the production of methyl 2-benzamide carbonate (MBC) and methyl ethyl sulfide (MES) and the mixing of Metam Sodium.

- Unit 5 was primarily used to manufacture nitroparaffin derivatives and Unit 6 began producing dichloroaniline in 1991 used in the production of Propanil Regulatory History

The chemicals identified in this bulleted list are not an exhaustive list; many other chemicals were produced at the site. The unit(s) involved in the production of these chemicals, including dinoseb, could not be identified with certainty during the preparation of this report.

The ADPC&E initially became involved with the Facility shortly after production began at the plant in the early 1970s. This involvement was in response to citizen complaints of discharges of water and odors. There were additional regulatory actions or directives regarding the Facility during its operational history; these are summarized below.

In 1972 to 1973, Vertac began using three unlined earthen surface impoundments on the west side of the Facility for disposal of waste chemicals. The surface impoundments were constructed during the early 1970s and utilized until 1978 when they were closed by Vertac. Closure of the impoundments was performed by draining them of water and installing a clay cap consisting of native soil and bentonite (Ecology and Environment, Inc., 1986).

In 1980, Vertac submitted a RCRA Part A Permit application to ADPC&E for a hazardous waste storage tank (T-B112), a container storage area, and the surface impoundments described above. In August 1984, Vertac submitted the Part B Permit application. Soon after the Part B application was submitted, the ADPC&E concluded that the surface impoundments were not a hazardous waste unit, and dropped them from the permitting process in a letter dated November 1984.

On January 9, 1986, Vertac notified ADPC&E that Cedar Chemical had purchased the Facility. The Part A and Part B Applications were revised in March 1986 and November 1986 to reflect the new ownership.

On May 30, 1986, ADPC&E conducted a compliance evaluation inspection (CEI). This resulted in an issuance of a notice of violation (NOV) to Cedar Chemical on December 19, 1986, citing several violations. Subsequently, Consent Administrative Order (CAO) No. LIS 86-027 was issued to Cedar Chemical on July 16, 1987, required them to stop disposing of hazardous waste in the certain surface impoundments and to investigate potential release(s) to surrounding media.

On September 14, 1987, Cedar Chemical submitted a Closure Plan for hazardous waste storage tank T-B112 and the container storage area, under the Part A and B permit applications.

On October 1, 1987, Cedar Chemical Company submitted a letter to ADPC&E stating that waste would not be treated or stored on site for more than 90 days and requesting that the RCRA Permit application be withdrawn.

In December 1987, EPA Region VI conducted a Preliminary Review and Visual Site Inspection (PR/VSI) under the RCRA Facility Assessment (RFA) process, and identified 74 solid waste management units (SWMUs) and one AOC. The results of this study were presented in the PR/VSI Report dated January 1988.

On April 1988, under Consent Order LIS-86-027, a site hydrogeological assessment plan was submitted by Geologic Associates, Inc. to ADPC&E for an assessment required under CAO No. LIS 86-027.

On June 6, 1988, the ADPC&E approved Cedar Chemical's request to withdraw the hazardous waste tank T-B112 from the permit process.

On July 18, 1988, the hydrogeological assessment required under the CAO LIS-86-027 was performed and on August 4, 1988, the report (Grubbs, Garner & Hoskyn, Inc., 1988) was submitted to ADPC&E.

On November 21, 1988, Cedar Chemical filed a letter with ADPC&E stating that the tank and the container storage areas had been closed and had been converted to a less than 90 day storage areas. ADEQ approved the closure of these areas on December 12, 1988.

In November 1988, under CAO LIS-86-027, a groundwater monitoring program plan was submitted to ADPC&E; a series of monitoring wells were subsequently installed and sampled. In January 1990, the first groundwater monitoring report was submitted, and a program of quarterly monitoring was commenced.

On February 26, 1990, ADPC&E conducted another CEI. On June 26, 1990, Cedar Chemical Company was informed of an observed violation, involving the disposal of contaminated monitoring well purge water directly onto surface soil.

In April 1990, Cedar Chemical informed ADPC&E that buried drums had been found during an excavation to construct a stormwater ditch. The excavation and removal of the buried drums was performed during 1990 through 1992.

In 1991 and 1992, the Facility experienced several exceedances of NPDES permit discharge limitations, and resulting NOVs were issued during this time. The causes of these violations were reportedly all addressed by Cedar Chemical Company.

In 1991, Cedar Chemical entered into CAO No. LIS 91-118 under RCRA corrective action, requiring the completion of a Facility Investigation (FI) at the site. As discussed in later sections of this report, Phases I, II, and III of this FI were performed by EnSafe in 1993 through 1996. The FI results were then incorporated into a risk assessment in 2001, and submitted with a final addendum to ADEQ in 2002 prior to the operational shutdown of the Facility.

On May 27, 1998, ADEQ conducted another CEI, and again documented observed violations. The resulting CEI report stated that Cedar Chemical had been accumulating hazardous waste for more than 90 days in an un-permitted unit. ADEQ subsequently issued CAO No 99-131, that required Cedar Chemical Company to achieve and maintain compliance with Arkansas state regulations.

On March 8, 2002, Cedar Chemical filed for bankruptcy. Manufacturing and plant operations were shut down shortly thereafter.

ADEQ conducted a CEI on June 4, 2002, after the Facility operations shut down, and noted that Cedar Chemical Company had again accumulated hazardous waste for more than 90 days in an un-permitted unit and had relinquished hazardous waste to an un-permitted transporter. In an August 14, 2002 letter, ADEQ required that Cedar Chemical submit manifests to ADEQ for the waste being shipped off-site, documenting that the transporter and disposal facility being used were properly licensed and permitted.

Cedar Chemical was in the process of preparing a corrective action plan at the time it filed for Chapter 11 bankruptcy. The plan was not completed or submitted.

ADEQ assumed control of the site on October 12, 2002. As documented in the Comprehensive Assessment Report prepared by ADEQ dated April 2004, the existing environmental issues associated with the site included abandoned chemicals, buried drums, groundwater

contamination, surface and subsurface soil contamination, and an abandoned stormwater treatment system.

In January 2003, USEPA Region 6 issued a Request for Removal Action Memorandum to remove chemicals left on site in tanks and containers. A USEPA contractor completed the required waste removal during the summer of 2003.

On July 20, 2006, ADEQ issued a Civil Complaint against Wormald, USA, Inc., successor to Ansul, Inc., Helena Chemical Company Inc., and ExxonMobil Chemical Company successor to Mobil Chemical Co. On March 26, 2007, ADEQ voluntarily dismissed its civil complaint. On March 26, 2007, ADEQ also issued a CAO to these same parties, which is the basis for the work currently being performed by the Group at the Facility.

3.2. Permits

Numerous air emission permits have been issued to the Facility beginning in 1972. The Facility was never issued a Part B hazardous waste permit, and operated as an interim status Facility. Currently, the Facility holds NPDES Permit No. AR0036412 issued April 25, 2001, for discharges to surface water from the Facility wastewater treatment system. The NPDES permit expired in 2007 and ADEQ is currently working with USEPA Region 6 on the status of the Permit.

SECTION 4

Preliminary Assessment of the Nature and Extent of Contamination

4. PREVIOUS ASSESSMENTS OF THE NATURE AND EXTENT OF CONTAMINATION

4.1. PREVIOUS INVESTIGATIONS

The following sections provide an overview of past investigations performed at the site from 1985 through 2002. Soil and groundwater analytical data from these past investigations are presented in Tables 1 and 2.

4.1.1. Dioxin Sampling – 1985, Ecology and Environment, Inc.

As part of the National Dioxin Study for the USEPA, Ecology and Environment, Inc. collected soil samples from 43 locations at the Facility on December 4, 1984, and analyzed these samples for tetrachlorodibenzo(p)dioxin (TCDD). Sampling was conducted along the northwest boundary of the Facility, near the location of the three inactive covered surface impoundments. In addition, randomly located samples were collected throughout the remainder of the unpaved portions of the Facility. No TCDD was detected in any of the samples collected from the Facility during this investigation (Ecology and Environment, Inc. 1985).

4.1.2. Preliminary Investigation – 1986, Ecology and Environment, Inc.

Under contract from the USEPA, Ecology and Environment, Inc. conducted on-site surface and subsurface soil sampling during 1985 in the area of the three former surface impoundments along the Facility's northwest boundary.

On October 20, 1985, three sample locations were established within each of the three impoundment areas. A total of nine surface and nine subsurface soil samples were collected, and analyzed for organic and inorganic contaminants. Pesticides (i.e., both insecticides and herbicides) and other organic compounds were detected in the subsurface soil in the area of the inactive impoundments; the surface fill material also contained pesticides. No impact from inorganic constituents was not reported (Ecology and Environment, Inc., 1986). Ecology and Environment, Inc. recommended the installation of groundwater monitoring wells around the surface impoundments.

4.1.3. PR/VSI Report – 1988, A.T. Kearny, Inc.

A RCRA Facility Assessment (RFA) was performed by USEPA Region 6 in March 1988. The RFA identified 74 solid waste management units (SWMU) and one Area of Concern (AOC). The findings of the RFA are summarized in the January 1998 PR/VSI Report prepared for USEPA Region VI by A.T. Kearny, Inc., (1988). Table 3 summarizes the SWMUs and AOC

identified during the PR/VSI and the conclusion documented by USEPA Region 6 in the RFA for each. Figure 5 shows the location of each SWMU and AOC identified during the RFA (A.T. Kearney, Inc., 1988).

4.1.4. Hydrogeologic Study – 1988, Grubbs, Garner & Hoskyn, Inc.

Grubbs, Garner & Hoskyn, Inc. (GG&H) performed a hydrogeologic assessment dated July 19, 1988 pursuant to CAO LIS-86-027, for the portion of the Facility located north of Industrial Park Road (i.e., the manufacturing area). The assessment was intended to characterize the shallow hydrogeology of the site, and to identify potential locations for monitoring well installation. Activities included drilling ten soil borings, analysis of soil from various depths, installing piezometers at the boring locations, and measuring groundwater elevations to assess the groundwater gradient.

Based on field observations and analytical data, GG&H estimated the hydraulic conductivity for the site varied from $3x10^{-5}$ to $5x10^{-4}$ cm/s for shallow, silty soils to $2.5x10^{-2}$ cm/s for deeper sandy soils. In addition, they estimated that the alluvial aquifer had a transmissivity of 83 cm^2/sec and a flow velocity of approximately 0.05 feet per day. Potentiometric surface measurements indicated that the groundwater gradient was to the southwest across the site (GG&H, 1988).

In a letter dated April 5, 1989, GG&H supplemented the hydrogeologic assessment with the collection of additional groundwater elevation data. These data were collected from August 9, 1988 through March 3, 1989, and used to update potentiometric surface maps. A final composite potentiometric surface map showed groundwater flow as being generally to the southwest across the site (GG&H, 1989).

Environmental & Safety Design, Inc. (EnSafe) prepared a Preliminary Facility Investigation (FI) pursuant to CAO 99-131 (EnSafe, 1991). Discussion of this CAO is provided in Section 3.1 of this report. The FI report summarized previous investigations and current conditions for the Facility. The report concluded that contaminated surface water, soil, and groundwater all pose a threat as release pathways for site contaminants.

Of the 74 SWMUs and one AOC reported in the EPA Region VI 1988 PR/VSI, the 1991 FI report (EnSafe, 1991) narrowed this to thirteen SWMUs and two AOCs that were concluded to have a strong potential for past releases to the environment, and would therefore require further investigation. These sites included the Railroad Loading and Unloading Sump (SWMU 3), the storm drainage system (SWMU 59), the stormwater sump area (SWMU 60), the API Separator

(SWMU 62), the Wastewater Tank #2 Wastewater Treatment System (SWMU 63), the Flow Equalization Basin (SWMU 64), the Aeration Basin (SWMU 65), the former surface impoundments (SWMUs 69, 70, 71), the Drum Vault (SWMU 72), Rail Spur (SWMU 74), the Former Dinoseb Disposal Ponds (Site 9), the yellow surface stained areas (AOC 1), and the drainage ditch area (AOC 3).

Pursuant to CAO LIS 91-118, EnSafe conducted an FI for the Facility to assess the nature and extent of impact to soil and groundwater from previous chemical handling and waste disposal practices at the Facility. The field work for Phase I of the FI was performed between August 30 and October 8, 1993, and findings were reported to the ADEQ in a Technical Memorandum dated December 16, 1993. After review of the Technical Memorandum, the ADEQ required further Phase II investigation to fill data gaps and to further delineate contamination identified in the Phase I report. Following ADEQ approval of a submitted work plan, EnSafe began field work for Phase II of the FI on November 7, 1994.

The findings and conclusions of Phase II of the FI were submitted to the ADEQ in a report dated March 2, 1995. After review of the Phase II FI report, the ADEQ required Cedar Chemical to conduct a Phase III investigation to characterize and delineate the source of 1,2-dichloroethane (1,2-DCA) in the soil and groundwater. After ADEQ approval of the Interim Response Work Plan for the Phase III investigation, Phase III field work began on September 19, 1995. The findings and conclusions were submitted to the ADEQ in a comprehensive report dated June 28, 1996.

The following sections summarize the investigation activities for Phase I, II, and III field investigations.

4.1.4.1. Phase I Facility Investigation – 1993, EnSafe

The 1993 Phase I investigation included collection of sediment samples, surface and sub-surface soil samples, and groundwater samples, as well as installation of monitoring wells. Samples collected were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides (analytical method unknown), and Resource Conservation and Recovery Act (RCRA) metals. During this FI event, EnSafe subdivided the investigation areas into nine separate sites, designated Sites 1 through 9 (this designation persisted throughout the three phases of the FI). Each site contained one or more of the SWMUs identified in the EnSafe preliminary assessment as needing further investigation. During this investigation, a monitoring well nomenclature was also utilized to distinguish between wells in the perched and alluvial aquifers. A summary of the 1993 Phase I FI work is provided in the following sections.

Background Soil Samples

Three background soil samples (CED-BG1 through CED-BG3) were collected from agricultural fields adjacent to the Facility to the northeast, northwest, and southwest. These samples contained detectable levels of several compounds, including toluene, total xylenes, acetone, methylene chloride, 2-butanone, bis-(2-ethylhexyl)phthalate, 4,4-DDT, 4,4-DDE, lead, arsenic, barium and chromium. The presence of 4,4-DDT and 4,4-DDE in these samples was concluded to be the result of past agricultural application of DDT to crops in these fields (EnSafe, 1993).

Site 1 (SWMUs 62-65, 68 and AOC 3 [the API Separator])

Groundwater and soil sampling was conducted at Site 1 in Phase I of the FI to determine the extent of contamination in this area.

Five monitoring wells (1MW-1 through 1MW-5) were proposed to be installed in the alluvial aquifer. During installation, however, a perched zone was encountered at approximately 12 feet below ground surface (bgs), and the five wells were subsequently installed in the perched aquifer. One alluvial aquifer well (1MW-6) was also installed and sampled along the southeastern border of Site 1, adjacent to the wastewater treatment ponds. This well was screened in the alluvial aquifer immediately below the clay semiconfining unit, to assess whether contaminants in the perched zone had migrated vertically through the confining unit to the alluvial aquifer. All samples were analyzed for VOCs, SVOCs, pesticides, RCRA metals, ammonia, bicarbonate, chloride, fluoride, nitrate, sulfate, and cyanide (EnSafe, 1993).

During monitoring well installation, soil samples were collected at 5-foot intervals from each boring. One sediment sample from each wastewater treatment pond (1SED 1-3), three soil samples from the berm down gradient of the API separator (1HA 1-3), and one soil sample from each of two stained areas surrounding Wastewater Tank 2 (1HA 4-5) were also collected using hand auger methods. All Site 1 soil and sediment samples were analyzed for VOCs, SVOCs, pesticides (analytical method unknown), and RCRA metals (EnSafe, 1993).

Site 2 (SWMU 69, 70, and 71)

Site 2 consists of the three SWMUs that were part of the former surface impoundments located on the northwest side of the site near State Highway 242. Groundwater and soil sampling was conducted at Site 2 in Phase I of the FI to delineate the pond boundaries and the extent of soil and groundwater impact at the Site.

Two monitoring wells (2MW-1 and 2MW-2) were installed and sampled in the perched zone at an approximate depth of 12 feet along the east and west perimeter of the Site respectively. The perched zone was not encountered on the south side of the Site, and three monitoring wells (2MW-3, MW-4 and MW-5) were installed there at an approximate depth of 35 feet. Samples from 2MW-1 were analyzed for VOCs and pesticides (analytical method unknown), while samples from 2MW-2 were analyzed for VOCs, SVOCs, pesticides, and RCRA metals. All other Site 2 groundwater samples were analyzed for VOCs, SVOCs, pesticides, RCRA metals, ammonia, bicarbonate, chloride, fluoride, nitrate, sulfate, and cyanide (EnSafe, 1993).

Soil samples were typically collected at 5-foot intervals from each monitoring well boring. In addition, a grid of borings was drilled across Site 2 to delineate the pond boundaries. The grid consisted of twelve boring locations (2-SB 1-12) with borings advanced to total depths ranging from 25 to 30 feet bgs. All Site 2 soil samples were analyzed for VOCs, SVOCs, pesticides (analytical method unknown), and RCRA metals (EnSafe, 1993).

Site 3 (SWMU 59 and 60)

Site 3 includes two SWMUs that comprise the stormwater drainage system for the Facility. All stormwater runoff at the Facility is collected in four stormwater ditches (SWMU 59) that flow through the interior of the property to the southwest. These ditches all drain into a larger stormwater ditch adjacent to Industrial Park Road, which flows in turn into a stormwater sump (SWMU 60). The sump is periodically pumped into the wastewater treatment system directly across Industrial Park Road to the south of the Facility. Groundwater and soil sampling was conducted at Site 3 in Phase I of the FI to assess the nature and extent of contamination.

No additional wells were installed during Phase I of the FI at Site 3. A total of eleven surface soil and sediment samples (3SED 1-11) were collected from the drainage ditches and stormwater pond associated with this Site. Nine samples (3SED 1-9) were collected within the stormwater ditch. Sample 3SED 10 was sampled adjacent to the stormwater pond. All Site 3 soil samples were analyzed for VOCs, SVOCs, pesticides, and RCRA metals to evaluate whether stormwater runoff had impacted the ditches (EnSafe, 1993).

Site 4 (SWMU 3 and 74)

Site 4 includes two SWMUs: the railroad loading/unloading area (SWMU 74) on the north side of the Facility, and an abandoned railroad loading and unloading sump (SWMU 3) in the same area. Groundwater and soil sampling was conducted at Site 4 in Phase I of the FI to assess the general nature and extent of contamination.

Soil samples were collected from six locations (CED4SHA1 through CED4SHA6) from 0 to 24 inches bgs. Two monitoring wells (4MW-1 and 2) were installed in the alluvial aquifer and screened from 27 to 37 feet bgs. During installation of 4MW-1, adjacent to propanil unit U-1 expansion unit, gas venting occurred when the borehole was advanced through the confining layer. Benzene, toluene, and xylenes were detected in field analyses (Draeger tubes) performed at the time. Well 4MW-2 was installed in the roadway between the Unit 3 expansion area and the Nitration unit. All Site 4 groundwater samples were analyzed for VOCs, SVOCs, pesticides, RCRA metals, ammonia, bicarbonate, chloride, fluoride, nitrate, sulfate, and cyanide (EnSafe, 1993).

During monitoring well installation, soil samples were collected at 5-foot intervals from each boring. Six soil sample locations (4HA 1-6) were sampled in a line parallel to the rail spur along the northern property boundary. Two samples were collected from each location at intervals of 0 to 12 inches and 12 to 24 inches. Two additional soil sample locations (4HA 7 and 8) were advanced adjacent to the abandoned sump (SWMU 3) located in Site 4. Three samples were collected at each of these locations at intervals of 5 to 6 feet, 6 to 7 feet, and 7 to 8 feet. All Site 4 soil samples were analyzed for VOCs, SVOCs, pesticides, and RCRA metals (EnSafe, 1993).

Site 5 (Drum Vault SWMU 72)

Site 5 consists of a drum vault that was capped to form the floor of the current maintenance service warehouse for the Facility. The contents and conditions of the drums in the vault, as well as the condition of the vault itself, are unknown. Three slant borings (5SB 1-3) were advanced to the northeast, southeast, and southwest corners of the current warehouse. The borings were positioned eleven feet from the building, and advanced at a 45 degree angle towards the building. Two soil samples were collected from each boring at approximately 11 and 16 vertical feet bgs. All Site 5 soil samples were analyzed for VOCs, SVOCs, pesticides, and RCRA metals (EnSafe, 1993).

No groundwater sampling was conducted for Site 5.

Site 6 (AOC 1)

Site 6 consists of several surface stained areas dispersed across the non-production area of the Site. Cedar Chemical Company proposed to build an asphalt-paved employee parking lot over a portion of Site 6. Prior to the construction of the parking lot, five soil samples (1 through 5) were collected and analyzed from the proposed parking lot area. The analyses identified VOCs,

SVOCs, and pesticides in these soils. These results were reported to ADPC&E in a May 7, 1993 letter; the agency responded that the parking lot would not be considered a remedial action. The parking lot was constructed later in 1993, and is still in place (EnSafe, 1993).

No groundwater sampling was conducted for Site 6.

Site 8 (AOC 3)

Site 8 is a drainage ditch located directly south of Site 1, and sampling at Site 8 was conducted in conjunction with Site 1. Four surface soil samples (8HA 1-4) were collected beginning 50 feet north of the API separator associated with Site 1 and continuing in 50-foot increments southward along the bottom of the drainage ditch. All Site 8 soil samples were analyzed for VOCs, SVOCs, pesticides, and RCRA metals (EnSafe, 1993).

No groundwater sampling was conducted for Site 8.

Site 9 (Former Dinoseb Disposal Ponds)

Site 9 consists of three ponds reported to be formerly present in the area between the DCA unit and the maintenance services building. The ponds were reportedly shallow unlined basins used to dispose of off-spec dinoseb. Buildings and paved areas have been constructed over the former ponds. A total of nineteen soil borings (9SB 1-19) were advanced in Site 9 to determine whether these ponds and dinoseb waste were actually present. Each boring was advanced to a minimum of 10 feet, and soil samples were collected on 5-foot intervals. Each boring was terminated once a stain-free sample was obtained. For each boring, two samples from each 5-foot interval were submitted for 24-hour turn-around for dinoseb and SVOCs. Additional sample volume from each interval was placed in Ziploc bags and refrigerated until the results for the dinoseb analysis were available. Soil samples from the sample intervals with the lowest and highest dinoseb concentrations in each boring were then submitted for analysis for VOCs, pesticides, and RCRA metals (EnSafe, 1993).

No groundwater sampling was conducted for Site 9.

Additional Monitoring Wells

Based on laboratory analytical reports, 37 monitoring wells installed during previous field events were also sampled for the Phase I FI. All of these samples were analyzed for VOCs, SVOCs, pesticides, RCRA metals, ammonia, bicarbonate, chloride, fluoride, nitrate, sulfate, and cyanide.

4.1.4.2. Phase II Facility Investigation – 1995, EnSafe

Phase II of the FI included collection of sediment, surface and sub-surface soil and groundwater samples, installation of monitoring wells, and a residential and agricultural well survey. All samples were analyzed using USEPA Office of Solid Waste. A summary of the work performed at each site is provided in the following sections.

Site 1 (SWMU 62-65 and 68)

Additional groundwater and soil sampling was conducted in Phase II of the FI to better assess the nature and extent of contamination at Site 1.

Groundwater contamination was detected in both the perched and alluvial wells in Phase I investigations. In Phase II, an additional alluvial aquifer monitoring well (1MW-7) was installed adjacent to monitoring well 1MW-1, upgradient from the storm water treatment ponds (EnSafe, 1995).

The Phase II work also included the planned installation of nested monitoring wells at three off-site locations downgradient of Site 1. Instead, of permanent wells, however, groundwater samples were collected from these locations using a Geoprobe sampling rig. Two of the three off-site Geoprobe borings (1GB 2-3) were installed on the neighboring Norac property to the east, and the third (1GB- 4) was installed in the agricultural field to the south of Site 1. All Site 1 wells were sampled and analyzed for VOCs, SVOCs, lead, and arsenic (Ensafe, 1995).

During installation of 1MW-7, soil samples were collected at 5-foot intervals from the well boring. Soil samples were also collected from two hand augered borings in each of two stained areas surrounding Wastewater Tank 2 (1HA 6-7). To delineate the vertical extent of contamination detected in this area during the Phase I sampling, the Phase II borings were sampled at 3-foot intervals to a depth of 12 feet bgs. All Site 1 soil samples were analyzed for SVOCs, and pesticides (organochlorine pesticides and polychlorinated biphenyls (PCBs),using USEPA SW-846 Method 8080). In addition to the soil samples for chemical analysis, three stratigraphic borings were advanced in Site 1 to aid in mapping the top and bottom of the alluvial clay layer (EnSafe, 1995).

Site 2 (SWMU 69-71)

Groundwater and soil sampling was conducted in Phase II of the FI to better assess the nature and extent of contamination at Site 2.

In addition to the five monitoring wells installed in Phase II, two additional monitoring wells were installed at the southwestern corner of the Site, near the intersection of State Highway 242 and Industrial Park Road, to investigate the possible off-site migration of the groundwater contamination detected in Phase I of the FI. Well (2MW-6) was installed and screened 31 to 41 feet bgs at the surface of the alluvial aquifer. A deeper well (2MW-7) was installed and screened near the base of the alluvial aquifer between 135 and 145 feet bgs. All Site 2 wells were sampled and analyzed for VOCs, SVOCs, lead, and arsenic (Ensafe, 1995).

The overall boundaries of the Site 2 surface impoundments were delineated during Phase I investigations. An additional soil boring (2SB-13) was advanced outside the fence to the north of the Site to confirm the surface impoundment's northern extent. Samples were collected from this boring at 5-foot intervals until groundwater was encountered. Two additional surface soil samples were collected using hand auger methods at Phase I soil boring locations 2SB-5 and 10. These samples (2HA-5 and 10) were collected from 0 to 1 foot bgs. These two samples were analyzed for VOCs, SVOCs, and pesticides (organochlorine pesticides and PCBs) by the Synthetic Precipitation Leaching Procedure (SPLP) Method SW-846 1312. During the installation of well 2MW-7, soil samples were collected at 5-foot intervals. All other Site 2 soil samples were analyzed for VOCs, SVOCs, metals, and pesticides (organochlorine pesticides and PCBs using USEPA Method 8080) (EnSafe, 1995).

Site 3 (SWMU 59 and 60)

Additional soil sampling was conducted in Phase II of the FI to verify results from Phase I sampling. No additional groundwater sampling was performed.

Elevated levels of metals and pesticides were detected in the sediment samples collected during Phase I investigations. To assess whether this contamination was confined to the sediment or if it was also present in the native soils, thirteen locations (3SED 11-23) were sampled at two depth intervals. These soil samples were analyzed for constituents detected during Phase I investigation (EnSafe, 1995).

To aid in mapping the clay semi-confining unit in the area, one stratigraphic boring (3LB-6) was also advanced. Due to heavy staining observed from 3 to 7 feet, three soil samples were collected from the boring and analyzed for SVOCs (page 4-10 through 4-12 EnSafe, 1995).

Site 4 (SWMU 3 and74)

Additional groundwater and soil sampling was conducted in Phase II of the FI to better understand the extent of contamination at Site 4.

Two additional alluvial aquifer monitoring wells were installed and sampled at Site 4 during Phase II investigations. Well 4MW-3 was installed near the new hydrogen tube trailer, and the screened from 32.5 to 46.5 feet bgs. Well 4MW-4 was installed south of the drum storage warehouse and loading dock, and the screened from 140 to 150 feet bgs. Groundwater samples were also collected at approximately 50 feet bgs from a direct push technique (DPT) boring (4GB-3) to complete the vertical delineation of groundwater impact near 4MW-2. Samples were collected at 15-foot intervals from 50 to 95 feet bgs. All Phase II groundwater samples from Site 4 were analyzed for VOCs and SVOCs (EnSafe, 1995).

During installation of wells 4MW-3 and 4, soil samples were collected at 5-foot intervals. Three additional soil borings (4GB-1-3) were sampled beside the railroad at the northern boundary of the Site. Two soil samples (4HA-9 and 10) were also collected along the railroad tracks using hand auger methods. These samples were collected below the gravel layer in the native soils. The Site 4 Phase II soil sample locations were selected based on Phase I data to evaluate the leachability of the detected compounds in heavily and moderately contaminated areas. The samples were analyzed for VOCs, SVOCs, and pesticides (organochlorine pesticides and PCBs) by SPLP Method SW-846 1312 (EnSafe, 1995).

Site 5 (SWMU 72)

No additional Phase II investigations were conducted at Site 5.

Site 6 (AOC 1)

Based on the data collected during Phase I sampling, fifteen additional soil samples (6HA 1-15) were collected during Phase II using hand auger methods at Site 6. Samples were collected from 0-1 ft at locations where contamination was suspected to be present. The samples were collected to support performance of a risk assessment, and were analyzed for pesticides (organochlorine pesticides and PCBs), and SVOCs (EnSafe, 1995).

Site 8 (AOC 3)

No additional Phase II investigations were conducted at Site 8.

Site 9 (Former Dinoseb Disposal Ponds)

Based on the findings from Phase I sampling, additional groundwater and soil sampling was conducted in Phase II of the FI.

One alluvial aquifer monitoring well (9MW-1) was installed to further assess the character and extent of groundwater impact at Site 9 and to evaluate whether the dinoseb impact observed in the soils had migrated to groundwater in this aquifer. This well was installed south of the boiler room adjacent to the Shipping and Receiving area, and was screened from 31 to 41 feet bgs. A DPT boring (9SB-21) was advanced adjacent to 9MW-1. Four groundwater samples were collected from this boring, at 15-foot intervals between 45 and 90 feet bgs. All Site 9 Phase II groundwater samples were analyzed for VOCs and SVOCs.

In addition to soil boring 9-SB 21, two more borings (9-SB 20 and 22) were advanced during Phase II. All three borings were placed in the areas which exhibited the highest dinoseb concentrations based on the Phase I findings. Soil sampling was conducted at 2-foot intervals starting at 10 feet bgs and terminating at groundwater. Three intervals (the first interval starting at 10 feet bgs, the last interval before groundwater was encountered, and the interval with the highest photoionization detector [PID] headspace reading) from each boring were analyzed for VOCs and SVOCs.

1995 Residential and Agricultural Well Survey

In 1995, a residential and agricultural well survey was conducted by EnSafe to identify water use in the vicinity of the site. Nineteen residences down-gradient or cross-gradient from the Facility were either visited or observed during the residential well survey. Wells at these locations formerly supplied all residences with domestic water; however, all of the homes had been connected to the city water system for over 10 years at the time of the survey. All of the inspected wells were reported to be in various states of disuse or disrepair; some were capped, some were open with no pumps, and others had non-usable pumps. Several of the residences are located within a one-mile radius of the site, primarily along Phillips County Road 300.

Several agricultural wells were also identified during the well survey. EnSafe subsequently obtained data on these wells from the U.S. Department of Agriculture Soil Conservation Service (SCS) extension office in Helena, Arkansas. The wells are reported to be 120 to 125 feet deep, and are screened in the basal portion of the alluvial aquifer (*EnSafe, 1996*). The report states that these wells were used primarily to irrigate cotton fields.

4.1.4.3. Phase III Facility Investigation – 1996, EnSafe

Phase III was conducted at the request of ADEQ to delineate the extent of 1,2-DCA in soil and groundwater. Phase III of the FI included sediment, surface, sub-surface soil and groundwater sampling, and installation of monitoring wells. During the Phase III FI, no additional

investigations were performed at Sites 4, 5, 6, 8, and 9. In addition, four deep off-site alluvial aquifer wells, (OFFMW-1 through OFF-MW-4), were installed during this Phase.

Site 1 (SWMU 62-65 and 68)

No additional Phase III investigations were conducted at Site 1 (EnSafe, 1996(a)).

Site 2 (SWMU 69-71)

Additional soil sampling was conducted in Phase III of the FI to verify results from Phase II sampling. No additional groundwater sampling was performed.

To confirm the presence of methoxychlor, one soil sample (2SB 8-10') was collected adjacent to well 2MW-7. An additional soil boring (2SB-15) was installed approximately 100 feet northwest of 2MW-3. Samples were collected from 0 to 2 feet bgs and 8 to 10 feet bgs to determine if the stressed vegetation was a result of Site 2 contamination. All Site 2 Phase 3 soil samples were analyzed for SVOCs and pesticides (organochlorine pesticides and PCBs) (EnSafe, 1996(a)).

Site 3 (SWMU 59 and 60)

Additional soil sampling was conducted in Phase III of the FI to verify results from Phase II sampling; but no additional groundwater sampling was performed.

Site 4 (SWMU 3 and 74)

No additional Phase III investigations were conducted at Site 4.

Site 5 (SWMU 72)

No additional Phase III investigations were conducted at Site 5.

Site 6 (AOC 1)

No additional Phase III investigations were conducted at Site 6.

Site 8 (AOC 3)

No additional Phase III investigations were conducted at Site 8.

Site 9 (Former Dinoseb Disposal Ponds)

No additional Phase III investigations were conducted at Site 9.

Off-Site Well Installations

Four off-site wells (OFFMW-1 through OFFMW- 4) were installed in the alluvial aquifer approximately three-quarters of a mile downgradient southeast of the site. Each well was completed with a 20-foot screen. The wells were installed in pairs, with OFFMW-1 and OFFMW-3 screened two feet into the Jackson Clay interface at a depth of 137 to 145 feet bgs, and OFFMW-2 and OFFMW- 4 screened from 79 to110 feet bgs. Groundwater samples from each well were analyzed for VOCs, SVOCs, metals, pesticides (organochlorine pesticides and PCBs) and herbicides.

4.1.5. Supplemental Work - 1993 – 1995, EnSafe

Monitoring wells at the Facility were sampled sporadically in 1993 through 1995. In April 1996, EnSafe sampled all new and existing Facility monitoring wells to establish baseline groundwater conditions. Samples from all wells were analyzed for total organic halogens (TOX) and total organic carbon (TOC). Samples from three wells (4MW- 2, EMW- 7, and 2MW- 6) were also analyzed for VOCs and SVOC analysis. Four wells could not be sampled: 2MW- 1 and 2 and EMW-6C were dry, and 9MW- 1 was inaccessible due to construction at the time of sampling (EnSafe, 1996(a)). The wells were sampled by EnSafe on a quarterly basis beginning in 1998 and concluding in April and July 2001.

In June 2007, EnSafe performed well assessment activities at the Site. No groundwater samples were collected during this event.

4.1.6. Risk Assessment – 2001, EnSafe

Pursuant to the submitted Risk Assessment Workplan dated July 1996, EnSafe conducted a human health risk assessment (HHRA) and ecological risk assessment for the Facility which were submitted to the ADEQ on March 21, 2001. For the HHRA, eight previously identified sites (Sites 1 through 6, 8, and 9) were evaluated based on soil, sediment, perched groundwater, and alluvial groundwater data collected in previous investigations. Potential risk was evaluated for the following receptors using guidance from *Risk Assessment Guidance for Superfund Volume 1: Human Health Evaluation Manual* (RAGS Part A) (USEPA, 1989): Site workers, future on-site construction workers, future on-site agricultural workers, and future site trespassers (EnSafe, 2001(a)).

4.1.7. Risk Assessment Addendum – 2002, EnSafe

Pursuant to a March 1, 2001 agreement between Cedar Chemical and the ADEQ an addendum to the 2001 HRRA was prepared to address groundwater contamination detected in off-site

agricultural wells downgradient from the Facility. As documented from the July 2001 groundwater monitoring event, 1,2-dichloroethane was detected in two off-site agricultural wells BHAG-1 and AGI-1 (EnSafe 2001(c)). Based on analytical results presented in the 2002 addendum, alluvial groundwater risks for agricultural workers were below those presented in the 2001 HRRA (EnSafe 2002).

4.1.8. Health Consultation Reports ADEQ and Agency for Toxic Substances and Disease Registry (ATSDR) Reports, 2005 and 2006

ADEQ collected and analyzed groundwater samples in 2001, 2002 and 2004 from wells AGI-1, AGI-2, BHAG-1, and OFFMW-1 through OFFMW-4. The data from these sampling events were provided to ATSDR, and used by that agency to prepare two Health Consultation Reports (ATSDR, August 1, 2005 and June 16, 2006). These reports were used to evaluate the potential health risk to farm workers from possible exposure to 1,2-DCA in off-site groundwater. This evaluation included a comparison of the estimated contaminant concentration to National Institute of Occupational Safety and Health (NIOSH) recommended exposure limits (REL).

Although Geomatrix has obtained copies of these reports, the available information is incomplete with respect to several key aspects of data collection and generation. For example, data presented in these reports included sample identification, constituent analyzed, data result, and date of analyses. A laboratory protocol report describing sampling procedures, sample preservation, storage and preparation, analytical measurements, methods, calculations, method verification, validation and/or demonstration of analytical capability, and quality assurance (QA) program for the laboratory was not included. For this reason, these data are not included in the compilation of groundwater analyses provided in Table 1, and are not utilized in the evaluation of current conditions and data gaps provided in Section 5.3 and associated figures. This is not intended, however, to represent a conclusion on the part of either Geomatrix or the Group that the data or health evaluations are invalid. Rather, it is the conclusion of both Geomatrix and the Group that information regarding this data is not sufficiently complete to support its incorporation into an evaluation of current conditions.

4.1.9. USEPA Sampling Event Booz Allen Hamilton and ADEQ - August 2005

Sampling and soil boring activities were performed at the Facility by the USEPA contractor Booz Allen Hamilton on August 22 through 26, 2005. The purpose of this event was to "provide ADEQ with data that describes current site conditions," and to use the data to make environmental indicator (EI) determinations for the Resource Conservation and Recovery Information System (RCRIS) code CA725 "Current Human Exposures Under Control" and the CA750 "Migration of Contaminated Groundwater Under Control" (Booz Allen Hamilton,

March, 2006). The samples collected from this event were provided to ADEQ for laboratory analysis. The documentation currently available regarding this event is limited to a trip report summary and laboratory analytical data reports. It is not clear whether a formal report of findings was ever issued by either agency.

As with the data discussed in Section 4.1.8 above, the available information is incomplete with respect to several key aspects of data collection and generation. For example, data presented in these reports included sample identification, constituent analyzed, data result and date of analyses. A laboratory protocol report describing sampling procedures, sample preservation, storage and preparation, analytical measurements, methods, calculations, method verification, validation and/or demonstration of analytical capability, and quality assurance (QA) program for the laboratory was not included. For this reason, these data are also not included in the compilation of groundwater analyses provided in Table 1, and are not used in the evaluation of current conditions and data gaps provided in Section 5.3 and associated figures. As with the data discussed in 4.1.8, this is not intended to represent any conclusion that the data are invalid. Rather, it is the conclusion of both Geomatrix and the Group that information currently available to us regarding this data is not sufficiently complete to support its incorporation into an evaluation of current conditions.

SECTION 5

Conclusions

5. CONCLUSIONS

There has been extensive investigative work performed to date at the Facility. The results of this work allow Geomatrix to reach several conclusions regarding the character and extent of impact to soil and groundwater. Certain questions remain, however, that must be addressed before an appropriate and effective remedy can be selected and implemented. These are referred to herein as remedy-related data gaps. The conclusions, as well as associated remedy-related data gaps, are discussed in the following sections. The data supporting the findings are are illustrated on Figures 6 through 24.

5.1. PERCHED ZONE HYDROGEOLOGY

There are one or more perched groundwater zones present, beneath the area of the former surface impoundments on the northwest part of the facility and the wastewater treatment ponds south of Industrial Park Road. These zones occur at an approximate depth of 20 to 25 feet bgs, and exhibit seasonal variation in thickness and extent. As discussed below, groundwater in these perched zones exhibit impact from organic constituents and arsenic. In at least the area of the wastewater treatment ponds, this impact may extend beyond the Facility boundary.

Although the lateral extent of the perched zone or zones has been identified in some areas by perched zone wells or borings for alluvial aquifer wells (as illustrated on Figures 6, 8, 10, 12 and 14), this extent is not fully understood in some areas. In addition, further information is needed on the groundwater gradient or flow regime present in these zones, and the continuity or possible communication between the zones is not defined.

Remedy-Related Data Gaps:

1. ***Delineation of the extent of the perched zone to the north and west of the former surface impoundments, and south and east of the wastewater treatment ponds.***

2. ***Seasonal variability in the thickness and extent of the perched zone.***

3. ***Degree to which the perched zone identified at the former surface impoundments and the wastewater treatment ponds is connected or continuous.***

4. ***The groundwater flow direction and velocity in the perched zone.***

5.2. ALLUVIAL AQUIFER HYDROGEOLOGY

The alluvial aquifer appears to be present throughout the Facility and the surrounding area where data are available. From the standpoint of both chemical impact and potential exposure, this is the groundwater bearing unit of greatest concern at this site. Groundwater in the alluvial aquifer exhibits impact from a number of VOCs, pesticides, and arsenic. As discussed below, some of these constituents extend at least 2000 feet beyond the southernmost site boundary to the southeast.

Data available on the alluvial aquifer indicate that it is a sand-dominated transmissive zone locally used for groundwater supply mainly to agricultural wells. Alluvial aquifers of this type can contain zones of higher permeability that can behave as preferential pathways for advective transport of chemical solutes. Although potentiometric surface data and chemical distribution indicate that advective groundwater flow at the Site is generally to the southeast. More site-specific data is needed regarding the vertical and horizontal hydraulic gradient, conductivity, or variations in hydraulic conductivities, in this aquifer. These are important data factors in order to better understand contaminant movement, plume shape, and hydrodynamic dispersion.

Remedy-Related Data Gaps:

5. ***Magnitude and variability of the hydraulic conductivity (K) and flow velocity in the alluvial aquifer, particularly the presence of any linear higher transmissive features such as channel deposits that could behave as preferential migration pathways.***

6. ***General geochemistry of alluvial aquifer soils and groundwater (e.g., organic carbon, iron, redox).***

7. ***Character, nature and extent of the aquifer between the southern property line and the wells downgradient (southeast) of the property.***

5.3. DISTRIBUTION OF CHEMICAL CONSTITUENTS IN SOILS AND GROUNDWATER

As noted above, a number of compounds, including VOCs, SVOCs, metals, and pesticides, have been observed in the soils, ditch sediments, perched groundwater, and alluvial groundwater onsite. In addition, off-site impacts to alluvial aquifer groundwater extending approximately 2000 feet from the downgradient site boundary were identified beginning in 1996. The presence of these off-site impacts was confirmed in subsequent sampling events, through the most recent validated sample results in 2001.

In order to focus the process of identifying data gaps on those compounds that are most likely to drive the need for additional investigation and remedy decisions, Geomatrix has screened historic detections of compounds in soil and groundwater against several criteria. The screening process was as follows:

1. All documented detections in soil and groundwater since 1993 were screened versus an applicable USEPA risk-based screening level (a medium-specific screening level, or MSSL (USEPA, 2007). For groundwater samples, this was the Tap Water MSSL; for soils, it was the dilution attenuation factor (DAF) MSSL (used for groundwater protection and the outdoor worker exposure MSSL (surface soils only).

2. The frequency of detections that exceeded an MSSL was calculated for each detected compound in groundwater, surface soil (0-6 inches), and subsurface soils (greater than 6 inches). This allowed Geomatrix to identify compounds that were repeatedly identified, at a number of locations, and at concentrations that exceed screening levels.

3. Compounds were screened from more detailed evaluation in this CCR (e.g., mapping, detailed discussion) if they exhibited a low frequency of detection above an MSSL in all media.

In addition, the most recent groundwater analytical data (July 2001) available for wells sampled during this event was considered to be the most representative of current conditions. All discussions of groundwater impact in this section refer to the most recent data available.

It should be noted that this screening process was not intended to indicate that compounds that were screened from more detailed evaluation would not be included in future analytical programs or considered in future risk assessments. The process was intended to focus the discussion in this CCR on those compounds most likely to be significant in reaching future decisions regarding the site.

Based on the results of this screening, more detailed discussions are presented for the following compounds:

Arsenic
Chromium
1,2-Dichloroethane (1,2-DCA)
Acetone

Methylene Chloride
1,2-Dichlorobenzene (1,2-DCB)
Dinoseb
Dieldrin
Methoxychlor

The distribution of each of these constituents in site media, and those conclusions that may be drawn from that distribution, are discussed below.

Arsenic

Arsenic concentrations in shallow soils across the site typically ranged from about 4 to 10 mg/kg (Figure 16). This relatively low and consistent distribution is not consistent with point source type releases, and is more suggestive of background. This range is also generally consistent with previously evaluated site-specific background levels for arsenic in soil, which ranged from 3.9 to 6.2 mg/kg, based on a limited 1993 background evaluation (EnSafe, 1993).

Arsenic concentrations in sediment samples and shallow soils at a few areas of the Site are outside this range, however, and may represent point source releases. These areas are the former surface impoundments (2HA-5, 98 mg/kg), the southwest corner of the process area (IMSB-1, 59 mg/kg), the southeast corner of the wastewater treatment area (1HA-2, 44 mg/kg) and a sediment sample collected from location (3Sed-9, 222 mg/kg) (Figure 16). Even these concentrations, however, could be related to historic agricultural application, such as arsenate defoliants, or other sources. As discussed in Section 3.1, before chemical manufacturing was performed, the Facility property was used for agricultural purposes.

There is no direct evidence of arsenic in the perched zone groundwater, although some elevated arsenic concentrations in soils are present at roughly the depth of the perched zone in the vicinity of the former surface impoundments and process area (Figure 6).

In the alluvial groundwater, however, elevated arsenic concentrations (up to 603 µg/l, 2MW-2) were noted in samples collected from an area that extends from the process area and former surface impoundments to the southeast of the Facility (Figure 7). Concentrations up to 14.2 µg/l were observed in alluvial aquifer groundwater approximately 2000 feet southeast of the Facility property in well OFFMW-1, although the source of this elevated arsenic is not well understood.

Remedy-Related Data Gap – See Data Gap 6 and 7 above.

Chromium

Total chromium concentrations in shallow soils across the site typically ranged from about 8 to 25 mg/kg (Figure 17). This relatively low and consistent distribution is not consistent with point source type releases, and is more suggestive of background concentration. This range is also generally consistent with previously evaluated site-specific background levels for chromium in soil, which ranged from 10.7 to 13.1 mg/kg, based on a limited 1993 background evaluation (EnSafe, 1993).

Chromium concentrations in two ditch sediment samples (locations not known) were higher, at 51.8 mg/kg in 1SED-1 and 82 mg/kg in 1SED-3. Given that the Facility storm water ditches receive runoff from the Facility areas, these isolated hits may represent metals leached from asphalt or particles of asphalt in the sample.

Chromium was not detected in perched zone or alluvial groundwater.

1,2-Dichloroethane (1,2-DCA)

Concentrations of 1,2-DCA below 1 mg/kg were present in surface soils across the Facility (Figure 20). Higher concentrations were observed in subsurface soils in the area of the former surface impoundments. The depths of these samples, however, suggest they may represent 1,2-DCA in perched groundwater, rather than true soil impact.

Elevated 1,2-DCA concentrations (up to 8,900 µg/l) were observed in perched groundwater at the southwest corner of the process area/southeast corner of the former surface impoundments (Figure 13). This, with the subsurface soil detections noted above, indicate these areas may be sources of 1,2-DCA to groundwater.

Higher 1,2-DCA concentrations (up to 24,000 µg/l, EMW-7) have been observed in alluvial aquifer groundwater (Figure 15). The distribution of these detections suggests 1,2-DCA is likely emanating primarily from the north part of the process area, although there may be significant contribution from the east part of the process area as well. The density of soil and groundwater data in these areas does not allow for a more specific source identification at this time.

As shown in Figure 15, elevated 1,2-DCA concentrations form a plume in alluvial aquifer groundwater that extends from the process area to the southeast. High concentrations (14,000

µg/l) have historically been observed in well OFFMW-2 located approximately 2,000 feet downgradient of the Facilty. This total extent of this plume has not yet been fully delineated.

The fact that concentrations at this distance downgradient are roughly comparable to those in the suspected source area (i.e., 14,000 µg/l vs. 24,000 µg/l at the process area) strongly suggests the presence of either another source downgradient of the Facility, or a preferential flow path (e.g., a paleochannel or other linear high transmissivity feature) connecting the Facility subsurface and the downgradient wells. In the absence of another source or such a pathway, the distal off-site concentrations would be expected to have declined by one or two orders of magnitude over this travel distance.

Remedy-Related Data Gaps (also see Data Gaps 5 and 7 Above):

8. ***Increased detail on distribution of organic compounds in soils and alluvial groundwater within the process areas, to better define the source areas for these compounds.***

9. ***Further delineation of the organic compound plumes in the perched zone and alluvial aquifers. For the alluvial aquifer, this would specifically include the areas downgradient (south, southeast, east) and upgradient (north) of the process areas, both on and off site.***

Methylene Chloride and Acetone

Methylene chloride was detected in soil across the site at concentrations ranging up to about 35 mg/kg (Figure 23). At these levels, this could represent non-point source type releases, or could be an artifact of laboratory analysis (methylene chloride is routinely observed at these concentrations as a laboratory contaminant). Higher concentrations, indicative of likely point source releases, were observed in a few scattered locations, with a locus of these elevated concentrations in the western part of the process area and the former surface impoundments. This area also includes the location of the Facility laboratory, which reportedly performed gas chromatographic analysis, and therefore likely used methylene chloride as an extractant.

There is evidence of methylene chloride in the perched zone groundwater, although some elevated concentrations in soils are present at roughly the depth of the perched zone in the vicinity of the former surface impoundments (Figure 12). Perched groundwater under the west process area and former surface impoundments also exhibits methylene chloride impact, with a detection of 140,000 µg/l at 2MW-1. Alluvial aquifer groundwater under the rail loading area

and north process area also exhibits impact from this compound, although at lower concentrations (maximum detection is 460 µg/l, 4MW-2) (Figure 13). Based on existing data, methylene chloride impact to perched zone and alluvial aquifer groundwater does not appear to be areally extensive. It is, rather, localized to the vicinity of the suspected sources.

Similar to methylene chloride, acetone was observed in soil samples from throughout the site. Concentrations in these samples were consistently in a range of about 0.84 to 21 µg/kg. The sole exception was a sample collected from 10 to 12 feet in the vicinity of the drum vault (9SB-22), with a concentration of 200 mg/kg. Acetone was not observed in site groundwater.

Acetone is also a common sample contaminant, and is routinely observed at these concentrations as an artifact of both field and laboratory procedures. The distribution of this compound does not suggest a point source release of this compound.

Remedy-Related Data Gaps (also see Data Gaps 8 and 9 Above):

10. ***Perform data validation of acetone and methylene chloride detections in historic soil data.***

1,2-Dichlorobenzene (1,2-DCB)

This compound was detected in soils at low concentrations at a small number of locations along the railroad loading/unloading area and at the former surface impoundments (Figure 21). Similar to 1,2-DCA, however, it is present in elevated concentrations in perched zone groundwater at the southwest corner of the process area (Figure 8), and in an alluvial aquifer plume that extends from the north process area and rail loading area to monitoring wells approximately 2,000 feet southeast of the Facility (Figure 9).

These data indicate the 1,2-DCB is likely originating from a source in the central portion of the Facility. Existing soil and groundwater data does not allow for the identification of the specific source. As with 1,2-DCA, the extent of 1,2-DCB in perched zone and alluvial groundwater has not been fully delineated.

Remedy-Related Data Gaps (also see Data Gaps 5,7, 8, and 9 Above)

Dinoseb

Dinoseb is present in shallow soils throughout the Facility (Figure 19). Elevated concentrations (above the risk-based screening level of 680 mg/kg) are observed in scattered locations in the process and rail loading areas, with the highest observed concentration being 29,000 mg/kg at the drum vault area at location 9SB-5. This is consistent with historical site observations of yellow staining to surface soils, which is reportedly attributed to dinoseb. In general, where vertical soil sampling data were available, dinoseb extends down to 15 feet bgs at location 4GB-3 at a concentration of 1700 mg/kg, and in sampling at the dinoseb disposal ponds (a.k.a. Site 9) in the central processing area (e.g., sample 9SB-5).

Dinoseb was not detected in perched groundwater in the most current sampling event (July 2001) (Figure 10). In alluvial aquifer groundwater, however, it was observed at elevated concentrations in the north central process area (54,000 µg/l at 4MW-2), with much lower concentrations extending across the Facility area north of Industrial Park Road (Figure 11). This distribution indicates the presence of a source, where dinoseb impact extends to groundwater, somewhere in the north or central parts of the process area.

Methoxychlor

There have been low detections of methoxychlor in soil at scattered locations across the Facility (Figure 18). The highest soil concentrations have been observed in surface soils in the rail loading area and in subsurface soils at the former surface impoundments. Many of the subsurface soil detections at the former surface impoundments are at the depth of the perched zone, suggesting there is likely some impact to this zone. During the 2001 groundwater sampling, however, methoxychlor was not observed in perched zone groundwater, and was only detected in alluvial aquifer groundwater in a single well (2MW-3), and at the low concentration of 0.13 µg/l.

Dieldrin

Low concentrations of dieldrin were detected in soil samples collected across the Facility (Figure 24), including the process areas, the rail loading area, the wastewater treatment ponds, and in storm water ditches. There was no particular locus of elevated concentrations, however, that suggest an individual or specific source for this compound. Dieldrin was not observed in the most recent groundwater sampling, except for a low detection (0.24 µg/l) at perched zone well 1MW-3, south of the wastewater treatment ponds. This does not suggest the presence of an on-going and significant source of dieldrin to groundwater.

5.4. WASTE DISPOSAL

There are three areas of former on-site waste disposal at the Facility that are still known to be present:

- The drum vault, in the north central process area.
- The dinoseb disposal ponds, also in the north central process area.
- The former surface impoundments, in the west area of the Facility.

Although the former surface impoundments are likely contributing moderate levels of chemical impact in the perched zone and alluvial aquifer, the highest concentrations of dissolved constituents, including the apparent source of dinoseb in groundwater, appear to be emanating from the vicinity of the drum vault and dinoseb disposal ponds. These features have not yet been fully evaluated or characterized.

Remedy-Related Data Gaps (also see Data Gaps 8 and 9 Above):

11. Character of the wastes, drums, and containment at the drum vault.

12. Character of the wastes and underlying soils within the dinoseb disposal areas.

5.5. EXPOSURE PATHWAYS

Based on the current distribution of soil and groundwater impact described above, and the fact that the Facility is not currently operational, the exposure routes that are potentially present are:

- Exposure to surface soils and equipment surfaces by on-site workers (security personnel) and trespassers.
- Exposure to alluvial aquifer groundwater by agricultural workers (irrigation use).

There is no known groundwater use from the perched zone, and no known residential use of alluvial aquifer groundwater downgradient of the facility. Although they cannot be categorically eliminated for any evaluation of risk at this time, it appears unlikely that these exposure routes will be complete.

Remedy-Related Data Gaps (also see Data Gaps 5 and 7 Above):

13. ***Current and complete groundwater use, particularly residential, in the vicinity of the Facility.***

14. ***Delineation of the organic compound plumes in the perched zone and alluvial aquifers. For the alluvial aquifer, this would specifically include the areas downgradient (south, southeast, east) and upgradient (north) of the process areas, both on and off site.***

5.6. OTHER INFORMATION

Detailed information on the construction and location of certain wells is unavailable. Construction information of the off-site wells OFFM-W1 through OFFMW-4 is available, although survey data is not. As the project goes forward, this information will be needed to support the detailed evaluation of groundwater data.

Remedy-Related Data Gaps (also see Data Gaps 5 and 7 Above):

15. ***Information on monitoring well locations (e.g., surveyed coordinates) and screened intervals.***

TABLES

Table 1

Historical Groundwater Data

TABLE 1
HISTORICAL GROUNDWATER DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Site 1 Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	1GB-1 (36') 12/20/1994 (ug/l)	1GB-2 (42') 12/20/1994 (ug/l)	1GB-2 (61_5') 12/21/1994 (ug/l)	1GB-2 (80') 12/22/1994 (ug/l)	1GB-2 (102') 12/23/1994 (ug/l)	1GB-3 (37_5') 12/21/1994 (ug/l)	1GB-3 (60') 12/23/1994 (ug/l)	1GB-3 (80') 12/23/1994 (ug/l)	1GB-3 (100') 12/23/1994 (ug/l)	1GB-4 (40') 1/5/1995 (ug/l)	1GB-4 (40') Dup 1/5/1995 (ug/l)	1GB-4 (60') 1/9/1995 (ug/l)	1GB-4 (80') 1/9/1995 (ug/l)	1GB-4 (107') 1/9/1995 (ug/l)	1GB-7 (100') 9/27/1995 (ug/l)
Metals																
Lead	15	**47**	**490**	**96**	**30**	**280**	**120**	**41**	**57**	**64**	**61**	**66**	**160**	**77**	**300**	ND
Arsenic	0.045	**440**	**120**	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	ND
Barium	7300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	26000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	0.63	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	180	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	180	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides/Polychlorinated Biphenyls																
4,4'-DDD	0.28	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	ND	ND	ND	ND	ND	ND
4,4'-DDE	0.2	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	ND	ND	ND	ND	ND	ND
4,4'-DDT	0.2	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	ND	ND	ND	ND	ND	ND
Aldrin	0.004	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	ND	ND	ND	ND	ND	ND
Alpha-BHC	0.011	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	ND	ND	ND	ND	ND	ND
Aroclor-1016	0.96	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	ND	ND	ND	ND	ND	ND
Aroclor-1221	0.034	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	ND	ND	ND	ND	ND	ND
Aroclor-1232	0.034	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	ND	ND	ND	ND	ND	ND
Aroclor-1242	0.034	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	ND	ND	ND	ND	ND	ND
Aroclor-1248	0.034	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	ND	ND	ND	ND	ND	ND
Aroclor-1254	0.034	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	ND	ND	ND	ND	ND	ND
Aroclor-1260	0.034	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	ND	ND	ND	ND	ND	ND
Beta-BHC	0.037	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	ND	ND	ND	ND	ND	ND
Chlordane	0.19	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	ND	ND	ND	ND	ND	ND
Dieldrin	0.0042	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND	ND	ND	ND	ND
Endrin	11	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	ND	ND	ND	ND	ND	ND
gamma-BHC (Lindane)	0.052	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	ND	ND	ND	ND	ND	ND
Heptachlor	0.015	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	0.0074	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	ND	ND	ND	ND	ND	ND
Methoxychlor	180	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	ND	ND	ND	ND	ND	ND
Toxaphene	0.061	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	ND	ND	ND	ND	ND	ND
Semivolatile Organic Compounds																
1,2,4-Trichlorobenzene	8.2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
1,2-Dichlorobenzene	49	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
1,3-Dichlorobenzene	15	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
1,4-Dichlorobenzene	0.47	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
2,4,5-Trichlorophenol	3700	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND

Notes:
ug/l = micrograms per liter
GB - Direct Push Technique Groundwater Sample
MW - Monitoring Well Groundwater Sample
MSSL - Medium Specific Screening Levels
ND - No Data Available
<10 - Not detected, results below detection or reporting limit
- Not detected; detection/reporting limit exceeds the Tap Water MSSL
BOLD - Analyte is detected
- Detection exceeds the Region 6 Tap Water MSSL
NA - No MSSL available

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Semivolatile Organic Compounds																
2,4,6-Trichlorophenol	6.1	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
2,4-Dichlorophenol	110	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
2,4-Dimethylphenol	730	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
2,4-Dinitrophenol	73	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	ND
2,4-Dinitrotoluene	73	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
2,6-Dinitrotoluene	37	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
2-Chloronaphthalene	490	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
2-Chlorophenol	30	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
2-Methylphenol (o-Cresol)	1800	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
2-Nitroaniline	110	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	ND
3,3'-Dichlorobenzidine	0.15	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	ND
4-Chloroaniline	150	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	ND
4-Methylphenol (p-Cresol)	180	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
4-Nitrophenol	290	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	ND
Acenaphthene	370	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Aniline	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	1800	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Benzo(a)anthracene	0.03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Benzo(a)pyrene	0.003	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Benzo(b)fluoranthene	0.03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Benzo(k)fluoranthene	0.3	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Benzoic acid	150000	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	ND
Benzyl alcohol	11000	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	ND
bis(2-Chloroethyl)ether	0.0098	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
bis(2-Chloroisopropyl)ether	0.27	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
bis(2-Ethylhexyl)phthalate (BEHP)	4.8	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Butylbenzylphthalate	7300	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Chrysene	3	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Dibenz(a,h)anthracene	0.003	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Dibenzofuran	12	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Diethylphthalate	29000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Dimethylphthalate	370000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Di-n-butylphthalate	3700	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Di-n-octylphthalate	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Dinoseb	37	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ND
Fluoranthene	1500	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Fluorene	240	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Hexachlorobenzene	0.042	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND

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CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Site 1 Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	1GB-1 (36') 12/20/1994 (ug/l)	1GB-2 (42') 12/20/1994 (ug/l)	1GB-2 (61_5') 12/21/1994 (ug/l)	1GB-2 (80') 12/22/1994 (ug/l)	1GB-2 (102') 12/23/1994 (ug/l)	1GB-3 (37_5') 12/21/1994 (ug/l)	1GB-3 (60') 12/23/1994 (ug/l)	1GB-3 (80') 12/23/1994 (ug/l)	1GB-3 (100') 12/23/1994 (ug/l)	1GB-4 (40') 1/5/1995 (ug/l)	1GB-4 (40') Dup 1/5/1995 (ug/l)	1GB-4 (60') 1/9/1995 (ug/l)	1GB-4 (80') 1/9/1995 (ug/l)	1GB-4 (107') 1/9/1995 (ug/l)	1GB-7 (100') 9/27/1995 (ug/l)
Semivolatile Organic Compounds																
Hexachlorobutadiene	0.86	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Hexachlorocyclopentadiene	220	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Hexachloroethane	4.8	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Indeno(1,2,3-cd)pyrene	0.03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Isophorone	71	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Naphthalene	6.2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Nitrobenzene	3.4	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
N-Nitroso-di-n-propylamine	0.0096	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
N-Nitrosodiphenylamine	14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Pentachlorophenol	0.56	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	ND
Phenol	11000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Propanil	180	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	180	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND
Volatile Organic Compounds																
1,1,1-Trichloroethane	840	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
1,1,2,2-Tetrachloroethane	0.055	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
1,1,2-Trichloroethane	0.2	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
1,1-Dichloroethane	1200	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
1,1-Dichloroethene	340	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
1,2-Dibromoethane	0.0056	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<10
1,2-Dichloroethane	1200	<5	<5	<5	**9.1**	**9.4**	<5	<5	**5.9**	**63**	<5	<5	<5	<5	<5	**150**
1,2-Dichloropropane	0.17	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
1,3-Dichlorobenzene	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<10
1,4-Dichlorobenzene	0.47	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<10
2-Butanone (MEK)	7100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<10
4-Methyl-2-Pentanone (MIBK)	2000	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<10
Acetone	5500	<100	<100	<100	<100	<100	<100	<100	<100	**620**	<100	<100	<100	**170**	**790**	<25
Benzene	0.35	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
Bromobenzene	23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	0.18	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
Bromoform	8.5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
Bromomethane	8.7	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbon disulfide	1000	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<10
Carbon tetrachloride	0.17	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
Chlorobenzene	91	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
Chloroethane	3.9	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroform	0.17	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10

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HELENA-WEST HELENA, ARKANSAS

Site 1 Groundwater Results

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Volatile Organic Compounds																
Chloromethane	2.1	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,2-Dichloroethene	61	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<10
Dibromochloromethane	0.13	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
Dibromomethane	61	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1300	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
Methylene chloride	4.3	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<10
o-Xylene	1400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<10
Styrene	1600	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
Tetrachloroethene	0.11	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
Toluene	2300	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
trans-1,2-Dichloroethene	110	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
Trichloroethene	0.028	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
Trichlorofluoromethane	1300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<10
Vinyl acetate	410	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<10
Vinyl chloride	0.015	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Xylene (total)	200	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
Wet Chemistry Analytes																
Ammonia (as N)	210	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrate (as N)	10000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Site 1 Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	1GB-12 (80') 10/19/1995 (ug/l)	1GB-12 (100') 10/19/1995 (ug/l)	1GB-12 (120') 11/3/1995 (ug/l)	1MW-1 9/14/1993 (ug/l)	1MW-1 11/29/1994 (ug/l)	1MW-1 4/11/2001 (ug/l)	1MW-1 7/25/2001 (ug/l)	1MW-2 9/14/1993 (ug/l)	1MW-2 11/29/1994 (ug/l)	1MW-2 4/11/2001 (ug/l)	1MW-2 7/25/2001 (ug/l)	1MW-3 9/14/1993 (ug/l)	1MW-3 DUP 9/14/1993 (ug/l)	1MW-3 11/30/1994 (ug/l)	1MW-3 4/11/2001 (ug/l)	1MW-3 7/25/2001 (ug/l)
Metals																	
Lead	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.8	ND	ND
Arsenic	0.045	ND	ND	ND	**38.5**	<50	<3.3	<1.1	**21.8**	<50	<3.3	<0.75	**44.6**	**49.3**	<50	<3.3	<0.75
Barium	7300	ND	ND	ND	923	ND	ND	ND	513	ND	ND	ND	639	955	ND	ND	ND
Cadmium	18	ND	ND	ND	<3	ND	ND	ND	<3	ND	ND	ND	<3	<3	ND	ND	ND
Chromium	NA	ND	ND	ND	81.4	ND	ND	ND	47.1	ND	ND	ND	80.8	113	ND	ND	ND
Iron	26000	ND	ND	ND	**109000**	ND	ND	ND	**53600**	ND	ND	ND	**107000**	**169000**	ND	ND	ND
Lead	15	ND	ND	ND	**41.1**	ND	ND	ND	**25.3**	ND	ND	ND	**38**	**48.9**	ND	ND	ND
Mercury	0.63	ND	ND	ND	<0.2	ND	ND	ND	<0.2	ND	ND	ND	<0.2	<0.2	ND	ND	ND
Selenium	180	ND	ND	ND	<5	ND	ND	ND	<5	ND	ND	ND	<5	<5	ND	ND	ND
Silver	180	ND	ND	ND	<3	ND	ND	ND	<3	ND	ND	ND	<3	<3	ND	ND	ND
Pesticides/Polychlorinated Biphenyls																	
4,4'-DDD	0.28	ND	ND	ND	<0.11	ND	<0.08	<0.08	<0.11	ND	<0.08	<0.08	<0.11	<0.11	<0.11	<0.08	<0.08
4,4'-DDE	0.2	ND	ND	ND	<0.04	ND	<0.08	<0.08	<0.04	ND	<0.08	<0.08	<0.04	<0.04	<0.04	<0.08	<0.08
4,4'-DDT	0.2	ND	ND	ND	<0.12	ND	<0.08	<0.08	<0.12	ND	<0.08	<0.08	<0.12	<0.12	<0.12	<0.08	<0.08
Aldrin	0.004	ND	ND	ND	<0.04	ND	<0.04	<0.04	<0.04	ND	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Alpha-BHC	0.011	ND	ND	ND	<0.03	ND	<0.04	<0.04	<0.03	ND	<0.04	<0.04	<0.03	<0.03	<0.03	**0.041**	<0.04
Aroclor-1016	0.96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.89	ND	ND
Aroclor-1221	0.034	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<2.7	ND	ND
Aroclor-1232	0.034	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.48	ND	ND
Aroclor-1242	0.034	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.65	ND	ND
Aroclor-1248	0.034	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<2.6	ND	ND
Aroclor-1254	0.034	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1.2	ND	ND
Aroclor-1260	0.034	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.36	ND	ND
Beta-BHC	0.037	ND	ND	ND	<0.06	ND	<0.04	<0.04	<0.06	ND	<0.04	<0.04	<0.06	<0.06	<0.06	<0.04	**0.087**
Chlordane	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.14	ND	ND
Dieldrin	0.0042	ND	ND	ND	<0.02	ND	<0.08	<0.08	<0.02	ND	<0.08	<0.08	<0.02	<0.02	<0.02	<0.08	**0.24**
Endrin	11	ND	ND	ND	<0.06	ND	<0.08	<0.08	<0.06	ND	<0.08	<0.08	<0.06	<0.06	<0.06	<0.08	<0.08
gamma-BHC (Lindane)	0.052	ND	ND	ND	<0.04	ND	<0.04	<0.04	<0.04	ND	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Heptachlor	0.015	ND	ND	ND	<0.03	ND	<0.054	<0.04	<0.03	ND	<0.04	<0.04	<0.03	<0.03	<0.03	<0.04	<0.04
Heptachlor Epoxide	0.0074	ND	ND	ND	<0.2	ND	<0.04	<0.04	<0.2	ND	<0.04	<0.04	<0.2	<0.2	<0.83	<0.04	<0.04
Methoxychlor	180	ND	ND	ND	<1.8	ND	<0.38	<0.38	<1.8	ND	<0.38	<0.38	<1.8	<1.8	<1.8	<0.38	<0.38
Toxaphene	0.061	ND	ND	ND	<2.4	ND	<2.5	<2.5	<2.4	ND	<2.5	<2.5	<2.4	<2.4	<2.4	<2.5	<2.5
Semivolatile Organic Compounds																	
1,2,4-Trichlorobenzene	8.2	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	49	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	**31**	**30**	**31**	<10	<10
1,3-Dichlorobenzene	15	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	**4**	**3**	<10	<10	<10
1,4-Dichlorobenzene	0.47	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	**4**	**4**	<10	<10	<10
2,4,5-Trichlorophenol	3700	ND	ND	ND	<50	<10	<25	<25	<50	<10	<25	<25	<50	<50	<10	<25	<25

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Semivolatile Organic Compounds																	
2,4,6-Trichlorophenol	6.1	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4-Dichlorophenol	110	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4-Dimethylphenol	730	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4-Dinitrophenol	73	ND	ND	ND	<50	<50	<25	<25	<50	<50	<25	<25	<50	<50	<50	<25	<25
2,4-Dinitrotoluene	73	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,6-Dinitrotoluene	37	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chloronaphthalene	490	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chlorophenol	30	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Methylphenol (o-Cresol)	1800	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Nitroaniline	110	ND	ND	ND	<50	<50	<25	<25	<50	<50	<25	<25	<50	<50	<50	<25	<25
3,3'-Dichlorobenzidine	0.15	ND	ND	ND	<20	<20	<10	<10	<20	<20	<10	<10	<20	<20	<20	<10	<10
4-Chloroaniline	150	ND	ND	ND	<10	<20	<10	<10	<10	<20	<10	<10	**76**	**160**	**100**	<10	<10
4-Methylphenol (p-Cresol)	180	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-Nitrophenol	290	ND	ND	ND	<50	<50	<25	<25	<50	<50	<25	<25	<50	<50	<50	<25	<25
Acenaphthene	370	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Aniline	12	ND	ND	ND	ND	ND	<10	<10	ND	ND	<10	<10	ND	ND	ND	<10	<10
Anthracene	1800	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzo(a)anthracene	0.03	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzo(a)pyrene	0.003	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzo(b)fluoranthene	0.03	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzo(k)fluoranthene	0.3	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzoic acid	150000	ND	ND	ND	<50	<50	<25	<25	<50	<50	<25	<25	<50	<50	<50	<25	<25
Benzyl alcohol	11000	ND	ND	ND	<10	<20	<10	<10	<10	<20	<10	<10	<10	<10	<20	<10	<10
bis(2-Chloroethyl)ether	0.0098	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
bis(2-Chloroisopropyl)ether	0.27	ND	ND	ND	<10	<10	<10	ND	<10	<10	<10	ND	<10	<10	<10	<10	ND
bis(2-Ethylhexyl)phthalate (BEHP)	4.8	ND	ND	ND	<10	<10	<10	<29	<10	<10	<10	<10	<10	<10	<10	**35**	<10
Butylbenzylphthalate	7300	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chrysene	3	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibenz(a,h)anthracene	0.003	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibenzofuran	12	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Diethylphthalate	29000	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dimethylphthalate	370000	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Di-n-butylphthalate	3700	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	**2**	**1**	<10	<10	<10
Di-n-octylphthalate	NA	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dinoseb	37	ND	ND	ND	<50	<7	<10	<10	<50	<7	<10	<10	<50	<50	<7	<10	<10
Fluoranthene	1500	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Fluorene	240	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobenzene	0.042	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

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CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Site 1 Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	1GB-12 (80') 10/19/1995 (ug/l)	1GB-12 (100') 10/19/1995 (ug/l)	1GB-12 (120') 11/3/1995 (ug/l)	1MW-1 9/14/1993 (ug/l)	1MW-1 11/29/1994 (ug/l)	1MW-1 4/11/2001 (ug/l)	1MW-1 7/25/2001 (ug/l)	1MW-2 9/14/1993 (ug/l)	1MW-2 11/29/1994 (ug/l)	1MW-2 4/11/2001 (ug/l)	1MW-2 7/25/2001 (ug/l)	1MW-3 9/14/1993 (ug/l)	1MW-3 DUP 9/14/1993 (ug/l)	1MW-3 11/30/1994 (ug/l)	1MW-3 4/11/2001 (ug/l)	1MW-3 7/25/2001 (ug/l)
Semivolatile Organic Compounds																	
Hexachlorobutadiene	0.86	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorocyclopentadiene	220	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachloroethane	4.8	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Indeno(1,2,3-cd)pyrene	0.03	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Isophorone	71	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	6.2	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Nitrobenzene	3.4	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-Nitroso-di-n-propylamine	0.0096	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-Nitrosodiphenylamine	14	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Pentachlorophenol	0.56	ND	ND	ND	<50	<50	<25	<25	<50	<50	<25	<25	<50	<50	<50	<25	<25
Phenol	11000	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Propanil	180	ND	ND	ND	<10	ND	<10	<10	<10	ND	<10	<10	<10	**10**	ND	<10	<10
Pyrene	180	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Volatile Organic Compounds																	
1,1,1-Trichloroethane	840	<10	<10	<10	<5	<5	<1	<1	<5	<5	<1	<1	<100	<100	<5	<1	<1
1,1,2,2-Tetrachloroethane	0.055	<10	<10	<10	<5	<5	<1	<1	<5	<5	<1	<1	<100	<100	<5	<1	<1
1,1,2-Trichloroethane	0.2	<10	<10	<10	<5	<5	<1	<1	<5	<5	<1	<1	<100	<100	<5	<1	<1
1,1-Dichloroethane	1200	<10	<10	<10	<5	<5	<1	<1	<5	<5	<1	<1	<100	<100	<5	<1	<1
1,1-Dichloroethene	340	<10	<10	<10	<5	<5	<1	<1	<5	<5	<1	<1	<100	<100	<5	<1	<1
1,2-Dibromoethane	0.0056	ND	ND	ND	ND	ND	<1	<1	ND	ND	<1	<1	ND	ND	ND	<1	<1
1,2-Dichlorobenzene	49	<10	<10	<10	ND	ND	<1	<1	ND	ND	<1	<1	ND	ND	ND	<1	**2**
1,2-Dichloroethane	1200	<10	<10	<10	**19**	**14**	<1	**0.2**	<5	<5	<1	**0.8**	**2700**	**2500**	**1100**	**3**	**10**
1,2-Dichloropropane	0.17	<10	<10	<10	<5	<5	<1	<1	<5	<5	<1	<1	<100	<100	<5	<1	<1
1,3-Dichlorobenzene	15	<10	<10	<10	ND	ND	<1	<1	ND	ND	<1	<1	ND	ND	ND	<1	**0.5**
1,4-Dichlorobenzene	0.47	<10	<10	<10	ND	ND	<1	<1	ND	ND	<1	<1	ND	ND	ND	<1	**1**
2-Butanone (MEK)	7100	<10	<10	<10	<10	<100	<5	<5	<10	<100	<5	<5	<200	<200	<100	<5	<5
4-Methyl-2-Pentanone (MIBK)	2000	<10	<10	<10	<50	<50	<5	<5	<50	<50	<5	<5	<1000	<1000	<50	<5	<5
Acetone	5500	<25	<25	<25	<10	<100	<5	<5	<10	<100	<6	<5	<200	<200	<100	<5	<10
Benzene	0.35	<10	<10	<10	<5	<5	<1	<1	<5	<5	<1	<1	<100	<100	<5	<1	<1
Bromobenzene	23	ND	ND	ND	ND	ND	<1	<1	ND	ND	<1	<1	ND	ND	ND	<1	<1
Bromodichloromethane	0.18	<10	<10	<10	<5	<5	<1	<1	<5	<5	<1	<1	<100	<100	<5	<1	<1
Bromoform	8.5	<10	<10	<10	<5	<5	<1	<1	<5	<5	<1	<1	<100	<100	<5	<1	<1
Bromomethane	8.7	<10	<10	<10	<10	<10	<1	<1	<10	<10	<1	<1	<200	<200	<10	<1	<1
Carbon disulfide	1000	<10	<10	<10	<5	<100	<1	<1	<5	<100	<1	<1	<100	<100	<100	<1	<1
Carbon tetrachloride	0.17	<10	<10	<10	<5	<5	<1	<1	<5	<5	<1	<1	<100	<100	<5	<1	<1
Chlorobenzene	91	<10	<10	<10	<5	<5	<1	<1	<5	<5	<1	<1	<100	<100	**11**	<1	<1
Chloroethane	3.9	<10	<10	<10	<10	<10	<1	<1	<10	<10	<1	<1	<200	<200	<10	<1	<1
Chloroform	0.17	<10	<10	<10	**2**	<5	<1	<1	<5	<5	<1	<1	<100	<100	<5	<1	<1

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Volatile Organic Compounds																	
Chloromethane	2.1	<10	<10	<10	<10	<10	<1	<1	<10	<10	<1	<1	<200	<200	<10	<1	<1
cis-1,2-Dichloroethene	61	<10	<10	<10	ND	ND	<1	<1	ND	ND	<1	<1	ND	ND	ND	<1	<1
Dibromochloromethane	0.13	<10	<10	<10	<5	<5	<1	<1	<5	<5	<1	<1	<100	<100	<5	<1	<1
Dibromomethane	61	ND	ND	ND	ND	ND	<1	<1	ND	ND	<1	<1	ND	ND	ND	<1	<1
Ethylbenzene	1300	<10	<10	<10	<5	<5	<1	<1	<5	<5	<1	<1	<100	<100	<5	<1	<1
Methylene chloride	4.3	<10	<10	<10	<5	<20	<2	<3	<5	<20	<2	<2	<100	<100	<20	<2	<5
o-Xylene	1400	<10	<10	<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	1600	<10	<10	<10	<5	<5	<1	<1	<5	<5	<1	<1	<100	<100	<5	<1	<1
Tetrachloroethene	0.11	<10	<10	<10	<5	<5	<1	<1	<5	<5	<1	<1	<100	<100	<5	<1	<1
Toluene	2300	<10	<10	<10	<5	<5	<1	<1	<5	<5	<1	<1	<100	<100	<5	<1	<1
trans-1,2-Dichloroethene	110	<10	<10	<10		<5	<1	<1	ND	<5	<1	<1	ND	ND	ND	<1	<1
Trichloroethene	0.028	<10	<10	<10	<5	<5	<1	<1	<5	<5	<1	<1	<100	<100	<5	<1	<1
Trichlorofluoromethane	1300	<10	<10	<10	ND	ND	<1	<1	ND	ND	<1	<1	ND	ND	ND	<1	<1
Vinyl acetate	410	<10	<10	<10	<5	<50	<1	<1	<5	<50	<1	<1	<100	<100	<50	<1	<1
Vinyl chloride	0.015	<10	<10	<10	<5	<10	<1	<1	<5	<10	<1	<1	<100	<100	<10	<1	<1
Xylene (total)	200	<10	<10	<10	<5	<5	<1	<1	<5	<5	<1	<1	<100	<100	<5	<1	<1
Wet Chemistry Analytes																	
Ammonia (as N)	210	ND	ND	ND	<100	ND	ND	ND	<100	ND	ND	ND	<100	<100	ND	ND	ND
Nitrate (as N)	10000	ND	ND	ND	5300	ND	ND	ND	900	ND	ND	ND	<20	<20	ND	ND	ND

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Metals																
Lead	15	ND	11	ND	ND	ND	5.2	ND	ND	ND	2.9	ND	ND	<1	ND	ND
Arsenic	0.045	**13.5**	<50	<3.3	<2.6	**20.1**	<50	<3.3	<1.2	**23.6**	<50	<3.3	**6.5**	<50	<3.3	<0.99
Barium	7300	441	ND	ND	ND	324	ND	ND	ND	553	ND	ND	ND	ND	ND	ND
Cadmium	18	<3	ND	ND	ND	<3	ND	ND	ND	<2	ND	ND	ND	ND	ND	ND
Chromium	NA	21.2	ND	ND	ND	47.5	ND	ND	ND	12.7	ND	ND	ND	ND	ND	ND
Iron	26000	22500	ND	ND	ND	**42300**	ND	ND	ND	18300	ND	ND	ND	ND	ND	ND
Lead	15	10.8	ND	ND	ND	**16.1**	ND	ND	ND	**15.9**	ND	ND	ND	ND	ND	ND
Mercury	0.63	<0.2	ND	ND	ND	<0.2	ND	ND	ND	<0.2	ND	ND	ND	ND	ND	ND
Selenium	180	<5	ND	ND	ND	<5	ND	ND	ND	5	ND	ND	ND	ND	ND	ND
Silver	180	<3	ND	ND	ND	<3	ND	ND	ND	<3	ND	ND	ND	ND	ND	ND
Pesticides/Polychlorinated Biphenyls																
4,4'-DDD	0.28	<0.11	<0.11	<0.08	<0.08	<0.11	<0.11	<0.08	<0.08	<0.11	<0.11	<0.08	<0.08	ND	<0.08	<0.08
4,4'-DDE	0.2	<0.04	<0.04	<0.08	<0.08	<0.04	<0.04	<0.08	<0.08	<0.04	<0.04	<0.08	<0.08	ND	<0.08	<0.08
4,4'-DDT	0.2	<0.12	<0.12	<0.08	<0.08	<0.12	<0.12	<0.08	<0.08	<0.12	<0.12	<0.08	<0.08	ND	<0.08	<0.08
Aldrin	0.004	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	ND	<0.04	<0.04
Alpha-BHC	0.011	<0.03	<0.03	**0.088**	<0.04	<0.03	<0.03	<0.04	<0.04	<0.03	<0.03	<0.04	<0.04	ND	<0.04	<0.04
Aroclor-1016	0.96	ND	<0.89	ND	ND	ND	<0.89	ND	ND	ND	<0.89	ND	ND	ND	ND	ND
Aroclor-1221	0.034	ND	<2.7	ND	ND	ND	<2.7	ND	ND	ND	<2.7	ND	ND	ND	ND	ND
Aroclor-1232	0.034	ND	<0.48	ND	ND	ND	<0.48	ND	ND	ND	<0.48	ND	ND	ND	ND	ND
Aroclor-1242	0.034	ND	<0.65	ND	ND	ND	<0.65	ND	ND	ND	<0.65	ND	ND	ND	ND	ND
Aroclor-1248	0.034	ND	<2.6	ND	ND	ND	<2.6	ND	ND	ND	<2.6	ND	ND	ND	ND	ND
Aroclor-1254	0.034	ND	<1.2	ND	ND	ND	<1.2	ND	ND	ND	<1.2	ND	ND	ND	ND	ND
Aroclor-1260	0.034	ND	<0.36	ND	ND	ND	<0.36	ND	ND	ND	<0.36	ND	ND	ND	ND	ND
Beta-BHC	0.037	<0.06	<0.06	<0.04	<0.04	<0.06	<0.06	<0.04	<0.04	<0.06	<0.06	<0.04	<0.04	ND	<0.04	<0.04
Chlordane	0.19	ND	<0.14	ND	ND	ND	<0.14	ND	ND	ND	<0.14	ND	ND	ND	ND	ND
Dieldrin	0.0042	<0.02	<0.02	<0.08	<0.08	<0.02	<0.02	<0.08	<0.08	<0.02	<0.02	<0.08	<0.08	ND	<0.08	<0.08
Endrin	11	<0.06	<0.06	<0.08	<0.08	<0.06	<0.06	<0.08	<0.08	<0.06	<0.06	<0.08	<0.08	ND	<0.08	<0.08
gamma-BHC (Lindane)	0.052	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	ND	<0.04	<0.04
Heptachlor	0.015	<0.03	<0.03	<0.04	<0.04	<0.03	<0.03	<0.04	<0.04	<0.03	<0.03	<0.04	<0.04	ND	<0.04	<0.04
Heptachlor Epoxide	0.0074	<0.2	<0.83	<0.04	<0.04	<0.2	<0.83	<0.04	<0.04	<0.2	<0.83	<0.04	<0.04	ND	<0.04	<0.04
Methoxychlor	180	<1.8	<1.8	<0.38	<0.38	<1.8	<1.8	<0.38	<0.38	<1.8	<1.8	<0.38	<0.38	ND	<0.38	<0.38
Toxaphene	0.061	<2.4	<2.4	<2.5	<2.5	<2.4	<2.4	<2.5	<2.5	<2.4	<2.4	<2.5	<2.5	ND	<2.5	<2.5
Semivolatile Organic Compounds																
1,2,4-Trichlorobenzene	8.2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	49	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	15	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	0.47	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4,5-Trichlorophenol	3700	<50	<10	<25	<25	<50	<10	<25	<25	<50	<10	<25	<25	<10	<25	<25

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CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Site 1 Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	1MW-4 9/15/1993 (ug/l)	1MW-4 11/30/1994 (ug/l)	1MW-4 4/11/2001 (ug/l)	1MW-4 7/25/2001 (ug/l)	1MW-5 9/15/1993 (ug/l)	1MW-5 11/30/1994 (ug/l)	1MW-5 4/12/2001 (ug/l)	1MW-5 7/25/2001 (ug/l)	1MW-6 9/29/1993 (ug/l)	1MW-6 11/30/1994 (ug/l)	1MW-6 4/11/2001 (ug/l)	1MW-6 7/25/2001 (ug/l)	1MW-7 1/13/1995 (ug/l)	1MW-7 4/11/2001 (ug/l)	1MW-7 7/25/2001 (ug/l)
Semivolatile Organic Compounds																
2,4,6-Trichlorophenol	6.1	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4-Dichlorophenol	110	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4-Dimethylphenol	730	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4-Dinitrophenol	73	<50	<50	<25	<25	<50	<50	<25	<25	<50	<50	<25	<25	<50	<25	<25
2,4-Dinitrotoluene	73	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,6-Dinitrotoluene	37	<10	<10	<10	<10	**320**	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chloronaphthalene	490	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chlorophenol	30	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Methylphenol (o-Cresol)	1800	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Nitroaniline	110	<50	<50	<25	<25	<50	<50	<25	<25	<50	<50	<25	<25	<50	<25	<25
3,3'-Dichlorobenzidine	0.15	<20	<20	<10	<10	<20	<20	<10	<10	<20	<20	<10	<10	<20	<10	<10
4-Chloroaniline	150	**1**	<20	<10	<10	<10	<20	<10	<10	<10	<20	<10	<10	<20	<10	<10
4-Methylphenol (p-Cresol)	180	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-Nitrophenol	290	<50	<50	<25	<25	<50	<50	<25	<25	<50	<50	<25	<25	<50	<25	<25
Acenaphthene	370	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Aniline	12	ND	ND	<10	<10	ND	ND	<10	<10	ND	ND	<10	<10	ND	<10	<10
Anthracene	1800	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzo(a)anthracene	0.03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzo(a)pyrene	0.003	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzo(b)fluoranthene	0.03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzo(k)fluoranthene	0.3	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzoic acid	150000	<50	<50	**8**	<25	<50	<50	**7**	<25	**11**	<50	**8**	<25	<50	<25	<25
Benzyl alcohol	11000	<10	<20	<10	<10	<10	<20	<10	<10	<10	<20	<10	<10	<20	<10	<10
bis(2-Chloroethyl)ether	0.0098	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
bis(2-Chloroisopropyl)ether	0.27	<10	<10	<10		<10	<10	<10	ND	<10	<10	<10	ND	<10	<10	ND
bis(2-Ethylhexyl)phthalate (BEHP)	4.8	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	**14**	<10	<10	<10	<10
Butylbenzylphthalate	7300	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chrysene	3	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibenz(a,h)anthracene	0.003	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibenzofuran	12	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Diethylphthalate	29000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dimethylphthalate	370000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Di-n-butylphthalate	3700	<10	<10	<10	<10	**2**	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Di-n-octylphthalate	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dinoseb	37	<50	<7	<10	<10	<50	<7	<10	<10	<50	<7	<10	<10	<7	<10	<10
Fluoranthene	1500	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Fluorene	240	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobenzene	0.042	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

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CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Site 1 Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	1MW-4 9/15/1993 (ug/l)	1MW-4 11/30/1994 (ug/l)	1MW-4 4/11/2001 (ug/l)	1MW-4 7/25/2001 (ug/l)	1MW-5 9/15/1993 (ug/l)	1MW-5 11/30/1994 (ug/l)	1MW-5 4/12/2001 (ug/l)	1MW-5 7/25/2001 (ug/l)	1MW-6 9/29/1993 (ug/l)	1MW-6 11/30/1994 (ug/l)	1MW-6 4/11/2001 (ug/l)	1MW-6 7/25/2001 (ug/l)	1MW-7 1/13/1995 (ug/l)	1MW-7 4/11/2001 (ug/l)	1MW-7 7/25/2001 (ug/l)
Semivolatile Organic Compounds																
Hexachlorobutadiene	0.86	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorocyclopentadiene	220	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachloroethane	4.8	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Indeno(1,2,3-cd)pyrene	0.03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Isophorone	71	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	6.2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Nitrobenzene	3.4	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-Nitroso-di-n-propylamine	0.0096	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-Nitrosodiphenylamine	14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Pentachlorophenol	0.56	<50	<50	<25	<25	<50	<50	<25	<25	<50	<50	<25	<25	<50	<25	<25
Phenol	11000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Propanil	180	<10	ND	<10	<10	<10	ND	<10	<10	<10	ND	<10	<10	ND	<10	<10
Pyrene	180	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Volatile Organic Compounds																
1,1,1-Trichloroethane	840	<75	<5	<25	<1	<5	<5	<1	<1	<25	<5	<50	<1	<5	<1	<1
1,1,2,2-Tetrachloroethane	0.055	<75	<5	<25	<1	<5	<5	<1	<1	<25	<5	<50	<1	<5	<1	<1
1,1,2-Trichloroethane	0.2	<75	<5	<25	<1	<5	<5	<1	<1	<25	<5	<50	<1	<5	<1	<1
1,1-Dichloroethane	1200	<75	<5	<25	<1	<5	<5	<1	<1	<25	<5	<50	<1	<5	<1	<1
1,1-Dichloroethene	340	<75	<5	<25	<1	<5	<5	<1	<1	<25	<5	<50	<1	<5	<1	<1
1,2-Dibromoethane	0.0056	ND	ND	<25	<1	ND	ND	<1	<1	ND	ND	<50	<1	ND	<1	<1
1,2-Dichlorobenzene	49	ND	ND	<25	**0.9**	ND	ND	<1	<1	ND	ND	<50	<1	ND	<1	<1
1,2-Dichloroethane	1200	**1800**	**1100**	**540**	**110**	<5	<5	<1	<1	**640**	**1300**	**850**	**39**	**39**	<1	**0.2**
1,2-Dichloropropane	0.17	<75	<5	<25	<1	<5	<5	<1	<1	<25	<5	<50	<1	<5	<1	<1
1,3-Dichlorobenzene	15	ND	ND	<25	<1	ND	ND	<1	<1	ND	ND	<50	<1	ND	<1	<1
1,4-Dichlorobenzene	0.47	ND	ND	<25	**0.5**	ND	ND	<1	<1	ND	ND	<50	<1	ND	<1	<1
2-Butanone (MEK)	7100	<150	<100	<120	<5	<10	<100	<5	<5	<50	<100	<250	<5	<100	<5	<5
4-Methyl-2-Pentanone (MIBK)	2000	<750	<50	<120	<5	<50	<50	<5	<5	<250	<50	<250	<5	<50	<5	<5
Acetone	5500	<150	<100	<120	<5	<10	<100	<5	<13	<50	<100	<250	<7	<100	<5	<5
Benzene	0.35	<75	<5	<25	<1	<5	<5	<1	<1	<25	<5	<50	<1	<5	<1	<1
Bromobenzene	23	ND	ND	<25	<1	ND	ND	<1	<1	ND	ND	<50	<1	ND	<1	<1
Bromodichloromethane	0.18	<75	<5	<25	<1	<5	<5	<1	<1	<25	<5	<50	<1	<5	<1	<1
Bromoform	8.5	<75	<5	<25	<1	<5	<5	<1	<1	<25	<5	<50	<1	<5	<1	<1
Bromomethane	8.7	<150	<10	<25	<1	<10	<10	<1	<1	<50	<10	<50	<1	<10	<1	<1
Carbon disulfide	1000	<75	<100	<25	<1	<5	<100	<1	<1	<25	<100	<50	<1	<100	<1	<1
Carbon tetrachloride	0.17	<75	<5	<25	<1	<5	<5	<1	<1	<25	<5	<50	<1	<5	<1	<1
Chlorobenzene	91	<75	<5	<25	<1	<5	<5	<1	<1	<25	<5	<50	**0.7**	<5	<1	<1
Chloroethane	3.9	<150	<10	<25	<1	<10	<10	<1	<1	<50	<10	<50	<1	<10	<1	<1
Chloroform	0.17	<75	<5	<25	<1	**2**	<5	<1	<1	<25	<5	<50	<1	<5	<1	<1

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HELENA-WEST HELENA, ARKANSAS

Site 1 Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	1MW-4 9/15/1993 (ug/l)	1MW-4 11/30/1994 (ug/l)	1MW-4 4/11/2001 (ug/l)	1MW-4 7/25/2001 (ug/l)	1MW-5 9/15/1993 (ug/l)	1MW-5 11/30/1994 (ug/l)	1MW-5 4/12/2001 (ug/l)	1MW-5 7/25/2001 (ug/l)	1MW-6 9/29/1993 (ug/l)	1MW-6 11/30/1994 (ug/l)	1MW-6 4/11/2001 (ug/l)	1MW-6 7/25/2001 (ug/l)	1MW-7 1/13/1995 (ug/l)	1MW-7 4/11/2001 (ug/l)	1MW-7 7/25/2001 (ug/l)
Volatile Organic Compounds																
Chloromethane	2.1	<150	<10	<25	<1	<10	<10	<1	<1	<50	<10	<50	<1	<10	<1	<1
cis-1,2-Dichloroethene	61	ND	ND	<25	<1	ND	ND	<1	<1	ND	ND	<50	<1	ND	<1	<1
Dibromochloromethane	0.13	<75	<5	<25	<1	<5	<5	<1	<1	<25	<5	<50	<1	<5	<1	<1
Dibromomethane	61	ND	ND	<25	<1	ND	ND	<1	<1	ND	ND	<50	<1	ND	<1	<1
Ethylbenzene	1300	<75	<5	<25	<1	<5	<5	<1	<1	<25	<5	<50	<1	<5	<1	<1
Methylene chloride	4.3	<75	<20	<50	<4	<5	<20	<2	<4	<25	<20	<100	<6	<20	<2	<2
o-Xylene	1400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	1600	<75	<5	<25	<1	<5	<5	<1	<1	<25	<5	<50	<1	<5	<1	<1
Tetrachloroethene	0.11	<75	<5	<25	<1	<5	<5	<1	<1	<25	<5	<50	<1	<5	<1	<1
Toluene	2300	<75	<5	<25	<1	<5	<5	<1	<1	<25	<5	<50	<1	<5	<1	<1
trans-1,2-Dichloroethene	110	ND	<5	<25	<1	ND	<5	<1	<1		<5	<50	<1	<5	<1	<1
Trichloroethene	0.028	**28**	<5	<25	<1	<5	<5	<1	<1	<25	<5	<50	<1	<5	<1	<1
Trichlorofluoromethane	1300	ND	ND	<25	<1	ND	ND	<1	<1	ND	ND	<50	<1	ND	<1	<1
Vinyl acetate	410	<75	<50	<25	<1	<5	<50	<1	<1	<25	<50	<50	<1	<50	<1	<1
Vinyl chloride	0.015	<75	<10	<25	<1	<5	<10	<1	<1	<25	<10	<50	<1	<10	<1	<1
Xylene (total)	200	<75	<5	<25	<1	<5	<5	<1	<1	<25	<5	<50	<1	<5	<1	<1
Wet Chemistry Analytes																
Ammonia (as N)	210	<100	ND	ND	ND	<100	ND	ND	ND	**1800**	ND	ND	ND	ND	ND	ND
Nitrate (as N)	10000	20	ND	ND	ND	<20	ND	ND	ND	<200	ND	ND	ND	ND	ND	ND

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Site 2 Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	2MW-1 9/30/1993 (ug/l)	2MW-1 3/20/1997 (ug/l)	2MW-1 7/31/1997 (ug/l)	2MW-2 9/29/1993 (ug/l)	2MW-2 9/30/1993 (ug/l)	2MW-2 12/1/1994 (ug/l)	2MW-2 4/11/2001 (ug/l)	2MW-2 7/24/2001 (ug/l)	2MW-3 9/28/1993 (ug/l)	2MW-3 12/2/1994 (ug/l)	2MW-3 4/13/2001 (ug/l)	2MW-3 7/26/2001 (ug/l)	2MW-4 9/28/1993 (ug/l)	2MW-4 12/2/1994 (ug/l)	2MW-4 Dup 12/2/1994 (ug/l)	2MW-4 4/11/2001 (ug/l)	2MW-4 7/25/2001 (ug/l)
Metals																		
Arsenic	0.045	ND	ND	ND	ND	**60.4**	**210**	**6.8**	**8.8**	**59.2**	**320**	**400**	**603**	**32**	<50	<50	**5.2**	**118**
Lead	15	ND	ND	ND	ND	ND	<1	ND	ND	ND	<1	ND	ND	ND	<1	<1	ND	ND
Barium	7300	ND	ND	ND	ND	**576**	ND	ND	ND	**1670**	ND	ND	ND	**1100**	ND	ND	ND	ND
Cadmium	18	ND	ND	ND	ND	**4**	ND	ND	ND	<2	ND	ND	ND	**2.8**	ND	ND	ND	ND
Chromium	NA	ND	ND	ND	ND	**102**	ND	ND	ND	**28.5**	ND	ND	ND	**61.7**	ND	ND	ND	ND
Iron	26000	ND	ND	ND	ND	**127000**	ND	ND	ND	**42400**	ND	ND	ND	**51000**	ND	ND	ND	ND
Lead	15	ND	ND	ND	ND	**60.2**	ND	ND	ND	**30.6**	ND	ND	ND	**39.1**	ND	ND	ND	ND
Mercury	0.63	ND	ND	ND	ND	**0.23**	ND	ND	ND	<0.2	ND	ND	ND	<0.2	ND	ND	ND	ND
Selenium	180	ND	ND	ND	ND	**5**	ND	ND	ND	<5	ND	ND	ND	**6**	ND	ND	ND	ND
Silver	180	ND	ND	ND	ND	<3	ND	ND	ND	<3	ND	ND	ND	<3	ND	ND	ND	ND
Pesticides/Polychlorinated Biphenyls																		
4,4'-DDD	0.28	<0.12	ND	ND	ND	<0.12	<0.11	<0.08	<0.08	<0.11	<0.11	<0.08	<0.08	<0.11	<0.11	<0.11	<0.08	<0.08
4,4'-DDE	0.2	<0.04	ND	ND	ND	<0.04	<0.04	<0.08	<0.08	<0.04	<0.04	<0.08	<0.08	<0.04	<0.04	<0.04	<0.08	<0.08
4,4'-DDT	0.2	<0.13	ND	ND	ND	<0.13	<0.12	<0.08	<0.08	<0.12	<0.12	<0.08	<0.08	<0.12	<0.12	<0.12	**0.074**	<0.08
Aldrin	0.004	<0.04	ND	ND	ND	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Alpha-BHC	0.011	<0.03	ND	ND	ND	<0.03	<0.03	<0.04	<0.04	<0.03	<0.03	<0.04	<0.04	<0.03	<0.03	<0.03	<0.04	<0.04
Aroclor-1016	0.96	ND	ND	ND	ND	ND	<0.89	ND	ND	ND	<0.89	ND	ND	ND	<0.89	<0.89	ND	ND
Aroclor-1221	0.034	ND	ND	ND	ND	ND	<2.7	ND	ND	ND	<2.7	ND	ND	ND	<2.7	<2.7	ND	ND
Aroclor-1232	0.034	ND	ND	ND	ND	ND	<0.48	ND	ND	ND	<0.48	ND	ND	ND	<0.48	<0.48	ND	ND
Aroclor-1242	0.034	ND	ND	ND	ND	ND	<0.65	ND	ND	ND	<0.65	ND	ND	ND	<0.65	<0.65	ND	ND
Aroclor-1248	0.034	ND	ND	ND	ND	ND	<2.6	ND	ND	ND	<2.6	ND	ND	ND	<2.6	<2.6	ND	ND
Aroclor-1254	0.034	ND	ND	ND	ND	ND	<1.2	ND	ND	ND	<1.2	ND	ND	ND	<1.2	<1.2	ND	ND
Aroclor-1260	0.034	ND	ND	ND	ND	ND	<0.36	ND	ND	ND	<0.36	ND	ND	ND	<0.36	<0.36	ND	ND
Beta-BHC	0.037	<0.07	ND	ND	ND	<0.06	<0.06	<0.04	<0.04	<0.06	<0.06	<0.04	<0.04	<0.06	<0.06	<0.06	<0.04	<0.04
Chlordane	0.19	ND	ND	ND	ND	ND	<0.14	ND	ND	ND	<0.14	ND	ND	ND	<0.14	<0.14	ND	ND
Dieldrin	0.0042	<0.02	ND	ND	ND	<0.02	<0.02	<0.08	<0.08	<0.02	<0.02	<0.08	<0.08	<0.02	<0.02	<0.02	<0.08	<0.08
Endrin	11	<0.07	ND	ND	ND	<0.06	<0.06	<0.08	<0.08	<0.06	<0.06	<0.08	<0.08	<0.06	<0.06	<0.06	<0.08	<0.08
gamma-BHC (Lindane)	0.052	<0.04	ND	ND	ND	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.062	**0.067**
Heptachlor	0.015	<0.03	ND	ND	ND	<0.03	<0.03	<0.04	<0.04	<0.03	<0.03	<0.04	<0.091	<0.03	<0.03	<0.03	<0.04	<0.041
Heptachlor Epoxide	0.0074	<0.22	ND	ND	ND	<0.21	<0.83	<0.04	<0.04	<0.2	<0.83	<0.04	<0.04	<0.2	<0.83	<0.83	<0.04	<0.04
Methoxychlor	180	**3.4**	ND	ND	ND	<1.9	<1.8	<0.38	<0.38	<1.8	<1.8	**0.13**	<0.38	<1.8	<1.8	<1.8	<0.38	<0.38
Toxaphene	0.061	<2.6	ND	ND	ND	<2.6	<2.4	<2.5	<2.5	<2.4	<2.4	<2.5	<2.5	<2.4	<2.4	<2.4	<2.5	<2.5
Semivolatile Organic Compounds																		
1,2,4-Trichlorobenzene	8.2	ND	<1000	**12**	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	49	ND	**750**	**1200**	**58**	ND	**40**	**45**	<10	**11**	**51**	**57**	**92**	**28**	**20**	**22**	**51**	**34**
1,3-Dichlorobenzene	15	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

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HELENA-WEST HELENA, ARKANSAS

Site 2 Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	2MW-1 9/30/1993 (ug/l)	2MW-1 3/20/1997 (ug/l)	2MW-1 7/31/1997 (ug/l)	2MW-2 9/29/1993 (ug/l)	2MW-2 9/30/1993 (ug/l)	2MW-2 12/1/1994 (ug/l)	2MW-2 4/11/2001 (ug/l)	2MW-2 7/24/2001 (ug/l)	2MW-3 9/28/1993 (ug/l)	2MW-3 12/2/1994 (ug/l)	2MW-3 4/13/2001 (ug/l)	2MW-3 7/26/2001 (ug/l)	2MW-4 9/28/1993 (ug/l)	2MW-4 12/2/1994 (ug/l)	2MW-4 Dup 12/2/1994 (ug/l)	2MW-4 4/11/2001 (ug/l)	2MW-4 7/25/2001 (ug/l)
Semivolatile Organic Compounds																		
1,4-Dichlorobenzene	0.47	ND	<1000	**17**	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4,5-Trichlorophenol	3700	ND	<1000	<10	<50	ND	<10	<25	<25	<250	<10	<25	<25	<50	<10	<10	<25	<25
2,4,6-Trichlorophenol	6.1	ND	<1000	<10	<10	ND	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10
2,4-Dichlorophenol	110	ND	<1000	**110**	<10	ND	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10
2,4-Dimethylphenol	730	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4-Dinitrophenol	73	ND	<5000	<50	<50	ND	<50	<25	<25	<250	<50	<25	<25	<50	<50	<50	<25	<25
2,4-Dinitrotoluene	73	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,6-Dinitrotoluene	37	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chloronaphthalene	490	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chlorophenol	30	ND	<1000	<10	<10	ND	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10
2-Methylphenol (o-Cresol)	1800	ND	<1000	**25**	<10	ND	<10	<10	<10	**3**	**25**	**28**	**28**	<10	<10	<10	<10	<10
2-Nitroaniline	110	ND	<1000	<10	<50	ND	<50	<25	<25	<50	<50	<25	<25	<50	<50	<50	<25	<25
3,3'-Dichlorobenzidine	0.15	ND	<2000	<20	<20	ND	<20	<10	<10	<20	<20	<10	<10	<20	<20	<20	<10	<10
4-Chloroaniline	150	ND	<1000	**28**	<10	ND	<20	<10	<10	<10	**57**	**66**	**34**	**590**	**140**	**170**	**8**	**7**
4-Methylphenol (p-Cresol)	180	ND	<1000	**54**	<10	ND	<10	<10	<10	**8**	**71**	**50**	**60**	<10	<10	<10	<10	<10
4-Nitrophenol	290	ND	<1000	**860**	<50	ND	<50	<25	<25	**250**	<50	<25	<25	<50	<50	<50	<25	<25
Acenaphthene	370	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Aniline	12	ND	<1000	<10	ND	ND	ND	<10	<10	ND	ND	<10	<10	ND	ND	ND	<10	<10
Anthracene	1800	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzo(a)anthracene	0.03	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzo(a)pyrene	0.003	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzo(b)fluoranthene	0.03	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzo(k)fluoranthene	0.3	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzoic acid	150000	ND	**750**	**3600**	<50	ND	<50	<25	<25	<50	<50	<25	<25	<50	<50	<50	<25	<25
Benzyl alcohol	11000	ND	<1000	<10	<10	ND	<20	<10	<10	<10	<20	<10	<10	<10	<20	<20	<10	<10
bis(2-Chloroethyl)ether	0.0098	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	**100**	**180**	**13**	<10	<10	<10	<10
bis(2-Chloroisopropyl)ether	0.27	ND	ND	ND	<10	ND	<10	<10	ND	<10	<10	<10	ND	<10	<10	<10	<10	ND
bis(2-Ethylhexyl)phthalate (BEHP)	4.8	ND	<1000	<10	<10	ND	<10	<32	<10	<10	<10	<10	<10	<10	<10	<10	<26	<10
Butylbenzylphthalate	7300	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chrysene	3	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibenz(a,h)anthracene	0.003	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibenzofuran	12	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Diethylphthalate	29000	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dimethylphthalate	370000	ND	**280**	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Di-n-butylphthalate	3700	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Di-n-octylphthalate	NA	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dinoseb	37	ND	<700	<7	<50	ND	<7	**19**	**4**	<50	<7	<10	**5**	<50	<7	<7	<10	<10
Fluoranthene	1500	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

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Site 2 Groundwater Results

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Semivolatile Organic Compounds																		
Fluorene	240	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobenzene	0.042	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	0.86	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorocyclopentadiene	220	ND	<2000	<20	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachloroethane	4.8	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Indeno(1,2,3-cd)pyrene	0.03	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Isophorone	71	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	6.2	ND	<1000	<10	<10	ND	<10	<10	<10	**1**	<10	<10	<10	<10	<10	<10	<10	<10
Nitrobenzene	3.4	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-Nitroso-di-n-propylamine	0.0096	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-Nitrosodiphenylamine	14	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Pentachlorophenol	0.56	ND	<5000	<50	<50	ND	<50	<25	<25	<250	<50	<25	<25	<50	<50	<50	<25	<25
Phenol	11000	ND	**3300**	**2200**	<10	ND	<10	<10	<10	**950**	**250**	<10	<10	<10	<10	**2**	<10	<10
Propanil	180	ND	**2400**	**2800**	<10	ND	ND	<10	<10	**6**	ND	**5**	**6**	<10	ND	ND	<10	<10
Pyrene	180	ND	<1000	<10	<10	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Volatile Organic Compounds																		
1,1,1-Trichloroethane	840	<2500	<1	<10000	ND	<5	<5	<2	<1	<15	<5	<25	<25	<25	<5	<5	<25	<50
1,1,2,2-Tetrachloroethane	0.055	<2500	<1	<10000	ND	<5	<5	<2	<1	<15	<5	<25	<25	<25	<5	<5	<25	<50
1,1,2-Trichloroethane	0.2	<2500	**3.4**	<10000	ND	<5	<5	<2	<1	<15	<5	<25	<25	<25	<5	<5	<25	<50
1,1-Dichloroethane	1200	<2500	<1	<10000	ND	<5	<5	<2	<1	<15	<5	<25	<25	<25	<5	<5	<25	<50
1,1-Dichloroethene	340	<2500	<1	<10000	ND	<5	<5	<2	<1	<15	<5	<25	<25	<25	<5	<5	<25	<50
1,2-Dibromoethane	0.0056	ND	<1	<10000	ND	ND	ND	<2	<1			<25	<25	ND	ND	ND	<25	<50
1,2-Dichlorobenzene	49	ND	<1	<10000	ND	ND	ND	**53**	<1			**94**	**170**	ND	ND	ND	**76**	**71**
1,2-Dichloroethane	1200	**29000**	**13000**	**8900**	ND	<5	<5	<2	**0.9**	**120**	**230**	**550**	**560**	**500**	**150**	**150**	**850**	**910**
1,2-Dichloropropane	0.17	<2500	<1	<10000	ND	<5	<5	<2	<1	<15	<5	<25	<25	<25	<5	<5	<25	<50
1,3-Dichlorobenzene	15	ND	**25**	<10000	ND	ND	ND	<2	<1	ND	ND	<25	<25	ND	ND	ND	<25	<50
1,4-Dichlorobenzene	0.47	ND	**1500**	<10000	ND	ND	ND	<2	<1	ND	ND	<25	<25	ND	ND	ND	<25	<50
2-Butanone (MEK)	7100	<5000	**84**	<25000	ND	<10	<100	<10	<5	<30	<100	<120	<120	<50	<100	<100	<120	<250
4-Methyl-2-Pentanone (MIBK)	2000	**2200**	<5	<10000	ND	<50	<50	<10	<5	**520**	**2500**	**290**	<120	<250	<250	<50	<120	<250
Acetone	5500	**4800**	<25	<25000	ND	<10	<100	<10	<5	**430**	**2000**	<120	<140	<50	**140**	<100	<230	<250
Benzene	0.35	<2500	**1.1**	<10000	ND	<5	<5	<2	<1	<15	<5	<25	<25	**7**	<5	<5	<25	<50
Bromobenzene	23	ND	<1	<10000	ND	ND	ND	<2	<1			<25	<25	ND	ND	ND	<25	<50
Bromodichloromethane	0.18	<2500	<1	<10000	ND	<5	<5	<2	<1	<15	<5	<25	<25	<25	<5	<5	<25	<50
Bromoform	8.5	<2500	<1	<10000	ND	<5	<5	<2	<1	<15	<5	<25	<25	<25	<5	<5	<25	<50
Bromomethane	8.7	<5000	<1	<10000	ND	<10	<10	<2	<1	<30	<10	<25	<25	<50	<10	<10	<25	<50
Carbon disulfide	1000	<2500	**110**	<10000	ND	<5	<100	<2	<1	<15	<100	<25	<25	<25	<100	<100	<25	<50
Carbon tetrachloride	0.17	<2500	<1	<10000	ND	<5	<5	<2	<1	<15	<5	<25	<25	<25	<5	<5	<25	<50
Chlorobenzene	91	<2500	**510**	<10000	ND	<5	<5	<2	**0.3**	<15	**62**	**21**	**28**	**470**	**210**	**240**	**88**	**94**

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Volatile Organic Compounds																		
Chloroethane	3.9	<5000	<1	<10000	ND	<10	<10	<2	<1	<30	**79**	**68**	**170**	<50	<10	<10	<25	<50
Chloroform	0.17	**700**	**620**	<10000	ND	<5	<5	<0.3	<1	**340**	**63**	<25	<25	<25	<5	<5	<25	<50
Chloromethane	2.1	<5000	**18**	<10000	ND	<10	<10	<2	<1	<30	<10	<25	<25	<50	<10	<10	<25	<50
cis-1,2-Dichloroethene	61	ND	<1	<10000	ND	ND	ND	<2	<1	ND	ND	<25	<25	ND	ND	ND	<25	<50
Dibromochloromethane	0.13	<2500	<1	<10000	ND	<5	<5	<2	<1	<15	<5	<25	<25	<25	<5	<5	<25	<50
Dibromomethane	61	ND	<1	<10000	ND	ND	ND	<2	<1	ND	ND	<25	<25	ND	ND	ND	<25	<50
Ethylbenzene	1300	<2500	**120**	<10000	ND	<5	<5	<2	<1	<15	<5	<25	<25	<25	<5	<5	<25	<50
Methylene chloride	4.3	**600000**	**15000**	**140000**	ND	<5	<20	<5	<3	**460**	**130**	<50	<61	**720**	<20	<20	<84	<150
o-Xylene	1400	ND	**470**	<10000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	1600	<2500	<1	<10000	ND	<5	<5	<2	<1	<15	<5	<25	<25	<25	<5	<5	<25	<50
Tetrachloroethene	0.11	<2500	**1.5**	<10000	ND	<5	<5	<2	<1	<15	<5	<25	<25	<25	<5	<5	<25	<50
Toluene	2300	**940**	**600**	<10000	ND	<5	<5	<2	<1	**160**	**710**	**160**	**310**	<25	**21**	**12**	<25	<50
trans-1,2-Dichloroethene	110	ND	<1	<10000	ND	ND	<5	<2	<1	ND	<5	<25	<25	ND	<5	<5	<25	<50
Trichloroethene	0.028	<2500	<1	<10000	ND	<5	<5	<2	<1	<15	<5	<25	<25	<25	<5	<5	<25	<50
Trichlorofluoromethane	1300	ND	<1	<10000	ND	ND	ND	<2	<1	ND	ND	<25	<25	ND	ND	ND	<25	<50
Vinyl acetate	410	<2500	<1	<10000	ND	<5	<50	<2	<1	<15	<50	<25	<25	<25	<50	<50	<25	<50
Vinyl chloride	0.015	<2500	**4.8**	<10000	ND	<5	<10	<2	<1	<15	<10	<25	<25	<25	<10	<10	<25	<50
Xylene (total)	200	**1100**	ND	ND	ND	<5	<5	<2	<1	**4**	**17**	<25	<25	<25	**11**	<10	<25	<50
Wet Chemistry Analytes																		
Ammonia (as N)	210	ND	ND	ND	ND	ND	ND	ND	ND	<100	ND	ND	ND	<100	ND	ND	ND	ND
Nitrate (as N)	10000	ND	ND	ND	ND	ND	ND	ND	ND	<200	ND	ND	ND	<200	ND	ND	ND	ND

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TABLE 1
HISTORICAL GROUNDWATER DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Site 2 Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	2MW-5 9/28/1993 (ug/l)	2MW-5 12/1/1994 (ug/l)	2MW-5 4/11/2001 (ug/l)	2MW-5 7/24/2001 (ug/l)	2MW-6 1/20/1995 (ug/l)	2MW-6 9/22/1995 (ug/l)	2MW-6 4/13/2001 (ug/l)	2MW-6 7/24/2001 (ug/l)	2MW-7 12/23/1994 (ug/l)	2MW-7 1/19/1995 (ug/l)	2MW-7 4/13/2001 (ug/l)	2MW-7 DUP 4/13/2001 (ug/l)	2MW-7 7/24/2001 (ug/l)
Metals														
Arsenic	0.045	<10	<50	<3.3	<2.7	ND	ND	<3.3	<5.4	<50	<50	**16.9**	**15.3**	**17.5**
Lead	15	ND	<1	ND	ND	ND	ND	ND	ND	**49**	<1	ND	ND	ND
Barium	7300	**217**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	18	<2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	NA	**18.8**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	26000	**21100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	15	**20.8**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	0.63	<0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	180	<5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	180	<3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides/Polychlorinated Biphenyls														
4,4'-DDD	0.28	<0.11	<0.11	<0.08	<0.11	ND	ND	<0.08	<0.08	ND	ND	<0.08	<0.08	<0.08
4,4'-DDE	0.2	<0.04	<0.04	<0.08	<0.11	ND	ND	<0.08	<0.08	ND	ND	<0.08	<0.08	<0.08
4,4'-DDT	0.2	<0.12	<0.12	<0.08	<0.11	ND	ND	<0.08	<0.08	ND	ND	<0.08	<0.08	<0.08
Aldrin	0.004	<0.04	<0.04	<0.04	<0.053	ND	ND	<0.04	<0.04	ND	ND	<0.04	<0.04	<0.04
Alpha-BHC	0.011	<0.03	<0.03	<0.04	<0.053	ND	ND	<0.04	<0.04	ND	ND	<0.04	<0.04	<0.04
Aroclor-1016	0.96	ND	<0.89	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	0.034	ND	<2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	0.034	ND	<0.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	0.034	ND	<0.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	0.034	ND	<2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1254	0.034	ND	<1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260	0.034	ND	<0.36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	0.037	<0.06	<0.06	<0.04	<0.053	ND	ND	<0.04	<0.04	ND	ND	<0.04	<0.04	<0.04
Chlordane	0.19	ND	<0.14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	0.0042	<0.02	<0.02	<0.08	<0.11	ND	ND	<0.08	<0.08	ND	ND	<0.08	<0.08	<0.08
Endrin	11	<0.06	<0.06	<0.08	<0.11	ND	ND	<0.08	<0.08	ND	ND	<0.08	<0.08	<0.08
gamma-BHC (Lindane)	0.052	<0.04	<0.04	<0.04	<0.053	ND	ND	<0.04	<0.04	ND	ND	<0.04	<0.04	<0.04
Heptachlor	0.015	<0.03	<0.03	<0.057	<0.057	ND	ND	<0.04	<0.04	ND	ND	<0.04	<0.04	<0.04
Heptachlor Epoxide	0.0074	<0.2	<0.83	<0.04	<0.053	ND	ND	<0.04	<0.04	ND	ND	<0.04	<0.04	<0.04
Methoxychlor	180	<1.8	<1.8	<0.38	<0.51	ND	ND	<0.38	<0.38	ND	ND	<0.38	<0.38	<0.38
Toxaphene	0.061	<2.4	<2.4	<2.5	<3.3	ND	ND	<2.5	<2.5	ND	ND	<2.5	<2.5	<2.5
Semivolatile Organic Compounds														
1,2,4-Trichlorobenzene	8.2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	49	**7**	**11**	<10	<10	**15**	**11**	**13**	**11**	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	15	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

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CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Site 2 Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	2MW-5 9/28/1993 (ug/l)	2MW-5 12/1/1994 (ug/l)	2MW-5 4/11/2001 (ug/l)	2MW-5 7/24/2001 (ug/l)	2MW-6 1/20/1995 (ug/l)	2MW-6 9/22/1995 (ug/l)	2MW-6 4/13/2001 (ug/l)	2MW-6 7/24/2001 (ug/l)	2MW-7 12/23/1994 (ug/l)	2MW-7 1/19/1995 (ug/l)	2MW-7 4/13/2001 (ug/l)	2MW-7 DUP 4/13/2001 (ug/l)	2MW-7 7/24/2001 (ug/l)
Semivolatile Organic Compounds														
1,4-Dichlorobenzene	0.47	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4,5-Trichlorophenol	3700	<50	<10	<25	<25	<10	<10	<25	<25	<10	<10	<25	<25	<25
2,4,6-Trichlorophenol	6.1	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4-Dichlorophenol	110	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4-Dimethylphenol	730	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4-Dinitrophenol	73	<50	<50	<25	<25	<50	<50	<25	<25	<50	<50	<25	<25	<25
2,4-Dinitrotoluene	73	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,6-Dinitrotoluene	37	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chloronaphthalene	490	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Chlorophenol	30	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Methylphenol (o-Cresol)	1800	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Nitroaniline	110	<50	<50	<25	<25	<50	<10	<25	<25	<50	<50	<25	<25	<25
3,3'-Dichlorobenzidine	0.15	<20	<20	<10	<10	<20	<20	<10	<10	<20	<20	<10	<10	<10
4-Chloroaniline	150	**3**	<20	<10	<10	<20	<10	<10	<10	<20	<20	<10	<10	<10
4-Methylphenol (p-Cresol)	180	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-Nitrophenol	290	<50	<50	<25	<25	<50	<50	<25	<25	<50	<50	<25	<25	<25
Acenaphthene	370	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Aniline	12	ND	ND	<10	<10	ND	ND	<10	<10	ND	ND	<10	<10	<10
Anthracene	1800	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzo(a)anthracene	0.03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzo(a)pyrene	0.003	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzo(b)fluoranthene	0.03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzo(k)fluoranthene	0.3	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Benzoic acid	150000	<50	<50	<25	<25	<50	<20	<25	<25	<50	<50	<25	<25	<25
Benzyl alcohol	11000	<10	<20	<10	<10	<20	<10	<10	<10	<20	<20	<10	<10	<10
bis(2-Chloroethyl)ether	0.0098	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
bis(2-Chloroisopropyl)ether	0.27	<10	<10	<10	ND	<10	ND	<10	ND	<10	<10	<10	<10	ND
bis(2-Ethylhexyl)phthalate (BEHP)	4.8	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<75	<10
Butylbenzylphthalate	7300	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chrysene	3	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibenz(a,h)anthracene	0.003	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dibenzofuran	12	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Diethylphthalate	29000	**1**	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dimethylphthalate	370000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Di-n-butylphthalate	3700	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Di-n-octylphthalate	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Dinoseb	37	**39**	**26**	**18**	**15**	<7	<10	<10	<10	<7	<7	<10	<10	<10
Fluoranthene	1500	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

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CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Site 2 Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	2MW-5 9/28/1993 (ug/l)	2MW-5 12/1/1994 (ug/l)	2MW-5 4/11/2001 (ug/l)	2MW-5 7/24/2001 (ug/l)	2MW-6 1/20/1995 (ug/l)	2MW-6 9/22/1995 (ug/l)	2MW-6 4/13/2001 (ug/l)	2MW-6 7/24/2001 (ug/l)	2MW-7 12/23/1994 (ug/l)	2MW-7 1/19/1995 (ug/l)	2MW-7 4/13/2001 (ug/l)	2MW-7 DUP 4/13/2001 (ug/l)	2MW-7 7/24/2001 (ug/l)
Semivolatile Organic Compounds														
Fluorene	240	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobenzene	0.042	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	0.86	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachlorocyclopentadiene	220	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10	<10	<10	<10
Hexachloroethane	4.8	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Indeno(1,2,3-cd)pyrene	0.03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Isophorone	71	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Naphthalene	6.2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Nitrobenzene	3.4	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-Nitroso-di-n-propylamine	0.0096	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
N-Nitrosodiphenylamine	14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Pentachlorophenol	0.56	<50	<50	<25	<25	<50	<50	<25	<25	<50	<50	<25	<25	<25
Phenol	11000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Propanil	180	**1**	ND	<10	<10	ND	<10	<10	<10	ND	ND	<10	<10	<10
Pyrene	180	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Volatile Organic Compounds														
1,1,1-Trichloroethane	840	<5	<5	<1	<1	ND	<10	<1	<1	<5	<5	<1	<1	<1
1,1,2,2-Tetrachloroethane	0.055	<5	<5	<1	<1	ND	<10	<1	<1	<5	<5	<1	<1	<1
1,1,2-Trichloroethane	0.2	<5	<5	<1	<1	ND	<10	<1	<1	<5	<5	<1	<1	<1
1,1-Dichloroethane	1200	<5	<5	<1	<1	ND	<10	<1	<1	<5	<5	<1	<1	<1
1,1-Dichloroethene	340	<5	<5	<1	<1	ND	<10	<1	<1	<5	<5	<1	<1	<1
1,2-Dibromoethane	0.0056	ND	ND	<1	<1	ND	ND	<1	<1	ND	ND	<1	<1	<1
1,2-Dichlorobenzene	49	ND	ND	**4**	**4**	ND	**17**	**18**	**28**	ND	ND	<1	<1	<1
1,2-Dichloroethane	1200	<5	<5	<1	<1	ND	<10	**2**	**1**	<5	<5	<1	<1	<1
1,2-Dichloropropane	0.17	<5	<5	<1	<1	ND	<10	<1	<1	<5	<5	<1	<1	<1
1,3-Dichlorobenzene	15	ND	ND	<1	<1	ND	<10	<1	<1	ND	ND	<1	<1	<1
1,4-Dichlorobenzene	0.47	ND	ND	<1	<1	ND	<10	<1	<1	ND	ND	<1	<1	<1
2-Butanone (MEK)	7100	<10	<100	<5	<5	ND	<10	<5	<5	<100	<100	<5	<5	<5
4-Methyl-2-Pentanone (MIBK)	2000	<50	<50	<5	<5	ND	<10	<5	<5	<50	<50	<5	<5	<5
Acetone	5500	<10	<100	<23	<5	ND	**43**	<13	<5	<100	**1000**	<5	<5	<5
Benzene	0.35	<5	<5	<1	<1	ND	<10	<1	<1	<5	<5	<1	<1	<1
Bromobenzene	23	ND	ND	<1	<1	ND	ND	<1	<1			<1	<1	<1
Bromodichloromethane	0.18	<5	<5	<1	<1	ND	<10	<1	<1	<5	<5	<1	<1	<1
Bromoform	8.5	<5	<5	<1	<1	ND	<10	<1	<1	<5	<5	<1	<1	<1
Bromomethane	8.7	<10	<10	<1	<1	ND	<10	<1	<1	<10	<10	<1	<1	<1
Carbon disulfide	1000	<5	<100	<1	<1	ND	<10	<1	<1	<100	<100	<1	<1	<1
Carbon tetrachloride	0.17	<5	<5	<1	<1	ND	<10	<1	<1	<5	<5	<1	<1	<1
Chlorobenzene	91	<5	<5	<1	<1	ND	<10	<1	<1	<5	<5	<1	<1	<1

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CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Site 2 Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	2MW-5 9/28/1993 (ug/l)	2MW-5 12/1/1994 (ug/l)	2MW-5 4/11/2001 (ug/l)	2MW-5 7/24/2001 (ug/l)	2MW-6 1/20/1995 (ug/l)	2MW-6 9/22/1995 (ug/l)	2MW-6 4/13/2001 (ug/l)	2MW-6 7/24/2001 (ug/l)	2MW-7 12/23/1994 (ug/l)	2MW-7 1/19/1995 (ug/l)	2MW-7 4/13/2001 (ug/l)	2MW-7 DUP 4/13/2001 (ug/l)	2MW-7 7/24/2001 (ug/l)
Volatile Organic Compounds														
Chloroethane	3.9	<10	<10	<1	<1	ND	<10	<1	<1	<10	<10	<1	<1	<1
Chloroform	0.17	**3**	<5	<1	<0.9	ND	<10	<1	<1	<5	<5	<1	<1	<1
Chloromethane	2.1	<10	<10	<1	<1	ND	<10	<1	<1	<10	<10	<1	<1	<1
cis-1,2-Dichloroethene	61	ND	ND	<1	<1	ND	<10	<1	<1	ND	ND	<1	<1	<1
Dibromochloromethane	0.13	<5	<5	<1	<1	ND	<10	<1	<1	<5	<5	<1	<1	<1
Dibromomethane	61	ND	ND	<1	<1	ND	ND	<1	<1	ND	ND	<1	<1	<1
Ethylbenzene	1300	<5	<5	<1	<1	ND	<10	<1	<1	<5	<5	<1	<1	<1
Methylene chloride	4.3	<5	<20	<3	<2	ND	<10	<2	<2	<20	<20	<2	<2	<2
o-Xylene	1400	ND	ND	ND	ND	ND	<10	ND	ND	ND	ND	ND	ND	ND
Styrene	1600	<5	<5	<1	<1	ND	<10	<1	<1	<5	<5	<1	<1	<1
Tetrachloroethene	0.11	<5	<5	<1	<1	ND	<10	<1	<1	<5	<5	<1	<1	<1
Toluene	2300	<5	<5	<1	<1	ND	<10	**5**	<1	<5	<5	<1	<1	<1
trans-1,2-Dichloroethene	110	ND	<5	<1	<1	ND	<10	<1	<1	<5	<5	<1	<1	<1
Trichloroethene	0.028	<5	<5	<1	<1	ND	<10	<1	<1	<5	<5	<1	<1	<1
Trichlorofluoromethane	1300	ND	ND	<1	<1	ND	<10	<1	<1	ND	ND	<1	<1	<1
Vinyl acetate	410	<5	<50	<1	<1	ND	<10	<1	<1	<50	<50	<1	<1	<1
Vinyl chloride	0.015	<5	<10	<1	<1	ND	<10	<1	<1	<10	<10	<1	<1	<1
Xylene (total)	200	<5	<5	<1	<1	ND	<10	<1	<1	<5	<5	<1	<1	<1
Wet Chemistry Analytes														
Ammonia (as N)	210	<100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrate (as N)	10000	**2200**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Site 4 Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	4GB-10 (134') 11/2/1995 (ug/l)	4GB-12 (100') 11/6/1995 (ug/l)	4GB-3 (51') 12/13/1994 (ug/l)	4GB-3 (65') 12/14/1994 (ug/L)	4GB-3 (80') 12/14/1994 (ug/l)	4GB-3 (95') 12/14/1994 (ug/l)	4GB-4 (40') 1/31/1995 (ug/l)	4GB-4 (60') 1/31/1995 (ug/l)	4GB-4 (80') 1/31/1995 (ug/l)	4GB-4 (100') 1/31/1995 (ug/l)	4GB-7 (80') 10/5/1995 (ug/l)	4GB-9 (118') 11/1/1995 (ug/l)
Metals													
Arsenic	0.045	ND	ND	ND	ND	ND	ND	<50	<50	<50	<50	ND	ND
Lead	15	ND	ND	ND	ND	ND	ND	**3.6**	**30**	**9.1**	**7.1**	ND	ND
Aluminum	37000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Antimony	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	7300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Beryllium	73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	730	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	1400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	26000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	1700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	0.63	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	730	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	180	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	180	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	180	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	11000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides/Polychlorinated Biphenyls													
4,4'-DDD	0.28	ND	ND	ND	ND	ND	ND	<0.11	<0.11	<0.11	<0.11	ND	ND
4,4'-DDE	0.2	ND	ND	ND	ND	ND	ND	<0.04	<0.04	<0.04	<0.04	ND	ND
4,4'-DDT	0.2	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.12	ND	ND
Aldrin	0.004	ND	ND	ND	ND	ND	ND	<0.04	<0.04	<0.04	<0.04	ND	ND
Alpha-BHC	0.011	ND	ND	ND	ND	ND	ND	<0.03	<0.03	<0.03	<0.03	ND	ND
Aroclor-1016	0.96	ND	ND	ND	ND	ND	ND	<0.89	<0.89	<0.89	<0.89	ND	ND
Aroclor-1221	0.034	ND	ND	ND	ND	ND	ND	<2.7	<2.7	<2.7	<2.7	ND	ND
Aroclor-1232	0.034	ND	ND	ND	ND	ND	ND	<0.48	<0.48	<0.48	<0.48	ND	ND
Aroclor-1242	0.034	ND	ND	ND	ND	ND	ND	<0.65	<0.65	<0.65	<0.65	ND	ND
Aroclor-1248	0.034	ND	ND	ND	ND	ND	ND	<2.6	<2.6	<2.6	<2.6	ND	ND
Aroclor-1254	0.034	ND	ND	ND	ND	ND	ND	<1.2	<1.2	<1.2	<1.2	ND	ND
Aroclor-1260	0.034	ND	ND	ND	ND	ND	ND	<0.36	<0.36	<0.36	<0.36	ND	ND
Beta-BHC	0.037	ND	ND	ND	ND	ND	ND	<0.06	<0.06	<0.06	<0.06	ND	ND
Chlordane	0.19	ND	ND	ND	ND	ND	ND	<0.14	<0.14	<0.14	<0.14	ND	ND

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HELENA-WEST HELENA, ARKANSAS

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Pesticides/Polychlorinated Biphenyls													
Dieldrin	0.0042	ND	ND	ND	ND	ND	ND	<0.02	<0.02	<0.02	<0.02	ND	ND
Endrin	11	ND	ND	ND	ND	ND	ND	<0.06	<0.06	<0.06	<0.06	ND	ND
gamma-BHC (Lindane)	0.052	ND	ND	ND	ND	ND	ND	<0.04	<0.04	<0.04	<0.04	ND	ND
Heptachlor	0.015	ND	ND	ND	ND	ND	ND	<0.03	<0.03	<0.03	<0.03	ND	ND
Heptachlor Epoxide	0.0074	ND	ND	ND	ND	ND	ND	<0.83	<0.83	<0.83	<0.83	ND	ND
Methoxychlor	180	ND	ND	ND	ND	ND	ND	<1.8	<1.8	<1.8	<1.8	ND	ND
Toxaphene	0.061	ND	ND	ND	ND	ND	ND	<2.4	<2.4	<2.4	<2.4	ND	ND
Semivolatile Organic Compounds													
1,2,4-Trichlorobenzene	8.2	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
1,2-Dichlorobenzene	49	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
1,3-Dichlorobenzene	15	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
1,4-Dichlorobenzene	0.47	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
2,4,5-Trichlorophenol	3700	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
2,4,6-Trichlorophenol	6.1	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
2,4-Dichlorophenol	110	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
2,4-Dimethylphenol	730	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
2,4-Dinitrophenol	73	ND	ND	<50	<50	<50	<50	<50	<50	<50	<50	ND	ND
2,4-Dinitrotoluene	73	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
2,6-Dinitrotoluene	37	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
2-Chloronaphthalene	490	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
2-Chlorophenol	30	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
2-Methylphenol (o-Cresol)	1800	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
2-Nitroaniline	110	ND	ND	<50	<50	<50	<50	<50	<50	<50	<50	ND	ND
3,3'-Dichlorobenzidine	0.15	ND	ND	<20	<20	<20	<20	<20	<20	<20	<20	ND	ND
4-Chloroaniline	150	ND	ND	<20	<20	<20	<20	<20	<20	<20	<20	ND	ND
4-Methylphenol (p-Cresol)	180	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
4-Nitrophenol	290	ND	ND	<50	<50	<50	<50	<50	<50	<50	<50	ND	ND
Acenaphthene	370	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Aniline	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	1800	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Benzo(a)anthracene	0.03	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Benzo(a)pyrene	0.003	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Benzo(b)fluoranthene	0.03	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Benzo(k)fluoranthene	0.3	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Benzoic acid	150000	ND	ND	<50	<50	<50	<50	<50	<50	<50	<50	ND	ND
Benzyl alcohol	11000	ND	ND	<20	<20	<20	<20	<20	<20	<20	<20	ND	ND
bis(2-Chloroethyl)ether	0.0098	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
bis(2-Chloroisopropyl)ether	0.27	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND

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Semivolatile Organic Compounds													
bis(2-Ethylhexyl)phthalate (BEHP)	4.8	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Butylbenzylphthalate	7300	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Chrysene	3	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Dibenz(a,h)anthracene	0.003	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Dibenzofuran	12	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Diethylphthalate	29000	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Dimethylphthalate	370000	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Di-n-butylphthalate	3700	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Di-n-octylphthalate	NA	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Dinoseb	37	ND	ND	<7	<7	<7	<7	<7	<7	<7	<7	ND	ND
Fluoranthene	1500	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Fluorene	240	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Hexachlorobenzene	0.042	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Hexachlorobutadiene	0.86	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Hexachlorocyclopentadiene	220	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Hexachloroethane	4.8	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Indeno(1,2,3-cd)pyrene	0.03	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Isophorone	71	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Naphthalene	6.2	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Nitrobenzene	3.4	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
N-Nitroso-di-n-propylamine	0.0096	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
N-Nitrosodiphenylamine	14	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Pentachlorophenol	0.56	ND	ND	<50	<50	<50	<50	<50	<50	<50	<50	ND	ND
Phenol	11000	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Propanil	180	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	180	ND	ND	<10	<10	<10	<10	<10	<10	<10	<10	ND	ND
Volatile Organic Compounds													
1,1,1-Trichloroethane	840	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
1,1,2,2-Tetrachloroethane	0.055	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
1,1,2-Trichloroethane	0.2	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
1,1-Dichloroethane	1200	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
1,1-Dichloroethene	340	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
1,2-Dibromoethane	0.0056	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	49	<10	<10	ND	ND	ND	ND	ND	ND	ND	ND	<10	<10
1,2-Dichloroethane	1200	<10	<10	<5	<5	**8.4**	**7.6**	<5	**1900**	**3300**	**1900**	**3700**	<10
1,2-Dichloropropane	0.17	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
1,3-Dichlorobenzene	15	<10	<10	ND	ND	ND	ND	ND	ND	ND	ND	<10	<10
1,4-Dichlorobenzene	0.47	<10	<10	ND	ND	ND	ND	ND	ND	ND	ND	<10	<10

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Volatile Organic Compounds													
2-Butanone (MEK)	7100	<10	<10	<100	<100	<100	<100	<100	<100	<100	<100	<10	<10
4-Methyl-2-Pentanone (MIBK)	2000	<10	<10	<50	<50	<50	<50	<50	<50	<50	<50	<10	<10
Acetone	5500	<25	<25	<100	<100	<100	<100	<100	<100	**110**	<100	**100**	<25
Benzene	0.35	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
Bromobenzene	23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	0.18	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
Bromoform	8.5	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
Bromomethane	8.7	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbon disulfide	1000	<10	<10	<100	<100	<100	<100	<100	<100	<100	<100	<10	<10
Carbon tetrachloride	0.17	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
Chlorobenzene	91	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
Chloroethane	3.9	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroform	0.17	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
Chloromethane	2.1	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,2-Dichloroethene	61	<10	<10	ND	ND	ND	ND	ND	ND	ND	ND	<10	<10
Dibromochloromethane	0.13	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
Dibromomethane	61	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1300	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
Methylene chloride	4.3	<10	<10	<20	<20	<20	<20	<20	<20	<20	<20	<10	<10
o-Xylene	1400	<10	<10	ND	ND	ND	ND	ND	ND	ND	ND	<10	<10
Styrene	1600	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
Tetrachloroethene	0.11	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
Toluene	2300	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
trans-1,2-Dichloroethene	110	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
Trichloroethene	0.028	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
Trichlorofluoromethane	1300	<10	<10	ND	ND	ND	ND	ND	ND	ND	ND	<10	<10
Vinyl acetate	410	<10	<10	<50	<50	<50	<50	<50	<50	<50	<50	<10	<10
Vinyl chloride	0.015	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Xylene (total)	200	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
Wet Chemistry Analytes													
Ammonia (as N)	210	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrate (as N)	10000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Site 4 Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	4MW-1 9/29/1993 (ug/l)	4MW-1 12/15/1994 (ug/l)	4MW-1 11/6/1996 (ug/l)	4MW-1 3/19/1997 (ug/l)	4MW-1 7/31/1997 (ug/l)	4MW-1 4/13/2001 (ug/l)	4MW-1 7/26/2001 (ug/l)	4MW-2 9/29/1993 (ug/l)	4MW-2 DUP 9/29/1993 (ug/l)	4MW-2 12/15/1994 (ug/l)	4MW-2 9/26/1995 (ug/l)	4MW-3 1/13/1995 (ug/l)	4MW-3 4/11/2001 (ug/l)	4MW-3 7/25/2001 (ug/l)	4MW-4 1/20/1995 (ug/l)	4MW-4 4/13/2001 (ug/l)	4MW-4 7/24/2001 (ug/l)
Metals																		
Arsenic	0.045	**21.6**	**75**	ND	ND	ND	**49.1**	**18.3**	**24.6**	**25.8**	<50	ND	<50	<3.3	<1.5	<50	**23.2**	**20.7**
Lead	15	ND	**3.9**	ND	ND	ND	ND	ND	ND	ND	<1	ND	<1	ND	ND	<1	ND	ND
Aluminum	37000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<47	ND	ND	ND	ND
Antimony	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3.5**	ND	ND	ND	ND
Barium	7300	**1450**	ND	ND	ND	ND	ND	ND	**1530**	**1370**	ND	ND	ND	**193**	ND	ND	ND	ND
Beryllium	73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.4	ND	ND	ND	ND
Cadmium	18	<2	ND	ND	ND	ND	ND	ND	**2.3**	<2	ND	ND	ND	<1	ND	ND	ND	ND
Chromium	NA	**41**	ND	ND	ND	ND	ND	ND	**120**	**107**	ND	ND	ND	**5.4**	ND	ND	ND	ND
Cobalt	730	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1	ND	ND	ND	ND
Copper	1400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<2	ND	ND	ND	ND
Iron	26000	**32000**	ND	ND	ND	ND	ND	ND	**122000**	**108000**	ND	ND	ND	<21	ND	ND	ND	ND
Lead	15	**33.2**	ND	ND	ND	ND	ND	ND	**134**	**119**	ND	ND	ND	<1.2	ND	ND	ND	ND
Manganese	1700	ND	ND	ND	ND	ND	ND	ND			ND	ND	ND	**59.1**	ND	ND	ND	ND
Mercury	0.63	<0.2	ND	ND	ND	ND	ND	ND	<0.2	<0.2	ND	ND	ND	<0.1	ND	ND	ND	ND
Nickel	730	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2.6**	ND	ND	ND	ND
Selenium	180	**5**	ND	ND	ND	ND	ND	ND	**5**	**5**	ND	ND	ND	<2	ND	ND	ND	ND
Silver	180	<3	ND	ND	ND	ND	ND	ND	<3	<3	ND	ND	ND	<0.9	ND	ND	ND	ND
Vanadium	180	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**4.8**	ND	ND	ND	ND
Zinc	11000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<2	ND	ND	ND	ND
Pesticides/Polychlorinated Biphenyls																		
4,4'-DDD	0.28	<0.11	<0.11	ND	ND	ND	<0.27	<0.08	<0.11	<0.11	<0.11	ND	ND	<0.08	<0.08	ND	<0.08	<0.08
4,4'-DDE	0.2	<0.04	<0.04	ND	ND	ND	<0.08	<0.08	<0.04	<0.04	<0.04	ND	ND	<0.08	<0.08	ND	<0.08	<0.08
4,4'-DDT	0.2	<0.12	<0.12	ND	ND	ND	<0.08	<0.08	<0.12	<0.12	<0.12	ND	ND	<0.08	<0.08	ND	<0.08	<0.08
Aldrin	0.004	<0.04	<0.04	ND	ND	ND	<0.04	<0.04	<0.04	<0.04	<0.04	ND	ND	<0.04	<0.04	ND	<0.04	<0.04
Alpha-BHC	0.011	<0.03	<0.03	ND	ND	ND	<0.04	<0.04	<0.03	<0.03	<0.03	ND	ND	<0.04	<0.04	ND	<0.04	<0.04
Aroclor-1016	0.96	ND	<0.89	ND	ND	ND	ND	ND	ND	ND	<0.89	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	0.034	ND	<2.7	ND	ND	ND	ND	ND	ND	ND	<2.7	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	0.034	ND	<0.48	ND	ND	ND	ND	ND	ND	ND	<0.48	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	0.034	ND	<0.65	ND	ND	ND	ND	ND	ND	ND	<0.65	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	0.034	ND	<2.6	ND	ND	ND	ND	ND	ND	ND	<2.6	ND	ND	ND	ND	ND	ND	ND
Aroclor-1254	0.034	ND	<1.2	ND	ND	ND	ND	ND	ND	ND	<1.2	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260	0.034	ND	<0.36	ND	ND	ND	ND	ND	ND	ND	<0.36	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	0.037	<0.06	<0.06	ND	ND	ND	<0.04	<0.04	<0.06	<0.06	<0.06	ND	ND	<0.04	<0.04	ND	<0.04	<0.04
Chlordane	0.19	ND	<0.14	ND	ND	ND	ND	ND	ND	ND	<0.14	ND	ND	ND	ND	ND	ND	ND

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Site 4 Groundwater Results

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Pesticides/Polychlorinated Biphenyls																		
Dieldrin	0.0042	<0.02	<0.02	ND	ND	ND	<0.08	<0.08	<0.02	<0.02	<0.02	ND	ND	<0.08	<0.08	ND	<0.08	<0.08
Endrin	11	<0.06	<0.06	ND	ND	ND	<0.08	<0.08	<0.06	<0.06	<0.06	ND	ND	<0.08	<0.08	ND	<0.08	<0.08
gamma-BHC (Lindane)	0.052	<0.04	<0.04	ND	ND	ND	<0.04	<0.04	<0.04	<0.04	<0.04	ND	ND	<0.04	<0.04	ND	<0.04	<0.04
Heptachlor	0.015	<0.03	<0.03	ND	ND	ND	<0.04	<0.04	<0.03	<0.03	<0.03	ND	ND	<0.051	<0.061	ND	<0.04	<0.04
Heptachlor Epoxide	0.0074	<0.2	<0.83	ND	ND	ND	<0.04	<0.04	<0.2	<0.2	<0.83	ND	ND	<0.04	<0.04	ND	<0.04	<0.04
Methoxychlor	180	<1.8	<1.8	ND	ND	ND	<0.38	<0.38	<1.8	<1.8	<1.8	ND	ND	<0.38	<0.38	ND	<0.38	<0.38
Toxaphene	0.061	<2.4	<2.4	ND	ND	ND	<2.5	<2.5	<2.4	<2.4	<2.4	ND	ND	<2.5	<2.5	ND	<2.5	<2.5
Semivolatile Organic Compounds																		
1,2,4-Trichlorobenzene	8.2	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	49	**960**	**820**	**710**	**780**	**660**	**280**	**880**	**33**	**35**	<200	<500	<100	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	15	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	0.47	<10	<100	<500	<500	<100	**11**	<75	<10	**2**	<200	<500	<100	<10	<10	<10	<10	<10
2,4,5-Trichlorophenol	3700	<50	<100	<500	<500	<100	<25	<190	<50	<100	<200	<500	<100	<25	<25	<10	<25	<25
2,4,6-Trichlorophenol	6.1	<10	<100	<500	<500	<100	<10	<75	<10	<20	<200	<500	<100	<10	<10	<10	<10	<10
2,4-Dichlorophenol	110	<10	<100	<500	<500	**57**	**11**	<75	<10	<20	<200	<500	<100	<10	<10	<10	<10	<10
2,4-Dimethylphenol	730	<10	<100	<500	<500	<100	<10	<75	<10	<20	<200	<500	<100	<10	<10	<10	<10	<10
2,4-Dinitrophenol	73	<50	<500	<2500	<2500	<500	<25	<190	**110**	**109**	<1000	<2500	<500	<25	<25	<50	<25	<25
2,4-Dinitrotoluene	73	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
2,6-Dinitrotoluene	37	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
2-Chloronaphthalene	490	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
2-Chlorophenol	30	<10	**110**	<500	<500	<100	**30**	<75	<10	<20	<200	<500	<100	<10	<10	<10	<10	<10
2-Methylphenol (o-Cresol)	1800	**15**	**180**	<500	<500	<100	**1200**	**440**	<10	<20	<200	<500	<100	<10	<10	<10	<10	<10
2-Nitroaniline	110	<50	<500	<500	<500	<100	<25	<190	<50	<50	<1000	<500	<500	<25	<25	<50	<25	<25
3,3'-Dichlorobenzidine	0.15	<20	<200	<1000	<1000	<200	<10	<75	<20	<20	<400	<1000	<200	<10	<10	<20	<10	<10
4-Chloroaniline	150	**23**	**5800**	**2300**	**5900**	**8700**	**6500**	**670**	**5**	**5**	<400	<500	<200	<10	<10	<20	<10	<10
4-Methylphenol (p-Cresol)	180	**23**	**340**	<500	**210**	**260**	**660**	**480**	<10	<20	<200	<500	<100	<10	<10	<10	<10	<10
4-Nitrophenol	290	<50	<500	<2500	<2500	<500	<25	<190	<50	<100	<1000	<2500	<500	<25	<25	<50	<25	<25
Acenaphthene	370	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Aniline	12	ND	ND	<500	<500	<100	<10	<75	ND	ND	ND	ND	ND	<10	<10	ND	<10	<10
Anthracene	1800	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Benzo(a)anthracene	0.03	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Benzo(a)pyrene	0.003	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Benzo(b)fluoranthene	0.03	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Benzo(k)fluoranthene	0.3	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Benzoic acid	150000	**57**	<500	<1000	<1000	**1400**	<25	**78**	<50	<50	<1000	<1000	<500	**7**	<25	<50	<25	<25
Benzyl alcohol	11000	<10	<200	<500	<500	<100	<10	<75	<10	<10	<400	<500	<200	<10	<10	<20	<10	<10
bis(2-Chloroethyl)ether	0.0098	<10	<100	<500	<500	<100	**7.4**	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
bis(2-Chloroisopropyl)ether	0.27	<10	<100	ND	ND	ND	<10	ND	<10	<10	<200		<100	<10	ND	<10	<10	ND

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Semivolatile Organic Compounds																		
bis(2-Ethylhexyl)phthalate (BEHP)	4.8	<10	<100	<500	<500	<100	**31**	<75	<12	<37	<200	<500	<100	<10	<10	<10	<10	<10
Butylbenzylphthalate	7300	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Chrysene	3	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Dibenz(a,h)anthracene	0.003	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Dibenzofuran	12	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Diethylphthalate	29000	**1**	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Dimethylphthalate	370000	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Di-n-butylphthalate	3700	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Di-n-octylphthalate	NA	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Dinoseb	37	<50	<70	<350	<350	<70	<10	<75	**41000**	**47000**	**170000**	**54000**	<70	**57**	**65**	<7	<10	<10
Fluoranthene	1500	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Fluorene	240	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Hexachlorobenzene	0.042	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Hexachlorobutadiene	0.86	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Hexachlorocyclopentadiene	220	<10	<100	<1000	<1000	<200	<10	<75	<10	<10	<200	<1000	<100	<10	<10	<10	<10	<10
Hexachloroethane	4.8	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Indeno(1,2,3-cd)pyrene	0.03	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Isophorone	71	**17**	**150**	<500	**130**	<100	**350**	**69**	**2**	**2**	<200	<500	<100	<10	<10	<10	**12**	**10**
Naphthalene	6.2	**2**	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Nitrobenzene	3.4	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
N-Nitroso-di-n-propylamine	0.0096	<10	<100	<500	<500	**740**	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
N-Nitrosodiphenylamine	14	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Pentachlorophenol	0.56	<50	<500	<2500	<2500	<500	<25	<190	<50	<100	<1000	<2500	<500	<25	<25	<50	<25	<25
Phenol	11000	<10	**2400**	<500	**920**	**3200**	**230**	**290**	<10	<20	<200	<500	<100	<10	<10	<10	<10	<10
Propanil	180	**45**	ND	<500	<500	**700**	**310**	**49**	<10	<10	ND	<500	ND	<10	<10	ND	<10	<10
Pyrene	180	<10	<100	<500	<500	<100	<10	<75	<10	<10	<200	<500	<100	<10	<10	<10	<10	<10
Volatile Organic Compounds																		
1,1,1-Trichloroethane	840	<5000	<2500	<100	<1	<8000	<2500	<2500	<50	<50	<25	<10	<5	<20	<50	<5	<25	<1
1,1,2,2-Tetrachloroethane	0.055	<5000	<2500	<100	<1	<8000	<2500	<2500	<50	<50	<25	<10	<5	<20	<50	<5	<25	<1
1,1,2-Trichloroethane	0.2	<5000	<2500	<100	<1	<8000	<2500	<2500	<50	<50	<25	<10	**27**	<20	<50	<5	<25	<1
1,1-Dichloroethane	1200	<5000	<2500	<100	<1	<8000	<2500	<2500	<50	<50	<25	<10	<5	<20	<50	<5	<25	<1
1,1-Dichloroethene	340	<5000	<2500	<100	<1	<8000	<2500	<2500	<50	<50	<25	<10	<5	<20	<50	<5	<25	<1
1,2-Dibromoethane	0.0056	ND	ND	<100	<1	<8000	<2500	<2500	ND	ND	ND	ND	ND	<20	<50	ND	<25	<1
1,2-Dichlorobenzene	49	ND	ND	<100	<1	<8000	<2500	**6800**	ND	ND	ND	**76**	ND	**17**	<50	ND	<25	**0.4**
1,2-Dichloroethane	1200	**5800**	**4300**	**2600**	**1400**	**8500**	<2500	**19000**	**210**	**240**	**310**	**260**	**52000**	**390**	**1500**	**11**	**570**	**820**
1,2-Dichloropropane	0.17	<5000	<2500	<100	<1	<8000	<2500	<2500	<50	<50	<25	<10	**43**	<20	<50	<5	<25	<1
1,3-Dichlorobenzene	15	ND	ND	<100	<1	<8000	<2500	<2500	ND	ND	ND	<10	ND	<20	<50	ND	<25	<1
1,4-Dichlorobenzene	0.47	ND	ND	<100	<1	<8000	<2500	<2500	ND	ND	ND	<10	ND	<20	<50	ND	<25	<1

Notes:
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GB - Direct Push Technique Groundwater Sample
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MSSL - Medium Specific Screening Levels
ND - No Data Available
<10 - Not detected, results below detection or reporting limit
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TABLE 1
HISTORICAL GROUNDWATER DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Site 4 Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	4MW-1 9/29/1993 (ug/l)	4MW-1 12/15/1994 (ug/l)	4MW-1 11/6/1996 (ug/l)	4MW-1 3/19/1997 (ug/l)	4MW-1 7/31/1997 (ug/l)	4MW-1 4/13/2001 (ug/l)	4MW-1 7/26/2001 (ug/l)	4MW-2 9/29/1993 (ug/l)	4MW-2 DUP 9/29/1993 (ug/l)	4MW-2 12/15/1994 (ug/l)	4MW-2 9/26/1995 (ug/l)	4MW-3 1/13/1995 (ug/l)	4MW-3 4/11/2001 (ug/l)	4MW-3 7/25/2001 (ug/l)	4MW-4 1/20/1995 (ug/l)	4MW-4 4/13/2001 (ug/l)	4MW-4 7/24/2001 (ug/l)
Volatile Organic Compounds																		
2-Butanone (MEK)	7100	<10000	<50000	<2500	<25	<20000	<12000	<12000	<100	<100	<500	**13**	<100	<100	<250	<100	<120	<5
4-Methyl-2-Pentanone (MIBK)	2000	<50000	<25000	<500	<5	<8000	<12000	<12000	<500	<500	**520**	<10	<50	<100	<250	<50	<120	<5
Acetone	5500	<10000	<50000	<2500	**50**	<20000	<12000	<12000	<100	<100	<500	<25	<100	<100	<250	**110**	<120	<5
Benzene	0.35	<5000	<2500	**100**	**140**	<8000	<2500	**810**	**46**	**43**	<25	<10	<5	<20	<50	<5	<25	<1
Bromobenzene	23	ND	ND	<100	<1	<8000	<2500	<2500	ND	ND	ND	ND	ND	<20	<50	ND	<25	<1
Bromodichloromethane	0.18	<5000	<2500	<100	<1	<8000	<2500	<2500	<50	<50	<25	<10	<5	<20	<50	**6.1**	<25	<1
Bromoform	8.5	<5000	<2500	<100	<1	<8000	<2500	<2500	<50	<50	<25	<10	<5	<20	<50	**11**	<25	<1
Bromomethane	8.7	<10000	<5000	<100	<1	<8000	<2500	<2500	<100	<100	<50	<10	<10	<20	<50	<10	<25	<1
Carbon disulfide	1000	<5000	<50000	<100	<1	<8000	<2500	<2500	<50	<50	<500	**14**	<100	<20	<50	<100	<25	<1
Carbon tetrachloride	0.17	<5000	<2500	<100	<1	<8000	<2500	<2500	<50	<50	<25	<10	<5	<20	<50	<5	<25	<1
Chlorobenzene	91	<5000	<2500	**240**	**200**	<8000	<2500	<2500	**31**	**30**	<25	<10	<5	<20	<50	<5	**15**	**16**
Chloroethane	3.9	<10000	<5000	<100	<1	<8000	<2500	<2500	<100	<100	<50	<10	<10	<20	<50	<10	<25	<1
Chloroform	0.17	<5000	<2500	<100	**26**	<8000	<2500	<4200	**1400**	**1900**	**460**	**760**	**14**	<20	<50	<5	<25	<1
Chloromethane	2.1	<10000	<5000	<100	<1	<8000	<2500	<2500	<100	<100	<50	<10	<10	<20	<50	<10	<25	<1
cis-1,2-Dichloroethene	61	ND	ND	<100	<1	<8000	<2500	<2500	ND	ND	ND	<10	ND	<20	<50	ND	<25	<1
Dibromochloromethane	0.13	<5000	<2500	<100	<1	<8000	<2500	<2500	<50	<50	<25	<10	<5	<20	<50	**13**	<25	<1
Dibromomethane	61	ND	ND	<100	<1	<8000	<2500	<2500	ND	ND	ND	ND	ND	<20	<50		<25	<1
Ethylbenzene	1300	<5000	<2500	**200**	**420**	<8000	<2500	**2000**	<50	<50	<25	<10	<5	<20	<50	<5	<25	<1
Methylene chloride	4.3	<5000	<10000	<500	**51**	<8000	<5000	<10000	<1300	<1500	**1300**	**460**	**150**	<42	<140	<20	<50	<2
o-Xylene	1400	ND	ND	**710**	**1000**	<8000	ND	ND	ND	ND	ND	<10	ND	ND	ND	ND	ND	ND
Styrene	1600	<5000	<2500	<100	<1	<8000	<2500	<2500	<50	<50	<25	<10	<5	<20	<50	<5	<25	<1
Tetrachloroethene	0.11	<5000	<2500	<100	<1	<8000	<2500	<2500	<50	<50	<25	<10	<5	<20	<50	<5	<25	<1
Toluene	2300	**110000**	**140000**	**90000**	**80000**	**17000**	**63000**	**760000**	**80**	**52**	<25	<10	<5	**110**	<50	<5	<25	<1
trans-1,2-Dichloroethene	110	ND	<2500	<100	<1	<8000	<2500	<2500	ND	ND	<25	<10	<5	<20	<50	<5	<25	<1
Trichloroethene	0.028	<5000	<2500	<100	<1	<8000	<2500	<2500	<50	<50	<25	<10	<5	<20	<50	<5	<25	<1
Trichlorofluoromethane	1300	ND	ND	<100	<1	<8000	<2500	<2500	ND	ND	ND	<10	ND	<20	<50	ND	<25	<1
Vinyl acetate	410	<5000	<25000	<100	<1	<8000	<2500	<2500	<50	<50	<250	<10	<50	<20	<50	<50	<25	<1
Vinyl chloride	0.015	<5000	<5000	<100	<1	<8000	<2500	<2500	<50	<50	<50	<10	<10	<20	<50	<10	<25	<1
Xylene (total)	200	**1400**	<2500	ND	ND	ND	<2500	**13000**	**38**	**44**	<25	**12**	<5	<20	<50	<5	<25	<1
Wet Chemistry Analytes																		
Ammonia (as N)	210	<100	ND	ND	ND	ND	ND	ND	<100	<100	ND	ND	ND	ND	ND	ND	ND	ND
Nitrate (as N)	10000	<200	ND	ND	ND	ND	ND	ND	1200	1000	ND	ND	ND	**7300**	ND	ND	ND	ND

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TABLE 1
HISTORICAL GROUNDWATER DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Site 9 Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	9GB-21 (30') 12/7/1994 (ug/l)	9GB-21 (45') 12/7/1994 (ug/l)	9GB-21 (60') 12/8/1994 (ug/l)	9GB-21 (75') 12/9/1994 (ug/l)	9GB-21 (90') 12/16/1994 (ug/l)	9MW-1 1/13/1995 (ug/l)	9MW-1 11/7/1996 (ug/l)	9MW-1 3/19/1997 (ug/l)	9MW-1 4/12/2001 (ug/l)	9MW-1 7/26/2001 (ug/l)
Metals											
Arsenic	0.045	ND	ND	ND	ND	ND	ND	ND	ND	ND	**84**
Aluminum	37000	ND	ND	ND	ND	ND	**150**	ND	ND	<47	ND
Antimony	15	ND	ND	ND	ND	ND	<3	ND	ND	<3	ND
Arsenic	0.045	ND	ND	ND	ND	ND	**120**	ND	ND	**74.6**	ND
Barium	7300	ND	ND	ND	ND	ND	**130**	ND	ND	**229**	ND
Beryllium	73	ND	ND	ND	ND	ND	<0.3	ND	ND	<0.4	ND
Cadmium	18	ND	ND	ND	ND	ND	<4	ND	ND	<1	ND
Chromium	NA	ND	ND	ND	ND	ND	<7	ND	ND	<1	ND
Cobalt	730	ND	ND	ND	ND	ND	<7	ND	ND	<1	ND
Copper	1400	ND	ND	ND	ND	ND	ND	ND	ND	<2	ND
Iron	26000	ND	ND	ND	ND	ND	**6500**	ND	ND	**17500**	ND
Lead	15	ND	ND	ND	ND	ND	<1	ND	ND	**1.5**	ND
Manganese	1700	ND	ND	ND	ND	ND	**6600**	ND	ND	**8820**	ND
Mercury	0.63	ND	ND	ND	ND	ND	<0.2	ND	ND	<0.1	ND
Nickel	730	ND	ND	ND	ND	ND	<10	ND	ND	**3.5**	ND
Selenium	180	ND	ND	ND	ND	ND	<70	ND	ND	<2	ND
Silver	180	ND	ND	ND	ND	ND	<7	ND	ND	<0.9	ND
Vanadium	180	ND	ND	ND	ND	ND	**56**	ND	ND	**19.2**	ND
Zinc	11000	ND	ND	ND	ND	ND	**2.6**	ND	ND	<2	ND
Pesticides/Polychlorinated Biphenyls											
4,4'-DDD	0.28	ND	ND	ND	ND	ND	<0.11	ND	ND	<0.08	<0.08
4,4'-DDE	0.2	ND	ND	ND	ND	ND	<0.04	ND	ND	<0.08	<0.08
4,4'-DDT	0.2	ND	ND	ND	ND	ND	<0.12	ND	ND	<0.08	<0.08
Aldrin	0.004	ND	ND	ND	ND	ND	<0.04	ND	ND	<0.04	<0.04
Alpha-BHC	0.011	ND	ND	ND	ND	ND	<0.03	ND	ND	<0.04	<0.04
Aroclor-1016	0.96	ND	ND	ND	ND	ND	<0.89	ND	ND	ND	ND
Aroclor-1221	0.034	ND	ND	ND	ND	ND	<2.7	ND	ND	ND	ND
Aroclor-1232	0.034	ND	ND	ND	ND	ND	<0.48	ND	ND	ND	ND
Aroclor-1242	0.034	ND	ND	ND	ND	ND	<0.65	ND	ND	ND	ND
Aroclor-1248	0.034	ND	ND	ND	ND	ND	<2.6	ND	ND	ND	ND
Aroclor-1254	0.034	ND	ND	ND	ND	ND	<1.2	ND	ND	ND	ND
Aroclor-1260	0.034	ND	ND	ND	ND	ND	<0.36	ND	ND	ND	ND
Beta-BHC	0.037	ND	ND	ND	ND	ND	<0.06	ND	ND	<0.04	<0.04
Chlordane	0.19	ND	ND	ND	ND	ND	<0.14	ND	ND	ND	ND
Dieldrin	0.0042	ND	ND	ND	ND	ND	<0.02	ND	ND	<0.08	<0.08

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HISTORICAL GROUNDWATER DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Site 9 Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	9GB-21 (30') 12/7/1994 (ug/l)	9GB-21 (45') 12/7/1994 (ug/l)	9GB-21 (60') 12/8/1994 (ug/l)	9GB-21 (75') 12/9/1994 (ug/l)	9GB-21 (90') 12/16/1994 (ug/l)	9MW-1 1/13/1995 (ug/l)	9MW-1 11/7/1996 (ug/l)	9MW-1 3/19/1997 (ug/l)	9MW-1 4/12/2001 (ug/l)	9MW-1 7/26/2001 (ug/l)
Pesticides/Polychlorinated Biphenyls											
Endrin	11	ND	ND	ND	ND	ND	<0.06	ND	ND	<0.08	<0.08
gamma-BHC (Lindane)	0.052	ND	ND	ND	ND	ND	<0.04	ND	ND	<0.04	<0.04
Heptachlor	0.015	ND	ND	ND	ND	ND	<0.03	ND	ND	<0.04	<0.054
Heptachlor Epoxide	0.0074	ND	ND	ND	ND	ND	<0.83	ND	ND	<0.04	<0.04
Methoxychlor	180	ND	ND	ND	ND	ND	<1.8	ND	ND	<0.38	<0.38
Toxaphene	0.061	ND	ND	ND	ND	ND	<2.4	ND	ND	<2.5	<2.5
Semivolatile Organic Compounds											
1,2,4-Trichlorobenzene	8.2	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
1,2-Dichlorobenzene	49	<100	<100	<100	<100	<10	**36**	**45**	**69**	**32**	**36**
1,3-Dichlorobenzene	15	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	0.47	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
2,4,5-Trichlorophenol	3700	<100	<100	<100	<100	<10	<10	<10	<10	<25	<25
2,4,6-Trichlorophenol	6.1	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
2,4-Dichlorophenol	110	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
2,4-Dimethylphenol	730	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
2,4-Dinitrophenol	73	<500	<500	<500	<500	<50	<50	<50	<50	<25	<25
2,4-Dinitrotoluene	73	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
2,6-Dinitrotoluene	37	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
2-Chloronaphthalene	490	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
2-Chlorophenol	30	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
2-Methylphenol (o-Cresol)	1800	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
2-Nitroaniline	110	<500	<500	<500	<500	<50	<50	<10	<10	<25	<25
3,3'-Dichlorobenzidine	0.15	<200	<200	<200	<200	<20	<20	<20	<20	<10	<10
4-Chloroaniline	150	<200	<200	<200	<200	<20	<20	<10	<10	**7**	**7**
4-Methylphenol (p-Cresol)	180	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
4-Nitrophenol	290	<500	<500	<500	<500	<50	<50	<50	<50	<25	<25
Acenaphthene	370	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Aniline	12	ND	ND	ND	ND	ND	ND	<10	<10	<10	<10
Anthracene	1800	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Benzo(a)anthracene	0.03	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Benzo(a)pyrene	0.003	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Benzo(b)fluoranthene	0.03	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Benzo(k)fluoranthene	0.3	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Benzoic acid	150000	<500	<500	<500	<500	<50	<50	<20	<20	<25	<25
Benzyl alcohol	11000	<200	<200	<200	<200	<20	<20	<10	<10	<10	<10
bis(2-Chloroethyl)ether	0.0098	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
bis(2-Chloroisopropyl)ether	0.27	<100	<100	<100	<100	<10	<10	ND	ND	<10	ND
bis(2-Ethylhexyl)phthalate (BEHP)	4.8	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10

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CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Site 9 Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	9GB-21 (30') 12/7/1994 (ug/l)	9GB-21 (45') 12/7/1994 (ug/l)	9GB-21 (60') 12/8/1994 (ug/l)	9GB-21 (75') 12/9/1994 (ug/l)	9GB-21 (90') 12/16/1994 (ug/l)	9MW-1 1/13/1995 (ug/l)	9MW-1 11/7/1996 (ug/l)	9MW-1 3/19/1997 (ug/l)	9MW-1 4/12/2001 (ug/l)	9MW-1 7/26/2001 (ug/l)
Semivolatile Organic Compounds											
Butylbenzylphthalate	7300	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Chrysene	3	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Dibenz(a,h)anthracene	0.003	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Dibenzofuran	12	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Diethylphthalate	29000	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Dimethylphthalate	370000	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Di-n-butylphthalate	3700	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Di-n-octylphthalate	NA	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Dinoseb	37	**1000**	<70	<70	**2800**	<7	**18**	<7	<7	<10	<10
Fluoranthene	1500	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Fluorene	240	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Hexachlorobenzene	0.042	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene	0.86	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Hexachlorocyclopentadiene	220	<100	<100	<100	<100	<10	<10	<20	<20	<10	<10
Hexachloroethane	4.8	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Indeno(1,2,3-cd)pyrene	0.03	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Isophorone	71	<100	<100	<100	<100	<10	<10	<10	<10	<10	**31**
Naphthalene	6.2	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Nitrobenzene	3.4	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
N-Nitroso-di-n-propylamine	0.0096	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
N-Nitrosodiphenylamine	14	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Pentachlorophenol	0.56	<500	<500	<500	<500	<50	<50	<50	<50	<25	<25
Phenol	11000	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Propanil	180	ND	ND	ND	ND	ND	ND	**35**	**22**	<10	<10
Pyrene	180	<100	<100	<100	<100	<10	<10	<10	<10	<10	<10
Volatile Organic Compounds											
1,1,1-Trichloroethane	840	<200	<200	<200	<200	<5	<50	<200	<250	<50	<25
1,1,2,2-Tetrachloroethane	0.055	<200	<200	<200	<200	<5	<50	<200	<250	<50	<25
1,1,2-Trichloroethane	0.2	<200	<200	<200	<200	<5	<50	<200	<250	<50	<25
1,1-Dichloroethane	1200	<200	<200	<200	<200	<5	<50	<200	<250	<50	<25
1,1-Dichloroethene	340	<200	<200	<200	<200	<5	<50	<200	<250	<50	<25
1,2-Dibromoethane	0.0056	ND	ND	ND	ND	ND	ND	<200	<250	<50	<25
1,2-Dichlorobenzene	49	ND	ND	ND	ND	ND	ND	<200	<250	**37**	**62**
1,2-Dichloroethane	1200	**3900**	**5800**	**6800**	**7300**	**41**	**2300**	**2000**	**1400**	**800**	**420**
1,2-Dichloropropane	0.17	<200	<200	<200	<200	<5	<50	<200	<250	<50	<25
1,3-Dichlorobenzene	15	ND	ND	ND	ND	ND	ND	<200	<250	<50	<25
1,4-Dichlorobenzene	0.47	ND	ND	ND	ND	ND	ND	<200	<250	<50	<25
2-Butanone (MEK)	7100	<4000	<4000	<4000	<4000	<100	<1000	<5000	<6250	<250	<120

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ND - No Data Available
<10 - Not detected, results below detection or reporting limit
- Not detected; detection/reporting limit exceeds the Tap Water MSSL
BOLD - Analyte is detected
- Detection exceeds the Region 6 Tap Water MSSL
NA - No MSSL available

TABLE 1
HISTORICAL GROUNDWATER DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Site 9 Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	9GB-21 (30') 12/7/1994 (ug/l)	9GB-21 (45') 12/7/1994 (ug/l)	9GB-21 (60') 12/8/1994 (ug/l)	9GB-21 (75') 12/9/1994 (ug/l)	9GB-21 (90') 12/16/1994 (ug/l)	9MW-1 1/13/1995 (ug/l)	9MW-1 11/7/1996 (ug/l)	9MW-1 3/19/1997 (ug/l)	9MW-1 4/12/2001 (ug/l)	9MW-1 7/26/2001 (ug/l)
Volatile Organic Compounds											
4-Methyl-2-Pentanone (MIBK)	2000	<2000	<2000	<2000	<2000	<50	<500	<1000	<1250	<250	<120
Acetone	5500	<4000	<4000	<4000	<4000	<100	<1000	<5000	<6250	<250	<120
Benzene	0.35	<200	<200	<200	<200	<5	<50	<200	<250	<50	<25
Bromobenzene	23	ND	ND	ND	ND	ND	ND	<200	<250	<50	<25
Bromodichloromethane	0.18	<200	<200	<200	<200	<5	<50	<200	<250	<50	<25
Bromoform	8.5	<200	<200	<200	<200	<5	<50	<200	<250	<50	<25
Bromomethane	8.7	<400	<400	<400	<400	<10	<100	<200	<250	<50	<25
Carbon disulfide	1000	<4000	<4000	<4000	<4000	<100	<1000	<200	<250	<50	<25
Carbon tetrachloride	0.17	<200	<200	<200	<200	<5	<50	<200	<250	<50	<25
Chlorobenzene	91	<200	<200	<200	<200	<5	<50	<200	<250	<50	<25
Chloroethane	3.9	<400	<400	<400	<400	<10	<100	<200	<250	<50	<25
Chloroform	0.17	<200	<200	<200	<200	<5	<50	<200	<250	<50	<15
Chloromethane	2.1	<400	<400	<400	<400	<10	<100	<200	<250	<50	<25
cis-1,2-Dichloroethene	61	ND	ND	ND	ND	ND	ND	<200	<250	<50	<25
Dibromochloromethane	0.13	<200	<200	<200	<200	<5	<50	<200	<250	<50	<25
Dibromomethane	61	ND	ND	ND	ND	ND	ND	<200	<250	<50	<25
Ethylbenzene	1300	<200	<200	<200	<200	<5	<50	<200	<250	<50	<25
Methylene chloride	4.3	**5000**	<800	<800	<800	<20	**4100**	<1000	<1250	<100	<88
o-Xylene	1400	ND	ND	ND	ND	ND	ND	<200	<250	ND	ND
Styrene	1600	<200	<200	<200	<200	<5	<50	<200	<250	<50	<25
Tetrachloroethene	0.11	<200	<200	<200	<200	<5	<50	<200	<250	<50	<25
Toluene	2300	<200	<200	<200	<200	<5	**52**	<200	**150**	<50	<25
trans-1,2-Dichloroethene	110	<200	<200	<200	<200	<5	<50	<200	<250	<50	<25
Trichloroethene	0.028	<200	<200	<200	<200	<5	<50	<200	<250	<50	<25
Trichlorofluoromethane	1300	ND	ND	ND	ND	ND	ND	<200	<250	<50	<25
Vinyl acetate	410	<2000	<2000	<2000	<2000	<50	<500	<200	<250	<50	<25
Vinyl chloride	0.015	<400	<400	<400	<400	<10	<100	<200	<250	<50	<25
Xylene (total)	200	<200	<200	<200	<200	<5	<50	ND	ND	<50	<25
Wet Chemistry Analytes											
Nitrate (as N)	10000	ND	ND	ND	ND	ND	ND	ND	ND	<100	ND

Notes:
ug/l = micrograms per liter
GB - Direct Push Technique Groundwater Sample
MW - Monitoring Well Groundwater Sample
MSSL - Medium Specific Screening Levels
ND - No Data Available
<10 - Not detected, results below detection or reporting limit
- Not detected; detection/reporting limit exceeds the Tap Water MSSL
BOLD - Analyte is detected
- Detection exceeds the Region 6 Tap Water MSSL
NA - No MSSL available

TABLE 1
HISTORICAL GROUNDWATER DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

AGI Area Groundwater Data

Analyte	2007 Tap Water MSSL (ug/l)	AGI-1 7/24/2001 (ug/l)	AGI-1 DUP 7/24/2001 (ug/l)	AGI-2 7/25/2001 (ug/l)	AGI-3 7/25/2001 (ug/l)	AGI-4 7/25/2001 (ug/l)	AGI-5 7/25/2001 (ug/l)	AGI-6 7/25/2001 (ug/l)	AGI-7 7/26/2001 (ug/l)
Volatile Organic Compounds									
1,1,1-Trichloroethane	840	<2	<2	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	0.055	<2	<2	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	0.2	<2	<2	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	1200	<2	<2	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	340	<2	<2	<1	<1	<1	<1	<1	<1
1,2-Dibromoethane	0.0056	<2	<2	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	49	<2	<2	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	1200	**46**	**55**	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	0.17	<2	<2	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	15	<2	<2	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	0.47	<2	<2	<1	<1	<1	<1	<1	<1
2-Butanone (MEK)	7100	<12	<10	<5	<5	<5	<5	<5	<5
4-Methyl-2-Pentanone (MIBK)	2000	<12	<10	<5	<5	<5	<5	<5	<5
Acetone	5500	<12	<10	<5	<5	<5	<5	<5	<5
Benzene	0.35	<2	<2	<1	<1	<1	<1	<1	<1
Bromobenzene	23	<2	<2	<1	<1	<1	<1	<1	<1
Bromodichloromethane	0.18	<2	<2	<1	<1	<1	<1	<1	<1
Bromoform	8.5	<2	<2	<1	<1	<1	<1	<1	<1
Bromomethane	8.7	<2	<2	<1	<1	<1	<1	<1	<1
Carbon disulfide	1000	<2	<2	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	0.17	<2	<2	<1	<1	<1	<1	<1	<1
Chlorobenzene	91	<2	<2	<1	<1	<1	<1	<1	<1
Chloroethane	3.9	<2	<2	<1	<1	<1	<1	<1	<1
Chloroform	0.17	<2	<2	<1	<1	<1	<1	<1	<1
Chloromethane	2.1	<2	<2	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	61	<2	<2	<1	<1	<1	<1	<1	<1
Dibromochloromethane	0.13	<2	<2	<1	<1	<1	<1	<1	<1
Dibromomethane	61	<2	<2	<1	<1	<1	<1	<1	<1
Ethylbenzene	1300	<2	<2	<1	<1	<1	<1	<1	<1
Methylene chloride	4.3	<9	<4	<2	<5	<2	<2	<2	<2
Styrene	1600	<2	<2	<1	<1	<1	<1	<1	<1
Tetrachloroethene	0.11	<2	<2	<1	<1	<1	<1	<1	<1
Toluene	2300	<2	<2	<1	<1	<1	<0.6	<1	<0.5
trans-1,2-Dichloroethene	110	<2	<2	<1	<1	<1	<1	<1	<1
Trichloroethene	0.028	<2	<2	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	1300	<2	<2	<1	<1	<1	<1	<1	<1
Vinyl acetate	410	<2	<2	<1	<1	<1	<1	<1	<1
Vinyl chloride	0.015	<2	<2	<1	<1	<1	<1	<1	<1
Xylene (total)	200	<2	<2	<1	<1	<1	<1	<1	<1

Notes:
ug/l = micrograms per liter
AGI - Agricultural Well Groundwater Sample
MSSL - Medium Specific Screening Levels
ND - No Data Available
<10 - Not detected, results below detection or reporting limit
- Not detected; detection/reporting limit exceeds the Tap Water MSSL
BOLD - Analyte is detected
- Detection exceeds the Region 6 Tap Water MSSL
NA - No MSSL available

TABLE 1
HISTORICAL GROUNDWATER DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

BHI Area Groundwater Data

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	BHI-1 10/2/1995 (ug/l)	BHI-1 11/7/1995 (ug/l)
Volatile Organic Compounds			
1,1,1-Trichloroethane	840	<10	<10
1,1,2,2-Tetrachloroethane	0.055	<10	<10
1,1,2-Trichloroethane	0.2	<10	<10
1,1-Dichloroethane	1200	<10	<10
1,1-Dichloroethene	340	<10	<10
1,2-Dichlorobenzene	49	<10	<10
1,2-Dichloroethane	1200	<10	**1600**
1,2-Dichloropropane	0.17	<10	<10
1,3-Dichlorobenzene	15	<10	<10
1,4-Dichlorobenzene	0.47	<10	<10
2-Butanone (MEK)	7100	<10	<10
4-Methyl-2-Pentanone (MIBK)	2000	<10	<10
Acetone	5500	<25	<25
Benzene	0.35	<10	<10
Bromodichloromethane	0.18	<10	<10
Bromoform	8.5	<10	<10
Bromomethane	8.7	<10	<10
Carbon disulfide	1000	<10	<10
Carbon tetrachloride	0.17	<10	<10
Chlorobenzene	91	<10	<10
Chloroethane	3.9	<10	<10
Chloroform	0.17	<10	<10
Chloromethane	2.1	<10	<10
cis-1,2-Dichloroethene	61	<10	<10
Dibromochloromethane	0.13	<10	<10
Ethylbenzene	1300	<10	<10
Methylene chloride	4.3	<10	<10
o-Xylene	1400	<10	<10
Styrene	1600	<10	<10
Tetrachloroethene	0.11	<10	<10
Toluene	2300	<10	<10
trans-1,2-Dichloroethene	110	<10	<10
Trichloroethene	0.028	<10	<10
Trichlorofluoromethane	1300	<10	<10
Vinyl acetate	410	<10	<10
Vinyl chloride	0.015	<10	<10
Xylene (total)	200	<10	<10

Notes:
ug/l = micrograms per liter
BHI - Blackhawk Well Groundwater Sample
MSSL - Medium Specific Screening Levels
ND - No Data Available
<10 - Not detected, results below detection or reporting limit
- Not detected; detection/reporting limit exceeds the Tap Water MSSL
BOLD - Analyte is detected
- Detection exceeds the Region 6 Tap Water MSSL
NA - No MSSL available

TABLE 1
HISTORICAL GROUNDWATER DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Offsite Well Groundwater Data

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	OFFMW-1 1/9/1996 (ug/l)	OFFMW-1 4/2/1996 (ug/l)	OFFMW-1 11/5/1996 (ug/l)	OFFMW-1 3/18/1997 (ug/l)	OFFMW-1 7/29/1997 (ug/l)	OFFMW-1 4/11/2001 (ug/l)	OFFMW-1 7/24/2001 (ug/l)	OFFMW-2 1/9/1996 (ug/l)	OFFMW-2 4/2/1996 (ug/l)	OFFMW-2 DUP 4/2/1996 (ug/l)	OFFMW-2 11/5/1996 (ug/l)	OFFMW-2 DUP 11/5/1996 (ug/l)	OFFMW-2 3/18/1997 (ug/l)	OFFMW-2 DUP 3/18/1997 (ug/l)	OFFMW-2 7/29/1997 (ug/l)	OFFMW-2 DUP 7/29/1997 (ug/l)	OFFMW-2 5/23/2001 (ug/l)
Metals																		
Arsenic	0.045	<10	ND	ND	ND	ND	**9**	**14.3**	<10	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aluminum	37000	ND	ND	ND	ND	ND	<47	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Antimony	15	ND	ND	ND	ND	ND	<3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	7300	<200	ND	ND	ND	ND	**154**	ND	<200	ND	ND	ND	ND	ND	ND	ND	ND	ND
Beryllium	73	ND	ND	ND	ND	ND	<0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	18	<5	ND	ND	ND	ND	<1	ND	**6**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	NA	<50	ND	ND	ND	ND	**1.3**	ND	<50	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	730	ND	ND	ND	ND	ND	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	1400	ND	ND	ND	ND	ND	<2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	26000	ND	ND	ND	ND	ND	**3450**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	15	<5	ND	ND	ND	ND	<1.2	ND	<5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	1700	ND	ND	ND	ND	ND	**741**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	0.63	<0.2	ND	ND	ND	ND	<0.1	ND	<0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	730	ND	ND	ND	ND	ND	<2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	180	<10	ND	ND	ND	ND	<2	ND	<10	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	180	<50	ND	ND	ND	ND	<0.9	ND	<50	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	180	ND	ND	ND	ND	ND	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	11000	ND	ND	ND	ND	ND	<2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides/Polychlorinated Biphenyls																		
4,4'-DDD	0.28	<0.1	ND	ND	ND	ND	<0.08	<0.08	<0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	0.2	<0.1	ND	ND	ND	ND	<0.08	<0.08	<0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	0.2	<0.1	ND	ND	ND	ND	<0.08	<0.08	<0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	0.004	<0.1	ND	ND	ND	ND	<0.04	<0.04	<0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	0.011	<0.1	ND	ND	ND	ND	<0.04	<0.04	<0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	0.037	<0.1	ND	ND	ND	ND	<0.04	<0.04	<0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane	0.19	<1	ND	ND	ND	ND	ND	ND	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	0.0042	<0.1	ND	ND	ND	ND	<0.08	<0.08	<0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	11	<0.1	ND	ND	ND	ND	<0.08	<0.08	<0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
gamma-BHC (Lindane)	0.052	<0.1	ND	ND	ND	ND	<0.04	<0.04	<0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	0.015	<0.1	ND	ND	ND	ND	<0.04	<0.04	<0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	0.0074	<0.1	ND	ND	ND	ND	<0.04	<0.04	<0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	180	<0.5	ND	ND	ND	ND	<0.38	<0.38	<0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	0.061	<1	ND	ND	ND	ND	<2.5	<2.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Semivolatile Organic Compounds																		
1,2,4-Trichlorobenzene	8.2	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
1,2-Dichlorobenzene	49	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
1,3-Dichlorobenzene	15	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
1,4-Dichlorobenzene	0.47	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
2,4,5-Trichlorophenol	3700	<10	<10	ND	ND	<10	<25	<25	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
2,4,6-Trichlorophenol	6.1	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
2,4-Dichlorophenol	110	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
2,4-Dimethylphenol	730	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND

Notes:
ug/l = micrograms per liter
OFF - Offsite Monitoring Well Groundwater Sample
MSSL - Medium Specific Screening Levels
ND - No Data Available
<10 - Not detected, results below detection or reporting limit
- Not detected; detection/reporting limit exceeds the Tap Water MSSL
BOLD - Analyte is detected
- Detection exceeds the Region 6 Tap Water MSSL
NA - No MSSL available

TABLE 1
HISTORICAL GROUNDWATER DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Offsite Well Groundwater Data

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	OFFMW-1 1/9/1996 (ug/l)	OFFMW-1 4/2/1996 (ug/l)	OFFMW-1 11/5/1996 (ug/l)	OFFMW-1 3/18/1997 (ug/l)	OFFMW-1 7/29/1997 (ug/l)	OFFMW-1 4/11/2001 (ug/l)	OFFMW-1 7/24/2001 (ug/l)	OFFMW-2 1/9/1996 (ug/l)	OFFMW-2 4/2/1996 (ug/l)	OFFMW-2 DUP 4/2/1996 (ug/l)	OFFMW-2 11/5/1996 (ug/l)	OFFMW-2 DUP 11/5/1996 (ug/l)	OFFMW-2 3/18/1997 (ug/l)	OFFMW-2 DUP 3/18/1997 (ug/l)	OFFMW-2 7/29/1997 (ug/l)	OFFMW-2 DUP 7/29/1997 (ug/l)	OFFMW-2 5/23/2001 (ug/l)
Metals																		
Semivolatile Organic Compounds																		
2,4-Dinitrophenol	73	<50	<50	ND	ND	<50	<25	<25	<50	<50	<50	ND	ND	ND	ND	<50	<50	ND
2,4-Dinitrotoluene	73	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
2,6-Dinitrotoluene	37	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
2-Chloronaphthalene	490	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
2-Chlorophenol	30	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
2-Methylphenol (o-Cresol)	1800	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
2-Nitroaniline	110	<10	<10	ND	ND	<10	<25	<25	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
3,3'-Dichlorobenzidine	0.15	<20	<20	ND	ND	<20	<10	<10	<20	<20	<20	ND	ND	ND	ND	<20	<20	ND
4-Chloroaniline	150	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
4-Methylphenol (p-Cresol)	180	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
4-Nitrophenol	290	<50	<50	ND	ND	<50	<25	<25	<50	<50	<50	ND	ND	ND	ND	<50	<50	ND
Acenaphthene	370	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Aniline	12	ND	ND	ND	ND	<10	<10	<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	1800	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Benzo(a)anthracene	0.03	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Benzo(a)pyrene	0.003	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Benzo(b)fluoranthene	0.03	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Benzo(k)fluoranthene	0.3	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Benzoic acid	150000	<20	<20	ND	ND	<20	<25	<25	<20	<20	<20	ND	ND	ND	ND	<20	<20	ND
Benzyl alcohol	11000	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
bis(2-Chloroethyl)ether	0.0098	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
bis(2-Chloroisopropyl)ether	0.27	ND	ND	ND	ND	ND	<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate (BEHP)	4.8	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Butylbenzylphthalate	7300	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Chrysene	3	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Dibenz(a,h)anthracene	0.003	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Dibenzofuran	12	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Diethylphthalate	29000	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Dimethylphthalate	370000	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	**5.5**	ND
Di-n-butylphthalate	3700	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Di-n-octylphthalate	-	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Dinoseb	37	<10	<7	ND	ND	<7	<10	<10	<10	<7	<7	ND	ND	ND	ND	<7	<7	ND
Fluoranthene	1500	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Fluorene	240	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Hexachlorobenzene	0.042	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Hexachlorobutadiene	0.86	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Hexachlorocyclopentadiene	220	<20	<20	ND	ND	<20	<10	<10	<20	<20	<20	ND	ND	ND	ND	<20	<20	ND
Hexachloroethane	4.8	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Indeno(1,2,3-cd)pyrene	0.03	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Isophorone	71	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Naphthalene	6.2	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Nitrobenzene	3.4	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
N-Nitroso-di-n-propylamine	0.0096	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
N-Nitrosodiphenylamine	14	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Pentachlorophenol	0.56	<50	<50	ND	ND	<50	<25	<25	<50	<50	<50	ND	ND	ND	ND	<50	<50	ND
Phenol	11000	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Propanil	180	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Pyrene	180	<10	<10	ND	ND	<10	<10	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	ND
Volatile Organic Compounds																		
1,1,1-Trichloroethane	840	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
1,1,2,2-Tetrachloroethane	0.055	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
1,1,2-Trichloroethane	0.2	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
1,1-Dichloroethane	1200	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
1,1-Dichloroethene	340	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
1,2-Dibromoethane	0.0056	ND	ND	<1	<1	<80	<50	<50	ND	ND	ND	<1	<1	<1	<1	<10	ND	<100
1,2-Dichlorobenzene	49	<10	<10	<1	<1	<80	<50	**60**	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100

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CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Offsite Well Groundwater Data

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	OFFMW-1 1/9/1996 (ug/l)	OFFMW-1 4/2/1996 (ug/l)	OFFMW-1 11/5/1996 (ug/l)	OFFMW-1 3/18/1997 (ug/l)	OFFMW-1 7/29/1997 (ug/l)	OFFMW-1 4/11/2001 (ug/l)	OFFMW-1 7/24/2001 (ug/l)	OFFMW-2 1/9/1996 (ug/l)	OFFMW-2 4/2/1996 (ug/l)	OFFMW-2 DUP 4/2/1996 (ug/l)	OFFMW-2 11/5/1996 (ug/l)	OFFMW-2 DUP 11/5/1996 (ug/l)	OFFMW-2 3/18/1997 (ug/l)	OFFMW-2 DUP 3/18/1997 (ug/l)	OFFMW-2 7/29/1997 (ug/l)	OFFMW-2 DUP 7/29/1997 (ug/l)	OFFMW-2 5/23/2001 (ug/l)
Metals																		
Volatile Organic Compounds																		
1,2-Dichloroethane	1200	<10	<10	<1	<1	**540**	**990**	**1400**	**110**	**140**	**130**	**220**	**200**	**240**	**220**	**3.4**	ND	**13000**
1,2-Dichloropropane	0.17	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
1,3-Dichlorobenzene	15	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
1,4-Dichlorobenzene	0.47	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
2-Butanone (MEK)	7100	<10	<10	<25	<25	<200	<250	<250	**77**	<10	**10**	<25	<25	<25	<25	<25	ND	<500
4-Methyl-2-Pentanone (MIBK)	2000	<10	<10	<5	<5	<80	<250	<250	<10	<10	<10	<5	<5	<5	<5	<10	ND	<500
Acetone	5500	<25	<25	<25	<25	<200	<250	<250	<25	<25	<25	<25	<25	<25	<25	<25	ND	<500
Benzene	0.35	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
Bromobenzene	23	ND	ND	<1	<1	<80	<50	<50	ND	ND	ND	<1	<1	<1	<1	<10	ND	<100
Bromodichloromethane	0.18	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
Bromoform	8.5	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
Bromomethane	8.7	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
Carbon disulfide	1000	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	**22**
Carbon tetrachloride	0.17	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
Chlorobenzene	91	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
Chloroethane	3.9	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	**3.9**	**4.3**	**6**	**6**	<10	ND	<100
Chloroform	0.17	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
Chloromethane	2.1	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
cis-1,2-Dichloroethene	61	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
Dibromochloromethane	0.13	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
Dibromomethane	61	ND	ND	<1	<1	<80	<50	<50	ND	ND	ND	<1	<1	<1	<1	<10	ND	<100
Ethylbenzene	1300	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
Methylene chloride	4.3	<10	<10	<5	<5	<80	<100	<100	<10	<10	<10	<5	<5	<5	<5	<10	ND	<200
o-Xylene	1400	<10	<10	<1	<1	<80	ND	ND	<10	<10	<10	<1	<1	<1	<1	<10	ND	ND
Styrene	1600	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
Tetrachloroethene	0.11	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
Toluene	2300	<10	<10	<1	<1	<80	**610**	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
trans-1,2-Dichloroethene	110	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
Trichloroethene	0.028	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
Trichlorofluoromethane	1300	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
Vinyl acetate	410	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
Vinyl chloride	0.015	<10	<10	<1	<1	<80	<50	<50	<10	<10	<10	<1	<1	<1	<1	<10	ND	<100
Xylene (total)	200	<10	<10	ND	ND	ND	<50	<50	<10	<10	<10	ND	ND	ND	ND	ND	ND	<100
Wet Chemistry Analytes																		
Nitrate (as N)	10000	ND	ND	ND	ND	ND	<100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Offsite Well Groundwater Data

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	OFFMW-2 DUP 5/23/2001 (ug/l)	OFFMW-2 7/24/2001 (ug/l)	OFFMW-2 DUP 7/24/2001 (ug/l)	OFFMW-3 1/9/1996 (ug/l)	OFFMW-3 DUP 1/9/1996 (ug/l)	OFFMW-3 4/2/1996 (ug/l)	OFFMW-3 7/29/1997 (ug/l)	OFFMW-3 11/5/1996 (ug/l)	OFFMW-3 3/18/1997 (ug/l)	OFFMW-3 4/12/2001 (ug/l)	OFFMW-3 7/24/2001 (ug/l)	OFFMW-4 1/9/1996 (ug/l)	OFFMW-4 4/2/1996 (ug/l)	OFFMW-4 11/5/1996 (ug/l)	OFFMW-4 3/18/1997 (ug/l)	OFFMW-4 7/29/1997 (ug/l)	OFFMW-4 4/12/2001 (ug/l)	OFFMW-4 7/24/2001 (ug/l)
Metals																			
Arsenic	0.045	ND	**11.2**	**13.2**	<10	<10	ND	ND	ND	ND	**18.5**	**18.7**	<10	ND	ND	ND	ND	<3.3	<1.8
Aluminum	37000	ND	ND	ND	ND	ND	ND	ND	ND	ND	<47	ND	ND	ND	ND	ND	ND	<47	ND
Antimony	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	<3	ND	ND	ND	ND	ND	ND	<3	ND
Barium	7300	ND	ND	ND	<200	<200	ND	ND	ND	ND	**338**	ND	<200	ND	ND	ND	ND	**195**	ND
Beryllium	73	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.4	ND	ND	ND	ND	ND	ND	<0.4	ND
Cadmium	18	ND	ND	ND	**5**	**6**	ND	ND	ND	ND	<1	ND	**5**	ND	ND	ND	ND	<1	ND
Chromium	NA	ND	ND	ND	<50	<50	ND	ND	ND	ND	**3.5**	ND	<50	ND	ND	ND	ND	**1.7**	ND
Cobalt	730	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2.7**	ND	ND	ND	ND	ND	ND	<1	ND
Copper	1400	ND	ND	ND	ND	ND	ND	ND	ND	ND	<2	ND	ND	ND	ND	ND	ND	<2	ND
Iron	26000	ND	ND	ND	ND	ND	ND	ND	ND	ND	**10100**	ND	ND	ND	ND	ND	ND	**1360**	ND
Lead	15	ND	ND	ND	<5	<5	ND	ND	ND	ND	<1.2	ND	<5	ND	ND	ND	ND	<1.2	ND
Manganese	1700	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1430**	ND	ND	ND	ND	ND	ND	**279**	ND
Mercury	0.63	ND	ND	ND	<0.2	<0.2	ND	ND	ND	ND	<0.1	ND	<0.2	ND	ND	ND	ND	<0.1	ND
Nickel	730	ND	ND	ND	ND	ND	ND	ND	ND	ND	**6.7**	ND	ND	ND	ND	ND	ND	**2.1**	ND
Selenium	180	ND	ND	ND	<10	<10	ND	ND	ND	ND	<2	ND	<10	ND	ND	ND	ND	<2	ND
Silver	180	ND	ND	ND	<50	<50	ND	ND	ND	ND	<0.9	ND	<50	ND	ND	ND	ND	<0.9	ND
Vanadium	180	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1	ND	ND	ND	ND	ND	ND	<1	ND
Zinc	11000	ND	ND	ND	ND	ND	ND	ND	ND	ND	<2	ND	ND	ND	ND	ND	ND	<2	ND
Pesticides/Polychlorinated Biphenyls																			
4,4'-DDD	0.28	ND	<0.08	<0.08	<0.1	<0.1	ND	ND	ND	ND	<0.08	<0.08	<0.1	ND	ND	ND	ND	<0.08	<0.08
4,4'-DDE	0.2	ND	<0.08	<0.08	<0.1	<0.1	ND	ND	ND	ND	<0.08	<0.08	<0.1	ND	ND	ND	ND	<0.08	<0.08
4,4'-DDT	0.2	ND	<0.08	<0.08	<0.1	<0.1	ND	ND	ND	ND	<0.08	<0.08	<0.1	ND	ND	ND	ND	<0.08	<0.08
Aldrin	0.004	ND	<0.04	<0.04	<0.1	<0.1	ND	ND	ND	ND	<0.04	<0.04	<0.1	ND	ND	ND	ND	<0.04	<0.04
Alpha-BHC	0.011	ND	<0.04	<0.04	<0.1	<0.1	ND	ND	ND	ND	<0.04	<0.04	<0.1	ND	ND	ND	ND	<0.04	<0.04
Beta-BHC	0.037	ND	<0.04	<0.04	<0.1	<0.1	ND	ND	ND	ND	<0.04	<0.04	<0.1	ND	ND	ND	ND	<0.04	<0.04
Chlordane	0.19	ND	ND	ND	<1	<1	ND	ND	ND	ND	ND	ND	<1	ND	ND	ND	ND	ND	ND
Dieldrin	0.0042	ND	<0.08	<0.08	<0.1	<0.1	ND	ND	ND	ND	<0.08	<0.08	<0.1	ND	ND	ND	ND	<0.08	<0.08
Endrin	11	ND	<0.08	<0.08	<0.1	<0.1	ND	ND	ND	ND	<0.08	<0.08	<0.1	ND	ND	ND	ND	<0.08	<0.08
gamma-BHC (Lindane)	0.052	ND	<0.04	<0.04	<0.1	<0.1	ND	ND	ND	ND	<0.04	<0.04	<0.1	ND	ND	ND	ND	<0.04	<0.04
Heptachlor	0.015	ND	<0.04	<0.04	<0.1	<0.1	ND	ND	ND	ND	<0.04	<0.04	<0.1	ND	ND	ND	ND	<0.04	<0.04
Heptachlor Epoxide	0.0074	ND	<0.04	<0.04	<0.1	<0.1	ND	ND	ND	ND	<0.04	<0.04	<0.1	ND	ND	ND	ND	<0.04	<0.04
Methoxychlor	180	ND	<0.38	<0.38	<0.5	<0.5	ND	ND	ND	ND	<0.38	<0.38	<0.5	ND	ND	ND	ND	<0.38	<0.38
Toxaphene	0.061	ND	<2.5	<2.5	<1	<1	ND	ND	ND	ND	<2.5	<2.5	<1	ND	ND	ND	ND	<2.5	<2.5
Semivolatile Organic Compounds																			
1,2,4-Trichlorobenzene	8.2	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
1,2-Dichlorobenzene	49	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
1,3-Dichlorobenzene	15	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
1,4-Dichlorobenzene	0.47	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
2,4,5-Trichlorophenol	3700	ND	<25	<25	<10	<10	<10	<10	ND	ND	<25	<25	<10	<10	ND	ND	<10	<25	<25
2,4,6-Trichlorophenol	6.1	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
2,4-Dichlorophenol	110	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
2,4-Dimethylphenol	730	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10

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Offsite Well Groundwater Data

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	OFFMW-2 DUP 5/23/2001 (ug/l)	OFFMW-2 7/24/2001 (ug/l)	OFFMW-2 DUP 7/24/2001 (ug/l)	OFFMW-3 1/9/1996 (ug/l)	OFFMW-3 DUP 1/9/1996 (ug/l)	OFFMW-3 4/2/1996 (ug/l)	OFFMW-3 7/29/1997 (ug/l)	OFFMW-3 11/5/1996 (ug/l)	OFFMW-3 3/18/1997 (ug/l)	OFFMW-3 4/12/2001 (ug/l)	OFFMW-3 7/24/2001 (ug/l)	OFFMW-4 1/9/1996 (ug/l)	OFFMW-4 4/2/1996 (ug/l)	OFFMW-4 11/5/1996 (ug/l)	OFFMW-4 3/18/1997 (ug/l)	OFFMW-4 7/29/1997 (ug/l)	OFFMW-4 4/12/2001 (ug/l)	OFFMW-4 7/24/2001 (ug/l)
Metals																			
Semivolatile Organic Compounds																			
2,4-Dinitrophenol	73	ND	<25	<25	<50	<50	<50	<50	ND	ND	<25	<25	<50	<50	ND	ND	<50	<25	<25
2,4-Dinitrotoluene	73	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
2,6-Dinitrotoluene	37	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
2-Chloronaphthalene	490	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
2-Chlorophenol	30	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
2-Methylphenol (o-Cresol)	1800	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
2-Nitroaniline	110	ND	<25	<25	<10	<10	<10	<10	ND	ND	<25	<25	<10	<10	ND	ND	<10	<25	<25
3,3'-Dichlorobenzidine	0.15	ND	<10	<10	<20	<20	<20	<20	ND	ND	<10	<10	<20	<20	ND	ND	<20	<10	<10
4-Chloroaniline	150	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
4-Methylphenol (p-Cresol)	180	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
4-Nitrophenol	290	ND	<25	<25	<50	<50	<50	<50	ND	ND	<25	<25	<50	<50	ND	ND	<50	<25	<25
Acenaphthene	370	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Aniline	12	ND	<10	<10	ND	ND	ND	<10	ND	ND	<10	<10	ND	ND	ND	ND	<10	<10	<10
Anthracene	1800	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Benzo(a)anthracene	0.03	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Benzo(a)pyrene	0.003	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Benzo(b)fluoranthene	0.03	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Benzo(k)fluoranthene	0.3	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Benzoic acid	150000	ND	<25	<25	<20	<20	<20	<20	ND	ND	<25	<25	<20	<20	ND	ND	<20	<25	<25
Benzyl alcohol	11000	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
bis(2-Chloroethyl)ether	0.0098	ND	<10	<10	<10	<10	<10	<10	ND	ND	**12**	**14**	<10	<10	ND	ND	<10	<10	<10
bis(2-Chloroisopropyl)ether	0.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	<10	ND	ND	ND	ND	ND	ND	<10	ND
bis(2-Ethylhexyl)phthalate (BEHP)	4.8	ND	<10	<27	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Butylbenzylphthalate	7300	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Chrysene	3	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Dibenz(a,h)anthracene	0.003	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Dibenzofuran	12	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Diethylphthalate	29000	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Dimethylphthalate	370000	ND	<10	<10	<10	<10	<10	**4.4**	ND	ND	<10	<10	<10	<10	ND	ND	**4.4**	<10	<10
Di-n-butylphthalate	3700	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Di-n-octylphthalate	-	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Dinoseb	37	ND	<10	<10	<10	<10	<7	<7	ND	ND	<10	<10	<10	<7	ND	ND	<7	<10	<10
Fluoranthene	1500	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Fluorene	240	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Hexachlorobenzene	0.042	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Hexachlorobutadiene	0.86	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Hexachlorocyclopentadiene	220	ND	<10	<10	<20	<20	<20	<20	ND	ND	<10	<10	<20	<20	ND	ND	<20	<10	<10
Hexachloroethane	4.8	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Indeno(1,2,3-cd)pyrene	0.03	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Isophorone	71	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Naphthalene	6.2	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Nitrobenzene	3.4	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
N-Nitroso-di-n-propylamine	0.0096	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
N-Nitrosodiphenylamine	14	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Pentachlorophenol	0.56	ND	<25	<25	<50	<50	<50	<50	ND	ND	<25	<25	<50	<50	ND	ND	<50	<25	<25
Phenol	11000	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Propanil	180	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Pyrene	180	ND	<10	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10	ND	ND	<10	<10	<10
Volatile Organic Compounds																			
1,1,1-Trichloroethane	840	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
1,1,2,2-Tetrachloroethane	0.055	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
1,1,2-Trichloroethane	0.2	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
1,1-Dichloroethane	1200	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
1,1-Dichloroethene	340	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
1,2-Dibromoethane	0.0056	<500	<5	<500	ND	ND	ND	<10	<1	<1	<25	<25	ND	ND	<1	<1	<10	<10	<10
1,2-Dichlorobenzene	49	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10

Notes:
ug/l = micrograms per liter
OFF - Offsite Monitoring Well Groundwater Sample
MSSL - Medium Specific Screening Levels
ND - No Data Available
<10 - Not detected, results below detection or reporting limit
- Not detected; detection/reporting limit exceeds the Tap Water MSSL
BOLD - Analyte is detected
- Detection exceeds the Region 6 Tap Water MSSL
NA - No MSSL available

TABLE 1
HISTORICAL GROUNDWATER DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Offsite Well Groundwater Data

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	OFFMW-2 DUP 5/23/2001 (ug/l)	OFFMW-2 7/24/2001 (ug/l)	OFFMW-2 DUP 7/24/2001 (ug/l)	OFFMW-3 1/9/1996 (ug/l)	OFFMW-3 DUP 1/9/1996 (ug/l)	OFFMW-3 4/2/1996 (ug/l)	OFFMW-3 7/29/1997 (ug/l)	OFFMW-3 11/5/1996 (ug/l)	OFFMW-3 3/18/1997 (ug/l)	OFFMW-3 4/12/2001 (ug/l)	OFFMW-3 7/24/2001 (ug/l)	OFFMW-4 1/9/1996 (ug/l)	OFFMW-4 4/2/1996 (ug/l)	OFFMW-4 11/5/1996 (ug/l)	OFFMW-4 3/18/1997 (ug/l)	OFFMW-4 7/29/1997 (ug/l)	OFFMW-4 4/12/2001 (ug/l)	OFFMW-4 7/24/2001 (ug/l)
Metals																			
Volatile Organic Compounds																			
1,2-Dichloroethane	1200	**12000**	**14000**	**10000**	<10	<10	<10	**150**	**14**	**140**	**700**	**530**	<10	<10	<1	<1	<10	**250**	**330**
1,2-Dichloropropane	0.17	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
1,3-Dichlorobenzene	15	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
1,4-Dichlorobenzene	0.47	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
2-Butanone (MEK)	7100	<2500	<25	<2500	<10	<10	<10	<25	<25	<25	<120	<120	<10	<10	<25	<25	<25	<50	<50
4-Methyl-2-Pentanone (MIBK)	2000	<2500	<25	<2500	<10	<10	<10	<10	<5	<5	<120	<120	<10	<10	<5	<5	<10	<50	<50
Acetone	5500	<2500	<31	<2500	<25	<25	<25	<25	<25	<25	<120	<120	<25	<25	<25	<25	<25	<50	<50
Benzene	0.35	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
Bromobenzene	23	<500	<5	<500	ND	ND	ND	<10	<1	<1	<25	<25	ND	ND	<1	<1	<10	<10	<10
Bromodichloromethane	0.18	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
Bromoform	8.5	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
Bromomethane	8.7	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
Carbon disulfide	1000	**510**	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
Carbon tetrachloride	0.17	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
Chlorobenzene	91	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
Chloroethane	3.9	<500	<5	<500	<10	<10	<10	<10	<1	**2**	<25	<25	<10	<10	<1	<1	<10	<10	<10
Chloroform	0.17	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
Chloromethane	2.1	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
cis-1,2-Dichloroethene	61	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
Dibromochloromethane	0.13	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
Dibromomethane	61	<500	<5	<500	ND	ND	ND	<10	<1	<1	<25	<25	ND	ND	<1	<1	<10	<10	<10
Ethylbenzene	1300	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
Methylene chloride	4.3	<1000	<37	<1000	<10	<10	<10	<10	<5	<5	<50	<76	<10	<10	<5	<5	<10	<20	<20
o-Xylene	1400	ND	ND	ND	<10	<10	<10	<10	<1	<1	ND	ND	<10	<10	<1	<1	<10	ND	ND
Styrene	1600	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
Tetrachloroethene	0.11	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
Toluene	2300	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
trans-1,2-Dichloroethene	110	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
Trichloroethene	0.028	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
Trichlorofluoromethane	1300	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
Vinyl acetate	410	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
Vinyl chloride	0.015	<500	<5	<500	<10	<10	<10	<10	<1	<1	<25	<25	<10	<10	<1	<1	<10	<10	<10
Xylene (total)	200	<500	<5	<500	<10	<10	<10	ND	ND	ND	<25	<25	<10	<10	ND	ND	ND	<10	<10
Wet Chemistry Analytes																			
Nitrate (as N)	10000	ND	ND	ND	ND	ND	ND	ND	ND	ND	<100	ND	ND	ND	ND	ND	ND	<100	ND

Notes:
ug/l = micrograms per liter
OFF - Offsite Monitoring Well Groundwater Sample
MSSL - Medium Specific Screening Levels
ND - No Data Available
<10 - Not detected, results below detection or reporting limit
- Not detected; detection/reporting limit exceeds the Tap Water MSSL
BOLD - Analyte is detected
- Detection exceeds the Region 6 Tap Water MSSL
NA - No MSSL available

TABLE 1
HISTORICAL GROUNDWATER DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

BHA Area Groundwater Results

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	BHAG-1 7/25/2001 (ug/l)
Volatile Organic Compounds		
1,1,1-Trichloroethane	840	<5
1,1,2,2-Tetrachloroethane	0.055	<5
1,1,2-Trichloroethane	0.2	<5
1,1-Dichloroethane	1200	<5
1,1-Dichloroethene	340	<5
1,2-Dibromoethane	0.0056	<5
1,2-Dichlorobenzene	49	<5
1,2-Dichloroethane	0.12	**100**
1,2-Dichloropropane	0.17	<5
1,3-Dichlorobenzene	15	<5
1,4-Dichlorobenzene	0.47	<5
2-Butanone (MEK)	7100	<25
4-Methyl-2-Pentanone (MIBK)	2000	<25
Acetone	5500	<25
Benzene	0.35	<5
Bromobenzene	23	<5
Bromodichloromethane	0.18	<5
Bromoform	8.5	<5
Bromomethane	8.7	<5
Carbon disulfide	1000	<5
Carbon tetrachloride	0.17	<5
Chlorobenzene	91	<5
Chloroethane	3.9	<5
Chloroform	0.17	<5
Chloromethane	2.1	<5
cis-1,2-Dichloroethene	61	<5
Dibromochloromethane	0.13	<5
Dibromomethane	61	<5
Ethylbenzene	1300	<5
Methylene chloride	4.3	<13
Styrene	1600	<5
Tetrachloroethene	0.11	<5
Toluene	2300	<5
trans-1,2-Dichloroethene	110	<5
Trichloroethene	0.028	<5
Trichlorofluoromethane	1300	<5
Vinyl acetate	410	<5
Vinyl chloride	0.015	<5
Xylene (total)	200	<5

Notes:

ug/l = micrograms per liter

BHAG - Blackhawk Agricultiral Well Groundwater Sample

MSSL - Medium Specific Screening Levels

ND - No Data Available

<10 - Not detected, results below detection or reporting limit

- Not detected; detection/reporting limit exceeds the Tap Water MSSL

BOLD - Analyte is detected

- Detection exceeds the Region 6 Tap Water MSSL

NA - No MSSL available

TABLE 1
HISTORICAL GROUNDWATER DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	EMW-1 9/22/1993 (ug/L)	EMW-1 11/30/1994 (ug/L)	EMW-1 4/2/1996 (ug/L)	EMW-1 4/11/2001 (ug/L)	EMW-1 DUP 4/11/2001 (ug/L)	EMW-1 7/26/2001 (ug/L)	EMW-2 9/22/1993 (ug/L)	EMW-2 12/1/1994 (ug/L)	EMW-2 4/2/1996 (ug/L)	EMW-2 4/12/2001 (ug/L)	EMW-2 7/25/2001 (ug/L)	EMW-3 9/23/1993 (ug/L)	EMW-3 DUP 9/23/1993 (ug/L)	EMW-3 12/1/1994 (ug/L)	EMW-3 4/11/2001 (ug/L)	EMW-3 7/25/2001 (ug/L)	EMW-4 9/23/1993 (ug/L)	EMW-4 12/1/1994 (ug/L)
Metals																			
Arsenic	0.045	ND	<50	ND	<3.3	<3.3	<2.3	ND	<50	ND	ND	<5.8	ND	ND	<50	**6.6**	**6.4**	ND	<50
Lead	15	ND	<1	ND	ND	ND	ND	ND	<1	ND	ND	ND	ND	ND	<1	ND	ND	ND	<1
Aluminum	37000	ND	ND	ND	ND	ND	ND	ND	ND	ND	<47	ND	ND	ND	ND	ND	ND	ND	ND
Antimony	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	<3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	0.045	**29.3**	ND	ND	ND	ND	ND	**26.5**	ND	ND	<3.3	ND	**39.9**	**43.5**	ND	ND	ND	**44.4**	ND
Arsenic	0.045	**29.3**	ND	ND	ND	ND	ND	**26.5**	ND	ND	<3.3	ND	**39.9**	**43.5**	ND	ND	ND	**44.4**	ND
Barium	7300	**799**	ND	ND	ND	ND	ND	**1120**	ND	ND	**41.8**	ND	**319**	**332**	ND	ND	ND	**2400**	ND
Beryllium	73	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.4	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	18	**3.6**	ND	ND	ND	ND	ND	**8.5**	ND	ND	**1.1**	ND	**180**	**212**	ND	ND	ND	**4.3**	ND
Chromium	NA	**63.2**	ND	ND	ND	ND	ND	**104**	ND	ND	**4.6**	ND	**800**	**972**	ND	ND	ND	**226**	ND
Cobalt	730	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1	ND	ND	ND	ND	ND	ND	ND	ND
Copper	1400	ND	ND	ND	ND	ND	ND	ND	ND	ND	**7.8**	ND	ND	ND	ND	ND	ND	ND	ND
Iron	26000	**64200**	ND	ND	ND	ND	ND	**121000**	ND	ND	**30.5**	ND	**82900**	**85200**	ND	ND	ND	**347000**	ND
Lead	15	**30.8**	ND	ND	ND	ND	ND	**89.4**	ND	ND	<1.2	ND	**38.4**	**40.8**	ND	ND	ND	**174**	ND
Manganese	1700	ND	ND	ND	ND	ND	ND	ND	ND	ND	**3.1**	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	0.63	<0.2	ND	ND	ND	ND	ND	<0.2	ND	ND	<0.1	ND	<0.2	<0.2	ND	ND	ND	<0.2	ND
Nickel	730	ND	ND	ND	ND	ND	ND	ND	ND	ND	**4.2**	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	180	<5	ND	ND	ND	ND	ND	<5	ND	ND	**2.6**	ND	<5	<5	ND	ND	ND	<5	ND
Silver	180	<3	ND	ND	ND	ND	ND	<3	ND	ND	<0.9	ND	<3	<3	ND	ND	ND	<3	ND
Vanadium	180	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	11000	ND	ND	ND	ND	ND	ND	ND	ND	ND	<2	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides/Polychlorinated Biphenyls																			
4,4'-DDD	0.28	<0.11	<0.11	ND	<0.08	<0.08	<0.08	<0.11	<0.11	ND	<0.08	<0.08	<0.11	<0.11	<0.55	<0.08	<0.08	<0.11	<0.11
4,4'-DDE	0.2	<0.04	<0.04	ND	<0.08	<0.08	<0.08	<0.04	<0.04	ND	<0.08	<0.08	<0.04	<0.04	<0.2	<0.08	<0.08	<0.04	<0.04
4,4'-DDT	0.2	**0.49**	<0.12	ND	<0.08	<0.08	<0.08	<0.12	<0.12	ND	<0.08	<0.08	<0.12	<0.12	<0.6	<0.08	<0.08	**0.56**	<0.12
Aldrin	0.004	<0.04	<0.04	ND	<0.04	<0.04	<0.04	<0.04	<0.04	ND	<0.04	<0.04	<0.04	<0.04	<0.2	<0.04	<0.04	<0.04	<0.04
Alpha-BHC	0.011	**0.05**	<0.03	ND	**0.045**	**0.047**	<0.04	<0.03	<0.03	ND	<0.04	<0.04	**0.07**	**0.06**	<0.2	<0.04	<0.04	<0.03	<0.03
Aroclor-1016	0.96	ND	<0.89	ND	ND	ND	ND	ND	<0.89	ND	ND	ND	ND	ND	<4.4	ND	ND	ND	<0.89
Aroclor-1221	0.034	ND	<2.7	ND	ND	ND	ND	ND	<2.7	ND	ND	ND	ND	ND	<14	ND	ND	ND	<2.7
Aroclor-1232	0.034	ND	<0.48	ND	ND	ND	ND	ND	<0.48	ND	ND	ND	ND	ND	<2.4	ND	ND	ND	<0.48
Aroclor-1242	0.034	ND	<0.65	ND	ND	ND	ND	ND	<0.65	ND	ND	ND	ND	ND	<3.2	ND	ND	ND	<0.65
Aroclor-1248	0.034	ND	<2.6	ND	ND	ND	ND	ND	<2.6	ND	ND	ND	ND	ND	<13	ND	ND	ND	<2.6
Aroclor-1254	0.034	ND	<1.2	ND	ND	ND	ND	ND	<1.2	ND	ND	ND	ND	ND	<6	ND	ND	ND	<1.2
Aroclor-1260	0.034	ND	<0.36	ND	ND	ND	ND	ND	<0.36	ND	ND	ND	ND	ND	<1.8	ND	ND	ND	<0.36
Beta-BHC	0.037	<0.06	<0.06	ND	<0.04	<0.04	<0.04	<0.06	<0.06	ND	<0.04	<0.04	<0.06	**0.08**	<0.3	<0.04	<0.04	<0.06	<0.06
Chlordane	0.19	ND	<0.14	ND	ND	ND	ND	ND	<0.14	ND	ND	ND	ND	ND	<0.7	ND	ND	ND	<0.14
Dieldrin	0.0042	<0.02	<0.02	ND	<0.08	<0.08	<0.08	<0.02	<0.02	ND	<0.08	<0.08	**0.03**	**0.02**	<0.1	<0.08	<0.08	<0.02	<0.02

Notes:
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TABLE 1
HISTORICAL GROUNDWATER DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	EMW-1 9/22/1993 (ug/L)	EMW-1 11/30/1994 (ug/L)	EMW-1 4/2/1996 (ug/L)	EMW-1 4/11/2001 (ug/L)	EMW-1 DUP 4/11/2001 (ug/L)	EMW-1 7/26/2001 (ug/L)	EMW-2 9/22/1993 (ug/L)	EMW-2 12/1/1994 (ug/L)	EMW-2 4/2/1996 (ug/L)	EMW-2 4/12/2001 (ug/L)	EMW-2 7/25/2001 (ug/L)	EMW-3 9/23/1993 (ug/L)	EMW-3 DUP 9/23/1993 (ug/L)	EMW-3 12/1/1994 (ug/L)	EMW-3 4/11/2001 (ug/L)	EMW-3 7/25/2001 (ug/L)	EMW-4 9/23/1993 (ug/L)	EMW-4 12/1/1994 (ug/L)
Pesticides/Polychlorinated Biphenyls																			
Endrin	11	<0.06	<0.06	ND	<0.08	<0.08	<0.08	<0.06	<0.06	ND	<0.08	<0.08	<0.06	<0.06	<0.3	<0.08	<0.08	<0.06	<0.06
gamma-BHC (Lindane)	0.052	<0.04	<0.04	ND	<0.04	<0.04	<0.04	<0.04	<0.04	ND	<0.04	<0.04	<0.04	<0.04	<0.2	<0.04	**0.2**	<0.04	<0.04
Heptachlor	0.015	<0.03	<0.03	ND	<0.048	<0.04	<0.07	<0.03	<0.03	ND	<0.041	<0.04	<0.03	<0.03	<0.2	<0.04	<0.11	<0.03	<0.03
Heptachlor Epoxide	0.0074	<0.2	<0.83	ND	<0.04	<0.04	<0.04	<0.2	<0.83	ND	<0.04	<0.04	<0.2	<0.2	<4.2	<0.04	<0.04	<0.2	<0.83
Methoxychlor	180	<1.8	<1.8	ND	<0.38	<0.38	<0.38	<1.8	<1.8	ND	<0.38	<0.38	<1.8	**1.8**	<9	<0.38	<0.38	<1.8	<1.8
Toxaphene	0.061	<2.4	<2.4	ND	<2.5	<2.5	<2.5	<2.4	<2.4	ND	<2.5	<2.5	<2.4	<2.4	<12	<2.5	<2.5	<2.4	<2.4
Semivolatile Organic Compounds																			
1,2,4-Trichlorobenzene	8.2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	**2**	**2**	<20	<10	<10	<10	<10
1,2-Dichlorobenzene	49	<10	**18**	<10	<10	<10	<10	**1**	<10	<10	<10	<10	**310**	**300**	**280**	**120**	**72**	**7**	<10
1,3-Dichlorobenzene	15	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
1,4-Dichlorobenzene	0.47	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
2,4,5-Trichlorophenol	3700	<50	<10	<10	<25	<25	<25	<50	<10	<10	<25	<25	<250	<50	<20	<25	<25	<50	<10
2,4,6-Trichlorophenol	6.1	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
2,4-Dichlorophenol	110	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	**2**	<10	<20	<10	<10	<10	<10
2,4-Dimethylphenol	730	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	**2**	<10	<20	<10	<10	<10	<10
2,4-Dinitrophenol	73	<50	<50	<50	<25	<25	<25	<50	<50	<50	<25	<25	<250	<50	<100	<25	<25	<50	<50
2,4-Dinitrotoluene	73	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
2,6-Dinitrotoluene	37	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
2-Chloronaphthalene	490	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
2-Chlorophenol	30	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<20	<10	<10	<10	<10
2-Methylphenol (o-Cresol)	1800	**2**	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<20	<10	<10	<10	<10
2-Nitroaniline	110	<50	<50	<10	<25	<25	<25	<50	<50	<10	<25	<25	<50	<50	<100	<25	<25	<50	<50
3,3'-Dichlorobenzidine	0.15	<20	<20	<20	<10	<10	<10	<20	<20	<20	<10	<10	<20	<20	<40	<10	<10	<20	<20
4-Chloroaniline	150	<10	<20	<10	<10	<10	<10	<10	<20	<10	<10	<10	**40**	**44**	<40	**50**	**6**	**130**	**180**
4-Methylphenol (p-Cresol)	180	<10	<10	<10	<10	<10	<10	**1**	<10	<10	<10	<10	<50	<10	<20	<10	<10	<10	<10
4-Nitrophenol	290	<50	<50	<50	<25	<25	<25	<50	<50	<50	<25	<25	<250	<50	<100	<25	<25	<50	<50
Acenaphthene	370	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Aniline	12	ND	ND	ND	<10	<10	<10	ND	ND	ND	<10	<10	ND	ND	ND	<10	<10	ND	ND
Anthracene	1800	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Benzo(a)anthracene	0.03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Benzo(a)pyrene	0.003	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Benzo(b)fluoranthene	0.03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Benzo(k)fluoranthene	0.3	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Benzoic acid	150000	<50	<50	<20	<25	<25	<25	<50	<50	<20	<25	<25	<50	<50	<100	**8**	<25	<50	<50
Benzyl alcohol	11000	<10	<20	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10	<10	<40	<10	<10	<10	<20
bis(2-Chloroethyl)ether	0.0098	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	**5**	<10
bis(2-Chloroisopropyl)ether	0.27	<10	<10		<10	<10		<10	<10		<10		<10	<10	<20	<10		<10	<10
bis(2-Ethylhexyl)phthalate (BEHP)	4.8	<22	<10	<10	<10	<10	<10	<28	<10	<10	<10	<10	<27	<15	<20	<10	<15	<58	<10
Butylbenzylphthalate	7300	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10

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HELENA-WEST HELENA, ARKANSAS

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	EMW-1 9/22/1993 (ug/L)	EMW-1 11/30/1994 (ug/L)	EMW-1 4/2/1996 (ug/L)	EMW-1 4/11/2001 (ug/L)	EMW-1 DUP 4/11/2001 (ug/L)	EMW-1 7/26/2001 (ug/L)	EMW-2 9/22/1993 (ug/L)	EMW-2 12/1/1994 (ug/L)	EMW-2 4/2/1996 (ug/L)	EMW-2 4/12/2001 (ug/L)	EMW-2 7/25/2001 (ug/L)	EMW-3 9/23/1993 (ug/L)	EMW-3 DUP 9/23/1993 (ug/L)	EMW-3 12/1/1994 (ug/L)	EMW-3 4/11/2001 (ug/L)	EMW-3 7/25/2001 (ug/L)	EMW-4 9/23/1993 (ug/L)	EMW-4 12/1/1994 (ug/L)
Semivolatile Organic Compounds																			
Chrysene	3	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Dibenz(a,h)anthracene	0.003	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Dibenzofuran	12	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Diethylphthalate	29000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	**2**	**2**	<20	<10	<10	<10	<10
Dimethylphthalate	370000	**10**	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Di-n-butylphthalate	3700	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Di-n-octylphthalate	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Dinoseb	37	**42**	**48**	**86**	**6**	**6**	**11**	<50	<7	**86**	**50**	**28**	**140**	**94**	**980**	<10	**52**	<50	<7
Fluoranthene	1500	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Fluorene	240	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Hexachlorobenzene	0.042	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Hexachlorobutadiene	0.86	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Hexachlorocyclopentadiene	220	<10	<10	<20	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10	<20	<10	<10	<10	<10
Hexachloroethane	4.8	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Indeno(1,2,3-cd)pyrene	0.03	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Isophorone	71	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	**6**	**6**	<20	<10	<10	<10	<10
Naphthalene	6.2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	**4**	**4**	<20	**3**	<10	<10	<10
Nitrobenzene	3.4	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
N-Nitroso-di-n-propylamine	0.0096	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
N-Nitrosodiphenylamine	14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
Pentachlorophenol	0.56	<50	<50	<50	<25	<25	<25	<50	<50	<50	<25	<25	<250	<50	<100	<25	<25	<50	<50
Phenol	11000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<20	<10	<10	**1**	<10
Propanil	180	<10		<10	<10	<10	<10	<10	ND	<10	<10	<10	<31	**24**	ND	<10	<10	<10	ND
Pyrene	180	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10
1,1,1-Trichloroethane	840	<5	<5	<10	<1	<1	<1	<5	<5	<10	<1	<1	<50	<250	<250	<200	<250	<40	<50
1,1,2,2-Tetrachloroethane	0.055	<5	<5	<10	<1	<1	<1	<5	<5	<10	<1	<1	<50	<250	<250	<200	<250	<40	<50
1,1,2-Trichloroethane	0.2	<5	<5	<10	<1	<1	<1	<5	<5	<10	<1	<1	<50	<250	<250	<200	<250	<40	<50
1,1-Dichloroethane	1200	<5	<5	<10	<1	<1	<1	<5	<5	<10	<1	<1	<50	<250	<250	<200	<250	<40	<50
1,1-Dichloroethene	340	<5	<5	<10	<1	<1	<1	<5	<5	<10	<1	<1	<50	<250	<250	<200	<250	<40	<50
1,2-Dibromoethane	0.0056	ND	ND	ND	<1	<1	<1	ND	ND	ND	<1	<1	ND	ND	ND	<200	<250	ND	ND
1,2-Dichlorobenzene	49	ND	ND	<10	<1	**0.1**	<1	ND	ND	<10	<1	**1**	ND	ND	ND	**74**	**130**	ND	ND
1,2-Dichloroethane	1200	**36**	**62**	<10	**0.8**	**0.7**	**2**	<5	<5	<10	**0.3**	**2**	**6100**	**6700**	**10000**	**4800**	**5300**	**1200**	**920**
1,2-Dichloropropane	0.17	<5	<5	<10	<1	<1	<1	<5	<5	<10	<1	<1	<50	<250	<250	<200	<250	<40	<50
1,3-Dichlorobenzene	15	ND	ND	<10	<1	<1	<1	ND	ND	<10	<1	<1	ND	ND	ND	<200	<250	ND	ND
1,4-Dichlorobenzene	0.47	ND	ND	<10	<1	<1	<1	ND	ND	<10	<1	<1	ND	ND	ND	<200	<250	ND	ND
2-Butanone (MEK)	7100	<10	<100	<10	<5	<5	<5	<10	<100	<10	<5	<5	<100	<500	<5000	<1000	<1200	<80	<1000
4-Methyl-2-Pentanone (MIBK)	2000	<50	<50	<10	<5	<5	<5	<50	<50	<10	<5	<5	**11**	<2500	<2500	<1000	<1200	<400	<500
Acetone	5500	<10	<100	<25	<5	<5	<5	<10	**130**	<25	<5	<2	<100	<500	<5000	<1000	<1200	<80	<1000
Benzene	0.35	<5	<5	<10	<1	<1	<1	<5	<5	<10	<1	<1	<50	<250	<250	<200	<250	<40	<50

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Volatile Organic Compounds																			
Bromobenzene	23	ND	ND	ND	<1	<1	<1	ND	ND	ND	<1	<1	ND	ND	ND	<200	<250	ND	ND
Bromodichloromethane	0.18	<5	<5	<10	<1	<1	<1	<5	<5	<10	<1	<1	<50	<250	<250	<200	<250	<40	<50
Bromoform	8.5	<5	<5	<10	<1	<1	<1	<5	<5	<10	<1	<1	<50	<250	<250	<200	<250	<40	<50
Bromomethane	8.7	<10	<10	<10	<1	<1	<1	<10	<10	<10	<1	<1	<100	<500	<500	<200	<250	<80	<100
Carbon disulfide	1000	<5	<100	<10	<1	<1	<1	<5	<100	<10	<1	<1	<50	<250	<5000	<200	<250	<40	<1000
Carbon tetrachloride	0.17	<5	<5	<10	<1	<1	<1	<5	<5	<10	<1	<1	<50	<250	<250	<200	<250	<40	<50
Chlorobenzene	91	<5	<5	<10	<1	<1	<1	<5	<5	<10	<1	**0.5**	**26**	<250	<250	<200	<250	**16**	<50
Chloroethane	3.9	<10	<10	<10	<1	<1	<1	<10	<10	<10	<1	<1	<100	<500	<500	<200	<250	<80	<100
Chloroform	0.17	**1**	<5	<10	<1	<1	<1	<5	<5	<10	<1	<1	**55**	**65**	<250	<200	<250	<40	<50
Chloromethane	2.1	<10	<10	<10	<1	<1	<1	<10	<10	<10	<1	<1	<100	<500	<500	<200	<250	<80	<100
cis-1,2-Dichloroethene	61	ND	ND	<10	<1	<1	<1	ND	ND	<10	<1	<1	ND	ND	ND	<200	<250	ND	ND
Dibromochloromethane	0.13	<5	<5	<10	<1	<1	<1	<5	<5	<10	<1	<1	<50	<250	<250	<200	<250	<40	<50
Dibromomethane	61	ND	ND	ND	<1	<1	<1	ND	ND		<1	<1	ND	ND	ND	<200	<250	ND	ND
Ethylbenzene	1300	<5	<5	<10	<1	<1	<1	<5	<5	<10	<1	<1	**54**	**65**	<250	<200	<250	<40	<50
Methylene chloride	4.3	<5	<20	<10	<2	<2	<8	<5	<20	<10	<1	<2	**390**	**410**	**2000**	<400	<920	<40	<200
o-Xylene	1400	ND	ND	<10	ND	ND	ND	ND	ND	<10	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	1600	<5	<5	<10	<1	<1	<1	<5	<5	<10	<1	<1	<50	<250	<250	<200	<250	<40	<50
Tetrachloroethene	0.11	<5	<5	<10	<1	<1	<1	<5	<5	<10	<1	<1	<50	<250	<250	<200	<250	<40	<50
Toluene	2300	<5	<5	<10	<1	<1	<1	<5	<5	<10	<1	<1	**32**	<250	<250	<200	<250	<40	<50
trans-1,2-Dichloroethene	110	ND	<5	<10	<1	<1	<1	ND	<5	<10	<1	<1	ND	ND	<250	<200	<250	ND	<50
Trichloroethene	0.028	<5	<5	<10	<1	<1	<1	<5	<5	<10	<1	<1	<50	<250	<250	<200	<250	<40	<50
Trichlorofluoromethane	1300	ND	ND	<10	<1	<1	<1	ND	ND	<10	<1	<1	ND	ND	ND	<200	<250	ND	ND
Vinyl acetate	410	<5	<50	<10	<1	<1	<1	<5	<50	<10	<1	<1	<50	<250	<2500	<200	<250	<40	<500
Vinyl chloride	0.015	<5	<10	<10	<1	<1	<1	<5	<10	<10	<1	<1	<50	<250	<500	<200	<250	<40	<100
Xylene (total)	200	<5	<5	<10	<1	<1	<1	<5	<5	<10	<1	<1	**88**	**100**	<250	<200	<250	<40	<50
Wet Chemistry Analytes																			
Ammonia (as N)	210	<100	ND	ND	ND	ND	ND	**300**	ND	ND	ND	ND	**700**	**800**	ND	ND	ND	**200**	ND
Nitrate (as N)	10000	<200	ND	ND	ND	ND	ND	<200	ND	ND	**3130**	ND	<200	<200	ND	ND	ND	<200	ND

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TABLE 1
HISTORICAL GROUNDWATER DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	EMW-4 Dup 12/1/1994 (ug/L)	EMW-4 4/11/2001 (ug/L)	EMW-4 7/24/2001 (ug/L)	EMW-6 9/24/1993 (ug/L)	EMW-6 11/30/1994 (ug/L)	EMW-6A 9/24/1993 (ug/L)	EMW-6A 11/30/1994 (ug/L)	EMW-6B 9/24/1993 (ug/L)	EMW-6B 11/30/1994 (ug/L)	EMW-7 9/23/1993 (ug/L)	EMW-7 12/1/1994 (ug/L)	EMW-7 9/27/1995 (ug/L)	EMW-7 11/7/1996 (ug/L)	EMW-7 3/20/1997 (ug/L)	EMW-7 DUP 3/20/1997 (ug/L)	EMW-7 7/30/1997 (ug/L)	EMW-7 4/12/2001 (ug/L)	EMW-7 5/23/2001 (ug/L)	EMW-7 7/24/2001 (ug/L)
Metals																				
Arsenic	0.045	<50	<3.3	**6.5**	ND	<50	ND	<50	ND	<50	ND	<50	ND	ND	ND	ND	ND	ND	ND	**16.2**
Lead	15	<1	ND	ND	ND	<1	ND	<1	ND	**8.8**	ND	<1	ND	ND	ND	ND	ND	ND	ND	ND
Aluminum	37000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<47	ND	ND
Antimony	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**4.9**	ND	ND
Arsenic	0.045	ND	ND	ND	**10**	ND	**47.8**	ND	**28**	ND	**29.7**	ND	ND	ND	ND	ND	ND	**13.6**	ND	ND
Arsenic	0.045	ND	ND	ND	**10**	ND	**47.8**	ND	**28**	ND	**29.7**	ND	ND	ND	ND	ND	ND	**13.6**	ND	ND
Barium	7300	ND	ND	ND	**336**	ND	**1010**	ND	**830**	ND	**441**	ND	ND	ND	ND	ND	ND	**276**	ND	ND
Beryllium	73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.4	ND	ND
Cadmium	18	ND	ND	ND	<2	ND	<2	ND	**16.3**	ND	<2	ND	ND	ND	ND	ND	ND	<1	ND	ND
Chromium	NA	ND	ND	ND	**18.6**	ND	**72.6**	ND	**58.6**	ND	**63.9**	ND	ND	ND	ND	ND	ND	<1	ND	ND
Cobalt	730	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1	ND	ND
Copper	1400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<2	ND	ND
Iron	26000	ND	ND	ND	**14900**	ND	**106000**	ND	**50100**	ND	**38200**	ND	ND	ND	ND	ND	ND	**3100**	ND	ND
Lead	15	ND	ND	ND	**10.1**	ND	**66.4**	ND	**29.3**	ND	**25**	ND	ND	ND	ND	ND	ND	<1.2	ND	ND
Manganese	1700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**885**	ND	ND
Mercury	0.63	ND	ND	ND	<0.2	ND	<0.2	ND	<0.2	ND	<0.2	ND	ND	ND	ND	ND	ND	<0.1	ND	ND
Nickel	730	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**6.4**	ND	ND
Selenium	180	ND	ND	ND	<5	ND	<5	ND	<5	ND	<5	ND	ND	ND	ND	ND	ND	<2	ND	ND
Silver	180	ND	ND	ND	<3	ND	<3	ND	<3	ND	<3	ND	ND	ND	ND	ND	ND	<0.9	ND	ND
Vanadium	180	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1	ND	ND
Zinc	11000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<2	ND	ND
Pesticides/Polychlorinated Biphenyls																				
4,4'-DDD	0.28	<0.11	<0.08	<0.08	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	ND	ND	ND	ND	ND	<0.08	ND	<0.08
4,4'-DDE	0.2	<0.04	<0.08	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	ND	ND	ND	ND	ND	<0.08	ND	<0.08
4,4'-DDT	0.2	<0.12	<0.08	<0.08	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	ND	ND	ND	ND	ND	<0.08	ND	<0.08
Aldrin	0.004	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	ND	ND	ND	ND	ND	<0.04	ND	<0.04
Alpha-BHC	0.011	<0.03	<0.09	<0.04	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	ND	ND	ND	ND	ND	<0.04	ND	<0.04
Aroclor-1016	0.96	<0.89	ND	ND	ND	<0.89	ND	<0.89	ND	<0.89	ND	<0.89	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	0.034	<2.7	ND	ND	ND	<2.7	ND	<2.7	ND	<2.7	ND	<2.7	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	0.034	<0.48	ND	ND	ND	<0.48	ND	<0.48	ND	<0.48	ND	<0.48	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	0.034	<0.65	ND	ND	ND	<0.65	ND	<0.65	ND	<0.65	ND	<0.65	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	0.034	<2.6	ND	ND	ND	<2.6	ND	<2.6	ND	<2.6	ND	<2.6	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1254	0.034	<1.2	ND	ND	ND	<1.2	ND	<1.2	ND	<1.2	ND	<1.2	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260	0.034	<0.36	ND	ND	ND	<0.36	ND	<0.36	ND	<0.36	ND	<0.36	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	0.037	<0.06	<0.04	<0.04	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	ND	ND	ND	ND	ND	<0.04	ND	<0.04
Chlordane	0.19	<0.14	ND	ND	ND	<0.14	ND	<0.14	ND	<0.14	ND	<0.14	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	0.0042	<0.02	<0.08	<0.08	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	ND	ND	ND	ND	ND	<0.08	ND	<0.08

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CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	EMW-4 Dup 12/1/1994 (ug/L)	EMW-4 4/11/2001 (ug/L)	EMW-4 7/24/2001 (ug/L)	EMW-6 9/24/1993 (ug/L)	EMW-6 11/30/1994 (ug/L)	EMW-6A 9/24/1993 (ug/L)	EMW-6A 11/30/1994 (ug/L)	EMW-6B 9/24/1993 (ug/L)	EMW-6B 11/30/1994 (ug/L)	EMW-7 9/23/1993 (ug/L)	EMW-7 12/1/1994 (ug/L)	EMW-7 9/27/1995 (ug/L)	EMW-7 11/7/1996 (ug/L)	EMW-7 3/20/1997 (ug/L)	EMW-7 DUP 3/20/1997 (ug/L)	EMW-7 7/30/1997 (ug/L)	EMW-7 4/12/2001 (ug/L)	EMW-7 5/23/2001 (ug/L)	EMW-7 7/24/2001 (ug/L)
Pesticides/Polychlorinated Biphenyls																				
Endrin	11	<0.06	<0.41	<0.08	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	ND	ND	ND	ND	ND	<0.08	ND	<0.08
gamma-BHC (Lindane)	0.052	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	ND	ND	ND	ND	ND	<0.04	ND	<0.04
Heptachlor	0.015	<0.03	<0.04	<0.041	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	ND	ND	ND	ND	ND	<0.04	ND	<0.04
Heptachlor Epoxide	0.0074	<0.83	<0.04	<0.04	<0.2	<0.83	<0.2	<0.83	<0.2	<0.83	<0.2	<0.83	ND	ND	ND	ND	ND	<0.04	ND	<0.04
Methoxychlor	180	<1.8	<0.38	<0.38	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	ND	ND	ND	ND	ND	<0.38	ND	<0.38
Toxaphene	0.061	<2.4	<2.5	<2.5	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	ND	ND	ND	ND	ND	<2.5	ND	<2.5
Semivolatile Organic Compounds																				
1,2,4-Trichlorobenzene	8.2	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
1,2-Dichlorobenzene	49	<10	**21**	**26**	<10	<10	<10	<10	**130**	**120**	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
1,3-Dichlorobenzene	15	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
1,4-Dichlorobenzene	0.47	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
2,4,5-Trichlorophenol	3700	<10	<25	<25	<50	<10	<50	<10	<250	<100	<50	<100	<10	<10	<10	<10	<10	<25	ND	<25
2,4,6-Trichlorophenol	6.1	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
2,4-Dichlorophenol	110	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
2,4-Dimethylphenol	730	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
2,4-Dinitrophenol	73	<50	<25	<25	<50	<50	<50	<50	<250	<500	<50	<500	<50	<50	<50	<50	<50	<25	ND	<25
2,4-Dinitrotoluene	73	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
2,6-Dinitrotoluene	37	<10	<10	<10	<10	<10	<10	<10	<50	<100	**13**	<100	<10	<10	<10	<10	<10	<10	ND	<10
2-Chloronaphthalene	490	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
2-Chlorophenol	30	<10	<10	<10	<10	<10	<10	<10	<50	<100	**1**	<100	<10	<10	<10	<10	<10	<10	ND	<10
2-Methylphenol (o-Cresol)	1800	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
2-Nitroaniline	110	<50	<25	<25	<50	<50	<50	<50	<250	<500	<50	<500	<10	<10	<10	<10	<10	<25	ND	<25
3,3'-Dichlorobenzidine	0.15	<20	<10	<10	<20	<20	<20	<20	<100	<200	<20	<200	<20	<20	<20	<20	<20	<10	ND	<10
4-Chloroaniline	150	**140**	**310**	**300**	<10	<20	<10	<20	**5900**	**6900**	**65**	<200	<10	<10	**17**	<10	<10	<10	ND	<10
4-Methylphenol (p-Cresol)	180	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
4-Nitrophenol	290	<50	<25	<25	<50	<50	<50	<50	<250	<500	<50	<500	<50	<50	<50	<50	<50	<25	ND	<25
Acenaphthene	370	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Aniline	12	ND	<10	<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	<10	<10	<10	<10	<10	ND	<10
Anthracene	1800	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Benzo(a)anthracene	0.03	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Benzo(a)pyrene	0.003	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Benzo(b)fluoranthene	0.03	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Benzo(k)fluoranthene	0.3	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Benzoic acid	150000	<50	**8**	<25	<50	<50	<50	<50	<250	<500	<50	<500	<20	<20	<20	<20	**110**	<25	ND	<25
Benzyl alcohol	11000	<20	<10	<10	<10	<20	<10	<20	<50	<200	<10	<200	<10	<10	<10	<10	<10	<10	ND	<10
bis(2-Chloroethyl)ether	0.0098	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
bis(2-Chloroisopropyl)ether	0.27	<10	<10		<10	<10	<10	<10	<50	<100	<10	<100	ND	ND	ND	ND	ND	<10	ND	ND
bis(2-Ethylhexyl)phthalate (BEHP)	4.8	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<40	ND	<10
Butylbenzylphthalate	7300	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10

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Analyte	Region 6 2007 Tap Water MSSL (ug/l)	EMW-4 Dup 12/1/1994 (ug/L)	EMW-4 4/11/2001 (ug/L)	EMW-4 7/24/2001 (ug/L)	EMW-6 9/24/1993 (ug/L)	EMW-6 11/30/1994 (ug/L)	EMW-6A 9/24/1993 (ug/L)	EMW-6A 11/30/1994 (ug/L)	EMW-6B 9/24/1993 (ug/L)	EMW-6B 11/30/1994 (ug/L)	EMW-7 9/23/1993 (ug/L)	EMW-7 12/1/1994 (ug/L)	EMW-7 9/27/1995 (ug/L)	EMW-7 11/7/1996 (ug/L)	EMW-7 3/20/1997 (ug/L)	EMW-7 DUP 3/20/1997 (ug/L)	EMW-7 7/30/1997 (ug/L)	EMW-7 4/12/2001 (ug/L)	EMW-7 5/23/2001 (ug/L)	EMW-7 7/24/2001 (ug/L)
Semivolatile Organic Compounds																				
Chrysene	3	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Dibenz(a,h)anthracene	0.003	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Dibenzofuran	12	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Diethylphthalate	29000	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Dimethylphthalate	370000	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	**6.3**	<10	ND	<10
Di-n-butylphthalate	3700	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Di-n-octylphthalate	NA	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Dinoseb	37	<7	<10	<10	<50	<7	<50	<7	<250	<70	<50	<70	**33**	<7	**10**	<7	<7	<10	ND	<10
Fluoranthene	1500	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Fluorene	240	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Hexachlorobenzene	0.042	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Hexachlorobutadiene	0.86	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Hexachlorocyclopentadiene	220	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<20	<20	<20	<20	<20	<10	ND	<10
Hexachloroethane	4.8	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Indeno(1,2,3-cd)pyrene	0.03	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Isophorone	71	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Naphthalene	6.2	<10	<10	<10	<10	<10	<10	<10	**15**	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Nitrobenzene	3.4	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
N-Nitroso-di-n-propylamine	0.0096	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
N-Nitrosodiphenylamine	14	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Pentachlorophenol	0.56	<50	<25	<25	<50	<50	<50	<50	<250	<500	<50	<500	<50	<50	<50	<50	<50	<25	ND	<25
Phenol	11000	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
Propanil	180	ND	<10	<10	<10	ND	<10	ND	**18**	ND	<10	ND	<10	<10	<10	<10	<10	<10	ND	<10
Pyrene	180	<10	<10	<10	<10	<10	<10	<10	<50	<100	<10	<100	<10	<10	<10	<10	<10	<10	ND	<10
1,1,1-Trichloroethane	840	<50	<25	<1	<5	<10	<5	<5	<50	<5	<2500	<2500	<10	<1	<5000	<2500	<8000	<500	<1200	<1
1,1,2,2-Tetrachloroethane	0.055	<50	<25	<1	<5	<10	<5	<5	<50	<5	<2500	<2500	<10	<1	<5000	<2500	<8000	<500	<1200	<1
1,1,2-Trichloroethane	0.2	<50	<25	<1	<5	<10	<5	<5	<50	<5	<2500	<2500	<10	<1	<5000	<2500	<8000	<500	<1200	<1
1,1-Dichloroethane	1200	<50	<25	<1	<5	<10	<5	<5	<50	<5	<2500	<2500	<10	**1.4**	<5000	<2500	<8000	<500	<1200	**0.7**
1,1-Dichloroethene	340	<50	<25	<1	<5	<10	<5	<5	<50	<5	<2500	<2500	<10	<1	<5000	<2500	<8000	<500	<1200	<1
1,2-Dibromoethane	0.0056	ND	<25	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1	<5000	<2500	<8000	<500	<1200	<1
1,2-Dichlorobenzene	49	ND	**31**	**48**	ND	ND	ND	ND	ND	ND	ND	ND	<10	<1	<5000	<2500	<8000	<500	<1200	**2**
1,2-Dichloroethane	1200	**950**	**490**	**660**	**190**	**360**	**18**	**49**	**1900**	**1500**	**64000**	**84000**	**87000**	**92000**	**78000**	**69000**	**91000**	**30000**	**30000**	**24000**
1,2-Dichloropropane	0.17	<50	<25	<1	<5	<10	<5	<5	<50	<5	<2500	<2500	<150	**160**	<5000	<2500	<8000	<500	<1200	<1
1,3-Dichlorobenzene	15	ND	<25	<1	ND	ND	ND	ND	ND	ND	ND	ND	<10	<1	<5000	<2500	<8000	<500	<1200	<1
1,4-Dichlorobenzene	0.47	ND	<25	**0.5**	ND	ND	ND	ND	ND	ND	ND	ND	<10	<1	<5000	<2500	<8000	<500	<1200	<1
2-Butanone (MEK)	7100	<1000	<120	<5	<10	<200	<10	<100	<100	<100	<5000	<50000	<10	<25	<125000	<62500	<20000	<2500	<6200	<5
4-Methyl-2-Pentanone (MIBK)	2000	<500	<120	<5	<50	<100	<50	<50	<500	<50	<25000	<25000	<10	<5	<25000	<12500	<8000	<2500	<6200	<5
Acetone	5500	<1000	<120	<8	<10	<200	<10	<100	<100	**230**	<5000	<50000	<25	<25	<125000	<62500	<20000	<2500	<6200	<5
Benzene	0.35	<50	<25	**4**	<5	<10	<5	<5	**17**	**14**	<2500	<2500	<10	<1	<5000	<2500	<8000	<500	<1200	<1

Notes:
ug/l = micrograms per liter
EMW - Existing Cedar Monitoring Well Groundwater Sample
MSSL - Medium Specific Screening Levels
ND - No Data Available
<10 - Not detected, results below detection or reporting limit
- Not detected; detection/reporting limit exceeds the Tap Water MSSL
BOLD - Analyte is detected
- Detection exceeds the Region 6 Tap Water MSSL
NA - No MSSL available

TABLE 1
HISTORICAL GROUNDWATER DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Analyte	Region 6 2007 Tap Water MSSL (ug/l)	EMW-4 Dup 12/1/1994 (ug/L)	EMW-4 4/11/2001 (ug/L)	EMW-4 7/24/2001 (ug/L)	EMW-6 9/24/1993 (ug/L)	EMW-6 11/30/1994 (ug/L)	EMW-6A 9/24/1993 (ug/L)	EMW-6A 11/30/1994 (ug/L)	EMW-6B 9/24/1993 (ug/L)	EMW-6B 11/30/1994 (ug/L)	EMW-7 9/23/1993 (ug/L)	EMW-7 12/1/1994 (ug/L)	EMW-7 9/27/1995 (ug/L)	EMW-7 11/7/1996 (ug/L)	EMW-7 3/20/1997 (ug/L)	EMW-7 DUP 3/20/1997 (ug/L)	EMW-7 7/30/1997 (ug/L)	EMW-7 4/12/2001 (ug/L)	EMW-7 5/23/2001 (ug/L)	EMW-7 7/24/2001 (ug/L)
Volatile Organic Compounds																				
Bromobenzene	23	ND	<25	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1	<5000	<2500	<8000	<500	<1200	<1
Bromodichloromethane	0.18	<50	<25	<1	<5	<10	<5	<5	<50	<5	<2500	<2500	<10	<1	<5000	<2500	<8000	<500	<1200	<1
Bromoform	8.5	<50	<25	<1	<5	<10	<5	<5	<50	<5	<2500	<2500	<10	<1	<5000	<2500	<8000	<500	<1200	<1
Bromomethane	8.7	<100	<25	<1	<10	<20	<10	<10	<100	<10	<5000	<5000	<10	<1	<5000	<2500	<8000	<500	<1200	<1
Carbon disulfide	1000	<1000	<25	<1	<5	<200	<5	<100	<50	<100	<2500	<50000	<10	<1	<5000	<2500	<8000	<500	<1200	<1
Carbon tetrachloride	0.17	<50	<25	<1	<5	<10	<5	<5	<50	<5	<2500	<2500	<10	<1	<5000	<2500	<8000	<500	<1200	<1
Chlorobenzene	91	<50	**53**	**79**	<5	<10	<5	<5	**30**	**48**	<2500	<2500	**10**	<1	<5000	<2500	<8000	<500	<1200	**1**
Chloroethane	3.9	<100	<25	<1	<10	<20	<10	<10	<100	<10	<5000	<5000	<11	**11**	<5000	<2500	<8000	<500	<1200	<1
Chloroform	0.17	<50	<25	<1	<5	<10	<5	<5	<50	<5	<2500	<2500	<10	<1	<5000	<2500	<8000	<500	<1200	<1
Chloromethane	2.1	<100	<25	<1	<10	<20	<10	<10	<100	<10	<5000	<5000	<10	<1	<5000	<2500	<8000	<500	<1200	<1
cis-1,2-Dichloroethene	61	ND	<25	**0.6**	ND	ND	ND	ND	ND	ND	ND	ND	<10	<1	<5000	<2500	<8000	<500	<1200	<1
Dibromochloromethane	0.13	<50	<25	<1	<5	<10	<5	<5	<50	<5	<2500	<2500	<10	<1	<5000	<2500	<8000	<500	<1200	<1
Dibromomethane	61	ND	<25	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1	<5000	<2500	<8000	<500	<1200	<1
Ethylbenzene	1300	<50	<25	<1	<5	<10	<5	<5	<50	<5	<2500	<2500	<10	<1	<5000	<2500	<8000	<500	<1200	<1
Methylene chloride	4.3	<200	<50	<3	<5	<40	<5	<20	<50	<20	<2500	<10000	<10	**12**	<25000	<12500	<8000	<1000	<2400	<4
o-Xylene	1400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**10**	<1	<5000	<2500	<8000	ND	ND	ND
Styrene	1600	<50	<25	<1	<5	<10	<5	<5	<50	<5	<2500	<2500	<10	<1	<5000	<2500	<8000	<500	<1200	<1
Tetrachloroethene	0.11	<50	<25	<1	<5	<10	<5	<5	<50	<5	<2500	<2500	<10	<1	<5000	<2500	<8000	<500	<1200	<1
Toluene	2300	<50	<25	<1	<5	<10	<5	<5	<50	<5	<2500	<2500	<10	<1	<5000	<2500	<8000	<500	<1200	<1
trans-1,2-Dichloroethene	110	<50	<25	**0.4**	ND	<10	ND	<5	ND	<5	ND	<2500	**10**	<1	<5000	<2500	<8000	<500	<1200	<1
Trichloroethene	0.028	<50	<25	<1	<5	<10	<5	<5	<50	<5	<2500	<2500	<10	<1	<5000	<2500	<8000	<500	<1200	<1
Trichlorofluoromethane	1300	ND	<25	<1	ND	ND	ND	ND	ND	ND	ND	ND	<10	<1	<5000	<2500	<8000	<500	<1200	<1
Vinyl acetate	410	<500	<25	<1	<5	<100	<5	<50	<50	<50	<2500	<25000	**10**	<1	<5000	<2500	<8000	<500	<1200	<1
Vinyl chloride	0.015	<100	<25	<1	<5	<20	<5	<10	<50	<10	<2500	<5000	<23	**40**	<5000	<2500	<8000	<500	<1200	**5**
Xylene (total)	200	<50	<25	<1	<5	<10	<5	<5	<50	<5	<2500	<2500	<10	ND	ND	ND	ND	<500	<1200	<1
Wet Chemistry Analytes																				
Ammonia (as N)	210	ND	ND	ND	<100	ND	**800**	ND	<100	ND	**400**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrate (as N)	10000	ND	ND	ND	<200	ND	<200	ND	<200	ND	<200	ND	ND	ND	ND	ND	ND	<100	ND	ND

Notes:
ug/l = micrograms per liter
EMW - Existing Cedar Monitoring Well Groundwater Sample
MSSL - Medium Specific Screening Levels
ND - No Data Available
<10 - Not detected, results below detection or reporting limit
- Not detected; detection/reporting limit exceeds the Tap Water MSSL
BOLD - Analyte is detected
- Detection exceeds the Region 6 Tap Water MSSL
NA - No MSSL available

Table 2

Historical Soil and Sediment Data

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

1,2-Dichlorobenzene Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
1HA-1 (0-1') 9/2/1993	Soil	1,2-Dichlorobenzene	<0.8	370	0.9
1HA-2 (0-1') 9/2/1993	Soil	1,2-Dichlorobenzene	<0.82	370	0.9
1HA-3 (0-1') 9/2/1993	Soil	1,2-Dichlorobenzene	<0.72	370	0.9
1HA-4 (0-1') 9/2/1993	Soil	1,2-Dichlorobenzene	<150	370	0.9
1HA-5 (0-1') 9/2/1993	Soil	1,2-Dichlorobenzene	<2.3	370	0.9
1HA-6 (13-14') 11/28/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
1HA-6 (8-9') 11/28/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
1HA-7 (11-12') 1/31/1995	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
1HA-7 (2-3') 1/31/1995	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
1HA-7 (2-3') 12/12/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
1HA-7 (5-6') 1/31/1995	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
1MW-1 (0-5') 8/31/1993	Soil	1,2-Dichlorobenzene	<0.79	370	0.9
1MW-1 (5-10') 8/31/1993	Soil	1,2-Dichlorobenzene	<0.84	370	0.9
1MW-2 (0-5') 8/31/1993	Soil	1,2-Dichlorobenzene	<0.78	370	0.9
1MW-2 (5-10') 8/31/1993	Soil	1,2-Dichlorobenzene	<0.82	370	0.9
1MW-3 (0-5') 9/1/1993	Soil	1,2-Dichlorobenzene	<0.77	370	0.9
1MW-3 (5-10') 9/1/1993	Soil	1,2-Dichlorobenzene	<0.84	370	0.9
1MW-4 (0-5') 9/1/1993	Soil	1,2-Dichlorobenzene	<0.77	370	0.9
1MW-4 (5-10') 9/1/1993	Soil	1,2-Dichlorobenzene	<0.82	370	0.9
1MW-5 (0-5') 9/1/1993	Soil	1,2-Dichlorobenzene	<0.78	370	0.9
1MW-5 (5-10') 9/1/1993	Soil	1,2-Dichlorobenzene	<0.81	370	0.9
1MW-6 (25-30') 9/23/1993	Soil	1,2-Dichlorobenzene	<0.46	370	0.9
1SB-1 (0-2') 12/20/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
1SB-1 (12-14') 12/20/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
1SB-1 (4-6') 12/20/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
1SED-1 9/7/1993	Sediment	1,2-Dichlorobenzene	<140	370	0.9

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

1,2-Dichlorobenzene Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
1SED-2 9/7/1993	Sediment	1,2-Dichlorobenzene	<4.1	370	0.9
1SED-3 9/7/1993	Sediment	1,2-Dichlorobenzene	<94	370	0.9
2HA-10 (0-1') 11/30/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
2MW-1 (15-20') 9/10/1993	Soil	1,2-Dichlorobenzene	<0.85	370	0.9
2MW-1 (20-25') 9/10/1993	Soil	1,2-Dichlorobenzene	<0.88	370	0.9
2MW-1 (30-35') 9/10/1993	Soil	1,2-Dichlorobenzene	<0.84	370	0.9
2MW-2 (15-20') 9/13/1993	Soil	1,2-Dichlorobenzene	<0.88	370	0.9
2MW-2 (5-10') 9/13/1993	Soil	1,2-Dichlorobenzene	<0.85	370	0.9
2MW-3 (15-20') 9/13/1993	Soil	1,2-Dichlorobenzene	<0.85	370	0.9
2MW-3 (20-25') 9/13/1993	Soil	1,2-Dichlorobenzene	<0.9	370	0.9
2MW-3 (30-35') 9/15/1993	Soil	1,2-Dichlorobenzene	<0.9	370	0.9
2MW-5 (0-1') 11/30/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
2MW-7 (0-5') 12/9/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
2MW-7 (20-25') 12/9/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
2MW-7 (5-10') 12/9/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
2SB-1 (15-20') 9/22/1993	Soil	1,2-Dichlorobenzene	<0.43	370	0.9
2SB-1 (25-30') 9/22/1993	Soil	1,2-Dichlorobenzene	<0.42	370	0.9
2SB-10 (15-20') 9/23/1993	Soil	1,2-Dichlorobenzene	11	370	0.9
2SB-10 (25-30') 9/23/1993	Soil	1,2-Dichlorobenzene	<0.44	370	0.9
2SB-11 (20-25') 9/23/1993	Soil	1,2-Dichlorobenzene	<0.93	370	0.9
2SB-11 (25-30') 9/23/1993	Soil	1,2-Dichlorobenzene	<0.46	370	0.9
2SB-12 (15-20') 9/23/1993	Soil	1,2-Dichlorobenzene	<21	370	0.9
2SB-12 (25-30') 9/23/1993	Soil	1,2-Dichlorobenzene	<1.2	370	0.9
2SB-13 (0-2') 12/6/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
2SB-13 (10-12') 12/6/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
2SB-13 (8-10') 12/6/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

1,2-Dichlorobenzene Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
2SB-2 (20-25') 9/21/1993	Soil	1,2-Dichlorobenzene	<2.2	370	0.9
2SB-2 (25-30') 9/21/1993	Soil	1,2-Dichlorobenzene	<0.84	370	0.9
2SB-3 (13-14') 9/17/1993	Soil	1,2-Dichlorobenzene	<4.1	370	0.9
2SB-3 (24-25') 9/17/1993	Soil	1,2-Dichlorobenzene	<4.3	370	0.9
2SB-4 (15-20') 9/23/1993	Soil	1,2-Dichlorobenzene	<0.44	370	0.9
2SB-4 (25-30') 9/23/1993	Soil	1,2-Dichlorobenzene	<0.42	370	0.9
2SB-5 (15-20') 9/21/1993	Soil	1,2-Dichlorobenzene	<4.2	370	0.9
2SB-5 (25-30') 9/21/1993	Soil	1,2-Dichlorobenzene	<23	370	0.9
2SB-6 (21-22') 9/20/1993	Soil	1,2-Dichlorobenzene	<2.1	370	0.9
2SB-6 (28-29') 9/20/1993	Soil	1,2-Dichlorobenzene	<44	370	0.9
2SB-7 (10-15') 9/23/1993	Soil	1,2-Dichlorobenzene	<0.42	370	0.9
2SB-7 (25-30') 9/23/1993	Soil	1,2-Dichlorobenzene	<0.45	370	0.9
2SB-8 (15-20') 9/21/1993	Soil	1,2-Dichlorobenzene	0.15	370	0.9
2SB-8 (25-30') 9/21/1993	Soil	1,2-Dichlorobenzene	1.1	370	0.9
2SB-9 (26-27') 9/21/1993	Soil	1,2-Dichlorobenzene	12	370	0.9
2SB-9 (4-5') 9/21/1993	Soil	1,2-Dichlorobenzene	5.3	370	0.9
3SB-1 (4-6') 9/29/1995	Soil	1,2-Dichlorobenzene	<19	370	0.9
3SB-1 (6-12') 9/29/1995	Soil	1,2-Dichlorobenzene	<0.39	370	0.9
3SB-6 (12-16') 1/10/1995	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
3SB-6 (4-8') 1/10/1995	Soil	1,2-Dichlorobenzene	<264	370	0.9
3SB-6 (8-12') 1/10/1995	Soil	1,2-Dichlorobenzene	<3.3	370	0.9
3SED-1 9/13/1993	Sediment	1,2-Dichlorobenzene	<0.83	370	0.9
3SED-10 9/16/1993	Sediment	1,2-Dichlorobenzene	<0.38	370	0.9
3SED-2 9/13/1993	Sediment	1,2-Dichlorobenzene	<0.85	370	0.9
3SED-3 9/13/1993	Sediment	1,2-Dichlorobenzene	0.3	370	0.9
3SED-4 9/13/1993	Sediment	1,2-Dichlorobenzene	<0.93	370	0.9

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
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1,2-Dichlorobenzene Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
3SED-5 9/14/1993	Sediment	1,2-Dichlorobenzene	0.12	370	0.9
3SED-6 9/14/1993	Sediment	1,2-Dichlorobenzene	<0.79	370	0.9
3SED-7 9/14/1993	Sediment	1,2-Dichlorobenzene	<0.8	370	0.9
3SED-8 9/14/1993	Sediment	1,2-Dichlorobenzene	<0.92	370	0.9
3SED-9 9/14/1993	Sediment	1,2-Dichlorobenzene	<0.87	370	0.9
4HA-1 (0-1') 9/2/1993	Soil	1,2-Dichlorobenzene	<0.72	370	0.9
4HA-1 (1-2') 9/2/1993	Soil	1,2-Dichlorobenzene	<0.76	370	0.9
4HA-1 (2-3') 9/2/1993	Soil	1,2-Dichlorobenzene	<0.79	370	0.9
4HA-2 (0-1') 9/2/1993	Soil	1,2-Dichlorobenzene	<37	370	0.9
4HA-2 (1-2') 9/2/1993	Soil	1,2-Dichlorobenzene	<7.8	370	0.9
4HA-2 (2-3') 9/2/1993	Soil	1,2-Dichlorobenzene	<23	370	0.9
4HA-3 (0-1') 9/3/1993	Soil	1,2-Dichlorobenzene	<0.69	370	0.9
4HA-4 (0-1') 9/3/1993	Soil	1,2-Dichlorobenzene	<0.7	370	0.9
4HA-4 (1-2') 9/3/1993	Soil	1,2-Dichlorobenzene	0.16	370	0.9
4HA-4 (2-3') 9/3/1993	Soil	1,2-Dichlorobenzene	<0.82	370	0.9
4HA-4 (2-3')DUP 9/3/1993	Soil Duplicate	1,2-Dichlorobenzene	0.35	370	0.9
4HA-5 (0-1') 9/15/1993	Soil	1,2-Dichlorobenzene	1.5	370	0.9
4HA-5 (1-2') 9/15/1993	Soil	1,2-Dichlorobenzene	1.7	370	0.9
4HA-5 (2-3') 9/15/1993	Soil	1,2-Dichlorobenzene	<3.3	370	0.9
4HA-6 (0-1') 9/3/1993	Soil	1,2-Dichlorobenzene	3.7	370	0.9
4HA-6 (1-2') 9/3/1993	Soil	1,2-Dichlorobenzene	<1400	370	0.9
4HA-7 (5-6') 9/3/1993	Soil	1,2-Dichlorobenzene	0.12	370	0.9
4HA-7 (6-7') 9/3/1993	Soil	1,2-Dichlorobenzene	<0.81	370	0.9
4HA-7 (7-8') 9/3/1993	Soil	1,2-Dichlorobenzene	<1.6	370	0.9
4HA-8 (5-6') 9/3/1993	Soil	1,2-Dichlorobenzene	<0.8	370	0.9
4HA-8 (6-7') 9/3/1993	Soil	1,2-Dichlorobenzene	<0.81	370	0.9

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Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
4HA-8 (7-8') 9/3/1993	Soil	1,2-Dichlorobenzene	<0.8	370	0.9
4MW-1 (10-15') 9/16/1993	Soil	1,2-Dichlorobenzene	<2.1	370	0.9
4MW-1 (25-30') 9/17/1993	Soil	1,2-Dichlorobenzene	<0.43	370	0.9
4MW-2 (0-5') 9/16/1993	Soil	1,2-Dichlorobenzene	<3.9	370	0.9
4MW-2 (25-30') 9/22/1993	Soil	1,2-Dichlorobenzene	<0.43	370	0.9
4MW-3 (0-3') 12/6/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
4MW-3 (28-33') 12/6/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
4MW-3 (33-38') 12/6/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
4MW-4 (0-3') 12/14/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
4MW-4 (0-3')Dup 12/14/1994	Soil Duplicate	1,2-Dichlorobenzene	<0.66	370	0.9
4MW-4 (18-23') 12/14/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
4MW-4 (23-28') 12/15/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
4MW-4 (8-13') 12/14/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
4SB-1 (0-2') 12/6/1994	Soil	1,2-Dichlorobenzene	<4	370	0.9
4SB-1 (4-6') 12/6/1994	Soil	1,2-Dichlorobenzene	<3.3	370	0.9
4SB-1 (8-10') 12/6/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
4SB-2 (0-2') 12/8/1994	Soil	1,2-Dichlorobenzene	<3.3	370	0.9
4SB-2 (12-14') 12/8/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
4SB-2 (4-6') 12/8/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
4SB-3 (0-2') 12/8/1994	Soil	1,2-Dichlorobenzene	<13.2	370	0.9
4SB-3 (12-14') 12/8/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
4SB-3 (6-8') 12/8/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
5SB-1 (16-18') 9/7/1993	Soil	1,2-Dichlorobenzene	<0.83	370	0.9
5SB-1 (21-23') 9/7/1993	Soil	1,2-Dichlorobenzene	<0.86	370	0.9
5SB-2 (16-18') 9/8/1993	Soil	1,2-Dichlorobenzene	<0.82	370	0.9
5SB-2 (21-23') 9/8/1993	Soil	1,2-Dichlorobenzene	<0.86	370	0.9

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1,2-Dichlorobenzene Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
5SB-3 (16-18') 9/30/1993	Soil	1,2-Dichlorobenzene	<0.84	370	0.9
5SB-3 (23-25') 9/30/1993	Soil	1,2-Dichlorobenzene	<0.86	370	0.9
6HA-B1 (0-1') 12/2/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
6HA-B2 (0-1') 12/2/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
6HA-C1 (0-1') 12/2/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
6HA-C2 (0-1') 12/2/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
6HA-D1 (0-1') 12/2/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
6HA-F1 (0-1') 12/2/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
6HA-F2 (0-1') 12/2/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
6HA-G1 (0-1') 12/2/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
6HA-G1 (0-1') 12/2/1994	Soil Duplicate	1,2-Dichlorobenzene	<0.66	370	0.9
6HA-G2 (0-1') 12/2/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
6HA-H1 (0-1') 12/2/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
6HA-H2 (0-1') 12/2/1994	Soil	1,2-Dichlorobenzene	<3.3	370	0.9
6HA-I1 (0-1') 12/2/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
6HA-J1 (0-1') 12/2/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
6HA-K1 (0-1') 12/2/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
6HA-L1 (0-1') 12/2/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
6SB-A (0-5') 9/27/1993	Soil	1,2-Dichlorobenzene	<0.81	370	0.9
6SB-A (5-10') 9/27/1993	Soil	1,2-Dichlorobenzene	<0.41	370	0.9
6SB-C (0-5') 9/29/1993	Soil	1,2-Dichlorobenzene	<0.82	370	0.9
6SB-C (5-10') 9/29/1993	Soil	1,2-Dichlorobenzene	<0.81	370	0.9
6SB-D (0-5') 9/29/1993	Soil	1,2-Dichlorobenzene	<0.83	370	0.9
6SB-D (5-10') 9/29/1993	Soil	1,2-Dichlorobenzene	<0.84	370	0.9
6SB-E (0-5') 9/27/1993	Soil	1,2-Dichlorobenzene	<0.81	370	0.9
6SB-E (5-10') 9/27/1993	Soil	1,2-Dichlorobenzene	<0.81	370	0.9

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HISTORICAL SOIL AND SEDIMENT DATA
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1,2-Dichlorobenzene Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
6SB-F (0-5') 9/27/1993	Soil	1,2-Dichlorobenzene	<8	370	0.9
6SB-F (5-10') 9/27/1993	Soil	1,2-Dichlorobenzene	<4.2	370	0.9
6SB-G (0-5') 9/29/1993	Soil	1,2-Dichlorobenzene	<0.78	370	0.9
6SB-G (5-10') 9/29/1993	Soil	1,2-Dichlorobenzene	<0.81	370	0.9
6SB-H (0-5') 9/30/1993	Soil	1,2-Dichlorobenzene	<0.77	370	0.9
6SB-H (5-10') 9/30/1993	Soil	1,2-Dichlorobenzene	<0.81	370	0.9
6SB-J (10-15') 9/27/1993	Soil	1,2-Dichlorobenzene	<0.42	370	0.9
6SB-J (5-10') 9/27/1993	Soil	1,2-Dichlorobenzene	<2.1	370	0.9
6SB-K (0-5') 9/29/1993	Soil	1,2-Dichlorobenzene	<0.82	370	0.9
6SB-K (5-10') 9/29/1993	Soil	1,2-Dichlorobenzene	<0.84	370	0.9
6SB-L (0-5') 9/30/1993	Soil	1,2-Dichlorobenzene	<0.76	370	0.9
6SB-L (5-10') 9/30/1993	Soil	1,2-Dichlorobenzene	<0.84	370	0.9
8HA-1 (0-1') 9/8/1993	Soil	1,2-Dichlorobenzene	<0.84	370	0.9
8HA-2 (0-1') 9/8/1993	Soil	1,2-Dichlorobenzene	<0.82	370	0.9
8HA-3 (0-1') 9/8/1993	Soil	1,2-Dichlorobenzene	<0.81	370	0.9
8HA-4 (0-1') 9/8/1993	Soil	1,2-Dichlorobenzene	<0.85	370	0.9
9SB-1 (0-5') 9/7/1993	Soil	1,2-Dichlorobenzene	<4	370	0.9
9SB-1 (5-10') 9/7/1993	Soil	1,2-Dichlorobenzene	<0.84	370	0.9
9SB-10 (0-5') 9/9/1993	Soil	1,2-Dichlorobenzene	<810	370	0.9
9SB-10 (5-10') 9/9/1993	Soil	1,2-Dichlorobenzene	<8.2	370	0.9
9SB-11 (0-5') 9/9/1993	Soil	1,2-Dichlorobenzene	<810	370	0.9
9SB-11 (5-10') 9/9/1993	Soil	1,2-Dichlorobenzene	<41	370	0.9
9SB-12 (0-5') 9/9/1993	Soil	1,2-Dichlorobenzene	<8400	370	0.9
9SB-12 (5-10') 9/9/1993	Soil	1,2-Dichlorobenzene	<83	370	0.9
9SB-13 (0-5') 9/9/1993	Soil	1,2-Dichlorobenzene	<83	370	0.9
9SB-13 (5-10') 9/9/1993	Soil	1,2-Dichlorobenzene	<8.4	370	0.9

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1,2-Dichlorobenzene Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
9SB-14 (0-5') 9/9/1993	Soil	1,2-Dichlorobenzene	<8.3	370	0.9
9SB-14 (5-10') 9/9/1993	Soil	1,2-Dichlorobenzene	<8.3	370	0.9
9SB-15 (0-5') 9/9/1993	Soil	1,2-Dichlorobenzene	<0.72	370	0.9
9SB-15 (5-10') 9/9/1993	Soil	1,2-Dichlorobenzene	<8.4	370	0.9
9SB-16 (0-5') 9/10/1993	Soil	1,2-Dichlorobenzene	<85000	370	0.9
9SB-16 (5-10') 9/10/1993	Soil	1,2-Dichlorobenzene	<8.3	370	0.9
9SB-19 (0-5') 9/16/1993	Soil	1,2-Dichlorobenzene	<41	370	0.9
9SB-19 (5-10') 9/16/1993	Soil	1,2-Dichlorobenzene	<4.1	370	0.9
9SB-2 (5-10') 9/7/1993	Soil	1,2-Dichlorobenzene	<0.84	370	0.9
9SB-20 (10-12') 12/7/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
9SB-20 (25-27') 12/7/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
9SB-20 (30-32') 12/7/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
9SB-21 (10-12') 12/7/1994	Soil	1,2-Dichlorobenzene	<2.64	370	0.9
9SB-21 (23-25') 12/7/1994	Soil	1,2-Dichlorobenzene	<2.64	370	0.9
9SB-21 (25-27') 12/7/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
9SB-22 (10-12') 12/9/1994	Soil	1,2-Dichlorobenzene	<3.3	370	0.9
9SB-22 (15-17') 12/9/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
9SB-22 (17-19') 12/9/1994	Soil	1,2-Dichlorobenzene	<0.66	370	0.9
9SB-3 (0-5') 9/7/1993	Soil	1,2-Dichlorobenzene	<42	370	0.9
9SB-3 (5-10') 9/7/1993	Soil	1,2-Dichlorobenzene	<0.82	370	0.9
9SB-4 (0-5') 9/8/1993	Soil	1,2-Dichlorobenzene	<16000	370	0.9
9SB-4 (10-15') 9/8/1993	Soil	1,2-Dichlorobenzene	<170	370	0.9
9SB-4 (5-10') 9/8/1993	Soil	1,2-Dichlorobenzene	<1600	370	0.9
9SB-5 (0-5') 9/8/1993	Soil	1,2-Dichlorobenzene	<8700	370	0.9
9SB-5 (10-15') 9/8/1993	Soil	1,2-Dichlorobenzene	<420	370	0.9
9SB-5 (5-10') 9/8/1993	Soil	1,2-Dichlorobenzene	<8600	370	0.9

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Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
9SB-6 (0-5') 9/8/1993	Soil	1,2-Dichlorobenzene	<84	370	0.9
9SB-6 (5-10') 9/8/1993	Soil	1,2-Dichlorobenzene	<84	370	0.9
9SB-7 (0-5') 9/8/1993	Soil	1,2-Dichlorobenzene	<1700	370	0.9
9SB-7 (10-15') 9/8/1993	Soil	1,2-Dichlorobenzene	<83	370	0.9
9SB-7 (5-10') 9/8/1993	Soil	1,2-Dichlorobenzene	<910	370	0.9
9SB-8 (0-5') 9/8/1993	Soil	1,2-Dichlorobenzene	<4200	370	0.9
9SB-8 (5-10') 9/8/1993	Soil	1,2-Dichlorobenzene	<8.2	370	0.9
9SB-9 (0-5') 9/8/1993	Soil	1,2-Dichlorobenzene	<3700	370	0.9
9SB-9 (5-10') 9/8/1993	Soil	1,2-Dichlorobenzene	<16	370	0.9
IMSB-1 (1-3') 4/8/1993	Soil	1,2-Dichlorobenzene	<0.8	370	0.9
IMSB-1 (8-12') 4/8/1993	Soil	1,2-Dichlorobenzene	<0.86	370	0.9
IMSB-2 (10-15') 4/8/1993	Soil	1,2-Dichlorobenzene	<0.85	370	0.9
IMSB-2 (1-5') 4/8/1993	Soil	1,2-Dichlorobenzene	<0.88	370	0.9
IMSB-2 (5-10') 4/8/1993	Soil	1,2-Dichlorobenzene	<0.85	370	0.9
IMSB-3 (10-15') 4/9/1993	Soil	1,2-Dichlorobenzene	<0.85	370	0.9
IMSB-3 (1-5') 4/9/1993	Soil	1,2-Dichlorobenzene	<0.8	370	0.9
IMSB-3 (5-10') 4/9/1993	Soil	1,2-Dichlorobenzene	<0.82	370	0.9
IMSB-4 (10-15') 4/9/1993	Soil	1,2-Dichlorobenzene	<0.85	370	0.9
IMSB-4 (1-5') 4/9/1993	Soil	1,2-Dichlorobenzene	<0.84	370	0.9
IMSB-4 (5-10') 4/9/1993	Soil	1,2-Dichlorobenzene	<0.84	370	0.9
IMSB-5 (10-15') 4/9/1993	Soil	1,2-Dichlorobenzene	<0.83	370	0.9
IMSB-5 (1-5') 4/9/1993	Soil	1,2-Dichlorobenzene	<0.81	370	0.9
IMSB-5 (5-10') 4/9/1993	Soil	1,2-Dichlorobenzene	<0.83	370	0.9
BGHA-1 (0-1') 9/16/1993	Soil	1,2-Dichlorobenzene	<0.38	370	0.9
BGHA-2 (0-1') 9/16/1993	Soil	1,2-Dichlorobenzene	<0.39	370	0.9
BGHA-3 (0-1') 9/16/1993	Soil	1,2-Dichlorobenzene	<0.38	370	0.9

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Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
OFF-2 (5-10') 11/20/1995	Soil	1,2-Dichlorobenzene	<0.4	370	0.9
OFF-2 (5-10') 11/20/1995	Soil	1,2-Dichlorobenzene	<0.012	370	0.9
OFF-3 (5-10') 11/21/1995	Soil	1,2-Dichlorobenzene	<0.4	370	0.9
OFF-3 (5-10') 11/21/1995	Soil	1,2-Dichlorobenzene	<0.012	370	0.9
SAI-1 (2-4') 10/10/1995	Soil	1,2-Dichlorobenzene	<0.012	370	0.9
SAI-1 (32-34') 10/10/1995	Soil	1,2-Dichlorobenzene	<0.012	370	0.9
SAI-11 (12-14') 10/16/1995	Soil	1,2-Dichlorobenzene	<0.39	370	0.9
SAI-11 (2-4') 10/16/1995	Soil	1,2-Dichlorobenzene	<0.38	370	0.9
SAI-12 (0-2') 10/17/1995	Soil	1,2-Dichlorobenzene	<0.37	370	0.9
SAI-12 (0-2') 10/17/1995	Soil	1,2-Dichlorobenzene	<0.012	370	0.9
SAI-14 (28-30') 10/16/1995	Soil	1,2-Dichlorobenzene	<0.44	370	0.9
SAI-14 (6-8') 10/16/1995	Soil	1,2-Dichlorobenzene	<0.38	370	0.9
SAI-2 (28-30') 10/10/1995	Soil	1,2-Dichlorobenzene	<0.45	370	0.9
SAI-23 (10-12') 10/19/1995	Soil	1,2-Dichlorobenzene	4.5	370	0.9
SAI-23 (10-12') 10/19/1995	Soil	1,2-Dichlorobenzene	3.4	370	0.9
SAI-24 (10-12') 11/7/1995	Soil	1,2-Dichlorobenzene	<0.012	370	0.9
SAI-24 (28-30') 11/7/1995	Soil	1,2-Dichlorobenzene	<0.013	370	0.9
SAI-25 (12-14') 11/7/1995	Soil	1,2-Dichlorobenzene	<0.013	370	0.9
SAI-25 (28-30') 11/7/1995	Soil	1,2-Dichlorobenzene	<0.013	370	0.9
SAI-26 (12-14') 11/8/1995	Soil	1,2-Dichlorobenzene	<0.013	370	0.9
SAI-26 (28-30') 11/8/1995	Soil	1,2-Dichlorobenzene	<0.013	370	0.9
SAI-27 (2-4') 11/8/1995	Soil	1,2-Dichlorobenzene	<0.012	370	0.9
SAI-27 (28-30') 11/8/1995	Soil	1,2-Dichlorobenzene	<0.013	370	0.9
SAI-28 (12-14') 11/8/1995	Soil	1,2-Dichlorobenzene	<0.012	370	0.9
SAI-28 (30-32') 11/8/1995	Soil	1,2-Dichlorobenzene	<0.013	370	0.9
SAI-5 (2-4') 10/11/1995	Soil	1,2-Dichlorobenzene	<0.4	370	0.9

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

1,2-Dichlorobenzene Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
SAI-6 (20-22') 10/11/1995	Soil	1,2-Dichlorobenzene	<0.41	370	0.9
SAI-6 (28-30') 10/11/1995	Soil	1,2-Dichlorobenzene	<0.39	370	0.9
SAI-9 (12-14') 10/17/1995	Soil	1,2-Dichlorobenzene	<0.42	370	0.9
SAI-9 (26-28') 10/17/1995	Soil	1,2-Dichlorobenzene	<0.39	370	0.9

Notes:
mg/kg = milligrams per kilogram.
SB - Soil Boring Sample
SED - Surface Sediment Sample
HA - Hand Auger Sample
SAI - Methylene Chloride Source Area Investigation
BGHA - Background Hand Auger Samples
MW - Soil sample collected from installation of monitoring well
OFF - Offsite Soil Boring Sample
IMSB - Interim Measures Soil Boring Sample
MSSL - Medium Specific Screening Levels
- Value exceeds either the Region 6 EPA Dilution Attenuation Factor or Industrial Soil MSSL

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

1,2-Dichloroethane Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
1HA-1 (0-1') 9/2/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
1HA-2 (0-1') 9/2/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
1HA-3 (0-1') 9/2/1993	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
1HA-4 (0-1') 9/2/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
1HA-5 (0-1') 9/2/1993	Soil	1,2-Dichloroethane	7.5	0.84	0.001
1HA-7 (2-3') 12/12/1994	Soil	1,2-Dichloroethane	0.016	0.84	0.001
1MW-1 (0-5') 8/31/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
1MW-1 (5-10') 8/31/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
1MW-2 (0-5') 8/31/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
1MW-2 (5-10') 8/31/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
1MW-3 (0-5') 9/1/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
1MW-3 (5-10') 9/1/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
1MW-4 (0-5') 9/1/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
1MW-4 (5-10') 9/1/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
1MW-5 (0-5') 9/1/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
1MW-5 (5-10') 9/1/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
1MW-6 (25-30') 9/23/1993	Soil	1,2-Dichloroethane	0.21	0.84	0.001
1SB-1 (0-2') 12/20/1994	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
1SB-1 (12-14') 12/20/1994	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
1SB-1 (4-6') 12/20/1994	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
1SED-1 9/7/1993	Sediment	1,2-Dichloroethane	<0.046	0.84	0.001
1SED-2 9/7/1993	Sediment	1,2-Dichloroethane	<0.006	0.84	0.001
1SED-3 9/7/1993	Sediment	1,2-Dichloroethane	<0.014	0.84	0.001
2HA-10 (0-1') 11/30/1994	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
2MW-1 (15-20') 9/10/1993	Soil	1,2-Dichloroethane	0.043	0.84	0.001
2MW-1 (20-25') 9/10/1993	Soil	1,2-Dichloroethane	<0.83	0.84	0.001
2MW-1 (30-35') 9/10/1993	Soil	1,2-Dichloroethane	<0.007	0.84	0.001

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

1,2-Dichloroethane Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
2MW-2 (15-20') 9/13/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
2MW-2 (5-10') 9/13/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
2MW-3 (15-20') 9/13/1993	Soil	1,2-Dichloroethane	0.035	0.84	0.001
2MW-3 (20-25') 9/13/1993	Soil	1,2-Dichloroethane	0.074	0.84	0.001
2MW-3 (30-35') 9/15/1993	Soil	1,2-Dichloroethane	0.11	0.84	0.001
2MW-5 (0-1') 11/30/1994	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
2MW-7 (0-5') 12/9/1994	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
2MW-7 (20-25') 12/9/1994	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
2MW-7 (5-10') 12/9/1994	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
2SB-1 (15-20') 9/22/1993	Soil	1,2-Dichloroethane	3.3	0.84	0.001
2SB-1 (25-30') 9/22/1993	Soil	1,2-Dichloroethane	4.1	0.84	0.001
2SB-10 (15-20') 9/23/1993	Soil	1,2-Dichloroethane	<8.3	0.84	0.001
2SB-10 (25-30') 9/23/1993	Soil	1,2-Dichloroethane	<0.033	0.84	0.001
2SB-11 (20-25') 9/23/1993	Soil	1,2-Dichloroethane	0.04	0.84	0.001
2SB-11 (25-30') 9/23/1993	Soil	1,2-Dichloroethane	0.17	0.84	0.001
2SB-12 (15-20') 9/23/1993	Soil	1,2-Dichloroethane	3.4	0.84	0.001
2SB-12 (25-30') 9/23/1993	Soil	1,2-Dichloroethane	0.063	0.84	0.001
2SB-13 (0-2') 12/6/1994	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
2SB-13 (10-12') 12/6/1994	Soil	1,2-Dichloroethane	0.74	0.84	0.001
2SB-13 (8-10') 12/6/1994	Soil	1,2-Dichloroethane	0.81	0.84	0.001
2SB-2 (20-25') 9/21/1993	Soil	1,2-Dichloroethane	70	0.84	0.001
2SB-2 (25-30') 9/21/1993	Soil	1,2-Dichloroethane	9.6	0.84	0.001
2SB-3 (13-14') 9/17/1993	Soil	1,2-Dichloroethane	0.012	0.84	0.001
2SB-3 (24-25') 9/17/1993	Soil	1,2-Dichloroethane	0.62	0.84	0.001
2SB-4 (15-20') 9/23/1993	Soil	1,2-Dichloroethane	0.27	0.84	0.001
2SB-4 (25-30') 9/23/1993	Soil	1,2-Dichloroethane	2.6	0.84	0.001
2SB-5 (15-20') 9/21/1993	Soil	1,2-Dichloroethane	1.8	0.84	0.001

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

1,2-Dichloroethane Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
2SB-5 (25-30') 9/21/1993	Soil	1,2-Dichloroethane	110	0.84	0.001
2SB-6 (21-22') 9/20/1993	Soil	1,2-Dichloroethane	32	0.84	0.001
2SB-6 (28-29') 9/20/1993	Soil	1,2-Dichloroethane	170	0.84	0.001
2SB-7 (10-15') 9/23/1993	Soil	1,2-Dichloroethane	0.011	0.84	0.001
2SB-7 (25-30') 9/23/1993	Soil	1,2-Dichloroethane	<0.82	0.84	0.001
2SB-8 (15-20') 9/21/1993	Soil	1,2-Dichloroethane	0.13	0.84	0.001
2SB-8 (25-30') 9/21/1993	Soil	1,2-Dichloroethane	0.22	0.84	0.001
2SB-9 (26-27') 9/21/1993	Soil	1,2-Dichloroethane	2.9	0.84	0.001
2SB-9 (4-5') 9/21/1993	Soil	1,2-Dichloroethane	0.014	0.84	0.001
3SED-1 9/13/1993	Sediment	1,2-Dichloroethane	<0.006	0.84	0.001
3SED-10 9/16/1993	Sediment	1,2-Dichloroethane	0.043	0.84	0.001
3SED-2 9/13/1993	Sediment	1,2-Dichloroethane	<0.006	0.84	0.001
3SED-3 9/13/1993	Sediment	1,2-Dichloroethane	<0.006	0.84	0.001
3SED-4 9/13/1993	Sediment	1,2-Dichloroethane	<0.007	0.84	0.001
3SED-5 9/14/1993	Sediment	1,2-Dichloroethane	<0.006	0.84	0.001
3SED-6 9/14/1993	Sediment	1,2-Dichloroethane	<0.006	0.84	0.001
3SED-7 9/14/1993	Sediment	1,2-Dichloroethane	<0.006	0.84	0.001
3SED-8 9/14/1993	Sediment	1,2-Dichloroethane	<0.007	0.84	0.001
3SED-9 9/14/1993	Sediment	1,2-Dichloroethane	<0.006	0.84	0.001
4HA-1 (0-1') 9/2/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
4HA-1 (1-2') 9/2/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
4HA-1 (2-3') 9/2/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
4HA-2 (0-1') 9/2/1993	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
4HA-2 (1-2') 9/2/1993	Soil	1,2-Dichloroethane	<0.017	0.84	0.001
4HA-2 (2-3') 9/2/1993	Soil	1,2-Dichloroethane	<0.015	0.84	0.001
4HA-3 (0-1') 9/3/1993	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
4HA-4 (0-1') 9/3/1993	Soil	1,2-Dichloroethane	<0.005	0.84	0.001

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

1,2-Dichloroethane Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
4HA-4 (1-2') 9/3/1993	Soil	1,2-Dichloroethane	0.025	0.84	0.001
4HA-4 (2-3') 9/3/1993	Soil	1,2-Dichloroethane	0.35	0.84	0.001
4HA-4 (2-3')DUP 9/3/1993	Soil Duplicate	1,2-Dichloroethane	0.32	0.84	0.001
4HA-5 (0-1') 9/15/1993	Soil	1,2-Dichloroethane	<0.01	0.84	0.001
4HA-5 (1-2') 9/15/1993	Soil	1,2-Dichloroethane	<0.029	0.84	0.001
4HA-5 (2-3') 9/15/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
4HA-6 (0-1') 9/3/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
4HA-6 (1-2') 9/3/1993	Soil	1,2-Dichloroethane	<0.011	0.84	0.001
4HA-7 (5-6') 9/3/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
4HA-7 (6-7') 9/3/1993	Soil	1,2-Dichloroethane	0.031	0.84	0.001
4HA-7 (7-8') 9/3/1993	Soil	1,2-Dichloroethane	0.026	0.84	0.001
4HA-8 (5-6') 9/3/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
4HA-8 (6-7') 9/3/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
4HA-8 (7-8') 9/3/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
4MW-1 (10-15') 9/16/1993	Soil	1,2-Dichloroethane	0.12	0.84	0.001
4MW-1 (25-30') 9/17/1993	Soil	1,2-Dichloroethane	0.65	0.84	0.001
4MW-2 (0-5') 9/16/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
4MW-2 (25-30') 9/22/1993	Soil	1,2-Dichloroethane	<0.007	0.84	0.001
4MW-3 (0-3') 12/6/1994	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
4MW-3 (28-33') 12/6/1994	Soil	1,2-Dichloroethane	0.34	0.84	0.001
4MW-3 (33-38') 12/6/1994	Soil	1,2-Dichloroethane	0.82	0.84	0.001
4MW-4 (0-3') 12/14/1994	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
4MW-4 (0-3')Dup 12/14/1994	Soil Duplicate	1,2-Dichloroethane	<0.005	0.84	0.001
4MW-4 (18-23') 12/14/1994	Soil	1,2-Dichloroethane	0.049	0.84	0.001
4MW-4 (23-28') 12/15/1994	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
4MW-4 (8-13') 12/14/1994	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
4SB-1 (0-2') 12/6/1994	Soil	1,2-Dichloroethane	0.0099	0.84	0.001

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

1,2-Dichloroethane Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
4SB-1 (4-6') 12/6/1994	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
4SB-1 (8-10') 12/6/1994	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
5SB-1 (16-18') 9/7/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
5SB-1 (21-23') 9/7/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
5SB-2 (16-18') 9/8/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
5SB-2 (21-23') 9/8/1993	Soil	1,2-Dichloroethane	<0.82	0.84	0.001
5SB-3 (16-18') 9/30/1993	Soil	1,2-Dichloroethane	<0.007	0.84	0.001
5SB-3 (23-25') 9/30/1993	Soil	1,2-Dichloroethane	0.004	0.84	0.001
6SB-A (0-5') 9/27/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
6SB-A (5-10') 9/27/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
6SB-C (0-5') 9/29/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
6SB-C (5-10') 9/29/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
6SB-D (0-5') 9/29/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
6SB-D (5-10') 9/29/1993	Soil	1,2-Dichloroethane	0.009	0.84	0.001
6SB-E (0-5') 9/27/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
6SB-E (5-10') 9/27/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
6SB-F (0-5') 9/27/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
6SB-F (5-10') 9/27/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
6SB-G (0-5') 9/29/1993	Soil	1,2-Dichloroethane	<0.029	0.84	0.001
6SB-G (0-5')DUP 9/29/1993	Soil Duplicate	1,2-Dichloroethane	<0.03	0.84	0.001
6SB-G (5-10') 9/29/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
6SB-H (0-5') 9/30/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
6SB-H (5-10') 9/30/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
6SB-J (10-15') 9/27/1993	Soil	1,2-Dichloroethane	0.009	0.84	0.001
6SB-J (5-10') 9/27/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
6SB-K (0-5') 9/29/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
6SB-K (5-10') 9/29/1993	Soil	1,2-Dichloroethane	<0.007	0.84	0.001

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

1,2-Dichloroethane Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
6SB-L (0-5') 9/30/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
6SB-L (5-10') 9/30/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
8HA-1 (0-1') 9/8/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
8HA-2 (0-1') 9/8/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
8HA-3 (0-1') 9/8/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
8HA-4 (0-1') 9/8/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
9SB-15 (0-5') 9/9/1993	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
9SB-15 (5-10') 9/9/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
9SB-20 (10-12') 12/7/1994	Soil	1,2-Dichloroethane	0.058	0.84	0.001
9SB-20 (25-27') 12/7/1994	Soil	1,2-Dichloroethane	0.73	0.84	0.001
9SB-20 (30-32') 12/7/1994	Soil	1,2-Dichloroethane	0.12	0.84	0.001
9SB-21 (10-12') 12/7/1994	Soil	1,2-Dichloroethane	0.043	0.84	0.001
9SB-21 (23-25') 12/7/1994	Soil	1,2-Dichloroethane	<0.025	0.84	0.001
9SB-21 (25-27') 12/7/1994	Soil	1,2-Dichloroethane	<0.025	0.84	0.001
9SB-22 (10-12') 12/9/1994	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
9SB-22 (15-17') 12/9/1994	Soil	1,2-Dichloroethane	<0.13	0.84	0.001
9SB-22 (17-19') 12/9/1994	Soil	1,2-Dichloroethane	<0.005	0.84	0.001
9SB-3 (0-5') 9/7/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
9SB-3 (5-10') 9/7/1993	Soil	1,2-Dichloroethane	<0.015	0.84	0.001
IMSB-1 (1-3') 4/8/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
IMSB-1 (3-8') 4/8/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
IMSB-2 (10-15') 4/8/1993	Soil	1,2-Dichloroethane	0.01	0.84	0.001
IMSB-2 (1-5') 4/8/1993	Soil	1,2-Dichloroethane	<0.007	0.84	0.001
IMSB-2 (5-10') 4/8/1993	Soil	1,2-Dichloroethane	<0.007	0.84	0.001
IMSB-3 (1-5') 4/9/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
IMSB-3 (5-10') 4/9/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
IMSB-4 (1-5') 4/9/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

1,2-Dichloroethane Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
IMSB-4 (5-10') 4/9/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
IMSB-5 (1-5') 4/9/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
IMSB-5 (5-10') 4/9/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
BGHA-1 (0-1') 9/16/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
BGHA-2 (0-1') 9/16/1993	Soil	1,2-Dichloroethane	<0.006	0.84	0.001
BGHA-3 (0-1') 9/16/1993	Soil	1,2-Dichloroethane	<0.026	0.84	0.001
OFF-2 (5-10') 11/20/1995	Soil	1,2-Dichloroethane	<0.012	0.84	0.001
OFF-3 (5-10') 11/21/1995	Soil	1,2-Dichloroethane	<0.012	0.84	0.001
SAI-1 (2-4') 10/10/1995	Soil	1,2-Dichloroethane	<0.012	0.84	0.001
SAI-1 (32-34') 10/10/1995	Soil	1,2-Dichloroethane	<0.012	0.84	0.001
SAI-12 (0-2') 10/17/1995	Soil	1,2-Dichloroethane	<0.012	0.84	0.001
SAI-23 (10-12') 10/19/1995	Soil	1,2-Dichloroethane	1.1	0.84	0.001
SAI-24 (10-12') 11/7/1995	Soil	1,2-Dichloroethane	<0.012	0.84	0.001
SAI-24 (28-30') 11/7/1995	Soil	1,2-Dichloroethane	<0.013	0.84	0.001
SAI-25 (12-14') 11/7/1995	Soil	1,2-Dichloroethane	<0.013	0.84	0.001
SAI-25 (28-30') 11/7/1995	Soil	1,2-Dichloroethane	<0.013	0.84	0.001
SAI-26 (12-14') 11/8/1995	Soil	1,2-Dichloroethane	<0.013	0.84	0.001
SAI-26 (28-30') 11/8/1995	Soil	1,2-Dichloroethane	<0.013	0.84	0.001
SAI-27 (2-4') 11/8/1995	Soil	1,2-Dichloroethane	<0.012	0.84	0.001
SAI-27 (28-30') 11/8/1995	Soil	1,2-Dichloroethane	<0.013	0.84	0.001

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

1,2-Dichloroethane Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
SAI-28 (12-14') 11/8/1995	Soil	1,2-Dichloroethane	<0.012	0.84	0.001
SAI-28 (30-32') 11/8/1995	Soil	1,2-Dichloroethane	<0.013	0.84	0.001

Notes:

mg/kg = milligrams per kilogram.

SB - Soil Boring Sample
SED - Surface Sediment Sample
HA - Hand Auger Sample
SAI - Methylene Chloride Source Area Investigation
BGHA - Background Hand Auger Samples
MW - Soil sample collected from installation of monitoring well
OFF - Offsite Soil Boring Sample
IMSB - Interim Measures Soil Boring Sample
MSSL - Medium Specific Screening Levels
- Value exceeds either the Region 6 EPA Dilution Attenuation Factor or Industrial Soil MSSL

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Acetone Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
1HA-1 (0-1') 9/2/1993	Soil	Acetone	<0.012	60000	0.8
1HA-2 (0-1') 9/2/1993	Soil	Acetone	<0.013	60000	0.8
1HA-3 (0-1') 9/2/1993	Soil	Acetone	<0.011	60000	0.8
1HA-4 (0-1') 9/2/1993	Soil	Acetone	<0.012	60000	0.8
1HA-5 (0-1') 9/2/1993	Soil	Acetone	0.064	60000	0.8
1HA-7 (2-3') 12/12/1994	Soil	Acetone	<0.1	60000	0.8
1MW-1 (0-5') 8/31/1993	Soil	Acetone	0.13	60000	0.8
1MW-1 (5-10') 8/31/1993	Soil	Acetone	<0.013	60000	0.8
1MW-2 (0-5') 8/31/1993	Soil	Acetone	<0.012	60000	0.8
1MW-2 (5-10') 8/31/1993	Soil	Acetone	<0.012	60000	0.8
1MW-3 (0-5') 9/1/1993	Soil	Acetone	<0.047	60000	0.8
1MW-3 (5-10') 9/1/1993	Soil	Acetone	<0.019	60000	0.8
1MW-4 (0-5') 9/1/1993	Soil	Acetone	<0.05	60000	0.8
1MW-4 (5-10') 9/1/1993	Soil	Acetone	<0.059	60000	0.8
1MW-5 (0-5') 9/1/1993	Soil	Acetone	<0.068	60000	0.8
1MW-5 (5-10') 9/1/1993	Soil	Acetone	<0.013	60000	0.8
1MW-6 (25-30') 9/23/1993	Soil	Acetone	0.054	60000	0.8
1SB-1 (0-2') 12/20/1994	Soil	Acetone	0.19	60000	0.8
1SB-1 (12-14') 12/20/1994	Soil	Acetone	0.1	60000	0.8
1SB-1 (4-6') 12/20/1994	Soil	Acetone	<0.1	60000	0.8
1SED-1 9/7/1993	Sediment	Acetone	1.2	60000	0.8
1SED-2 9/7/1993	Sediment	Acetone	<0.012	60000	0.8
1SED-3 9/7/1993	Sediment	Acetone	0.28	60000	0.8
2HA-10 (0-1') 11/30/1994	Soil	Acetone	1.9	60000	0.8
2MW-1 (15-20') 9/10/1993	Soil	Acetone	<0.027	60000	0.8
2MW-1 (20-25') 9/10/1993	Soil	Acetone	<1.7	60000	0.8
2MW-1 (30-35') 9/10/1993	Soil	Acetone	0.013	60000	0.8

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Acetone Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
2MW-2 (15-20') 9/13/1993	Soil	Acetone	<0.012	60000	0.8
2MW-2 (5-10') 9/13/1993	Soil	Acetone	<0.013	60000	0.8
2MW-3 (15-20') 9/13/1993	Soil	Acetone	0.035	60000	0.8
2MW-3 (20-25') 9/13/1993	Soil	Acetone	3.1	60000	0.8
2MW-3 (30-35') 9/15/1993	Soil	Acetone	2.7	60000	0.8
2MW-5 (0-1') 11/30/1994	Soil	Acetone	0.2	60000	0.8
2MW-7 (0-5') 12/9/1994	Soil	Acetone	<0.1	60000	0.8
2MW-7 (20-25') 12/9/1994	Soil	Acetone	1.2	60000	0.8
2MW-7 (5-10') 12/9/1994	Soil	Acetone	0.84	60000	0.8
2SB-1 (15-20') 9/22/1993	Soil	Acetone	1.5	60000	0.8
2SB-1 (25-30') 9/22/1993	Soil	Acetone	<3.2	60000	0.8
2SB-10 (15-20') 9/23/1993	Soil	Acetone	<17	60000	0.8
2SB-10 (25-30') 9/23/1993	Soil	Acetone	0.24	60000	0.8
2SB-11 (20-25') 9/23/1993	Soil	Acetone	0.084	60000	0.8
2SB-11 (25-30') 9/23/1993	Soil	Acetone	17	60000	0.8
2SB-12 (15-20') 9/23/1993	Soil	Acetone	<1.5	60000	0.8
2SB-12 (25-30') 9/23/1993	Soil	Acetone	7.4	60000	0.8
2SB-13 (0-2') 12/6/1994	Soil	Acetone	<0.1	60000	0.8
2SB-13 (10-12') 12/6/1994	Soil	Acetone	1.6	60000	0.8
2SB-13 (8-10') 12/6/1994	Soil	Acetone	0.82	60000	0.8
2SB-2 (20-25') 9/21/1993	Soil	Acetone	<16	60000	0.8
2SB-2 (25-30') 9/21/1993	Soil	Acetone	1.1	60000	0.8
2SB-3 (13-14') 9/17/1993	Soil	Acetone	0.025	60000	0.8
2SB-3 (24-25') 9/17/1993	Soil	Acetone	<1.2	60000	0.8
2SB-4 (15-20') 9/23/1993	Soil	Acetone	1	60000	0.8
2SB-4 (25-30') 9/23/1993	Soil	Acetone	2.6	60000	0.8
2SB-5 (15-20') 9/21/1993	Soil	Acetone	0.15	60000	0.8

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Acetone Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
2SB-5 (25-30') 9/21/1993	Soil	Acetone	<180	60000	0.8
2SB-6 (21-22') 9/20/1993	Soil	Acetone	<16	60000	0.8
2SB-6 (28-29') 9/20/1993	Soil	Acetone	<17	60000	0.8
2SB-7 (10-15') 9/23/1993	Soil	Acetone	0.21	60000	0.8
2SB-7 (25-30') 9/23/1993	Soil	Acetone	2.4	60000	0.8
2SB-8 (15-20') 9/21/1993	Soil	Acetone	0.98	60000	0.8
2SB-8 (25-30') 9/21/1993	Soil	Acetone	10	60000	0.8
2SB-9 (26-27') 9/21/1993	Soil	Acetone	<3.3	60000	0.8
2SB-9 (4-5') 9/21/1993	Soil	Acetone	0.026	60000	0.8
3SED-1 9/13/1993	Sediment	Acetone	<0.012	60000	0.8
3SED-10 9/16/1993	Sediment	Acetone	<0.012	60000	0.8
3SED-2 9/13/1993	Sediment	Acetone	<0.012	60000	0.8
3SED-3 9/13/1993	Sediment	Acetone	0.13	60000	0.8
3SED-4 9/13/1993	Sediment	Acetone	<0.014	60000	0.8
3SED-5 9/14/1993	Sediment	Acetone	<0.013	60000	0.8
3SED-6 9/14/1993	Sediment	Acetone	<0.012	60000	0.8
3SED-7 9/14/1993	Sediment	Acetone	<0.011	60000	0.8
3SED-8 9/14/1993	Sediment	Acetone	<0.014	60000	0.8
3SED-9 9/14/1993	Sediment	Acetone	<0.012	60000	0.8
4HA-1 (0-1') 9/2/1993	Soil	Acetone	<0.011	60000	0.8
4HA-1 (1-2') 9/2/1993	Soil	Acetone	<0.011	60000	0.8
4HA-1 (2-3') 9/2/1993	Soil	Acetone	<0.011	60000	0.8
4HA-2 (0-1') 9/2/1993	Soil	Acetone	0.019	60000	0.8
4HA-2 (1-2') 9/2/1993	Soil	Acetone	<0.035	60000	0.8
4HA-2 (2-3') 9/2/1993	Soil	Acetone	<0.029	60000	0.8
4HA-3 (0-1') 9/3/1993	Soil	Acetone	<0.011	60000	0.8
4HA-4 (0-1') 9/3/1993	Soil	Acetone	0.17	60000	0.8

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Acetone Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
4HA-4 (1-2') 9/3/1993	Soil	Acetone	0.031	60000	0.8
4HA-4 (2-3') 9/3/1993	Soil	Acetone	0.02	60000	0.8
4HA-4 (2-3')DUP 9/3/1993	Soil Duplicate	Acetone	<0.024	60000	0.8
4HA-5 (0-1') 9/15/1993	Soil	Acetone	0.025	60000	0.8
4HA-5 (1-2') 9/15/1993	Soil	Acetone	<0.059	60000	0.8
4HA-5 (2-3') 9/15/1993	Soil	Acetone	0.11	60000	0.8
4HA-6 (0-1') 9/3/1993	Soil	Acetone	<0.012	60000	0.8
4HA-6 (1-2') 9/3/1993	Soil	Acetone	0.13	60000	0.8
4HA-7 (5-6') 9/3/1993	Soil	Acetone	<0.013	60000	0.8
4HA-7 (6-7') 9/3/1993	Soil	Acetone	0.012	60000	0.8
4HA-7 (7-8') 9/3/1993	Soil	Acetone	0.012	60000	0.8
4HA-8 (5-6') 9/3/1993	Soil	Acetone	<0.012	60000	0.8
4HA-8 (6-7') 9/3/1993	Soil	Acetone	<0.012	60000	0.8
4HA-8 (7-8') 9/3/1993	Soil	Acetone	<0.012	60000	0.8
4MW-1 (10-15') 9/16/1993	Soil	Acetone	0.099	60000	0.8
4MW-1 (25-30') 9/17/1993	Soil	Acetone	1.2	60000	0.8
4MW-2 (0-5') 9/16/1993	Soil	Acetone	0.027	60000	0.8
4MW-2 (25-30') 9/22/1993	Soil	Acetone	<0.014	60000	0.8
4MW-3 (0-3') 12/6/1994	Soil	Acetone	<0.1	60000	0.8
4MW-3 (28-33') 12/6/1994	Soil	Acetone	<0.1	60000	0.8
4MW-3 (33-38') 12/6/1994	Soil	Acetone	0.33	60000	0.8
4MW-4 (0-3') 12/14/1994	Soil	Acetone	<0.1	60000	0.8
4MW-4 (0-3')Dup 12/14/1994	Soil Duplicate	Acetone	<0.1	60000	0.8
4MW-4 (18-23') 12/14/1994	Soil	Acetone	1	60000	0.8
4MW-4 (23-28') 12/15/1994	Soil	Acetone	<0.1	60000	0.8
4MW-4 (8-13') 12/14/1994	Soil	Acetone	0.19	60000	0.8
4SB-1 (0-2') 12/6/1994	Soil	Acetone	0.25	60000	0.8

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
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Acetone Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
4SB-1 (4-6') 12/6/1994	Soil	Acetone	0.15	60000	0.8
4SB-1 (8-10') 12/6/1994	Soil	Acetone	4.4	60000	0.8
5SB-1 (16-18') 9/7/1993	Soil	Acetone	<0.012	60000	0.8
5SB-1 (21-23') 9/7/1993	Soil	Acetone	<0.012	60000	0.8
5SB-2 (16-18') 9/8/1993	Soil	Acetone	6.8	60000	0.8
5SB-2 (21-23') 9/8/1993	Soil	Acetone	3.9	60000	0.8
5SB-3 (16-18') 9/30/1993	Soil	Acetone	<0.013	60000	0.8
5SB-3 (23-25') 9/30/1993	Soil	Acetone	21	60000	0.8
6SB-A (0-5') 9/27/1993	Soil	Acetone	0.053	60000	0.8
6SB-A (5-10') 9/27/1993	Soil	Acetone	<0.012	60000	0.8
6SB-C (0-5') 9/29/1993	Soil	Acetone	0.005	60000	0.8
6SB-C (5-10') 9/29/1993	Soil	Acetone	<0.012	60000	0.8
6SB-D (0-5') 9/29/1993	Soil	Acetone	0.008	60000	0.8
6SB-D (5-10') 9/29/1993	Soil	Acetone	0.86	60000	0.8
6SB-E (0-5') 9/27/1993	Soil	Acetone	0.067	60000	0.8
6SB-E (5-10') 9/27/1993	Soil	Acetone	0.031	60000	0.8
6SB-F (0-5') 9/27/1993	Soil	Acetone	<0.012	60000	0.8
6SB-F (5-10') 9/27/1993	Soil	Acetone	0.24	60000	0.8
6SB-G (0-5') 9/29/1993	Soil	Acetone	0.89	60000	0.8
6SB-G (0-5')DUP 9/29/1993	Soil Duplicate	Acetone	1.8	60000	0.8
6SB-G (5-10') 9/29/1993	Soil	Acetone	0.015	60000	0.8
6SB-H (0-5') 9/30/1993	Soil	Acetone	0.037	60000	0.8
6SB-H (5-10') 9/30/1993	Soil	Acetone	<0.013	60000	0.8
6SB-J (10-15') 9/27/1993	Soil	Acetone	<0.013	60000	0.8
6SB-J (5-10') 9/27/1993	Soil	Acetone	0.055	60000	0.8
6SB-K (0-5') 9/29/1993	Soil	Acetone	0.18	60000	0.8
6SB-K (5-10') 9/29/1993	Soil	Acetone	0.025	60000	0.8

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
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Acetone Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
6SB-L (0-5') 9/30/1993	Soil	Acetone	0.027	60000	0.8
6SB-L (5-10') 9/30/1993	Soil	Acetone	<0.013	60000	0.8
8HA-1 (0-1') 9/8/1993	Soil	Acetone	<0.012	60000	0.8
8HA-2 (0-1') 9/8/1993	Soil	Acetone	<0.012	60000	0.8
8HA-3 (0-1') 9/8/1993	Soil	Acetone	<0.012	60000	0.8
8HA-4 (0-1') 9/8/1993	Soil	Acetone	<0.013	60000	0.8
9SB-15 (0-5') 9/9/1993	Soil	Acetone	<0.011	60000	0.8
9SB-15 (5-10') 9/9/1993	Soil	Acetone	<0.013	60000	0.8
9SB-20 (10-12') 12/7/1994	Soil	Acetone	2.9	60000	0.8
9SB-20 (25-27') 12/7/1994	Soil	Acetone	4.3	60000	0.8
9SB-20 (30-32') 12/7/1994	Soil	Acetone	12	60000	0.8
9SB-21 (10-12') 12/7/1994	Soil	Acetone	0.8	60000	0.8
9SB-21 (23-25') 12/7/1994	Soil	Acetone	1.2	60000	0.8
9SB-21 (25-27') 12/7/1994	Soil	Acetone	1.4	60000	0.8
9SB-22 (10-12') 12/9/1994	Soil	Acetone	200	60000	0.8
9SB-22 (15-17') 12/9/1994	Soil	Acetone	44	60000	0.8
9SB-22 (17-19') 12/9/1994	Soil	Acetone	0.11	60000	0.8
9SB-3 (0-5') 9/7/1993	Soil	Acetone	0.3	60000	0.8
9SB-3 (5-10') 9/7/1993	Soil	Acetone	1.2	60000	0.8
IMSB-1 (1-3') 4/8/1993	Soil	Acetone	<0.12	60000	0.8
IMSB-1 (3-8') 4/8/1993	Soil	Acetone	0.2	60000	0.8
IMSB-2 (10-15') 4/8/1993	Soil	Acetone	<0.14	60000	0.8
IMSB-2 (1-5') 4/8/1993	Soil	Acetone	0.24	60000	0.8
IMSB-2 (5-10') 4/8/1993	Soil	Acetone	0.32	60000	0.8
IMSB-3 (1-5') 4/9/1993	Soil	Acetone	<0.12	60000	0.8
IMSB-3 (5-10') 4/9/1993	Soil	Acetone	<0.12	60000	0.8
IMSB-4 (1-5') 4/9/1993	Soil	Acetone	<0.12	60000	0.8

TABLE 2
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Acetone Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
IMSB-4 (5-10') 4/9/1993	Soil	Acetone	<0.13	60000	0.8
IMSB-5 (1-5') 4/9/1993	Soil	Acetone	<0.12	60000	0.8
IMSB-5 (5-10') 4/9/1993	Soil	Acetone	<0.13	60000	0.8
BGHA-1 (0-1') 9/16/1993	Soil	Acetone	<0.012	60000	0.8
BGHA-2 (0-1') 9/16/1993	Soil	Acetone	<0.012	60000	0.8
BGHA-3 (0-1') 9/16/1993	Soil	Acetone	1.2	60000	0.8
OFF-2 (5-10') 11/20/1995	Soil	Acetone	<0.031	60000	0.8
OFF-3 (5-10') 11/21/1995	Soil	Acetone	<0.03	60000	0.8
SAI-1 (2-4') 10/10/1995	Soil	Acetone	<0.029	60000	0.8
SAI-1 (32-34') 10/10/1995	Soil	Acetone	<0.031	60000	0.8
SAI-12 (0-2') 10/17/1995	Soil	Acetone	0.05	60000	0.8
SAI-23 (10-12') 10/19/1995	Soil	Acetone	5.6	60000	0.8
SAI-24 (10-12') 11/7/1995	Soil	Acetone	<0.03	60000	0.8
SAI-24 (28-30') 11/7/1995	Soil	Acetone	<0.033	60000	0.8
SAI-25 (12-14') 11/7/1995	Soil	Acetone	0.041	60000	0.8
SAI-25 (28-30') 11/7/1995	Soil	Acetone	<0.032	60000	0.8
SAI-26 (12-14') 11/8/1995	Soil	Acetone	<0.033	60000	0.8
SAI-26 (28-30') 11/8/1995	Soil	Acetone	<0.032	60000	0.8

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HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
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Acetone Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
SAI-27 (2-4') 11/8/1995	Soil	Acetone	0.056	60000	0.8
SAI-27 (28-30') 11/8/1995	Soil	Acetone	<0.032	60000	0.8
SAI-28 (12-14') 11/8/1995	Soil	Acetone	<0.031	60000	0.8
SAI-28 (30-32') 11/8/1995	Soil	Acetone	<0.032	60000	0.8

Notes:
mg/kg = milligrams per kilogram.

SB	- Soil Boring Sample
SED	- Surface Sediment Sample
HA	- Hand Auger Sample
SAI	- Methylene Chloride Source Area Investigation
BGHA	- Background Hand Auger Samples
MW	- Soil sample collected from installation of monitoring well
OFF	- Offsite Soil Boring Sample
IMSB	- Interim Measures Soil Boring Sample
MSSL	- Medium Specific Screening Levels
	- Value exceeds either the Region 6 EPA Dilution Attenuation Factor or Industrial Soil MSSL

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Arsenic Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
1HA-1 (0-1') 9/2/1993	Soil	Arsenic	5.1	1.8	1
1HA-2 (0-1') 9/2/1993	Soil	Arsenic	44.6	1.8	1
1HA-3 (0-1') 9/2/1993	Soil	Arsenic	5.8	1.8	1
1HA-4 (0-1') 9/2/1993	Soil	Arsenic	7.3	1.8	1
1HA-5 (0-1') 9/2/1993	Soil	Arsenic	3.2	1.8	1
1HA-7 (2-3') 12/12/1994	Soil	Arsenic	<5	1.8	1
1MW-1 (0-5') 8/31/1993	Soil	Arsenic	5.7	1.8	1
1MW-1 (5-10') 8/31/1993	Soil	Arsenic	6.1	1.8	1
1MW-2 (0-5') 8/31/1993	Soil	Arsenic	14	1.8	1
1MW-2 (5-10') 8/31/1993	Soil	Arsenic	7	1.8	1
1MW-3 (0-5') 9/1/1993	Soil	Arsenic	6.8	1.8	1
1MW-3 (5-10') 9/1/1993	Soil	Arsenic	8.6	1.8	1
1MW-4 (0-5') 9/1/1993	Soil	Arsenic	3.3	1.8	1
1MW-4 (5-10') 9/1/1993	Soil	Arsenic	6.1	1.8	1
1MW-5 (0-5') 9/1/1993	Soil	Arsenic	5.2	1.8	1
1MW-5 (5-10') 9/1/1993	Soil	Arsenic	4.8	1.8	1
1MW-6 (25-30') 9/23/1993	Soil	Arsenic	1.6	1.8	1
1SB-1 (0-2') 12/20/1994	Soil	Arsenic	<5	1.8	1
1SB-1 (12-14') 12/20/1994	Soil	Arsenic	<5	1.8	1
1SB-1 (4-6') 12/20/1994	Soil	Arsenic	<5	1.8	1
1SED-1 9/7/1993	Sediment	Arsenic	61	1.8	1
1SED-2 9/7/1993	Sediment	Arsenic	19	1.8	1
1SED-3 9/7/1993	Sediment	Arsenic	123	1.8	1
2HA-10 (0-1') 11/30/1994	Soil	Arsenic	<0.2	1.8	1

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Arsenic Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
2HA-5 (0-1') 9/13/1993	Soil	Arsenic	98.1	1.8	1
2HA-5 (0-1')DUP 9/13/1993	Soil Duplicate	Arsenic	68.8	1.8	1
2MW-1 (15-20') 9/10/1993	Soil	Arsenic	10.5	1.8	1
2MW-1 (20-25') 9/10/1993	Soil	Arsenic	9	1.8	1
2MW-1 (30-35') 9/10/1993	Soil	Arsenic	5	1.8	1
2MW-2 (15-20') 9/13/1993	Soil	Arsenic	12.2	1.8	1
2MW-2 (5-10') 9/13/1993	Soil	Arsenic	7.6	1.8	1
2MW-3 (15-20') 9/13/1993	Soil	Arsenic	10.8	1.8	1
2MW-3 (20-25') 9/13/1993	Soil	Arsenic	11.3	1.8	1
2MW-3 (30-35') 9/15/1993	Soil	Arsenic	6.1	1.8	1
2MW-5 (0-1') 11/30/1994	Soil	Arsenic	<0.2	1.8	1
2MW-7 (0-5') 12/9/1994	Soil	Arsenic	<5	1.8	1
2MW-7 (20-25') 12/9/1994	Soil	Arsenic	<5	1.8	1
2MW-7 (5-10') 12/9/1994	Soil	Arsenic	<5	1.8	1
2SB-1 (15-20') 9/22/1993	Soil	Arsenic	10.7	1.8	1
2SB-1 (25-30') 9/22/1993	Soil	Arsenic	4.3	1.8	1
2SB-10 (15-20') 9/23/1993	Soil	Arsenic	8.8	1.8	1
2SB-10 (25-30') 9/23/1993	Soil	Arsenic	9.9	1.8	1
2SB-11 (20-25') 9/23/1993	Soil	Arsenic	8.8	1.8	1
2SB-11 (25-30') 9/23/1993	Soil	Arsenic	20.1	1.8	1
2SB-12 (15-20') 9/23/1993	Soil	Arsenic	7.7	1.8	1
2SB-12 (25-30') 9/23/1993	Soil	Arsenic	24.4	1.8	1
2SB-13 (0-2') 12/6/1994	Soil	Arsenic	<5	1.8	1
2SB-13 (10-12') 12/6/1994	Soil	Arsenic	<5	1.8	1
2SB-13 (8-10') 12/6/1994	Soil	Arsenic	<5	1.8	1
2SB-2 (20-25') 9/21/1993	Soil	Arsenic	9.4	1.8	1
2SB-2 (25-30') 9/21/1993	Soil	Arsenic	4.9	1.8	1

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Arsenic Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
2SB-3 (13-14') 9/17/1993	Soil	Arsenic	8.5	1.8	1
2SB-3 (24-25') 9/17/1993	Soil	Arsenic	8	1.8	1
2SB-4 (15-20') 9/23/1993	Soil	Arsenic	7.2	1.8	1
2SB-4 (25-30') 9/23/1993	Soil	Arsenic	14.7	1.8	1
2SB-5 (15-20') 9/21/1993	Soil	Arsenic	9.1	1.8	1
2SB-5 (25-30') 9/21/1993	Soil	Arsenic	5.6	1.8	1
2SB-6 (21-22') 9/20/1993	Soil	Arsenic	18.7	1.8	1
2SB-6 (28-29') 9/20/1993	Soil	Arsenic	3.7	1.8	1
2SB-7 (10-15') 9/23/1993	Soil	Arsenic	10.9	1.8	1
2SB-7 (25-30') 9/23/1993	Soil	Arsenic	12.1	1.8	1
2SB-8 (15-20') 9/21/1993	Soil	Arsenic	7.2	1.8	1
2SB-8 (25-30') 9/21/1993	Soil	Arsenic	27.7	1.8	1
2SB-9 (26-27') 9/21/1993	Soil	Arsenic	9.1	1.8	1
2SB-9 (4-5') 9/21/1993	Soil	Arsenic	10.7	1.8	1
3SED-1 9/13/1993	Sediment	Arsenic	6.5	1.8	1
3SED-10 9/16/1993	Sediment	Arsenic	4.3	1.8	1
3SED-11-N 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-11-S 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-12-N 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-12-S 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-13-N 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-13-S 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-14-N 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-14-S 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-15-N 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-15-S 11/29/1994	Sediment	Arsenic	<5	1.8	1

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Arsenic Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
3SED-16-N 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-16-S 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-17-N 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-17-S 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-18-N 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-18-S 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-19-N 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-19-S 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-2 9/13/1993	Sediment	Arsenic	6.6	1.8	1
3SED-20-N 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-20-S 11/29/1994	Sediment	Arsenic	<5	1.8	1
11/29/1994	Duplicate	Arsenic	<5	1.8	1
3SED-21-N 11/29/1994	Sediment	Arsenic	20	1.8	1
3SED-21-S 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-22-N 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-22-S 11/29/1994	Sediment	Arsenic	<5	1.8	1
3SED-3 9/13/1993	Sediment	Arsenic	4.5	1.8	1
3SED-4 9/13/1993	Sediment	Arsenic	3.6	1.8	1
3SED-5 9/14/1993	Sediment	Arsenic	7.2	1.8	1
3SED-6 9/14/1993	Sediment	Arsenic	12.5	1.8	1
3SED-7 9/14/1993	Sediment	Arsenic	6.6	1.8	1
3SED-8 9/14/1993	Sediment	Arsenic	9.3	1.8	1
3SED-9 9/14/1993	Sediment	Arsenic	222	1.8	1
4HA-1 (0-1') 9/2/1993	Soil	Arsenic	5.2	1.8	1
4HA-1 (1-2') 9/2/1993	Soil	Arsenic	5	1.8	1
4HA-1 (2-3') 9/2/1993	Soil	Arsenic	3.3	1.8	1

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Arsenic Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
4HA-2 (0-1') 9/2/1993	Soil	Arsenic	3.8	1.8	1
4HA-2 (1-2') 9/2/1993	Soil	Arsenic	3.8	1.8	1
4HA-2 (2-3') 9/2/1993	Soil	Arsenic	4.4	1.8	1
4HA-3 (0-1') 9/3/1993	Soil	Arsenic	3.4	1.8	1
4HA-4 (0-1') 9/3/1993	Soil	Arsenic	4.1	1.8	1
4HA-4 (1-2') 9/3/1993	Soil	Arsenic	7.2	1.8	1
4HA-4 (2-3') 9/3/1993	Soil	Arsenic	7.5	1.8	1
4HA-4 (2-3')DUP 9/3/1993	Soil Duplicate	Arsenic	9.8	1.8	1
4HA-5 (0-1') 9/15/1993	Soil	Arsenic	4.6	1.8	1
4HA-5 (1-2') 9/15/1993	Soil	Arsenic	4.1	1.8	1
4HA-5 (2-3') 9/15/1993	Soil	Arsenic	3.1	1.8	1
4HA-6 (0-1') 9/3/1993	Soil	Arsenic	4.4	1.8	1
4HA-6 (1-2') 9/3/1993	Soil	Arsenic	5.2	1.8	1
4HA-7 (5-6') 9/3/1993	Soil	Arsenic	6.8	1.8	1
4HA-7 (6-7') 9/3/1993	Soil	Arsenic	7.4	1.8	1
4HA-7 (7-8') 9/3/1993	Soil	Arsenic	6.2	1.8	1
4HA-8 (5-6') 9/3/1993	Soil	Arsenic	7	1.8	1
4HA-8 (6-7') 9/3/1993	Soil	Arsenic	8.3	1.8	1
4HA-8 (7-8') 9/3/1993	Soil	Arsenic	6.6	1.8	1
4MW-1 (10-15') 9/16/1993	Soil	Arsenic	9.4	1.8	1
4MW-1 (25-30') 9/17/1993	Soil	Arsenic	15.5	1.8	1
4MW-2 (0-5') 9/16/1993	Soil	Arsenic	6	1.8	1
4MW-2 (25-30') 9/22/1993	Soil	Arsenic	1.3	1.8	1
5SB-1 (16-18') 9/7/1993	Soil	Arsenic	7.4	1.8	1
5SB-1 (21-23') 9/7/1993	Soil	Arsenic	9.1	1.8	1

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Arsenic Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
5SB-2 (16-18') 9/8/1993	Soil	Arsenic	7.6	1.8	1
5SB-2 (21-23') 9/8/1993	Soil	Arsenic	7.9	1.8	1
5SB-3 (16-18') 9/30/1993	Soil	Arsenic	8.5	1.8	1
5SB-3 (23-25') 9/30/1993	Soil	Arsenic	9.7	1.8	1
6SB-A (0-5') 9/27/1993	Soil	Arsenic	7.4	1.8	1
6SB-A (5-10') 9/27/1993	Soil	Arsenic	10.3	1.8	1
6SB-C (0-5') 9/29/1993	Soil	Arsenic	6.3	1.8	1
6SB-C (5-10') 9/29/1993	Soil	Arsenic	9.6	1.8	1
6SB-D (0-5') 9/29/1993	Soil	Arsenic	6.8	1.8	1
6SB-D (5-10') 9/29/1993	Soil	Arsenic	6.8	1.8	1
6SB-E (0-5') 9/27/1993	Soil	Arsenic	8.9	1.8	1
6SB-E (5-10') 9/27/1993	Soil	Arsenic	8	1.8	1
6SB-F (0-5') 9/27/1993	Soil	Arsenic	6.5	1.8	1
6SB-F (5-10') 9/27/1993	Soil	Arsenic	6.1	1.8	1
6SB-G (0-5') 9/29/1993	Soil	Arsenic	6.5	1.8	1
6SB-G (0-5')DUP 9/29/1993	Soil Duplicate	Arsenic	7.1	1.8	1
6SB-G (5-10') 9/29/1993	Soil	Arsenic	7.1	1.8	1
6SB-H (0-5') 9/30/1993	Soil	Arsenic	5.4	1.8	1
6SB-H (5-10') 9/30/1993	Soil	Arsenic	6.2	1.8	1
6SB-J (10-15') 9/27/1993	Soil	Arsenic	7.4	1.8	1
6SB-J (5-10') 9/27/1993	Soil	Arsenic	7.9	1.8	1
6SB-K (0-5') 9/29/1993	Soil	Arsenic	9	1.8	1
6SB-K (5-10') 9/29/1993	Soil	Arsenic	8.5	1.8	1
6SB-L (0-5') 9/30/1993	Soil	Arsenic	5.8	1.8	1
6SB-L (5-10') 9/30/1993	Soil	Arsenic	6.3	1.8	1
8HA-1 (0-1') 9/8/1993	Soil	Arsenic	6.1	1.8	1
8HA-2 (0-1') 9/8/1993	Soil	Arsenic	4.2	1.8	1

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Arsenic Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
8HA-3 (0-1') 9/8/1993	Soil	Arsenic	5.2	1.8	1
8HA-4 (0-1') 9/8/1993	Soil	Arsenic	6.3	1.8	1
9SB-15 (0-5') 9/9/1993	Soil	Arsenic	3.4	1.8	1
9SB-15 (5-10') 9/9/1993	Soil	Arsenic	7.1	1.8	1
9SB-3 (0-5') 9/7/1993	Soil	Arsenic	3.5	1.8	1
9SB-3 (5-10') 9/7/1993	Soil	Arsenic	7.3	1.8	1
IMSB-1 (1-3') 4/8/1993	Soil	Arsenic	59	1.8	1
IMSB-1 (3-8') 4/8/1993	Soil	Arsenic	9.3	1.8	1
IMSB-2 (1-5') 4/8/1993	Soil	Arsenic	3.4	1.8	1
IMSB-2 (5-10') 4/8/1993	Soil	Arsenic	7.4	1.8	1
IMSB-3 (1-5') 4/9/1993	Soil	Arsenic	7.4	1.8	1
IMSB-3 (5-10') 4/9/1993	Soil	Arsenic	7.3	1.8	1
IMSB-4 (1-5') 4/9/1993	Soil	Arsenic	8.6	1.8	1
IMSB-4 (5-10') 4/9/1993	Soil	Arsenic	8.5	1.8	1
IMSB-5 (1-5') 4/9/1993	Soil	Arsenic	9.6	1.8	1
IMSB-5 (5-10') 4/9/1993	Soil	Arsenic	7.2	1.8	1
BGHA-1 (0-1') 9/16/1993	Soil	Arsenic	3.9	1.8	1
BGHA-2 (0-1') 9/16/1993	Soil	Arsenic	6.2	1.8	1
BGHA-3 (0-1') 9/16/1993	Soil	Arsenic	5.3	1.8	1
BK10 9/10/1999	Soil	Arsenic	8.9	1.8	1
BK10 Dup 9/10/1999	Soil Duplicate	Arsenic	7	1.8	1
BKG1 9/10/1999	Soil	Arsenic	21	1.8	1
BKG2 9/10/1999	Soil	Arsenic	20	1.8	1
BKG3 9/10/1999	Soil	Arsenic	61	1.8	1
BKG4 9/10/1999	Soil	Arsenic	26	1.8	1

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Arsenic Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
BKG5 9/10/1999	Soil	Arsenic	9.5	1.8	1
BKG6 9/10/1999	Soil	Arsenic	9.8	1.8	1
BKG7 9/10/1999	Soil	Arsenic	31	1.8	1
BKG8 9/10/1999	Soil	Arsenic	18	1.8	1
BKG9 9/10/1999	Soil	Arsenic	7.9	1.8	1
HAC-1 9/10/1999	Soil	Arsenic	9.1	1.8	1
HAC-2 9/10/1999	Soil	Arsenic	10	1.8	1
HAC-3 9/10/1999	Soil	Arsenic	9.7	1.8	1

Notes:
mg/kg = milligrams per kilogram.

SB	- Soil Boring Sample
SED	- Surface Sediment Sample
HA	- Hand Auger Sample
SAI	- Methylene Chloride Source Area Investigation
BGHA	- Background Hand Auger Sample
BK and BKG	- Background Soil Sample
HAC	- Definition of sample identification is unknown
MW	- Soil sample collected from installation of monitoring well
OFF	- Offsite Soil Boring Sample
IMSB	- Interim Measures Soil Boring Sample
MSSL	- Medium Specific Screening Levels established by Region 6 EPA
	- Value exceeds either the Region 6 EPA Dilution Attenuation Factor or Industrial Soil MSSL

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Chromium Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
1HA-1 (0-1') 9/2/1993	Soil	Chromium	10.6	500	2
1HA-2 (0-1') 9/2/1993	Soil	Chromium	14.2	500	2
1HA-3 (0-1') 9/2/1993	Soil	Chromium	12.7	500	2
1HA-4 (0-1') 9/2/1993	Soil	Chromium	13.5	500	2
1HA-5 (0-1') 9/2/1993	Soil	Chromium	9.3	500	2
1MW-1 (0-5') 8/31/1993	Soil	Chromium	12.7	500	2
1MW-1 (5-10') 8/31/1993	Soil	Chromium	14.4	500	2
1MW-2 (0-5') 8/31/1993	Soil	Chromium	10.9	500	2
1MW-2 (5-10') 8/31/1993	Soil	Chromium	15	500	2
1MW-3 (0-5') 9/1/1993	Soil	Chromium	11.3	500	2
1MW-3 (5-10') 9/1/1993	Soil	Chromium	12.9	500	2
1MW-4 (0-5') 9/1/1993	Soil	Chromium	11	500	2
1MW-4 (5-10') 9/1/1993	Soil	Chromium	13.5	500	2
1MW-5 (0-5') 9/1/1993	Soil	Chromium	13.5	500	2
1MW-5 (5-10') 9/1/1993	Soil	Chromium	8.6	500	2
1MW-6 (25-30') 9/23/1993	Soil	Chromium	12	500	2
1SED-1 9/7/1993	Sediment	Chromium	51.8	500	2
1SED-2 9/7/1993	Sediment	Chromium	16.7	500	2
1SED-3 9/7/1993	Sediment	Chromium	82	500	2
2HA-5 (0-1') 9/13/1993	Soil	Chromium	95.3	500	2
2HA-5 (0-1')DUP 9/13/1993	Soil Duplicate	Chromium	64	500	2
2MW-1 (15-20') 9/10/1993	Soil	Chromium	9.7	500	2
2MW-1 (20-25') 9/10/1993	Soil	Chromium	11.1	500	2
2MW-1 (30-35') 9/10/1993	Soil	Chromium	13.9	500	2
2MW-2 (15-20') 9/13/1993	Soil	Chromium	18.3	500	2
2MW-2 (5-10') 9/13/1993	Soil	Chromium	15.4	500	2
2MW-3 (15-20') 9/13/1993	Soil	Chromium	13.9	500	2
2MW-3 (20-25') 9/13/1993	Soil	Chromium	15	500	2
2MW-3 (30-35') 9/15/1993	Soil	Chromium	8.4	500	2

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Chromium Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
2SB-1 (15-20') 9/22/1993	Soil	Chromium	13.5	500	2
2SB-1 (25-30') 9/22/1993	Soil	Chromium	9	500	2
2SB-10 (15-20') 9/23/1993	Soil	Chromium	13	500	2
2SB-10 (25-30') 9/23/1993	Soil	Chromium	20.2	500	2
2SB-11 (20-25') 9/23/1993	Soil	Chromium	18.4	500	2
2SB-11 (25-30') 9/23/1993	Soil	Chromium	20.2	500	2
2SB-12 (15-20') 9/23/1993	Soil	Chromium	12.5	500	2
2SB-12 (25-30') 9/23/1993	Soil	Chromium	13	500	2
2SB-2 (20-25') 9/21/1993	Soil	Chromium	15.4	500	2
2SB-2 (25-30') 9/21/1993	Soil	Chromium	11.5	500	2
2SB-3 (13-14') 9/17/1993	Soil	Chromium	10.5	500	2
2SB-3 (24-25') 9/17/1993	Soil	Chromium	12.2	500	2
2SB-4 (15-20') 9/23/1993	Soil	Chromium	17.1	500	2
2SB-4 (25-30') 9/23/1993	Soil	Chromium	12.3	500	2
2SB-5 (15-20') 9/21/1993	Soil	Chromium	9.7	500	2
2SB-5 (25-30') 9/21/1993	Soil	Chromium	15.5	500	2
2SB-6 (21-22') 9/20/1993	Soil	Chromium	15.3	500	2
2SB-6 (28-29') 9/20/1993	Soil	Chromium	13.7	500	2
2SB-7 (10-15') 9/23/1993	Soil	Chromium	13.9	500	2
2SB-7 (25-30') 9/23/1993	Soil	Chromium	18.4	500	2
2SB-8 (15-20') 9/21/1993	Soil	Chromium	9.2	500	2
2SB-8 (25-30') 9/21/1993	Soil	Chromium	19.9	500	2
2SB-9 (26-27') 9/21/1993	Soil	Chromium	15.2	500	2
2SB-9 (4-5') 9/21/1993	Soil	Chromium	10.9	500	2
3SED-1 9/13/1993	Sediment	Chromium	9.5	500	2
3SED-10 9/16/1993	Sediment	Chromium	8	500	2
3SED-2 9/13/1993	Sediment	Chromium	16.6	500	2
3SED-3 9/13/1993	Sediment	Chromium	16.1	500	2
3SED-4 9/13/1993	Sediment	Chromium	12.3	500	2

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Chromium Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
3SED-5 9/14/1993	Sediment	Chromium	11.2	500	2
3SED-6 9/14/1993	Sediment	Chromium	19.1	500	2
3SED-7 9/14/1993	Sediment	Chromium	15.8	500	2
3SED-8 9/14/1993	Sediment	Chromium	10.3	500	2
3SED-9 9/14/1993	Sediment	Chromium	12.1	500	2
4HA-1 (0-1') 9/2/1993	Soil	Chromium	11.7	500	2
4HA-1 (1-2') 9/2/1993	Soil	Chromium	10.6	500	2
4HA-1 (2-3') 9/2/1993	Soil	Chromium	12	500	2
4HA-2 (0-1') 9/2/1993	Soil	Chromium	14.3	500	2
4HA-2 (1-2') 9/2/1993	Soil	Chromium	14.2	500	2
4HA-2 (2-3') 9/2/1993	Soil	Chromium	14.1	500	2
4HA-3 (0-1') 9/3/1993	Soil	Chromium	10.6	500	2
4HA-4 (0-1') 9/3/1993	Soil	Chromium	10.2	500	2
4HA-4 (1-2') 9/3/1993	Soil	Chromium	8.6	500	2
4HA-4 (2-3') 9/3/1993	Soil	Chromium	11.4	500	2
4HA-4 (2-3')DUP 9/3/1993	Soil Duplicate	Chromium	13.5	500	2
4HA-5 (0-1') 9/15/1993	Soil	Chromium	19.1	500	2
4HA-5 (1-2') 9/15/1993	Soil	Chromium	18.1	500	2
4HA-5 (2-3') 9/15/1993	Soil	Chromium	14.2	500	2
4HA-6 (0-1') 9/3/1993	Soil	Chromium	13.9	500	2
4HA-6 (1-2') 9/3/1993	Soil	Chromium	20.9	500	2
4HA-7 (5-6') 9/3/1993	Soil	Chromium	17.8	500	2
4HA-7 (6-7') 9/3/1993	Soil	Chromium	14.7	500	2
4HA-7 (7-8') 9/3/1993	Soil	Chromium	11.3	500	2
4HA-8 (5-6') 9/3/1993	Soil	Chromium	18.2	500	2
4HA-8 (6-7') 9/3/1993	Soil	Chromium	14.7	500	2
4HA-8 (7-8') 9/3/1993	Soil	Chromium	13.2	500	2
4MW-1 (10-15') 9/16/1993	Soil	Chromium	12.4	500	2
4MW-1 (25-30') 9/17/1993	Soil	Chromium	14.9	500	2

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Chromium Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
4MW-2 (0-5') 9/16/1993	Soil	Chromium	10.9	500	2
4MW-2 (25-30') 9/22/1993	Soil	Chromium	11.5	500	2
5SB-1 (16-18') 9/7/1993	Soil	Chromium	9.6	500	2
5SB-1 (21-23') 9/7/1993	Soil	Chromium	11.2	500	2
5SB-2 (16-18') 9/8/1993	Soil	Chromium	11.7	500	2
5SB-2 (21-23') 9/8/1993	Soil	Chromium	10.4	500	2
5SB-3 (16-18') 9/30/1993	Soil	Chromium	9.1	500	2
5SB-3 (23-25') 9/30/1993	Soil	Chromium	10.2	500	2
6SB-A (0-5') 9/27/1993	Soil	Chromium	14.5	500	2
6SB-A (5-10') 9/27/1993	Soil	Chromium	9.5	500	2
6SB-C (0-5') 9/29/1993	Soil	Chromium	11	500	2
6SB-C (5-10') 9/29/1993	Soil	Chromium	10.1	500	2
6SB-D (0-5') 9/29/1993	Soil	Chromium	13.7	500	2
6SB-D (5-10') 9/29/1993	Soil	Chromium	8.6	500	2
6SB-E (0-5') 9/27/1993	Soil	Chromium	9.9	500	2
6SB-E (5-10') 9/27/1993	Soil	Chromium	12.3	500	2
6SB-F (0-5') 9/27/1993	Soil	Chromium	9.3	500	2
6SB-F (5-10') 9/27/1993	Soil	Chromium	13.4	500	2
6SB-G (0-5') 9/29/1993	Soil	Chromium	10.7	500	2
6SB-G (0-5')DUP 9/29/1993	Soil Duplicate	Chromium	10.8	500	2
6SB-G (5-10') 9/29/1993	Soil	Chromium	12.6	500	2
6SB-H (0-5') 9/30/1993	Soil	Chromium	8.9	500	2
6SB-H (5-10') 9/30/1993	Soil	Chromium	14.4	500	2
6SB-J (10-15') 9/27/1993	Soil	Chromium	10.1	500	2
6SB-J (5-10') 9/27/1993	Soil	Chromium	12.1	500	2
6SB-K (0-5') 9/29/1993	Soil	Chromium	11.3	500	2
6SB-K (5-10') 9/29/1993	Soil	Chromium	11.9	500	2
6SB-L (0-5') 9/30/1993	Soil	Chromium	10.3	500	2
6SB-L (5-10') 9/30/1993	Soil	Chromium	14.7	500	2
8HA-1 (0-1') 9/8/1993	Soil	Chromium	22.9	500	2
8HA-2 (0-1') 9/8/1993	Soil	Chromium	18.7	500	2

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Chromium Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
8HA-3 (0-1') 9/8/1993	Soil	Chromium	21.7	500	2
8HA-4 (0-1') 9/8/1993	Soil	Chromium	16.5	500	2
9SB-15 (0-5') 9/9/1993	Soil	Chromium	11.3	500	2
9SB-15 (5-10') 9/9/1993	Soil	Chromium	10.8	500	2
9SB-3 (0-5') 9/7/1993	Soil	Chromium	14.7	500	2
9SB-3 (5-10') 9/7/1993	Soil	Chromium	13.4	500	2
IMSB-1 (1-3') 4/8/1993	Soil	Chromium	12.4	500	2
IMSB-1 (3-8') 4/8/1993	Soil	Chromium	9.2	500	2
IMSB-2 (1-5') 4/8/1993	Soil	Chromium	8.2	500	2
IMSB-2 (5-10') 4/8/1993	Soil	Chromium	9.9	500	2
IMSB-3 (1-5') 4/9/1993	Soil	Chromium	12.5	500	2
IMSB-3 (5-10') 4/9/1993	Soil	Chromium	14.2	500	2
IMSB-4 (1-5') 4/9/1993	Soil	Chromium	13.8	500	2
IMSB-4 (5-10') 4/9/1993	Soil	Chromium	16.9	500	2
IMSB-5 (1-5') 4/9/1993	Soil	Chromium	12	500	2
IMSB-5 (5-10') 4/9/1993	Soil	Chromium	11.7	500	2
BGHA-1 (0-1') 9/16/1993	Soil	Chromium	13.1	500	2
BGHA-2 (0-1') 9/16/1993	Soil	Chromium	<14.7	500	2
BGHA-3 (0-1') 9/16/1993	Soil	Chromium	10.7	500	2

Notes:
mg/kg = milligrams per kilogram.

SB	- Soil Boring Sample
SED	- Surface Sediment Sample
HA	- Hand Auger Sample
BGHA	- Background Hand Auger Sample
MW	- Soil sample collected from installation of monitoring well
OFF	- Offsite Soil Boring Sample
IMSB	- Interim Measures Soil Boring Sample
MSSL	- Medium Specific Screening Levels established by Region 6 EPA
	- Value exceeds either the Region 6 EPA Dilution Attenuation Factor or Industrial Soil MSSL

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Dieldrin Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
1HA-1 (0-1') 9/2/1993	Soil	Dieldrin	<0.0081	0.12	0.0002
1HA-2 (0-1') 9/2/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
1HA-3 (0-1') 9/2/1993	Soil	Dieldrin	<0.0014	0.12	0.0002
1HA-4 (0-1') 9/2/1993	Soil	Dieldrin	<0.015	0.12	0.0002
1HA-5 (0-1') 9/2/1993	Soil	Dieldrin	0.593	0.12	0.0002
1HA-6 (13-14') 11/28/1994	Soil	Dieldrin	<0.13	0.12	0.0002
1HA-6 (8-9') 11/28/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
1HA-7 (11-12') 1/31/1995	Soil	Dieldrin	<0.0013	0.12	0.0002
1HA-7 (2-3') 1/31/1995	Soil	Dieldrin	<0.0013	0.12	0.0002
1HA-7 (2-3') 12/12/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
1HA-7 (5-6') 1/31/1995	Soil	Dieldrin	<0.0013	0.12	0.0002
1MW-1 (0-5') 8/31/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
1MW-1 (5-10') 8/31/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
1MW-2 (0-5') 8/31/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
1MW-2 (5-10') 8/31/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
1MW-3 (0-5') 9/1/1993	Soil	Dieldrin	<0.0015	0.12	0.0002
1MW-3 (5-10') 9/1/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
1MW-4 (0-5') 9/1/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
1MW-4 (5-10') 9/1/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
1MW-5 (0-5') 9/1/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
1MW-5 (5-10') 9/1/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
1MW-6 (25-30') 9/23/1993	Soil	Dieldrin	<0.0019	0.12	0.0002
1SB-1 (0-2') 12/20/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
1SB-1 (12-14') 12/20/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
1SB-1 (4-6') 12/20/1994	Soil	Dieldrin	<0.0013	0.12	0.0002

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Dieldrin Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
1SED-1 9/7/1993	Sediment	Dieldrin	<0.027	0.12	0.0002
1SED-2 9/7/1993	Sediment	Dieldrin	<0.0016	0.12	0.0002
1SED-3 9/7/1993	Sediment	Dieldrin	<0.0095	0.12	0.0002
2HA-10 (0-1') 11/30/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
2MW-1 (15-20') 9/10/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
2MW-1 (20-25') 9/10/1993	Soil	Dieldrin	<0.0018	0.12	0.0002
2MW-1 (30-35') 9/10/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
2MW-2 (15-20') 9/13/1993	Soil	Dieldrin	<0.0018	0.12	0.0002
2MW-2 (5-10') 9/13/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
2MW-3 (15-20') 9/13/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
2MW-3 (20-25') 9/13/1993	Soil	Dieldrin	<0.0018	0.12	0.0002
2MW-3 (30-35') 9/15/1993	Soil	Dieldrin	<0.0018	0.12	0.0002
2MW-5 (0-1') 11/30/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
2MW-7 (0-5') 12/9/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
2MW-7 (20-25') 12/9/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
2MW-7 (5-10') 12/9/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
2SB-1 (15-20') 9/22/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
2SB-1 (25-30') 9/22/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
2SB-10 (15-20') 9/23/1993	Soil	Dieldrin	<1.7	0.12	0.0002
2SB-10 (25-30') 9/23/1993	Soil	Dieldrin	<0.0071	0.12	0.0002
2SB-11 (20-25') 9/23/1993	Soil	Dieldrin	<0.0019	0.12	0.0002
2SB-11 (25-30') 9/23/1993	Soil	Dieldrin	<0.0018	0.12	0.0002
2SB-12 (15-20') 9/23/1993	Soil	Dieldrin	<0.017	0.12	0.0002
2SB-12 (25-30') 9/23/1993	Soil	Dieldrin	<0.017	0.12	0.0002
2SB-13 (0-2') 12/6/1994	Soil	Dieldrin	<0.0013	0.12	0.0002

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Dieldrin Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
2SB-13 (10-12') 12/6/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
2SB-13 (8-10') 12/6/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
2SB-14 (8-10') 9/29/1995	Soil	Dieldrin	<0.0041	0.12	0.0002
2SB-15 (0-2') 9/29/1995	Soil	Dieldrin	<0.0038	0.12	0.0002
2SB-15 (8-10') 9/29/1995	Soil	Dieldrin	0.0095	0.12	0.0002
2SB-2 (20-25') 9/21/1993	Soil	Dieldrin	<0.0018	0.12	0.0002
2SB-2 (25-30') 9/21/1993	Soil	Dieldrin	<0.018	0.12	0.0002
2SB-3 (13-14') 9/17/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
2SB-3 (24-25') 9/17/1993	Soil	Dieldrin	<0.0035	0.12	0.0002
2SB-4 (15-20') 9/23/1993	Soil	Dieldrin	<0.0018	0.12	0.0002
2SB-4 (25-30') 9/23/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
2SB-5 (15-20') 9/21/1993	Soil	Dieldrin	<0.017	0.12	0.0002
2SB-5 (25-30') 9/21/1993	Soil	Dieldrin	<0.019	0.12	0.0002
2SB-6 (21-22') 9/20/1993	Soil	Dieldrin	<0.017	0.12	0.0002
2SB-6 (28-29') 9/20/1993	Soil	Dieldrin	<0.089	0.12	0.0002
2SB-7 (10-15') 9/23/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
2SB-7 (25-30') 9/23/1993	Soil	Dieldrin	<0.018	0.12	0.0002
2SB-8 (15-20') 9/21/1993	Soil	Dieldrin	<0.0034	0.12	0.0002
2SB-8 (25-30') 9/21/1993	Soil	Dieldrin	<0.054	0.12	0.0002
2SB-9 (26-27') 9/21/1993	Soil	Dieldrin	<0.018	0.12	0.0002
2SB-9 (4-5') 9/21/1993	Soil	Dieldrin	<0.017	0.12	0.0002
3SED-1 9/13/1993	Sediment	Dieldrin	<0.017	0.12	0.0002
3SED-10 9/16/1993	Sediment	Dieldrin	<0.0016	0.12	0.0002
3SED-11-N 11/29/1994	Sediment	Dieldrin	<0.0013	0.12	0.0002
3SED-11-S 11/29/1994	Sediment	Dieldrin	<0.0013	0.12	0.0002

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Dieldrin Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
3SED-12-N 11/29/1994	Sediment	Dieldrin	<0.0013	0.12	0.0002
3SED-12-S 11/29/1994	Sediment	Dieldrin	<0.0013	0.12	0.0002
3SED-13-N 11/29/1994	Sediment	Dieldrin	0.002	0.12	0.0002
3SED-13-S 11/29/1994	Sediment	Dieldrin	<0.0013	0.12	0.0002
3SED-14-N 11/29/1994	Sediment	Dieldrin	<0.0013	0.12	0.0002
3SED-14-S 11/29/1994	Sediment	Dieldrin	0.0056	0.12	0.0002
3SED-15-N 11/29/1994	Sediment	Dieldrin	<0.0013	0.12	0.0002
3SED-15-S 11/29/1994	Sediment	Dieldrin	<0.013	0.12	0.0002
3SED-16-N 11/29/1994	Sediment	Dieldrin	<0.0013	0.12	0.0002
3SED-16-S 11/29/1994	Sediment	Dieldrin	<0.0013	0.12	0.0002
3SED-17-N 11/29/1994	Sediment	Dieldrin	<0.0013	0.12	0.0002
3SED-17-S 11/29/1994	Sediment	Dieldrin	<0.0013	0.12	0.0002
3SED-18-N 11/29/1994	Sediment	Dieldrin	<0.0013	0.12	0.0002
3SED-18-S 11/29/1994	Sediment	Dieldrin	<0.0013	0.12	0.0002
3SED-19-N 11/29/1994	Sediment	Dieldrin	<0.0013	0.12	0.0002
3SED-19-S 11/29/1994	Sediment	Dieldrin	<0.0013	0.12	0.0002
3SED-2 9/13/1993	Sediment	Dieldrin	0.012	0.12	0.0002
3SED-20-N 11/29/1994	Sediment	Dieldrin	0.011	0.12	0.0002
3SED-20-S 11/29/1994	Sediment	Dieldrin	0.22	0.12	0.0002
3SED-20-S DUP 11/29/1994	Duplicate	Dieldrin	0.55	0.12	0.0002
3SED-21-N 11/29/1994	Sediment	Dieldrin	0.043	0.12	0.0002
3SED-21-S 11/29/1994	Sediment	Dieldrin	<0.0013	0.12	0.0002
3SED-22-N 11/29/1994	Sediment	Dieldrin	<0.0013	0.12	0.0002
3SED-22-S 11/29/1994	Sediment	Dieldrin	<0.0013	0.12	0.0002
3SED-3 9/13/1993	Sediment	Dieldrin	3.4	0.12	0.0002

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Dieldrin Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
3SED-4 9/13/1993	Sediment	Dieldrin	0.0029	0.12	0.0002
3SED-5 9/14/1993	Sediment	Dieldrin	0.057	0.12	0.0002
3SED-6 9/14/1993	Sediment	Dieldrin	0.086	0.12	0.0002
3SED-7 9/14/1993	Sediment	Dieldrin	0.2	0.12	0.0002
3SED-8 9/14/1993	Sediment	Dieldrin	0.034	0.12	0.0002
3SED-9 9/14/1993	Sediment	Dieldrin	0.0045	0.12	0.0002
4HA-1 (0-1') 9/2/1993	Soil	Dieldrin	<0.0015	0.12	0.0002
4HA-1 (1-2') 9/2/1993	Soil	Dieldrin	<0.0015	0.12	0.0002
4HA-1 (2-3') 9/2/1993	Soil	Dieldrin	0.05	0.12	0.0002
4HA-2 (0-1') 9/2/1993	Soil	Dieldrin	<0.015	0.12	0.0002
4HA-2 (1-2') 9/2/1993	Soil	Dieldrin	<0.016	0.12	0.0002
4HA-2 (2-3') 9/2/1993	Soil	Dieldrin	<0.016	0.12	0.0002
4HA-3 (0-1') 9/3/1993	Soil	Dieldrin	<0.0014	0.12	0.0002
4HA-4 (0-1') 9/3/1993	Soil	Dieldrin	0.0016	0.12	0.0002
4HA-4 (1-2') 9/3/1993	Soil	Dieldrin	<0.016	0.12	0.0002
4HA-4 (2-3') 9/3/1993	Soil	Dieldrin	<0.0083	0.12	0.0002
4HA-4 (2-3')DUP 9/3/1993	Soil Duplicate	Dieldrin	<0.0033	0.12	0.0002
4HA-5 (0-1') 9/15/1993	Soil	Dieldrin	<0.0031	0.12	0.0002
4HA-5 (1-2') 9/15/1993	Soil	Dieldrin	<0.078	0.12	0.0002
4HA-5 (2-3') 9/15/1993	Soil	Dieldrin	<0.0082	0.12	0.0002
4HA-6 (0-1') 9/3/1993	Soil	Dieldrin	0.19	0.12	0.0002
4HA-6 (1-2') 9/3/1993	Soil	Dieldrin	0.63	0.12	0.0002
4HA-7 (5-6') 9/3/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
4HA-7 (6-7') 9/3/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
4HA-7 (7-8') 9/3/1993	Soil	Dieldrin	<0.0017	0.12	0.0002

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
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Dieldrin Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
4HA-8 (5-6') 9/3/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
4HA-8 (6-7') 9/3/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
4HA-8 (7-8') 9/3/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
4MW-1 (25-30') 9/17/1993	Soil	Dieldrin	<0.0018	0.12	0.0002
4MW-2 (0-5') 9/16/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
4MW-2 (25-30') 9/22/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
4MW-3 (0-3') 12/6/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
4MW-3 (28-33') 12/6/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
4MW-3 (33-38') 12/6/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
4MW-4 (0-3') 12/14/1994	Soil	Dieldrin	0.48	0.12	0.0002
4MW-4 (0-3')Dup 12/14/1994	Soil Duplicate	Dieldrin	0.43	0.12	0.0002
4MW-4 (18-23') 12/14/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
4MW-4 (23-28') 12/15/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
4MW-4 (8-13') 12/14/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
4SB-1 (0-2') 12/6/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
4SB-1 (4-6') 12/6/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
4SB-1 (8-10') 12/6/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
4SB-2 (0-2') 12/8/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
4SB-2 (12-14') 12/8/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
4SB-2 (4-6') 12/8/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
4SB-3 (0-2') 12/8/1994	Soil	Dieldrin	<0.013	0.12	0.0002
4SB-3 (12-14') 12/8/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
4SB-3 (6-8') 12/8/1994	Soil	Dieldrin	<0.013	0.12	0.0002
5SB-1 (16-18') 9/7/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
5SB-1 (21-23') 9/7/1993	Soil	Dieldrin	<0.0017	0.12	0.0002

TABLE 2
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Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
5SB-2 (16-18') 9/8/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
5SB-2 (21-23') 9/8/1993	Soil	Dieldrin	<0.0018	0.12	0.0002
5SB-3 (16-18') 9/30/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
5SB-3 (23-25') 9/30/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
6HA-B1 (0-1') 12/2/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
6HA-B2 (0-1') 12/2/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
6HA-C1 (0-1') 12/2/1994	Soil	Dieldrin	0.026	0.12	0.0002
6HA-C2 (0-1') 12/2/1994	Soil	Dieldrin	0.078	0.12	0.0002
6HA-D1 (0-1') 12/2/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
6HA-F1 (0-1') 12/2/1994	Soil	Dieldrin	0.036	0.12	0.0002
6HA-F2 (0-1') 12/2/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
6HA-G1 (0-1') 12/2/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
6HA-G1 (0-1') 12/2/1994	Soil Duplicate	Dieldrin	<0.0013	0.12	0.0002
6HA-G2 (0-1') 12/2/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
6HA-H1 (0-1') 12/2/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
6HA-H2 (0-1') 12/2/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
6HA-I1 (0-1') 12/2/1994	Soil	Dieldrin	<0.0013	0.12	0.0002
6HA-J1 (0-1') 12/2/1994	Soil	Dieldrin	0.042	0.12	0.0002
6HA-K1 (0-1') 12/2/1994	Soil	Dieldrin	0.044	0.12	0.0002
6HA-L1 (0-1') 12/2/1994	Soil	Dieldrin	0.029	0.12	0.0002
6SB-A (0-5') 9/27/1993	Soil	Dieldrin	0.03	0.12	0.0002
6SB-A (5-10') 9/27/1993	Soil	Dieldrin	0.0055	0.12	0.0002
6SB-C (0-5') 9/29/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
6SB-C (5-10') 9/29/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
6SB-D (0-5') 9/29/1993	Soil	Dieldrin	<0.0017	0.12	0.0002

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Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
6SB-D (5-10') 9/29/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
6SB-E (0-5') 9/27/1993	Soil	Dieldrin	0.0086	0.12	0.0002
6SB-E (5-10') 9/27/1993	Soil	Dieldrin	<0.016	0.12	0.0002
6SB-F (0-5') 9/27/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
6SB-F (5-10') 9/27/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
6SB-G (0-5') 9/29/1993	Soil	Dieldrin	<0.0062	0.12	0.0002
6SB-G (0-5')DUP 9/29/1993	Soil Duplicate	Dieldrin	<0.013	0.12	0.0002
6SB-G (5-10') 9/29/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
6SB-H (0-5') 9/30/1993	Soil	Dieldrin	<0.0077	0.12	0.0002
6SB-H (5-10') 9/30/1993	Soil	Dieldrin	<0.0064	0.12	0.0002
6SB-J (10-15') 9/27/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
6SB-J (5-10') 9/27/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
6SB-K (0-5') 9/29/1993	Soil	Dieldrin	<0.049	0.12	0.0002
6SB-K (5-10') 9/29/1993	Soil	Dieldrin	<0.017	0.12	0.0002
6SB-L (0-5') 9/30/1993	Soil	Dieldrin	<0.0015	0.12	0.0002
6SB-L (5-10') 9/30/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
8HA-1 (0-1') 9/8/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
8HA-2 (0-1') 9/8/1993	Soil	Dieldrin	0.004	0.12	0.0002
8HA-3 (0-1') 9/8/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
8HA-4 (0-1') 9/8/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
9SB-15 (0-5') 9/9/1993	Soil	Dieldrin	<0.0014	0.12	0.0002
9SB-15 (5-10') 9/9/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
9SB-3 (0-5') 9/7/1993	Soil	Dieldrin	<0.017	0.12	0.0002
9SB-3 (5-10') 9/7/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
IMSB-1 (1-3') 4/8/1993	Soil	Dieldrin	<0.055	0.12	0.0002

TABLE 2
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Dieldrin Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
IMSB-1 (3-8') 4/8/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
IMSB-1 (8-12') 5/6/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
IMSB-2 (10-15') 4/8/1993	Soil	Dieldrin	0.35	0.12	0.0002
IMSB-2 (1-5') 4/8/1993	Soil	Dieldrin	0.0074	0.12	0.0002
IMSB-2 (5-10') 4/8/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
IMSB-3 (10-15') 4/9/1993	Soil	Dieldrin	<0.0017	0.12	0.0002
IMSB-3 (1-5') 4/9/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
IMSB-3 (5-10') 4/9/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
IMSB-4 (1-5') 4/9/1993	Soil	Dieldrin	0.056	0.12	0.0002
IMSB-4 (5-10') 4/9/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
IMSB-5 (1-5') 4/9/1993	Soil	Dieldrin	0.013	0.12	0.0002
IMSB-5 (5-10') 4/9/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
BGHA-1 (0-1') 9/16/1993	Soil	Dieldrin	<0.0015	0.12	0.0002
BGHA-2 (0-1') 9/16/1993	Soil	Dieldrin	<0.0016	0.12	0.0002
BGHA-3 (0-1') 9/16/1993	Soil	Dieldrin	<0.0015	0.12	0.0002
OFF-2 (5-10') 11/20/1995	Soil	Dieldrin	<0.0039	0.12	0.0002
OFF-3 (5-10') 11/21/1995	Soil	Dieldrin	<0.0037	0.12	0.0002
SAI-2 (28-30') 10/10/1995	Soil	Dieldrin	<0.0044	0.12	0.0002
SAI-23 (10-12') 10/19/1995	Soil	Dieldrin	<0.0041	0.12	0.0002
SAI-5 (2-4') 10/11/1995	Soil	Dieldrin	<0.0039	0.12	0.0002
SAI-6 (20-22') 10/11/1995	Soil	Dieldrin	<0.0043	0.12	0.0002
SAI-6 (28-30') 10/11/1995	Soil	Dieldrin	<0.0041	0.12	0.0002

TABLE 2
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Dieldrin Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
SAI-9 (12-14') 10/17/1995	Soil	Dieldrin	<0.0042	0.12	0.0002
SAI-9 (26-28') 10/17/1995	Soil	Dieldrin	<0.0043	0.12	0.0002

Notes:

mg/kg = milligrams per kilogram.

SB - Soil Boring Sample

SED - Surface Sediment Sample

HA - Hand Auger Sample

SAI - Methylene Chloride Source Area Investigation

BGHA - Background Hand Auger Sample

MW - Soil sample collected from installation of monitoring well

OFF - Offsite Soil Boring Sample

IMSB - Interim Measures Soil Boring Sample

MSSL - Medium Specific Screening Levels established by Region 6 EPA

- Value exceeds either the Region 6 EPA Dilution Attenuation Factor or Industrial Soil MSSL

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
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Dinoseb Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
1HA-1 (0-1') 9/2/1993	Soil	Dinoseb	9.6	680	N/A
1HA-2 (0-1') 9/2/1993	Soil	Dinoseb	<0.82	680	N/A
1HA-3 (0-1') 9/2/1993	Soil	Dinoseb	<0.72	680	N/A
1HA-4 (0-1') 9/2/1993	Soil	Dinoseb	<150	680	N/A
1HA-5 (0-1') 9/2/1993	Soil	Dinoseb	<2.3	680	N/A
1HA-6 (13-14') 11/28/1994	Soil	Dinoseb	<0.462	680	N/A
1HA-6 (8-9') 11/28/1994	Soil	Dinoseb	<0.462	680	N/A
1HA-7 (11-12') 1/31/1995	Soil	Dinoseb	<0.462	680	N/A
1HA-7 (2-3') 1/31/1995	Soil	Dinoseb	<0.462	680	N/A
1HA-7 (2-3') 12/12/1994	Soil	Dinoseb	<0.462	680	N/A
1HA-7 (5-6') 1/31/1995	Soil	Dinoseb	<0.462	680	N/A
1MW-1 (0-5') 8/31/1993	Soil	Dinoseb	<0.79	680	N/A
1MW-1 (5-10') 8/31/1993	Soil	Dinoseb	<0.84	680	N/A
1MW-2 (0-5') 8/31/1993	Soil	Dinoseb	<0.78	680	N/A
1MW-2 (5-10') 8/31/1993	Soil	Dinoseb	<0.82	680	N/A
1MW-3 (0-5') 9/1/1993	Soil	Dinoseb	<0.77	680	N/A
1MW-3 (5-10') 9/1/1993	Soil	Dinoseb	<0.84	680	N/A
1MW-4 (0-5') 9/1/1993	Soil	Dinoseb	<0.77	680	N/A
1MW-4 (5-10') 9/1/1993	Soil	Dinoseb	<0.82	680	N/A
1MW-5 (0-5') 9/1/1993	Soil	Dinoseb	<0.78	680	N/A
1MW-5 (5-10') 9/1/1993	Soil	Dinoseb	<0.81	680	N/A
1MW-6 (25-30') 9/23/1993	Soil	Dinoseb	<1.1	680	N/A
1SB-1 (0-2') 12/20/1994	Soil	Dinoseb	<0.462	680	N/A
1SB-1 (12-14') 12/20/1994	Soil	Dinoseb	<0.462	680	N/A
1SB-1 (4-6') 12/20/1994	Soil	Dinoseb	<0.462	680	N/A
1SED-1 9/7/1993	Sediment	Dinoseb	<680	680	N/A

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Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
1SED-2 9/7/1993	Sediment	Dinoseb	<20	680	N/A
1SED-3 9/7/1993	Sediment	Dinoseb	<470	680	N/A
2HA-10 (0-1') 11/30/1994	Soil	Dinoseb	<0.462	680	N/A
2MW-1 (15-20') 9/10/1993	Soil	Dinoseb	<0.85	680	N/A
2MW-1 (20-25') 9/10/1993	Soil	Dinoseb	<0.88	680	N/A
2MW-1 (30-35') 9/10/1993	Soil	Dinoseb	<0.84	680	N/A
2MW-2 (15-20') 9/13/1993	Soil	Dinoseb	<4.4	680	N/A
2MW-2 (5-10') 9/13/1993	Soil	Dinoseb	<4.2	680	N/A
2MW-3 (15-20') 9/13/1993	Soil	Dinoseb	<1.7	680	N/A
2MW-3 (20-25') 9/13/1993	Soil	Dinoseb	<4.5	680	N/A
2MW-3 (30-35') 9/15/1993	Soil	Dinoseb	<4.5	680	N/A
2MW-5 (0-1') 11/30/1994	Soil	Dinoseb	100	680	N/A
2MW-7 (0-5') 12/9/1994	Soil	Dinoseb	<0.462	680	N/A
2MW-7 (20-25') 12/9/1994	Soil	Dinoseb	<0.462	680	N/A
2MW-7 (5-10') 12/9/1994	Soil	Dinoseb	<0.462	680	N/A
2SB-1 (15-20') 9/22/1993	Soil	Dinoseb	<1	680	N/A
2SB-1 (25-30') 9/22/1993	Soil	Dinoseb	<1	680	N/A
2SB-10 (15-20') 9/23/1993	Soil	Dinoseb	0.99	680	N/A
2SB-10 (25-30') 9/23/1993	Soil	Dinoseb	<0.44	680	N/A
2SB-11 (20-25') 9/23/1993	Soil	Dinoseb	<0.93	680	N/A
2SB-11 (25-30') 9/23/1993	Soil	Dinoseb	<0.46	680	N/A
2SB-12 (15-20') 9/23/1993	Soil	Dinoseb	9.8	680	N/A
2SB-12 (25-30') 9/23/1993	Soil	Dinoseb	<1.2	680	N/A
2SB-13 (0-2') 12/6/1994	Soil	Dinoseb	<0.462	680	N/A
2SB-13 (10-12') 12/6/1994	Soil	Dinoseb	<0.462	680	N/A
2SB-13 (8-10') 12/6/1994	Soil	Dinoseb	0.58	680	N/A

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Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
2SB-2 (20-25') 9/21/1993	Soil	Dinoseb	0.85	680	N/A
2SB-2 (25-30') 9/21/1993	Soil	Dinoseb	<2	680	N/A
2SB-3 (13-14') 9/17/1993	Soil	Dinoseb	29	680	N/A
2SB-3 (24-25') 9/17/1993	Soil	Dinoseb	<11	680	N/A
2SB-4 (15-20') 9/23/1993	Soil	Dinoseb	<1.1	680	N/A
2SB-4 (25-30') 9/23/1993	Soil	Dinoseb	<1	680	N/A
2SB-5 (15-20') 9/21/1993	Soil	Dinoseb	<17	680	N/A
2SB-5 (25-30') 9/21/1993	Soil	Dinoseb	49	680	N/A
2SB-6 (21-22') 9/20/1993	Soil	Dinoseb	10	680	N/A
2SB-6 (28-29') 9/20/1993	Soil	Dinoseb	93	680	N/A
2SB-7 (10-15') 9/23/1993	Soil	Dinoseb	<1	680	N/A
2SB-7 (25-30') 9/23/1993	Soil	Dinoseb	<1.1	680	N/A
2SB-8 (15-20') 9/21/1993	Soil	Dinoseb	<2.1	680	N/A
2SB-8 (25-30') 9/21/1993	Soil	Dinoseb	0.51	680	N/A
2SB-9 (26-27') 9/21/1993	Soil	Dinoseb	0.92	680	N/A
2SB-9 (4-5') 9/21/1993	Soil	Dinoseb	1.1	680	N/A
3SB-1 (4-6') 9/29/1995	Soil	Dinoseb	180	680	N/A
3SB-1 (6-12') 9/29/1995	Soil	Dinoseb	0.63	680	N/A
3SB-6 (12-16') 1/10/1995	Soil	Dinoseb	560	680	N/A
3SB-6 (4-8') 1/10/1995	Soil	Dinoseb	13000	680	N/A
3SB-6 (8-12') 1/10/1995	Soil	Dinoseb	180	680	N/A
3SED-1 9/13/1993	Sediment	Dinoseb	<6.3	680	N/A
3SED-10 9/16/1993	Sediment	Dinoseb	<0.93	680	N/A
3SED-2 9/13/1993	Sediment	Dinoseb	<4.2	680	N/A
3SED-3 9/13/1993	Sediment	Dinoseb	<4.1	680	N/A
3SED-4 9/13/1993	Sediment	Dinoseb	<4.6	680	N/A

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Dinoseb Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
3SED-5 9/14/1993	Sediment	Dinoseb	<1.7	680	N/A
3SED-6 9/14/1993	Sediment	Dinoseb	<4	680	N/A
3SED-7 9/14/1993	Sediment	Dinoseb	4	680	N/A
3SED-8 9/14/1993	Sediment	Dinoseb	<4.6	680	N/A
3SED-9 9/14/1993	Sediment	Dinoseb	<4.3	680	N/A
4HA-1 (0-1') 9/2/1993	Soil	Dinoseb	<0.72	680	N/A
4HA-1 (1-2') 9/2/1993	Soil	Dinoseb	<0.76	680	N/A
4HA-1 (2-3') 9/2/1993	Soil	Dinoseb	0.74	680	N/A
4HA-2 (0-1') 9/2/1993	Soil	Dinoseb	500	680	N/A
4HA-2 (1-2') 9/2/1993	Soil	Dinoseb	1100	680	N/A
4HA-2 (2-3') 9/2/1993	Soil	Dinoseb	470	680	N/A
4HA-3 (0-1') 9/3/1993	Soil	Dinoseb	<0.69	680	N/A
4HA-4 (0-1') 9/3/1993	Soil	Dinoseb	<0.7	680	N/A
4HA-4 (1-2') 9/3/1993	Soil	Dinoseb	<0.81	680	N/A
4HA-4 (2-3') 9/3/1993	Soil	Dinoseb	<0.82	680	N/A
4HA-4 (2-3')DUP 9/3/1993	Soil Duplicate	Dinoseb	<0.81	680	N/A
4HA-5 (0-1') 9/15/1993	Soil	Dinoseb	1.4	680	N/A
4HA-5 (1-2') 9/15/1993	Soil	Dinoseb	30	680	N/A
4HA-5 (2-3') 9/15/1993	Soil	Dinoseb	920	680	N/A
4HA-6 (0-1') 9/3/1993	Soil	Dinoseb	190	680	N/A
4HA-6 (1-2') 9/3/1993	Soil	Dinoseb	<1400	680	N/A
4HA-7 (5-6') 9/3/1993	Soil	Dinoseb	840	680	N/A
4HA-7 (6-7') 9/3/1993	Soil	Dinoseb	98	680	N/A
4HA-7 (7-8') 9/3/1993	Soil	Dinoseb	19	680	N/A
4HA-8 (5-6') 9/3/1993	Soil	Dinoseb	91	680	N/A
4HA-8 (6-7') 9/3/1993	Soil	Dinoseb	73	680	N/A

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Dinoseb Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
4HA-8 (7-8') 9/3/1993	Soil	Dinoseb	26	680	N/A
4MW-1 (10-15') 9/16/1993	Soil	Dinoseb	6.3	680	N/A
4MW-1 (25-30') 9/17/1993	Soil	Dinoseb	<1.1	680	N/A
4MW-2 (0-5') 9/16/1993	Soil	Dinoseb	18	680	N/A
4MW-2 (25-30') 9/22/1993	Soil	Dinoseb	0.045	680	N/A
4MW-3 (0-3') 12/6/1994	Soil	Dinoseb	<0.462	680	N/A
4MW-3 (28-33') 12/6/1994	Soil	Dinoseb	<0.462	680	N/A
4MW-3 (33-38') 12/6/1994	Soil	Dinoseb	<0.462	680	N/A
4MW-4 (0-3') 12/14/1994	Soil	Dinoseb	95	680	N/A
4MW-4 (0-3')Dup 12/14/1994	Soil Duplicate	Dinoseb	90	680	N/A
4MW-4 (18-23') 12/14/1994	Soil	Dinoseb	<0.462	680	N/A
4MW-4 (23-28') 12/15/1994	Soil	Dinoseb	<0.462	680	N/A
4MW-4 (8-13') 12/14/1994	Soil	Dinoseb	50	680	N/A
4SB-1 (0-2') 12/6/1994	Soil	Dinoseb	550	680	N/A
4SB-1 (4-6') 12/6/1994	Soil	Dinoseb	360	680	N/A
4SB-1 (8-10') 12/6/1994	Soil	Dinoseb	<0.462	680	N/A
4SB-2 (0-2') 12/8/1994	Soil	Dinoseb	<2.31	680	N/A
4SB-2 (12-14') 12/8/1994	Soil	Dinoseb	<0.462	680	N/A
4SB-2 (4-6') 12/8/1994	Soil	Dinoseb	<0.462	680	N/A
4SB-3 (0-2') 12/8/1994	Soil	Dinoseb	95	680	N/A
4SB-3 (12-14') 12/8/1994	Soil	Dinoseb	<0.462	680	N/A
4SB-3 (6-8') 12/8/1994	Soil	Dinoseb	<0.462	680	N/A
5SB-1 (16-18') 9/7/1993	Soil	Dinoseb	<4.2	680	N/A
5SB-1 (21-23') 9/7/1993	Soil	Dinoseb	<4.3	680	N/A
5SB-2 (16-18') 9/8/1993	Soil	Dinoseb	170	680	N/A
5SB-2 (21-23') 9/8/1993	Soil	Dinoseb	57	680	N/A

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Dinoseb Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
5SB-3 (16-18') 9/30/1993	Soil	Dinoseb	<4.2	680	N/A
5SB-3 (23-25') 9/30/1993	Soil	Dinoseb	<4.3	680	N/A
6HA-B1 (0-1') 12/2/1994	Soil	Dinoseb	160	680	N/A
6HA-B2 (0-1') 12/2/1994	Soil	Dinoseb	5.6	680	N/A
6HA-C1 (0-1') 12/2/1994	Soil	Dinoseb	110	680	N/A
6HA-C2 (0-1') 12/2/1994	Soil	Dinoseb	5.6	680	N/A
6HA-D1 (0-1') 12/2/1994	Soil	Dinoseb	9.1	680	N/A
6HA-F1 (0-1') 12/2/1994	Soil	Dinoseb	3.8	680	N/A
6HA-F2 (0-1') 12/2/1994	Soil	Dinoseb	<0.462	680	N/A
6HA-G1 (0-1') 12/2/1994	Soil Duplicate	Dinoseb	<0.462	680	N/A
6HA-G1 (0-1') 12/2/1994	Soil	Dinoseb	<0.462	680	N/A
6HA-G2 (0-1') 12/2/1994	Soil	Dinoseb	2.2	680	N/A
6HA-H1 (0-1') 12/2/1994	Soil	Dinoseb	<0.462	680	N/A
6HA-H2 (0-1') 12/2/1994	Soil	Dinoseb	<2.31	680	N/A
6HA-I1 (0-1') 12/2/1994	Soil	Dinoseb	<0.462	680	N/A
6HA-J1 (0-1') 12/2/1994	Soil	Dinoseb	2.9	680	N/A
6HA-K1 (0-1') 12/2/1994	Soil	Dinoseb	0.96	680	N/A
6HA-L1 (0-1') 12/2/1994	Soil	Dinoseb	<0.462	680	N/A
6SB-A (0-5') 9/27/1993	Soil	Dinoseb	9.5	680	N/A
6SB-A (5-10') 9/27/1993	Soil	Dinoseb	0.43	680	N/A
6SB-C (0-5') 9/29/1993	Soil	Dinoseb	14	680	N/A
6SB-C (5-10') 9/29/1993	Soil	Dinoseb	<4.1	680	N/A
6SB-D (0-5') 9/29/1993	Soil	Dinoseb	6.1	680	N/A
6SB-D (5-10') 9/29/1993	Soil	Dinoseb	<4.2	680	N/A
6SB-E (0-5') 9/27/1993	Soil	Dinoseb	<4	680	N/A
6SB-E (5-10') 9/27/1993	Soil	Dinoseb	10	680	N/A

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Dinoseb Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
6SB-F (0-5') 9/27/1993	Soil	Dinoseb	16	680	N/A
6SB-F (5-10') 9/27/1993	Soil	Dinoseb	21	680	N/A
6SB-G (0-5') 9/29/1993	Soil	Dinoseb	45	680	N/A
6SB-G (5-10') 9/29/1993	Soil	Dinoseb	5.3	680	N/A
6SB-H (0-5') 9/30/1993	Soil	Dinoseb	7.7	680	N/A
6SB-H (5-10') 9/30/1993	Soil	Dinoseb	10.2	680	N/A
6SB-J (10-15') 9/27/1993	Soil	Dinoseb	<1	680	N/A
6SB-J (5-10') 9/27/1993	Soil	Dinoseb	1	680	N/A
6SB-K (0-5') 9/29/1993	Soil	Dinoseb	4.1	680	N/A
6SB-K (5-10') 9/29/1993	Soil	Dinoseb	1.06	680	N/A
6SB-L (0-5') 9/30/1993	Soil	Dinoseb	<3.8	680	N/A
6SB-L (5-10') 9/30/1993	Soil	Dinoseb	<4.2	680	N/A
8HA-1 (0-1') 9/8/1993	Soil	Dinoseb	<0.84	680	N/A
8HA-2 (0-1') 9/8/1993	Soil	Dinoseb	<0.82	680	N/A
8HA-3 (0-1') 9/8/1993	Soil	Dinoseb	<0.81	680	N/A
8HA-4 (0-1') 9/8/1993	Soil	Dinoseb	<4.2	680	N/A
9SB-1 (0-5') 9/7/1993	Soil	Dinoseb	38	680	N/A
9SB-1 (5-10') 9/7/1993	Soil	Dinoseb	9.6	680	N/A
9SB-10 (0-5') 9/9/1993	Soil	Dinoseb	650	680	N/A
9SB-10 (5-10') 9/9/1993	Soil	Dinoseb	40	680	N/A
9SB-11 (0-5') 9/9/1993	Soil	Dinoseb	160	680	N/A
9SB-11 (5-10') 9/9/1993	Soil	Dinoseb	170	680	N/A
9SB-12 (0-5') 9/9/1993	Soil	Dinoseb	13000	680	N/A
9SB-12 (5-10') 9/9/1993	Soil	Dinoseb	320	680	N/A
9SB-13 (0-5') 9/9/1993	Soil	Dinoseb	150	680	N/A
9SB-13 (5-10') 9/9/1993	Soil	Dinoseb	34	680	N/A

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Dinoseb Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
9SB-14 (0-5') 9/9/1993	Soil	Dinoseb	9.1	680	N/A
9SB-14 (5-10') 9/9/1993	Soil	Dinoseb	35	680	N/A
9SB-15 (0-5') 9/9/1993	Soil	Dinoseb	8.6	680	N/A
9SB-15 (5-10') 9/9/1993	Soil	Dinoseb	22	680	N/A
9SB-16 (0-5') 9/10/1993	Soil	Dinoseb	<15000	680	N/A
9SB-16 (5-10') 9/10/1993	Soil	Dinoseb	9.2	680	N/A
9SB-19 (0-5') 9/16/1993	Soil	Dinoseb	93	680	N/A
9SB-19 (5-10') 9/16/1993	Soil	Dinoseb	17	680	N/A
9SB-2 (5-10') 9/7/1993	Soil	Dinoseb	1.6	680	N/A
9SB-20 (10-12') 12/7/1994	Soil	Dinoseb	0.5	680	N/A
9SB-20 (25-27') 12/7/1994	Soil	Dinoseb	<0.462	680	N/A
9SB-20 (30-32') 12/7/1994	Soil	Dinoseb	<0.462	680	N/A
9SB-21 (10-12') 12/7/1994	Soil	Dinoseb	42	680	N/A
9SB-21 (23-25') 12/7/1994	Soil	Dinoseb	7.4	680	N/A
9SB-21 (25-27') 12/7/1994	Soil	Dinoseb	0.69	680	N/A
9SB-22 (10-12') 12/9/1994	Soil	Dinoseb	270	680	N/A
9SB-22 (15-17') 12/9/1994	Soil	Dinoseb	0.88	680	N/A
9SB-22 (17-19') 12/9/1994	Soil	Dinoseb	4	680	N/A
9SB-3 (0-5') 9/7/1993	Soil	Dinoseb	140	680	N/A
9SB-3 (5-10') 9/7/1993	Soil	Dinoseb	<4.1	680	N/A
9SB-4 (0-5') 9/8/1993	Soil	Dinoseb	24000	680	N/A
9SB-4 (10-15') 9/8/1993	Soil	Dinoseb	550	680	N/A
9SB-4 (5-10') 9/8/1993	Soil	Dinoseb	8500	680	N/A
9SB-5 (0-5') 9/8/1993	Soil	Dinoseb	29000	680	N/A
9SB-5 (10-15') 9/8/1993	Soil	Dinoseb	1700	680	N/A
9SB-5 (5-10') 9/8/1993	Soil	Dinoseb	4100	680	N/A

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Dinoseb Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
9SB-6 (0-5') 9/8/1993	Soil	Dinoseb	<420	680	N/A
9SB-6 (5-10') 9/8/1993	Soil	Dinoseb	<420	680	N/A
9SB-7 (0-5') 9/8/1993	Soil	Dinoseb	26000	680	N/A
9SB-7 (10-15') 9/8/1993	Soil	Dinoseb	360	680	N/A
9SB-7 (5-10') 9/8/1993	Soil	Dinoseb	6400	680	N/A
9SB-8 (0-5') 9/8/1993	Soil	Dinoseb	15000	680	N/A
9SB-8 (5-10') 9/8/1993	Soil	Dinoseb	13	680	N/A
9SB-9 (0-5') 9/8/1993	Soil	Dinoseb	28000	680	N/A
9SB-9 (5-10') 9/8/1993	Soil	Dinoseb	90	680	N/A
IMSB-1 (1-3') 4/8/1993	Soil	Dinoseb	<1.6	680	N/A
IMSB-1 (8-12') 4/8/1993	Soil	Dinoseb	<1.7	680	N/A
IMSB-2 (10-15') 4/8/1993	Soil	Dinoseb	<1.7	680	N/A
IMSB-2 (1-5') 4/8/1993	Soil	Dinoseb	<1.7	680	N/A
IMSB-2 (5-10') 4/8/1993	Soil	Dinoseb	2.9	680	N/A
IMSB-3 (10-15') 4/9/1993	Soil	Dinoseb	<1.7	680	N/A
IMSB-3 (1-5') 4/9/1993	Soil	Dinoseb	<1.6	680	N/A
IMSB-3 (5-10') 4/9/1993	Soil	Dinoseb	12	680	N/A
IMSB-4 (10-15') 4/9/1993	Soil	Dinoseb	<1.7	680	N/A
IMSB-4 (1-5') 4/9/1993	Soil	Dinoseb	<1.6	680	N/A
IMSB-4 (5-10') 4/9/1993	Soil	Dinoseb	<1.6	680	N/A
IMSB-5 (10-15') 4/9/1993	Soil	Dinoseb	<0.83	680	N/A
IMSB-5 (1-5') 4/9/1993	Soil	Dinoseb	<1.6	680	N/A
IMSB-5 (5-10') 4/9/1993	Soil	Dinoseb	<1.6	680	N/A
BGHA-1 (0-1') 9/16/1993	Soil	Dinoseb	<0.93	680	N/A
BGHA-2 (0-1') 9/16/1993	Soil	Dinoseb	<0.95	680	N/A
BGHA-3 (0-1') 9/16/1993	Soil	Dinoseb	<0.92	680	N/A

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Dinoseb Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
OFF-2 (5-10') 11/20/1995	Soil	Dinoseb	<0.4	680	N/A
OFF-3 (5-10') 11/21/1995	Soil	Dinoseb	<0.4	680	N/A
SAI-11 (12-14') 10/16/1995	Soil	Dinoseb	10	680	N/A
SAI-11 (2-4') 10/16/1995	Soil	Dinoseb	57	680	N/A
SAI-12 (0-2') 10/17/1995	Soil	Dinoseb	<0.37	680	N/A
SAI-14 (28-30') 10/16/1995	Soil	Dinoseb	<0.44	680	N/A
SAI-14 (6-8') 10/16/1995	Soil	Dinoseb	0.99	680	N/A
SAI-2 (28-30') 10/10/1995	Soil	Dinoseb	<0.45	680	N/A
SAI-23 (10-12') 10/19/1995	Soil	Dinoseb	77	680	N/A
SAI-5 (2-4') 10/11/1995	Soil	Dinoseb	40	680	N/A
SAI-6 (20-22') 10/11/1995	Soil	Dinoseb	<0.41	680	N/A
SAI-6 (28-30') 10/11/1995	Soil	Dinoseb	<0.39	680	N/A
SAI-9 (12-14') 10/17/1995	Soil	Dinoseb	40	680	N/A
SAI-9 (26-28') 10/17/1995	Soil	Dinoseb	0.89	680	N/A

Notes:

mg/kg = milligrams per kilogram.

N/A	- Region 6 has not published an MSSL for this exposure pathway (MSSL not available)
SB	- Soil Boring Sample
SED	- Surface Sediment Sample
HA	- Hand Auger Sample
SAI	- Methylene Chloride Source Area Investigation
BGHA	- Background Hand Auger Sample
MW	- Soil sample collected from installation of monitoring well
OFF	- Offsite Soil Boring Sample
IMSB	- Interim Measures Soil Boring Sample
MSSL	- Medium Specific Screening Levels established by Region 6 EPA
	- Value exceeds either the Region 6 EPA Dilution Attenuation Factor or Industrial Soil MSSL

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Methoxychlor Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
1HA-1 (0-1') 9/2/1993	Soil	Methoxychlor	<0.73	3400	8
1HA-2 (0-1') 9/2/1993	Soil	Methoxychlor	<0.15	3400	8
1HA-3 (0-1') 9/2/1993	Soil	Methoxychlor	<0.13	3400	8
1HA-4 (0-1') 9/2/1993	Soil	Methoxychlor	<0.14	3400	8
1HA-5 (0-1') 9/2/1993	Soil	Methoxychlor	<6.9	3400	8
1HA-6 (13-14') 11/28/1994	Soil	Methoxychlor	<12	3400	8
1HA-6 (8-9') 11/28/1994	Soil	Methoxychlor	<0.12	3400	8
1HA-7 (11-12') 1/31/1995	Soil	Methoxychlor	<0.12	3400	8
1HA-7 (2-3') 1/31/1995	Soil	Methoxychlor	<0.12	3400	8
1HA-7 (2-3') 12/12/1994	Soil	Methoxychlor	<0.12	3400	8
1HA-7 (5-6') 1/31/1995	Soil	Methoxychlor	<0.12	3400	8
1MW-1 (0-5') 8/31/1993	Soil	Methoxychlor	<0.14	3400	8
1MW-1 (5-10') 8/31/1993	Soil	Methoxychlor	<0.14	3400	8
1MW-2 (0-5') 8/31/1993	Soil	Methoxychlor	<0.14	3400	8
1MW-2 (5-10') 8/31/1993	Soil	Methoxychlor	<0.15	3400	8
1MW-3 (0-5') 9/1/1993	Soil	Methoxychlor	<0.14	3400	8
1MW-3 (5-10') 9/1/1993	Soil	Methoxychlor	<0.15	3400	8
1MW-4 (0-5') 9/1/1993	Soil	Methoxychlor	<0.14	3400	8
1MW-4 (5-10') 9/1/1993	Soil	Methoxychlor	<0.15	3400	8
1MW-5 (0-5') 9/1/1993	Soil	Methoxychlor	<0.14	3400	8
1MW-5 (5-10') 9/1/1993	Soil	Methoxychlor	<0.15	3400	8
1MW-6 (25-30') 9/23/1993	Soil	Methoxychlor	<0.17	3400	8
1SB-1 (0-2') 12/20/1994	Soil	Methoxychlor	<0.12	3400	8
1SB-1 (12-14') 12/20/1994	Soil	Methoxychlor	<0.12	3400	8
1SB-1 (4-6') 12/20/1994	Soil	Methoxychlor	<0.12	3400	8
1SED-1 9/7/1993	Sediment	Methoxychlor	<2.5	3400	8
1SED-2 9/7/1993	Sediment	Methoxychlor	<0.15	3400	8

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
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Methoxychlor Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
1SED-3 9/7/1993	Sediment	Methoxychlor	<0.85	3400	8
2HA-10 (0-1') 11/30/1994	Soil	Methoxychlor	1.2	3400	8
2MW-1 (15-20') 9/10/1993	Soil	Methoxychlor	<0.16	3400	8
2MW-1 (20-25') 9/10/1993	Soil	Methoxychlor	<0.16	3400	8
2MW-1 (30-35') 9/10/1993	Soil	Methoxychlor	<0.15	3400	8
2MW-2 (15-20') 9/13/1993	Soil	Methoxychlor	<0.16	3400	8
2MW-2 (5-10') 9/13/1993	Soil	Methoxychlor	<0.15	3400	8
2MW-3 (15-20') 9/13/1993	Soil	Methoxychlor	<0.15	3400	8
2MW-3 (20-25') 9/13/1993	Soil	Methoxychlor	<0.16	3400	8
2MW-3 (30-35') 9/15/1993	Soil	Methoxychlor	<0.16	3400	8
2MW-5 (0-1') 11/30/1994	Soil	Methoxychlor	15	3400	8
2MW-7 (0-5') 12/9/1994	Soil	Methoxychlor	0.18	3400	8
2MW-7 (20-25') 12/9/1994	Soil	Methoxychlor	<0.12	3400	8
2MW-7 (5-10') 12/9/1994	Soil	Methoxychlor	280	3400	8
2SB-1 (15-20') 9/22/1993	Soil	Methoxychlor	<0.16	3400	8
2SB-1 (25-30') 9/22/1993	Soil	Methoxychlor	<0.15	3400	8
2SB-10 (15-20') 9/23/1993	Soil	Methoxychlor	26	3400	8
2SB-10 (25-30') 9/23/1993	Soil	Methoxychlor	7.3	3400	8
2SB-11 (20-25') 9/23/1993	Soil	Methoxychlor	<0.17	3400	8
2SB-11 (25-30') 9/23/1993	Soil	Methoxychlor	<0.17	3400	8
2SB-12 (15-20') 9/23/1993	Soil	Methoxychlor	22	3400	8
2SB-12 (25-30') 9/23/1993	Soil	Methoxychlor	63	3400	8
2SB-13 (0-2') 12/6/1994	Soil	Methoxychlor	0.26	3400	8
2SB-13 (10-12') 12/6/1994	Soil	Methoxychlor	<0.12	3400	8
2SB-13 (8-10') 12/6/1994	Soil	Methoxychlor	<0.12	3400	8
2SB-14 (8-10') 9/29/1995	Soil	Methoxychlor	<0.02	3400	8
2SB-15 (0-2') 9/29/1995	Soil	Methoxychlor	0.055	3400	8

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Methoxychlor Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
2SB-15 (8-10') 9/29/1995	Soil	Methoxychlor	<0.021	3400	8
2SB-2 (20-25') 9/21/1993	Soil	Methoxychlor	<0.16	3400	8
2SB-2 (25-30') 9/21/1993	Soil	Methoxychlor	<34	3400	8
2SB-3 (13-14') 9/17/1993	Soil	Methoxychlor	<0.15	3400	8
2SB-3 (24-25') 9/17/1993	Soil	Methoxychlor	<0.32	3400	8
2SB-4 (15-20') 9/23/1993	Soil	Methoxychlor	0.23	3400	8
2SB-4 (25-30') 9/23/1993	Soil	Methoxychlor	<0.15	3400	8
2SB-5 (15-20') 9/21/1993	Soil	Methoxychlor	160	3400	8
2SB-5 (25-30') 9/21/1993	Soil	Methoxychlor	160	3400	8
2SB-6 (21-22') 9/20/1993	Soil	Methoxychlor	16	3400	8
2SB-6 (28-29') 9/20/1993	Soil	Methoxychlor	290	3400	8
2SB-7 (10-15') 9/23/1993	Soil	Methoxychlor	<0.15	3400	8
2SB-7 (25-30') 9/23/1993	Soil	Methoxychlor	17	3400	8
2SB-8 (15-20') 9/21/1993	Soil	Methoxychlor	<0.31	3400	8
2SB-8 (25-30') 9/21/1993	Soil	Methoxychlor	1.9	3400	8
2SB-9 (26-27') 9/21/1993	Soil	Methoxychlor	340	3400	8
2SB-9 (4-5') 9/21/1993	Soil	Methoxychlor	240	3400	8
3SED-1 9/13/1993	Sediment	Methoxychlor	3.6	3400	8
3SED-10 9/16/1993	Sediment	Methoxychlor	<0.14	3400	8
3SED-11-N 11/29/1994	Sediment	Methoxychlor	<0.12	3400	8
3SED-11-S 11/29/1994	Sediment	Methoxychlor	<0.12	3400	8
3SED-12-N 11/29/1994	Sediment	Methoxychlor	<0.12	3400	8
3SED-12-S 11/29/1994	Sediment	Methoxychlor	0.63	3400	8
3SED-13-N 11/29/1994	Sediment	Methoxychlor	<0.12	3400	8
3SED-13-S 11/29/1994	Sediment	Methoxychlor	0.38	3400	8
3SED-14-N 11/29/1994	Sediment	Methoxychlor	<0.12	3400	8
3SED-14-S 11/29/1994	Sediment	Methoxychlor	<0.12	3400	8

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Methoxychlor Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
3SED-15-N 11/29/1994	Sediment	Methoxychlor	<0.12	3400	8
3SED-15-S 11/29/1994	Sediment	Methoxychlor	2.4	3400	8
3SED-16-N 11/29/1994	Sediment	Methoxychlor	0.36	3400	8
3SED-16-S 11/29/1994	Sediment	Methoxychlor	0.41	3400	8
3SED-17-N 11/29/1994	Sediment	Methoxychlor	0.32	3400	8
3SED-17-S 11/29/1994	Sediment	Methoxychlor	2.5	3400	8
3SED-18-N 11/29/1994	Sediment	Methoxychlor	<0.12	3400	8
3SED-18-S 11/29/1994	Sediment	Methoxychlor	1.9	3400	8
3SED-19-N 11/29/1994	Sediment	Methoxychlor	0.21	3400	8
3SED-19-S 11/29/1994	Sediment	Methoxychlor	0.13	3400	8
3SED-2 9/13/1993	Sediment	Methoxychlor	0.26	3400	8
3SED-20-N 11/29/1994	Sediment	Methoxychlor	<0.12	3400	8
3SED-20-S 11/29/1994	Sediment	Methoxychlor	2	3400	8
3SED-20-S DUP 11/29/1994	Sediment Duplicate	Methoxychlor	1.2	3400	8
3SED-21-N 11/29/1994	Sediment	Methoxychlor	0.22	3400	8
3SED-21-S 11/29/1994	Sediment	Methoxychlor	1.7	3400	8
3SED-22-N 11/29/1994	Sediment	Methoxychlor	0.21	3400	8
3SED-22-S 11/29/1994	Sediment	Methoxychlor	0.75	3400	8
3SED-3 9/13/1993	Sediment	Methoxychlor	2.4	3400	8
3SED-4 9/13/1993	Sediment	Methoxychlor	<0.17	3400	8
3SED-5 9/14/1993	Sediment	Methoxychlor	<0.46	3400	8
3SED-6 9/14/1993	Sediment	Methoxychlor	0.74	3400	8
3SED-7 9/14/1993	Sediment	Methoxychlor	0.89	3400	8
3SED-8 9/14/1993	Sediment	Methoxychlor	1.3	3400	8
3SED-9 9/14/1993	Sediment	Methoxychlor	<0.16	3400	8
4HA-1 (0-1') 9/2/1993	Soil	Methoxychlor	<0.13	3400	8
4HA-1 (1-2') 9/2/1993	Soil	Methoxychlor	8.1	3400	8

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Methoxychlor Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
4HA-1 (2-3') 9/2/1993	Soil	Methoxychlor	5.7	3400	8
4HA-2 (0-1') 9/2/1993	Soil	Methoxychlor	15	3400	8
4HA-2 (1-2') 9/2/1993	Soil	Methoxychlor	74	3400	8
4HA-2 (2-3') 9/2/1993	Soil	Methoxychlor	15	3400	8
4HA-3 (0-1') 9/3/1993	Soil	Methoxychlor	8.4	3400	8
4HA-4 (0-1') 9/3/1993	Soil	Methoxychlor	12	3400	8
4HA-4 (1-2') 9/3/1993	Soil	Methoxychlor	26	3400	8
4HA-4 (2-3') 9/3/1993	Soil	Methoxychlor	1.6	3400	8
4HA-4 (2-3')DUP 9/3/1993	Soil Duplicate	Methoxychlor	0.43	3400	8
4HA-5 (0-1') 9/15/1993	Soil	Methoxychlor	3.2	3400	8
4HA-5 (1-2') 9/15/1993	Soil	Methoxychlor	7.4	3400	8
4HA-5 (2-3') 9/15/1993	Soil	Methoxychlor	<0.74	3400	8
4HA-6 (0-1') 9/3/1993	Soil	Methoxychlor	9.4	3400	8
4HA-6 (1-2') 9/3/1993	Soil	Methoxychlor	34	3400	8
4HA-7 (5-6') 9/3/1993	Soil	Methoxychlor	<0.15	3400	8
4HA-7 (6-7') 9/3/1993	Soil	Methoxychlor	<0.15	3400	8
4HA-7 (7-8') 9/3/1993	Soil	Methoxychlor	<0.15	3400	8
4HA-8 (5-6') 9/3/1993	Soil	Methoxychlor	<0.15	3400	8
4HA-8 (6-7') 9/3/1993	Soil	Methoxychlor	<0.15	3400	8
4HA-8 (7-8') 9/3/1993	Soil	Methoxychlor	<0.15	3400	8
4MW-1 (25-30') 9/17/1993	Soil	Methoxychlor	<0.16	3400	8
4MW-2 (0-5') 9/16/1993	Soil	Methoxychlor	<0.14	3400	8
4MW-2 (25-30') 9/22/1993	Soil	Methoxychlor	<0.16	3400	8
4MW-3 (0-3') 12/6/1994	Soil	Methoxychlor	0.22	3400	8
4MW-3 (28-33') 12/6/1994	Soil	Methoxychlor	<0.12	3400	8
4MW-3 (33-38') 12/6/1994	Soil	Methoxychlor	<0.12	3400	8
4MW-4 (0-3') 12/14/1994	Soil	Methoxychlor	6.8	3400	8

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Methoxychlor Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
4MW-4 (0-3')Dup 12/14/1994	Soil Duplicate	Methoxychlor	8.9	3400	8
4MW-4 (18-23') 12/14/1994	Soil	Methoxychlor	<0.12	3400	8
4MW-4 (23-28') 12/15/1994	Soil	Methoxychlor	<0.12	3400	8
4MW-4 (8-13') 12/14/1994	Soil	Methoxychlor	<0.12	3400	8
4SB-1 (0-2') 12/6/1994	Soil	Methoxychlor	8.7	3400	8
4SB-1 (4-6') 12/6/1994	Soil	Methoxychlor	<0.12	3400	8
4SB-1 (8-10') 12/6/1994	Soil	Methoxychlor	<0.12	3400	8
4SB-2 (0-2') 12/8/1994	Soil	Methoxychlor	0.12	3400	8
4SB-2 (12-14') 12/8/1994	Soil	Methoxychlor	<0.12	3400	8
4SB-2 (4-6') 12/8/1994	Soil	Methoxychlor	<0.12	3400	8
4SB-3 (0-2') 12/8/1994	Soil	Methoxychlor	3.1	3400	8
4SB-3 (12-14') 12/8/1994	Soil	Methoxychlor	<0.12	3400	8
4SB-3 (6-8') 12/8/1994	Soil	Methoxychlor	<1.2	3400	8
5SB-1 (16-18') 9/7/1993	Soil	Methoxychlor	<0.15	3400	8
5SB-1 (21-23') 9/7/1993	Soil	Methoxychlor	<0.15	3400	8
5SB-2 (16-18') 9/8/1993	Soil	Methoxychlor	<0.15	3400	8
5SB-2 (21-23') 9/8/1993	Soil	Methoxychlor	<0.16	3400	8
5SB-3 (16-18') 9/30/1993	Soil	Methoxychlor	<0.15	3400	8
5SB-3 (23-25') 9/30/1993	Soil	Methoxychlor	<0.15	3400	8
6HA-B1 (0-1') 12/2/1994	Soil	Methoxychlor	5	3400	8
6HA-B2 (0-1') 12/2/1994	Soil	Methoxychlor	0.24	3400	8
6HA-C1 (0-1') 12/2/1994	Soil	Methoxychlor	9.2	3400	8
6HA-C2 (0-1') 12/2/1994	Soil	Methoxychlor	1.3	3400	8
6HA-D1 (0-1') 12/2/1994	Soil	Methoxychlor	1.5	3400	8
6HA-F1 (0-1') 12/2/1994	Soil	Methoxychlor	0.3	3400	8
6HA-F2 (0-1') 12/2/1994	Soil	Methoxychlor	0.17	3400	8
6HA-G1 (0-1') 12/2/1994	Soil	Methoxychlor	0.35	3400	8

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Methoxychlor Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
6HA-G1 (0-1') 12/2/1994	Soil Duplicate	Methoxychlor	0.3	3400	8
6HA-G2 (0-1') 12/2/1994	Soil	Methoxychlor	2.5	3400	8
6HA-H1 (0-1') 12/2/1994	Soil	Methoxychlor	<0.12	3400	8
6HA-H2 (0-1') 12/2/1994	Soil	Methoxychlor	340	3400	8
6HA-I1 (0-1') 12/2/1994	Soil	Methoxychlor	<0.12	3400	8
6HA-J1 (0-1') 12/2/1994	Soil	Methoxychlor	0.42	3400	8
6HA-K1 (0-1') 12/2/1994	Soil	Methoxychlor	0.82	3400	8
6HA-L1 (0-1') 12/2/1994	Soil	Methoxychlor	0.21	3400	8
6SB-A (0-5') 9/27/1993	Soil	Methoxychlor	<0.14	3400	8
6SB-A (5-10') 9/27/1993	Soil	Methoxychlor	<0.15	3400	8
6SB-C (0-5') 9/29/1993	Soil	Methoxychlor	<0.15	3400	8
6SB-C (5-10') 9/29/1993	Soil	Methoxychlor	<0.15	3400	8
6SB-D (0-5') 9/29/1993	Soil	Methoxychlor	<0.15	3400	8
6SB-D (5-10') 9/29/1993	Soil	Methoxychlor	<0.15	3400	8
6SB-E (0-5') 9/27/1993	Soil	Methoxychlor	0.51	3400	8
6SB-E (5-10') 9/27/1993	Soil	Methoxychlor	3.4	3400	8
6SB-F (0-5') 9/27/1993	Soil	Methoxychlor	<0.15	3400	8
6SB-F (5-10') 9/27/1993	Soil	Methoxychlor	<0.15	3400	8
6SB-G (0-5') 9/29/1993	Soil	Methoxychlor	0.93	3400	8
6SB-G (0-5')DUP 9/29/1993	Soil Duplicate	Methoxychlor	2.6	3400	8
6SB-G (5-10') 9/29/1993	Soil	Methoxychlor	<0.15	3400	8
6SB-H (0-5') 9/30/1993	Soil	Methoxychlor	<0.69	3400	8
6SB-H (5-10') 9/30/1993	Soil	Methoxychlor	<0.58	3400	8
6SB-J (10-15') 9/27/1993	Soil	Methoxychlor	<0.15	3400	8
6SB-J (5-10') 9/27/1993	Soil	Methoxychlor	<0.15	3400	8
6SB-K (0-5') 9/29/1993	Soil	Methoxychlor	98	3400	8
6SB-K (5-10') 9/29/1993	Soil	Methoxychlor	<1.5	3400	8

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Methoxychlor Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
6SB-L (0-5') 9/30/1993	Soil	Methoxychlor	<0.14	3400	8
6SB-L (5-10') 9/30/1993	Soil	Methoxychlor	<0.15	3400	8
8HA-1 (0-1') 9/8/1993	Soil	Methoxychlor	<0.15	3400	8
8HA-2 (0-1') 9/8/1993	Soil	Methoxychlor	<0.15	3400	8
8HA-3 (0-1') 9/8/1993	Soil	Methoxychlor	<0.15	3400	8
8HA-4 (0-1') 9/8/1993	Soil	Methoxychlor	<0.15	3400	8
9SB-15 (0-5') 9/9/1993	Soil	Methoxychlor	<0.13	3400	8
9SB-15 (5-10') 9/9/1993	Soil	Methoxychlor	<0.15	3400	8
9SB-3 (0-5') 9/7/1993	Soil	Methoxychlor	<1.5	3400	8
9SB-3 (5-10') 9/7/1993	Soil	Methoxychlor	<0.15	3400	8
IMSB-1 (1-3') 4/8/1993	Soil	Methoxychlor	<5.1	3400	8
IMSB-1 (3-8') 4/8/1993	Soil	Methoxychlor	<0.15	3400	8
IMSB-1 (8-12') 5/6/1993	Soil	Methoxychlor	<0.16	3400	8
IMSB-2 (10-15') 4/8/1993	Soil	Methoxychlor	<1.5	3400	8
IMSB-2 (1-5') 4/8/1993	Soil	Methoxychlor	0.6	3400	8
IMSB-2 (5-10') 4/8/1993	Soil	Methoxychlor	<0.15	3400	8
IMSB-3 (10-15') 4/9/1993	Soil	Methoxychlor	<0.15	3400	8
IMSB-3 (1-5') 4/9/1993	Soil	Methoxychlor	<0.15	3400	8
IMSB-3 (5-10') 4/9/1993	Soil	Methoxychlor	<0.15	3400	8
IMSB-4 (1-5') 4/9/1993	Soil	Methoxychlor	<0.3	3400	8
IMSB-4 (5-10') 4/9/1993	Soil	Methoxychlor	<0.15	3400	8
IMSB-5 (1-5') 4/9/1993	Soil	Methoxychlor	<0.29	3400	8
IMSB-5 (5-10') 4/9/1993	Soil	Methoxychlor	<0.15	3400	8
BGHA-1 (0-1') 9/16/1993	Soil	Methoxychlor	<0.14	3400	8
BGHA-2 (0-1') 9/16/1993	Soil	Methoxychlor	<0.14	3400	8
BGHA-3 (0-1') 9/16/1993	Soil	Methoxychlor	<0.14	3400	8
OFF-2 (5-10') 11/20/1995	Soil	Methoxychlor	<0.02	3400	8

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Methoxychlor Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
OFF-3 (5-10') 11/21/1995	Soil	Methoxychlor	<0.019	3400	8
SAI-2 (28-30') 10/10/1995	Soil	Methoxychlor	<0.022	3400	8
SAI-23 (10-12') 10/19/1995	Soil	Methoxychlor	0.52	3400	8
SAI-5 (2-4') 10/11/1995	Soil	Methoxychlor	<0.019	3400	8
SAI-6 (20-22') 10/11/1995	Soil	Methoxychlor	<0.021	3400	8
SAI-6 (28-30') 10/11/1995	Soil	Methoxychlor	<0.021	3400	8
SAI-9 (12-14') 10/17/1995	Soil	Methoxychlor	<0.021	3400	8
SAI-9 (26-28') 10/17/1995	Soil	Methoxychlor	<0.021	3400	8

Notes:

mg/kg = milligrams per kilogram.

SB - Soil Boring Sample
SED - Surface Sediment Sample
HA - Hand Auger Sample
SAI - Methylene Chloride Source Area Investigation
BGHA - Background Hand Auger Sample
MW - Soil sample collected from installation of monitoring well
OFF - Offsite Soil Boring Sample
IMSB - Interim Measures Soil Boring Sample
MSSL - Medium Specific Screening Levels established by Region 6 EPA
- Value exceeds either the Region 6 EPA Dilution Attenuation Factor or Industrial Soil MSSL

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Methylene Chloride Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
1HA-1 (0-1') 9/2/1993	Soil	Methylene chloride	<0.006	22	0.001
1HA-2 (0-1') 9/2/1993	Soil	Methylene chloride	<0.006	22	0.001
1HA-3 (0-1') 9/2/1993	Soil	Methylene chloride	<0.005	22	0.001
1HA-4 (0-1') 9/2/1993	Soil	Methylene chloride	<0.006	22	0.001
1HA-5 (0-1') 9/2/1993	Soil	Methylene chloride	0.006	22	0.001
1HA-7 (2-3') 12/12/1994	Soil	Methylene chloride	<0.02	22	0.001
1MW-1 (0-5') 8/31/1993	Soil	Methylene chloride	<0.012	22	0.001
1MW-1 (5-10') 8/31/1993	Soil	Methylene chloride	<0.011	22	0.001
1MW-2 (0-5') 8/31/1993	Soil	Methylene chloride	<0.007	22	0.001
1MW-2 (5-10') 8/31/1993	Soil	Methylene chloride	<0.006	22	0.001
1MW-3 (0-5') 9/1/1993	Soil	Methylene chloride	<0.006	22	0.001
1MW-3 (5-10') 9/1/1993	Soil	Methylene chloride	<0.006	22	0.001
1MW-4 (0-5') 9/1/1993	Soil	Methylene chloride	<0.006	22	0.001
1MW-4 (5-10') 9/1/1993	Soil	Methylene chloride	<0.008	22	0.001
1MW-5 (0-5') 9/1/1993	Soil	Methylene chloride	<0.008	22	0.001
1MW-5 (5-10') 9/1/1993	Soil	Methylene chloride	<0.006	22	0.001
1MW-6 (25-30') 9/23/1993	Soil	Methylene chloride	0.033	22	0.001
1SB-1 (0-2') 12/20/1994	Soil	Methylene chloride	<0.02	22	0.001
1SB-1 (12-14') 12/20/1994	Soil	Methylene chloride	<0.02	22	0.001
1SB-1 (4-6') 12/20/1994	Soil	Methylene chloride	<0.02	22	0.001
1SED-1 9/7/1993	Sediment	Methylene chloride	<0.046	22	0.001
1SED-2 9/7/1993	Sediment	Methylene chloride	<0.006	22	0.001
1SED-3 9/7/1993	Sediment	Methylene chloride	<0.014	22	0.001
2HA-10 (0-1') 11/30/1994	Soil	Methylene chloride	<0.02	22	0.001
2MW-1 (15-20') 9/10/1993	Soil	Methylene chloride	0.32	22	0.001
2MW-1 (20-25') 9/10/1993	Soil	Methylene chloride	25	22	0.001
2MW-1 (30-35') 9/10/1993	Soil	Methylene chloride	0.16	22	0.001
2MW-2 (15-20') 9/13/1993	Soil	Methylene chloride	<0.006	22	0.001
2MW-2 (5-10') 9/13/1993	Soil	Methylene chloride	<0.006	22	0.001
2MW-3 (15-20') 9/13/1993	Soil	Methylene chloride	0.25	22	0.001

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Methylene Chloride Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
2MW-3 (20-25') 9/13/1993	Soil	Methylene chloride	0.89	22	0.001
2MW-3 (30-35') 9/15/1993	Soil	Methylene chloride	0.026	22	0.001
2MW-5 (0-1') 11/30/1994	Soil	Methylene chloride	<0.02	22	0.001
2MW-7 (0-5') 12/9/1994	Soil	Methylene chloride	<0.02	22	0.001
2MW-7 (20-25') 12/9/1994	Soil	Methylene chloride	<0.02	22	0.001
2MW-7 (5-10') 12/9/1994	Soil	Methylene chloride	<0.02	22	0.001
2SB-1 (15-20') 9/22/1993	Soil	Methylene chloride	13	22	0.001
2SB-1 (25-30') 9/22/1993	Soil	Methylene chloride	110	22	0.001
2SB-10 (15-20') 9/23/1993	Soil	Methylene chloride	<8.3	22	0.001
2SB-10 (25-30') 9/23/1993	Soil	Methylene chloride	0.37	22	0.001
2SB-11 (20-25') 9/23/1993	Soil	Methylene chloride	0.34	22	0.001
2SB-11 (25-30') 9/23/1993	Soil	Methylene chloride	<3.5	22	0.001
2SB-12 (15-20') 9/23/1993	Soil	Methylene chloride	45	22	0.001
2SB-12 (25-30') 9/23/1993	Soil	Methylene chloride	4.1	22	0.001
2SB-13 (0-2') 12/6/1994	Soil	Methylene chloride	<0.02	22	0.001
2SB-13 (10-12') 12/6/1994	Soil	Methylene chloride	3.6	22	0.001
2SB-13 (8-10') 12/6/1994	Soil	Methylene chloride	4	22	0.001
2SB-2 (20-25') 9/21/1993	Soil	Methylene chloride	45	22	0.001
2SB-2 (25-30') 9/21/1993	Soil	Methylene chloride	40	22	0.001
2SB-3 (13-14') 9/17/1993	Soil	Methylene chloride	0.068	22	0.001
2SB-3 (24-25') 9/17/1993	Soil	Methylene chloride	8.1	22	0.001
2SB-4 (15-20') 9/23/1993	Soil	Methylene chloride	1.2	22	0.001
2SB-4 (25-30') 9/23/1993	Soil	Methylene chloride	100	22	0.001
2SB-5 (15-20') 9/21/1993	Soil	Methylene chloride	1.9	22	0.001
2SB-5 (25-30') 9/21/1993	Soil	Methylene chloride	380	22	0.001
2SB-6 (21-22') 9/20/1993	Soil	Methylene chloride	170	22	0.001
2SB-6 (28-29') 9/20/1993	Soil	Methylene chloride	82	22	0.001
2SB-7 (10-15') 9/23/1993	Soil	Methylene chloride	0.046	22	0.001
2SB-7 (25-30') 9/23/1993	Soil	Methylene chloride	<0.85	22	0.001
2SB-8 (15-20') 9/21/1993	Soil	Methylene chloride	1.1	22	0.001

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Methylene Chloride Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
2SB-8 (25-30') 9/21/1993	Soil	Methylene chloride	2.1	22	0.001
2SB-9 (26-27') 9/21/1993	Soil	Methylene chloride	93	22	0.001
2SB-9 (4-5') 9/21/1993	Soil	Methylene chloride	0.028	22	0.001
3SED-1 9/13/1993	Sediment	Methylene chloride	<0.006	22	0.001
3SED-10 9/16/1993	Sediment	Methylene chloride	0.16	22	0.001
3SED-2 9/13/1993	Sediment	Methylene chloride	<0.006	22	0.001
3SED-3 9/13/1993	Sediment	Methylene chloride	<0.006	22	0.001
3SED-4 9/13/1993	Sediment	Methylene chloride	<0.007	22	0.001
3SED-5 9/14/1993	Sediment	Methylene chloride	0.002	22	0.001
3SED-6 9/14/1993	Sediment	Methylene chloride	<0.006	22	0.001
3SED-7 9/14/1993	Sediment	Methylene chloride	<0.006	22	0.001
3SED-8 9/14/1993	Sediment	Methylene chloride	<0.007	22	0.001
3SED-9 9/14/1993	Sediment	Methylene chloride	<0.006	22	0.001
4HA-1 (0-1') 9/2/1993	Soil	Methylene chloride	<0.006	22	0.001
4HA-1 (1-2') 9/2/1993	Soil	Methylene chloride	<0.006	22	0.001
4HA-1 (2-3') 9/2/1993	Soil	Methylene chloride	<0.006	22	0.001
4HA-2 (0-1') 9/2/1993	Soil	Methylene chloride	<0.005	22	0.001
4HA-2 (1-2') 9/2/1993	Soil	Methylene chloride	<0.017	22	0.001
4HA-2 (2-3') 9/2/1993	Soil	Methylene chloride	<0.015	22	0.001
4HA-3 (0-1') 9/3/1993	Soil	Methylene chloride	<0.005	22	0.001
4HA-4 (0-1') 9/3/1993	Soil	Methylene chloride	<0.005	22	0.001
4HA-4 (1-2') 9/3/1993	Soil	Methylene chloride	0.001	22	0.001
4HA-4 (2-3') 9/3/1993	Soil	Methylene chloride	0.003	22	0.001
4HA-4 (2-3')DUP 9/3/1993	Soil Duplicate	Methylene chloride	0.003	22	0.001
4HA-5 (0-1') 9/15/1993	Soil	Methylene chloride	<0.01	22	0.001
4HA-5 (1-2') 9/15/1993	Soil	Methylene chloride	<0.029	22	0.001
4HA-5 (2-3') 9/15/1993	Soil	Methylene chloride	0.005	22	0.001
4HA-6 (0-1') 9/3/1993	Soil	Methylene chloride	<0.006	22	0.001
4HA-6 (1-2') 9/3/1993	Soil	Methylene chloride	<0.011	22	0.001
4HA-7 (5-6') 9/3/1993	Soil	Methylene chloride	<0.006	22	0.001

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Methylene Chloride Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
4HA-7 (6-7') 9/3/1993	Soil	Methylene chloride	<0.006	22	0.001
4HA-7 (7-8') 9/3/1993	Soil	Methylene chloride	<0.006	22	0.001
4HA-8 (5-6') 9/3/1993	Soil	Methylene chloride	<0.006	22	0.001
4HA-8 (6-7') 9/3/1993	Soil	Methylene chloride	<0.006	22	0.001
4HA-8 (7-8') 9/3/1993	Soil	Methylene chloride	<0.006	22	0.001
4MW-1 (10-15') 9/16/1993	Soil	Methylene chloride	0.13	22	0.001
4MW-1 (25-30') 9/17/1993	Soil	Methylene chloride	0.27	22	0.001
4MW-2 (0-5') 9/16/1993	Soil	Methylene chloride	<0.006	22	0.001
4MW-2 (25-30') 9/22/1993	Soil	Methylene chloride	0.009	22	0.001
4MW-3 (0-3') 12/6/1994	Soil	Methylene chloride	<0.02	22	0.001
4MW-3 (28-33') 12/6/1994	Soil	Methylene chloride	<0.02	22	0.001
4MW-3 (33-38') 12/6/1994	Soil	Methylene chloride	<0.02	22	0.001
4MW-4 (0-3') 12/14/1994	Soil	Methylene chloride	<0.02	22	0.001
4MW-4 (0-3')Dup 12/14/1994	Soil Duplicate	Methylene chloride	<0.02	22	0.001
4MW-4 (18-23') 12/14/1994	Soil	Methylene chloride	<0.02	22	0.001
4MW-4 (23-28') 12/15/1994	Soil	Methylene chloride	<0.02	22	0.001
4MW-4 (8-13') 12/14/1994	Soil	Methylene chloride	<0.02	22	0.001
4SB-1 (0-2') 12/6/1994	Soil	Methylene chloride	<0.02	22	0.001
4SB-1 (4-6') 12/6/1994	Soil	Methylene chloride	<0.02	22	0.001
4SB-1 (8-10') 12/6/1994	Soil	Methylene chloride	<0.02	22	0.001
5SB-1 (16-18') 9/7/1993	Soil	Methylene chloride	0.018	22	0.001
5SB-1 (21-23') 9/7/1993	Soil	Methylene chloride	0.14	22	0.001
5SB-2 (16-18') 9/8/1993	Soil	Methylene chloride	0.008	22	0.001
5SB-2 (21-23') 9/8/1993	Soil	Methylene chloride	<0.82	22	0.001
5SB-3 (16-18') 9/30/1993	Soil	Methylene chloride	0.021	22	0.001
5SB-3 (23-25') 9/30/1993	Soil	Methylene chloride	0.033	22	0.001
6SB-A (0-5') 9/27/1993	Soil	Methylene chloride	<0.006	22	0.001
6SB-A (5-10') 9/27/1993	Soil	Methylene chloride	<0.006	22	0.001
6SB-C (0-5') 9/29/1993	Soil	Methylene chloride	0.014	22	0.001
6SB-C (5-10') 9/29/1993	Soil	Methylene chloride	0.023	22	0.001

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Methylene Chloride Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
6SB-D (0-5') 9/29/1993	Soil	Methylene chloride	0.02	22	0.001
6SB-D (5-10') 9/29/1993	Soil	Methylene chloride	<0.044	22	0.001
6SB-E (0-5') 9/27/1993	Soil	Methylene chloride	<0.006	22	0.001
6SB-E (5-10') 9/27/1993	Soil	Methylene chloride	<0.006	22	0.001
6SB-F (0-5') 9/27/1993	Soil	Methylene chloride	<0.008	22	0.001
6SB-F (5-10') 9/27/1993	Soil	Methylene chloride	0.014	22	0.001
6SB-G (0-5') 9/29/1993	Soil	Methylene chloride	<0.029	22	0.001
6SB-G (0-5')DUP 9/29/1993	Soil Duplicate	Methylene chloride	<0.03	22	0.001
6SB-G (5-10') 9/29/1993	Soil	Methylene chloride	<0.01	22	0.001
6SB-H (0-5') 9/30/1993	Soil	Methylene chloride	<0.006	22	0.001
6SB-H (5-10') 9/30/1993	Soil	Methylene chloride	<0.007	22	0.001
6SB-J (10-15') 9/27/1993	Soil	Methylene chloride	0.01	22	0.001
6SB-J (5-10') 9/27/1993	Soil	Methylene chloride	<0.006	22	0.001
6SB-K (0-5') 9/29/1993	Soil	Methylene chloride	<0.007	22	0.001
6SB-K (5-10') 9/29/1993	Soil	Methylene chloride	0.024	22	0.001
6SB-L (0-5') 9/30/1993	Soil	Methylene chloride	<0.006	22	0.001
6SB-L (5-10') 9/30/1993	Soil	Methylene chloride	0.041	22	0.001
8HA-1 (0-1') 9/8/1993	Soil	Methylene chloride	<0.006	22	0.001
8HA-2 (0-1') 9/8/1993	Soil	Methylene chloride	<0.006	22	0.001
8HA-3 (0-1') 9/8/1993	Soil	Methylene chloride	<0.006	22	0.001
8HA-4 (0-1') 9/8/1993	Soil	Methylene chloride	<0.006	22	0.001
9SB-15 (0-5') 9/9/1993	Soil	Methylene chloride	<0.005	22	0.001
9SB-15 (5-10') 9/9/1993	Soil	Methylene chloride	<0.006	22	0.001
9SB-20 (10-12') 12/7/1994	Soil	Methylene chloride	0.092	22	0.001
9SB-20 (25-27') 12/7/1994	Soil	Methylene chloride	0.84	22	0.001
9SB-20 (30-32') 12/7/1994	Soil	Methylene chloride	<0.1	22	0.001
9SB-21 (10-12') 12/7/1994	Soil	Methylene chloride	0.094	22	0.001
9SB-21 (23-25') 12/7/1994	Soil	Methylene chloride	0.17	22	0.001
9SB-21 (25-27') 12/7/1994	Soil	Methylene chloride	<0.1	22	0.001
9SB-22 (10-12') 12/9/1994	Soil	Methylene chloride	<0.02	22	0.001

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Methylene Chloride Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
9SB-22 (15-17') 12/9/1994	Soil	Methylene chloride	<0.5	22	0.001
9SB-22 (17-19') 12/9/1994	Soil	Methylene chloride	<0.02	22	0.001
9SB-3 (0-5') 9/7/1993	Soil	Methylene chloride	<0.006	22	0.001
9SB-3 (5-10') 9/7/1993	Soil	Methylene chloride	<0.015	22	0.001
IMSB-1 (1-3') 4/8/1993	Soil	Methylene chloride	<0.006	22	0.001
IMSB-1 (3-8') 4/8/1993	Soil	Methylene chloride	<0.006	22	0.001
IMSB-2 (10-15') 4/8/1993	Soil	Methylene chloride	0.066	22	0.001
IMSB-2 (1-5') 4/8/1993	Soil	Methylene chloride	<0.007	22	0.001
IMSB-2 (5-10') 4/8/1993	Soil	Methylene chloride	<0.007	22	0.001
IMSB-3 (1-5') 4/9/1993	Soil	Methylene chloride	<0.006	22	0.001
IMSB-3 (5-10') 4/9/1993	Soil	Methylene chloride	0.012	22	0.001
IMSB-4 (1-5') 4/9/1993	Soil	Methylene chloride	<0.006	22	0.001
IMSB-4 (5-10') 4/9/1993	Soil	Methylene chloride	<0.006	22	0.001
IMSB-5 (1-5') 4/9/1993	Soil	Methylene chloride	<0.006	22	0.001
IMSB-5 (5-10') 4/9/1993	Soil	Methylene chloride	<0.006	22	0.001
BGHA-1 (0-1') 9/16/1993	Soil	Methylene chloride	0.006	22	0.001
BGHA-2 (0-1') 9/16/1993	Soil	Methylene chloride	0.002	22	0.001
BGHA-3 (0-1') 9/16/1993	Soil	Methylene chloride	0.007	22	0.001
OFF-2 (5-10') 11/20/1995	Soil	Methylene chloride	<0.031	22	0.001
OFF-3 (5-10') 11/21/1995	Soil	Methylene chloride	<0.03	22	0.001
SAI-1 (2-4') 10/10/1995	Soil	Methylene chloride	0.054	22	0.001
SAI-1 (32-34') 10/10/1995	Soil	Methylene chloride	<0.012	22	0.001
SAI-12 (0-2') 10/17/1995	Soil	Methylene chloride	<0.012	22	0.001
SAI-23 (10-12') 10/19/1995	Soil	Methylene chloride	0.04	22	0.001
SAI-24 (10-12') 11/7/1995	Soil	Methylene chloride	0.026	22	0.001
SAI-24 (28-30') 11/7/1995	Soil	Methylene chloride	<0.013	22	0.001
SAI-25 (12-14') 11/7/1995	Soil	Methylene chloride	0.056	22	0.001
SAI-25 (28-30') 11/7/1995	Soil	Methylene chloride	0.029	22	0.001
SAI-26 (12-14') 11/8/1995	Soil	Methylene chloride	<0.013	22	0.001
SAI-26 (28-30') 11/8/1995	Soil	Methylene chloride	0.035	22	0.001

TABLE 2
HISTORICAL SOIL AND SEDIMENT DATA
CEDAR CHEMICAL CORPORATION FACILITY
HELENA-WEST HELENA, ARKANSAS

Methylene Chloride Soil and Sediment Results

Sample ID	Sample Matrix	Constituent	Sample Result (mg/kg)	Region 6 2007 Industrial Outdoor Worker Soil MSSL (mg/kg)	Region 6 2007 Dillution Attentuation Factor MSSL (mg/kg)
SAI-27 (2-4') 11/8/1995	Soil	Methylene chloride	0.03	22	0.001
SAI-27 (28-30') 11/8/1995	Soil	Methylene chloride	0.035	22	0.001
SAI-28 (12-14') 11/8/1995	Soil	Methylene chloride	0.033	22	0.001
SAI-28 (30-32') 11/8/1995	Soil	Methylene chloride	0.035	22	0.001

Notes:

mg/kg = milligrams per kilogram.

SB - Soil Boring Sample
SED - Surface Sediment Sample
HA - Hand Auger Sample
SAI - Methylene Chloride Source Area Investigation
BGHA - Background Hand Auger Sample
MW - Soil sample collected from installation of monitoring well
OFF - Offsite Soil Boring Sample
IMSB - Interim Measures Soil Boring Sample
MSSL - Medium Specific Screening Levels established by Region 6 EPA
- Value exceeds either the Region 6 EPA Dilution Attenuation Factor or Industrial Soil MSSL

Table 3

SWMUs and AOCs Identified During the RFA

TABLE 3
SWMUs AND AOCS IDENTIFIED BY USEPA REGION 6 DURING THE RFA
CEDAR CHEMICAL CORPORATION SITE
HELENA-WEST HELENA, ARKANSAS

SWMU No. and AOC	Name	Conclusions Reached by USEPA Region 6
SWMU 1 & 2	Railroad Loading and Unloading Sumps	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the sumps could not be verified during the VSI. No further action is recommended.
SWMU 3	Railroad Loading and Unloading Sump	There is no documented release history for this unit. Despite severe deterioration of the unit, there was no visible sign of release from this unit observed during the VSI. An RFI appears warranted for this unit.
SWMU 4	Production Areas #1 and #2 Drainage System and Sump	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.
SWMU 5	Production Area #3 Drainage System and Sump	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.
SWMU 6	Production Area #4 Drainage System and Sump	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.
SWMU 7	Production Area #5 Drainage System and Sump	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.

TABLE 3
SWMUs AND AOCS IDENTIFIED BY USEPA REGION 6 DURING THE RFA
CEDAR CHEMICAL CORPORATION SITE
HELENA-WEST HELENA, ARKANSAS

SWMU No. and AOC	Name	Conclusions Reached by USEPA Region 6
SWMU 8	Boiler Blowdown Area Sump #1	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.
SWMU 9	Boiler Blowdown Area Sump #2	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.
SWMU 10	Laboratory Sump	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.
SWMU 11	Sump near main Tank Farm	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. Deterioration of the adjacent concrete pad was observed during the VSI. No further action is recommended.
SWMU 12	Maintenance Shop Drainage System and Sump	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.
SWMU 13	Truck Scale Sump	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.
SWMU 14	Packaging Building Sump	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.

TABLE 3
SWMUs AND AOCS IDENTIFIED BY USEPA REGION 6 DURING THE RFA
CEDAR CHEMICAL CORPORATION SITE
HELENA-WEST HELENA, ARKANSAS

SWMU No. and AOC	Name	Conclusions Reached by USEPA Region 6
SWMU 15-17	Air Emissions Scrubbers #01, #02 and #03	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.
SWMU 18	Air Emissions Scrubber #4	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.
SWMU 19	Sump in Main Tank Farm Diked Area #1 (North)	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.
SWMU 20	Sump in Main Tank Farm Diked Area #1 (South)	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.
SWMU 21	Sump in the Main Tank Farm Diked Area #2	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.
SWMU 22	Sump in the Main Tank Farm Diked Area #3	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.
SWMU 23	Waste Storage Tank PE-209 in Main Diked Area #4	There is no documented release history for this unit. However, the unit appeared stained and discolored liquid was observed in the secondary containment area. The integrity of the unit could not be verified during the VSI. No further action is recommended.

TABLE 3
SWMUs AND AOCS IDENTIFIED BY USEPA REGION 6 DURING THE RFA
CEDAR CHEMICAL CORPORATION SITE
HELENA-WEST HELENA, ARKANSAS

SWMU No. and AOC	Name	Conclusions Reached by USEPA Region 6
SWMU 24	Waste Storage Tank 002 in Main Tank Farm Diked Area #5	There is no documented release history for this unit. Severe staining of the unit and associated piping was noted during the VSI. Standing discolored water was observed in the containment area for this unit, and additional staining of the outside of the containment unit was noted. These stains appeared to be located directly under the associated piping and could not be attributed to overtopping of the unit. No further action is recommended.
SWMU 25	Sump in Main Tank Farm Diked Area #6	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, there were visible signs of deteriorated concrete observed during the VSI. No further action is recommended.
SWMU 26	Sump in Main Tank Farm Diked Area #7	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, there were visible signs of deteriorated concrete observed during the VSI. No further action is recommended.
SWMU 27	Tank B-109 in main Tank Farm Diked Area #7	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.
SWMU 28	Waste Storage Tank B-112 in the Main Tank Farm Diked Area #8	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the unit appeared corroded and the concrete diked area showed signs of deterioration. No further action is recommended.
SWMU 29	Sump in Main Tank Farm Diked Area #9	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.

TABLE 3
SWMUs AND AOCS IDENTIFIED BY USEPA REGION 6 DURING THE RFA
CEDAR CHEMICAL CORPORATION SITE
HELENA-WEST HELENA, ARKANSAS

SWMU No. and AOC	Name	Conclusions Reached by USEPA Region 6
SWMU 30	Waste Water Storage Tank B-102 in the Main Tank Farm Diked Area #10	There is no documented release history for this unit. However, staining was noted on the tank during the VSI. No further action is recommended.
SWMU 31	Sump in Main Tank Farm Diked Area #11	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, there were visible signs of deteriorated concrete observed during the VSI. No further action is recommended.
SWMU 32	Sump in Main Tank Farm Diked Area #12	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.
SWMU 33	Tank N-204 in main Tank Farm Diked Area #13	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.
SWMU 34	Tank N-201 in Main Tank Farm Diked Area #14	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, there were visible signs of deteriorated concrete in the diked area observed during the VSI. No further action is recommended.
SWMU 35	Tank N-205 in Main Tank Farm Diked Area #15	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.
SWMU 36	Tank N-206 in Production Area #4	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.

TABLE 3
SWMUs AND AOCS IDENTIFIED BY USEPA REGION 6 DURING THE RFA
CEDAR CHEMICAL CORPORATION SITE
HELENA-WEST HELENA, ARKANSAS

SWMU No. and AOC	Name	Conclusions Reached by USEPA Region 6
SWMU 37	Sump in Main Tank Farm Diked Area #16	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.
SWMU 38	Sump in Main Tank Farm Diked Area #17	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.
SWMU 39	Tank M-105 in Main Tank Farm Diked Area #17	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.
SWMU 40	Sump in Main Tank Farm Diked Area #18	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.
SWMU 41	Sump in Main Tank Farm Diked Area #19	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.
SWMU 42	Sump in Second Tank Farm Diked Area #1	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, there were visible signs of deteriorated concrete observed during the VSI. No further action is recommended.
SWMU 43	Wastewater Tank 014 in Second Tank Farm Diked Area #3	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.
SWMU 44	Hazardous Waste Storage Area	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.

TABLE 3
SWMUs AND AOCS IDENTIFIED BY USEPA REGION 6 DURING THE RFA
CEDAR CHEMICAL CORPORATION SITE
HELENA-WEST HELENA, ARKANSAS

SWMU No. and AOC	Name	Conclusions Reached by USEPA Region 6
SWMU 45	Nonhazardous Waste Storage Area	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.
SWMU 46	Drum Storage Area	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.
SWMU 47	Drum Crushing Area	The history of releases at the unit could not be determined; however, staining was evident throughout the area. An RFI appears warranted for this unit.
SWMU 48	Waste Drum Staging Area	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.
SWMU 49	Scrap Drum Storage Wagons	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.
SWMU 50	Waste Drum Staging Area in Main Tank Farm Area	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.
SWMU 51	Waste Oil Drum	Staining of the pad was evident during the VSI. No further action is recommended.
SWMU 52	Drums	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.
SWMU 53	Solvent Cleaner Tank	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.
SWMU 54	Miscellaneous Drum Storage	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.

TABLE 3
SWMUs AND AOCS IDENTIFIED BY USEPA REGION 6 DURING THE RFA
CEDAR CHEMICAL CORPORATION SITE
HELENA-WEST HELENA, ARKANSAS

SWMU No. and AOC	Name	Conclusions Reached by USEPA Region 6
SWMU 55	Dumpsters	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.
SWMU 56	Laboratory Waste Rack Area	There is no documented release history for this unit. There was some visible evidence of staining on the rack, but no evidence of staining on the concrete pad. No further action is recommended.
SWMU 57	Warehouse Drum Storage Area	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.
SWMU 58	Loading/Unloading Dock Area	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the unit could not be verified during the VSI. No further action is recommended.
SWMU 59—Site 3	Stormwater Drainage System	The unit periodically discharges offsite through the NPDES-permitted outfall during excessive rainfall events. During the VSI, an oily film was observed on the water near the control gate. An RFI appears warranted for this unit.
SWMU 60—Site 3	Stormwater Sump	In periods of excessive rainfall this unit backs up the stormwater drainage system which is then discharged through the NPDES-permitted outfall. An RFI appears warranted for this unit.
SWMU 61	Wastewater Tank #1 Wastewater Treatment System	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.
SWMU 62—Site 1	API Separator	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.

TABLE 3
SWMUs AND AOCS IDENTIFIED BY USEPA REGION 6 DURING THE RFA
CEDAR CHEMICAL CORPORATION SITE
HELENA-WEST HELENA, ARKANSAS

SWMU No. and AOC	Name	Conclusions Reached by USEPA Region 6
SWMU 63	Wastewater Tank #2 Waste Water Treatment System	During the VSI, staining was noted on the soil from leaks from the sampling valve. An RFI appears warranted for this unit.
SWMU 64	Flow Equalization Basin	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the clay liner could not be verified during the VSI. An RFI appears warranted for this unit.
SWMU 65	Aeration Basin	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. However, the integrity of the clay liner could not be verified during the VSI. An RFI appears warranted for this unit.
SWMU 66	Clarifier #1	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.
SWMU 67	Clarifier #2	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. No further action is recommended.
SWMU 68	Polish Pond	Effluent from this unit is pumped 4.5 miles through an epoxy-lined pipe to an NPDES-permitted outfall to the Mississippi River. There is no other documented or visible sign of release from this unit. An RFI appears warranted for this unit.
SWMU 69	Inactive Pond #1	Releases from this unit have not be documented by sampling although surface and subsurface contamination at the location of the unit has been documented. An RFI appears warranted for this unit.
SWMU 70	Inactive Pond #2	Releases from this unit have not been documented by sampling although surface and subsurface contamination in the location of the unit has been documented. An RFI appears warranted for this unit.

TABLE 3
SWMUs AND AOCS IDENTIFIED BY USEPA REGION 6 DURING THE RFA
CEDAR CHEMICAL CORPORATION SITE
HELENA-WEST HELENA, ARKANSAS

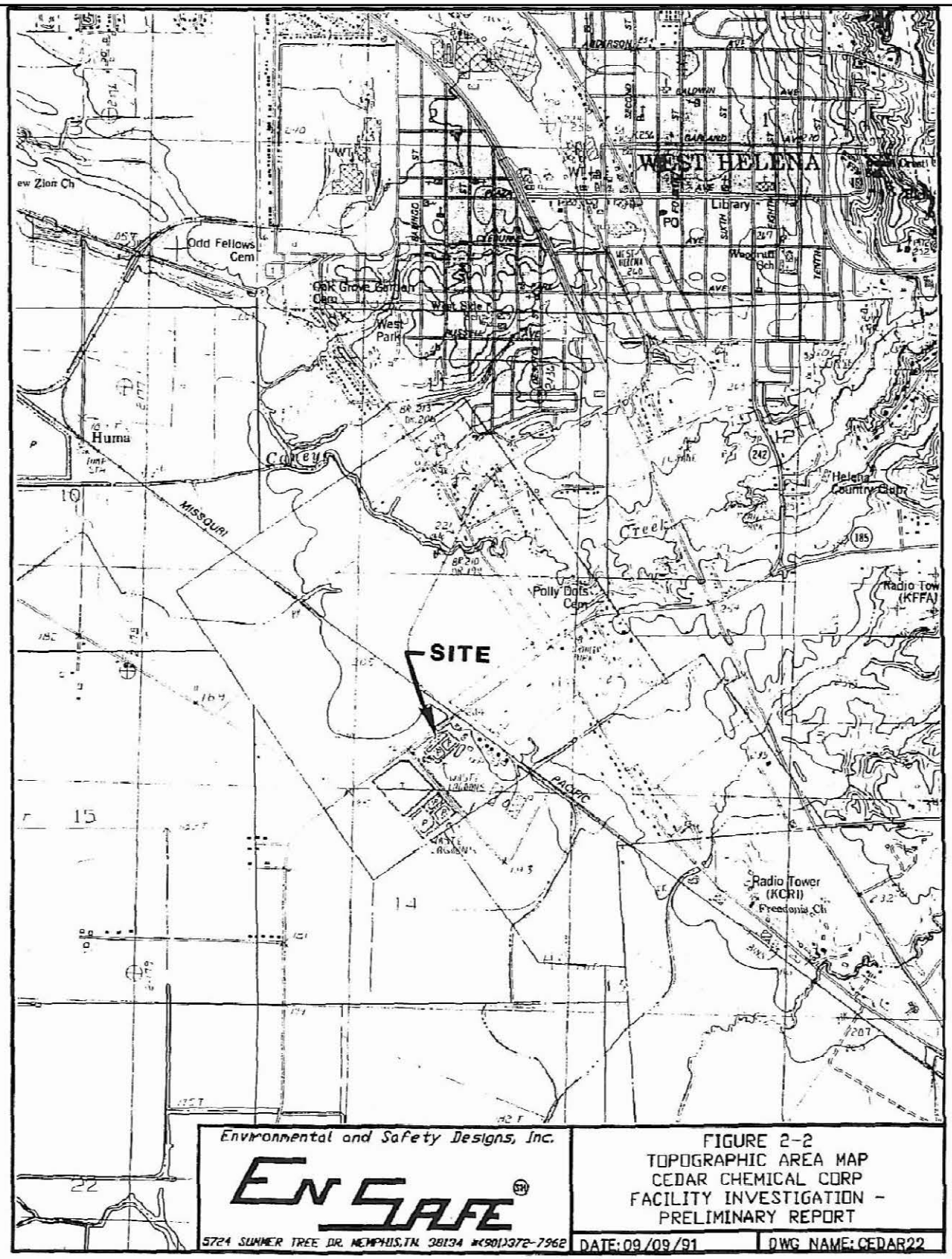
SWMU No. and AOC	Name	Conclusions Reached by USEPA Region 6
SWMU 71	Inactive Pond #3	Releases from this unit have not been documented by sampling although surface and subsurface contamination in the location of the unit has been documented. An RFI appears warranted for this unit.
SWMU 72	Drum vault	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. An RFI appears warranted for this unit.
SWMU 73	Buried Drums	There is no documented release history for this unit. There was no visible sign of release from this unit observed during the VSI. An RFI appears warranted for this unit.
SWMU 74	Loading/Unloading Area (Railroad Spur)	There was visible evidence of staining along the entire length of the unit. An RFI appears warranted for this unit.
AOC 1	Yellow Stained Areas	A facility representative indicated that yellow stains on the ground surface are the facility may be caused by waste associated with the manufacturing of dinitrobutylphenol conducted by Ansel Corporation while it operated the plant from 1970 until 1973. An RFI appears warranted for this unit.
AOC 2	Wetland Area	None Reached
AOC 3	Ditch Near Wastewater Treatment Basins	None Reached

Source: A.T. Kearny, Inc. 1988

Notes:

SWMU – Solid Waste Management Unit
AOC – Area of Concern
RFI/RFA – RCRA Facility Investigation/Assessment
VSI – Visual Site Inspection

FIGURES



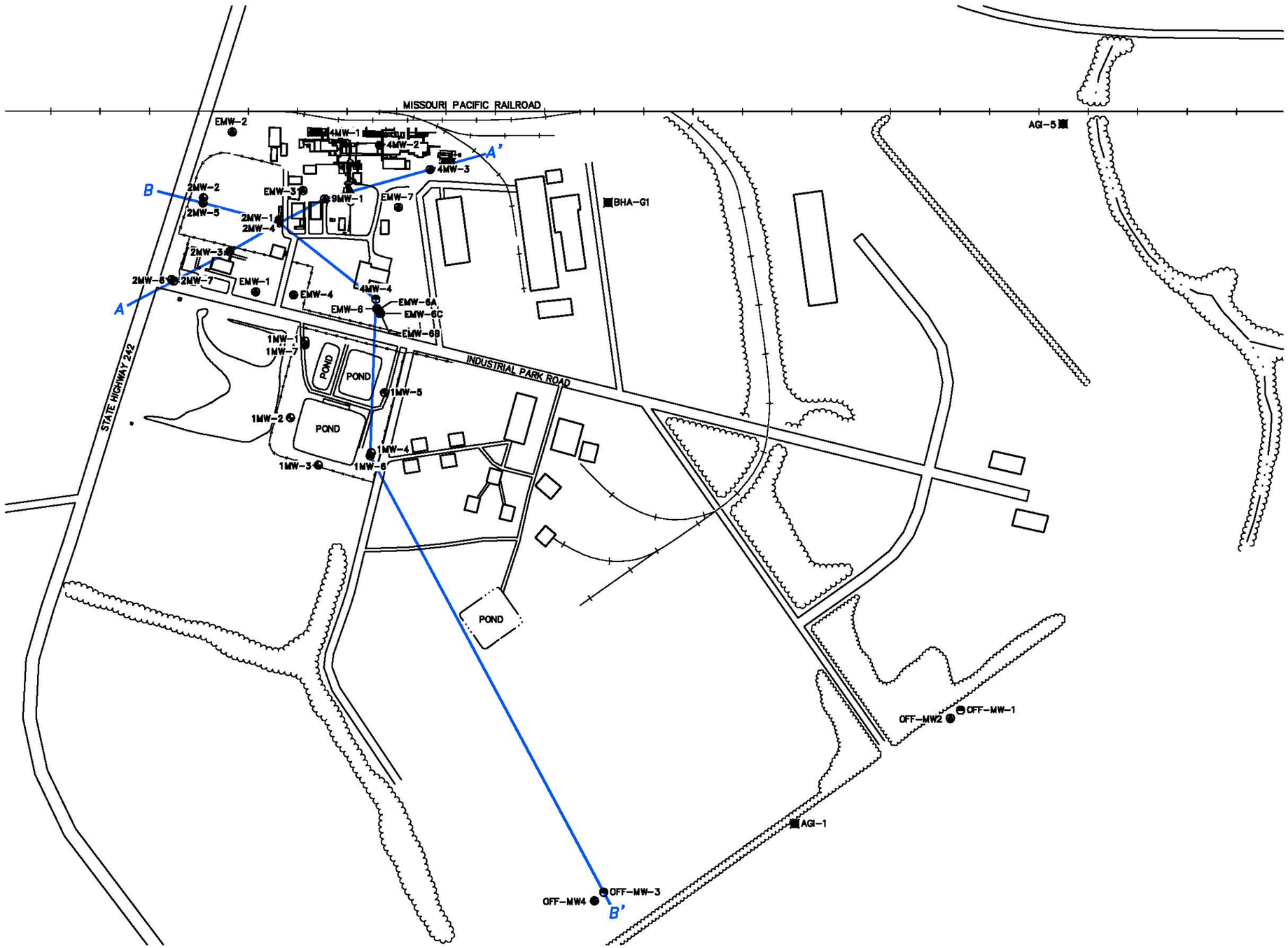
SOURCE: EnSafe, Phase II Investigation Report, 1995

SITE LOCATION MAP

Cedar Chemical
Helena-West Helena, Arkansas

Geomatrix | Project 13636 | Figure 1

I:\13636 - Arkansas Helena-West Helena\2007 CCR\FINAL FIGURES\ FIG 1 Site Location Map\FIG 1.dwg



EXPLANATION

- WATER OR DRAINAGE
- ROAD
- RAILROAD
- BUILDING
- FENCE
- DEEP MONITORING WELL (LOWER ALLUVIUM)
- SHALLOW MONITORING WELL (UPPER ALLUVIUM)
- PERCHED ZONE MONITORING WELL
- AGRICULTURAL IRRIGATION WELL
- A — A' LINE OF CROSS SECTION

0 500
APPROXIMATE SCALE IN FEET

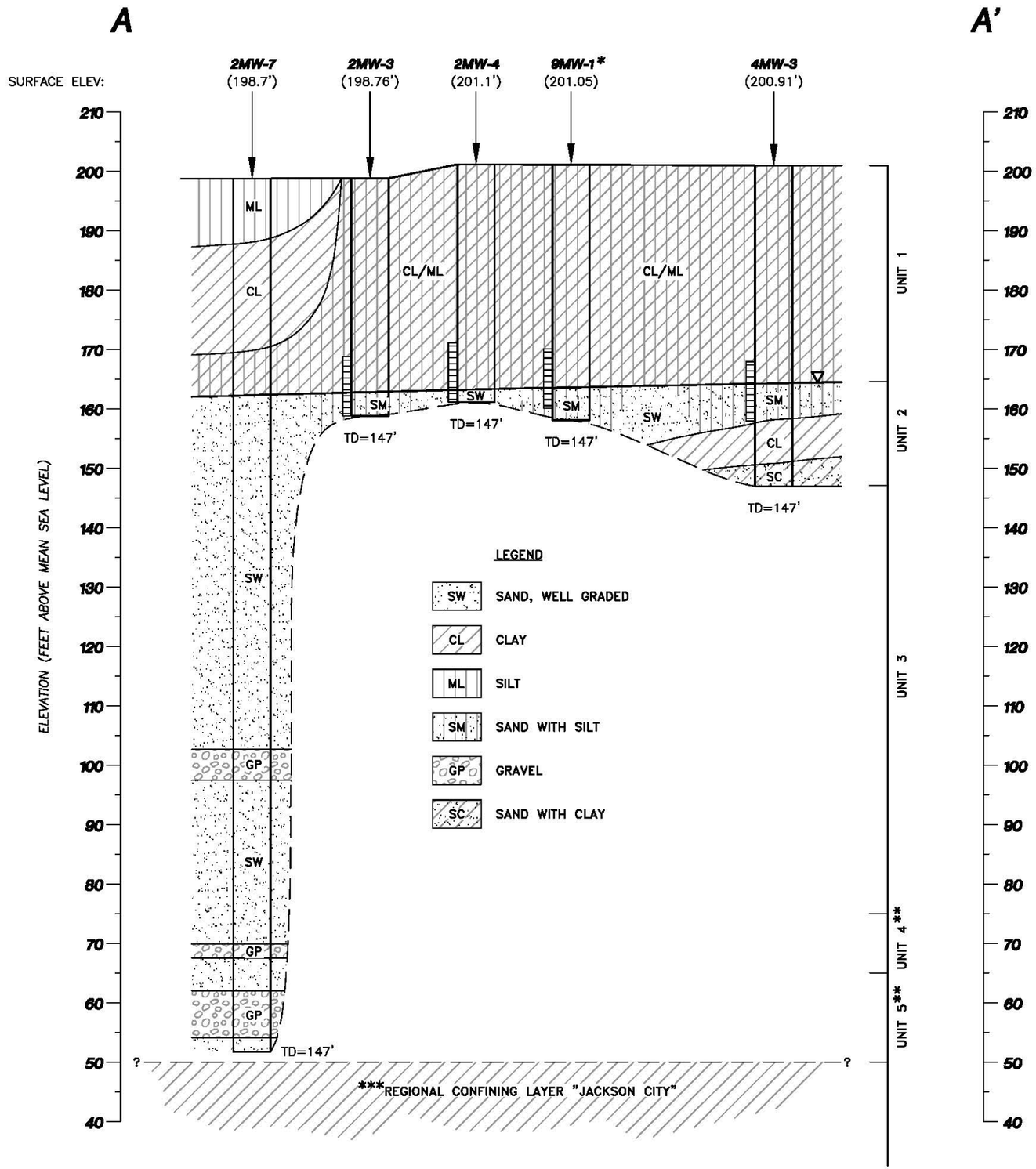
BASE MAP MODIFIED FROM:
EnSafe, 1996-Phase III FI, 2001 Groundwater Monitoring Report, Drawings C2162GWS and C2162VC7

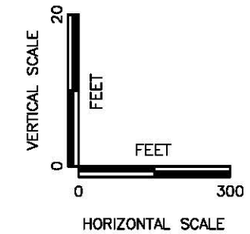
SITE MAP

Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 2

11/13/07 X-SECT.dwg





LEGEND

2MW–4 MONITORING WELL

SCREENED INTERVALS FOR LOCATIONS HAVING INSTALLED WELLS

RELATIVE GROUNDWATER ELEVATION

* SURFACE ELEVATION AT THIS POINT INTERPRETED FROM TOPOGRAPHIC MAP

** UNIT NOT OBSERVED IN LITHOLOGIC SAMPLES BUT WAS IDENTIFIED IN GEOPHYSICAL LOGGING

REFER TO CURRENT CONDITIONS REPORT SECTION 2.4.2 FOR UNIT DESCRIPTIONS

*** REGIONALLY, THE TOP OF THE JACKSON CLAY UNIT HAS BEEN OBSERVED AT AN ELEVATION AS HIGH AS 70 FEET MSL TEN MILES TO THE NW OF THE SITE & AS LOW AS 30 FEET MSL, TEN MILES TO THE SE OF THE SITE. LOCALLY THE TOP OF THE UNIT HAS BEEN OBSERVED AT 53FT MSL (4MW–4)

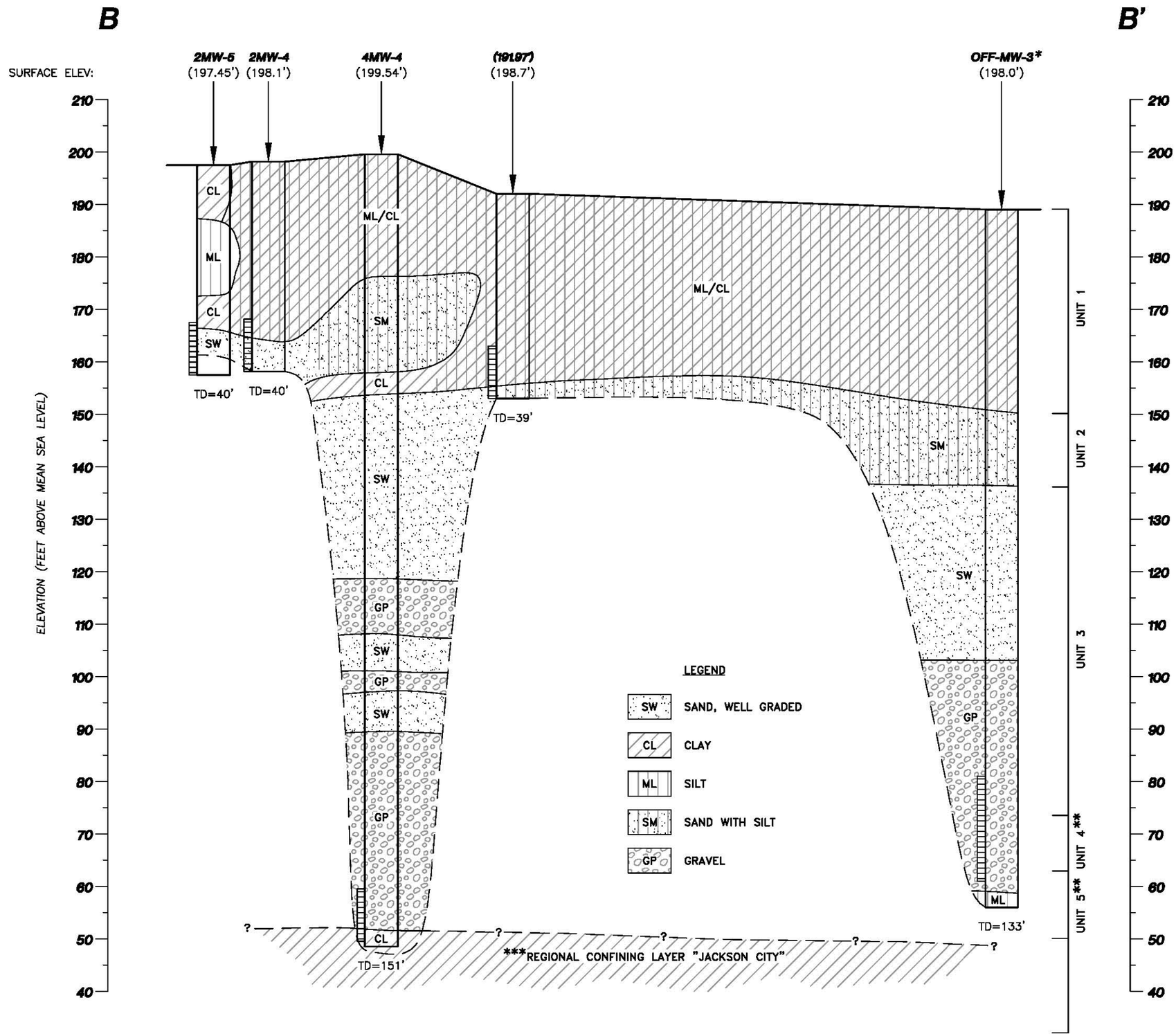
REFERENCE:
HYDROLOGY OF THE MISSISSIPPI RIVER VALLEY ALLUVIAL AQUFER, SOUTH–CENTRAL U.S.
D.J.–ACKERMAN, 1996 PG D–11

CROSS SECTION A-A'

Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 3

11/13/07 X–SECT.dwg



LEGEND

2MW–4 MONITORING WELL

SCREENED INTERVALS FOR LOCATIONS HAVING INSTALLED WELLS

RELATIVE GROUNDWATER ELEVATION

* SURFACE ELEVATION AT THIS POINT INTERPRETED FROM TOPOGRAPHIC MAP

** UNIT NOT OBSERVED IN LITHOLOGIC SAMPLES BUT WAS IDENTIFIED IN GEOPHYSICAL LOGGING

REFER TO CURRENT CONDITIONS REPORT SECTION 2.4.2 FOR UNIT DESCRIPTIONS

*** REGIONALLY, THE TOP OF THE JACKSON CLAY UNIT HAS BEEN OBSERVED AT AN ELEVATION AS HIGH AS 70 FEET MSL TEN MILES TO THE NW OF THE SITE & AS LOW AS 30 FEET MSL, TEN MILES TO THE SE OF THE SITE. LOCALLY THE TOP OF THE UNIT HAS BEEN OBSERVED AT 53FT MSL (4MW–4)

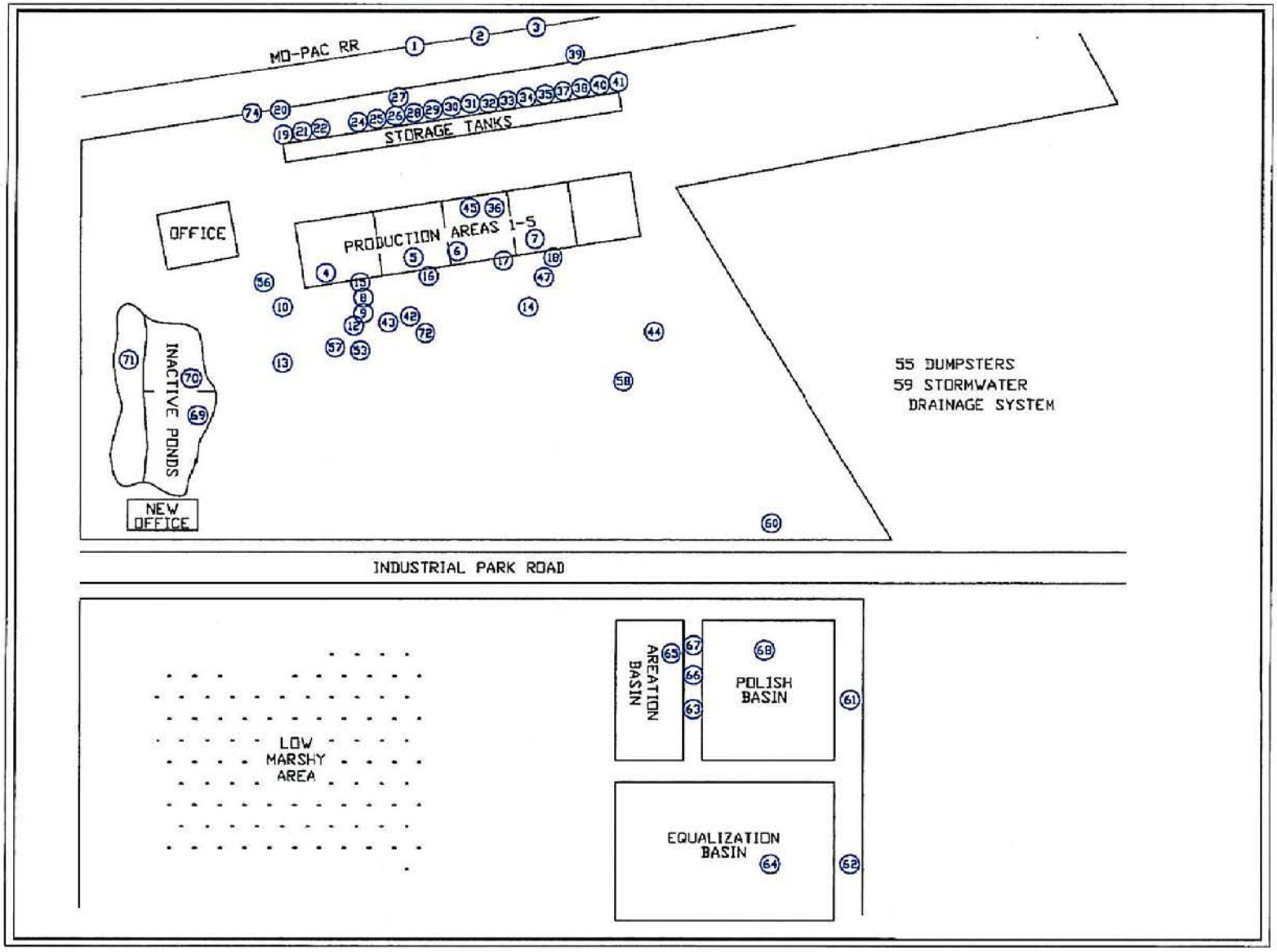
REFERENCE:
HYDROLOGY OF THE MISSISSIPPI RIVER VALLEY ALLUVIAL AQUFER, SOUTH–CENTRAL U.S.
D.J.–ACKERMAN, 1996 PG D–11

CROSS SECTION B-B'

Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 4

11/13/07 X–SECT.dwg



SOURCE: EnSafe 1993 FI Report

SWMUs and AOCs IDENTIFIED IN USEPA REGION 6 PR/VSI

Cedar Chemical
Helena-West Helena, Arkansas

Geomatrix | Project 13636 | Figure 5

I:\13636 - Arkansas Helena-West Helena\2007 CCR\FINAL FIGURES\ FIG 5 SWMUs and AOCs\FIG 5.dwg

EXPLANATION

APPROXIMATE PERCHED ZONE EXTENT

PERCHED ZONE MONITORING WELL

<2.6 ARSENIC NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT
(RED REPRESENTS CONCENTRATIONS ABOVE MSSL)

N/A NOT ANALYZED

N/S NOT SAMPLED

CONCENTRATIONS ARE REPORTED IN ug/l

NOTE:
DATA SHOWN REPRESENT MOST RECENT GROUNDWATER SAMPLING RESULT AT EACH WELL (JULY 2001, UNLESS OTHERWISE NOTED)

*2MW-1 DATA FROM JULY 1997 SAMPLING EVENT. 2MW-1 WAS DRY DURING 2001 GROUNDWATER SAMPLING EVENTS.

TAP WATER MEDIUM-SPECIFIC SCREENING LEVEL (MSSL) FOR ARSENIC: 0.045 ug/l (USEPA REGION 6, 2007)

0 500
APPROXIMATE SCALE IN FEET

BASE MAP MODIFIED FROM:
EnSafe, 1996-Phase III FI, 2001 Groundwater Monitoring Report, Drawings C2162GWS and C2162VC7

ARSENIC DISTRIBUTION IN PERCHED ZONE GROUNDWATER
Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 6

11/13/07 PERCHED.dwg

EXPLANATION

- DEEP MONITORING WELL (LOWER ALLUVIUM)
- SHALLOW MONITORING WELL (UPPER ALLUVIUM)
- AGRICULTURAL IRRIGATION WELL
- *N/A* NOT ANALYZED
- *<0.99* ARSENIC NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT (RED REPRESENTS CONCENTRATIONS ABOVE MSSL)
- 10 ARSENIC ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)

CONCENTRATIONS ARE REPORTED IN ug/l

NOTE:
DATA SHOWN REPRESENT JULY 2001 GROUNDWATER SAMPLING RESULT AT EACH WELL UNLESS OTHERWISE NOTED

*EMW-6, 6A & 6B DATA FROM 11/30/94; 4MW-2 DATA FROM 9/26/95.

TAP WATER MEDIUM-SPECIFIC SCREENING LEVEL (MSSL) FOR ARSENIC: 0.045 ug/l (USEPA REGION 6, 2007)

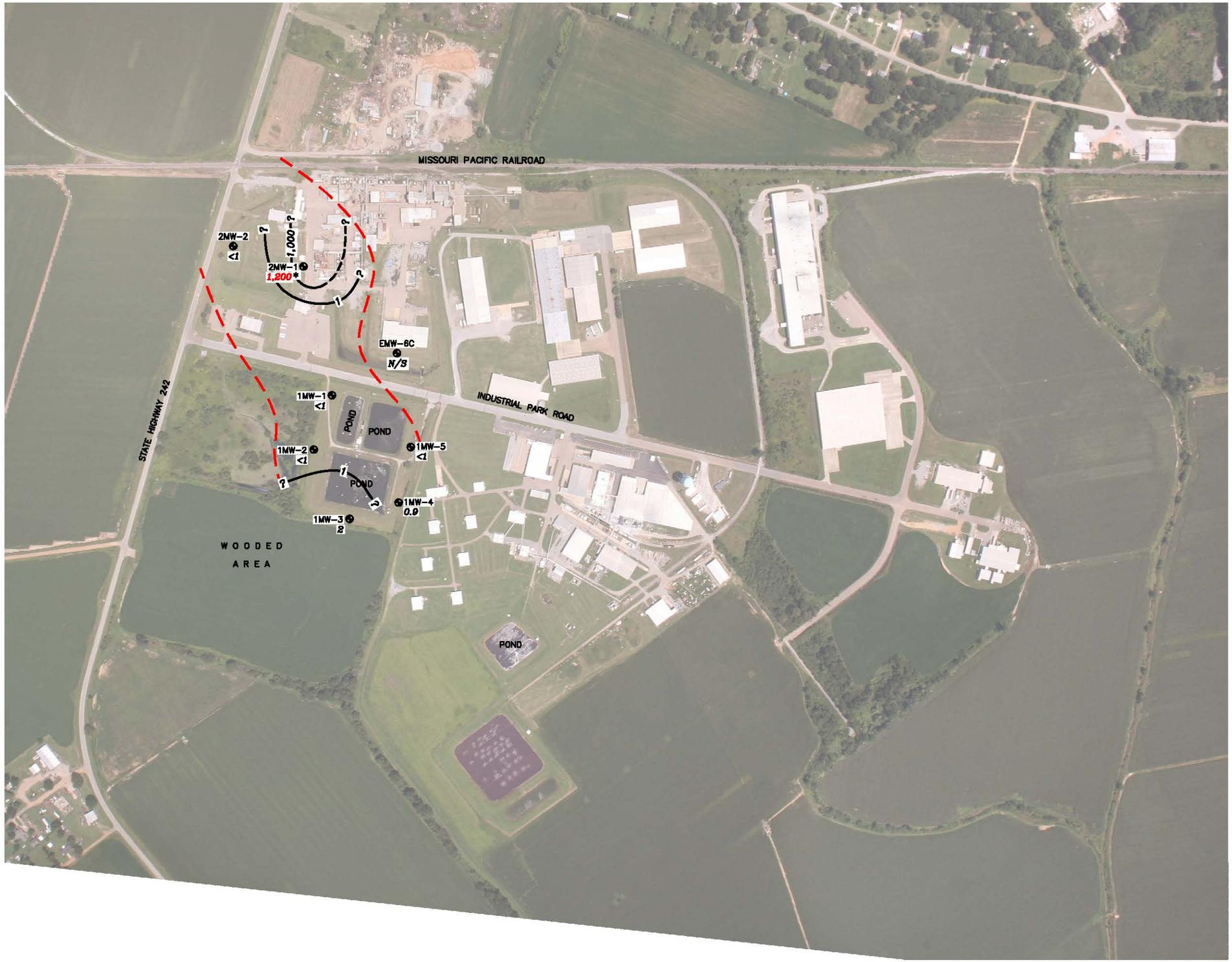
0 500
APPROXIMATE SCALE IN FEET

BASE MAP MODIFIED FROM:
EnSafe, 1996-Phase III FI, 2001 Groundwater Monitoring Report, Drawings C2162GWS and C2162VC7

ARSENIC DISTRIBUTION IN
ALLUVIAL ZONE GROUNDWATER
Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 7

11/13/07 ALLUVIAL.dwg



EXPLANATION

APPROXIMATE PERCHED ZONE EXTENT

PERCHED ZONE MONITORING WELL

<1 — 1,2-DCB NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT (RED REPRESENTS CONCENTRATIONS ABOVE MSSL)

N/S — NOT SAMPLED

10 — 1,2-DCB ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)

CONCENTRATIONS ARE REPORTED IN ug/l

NOTE:
DATA SHOWN REPRESENT MOST RECENT GROUNDWATER SAMPLING RESULT AT EACH WELL (JULY 2001, UNLESS OTHERWISE NOTED)

*2MW-1 DATA FROM JULY 1997 SAMPLING EVENT. 2MW-1 WAS DRY DURING 2001 GROUNDWATER SAMPLING EVENTS.

TAP WATER MEDIUM-SPECIFIC SCREENING LEVEL (MSSL) FOR 1,2-DICHLOROBENZENE: 49 ug/l (USEPA REGION 6, 2007)

0 500
APPROXIMATE SCALE IN FEET

BASE MAP MODIFIED FROM:
EnSafe, 1996-Phase III FI, 2001 Groundwater Monitoring Report, Drawings C2162GWS and C2162VC7

1,2-DICHLOROBENZENE DISTRIBUTION IN PERCHED ZONE GROUNDWATER
Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 8

11/13/07 PERCHED.dwg

EXPLANATION

- DEEP MONITORING WELL (LOWER ALLUVIUM)
- SHALLOW MONITORING WELL (UPPER ALLUVIUM)
- AGRICULTURAL IRRIGATION WELL

<1 — 1,2-DCB NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT (RED REPRESENTS CONCENTRATIONS ABOVE MSSL)

10 — 1,2-DCB ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)

CONCENTRATIONS ARE REPORTED IN ug/l

NOTE:
DATA SHOWN REPRESENT JULY 2001 GROUNDWATER SAMPLING RESULT AT EACH WELL UNLESS OTHERWISE NOTED

*EMW-6, 6A & 6B DATA FROM 11/30/94; 4MW-2 DATA FROM 9/26/95.

TAP WATER MEDIUM-SPECIFIC SCREENING LEVEL (MSSL) FOR 1,2-DICHLOROBENZENE: 49 ug/l (USEPA REGION 6, 2007)

0 500
APPROXIMATE SCALE IN FEET

BASE MAP MODIFIED FROM:
EnSafe, 1996-Phase III FI, 2001 Groundwater Monitoring Report, Drawings C2162GWS and C2162VC7

1,2-DICHLOROBENZENE DISTRIBUTION IN ALLUVIAL ZONE GROUNDWATER
Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 9

11/13/07 ALLUVIAL.dwg

EXPLANATION

APPROXIMATE PERCHED ZONE EXTENT

PERCHED ZONE MONITORING WELL

<10 DINOSEB NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT

N/S NOT SAMPLED

CONCENTRATIONS ARE REPORTED IN ug/l

NOTE:
DATA SHOWN REPRESENT MOST RECENT GROUNDWATER SAMPLING RESULT AT EACH WELL (JULY 2001, UNLESS OTHERWISE NOTED)

*2MW-1 DATA FROM JULY 1997 SAMPLING EVENT. 2MW-1 WAS DRY DURING 2001 GROUNDWATER SAMPLING EVENTS.

TAP WATER MEDIUM-SPECIFIC SCREENING LEVEL (MSSL) FOR DINOSEB: 37 ug/l (USEPA REGION 6, 2007)

0 500
APPROXIMATE SCALE IN FEET

BASE MAP MODIFIED FROM:
EnSafe, 1996-Phase III FI, 2001 Groundwater Monitoring Report, Drawings C2162GWS and C2162VC7

DINOSEB DISTRIBUTION IN PERCHED ZONE GROUNDWATER
Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 10

11/13/07 PERCHED.dwg

EXPLANATION

- DEEP MONITORING WELL (LOWER ALLUVIUM)
- SHALLOW MONITORING WELL (UPPER ALLUVIUM)
- AGRICULTURAL IRRIGATION WELL
- N/A — NOT ANALYZED
- <10 — DINOSEB NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT (RED REPRESENTS CONCENTRATIONS ABOVE MSSL)
- 10 — DINOSEB ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)

CONCENTRATIONS ARE REPORTED IN ug/l

NOTE:
DATA SHOWN REPRESENT JULY 2001 GROUNDWATER SAMPLING RESULT AT EACH WELL UNLESS OTHERWISE NOTED

*EMW-6, 6A & 6B DATA FROM 11/30/94; 4MW-2 DATA FROM 9/26/95.

TAP WATER MEDIUM-SPECIFIC SCREENING LEVEL (MSSL) FOR DINOSEB: 37 ug/l (USEPA REGION 6, 2007)

0 500
APPROXIMATE SCALE IN FEET

BASE MAP MODIFIED FROM:
EnSafe, 1996-Phase III FI, 2001 Groundwater Monitoring Report, Drawings C2162GWS and C2162VC7

DINOSEB DISTRIBUTION IN ALLUVIAL ZONE GROUNDWATER
Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 11

11/13/07 ALLUVIAL.dwg

EXPLANATION

APPROXIMATE PERCHED ZONE EXTENT

PERCHED ZONE MONITORING WELL

<5 METHYLENE CHLORIDE NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT (RED REPRESENTS CONCENTRATIONS ABOVE MSSL)

N/S NOT SAMPLED

10 METHYLENE CHLORIDE ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)

CONCENTRATIONS ARE REPORTED IN ug/l

NOTE:
DATA SHOWN REPRESENT MOST RECENT GROUNDWATER SAMPLING RESULT AT EACH WEL (JULY 2001, UNLESS OTHERWISE NOTED)

*2MW-1 DATA FROM JULY 1997 SAMPLING EVENT. 2MW-1 WAS DRY DURING 2001 GROUNDWATER SAMPLING EVENTS.

TAP WATER MEDIUM-SPECIFIC SCREENING LEVEL (MSSL) FOR METHYLENE CHLORIDE: 4.3 ug/l (USEPA REGION 6, 2007)

0 500
APPROXIMATE SCALE IN FEET

BASE MAP MODIFIED FROM:
EnSafe, 1996-Phase III FI, 2001 Groundwater Monitoring Report, Drawings C2162GWS and C2162VC7

METHYLENE CHLORIDE DISTRIBUTION IN PERCHED ZONE GROUNDWATER
Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 12

11/13/07 PERCHED.dwg

EXPLANATION

- DEEP MONITORING WELL (LOWER ALLUVIUM)
- SHALLOW MONITORING WELL (UPPER ALLUVIUM)
- AGRICULTURAL IRRIGATION WELL
- <2 — METHYLENE CHLORIDE NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT (RED REPRESENTS CONCENTRATIONS ABOVE MSSL)
- 10 — METHYLENE CHLORIDE ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)

CONCENTRATIONS ARE REPORTED IN ug/l

NOTE:
DATA SHOWN REPRESENT JULY 2001 GROUNDWATER SAMPLING RESULT AT EACH WELL UNLESS OTHERWISE NOTED

*EMW-6, 6A & 6B DATA FROM 11/30/94; 4MW-2 DATA FROM 9/26/95.

TAP WATER MEDIUM-SPECIFIC SCREENING LEVEL (MSSL) FOR METHYLENE CHLORIDE: 4.3 ug/l (USEPA REGION 6, 2007)

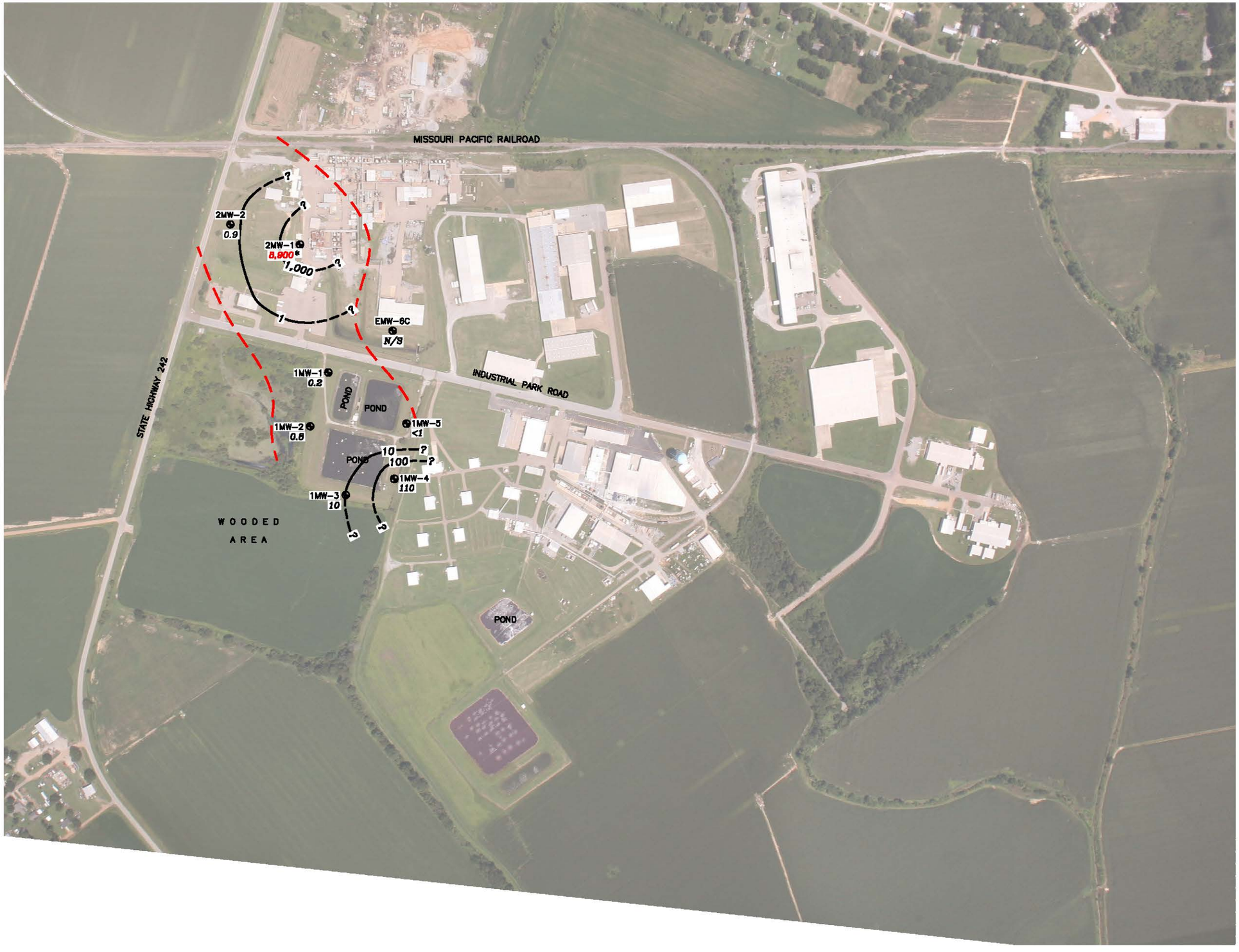
0 500
APPROXIMATE SCALE IN FEET

BASE MAP MODIFIED FROM:
EnSafe, 1996-Phase III FI, 2001 Groundwater Monitoring Report, Drawings C2162GWS and C2162VC7

METHYLENE CHLORIDE DISTRIBUTION IN ALLUVIAL ZONE GROUNDWATER
Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 13

11/13/07 ALLUVIAL.dwg



EXPLANATION

APPROXIMATE PERCHED ZONE EXTENT

PERCHED ZONE MONITORING WELL

<1 — 1,2-DCA NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT (RED REPRESENTS CONCENTRATIONS ABOVE MSSL)

N/S — NOT SAMPLED

10 — 1,2-DCA ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)

CONCENTRATIONS ARE REPORTED IN ug/l

NOTE:
DATA SHOWN REPRESENT MOST RECENT GROUNDWATER SAMPLING RESULT AT EACH WELL (JULY 2001, UNLESS OTHERWISE NOTED)

*2MW-1 DATA FROM JULY 1997 SAMPLING EVENT. 2MW-1 WAS DRY DURING 2001 GROUNDWATER SAMPLING EVENTS.

TAP WATER MEDIUM-SPECIFIC SCREENING LEVEL (MSSL) FOR 1,2-DICHLOROETHANE: 1200 ug/l (USEPA REGION 6, 2007)

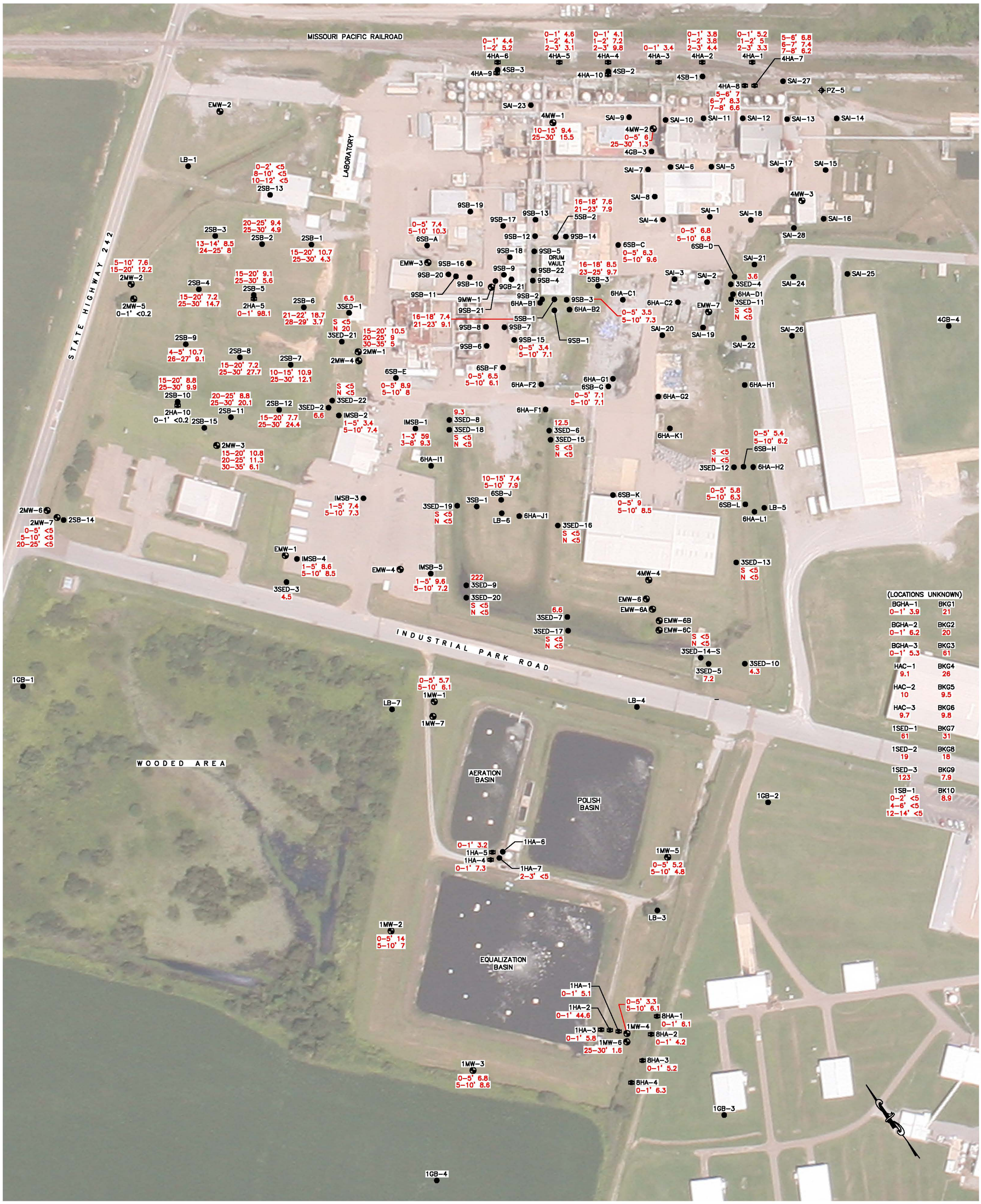
0 500
APPROXIMATE SCALE IN FEET

BASE MAP MODIFIED FROM:
EnSafe, 1996-Phase III FI, 2001 Groundwater Monitoring Report, Drawings C2162GWS and C2162VC7

1,2-DICHLOROETHANE DISTRIBUTION IN PERCHED ZONE GROUNDWATER
Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 14

11/13/07 PERCHED.dwg



LEGEND

- MONITORING WELL
- SOIL BORING
- HAND AUGER BORING
- PIEZOMETER

ARSENIC – INDUSTRIAL OUTDOOR WORKER SOIL MSSL = 1.8 mg/kg

ARSENIC – DILUTION ATTENUATION FACTOR MSSL = 1 mg/kg

NOTE: LOCATIONS WITH NO RESULT SHOWN INDICATE SAMPLE NOT ANALYZED OR THERE IS NOT DATA AVAILABLE

MSSL – MEDIUM SPECIFIC SCREENING LEVEL (USEPA REGION 6, 2007)

DAF – DILUTION ATTENUATION FACTOR MSSL (USEPA REGION 6, 2007)

mg/kg – MILLIGRAMS PER KILOGRAM

S – SEDIMENT

N – NATIVE SOIL

4-5' 0.014 ← DEPTH OF SAMPLE & CONCENTRATION (mg/kg)

<0.5 ← CONCENTRATION NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT

VALUE EXCEEDS USEPA REGION 6 DAF AND/OR INDUSTRIAL SOIL MSSLs

0 100
SCALE IN FEET

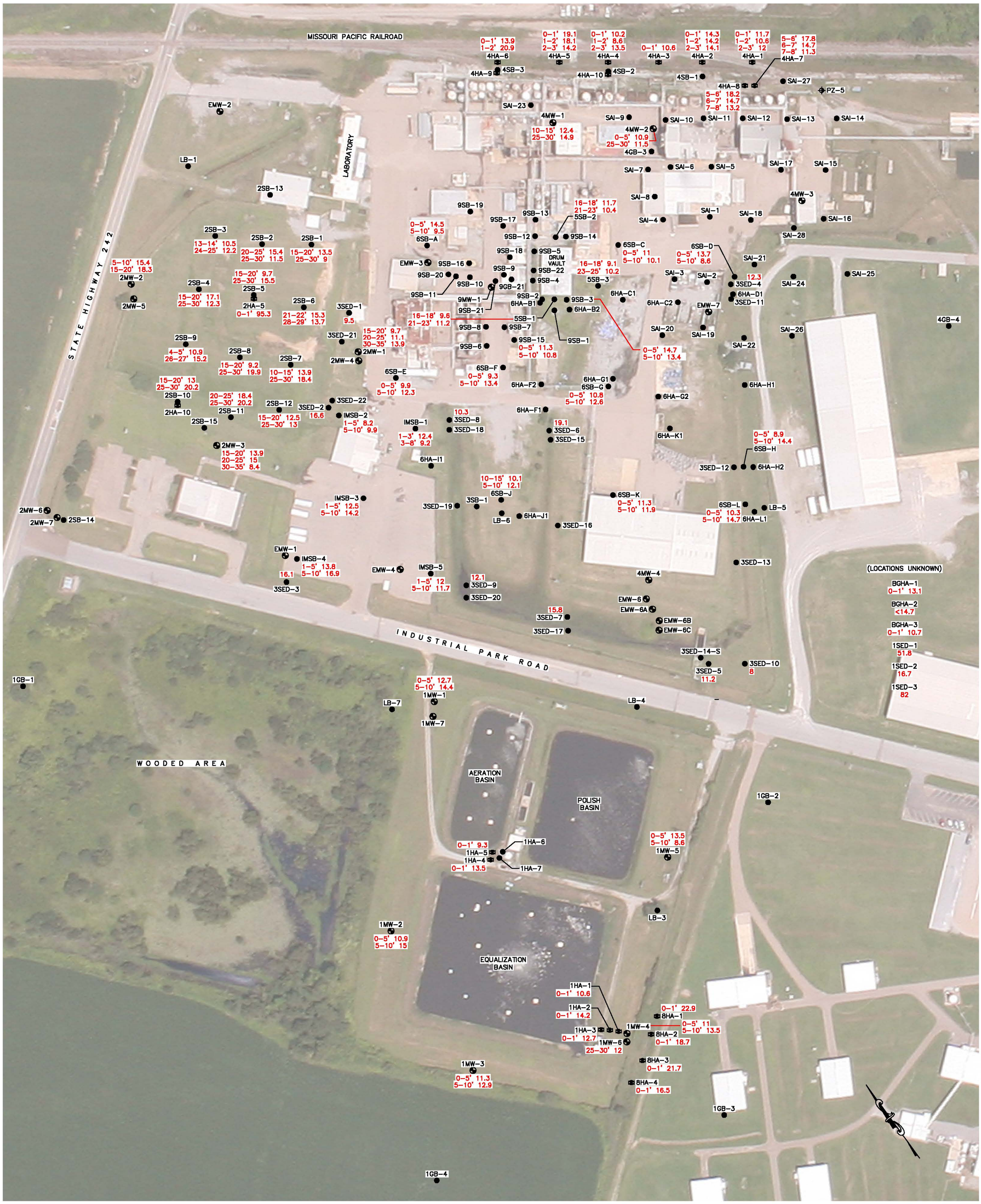
SOIL DATA SOURCES FROM ENSAFE, 1993, 1994 & 1995 INVESTIGATION REPORTS

ARSENIC DISTRIBUTION IN SOIL

Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 16

11/13/07 SOIL-DATA.dwg



LEGEND

- MONITORING WELL
- SOIL BORING
- HAND AUGER BORING
- PIEZOMETER

TOTAL CHROMIUM – INDUSTRIAL OUTDOOR WORKER SOIL MSSL = 500 mg/kg

TOTAL CHROMIUM – DILUTION ATTENUATION FACTOR MSSL = 2 mg/kg

NOTE: LOCATIONS WITH NO RESULT SHOWN INDICATE SAMPLE NOT ANALYZED OR THERE IS NOT DATA AVAILABLE

MSSL – MEDIUM SPECIFIC SCREENING LEVEL (USEPA REGION 6, 2007)

DAF – DILUTION ATTENUATION FACTOR MSSL (USEPA REGION 6, 2007)

mg/kg – MILLIGRAMS PER KILOGRAM

S – SEDIMENT

N – NATIVE SOIL

4-5' 0.014 ← DEPTH OF SAMPLE & CONCENTRATION (mg/kg)

<0.5 ← CONCENTRATION NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT

VALUE EXCEEDS USEPA REGION 6 DAF AND/OR INDUSTRIAL SOIL MSSLs

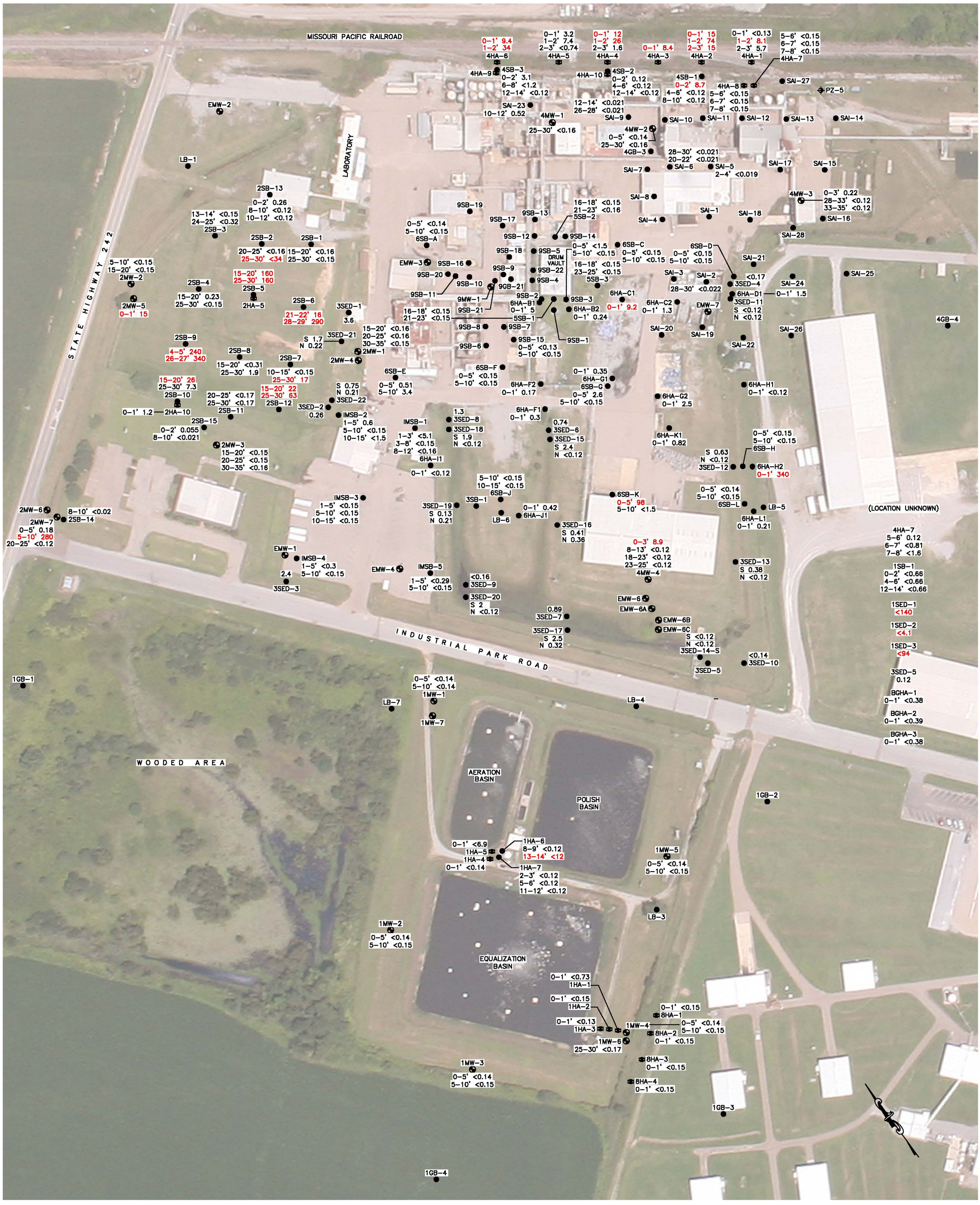
0 100
SCALE IN FEET

SOIL DATA SOURCES FROM ENSAFE, 1993, 1994 & 1995 INVESTIGATION REPORTS

TOTAL CHROMIUM DISTRIBUTION IN SOIL
Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 17

11/13/07 SOIL-DATA.dwg



LEGEND

- MONITORING WELL
- SOIL BORING
- HAND AUGER BORING
- PIEZOMETER

METHOXYCHLOR – INDUSTRIAL OUTDOOR WORKER SOIL MSSL = 3400 mg/kg

METHOXYCHLOR – DILUTION ATTENUATION FACTOR MSSL = 8 mg/kg

NOTE: LOCATIONS WITH NO RESULT SHOWN INDICATE SAMPLE NOT ANALYZED OR THERE IS NOT DATA AVAILABLE

MSSL – MEDIUM SPECIFIC SCREENING LEVEL (USEPA REGION 6, 2007)

DAF – DILUTION ATTENUATION FACTOR MSSL (USEPA REGION 6, 2007)

mg/kg – MILLIGRAMS PER KILOGRAM

S – SEDIMENT

N – NATIVE SOIL

4–5' 0.014 ← DEPTH OF SAMPLE & CONCENTRATION (mg/kg)

<0.5 ← CONCENTRATION NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT

VALUE EXCEEDS USEPA REGION 6 DAF AND/OR INDUSTRIAL SOIL MSSLs

0 100

SCALE IN FEET

SOIL DATA SOURCES FROM ENSAFE, 1993, 1994 & 1995 INVESTIGATION REPORTS

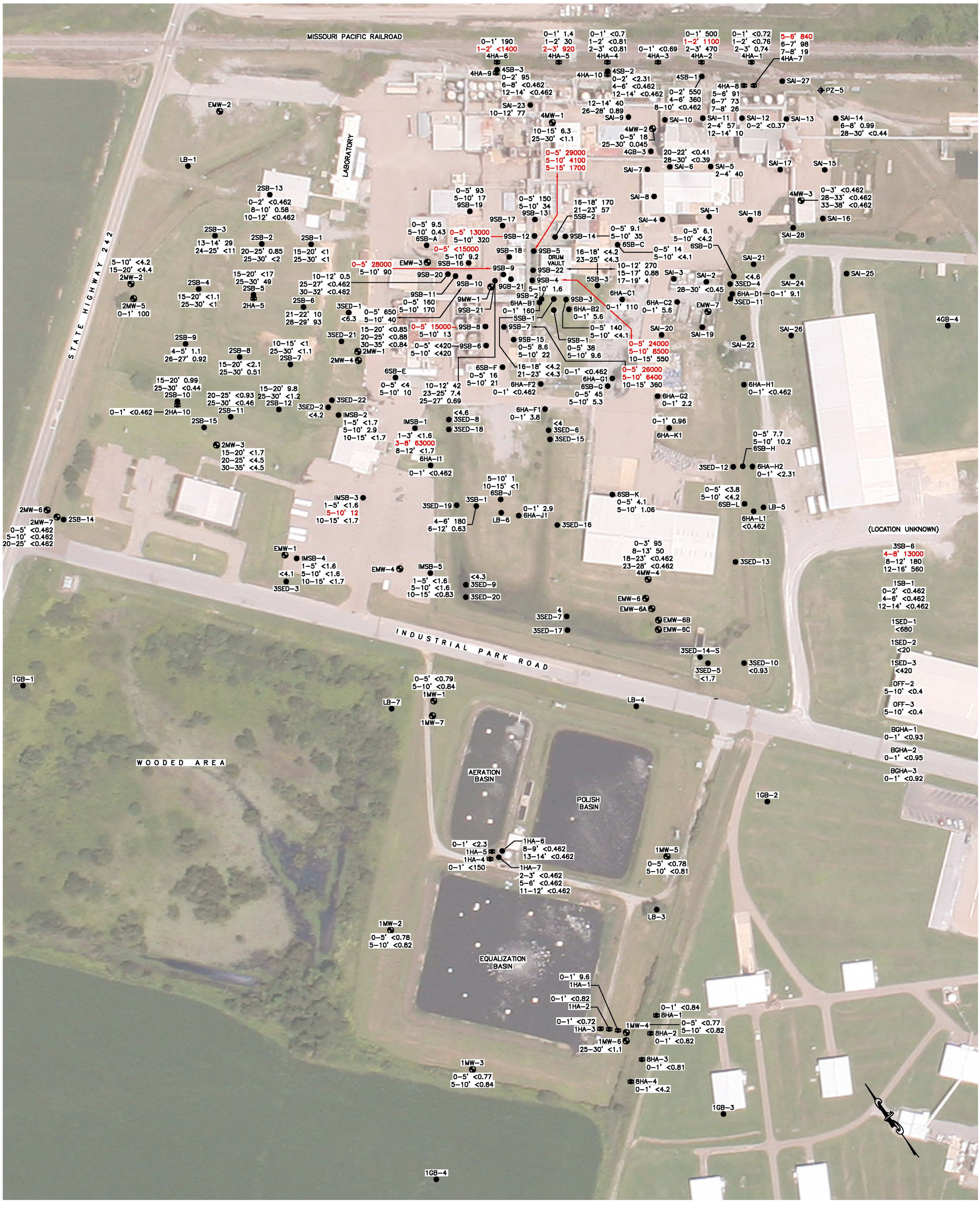
METHOXYCHLOR DISTRIBUTION IN SOIL

Cedar Chemical

Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 18

11/13/07 SOIL-DATA.dwg



LEGEND

- MONITORING WELL
- SOIL BORING
- HAND AUGER BORING
- PIEZOMETER

DINOSEB – INDUSTRIAL OUTDOOR WORKER SOIL MSSL = 680 mg/kg

DINOSEB – DILUTION ATTENUATION FACTOR MSSL = N/A (DINOSEB HAS NO PUBLISHED LEVEL)

NOTE: LOCATIONS WITH NO RESULT SHOWN INDICATE SAMPLE NOT ANALYZED OR THERE IS NOT DATA AVAILABLE

MSSL – MEDIUM SPECIFIC SCREENING LEVEL (USEPA REGION 6, 2007)

DAF – DILUTION ATTENUATION FACTOR MSSL (USEPA REGION 6, 2007)

mg/kg – MILLIGRAMS PER KILOGRAM

S – SEDIMENT

N – NATIVE SOIL

4–5' 0.014 ← DEPTH OF SAMPLE & CONCENTRATION (mg/kg)

<0.5 ← CONCENTRATION NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT

VALUE EXCEEDS USEPA REGION 6 DAF AND/OR INDUSTRIAL SOIL MSSLs

0 100

SCALE IN FEET

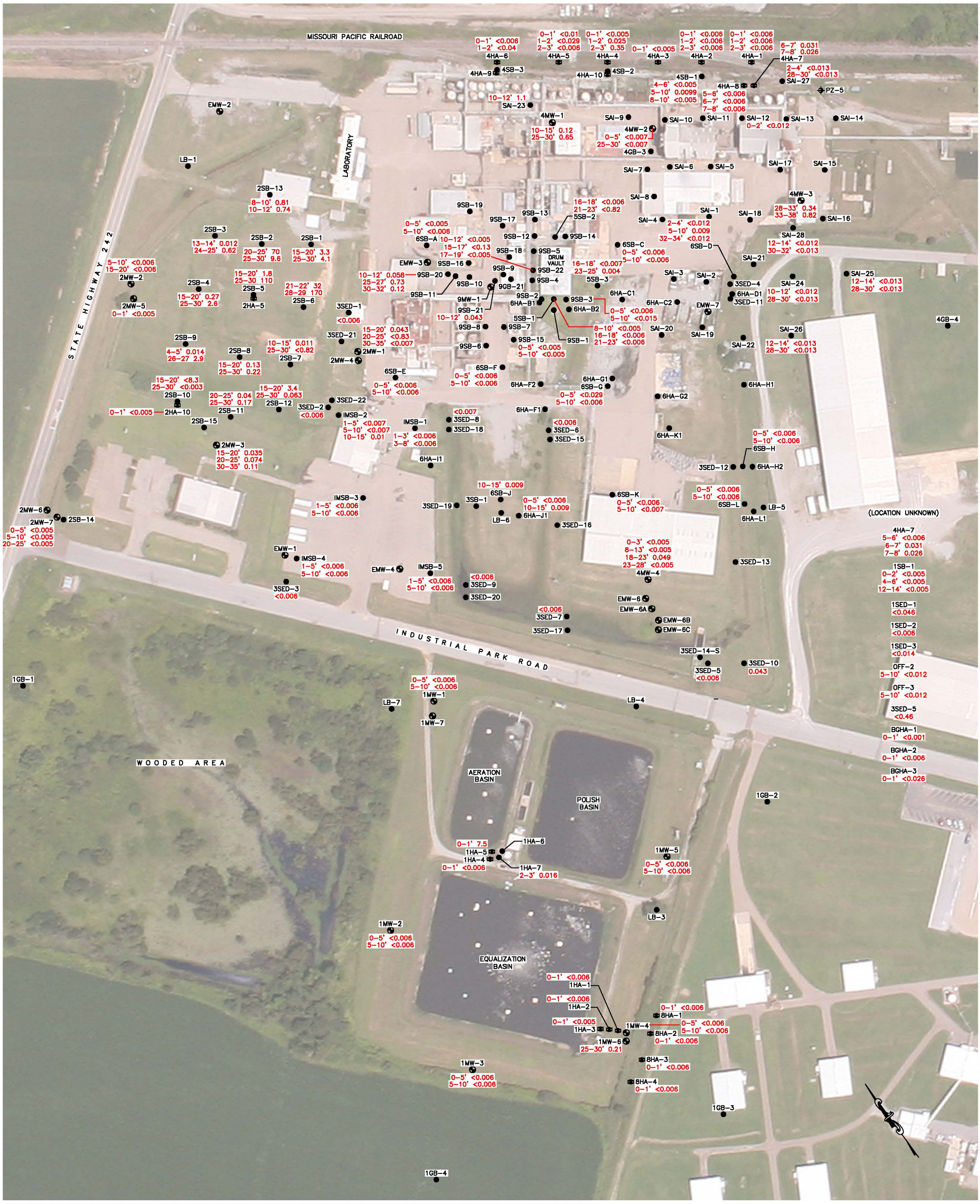
SOIL DATA SOURCES FROM ENSAFE, 1993, 1994 & 1995 INVESTIGATION REPORTS

DINOSEB DISTRIBUTION IN SOIL

Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 19

11/13/07 SOIL-DATA.dwg



LEGEND

- ⊕ – MONITORING WELL
- ● – SOIL BORING
- ⊠ – HAND AUGER BORING
- ⌖ – PIEZOMETER

1,2–DICHLOROETHANE – INDUSTRIAL OUTDOOR WORKER SOIL MSSL = 0.84 mg/kg

1,2–DICHLOROETHANE – DILUTION ATTENUATION FACTOR MSSL = 0.001 mg/kg

NOTE: LOCATIONS WITH NO RESULT SHOWN INDICATE SAMPLE NOT ANALYZED OR THERE IS NOT DATA AVAILABLE

MSSL – MEDIUM SPECIFIC SCREENING LEVEL (USEPA REGION 6, 2007)

DAF – DILUTION ATTENUATION FACTOR MSSL (USEPA REGION 6, 2007)

mg/kg – MILLIGRAMS PER KILOGRAM

S – SEDIMENT

N – NATIVE SOIL

4–5' 0.014 ← DEPTH OF SAMPLE & CONCENTRATION (mg/kg)

<0.5 ← CONCENTRATION NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT

VALUE EXCEEDS USEPA REGION 6 DAF AND/OR INDUSTRIAL SOIL MSSLs

0 100

SCALE IN FEET

SOIL DATA SOURCES FROM ENSAFE, 1993, 1994 & 1995 INVESTIGATION REPORTS

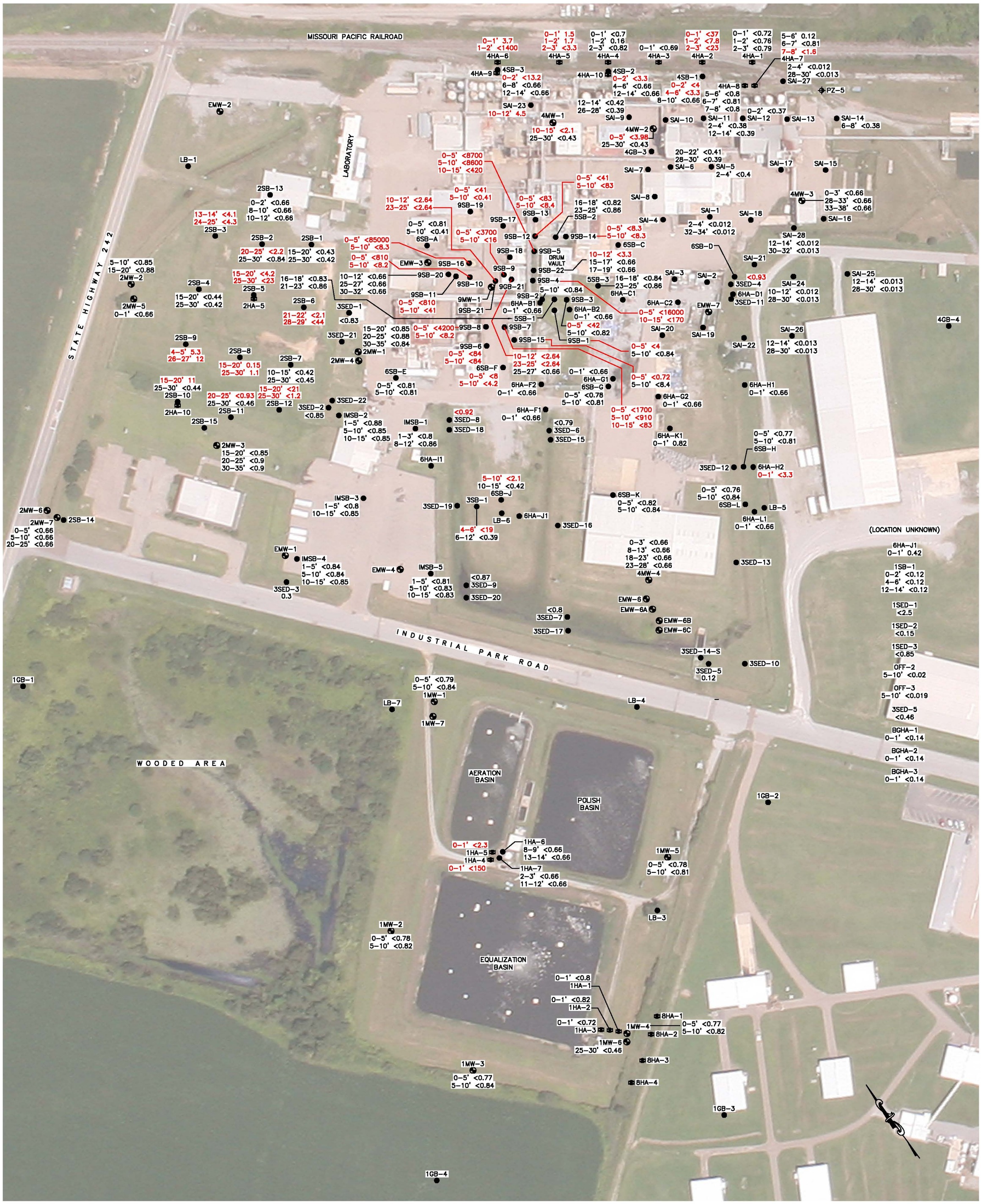
1,2-DICHLOROETHANE DISTRIBUTION IN SOIL

Cedar Chemical

Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 20

11/13/07 SOIL–DATA.dwg



LEGEND

- MONITORING WELL
- SOIL BORING
- HAND AUGER BORING
- PIEZOMETER

1,2-DICHLOROBENZENE – INDUSTRIAL OUTDOOR WORKER SOIL MSSL = 370 mg/kg

1,2-DICHLOROBENZENE – DILUTION ATTENUATION FACTOR MSSL = 0.9 mg/kg

NOTE: LOCATIONS WITH NO RESULT SHOWN INDICATE SAMPLE NOT ANALYZED OR THERE IS NOT DATA AVAILABLE

MSSL – MEDIUM SPECIFIC SCREENING LEVEL (USEPA REGION 6, 2007)

DAF – DILUTION ATTENUATION FACTOR MSSL (USEPA REGION 6, 2007)

mg/kg – MILLIGRAMS PER KILOGRAM

S – SEDIMENT

N – NATIVE SOIL

4–5' 0.014 ← DEPTH OF SAMPLE & CONCENTRATION (mg/kg)

<0.5 ← CONCENTRATION NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT

VALUE EXCEEDS USEPA REGION 6 DAF AND/OR INDUSTRIAL SOIL MSSLs

0 100

SCALE IN FEET

SOIL DATA SOURCES FROM ENSAFE, 1993, 1994 & 1995 INVESTIGATION REPORTS

1,2-DICHLOROBENZENE DISTRIBUTION IN SOIL

Cedar Chemical

Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 21

11/13/07 SOIL-DATA.dwg

LEGEND

- MONITORING WELL
- SOIL BORING
- HAND AUGER BORING
- PIEZOMETER

ACETONE – INDUSTRIAL OUTDOOR WORKER SOIL MSSL = 60,000 mg/kg

ACETONE – DILUTION ATTENUATION FACTOR MSSL = 0.8 mg/kg

NOTE: LOCATIONS WITH NO RESULT SHOWN INDICATE SAMPLE NOT ANALYZED OR THERE IS NOT DATA AVAILABLE

MSSL – MEDIUM SPECIFIC SCREENING LEVEL (USEPA REGION 6, 2007)

DAF – DILUTION ATTENUATION FACTOR MSSL (USEPA REGION 6, 2007)

mg/kg – MILLIGRAMS PER KILOGRAM

S – SEDIMENT

N – NATIVE SOIL

4-5' 0.014 ← DEPTH OF SAMPLE & CONCENTRATION (mg/kg)

<0.5 ← CONCENTRATION NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT

VALUE EXCEEDS USEPA REGION 6 DAF AND/OR INDUSTRIAL SOIL MSSLs

0 100
SCALE IN FEET

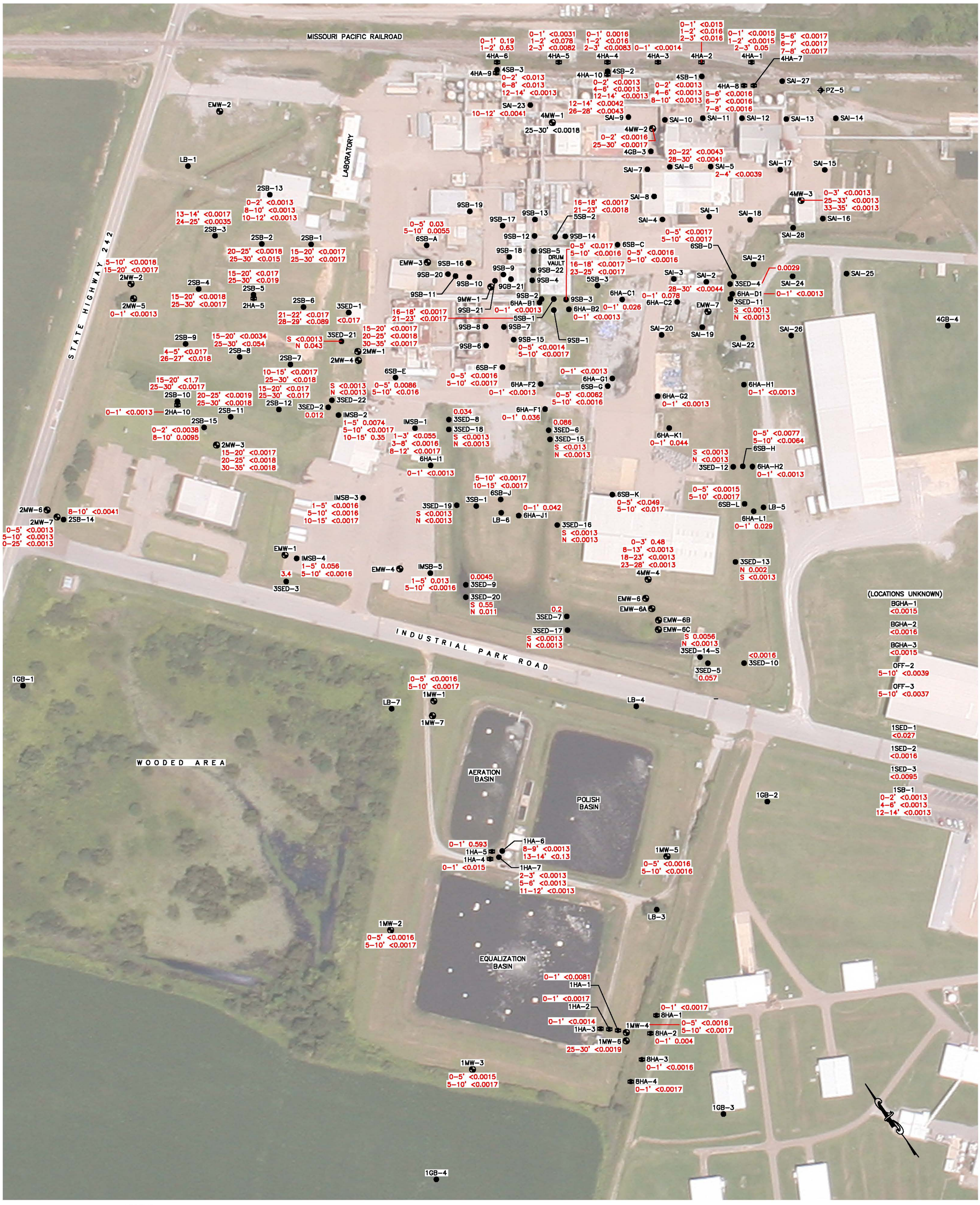
SOIL DATA SOURCES FROM ENSAFE, 1993, 1994 & 1995 INVESTIGATION REPORTS

ACETONE DISTRIBUTION IN SOIL

Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 22

11/13/07 SOIL-DATA.dwg



LEGEND

- MONITORING WELL
- SOIL BORING
- HAND AUGER BORING
- PIEZOMETER

DIELDRIN – INDUSTRIAL OUTDOOR WORKER SOIL MSSL = 0.12 mg/kg

DIELDRIN – DILUTION ATTENUATION FACTOR MSSL = 0.0002 mg/kg

NOTE: LOCATIONS WITH NO RESULT SHOWN INDICATE SAMPLE NOT ANALYZED OR THERE IS NOT DATA AVAILABLE

MSSL – MEDIUM SPECIFIC SCREENING LEVEL (USEPA REGION 6, 2007)

DAF – DILUTION ATTENUATION FACTOR MSSL (USEPA REGION 6, 2007)

mg/kg – MILLIGRAMS PER KILOGRAM

S – SEDIMENT

N – NATIVE SOIL

4-5' 0.014 ← DEPTH OF SAMPLE & CONCENTRATION (mg/kg)

<0.5 ← CONCENTRATION NOT DETECTED ABOVE RESPECTIVE REPORTING LIMIT

VALUE EXCEEDS USEPA REGION 6 DAF AND/OR INDUSTRIAL SOIL MSSLs

0 100
SCALE IN FEET

SOIL DATA SOURCES FROM ENSAFE, 1993, 1994 & 1995 INVESTIGATION REPORTS

DIELDRIN DISTRIBUTION IN SOIL

Cedar Chemical
Helena-West Helena, Arkansas

By: HCS	Date: 11-12-07	Project No. 13636
Geomatrix		Figure 24

11/13/07 SOIL-DATA.dwg

APPENDICES

LIST OF REFERENCES

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