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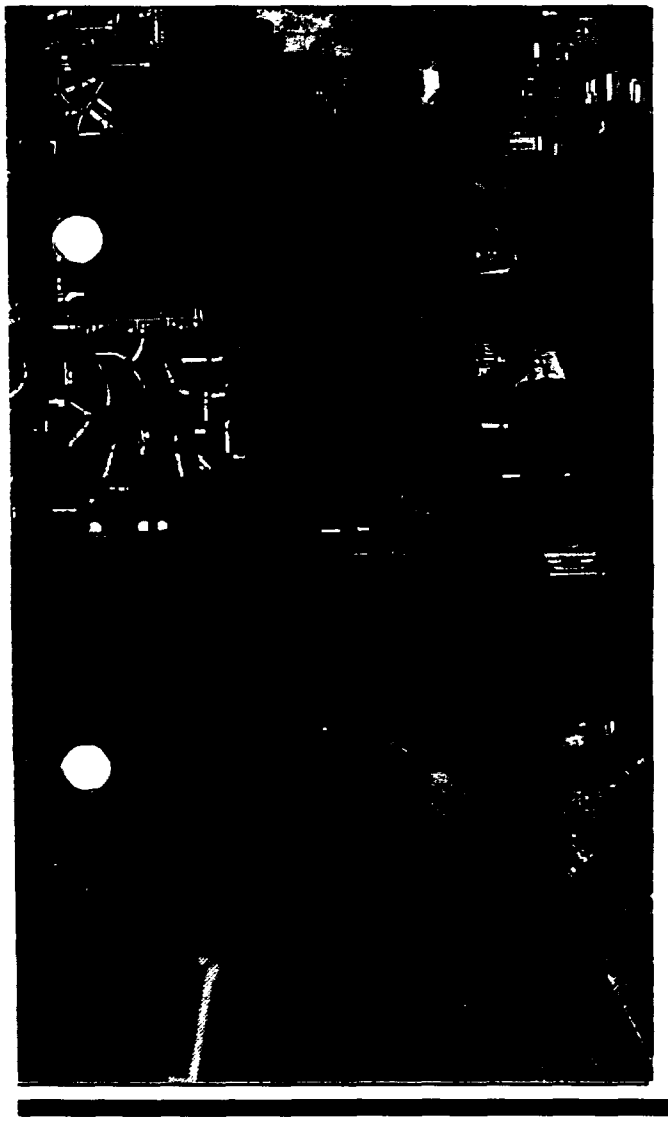
Groundwater Data Evaluation Report (Redacted Version*)

Evergreen Manor Site
Roscoe, Illinois



July 2003

Prepared for

U.S. Environmental Protection Agency
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Revision 1: 11 July 2003
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Document Control No. RFW 139-2A-ANOJ

GROUNDWATER DATA EVALUATION REPORT
EVERGREEN MANOR SITE
ROSCOE, ILLINOIS

REVISION 1
(REDACTED VERSION)

11 July 2003

Prepared for
U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604

This document was prepared in accordance with U.S. EPA Contract No. 68-W7-0026, WESTON Region V Response Action Contract (RAC) and contains confidential business information.

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GROUNDWATER DATA EVALUATION REPORT
EVERGREEN MANOR SITE
ROSCOE, ILLINOIS

REVISION 1
(REDACTED VERSION)

U.S. EPA CONTRACT NO. 68-W7-0026
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11 July 2003

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SECTION 1

INTRODUCTION

This Groundwater Data Evaluation Report (GDER) presents a detailed overview of the historical site investigations conducted at the Evergreen Manor site between 1990 and 2002; the results of these investigations; and conclusions and recommendations based on an analysis of the historical groundwater data. The previous site investigations were completed by the Illinois Environmental Protection Agency (IEPA), the Illinois Department of Public Health (IDPH), Rockford Office, and the United States Environmental Protection Agency (U.S. EPA), Region V.

1.1 SITE BACKGROUND

The Evergreen Manor groundwater site is located in Roscoe Township, Illinois and was first identified in November 1990 when a lending institution required a homeowner within the Evergreen Manor subdivision to sample and analyze the drinking water from the on-site water well. Results of the residential well analysis indicated the presence of elevated concentrations of volatile organic compounds (VOCs). The IDPH undertook further sampling in the area and identified a plume of VOC contamination located beneath the Hononegah Heights and Evergreen Manor subdivisions (IEPA, 1992). The results of the IDPH sampling indicated that the U.S. EPA Maximum Contaminant Levels (MCLs) for drinking water were exceeded for several VOC constituents in one or more wells. Based on these results, the IDPH concluded that groundwater underlying at least 130 residences in the Hononegah, Olde Farm, Evergreen Manor, and Tresemer subdivisions (collectively and hereafter referred to as the Evergreen Manor site) was contaminated with VOCs (IEPA, 1992).

The Evergreen Manor site was added to the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) on 3 August 1991, based on information provided to the IEPA by the IDPH and the U.S. EPA. The first Comprehensive Environmental Response and Liability Act (CERCLA) evaluation was a Preliminary Assessment (PA) of the Evergreen Manor site

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in January 1992. Subsequent to the PA, a 1992 Screening Site Inspection (SSI), a 1993 Expanded Site Inspection (ESI), a 2001 Remedial Investigation (RI), and an April 2002 Investigation were conducted at the Evergreen Manor site.

1.2 SITE DESCRIPTION

The Evergreen Manor site is located approximately 1.5 miles northwest of the Village of Roscoe, Roscoe Township, Winnebago County, Illinois. The location of the Evergreen Manor site is depicted on Figure 1-1. The Evergreen Manor site consists of an area of VOC affected groundwater that extends from an industrial area near the intersection of Route 251 and Rockton Road about 2 miles southwest to the Hononegah, Olde Farm, Evergreen Manor, and Tresemer subdivisions. The location of the historical and existing groundwater monitoring points, the site boundary, and the surrounding physical features are provided on Figure 1-2. The site extends over Sections 16, 20, 21, 29, and 32 in Township 46 North, Range 2 East, and is found on the South Beloit, Illinois/Wisconsin Quadrangle. The coordinates of the site are latitude 42° 26' 32.0", longitude 89° 01' 36.0".

The residential subdivisions were farmland prior to development. The Hononegah Heights subdivision was developed between 1940 and 1964; the Tresemer subdivision was developed between 1972 and 1974; the Olde Farm subdivision was developed between 1976 and 1979; and the Evergreen Manor subdivision was developed between 1986 and 1988. With the exception of the Evergreen Manor subdivision, most of the development occurred in the late 1970's and the early 1980's (IEPA, 1992).

The subdivisions are bounded to the south by the Rock River and to the west by the Hononegah Forest preserve. East of the subdivisions are agricultural fields and the Hononegah Country Estates subdivision. North of the subdivisions is a 1-mile tract of agricultural land, with a smaller residential area and various industries east of the agricultural land, east of Route 251.

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Roscoe Rock and Sand, Inc., a gravel pit and concrete mixing facility, is located approximately 0.5 miles northeast of the subdivisions. Roscoe Rock and Sand, Inc. purchased the former Kelley Sand and Gravel property, and is located on the north and south sides of McCurry Road, west of Route 251.

The industrial park, located north of Rockton Road, and east of Route 251, contains the following businesses: Inlander-Steindler Paper Company, Regal-Beloit Corporation, McGuire Brothers Auto Body and Sand Blasting, Makerite Manufacturing Company, Midwest-Precision Grinding, Rockford Steam Boiler Works, Oscar's Auto and Battery Clinic, Dayles Welding, Armour Specialty, Inc. (industrial painting), RD Systems, Electro Cam Corporation, Area Elevator, DGM, Preston 151 (trucking firm), and Indicon Midwest (IEPA, 1992).

The industries located on the south side of Rockton Road, east of Illinois Route 251, include Ecolab and Taylor Design, Inc. Further south along and east of Illinois Route 251 are five other facilities: State Line Foundries, Waste Management Transfer Station, Kenny's Cars, Trucks and Equipment, Stateline Printing Company, and Stateline Storage. Warner Brake and Clutch is located south of McCurry Road on the east side of Route 251 (IEPA, 1992).

1.3 REPORT OBJECTIVES

The objectives of this GDER are as follows:

- Develop a comprehensive presentation and discussion of results from the historical investigations conducted throughout the Evergreen Manor site between 1990 and 2002.
- Conduct a detailed evaluation and interpretation of all historical results.
- Use the results of this analysis to determine the potential risks associated with the impacted groundwater beneath the Evergreen Manor site based on the current understanding of the contaminant plume and potential migration pathways.

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- Identify data gaps and uncertainties associated with the historical groundwater data.
- Recommend appropriate measures, if necessary, for conducting additional groundwater characterization and long-term groundwater monitoring.

1.4 REPORT ORGANIZATION

This GDER is divided into the following sections:

Section 1, Introduction: Provides an overview of the Evergreen Manor site and the objectives of the GDER.

Section 2, Site Background: Provides the site description, the site history, and a summary of previous site investigations.

Section 3, Environmental Setting: Describes the surrounding land use and population, climate, regional soils, surface water features, area drainage and topography, regional geology, regional hydrogeology, and groundwater use in the area.

Section 4, Investigation Results: Presents the results of all investigations conducted from 1990 to 2002.

Section 5, Data Evaluation: Presents the evaluation and interpretation of all groundwater, surface water, sediment and soil gas data collected between 1990 and 2002.

Section 6, Uncertainty and Data Gap Analysis: Presents uncertainties and data gaps identified during the evaluation of groundwater, surface water, sediment, and soil gas data collected between 1990 and 2002.

Section 7, Conclusions and Recommendations: Presents the conclusions and recommendations of the groundwater data evaluation.

Section 8, References: Lists all reference sources used in the GDER.

The tables and figures are referenced by section numbers and are presented at the end of the report. For ease of use and reproduction and where appropriate, some figures have been provided in both 11 x 17 and full size formats.

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SECTION 2

PREVIOUS SITE INVESTIGATIONS

This section provides a description of the previous investigations conducted throughout the Evergreen Manor site from 1990 to 2002. In addition, a brief summary of the actions and/or findings associated with these investigations is included. A detailed presentation of the analytical results obtained during the field activities conducted from 1990 to 2002 is provided in Section 4 of this GDER. A detailed overview and analysis of all the groundwater data and information is presented in Section 5, Data Evaluation.

2.1 SITE DISCOVERY AND INITIAL CHARACTERIZATION (1990 TO 1991)

As indicated in Section 1, the Evergreen Manor site was first identified in November 1990 when a local lending institution required a homeowner within the Evergreen Manor subdivision to sample and analyze the drinking water from its on-site water well. Results of the analysis indicated the presence of elevated concentrations of VOCs. Additional sampling was conducted by the IDPH in the area and identified VOCs in excess of regulatory criteria for drinking water (i.e., MCLs) for several VOC constituents in one or more wells. Based on these results, the IDPH concluded that groundwater underlying at least 130 residences in the Hononegah, Olde Farm, Evergreen Manor, and possibly the Tresemer subdivisions was contaminated with VOCs (IEPA, 1992).

2.2 CERCLA SCREENING SITE INSPECTION (1992)

A Site Screening Inspection (SSI) was performed at the Evergreen Manor site in June and August 1992 to gather information for potential Hazard Ranking by IEPA (IEPA, 1994). As part of the SSI, a total of 39 soil gas samples and four groundwater samples were collected and analyzed for 1,1,1-trichloroethane (1,1,1-TCA), trichloroethene (TCE), and 1,1-Dichloroethene (1,1-DCE).

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Results of soil gas samples collected along McCurry Road, east of IL Route 251, and along the frontage road east of IL Route 251 indicated the presence of 1,1,1-TCA, TCE, and 1,1-DCE. These compounds were not detected in soil gas samples collected from the north side of the Ecolab facility, and along the north side of Rockton Road.

The results of the groundwater analyses did not indicate the presence of VOCs in the samples collected from the north side of the Ecolab facility, or along the frontage road. Three VOCs were detected in a well north of the Waste Management facility.

The SSI report, prepared by the IEPA, assigned a high priority to the Evergreen Manor site based on the results of the SSI and the groundwater samples collected from residential wells by the IDPH between 1990 and December 1991. Appendix A contains a table from the SSI Report showing TCE and PCE concentrations by address.

2.3 CERCLA EXPANDED SITE INSPECTION (1993)

An Expanded Site Inspection (ESI) was conducted in November 1993 by the IEPA (IEPA, 1994). The purpose of the ESI was to collect information in support of the Hazard Ranking System (HRS) package preparation. During the ESI, a total of 49 groundwater samples were collected from 45 residences in three subdivisions (including Hononegah Heights, Olde Farm, and Evergreen Manor), four of which were duplicate samples. The groundwater samples were analyzed for VOCs.

Results obtained from the ESI indicated that in all but one of the samples, and excluding two background samples, at least one VOC was detected. Acetone, 1,1-DCE, 1,1-DCA, 1,2-Dichloroethene (1,2-DCE), and tetrachloroethene (PCE) were detected at concentrations below the laboratory reporting limits. The compounds 1,1,1-TCA and TCE were detected at concentrations ranging from less than 10 micrograms per liter (µg/L) to 37, and 40 µg/L, respectively. Of the 45 wells sampled, 36 wells had 1,1,1-TCA concentrations significantly above background, and 40 wells

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had TCE concentrations significantly above background. All TCE detections were at concentrations greater than the MCL (5 µg/L). Additionally, results of the residential well sampling, conducted by the IEPA in December 1993 and January 1994, found more than 60 residential wells with 1,1,1-TCA and/or TCE at concentrations above the MCLs.

2.4 OTHER IEPA and IDPH INVESTIGATIONS

A number of other investigations, outside of the scope of the PA, the SSI, and the ESI, were conducted at the Evergreen Manor site. Results of these investigations are included in an *ACTION MEMORANDUM* (U.S. EPA, 1999) and are summarized below:

- Between December 1990 and March 1994, IEPA and IDPH sampled 267 drinking water wells, mostly in the four subdivisions which define the Evergreen Manor site. These wells include wells that were sampled as part of the SSI and the ESI. VOCs were detected in 203 wells. VOCs in 108 wells exceeded their respective MCLs.

- Between December 1993 and February 1995, IEPA installed and sampled 24 monitoring wells. Sample results from March 1994 indicated that TCE and PCE exceeded their respective MCLs (5 µg/L) in two out of 20 wells. Sample results from February 1995 indicated that groundwater collected from three out of 24 wells exceeded the MCLs for TCE, and four exceeded the MCL for PCE.

- Sample results from 12 wells sampled by U.S. EPA on 22 May 1998 indicated that groundwater samples from six of the wells exceeded the MCL for TCE, and groundwater samples from three of the wells exceeded the MCL for PCE.

2.5 HAZARD RANKING SYSTEM (HRS) DOCUMENTATION RECORD (MAY 1997)

Based on the information and data gathered during the PA, the SSI, the ESI, and other sampling conducted by IEPA and/or IDPH, a HRS score was prepared. The Evergreen Manor Ground Water Contamination Plume, ILD 984836734, received a score of 100 points, for the groundwater pathway. The air, soil, and surface water pathways were not evaluated. The final HRS site score was 50 points. The HRS document included the information on three likely sources of the groundwater contamination at the Evergreen Manor site. These potential sources included the waste disposal

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areas that were located on the properties of Regal-Beloit, AAA Disposal (property now owned by Waste Management), and Ecolab near Route 251 and Rockton Road. From the HRS package and other IEPA documents, the likely sources of the groundwater contamination at the Evergreen Manor site are identified as follows :

- A landfill at former AAA Disposal System that was covered with soil and granted closure by IEPA in 1977. In 1990, 1,380 cubic yards of material was also excavated from this property and removed by the current property owner, Waste Management. Soil samples collected from the site contained low levels of TCE (13 µg/kg), 1,1-DCA (8 µg/kg), cis-1,2-DCE (15 µg/kg) and PCE (6.8 µg/kg), and higher levels of benzene (1,000 µg/kg), toluene (940 µg/kg) and xylene (7,300 µg/kg). Samples Waste Management collected from the nearby Schewbke property in 1990 also contained PCE at 40 µg/kg.

- Wastewater discharged to a septic field and 5 underground storage tanks at Regal-Beloit which were closed under RCRA in 1987. Soil samples collected from the site contained low levels of TCE (7 µg/kg) and 1,1,1-TCA (2 µg/kg).

- A wastewater lagoon at Ecolab that was removed under IEPA oversight in 1979. Monitoring well MW-103, installed immediately downgradient of Ecolab had the highest concentrations of PCE (40 µg/L) and 1,1,1-TCA (16 µg/L)".

2.6 ENGINEERING EVALUATION/COST ANALYSIS REPORT (October 1998)

An Engineering Evaluation/Cost Analysis (EE/CA) Report was prepared by the U.S. EPA with the objective of evaluating removal action objectives and removal action alternatives. Three viable alternatives were identified which would abate the threat posed by drinking the VOC contaminated groundwater encountered beneath the Evergreen Manor site. These included a point-of-entry carbon filter treatment option, a point-of-use carbon filter treatment option, and an option to connect the affected residences to a public water supply system.

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2.7 ACTION MEMORANDUM (2 March 1999)

On 2 March 1999, an Action Memorandum was issued by the U.S. EPA and served as a request for CERCLA Non-Time Critical Removal Action (NTCRA) and consistency exemption to the $2 million and 12 month statutory limit at the Evergreen Manor site. The U.S. EPA recommended the extension of the public water supply system in order to provide the affected residences within the Evergreen Manor site with safe drinking water and abandon the existing residential wells. This decision was based on the permanence of the solution and the public response to the EE/CA during the public comment period, which opened on 10 November 1998.

The Evergreen Manor site contamination was estimated to affect 700 people in approximately 250 residences. A preliminary risk assessment indicated that continued usage of residential wells would pose a threat to public health and the environment. Since the concentrations of TCE and PCE exceeded the MCLs, this condition represented an imminent and substantial endangerment to local residents.

The source area was identified in the Action Memorandum as the area at the intersection of Rockton Road and Route 251.

2.8 ADMINISTRATIVE ORDER OF CONSENT (14 MAY 1999)

U.S. EPA entered into an administrative order of consent (AOC) with three PRPs concerning the Evergreen Manor Groundwater Contamination Site. The AOC required the PRPs to pay a total of $2,100,850 to partially fund the removal action to be performed by U.S. EPA. The removal action consisted of construction of a water main extension to bring potable water from the North Park Public Water District to the individual residences threatened by contaminated groundwater. The U.S. EPA provided a list of those residences deemed eligible for connection to the NPPWD water main in the *July 1999 Construction of Water Main Extension Project to Begin at the Evergreen*

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Manor Groundwater Contamination Site Fact Sheet. Work related to the extension of the public water supply system and hookup of the effected residences commenced in 1999, and was completed on September 29, 2000. All the private wells at the homes connected to the municipal water supply by the U.S. EPA were permanently abandoned. The residences included in this project are depicted on Figure 2-1. A copy of the U.S. EPA July 1999 Fact Sheet showing the eligible residences for hook-up is contained in Appendix B.

2.9 REMEDIAL INVESTIGATION (MARCH 2000)

From May through June 2000, a Remedial Investigation (RI) was completed at the Evergreen Manor site (WESTON, 2001). The objectives of the RI were to gather site information in support of a Feasibility Study (FS) and to make an informal risk management decision regarding an appropriate remedy.

A limited sampling and analysis program was implemented to evaluate the then-current conditions within the groundwater plume. This included limited sampling to verify that the lateral extent of the plume at selected locations in the residential area was not larger than previously determined; gathering multiple depth groundwater samples to further evaluate vertical distribution of VOCs within the shallow portion of the aquifer at selected areas; and gather limited data to preliminarily evaluate whether natural attenuation mechanisms were present and playing any role in reduction of VOC levels. Additionally, limited work was carried out in an effort to narrow down potential source areas in the vicinity of Rockton Road and Route 251. A total of 138 groundwater samples (including duplicates) were analyzed. Groundwater samples were collected from 22 residential wells, 15 IEPA shallow and deep wells at eight locations, and 72 groundwater samples from multiple depths at 10 cone penetrometer testing (CPT) locations. In addition, fracture trace analysis was conducted. Specific conclusions related to the RI are summarized below:

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- A total of 13 VOCs were detected in samples collected from CPT, monitoring wells, and residential wells. Only three of these constituents exceeded screening levels. TCE was detected in residential well RW-04 (near Blue Spruce Drive and Straw Lane), at a concentration of 6 µg/L, which exceeded the screening level of 5 µg/L. Chloroform was detected in residential well RW-08 (near Wagon Lane and Straw Lane), at a concentration of 0.9 µg/L, which exceeded the screening level of 0.02 µg/L. PCE was detected in monitoring well MW-103S at a concentration of 9 µg/L, which exceeded the screening level of 5 µg/L. The levels of chlorinated VOCs detected during this RI were significantly lower than those previously determined, indicating continued diminishing contamination of the aquifer. Based on these detections, chloroform, PCE, and TCE were considered constituents of potential concern (COPCs).

- A total of four VOCs were detected in the sediment samples collected from Dry Creek and the Rock River. The detected concentrations of the constituents were orders of magnitude less than their respective screening levels. Therefore, the RI concluded that there are no COPCs in the sediment medium.

- The results of the surface water analyses were all below the laboratory reporting limits. Therefore, the RI did not identify any COPCs in the surface water medium.

- Based on the results of the groundwater analytical data and the fracture trace analysis, the RI identified the industrial area near the intersection of Rockton Road and Illinois Route 251 as the likely source area of contamination.

- The residential groundwater exposure scenario carcinogenic risk estimates ranged from 4.6E-06 to 1.9E-05. The constituents that primarily drove the carcinogenic risk numbers under this scenario included chloroform, PCE, and TCE. The residential groundwater exposure scenario total hazard index ranged from 1.4 to 1.4 for an adult and from 3.7 to 3.8 for a child. The risk was primarily driven by chloroform across the inhalation pathway for both children and adults. To a lesser extent, TCE contributed to the inhalation pathway risk value as well.

- Under the commercial/industrial land use exposure scenario, carcinogenic risk estimates ranged from 2.0E-06 to 6.9E-06. The risk was primarily driven by PCE, TCE, and chloroform. The commercial/industrial land use exposure scenario total hazard index ranged from 0.97 to 0.99, which did not exceed the non-cancer threshold of unity.

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- The ecological risk assessment focused on the potential direct impact of VOCs to fish living in Dry Creek and the Rock River. The screening-level ecological risk assessment found that there is negligible potential for adverse effect on aquatic organisms in the Rock River and Dry Creek from site-related chemical constituents.

Additional RI details can be found in the Remedial Investigation Report, Revision 1 (WESTON, 2001).

2.10 APRIL 2002 FIELD INVESTIGATION

From 1 April through 23 April 2002, the U.S. EPA conducted an additional field investigation at selected areas of the Evergreen Manor site. As part of this investigation, additional groundwater monitoring wells were installed, two municipal water supply wells were sampled, and sediment, surface water and groundwater samples were collected. The objective of the 2002 investigation was to evaluate post-RI condition of contaminants within groundwater, surface water, and sediment prior to developing and evaluating appropriate remedial alternatives.

The field methods utilized during this investigation were conducted in accordance with the U.S. EPA approved Quality Assurance Project Plan (QAPP), Amendment No. 1, Revision 2. Details regarding the project objectives and the sample network design and rationale as well as the field and analytical methods for the April 2002 Investigation, are included in Appendix C. A brief description of the field activities and a summary of the findings are described below.

2.10.1 Monitoring Well Installation and Sampling

A total of four monitoring wells, including monitoring wells MW-01, MW-01A, MW-02, and MW-03 were installed during the period from 1 April 2002 through 11 April 2002. One of the newly installed wells, MW-01, located near Blue Spruce Drive and Straw Lane, was lost due to grout intrusion. Consequently, this well was abandoned and monitoring well MW-01A was constructed

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as a replacement. Following installation and development, each newly installed monitoring well was sampled. In addition, several of the previously installed monitoring wells were also sampled. The results of these sample analysis indicated that seven VOCs were detected in the groundwater samples at concentrations above the method detection limits. These VOCs are listed below:

- 1,1-DCA was detected in samples collected from monitoring wells MW-01A, MW-01A Duplicate, MW-03, MW-105S, MW-105S Duplicate, and MW-105D, at concentrations ranging from 0.19 µg/L to 0.39 µg/L.

- 1,1-DCE was detected in samples collected from monitoring wells MW-01A, MW-01A Duplicate, and MW-03 at concentrations ranging from 0.16 µg/L to 0.2 µg/L.

- Cis-1,2-DCE was detected in groundwater samples collected from monitoring wells MW-01A, MW-01A (Duplicate), MW-03, MW-105S, MW-105S (Duplicate), and MW-105D. The concentrations ranged from 0.39 µg/L to 1.5 µg/L.

- 1,1,1-TCA was detected in samples collected from monitoring wells MW-109D, MW-109S, MW-104D, MW-104S, MW-104S (Duplicate), MW-107D, MW-105S, MW-105S (Duplicate), MW-105D, MW-103D, MW-103S, MW-01A, MW-01A Duplicate, MW-02, and MW-03. The concentrations ranged from 0.29 µg/L to 2.4 µg/L.

- TCE was detected in samples collected from monitoring wells MW-105D, MW-105S, MW-105S Duplicate, MW-01A, MW-01A Duplicate, MW-03, MW-104S, MW-104S Duplicate, MW-101D, MW-101S, and MW-109D. TCE concentrations ranged from 0.16 µg/L to 7.2 µg/L.

- PCE was detected in samples collected from monitoring wells MW-109D, MW-109S, MW-104D, MW-104S, MW-104S Duplicate, MW-107D, MW-107S, MW-01A, MW-01A Duplicate, MW-03, MW-105S, MW-105S Duplicate, MW-105D, and MW-103S. PCE concentrations ranged from 0.1 µg/L to 5.9 µg/L.

- Freon 113 was detected in samples collected from monitoring wells MW-103D and MW-107D at concentrations ranging from 6.7 µg/L to 30 µg/L.

- Chloroform was detected at a concentration of 0.23 µg/L in monitoring well MW-02. Chloroform was also detected in the associated field blank sample at a concentration greater than ten times the concentration detected in the monitoring well MW-02 sample.

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2.10.2 Municipal Water Well Sampling

Two municipal wells (#6 and #6A) were sampled on 9 April 2002 for VOCs. The municipal wells are part of the North Park Water District and are located in Roscoe Township, Winnebago County, Illinois (see Figure 1-2). Samples from Municipal Wells #6 and #6A were collected both before and after chlorination and fluorination. One duplicate sample was collected from Well #6 prior to treatment. PCE was detected above the method detection limits in all the municipal water well samples, including the duplicate sample, at concentrations ranging from 0.23 µg/L to 0.61 µg/L.

2.10.3 Sediment Sampling

A total of eight sediment samples (SD-01 - SD-08), one QC duplicate, and two matrix spike (MS) / matrix spike duplicate (MSD) samples were collected from the Rock River on 5 April 2002. Sediment samples were collected from areas where sediments are readily deposited and within approximately five feet of the shore. To the extent possible, sediment samples were collected at the same locations as surface water samples and analyzed for VOCs. Three VOCs were detected in the sediment samples at concentrations exceeding the method detection limits and are listed below:

- Freon 113 was detected in samples SD-01 and SD-02 at a concentration of 8 µg/kg and 2 µg/kg, respectively.
- 2-Butanone was detected in sample SD-04 at a concentration of 3 µg/kg.
- Toluene was detected at a concentration of 4 µg/kg in sample SD-06.

2.10.4 Surface Water Sampling

A total of eight surface water samples (SW-01-SW-08), one duplicate, two MS/MS duplicates, one field blank, and one trip blank were collected from the Rock River on 5 April 2002. The surface water samples were collected to determine if site contaminants were migrating into the Rock River.

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Surface water samples were collected at approximately the same locations as sediment samples and prior to collection of sediment samples. No VOCs were detected at concentrations above the laboratory reporting limits.

2.11 2002 AIR SAMPLING

A limited soil gas and indoor air quality investigation (WESTON, 2003a) was undertaken by U.S. EPA at four locations within the residential area to investigate the potential for vapor intrusion in different parts of the groundwater plume. The objective of the air sampling program was to measure the concentrations of VOCs in ambient air, indoor air, and soil gas at four selected residences within different areas of the Evergreen Manor plume. The specific objectives of the air sampling program were: 1) to determine if VOCs related to the site groundwater contamination could be detected in ambient air, soil gas, and indoor air at four selected residences located at different areas within the Evergreen Manor site; 2) to determine if any VOCs detected in ambient air, soil gas and indoor air could pose a current health risk to the residents; 3) to determine whether a relationship exists between the VOC-containing groundwater contaminant plume and any VOC concentrations measured in ambient air, soil gas, and indoor air; and 4) to identify data gaps and uncertainties associated with the vapor migration pathway.

Based on information collected during the air sampling program, benzene, chloroform, ethylbenzene, methylene chloride, PCE and TCE were detected at concentrations above target risk-based concentrations (RBCs). These VOCs were reported in soil gas and indoor air samples collected from four residences in the subdivisions: one on Mathew Avenue (Area A), one near Blue Spruce Drive and Straw Lane (Area B), one near Wagon Lane and Wagon Lane Court (Area C), and one near Wagon Lane and Tanawingo (Area D), and were considered as COPCs. Specific conclusions related to this investigation are summarized below:

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- Indoor air sampling results indicated that potential cancer risks from detected site-related constituents (primarily PCE and benzene) were within the U.S. EPA's acceptable risk range. The overall potential cancer risk from all chemicals detected in the homes ranged from 1.1×10^{-4} to 1.3×10^{-5}. These risks were also within U.S. EPA's acceptable risk range. Similarly, there were no noncancer risks found from site-related chemicals.

- Soil gas sampling results indicated that potential cancer risks for detected constituents (primarily TCE, PCE, and benzene) were within the U.S. EPA's acceptable risk range. No noncancer risks were identified from the soil gas data.

- Although the potential indoor air and soil gas cancer risks at the four homes that were sampled were within U.S. EPA's acceptable risk range of 1×10^{-4} to 1×10^{-6}, additional sampling at more homes at different times of the year was recommended to address uncertainties associated with possible property- or residence-specific factors as well as any seasonal variations. Similarly, the presence of site related constituents in soil gas, indoor air, and groundwater, indicates a potential correlation between groundwater contamination at the site and the presence of these constituents in soil gas and indoor air which will require further evaluation.

Additional details regarding the air sampling investigation can be found in the Air Sampling Report, Revision 3 (WESTON, 2003a).

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SECTION 3

ENVIRONMENTAL SETTING

3.1 DEMOGRAPHY AND LAND USE

The Evergreen Manor site in Roscoe Township, Winnebago County, Illinois includes four residential subdivisions. The site consists of an area of VOC-contaminated groundwater and has been defined by the maximum extent of these detections. The location of the historic and existing groundwater monitoring points, site boundaries, and surrounding physical features is provided on Figure 1-2. According to the 2000 U.S. Census, the Evergreen Manor site is in Census Tract 003902, Block Group 2, and has a total population of 6,244, 3% of whom are minorities. Based on the estimated extent of the VOC contamination plume, the Evergreen Manor site has the potential for affecting 243 homes and an estimated population of 700 persons (IDPH, 1999).

Land use in and around the site is residential, agricultural, commercial and industrial. The land from Hononegah Road to the Rock River is residential. Directly north of Hononegah Road is commercial property with various stores in a strip mall. Between the strip mall and Rockton Road, on the west side of Illinois Route 251, most of the land is agricultural and is actively used during the growing season. This area also includes an area of heavy industrial land use: a sand and gravel quarry and cement mixing facility. To the east of Illinois Route 251, from Hononegah Road to Rockton Road, land use is mixed between commercial, light industrial and residential. This area includes the Ecolab facility, the Waste Management Transfer Station, Kenny's Cars, Trucks, and Equipment, as well as other companies. In the northeast quadrant of Illinois Route 251 and Rockton Road most of the land is light industrial and is occupied by an industrial park.

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3.2 CLIMATE

Winnebago County has a continental climate typical of northern Illinois. This area has hot summers and cold winters, with July being the hottest month and January being the coldest. The average temperature in winter is 23°F and in summer is 71°F. The lowest recorded temperature was -22°F recorded on 21 January, 1970. The highest recorded temperature was 103°F recorded on 27 July, 1955. Annual precipitation averages 38 inches and annual snowfall averages 33 inches. Sixty-six percent of the rainfall occurs between the months of April through September.

3.3 ECOLOGY

The site is located in the Central Lowland geomorphic province, in the eastern broadleaf forest province of the Hot Continental Division in the Humid Temperate Domain (USDA Forest Service, Ecological Subregions of the United States, http://www.fs.fed.us/land/pubs/ecoregions).

The Rock River receives drainage from three major streams - the Pecatonica River, the Kishwaukee River, and the Green River. It is 163 miles long in Illinois, and drains 2,272,000 acres in Illinois. Of the total river miles in this basin, 69 stream miles have "good" overall resource quality and 97.9 miles have "fair" quality. The Rock River enters the Mississippi River at Rock Island (IDNR, http://dnr.state.il.us/lands/education/valerie/end/page6.htm). Dry Creek, a tributary of the Rock River and an intermittent stream, enters the river northwest of the Tresemer Subdivision. West of Dry Creek, the river is classified by the NWI as a riverine wetland and east of the creek, the river is classified as a lacustrine system. Forested wetlands border both the river and the creek west of the site and the river south of the site. There are small areas of emergent wetlands within the Evergreen Manor subdivision.

The U.S. Fish and Wildlife Service (USFWS) was contacted to obtain information on threatened and endangered species within the Evergreen Manor project area. Species that may be present in the area

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include the endangered Indiana bat (*Myotis sodalis*), the threatened prairie bush clover (*Lespedeza leptostachya*), the threatened bald eagle (*Haliaeetus leucocephalus*).

3.4 REGIONAL TOPOGRAPHY

The topography in Winnebago County has been created in large part by features developed during the advance and retreat of glaciers. This includes till plains that contain kames, drumlins, and eskers (USDA-NRCS, 1980). The Evergreen Manor site is located on a broad, flat terrace, which gently slopes toward the Rock River. Locally, relief is no greater than about 75 feet from the highest area near Rockton Road and IL Route 251 (approximately 770 to 775 feet above mean sea level [amsl]), down to the Rock River elevation of approximately 700 feet amsl.

3.5 REGIONAL GEOLOGY

The geology in the vicinity of the Evergreen Manor site has been most heavily influenced by fluvial and glacial processes. The preglacial Rock River incised a deep bedrock valley that was subsequently buried during glaciation. As the glacier retreated, vast deposits of sand and gravel with lesser amounts of silt and clay were deposited in the river valley. The Evergreen Manor site is located in the preglacial Rock River buried valley.

Surficial Geology

The surficial geology in the vicinity of the Evergreen Manor site consists of windblown sand and silt, lacustrine sand, silts and clays, and sand and gravel outwash deposited within the preglacial Rock River valley. Till deposits are found primarily along the valley margins. The valley was primarily filled with deposits from the Quaternary Period, during the Illinoian and Wisconsinan glacial events. The sand and gravel outwash deposits are the most abundant and most extensive deposits in the

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buried valley, and can reach a thickness of up to 300 ft. in the vicinity of the Evergreen Manor site (IDENR, 1960).

Bedrock Geology

The bedrock geology in the vicinity of the Evergreen Manor site is characterized by the Ordovician and Cambrian clastic and carbonate rocks. Both the Galena and Platteville dolomite, and the underlying Ancell Groups represent the Ordovician Period in this area. The Ancell Group consists of the Glenwood formation, a sandy shale, and the underlying St. Peter sandstone, a well-sorted sandstone up to 400 ft thick. The ancient Rock River eroded the Galena and Platteville dolomite, and the Glenwood formation, and carved its valley into the St. Peter sandstone (Colten and Breen, 1986).

The Cambrian rocks are dominated by sandstones with lesser thicknesses of shale and dolomite. The Potosi (dolomite) and Franconia (sandy shale) formations lie on top of the Ironton-Galesville sandstone and separate it from the Ordovician rocks. The Ironton-Galesville sandstone has a thickness of up to 170 ft. The thickness of underlying Eau Claire Formation may reach up to 450 ft, and the Mt. Simon sandstone below can reach up to 1600 ft in thickness.

The sedimentary bedrock units in the vicinity of the Evergreen Manor site were deposited on an irregular surface of metamorphic and igneous Precambrian rocks. Beneath the site, the Precambrian consists of a granite (Colten and Breen, 1986).

3.6 SURFICIAL SOIL

The predominant surficial soil type mapped for the site and the surrounding area is the Warsaw loam (USDA-NRCS, 1980). The Warsaw loam is a nearly level to gently sloping soil found on terraces, convex ridges, outwash plains, gravelly kames and stream terraces. Depending on the slope, the

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surface layer is about 10 to 12 inches thick and consists of a very dark gray to a very dark brown loam. The subsoil is from about 24 to 41 inches thick and consists of loam to gravelly loam and varies in color from dark grayish brown to brown to dark reddish brown. The substratum, to a depth of about 60 inches, consists of yellowish brown, calcareous sand and gravel. The permeability of the Warsaw loam is moderate to rapid, with moderate water capacity, and moderate organic matter content (USDA-NRCS, 1980).

Other soil types exist within the site area. Soil types located near the Rock River and Dry Creek are characterized by higher clay contents and moderate permeabilities. Other soil types, further from the water ways, are characterized by higher sand or sand and gravel contents and rapid permeability (USDA-NRCS, 1980).

3.7 REGIONAL HYDROGEOLOGY

The unconsolidated sand and gravel outwash deposits, the St. Peter, Ironton-Galesville, and Mt. Simon sandstones are the aquifers underlying the site. The sand and gravel outwash deposits have significant permeability and transmissivity and are the predominant local water source for private residences in the vicinity of the preglacial Rock River Valley. The typical lithology encountered during the field activities completed between 2000 and 2002 is depicted on Figure 3-1. This figure represents a cross-section adapted from the 2000 RI Report. Larger wells owned or used by municipalities or developments draw groundwater from both the bedrock aquifers and the shallower glacial drift formations.

The sand and gravel outwash is an unconfined aquifer with more uniform (i.e. better sorted) deposits at depth. Hydraulic conductivity test results were conducted within the shallow sand and gravel outwash aquifer in the 1980's by the Illinois Department of Energy and Natural Resources (IDENR). Pressure tests were conducted at four well clusters, at depths between 40 and 80 feet bgs, and an average hydraulic conductivity was found to be 3.8×10^{-2} cm/sec (Wehrmann, 1984).

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Using hydraulic conductivity estimates, groundwater gradient, and effective porosity estimates, an average linear flow velocity for groundwater in the shallow sand and gravel outwash aquifer was estimated in accordance with Darcy's Law as follows:

$$v = \frac{Ki}{n_e}$$

Where:

v	=	Linear groundwater seepage velocity (cm/sec)
K	=	Hydraulic conductivity (cm/sec)
i	=	Horizontal hydraulic gradient (ft/ft)
n_e	=	Effective porosity

Using a hydraulic conductivity value of 3.8×10^{-2} cm/sec, a gradient of 0.0015 ft/ft, and an estimated effective porosity of 30% for sand and gravel mixtures (Fetter, 1994), an average linear groundwater flow velocity of 1.9×10^{-4} cm/sec (0.54 ft/day) was estimated.

According to the IEPA's Hazard Ranking System Documentation Record (IEPA, 1997), the Galena and Platteville dolomite is a regional aquitard with an estimated hydraulic conductivity of 1×10^{-8} to 1×10^{-11} cm/sec (IEPA, 1997). However, Colten and Breen (1986) recognize the Galena-Platteville as a regional aquifer of importance for small-demand, rural domestic and livestock water supply. In addition, the U.S. EPA site geologist has noted that based on experience, in north-central Illinois, it is more appropriate to consider the Galena-Platteville dolomite a residential water-supply aquifer rather than an aquitard, and that the hydraulic conductivity reported values cited above for the Galena-Platteville are on the low side for this area. However, since most of the flow in the dolomite is through vertically oriented fracture and joint systems (Colten and Breen, 1986), the hydraulic conductivity may vary depending of the amount of fractures and the presence of joint-sets.

The Glenwood formation, consisting of shale overlying a poorly sorted sandstone, has an estimated hydraulic conductivity of 1×10^{-4} to 1×10^{-7} cm/sec (IEPA, 1997).

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The St. Peter sandstone aquifer underlies the Galena-Platteville aquifer/aquitard and the Glenwood semi-confining unit, except along the axis of the Rock River buried valley, where the overlying bedrock has been removed by erosion. The St. Peter sandstone has an estimated hydraulic conductivity of $1x10^{-4}$ cm/sec and is widely used as a water source in Winnebago County (IEPA, 1997).

The Ironton-Galesville sandstone is a regionally confined unit and a very productive aquifer. However, due to its depth, few wells are finished in the Ironton-Galesville sandstone (Colten and Breen, 1986). The same holds true for the Mt. Simon sandstone, which can reach a thickness of 1,600 feet, and overlies the Precambrian granite.

3.8 SITE HYDROGEOLOGY

The shallow hydrogeology in the vicinity of the Evergreen Manor site is that of an extensive unconfined sand and gravel outwash aquifer (mostly Henry and Glasford formations). Groundwater elevations were measured to be consistent in the shallow and deep cluster wells, and varied in elevation from 710 to 731 feet above mean sea level (MSL) during the April 2002 Investigation. Groundwater flow at the site is from the northeast to the southwest toward the Rock River as shown on Figure 3-2. The Rock River is presumed to be the groundwater discharge location for the shallow sand and gravel aquifer. The gradient across the site is fairly uniform, and based on the contours shown on Figure 3-2, is approximately 0.0015 ft/ft.

The Galena and Platteville dolomite and the Glenwood formation are not present beneath the Evergreen Manor site due to the ancient Rock River carving its valley into the St. Peter Sandstone. From the NPPWD well logs, it is inferred that in the vicinity of the Evergreen Manor site, the glacial outwash aquifer lies directly on top of the St. Peter Sandstone, which is underlain by the Potosi (or Trepealeau) formation.

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3.9 REGIONAL SURFACE WATER HYDROLOGY

The Evergreen Manor site lies in the Lower Rock River drainage basin. The Rock River originates in Wisconsin and enters Illinois south of Beloit. In Illinois, the Rock flows in a southwesterly direction to its confluence with the Mississippi at Rock Island. In the vicinity of the site, the Rock River flows generally in a north to south direction. Two lakes, Pearl Lake and Victoria Lake, are located north of the site, west of Illinois Route 251. These lakes are former sand and gravel pits.

Dry Creek, a tributary of the Rock River, enters the river northwest of the Tresemer Subdivision and is the only drainage-way that traverses a portion of the site and ultimately flows into the Rock River in the Hononegah Forest Preserve. The Rock River is the southern boundary of the site. In Rockton, the mean daily discharge of the Rock River ranges from 2839 cubic feet per second (cfs) in September to 7375 cfs in April, with an annual mean of 4178 cfs (USGS, CD-ROM, Current Year Discharge, http://www.il.water.usgs.gov/cd04-99/dis_tbl/05437500.htm). Because of the permeable nature of the sand and gravel outwash deposits underlying the site, most of the precipitation is expected to infiltrate into the subsurface and percolate to the groundwater table. However, Dry Creek will also receive surface runoff during wet periods, when rainwater ponds, or during heavy rainfall. The staff gauge reading from the 6 June 2000 RI indicated that the water level in Dry Creek was approximately 11 feet higher than the water table elevation in the closest wells (MW-110S and D). Based on these readings, Dry Creek is not expected to be in direct hydraulic connection with the groundwater table at that location. Dry Creek was classified as a losing stream at the time of the 2000 RI, indicating that it would contribute water to the subsurface. However, since the channel bottom sediments are clay and silt rich, the amount of water that is lost from Dry Creek to the subsurface is expected to be minimal.

In the residential areas, primarily south of Hononegah Road, the surface drainage pattern has been somewhat altered by construction of roadways, driveways, and buildings. Although precipitation

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will percolate through the lawns in the residential area, a portion will be carried by the ditch system to the Rock River.

3.10 EVERGREEN MANOR SITE PLUME & GROUNDWATER USE

The Hononegah Heights, the Evergreen Manor, the Tresemer and the Old Farm subdivisions are part of Roscoe Township. Roscoe Township is located within the North Park Public Water District (NPPWD), however, not all residences within these subdivisions receive their water from the NPPWD. Prior to 1999, the residences within the subdivisions obtained their water from private residential wells. Based on limited well construction data available for review, these residential wells were completed within the shallow sand and gravel outwash deposits at average depths of 55 to 65 feet bgs, with depths ranging from 43 feet to 105 feet bgs. An inventory of the residential wells, derived from the Hazard Ranking System Documentation Record (IEPA, 1997), is included as Appendix D. Upon discovering the presence of the VOC-affected groundwater contained in the shallow aquifer related to the Evergreen Manor site and Warner Electric RCRA site, U.S. EPA connected many of the residences in the area to the NPPWD water supply system, and abandoned the existing private wells at these homes. The boundaries of the Evergreen Manor site have been established using the groundwater data collected 1990 through 2002. The site boundary as interpreted based on the maximum extent of VOCs detected from 1990 through 2002 is depicted in Figure 1-2.

Between 1999 and 2000, the U.S. EPA connected a total of 262 residences located within the Evergreen Manor site to the NPPWD water supply. In addition, 19 of 21 homes included in a "buffer zone" were connected to the NPPWD water supply as a precaution. These residences are depicted on Figure 3-3. It should be noted, however, that due to the uncertainties associated with the exact addresses, not all residences connected to the NPPWD are shown on this figure. A list of the residential owners that are currently served by the NPPWD is included in Appendix E. At the request of the current landowners, two homes located within the southern perimeter of the "buffer

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zone" were not connected to the NPPWD water supply. As shown in Figure 3-3, these two residences (one on Valentine Court and one just east of the plume on Cedarbrook Road) are located outside the eastern boundary of the contamination plume. In May 2001, five residences located adjacent to the contamination plume, including one which had previously declined to be connected to the NPPWD water supply (on Valentine Court), were sampled by the IDPH. The results of this sampling indicated that the groundwater in the vicinity of these residences has remained unaffected by the site contamination. Documentation from the IDPH concerning sampling of these five additional residences and the two residences which declined sampling are included in Appendix F. Upon review of the NPPWD service records, it is apparent that additional residences and/or commercial properties within the vicinity of the Evergreen Manor Site may be using private wells for potable water. These locations are depicted on Figure 3-4.

To reduce the likelihood of exposure to the contaminated groundwater beneath the Evergreen Manor site, Winnebago County has implemented an ordinance that requires all residences to be connected to a public water supply system if they are within 200-feet of a system. In addition, the county requires property owners to obtain well permits for new or existing well repairs. This permit provides the county the opportunity to notify the applicant about the location of a contamination plume and provide recommendations for additional water treatment, as well as require new wells to be drilled to depths believed to be beneath a contamination plume. A copy of the Winnebago County Ordinance is contained in Appendix G.

Two municipal wells (#6 and #6A) that provide a portion of the water to the NPPWD are located at the corner of Hononegah Road and Cedarbrook Road (Figure 3-3). These wells are installed to a depth of 780 feet bgs. These wells are currently on "standby" status and are only used during periods of peak demand (e.g., summertime or drought conditions). Although well construction details indicate these wells were cased to a depth of 550 feet bgs, recent downhole logging efforts conducted in November 2002 on Well #6 by U.S. EPA show that this well is only cased to 450 feet bgs. Therefore, groundwater is withdrawn from a depth of approximately 450 feet to 780 feet bgs

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primarily from the Ironton-Galesville Sandstone. Well construction details indicate these wells are outfitted with 60-hp Byron-Jackson submersible pumping equipment rated at 470 gallons per minute (gpm). Pump tests conducted on Well #6A in November 2002 by the U.S. EPA indicate that the average pumping rates for this well were between 380 and 410 gpm.

PCE has been intermittently and inconsistently detected above the MCL of 5 μg/L in these municipal wells since 1985. U.S. EPA investigations have shown that a PCE-based coating material was apparently used on piping within this well during construction and is likely responsible for contaminant levels observed in this well. Sampling results from these wells are discussed in more detail in Sections 4 and 5.

The NPPWD owns and operates six wells within its distribution system, including Wells #6 and #6A. The remaining four wells are installed within shallow sand and gravel deposits, but are located three to six miles from the Evergreen Manor groundwater contamination site; and therefore, do not appear to be threatened by the groundwater plume.

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SECTION 4

INVESTIGATION RESULTS

This section summarizes the field and analytical results obtained from the assessments and investigations conducted at the Evergreen Manor site between 1990 to 2002. As described, these assessments have focused on the characterization and delineation of the VOC contaminated groundwater beneath the Evergreen Manor site, and the associated risks to human health and the environment. In addition to the groundwater assessments, a limited soil gas investigation was conducted to evaluate the groundwater to ambient air migration pathway. Due to the large quantity of data and information gathered between 1990 and 2002, three specific time frames were developed to present data results and associated results discussions efficiently. These time frames are as follows:

- Data gathered between 1990 and 1993. These data represent the period following initial discovery of groundwater contamination and subsequent IEPA and IDPH residential well sampling programs.
- Data gathered between 1994 and 1999. These data represent the period where more focused investigations took place including residential well sampling and monitoring well installation and sampling; and preceded the connection of the affected residences to the NPPWD water supply system.
- Data gathered between 2000 and 2002. These data represent more recent U.S. EPA investigations including the RI and the subsequent focused air and groundwater investigations.

IDPH residential well TCE results (sorted by address) from the time period 1990 through 1999 are presented in Appendix G. Some of the residential addresses listed in the IDPH data did not match the parcel information provided by the Winnebago County and are included in a separate table in Appendix G.

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4.1 RESIDENTIAL WELL SAMPLING 1990 THROUGH 1993

As previously described, upon discovery of the VOC contaminated groundwater at the site, the IDPH and IEPA completed residential well sampling activities at numerous residences between McCurry Road and the Rock River, as well as scattered residences in the less populated areas east and west of Route 251 and along Rockton Road. The location of the residential wells sampled between 1990 and 1993 is depicted on Figures 4-1 and 4-2. Prior to 1994, no permanent groundwater monitoring wells were present at the Evergreen Manor site. As a result, all of the groundwater chemistry data available prior to 1994 were obtained strictly from residential wells. A copy of IDPH residential well sampling inventory collected between 1990 and 1999 is included as Appendix H.

Based on a review of the available residential well analytical data, it appears that groundwater samples were analyzed for a limited set of VOCs and that PCE and TCE are the two main constituents of concern. Based on the toxicity and frequency of detection of PCE and TCE, the figures and discussion associated with the 1990 to 1993 period focus on these two compounds. It is important to note that the analytical data provided by the IDPH and the IEPA were incomplete in that the data did not always include results for PCE when TCE results were reported. As a result, it is not known whether the absence of analytical results for PCE represent non-detections, or that PCE was not analyzed, and therefore not reported.

As shown on Figure 4-1, the highest concentrations of TCE were reported at sample locations bounded by Mathew Avenue to the north, Blue Spruce Drive to the east, Straw Lane to the south, and Wagon Lane to the west. The maximum TCE concentration reported was 91 µg/L and was collected from a residential well located near Blue Spruce Drive and Straw Lane. As shown on Figure 4-2, the maximum PCE concentration reported during this same time frame was 5.8 µg/L and was collected from a home on Mathew Avenue.

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4.2 GROUNDWATER SAMPLING 1994 TO 1999

To further define the extent of the VOC contaminated groundwater at the Evergreen Manor site, IEPA installed and sampled additional groundwater monitoring locations between 1994 and 1996. The location of the residential and monitoring wells sampled between 1994 and 1999 are depicted on Figure 4-3. As shown, the new groundwater monitoring wells are primarily situated north of McCurry Road and in the vicinity of the suspected source area adjacent to Rockton Road and Route 251.

As shown in Figure 4-3, TCE was reported in groundwater samples collected from monitoring locations as far north as monitoring well MW-112 (detected once in 1995 at 2 µg/L) north of Rockton Road in the suspected source area. The maximum TCE concentration detected during this time frame was 26 µg/L. It was reported in a residential well located near Blue Spruce and Straw Lane. The maximum TCE concentration of 15 µg/L was detected in monitoring well MW-105D.

Due to the expanded monitoring network that was installed during the 1994 to 1999 time frame, additional PCE data were obtained. As shown on Figure 4-3, the maximum PCE concentration of 40 µg/L was reported in a groundwater sample collected from monitoring well MW-103S (screened from 732 to 722 feet above mean sea level). The highest PCE concentration reported in the adjacent monitoring well MW-103D (screened from 719 to 709 feet amsl) was 1 µg/L. PCE was also reported at elevated concentrations in the groundwater samples collected from monitoring wells MW-109D (screened from 706 to 696 feet amsl) and MW-105S (screened from 700 to 690 feet amsl) at 7 µg/L and 6µg/L, respectively.

In addition to the TCE and PCE that were reported in the groundwater samples collected between 1994 to 1999, several other chlorinated VOCs were reported in the groundwater samples collected from the permanent monitoring wells throughout the Evergreen Manor site. The location of the sampling points and the maximum concentrations reported for these additional VOCs are presented

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in Figure 4-4 and discussed below.

1,1,1-Trichloroethane (1,1,1-TCA)

The compound 1,1,1-TCA was reported in the groundwater samples collected from the following monitoring wells between 1994 and 1995:

- MW-103S at a maximum concentration of 5.7 µg/L.
- MW-103D at a maximum concentration of 16 µg/L.
- MW-104S at a maximum concentration of 12 µg/L.
- MW-104D at a maximum concentration of 9 µg/L.
- MW-105S at a maximum concentration of 7.5 µg/L.
- MW-105D at a maximum concentration of 9 µg/L.
- MW-106S at a maximum concentration of 1 µg/L.
- MW-106D at a maximum concentration of 2 µg/L.
- MW-107S at a maximum concentration of 0.5 µg/L.
- MW-107D at a maximum concentration of 8.8 µg/L.
- MW-108S at a maximum concentration of 1 µg/L.
- MW-108D at a maximum concentration of 9 µg/L.
- MW-109S at a maximum concentration of 2 µg/L .
- MW-109D at a maximum concentration of 9.5 µg/L.
- MW-110S at a maximum concentration of 4 µg/L.
- MW-114 at a maximum concentration of 3 µg/L.

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

The compound 1,1-DCA was reported in the groundwater samples collected from the following monitoring wells between 1994 and 1995:

- MW-105S at a maximum concentration of 0.7 µg/L.
- MW-105D at a maximum concentration of 1.1 µg/L.
- MW-108D at a maximum concentration of 2.2 µg/L.
- MW-109D at a maximum concentration of 0.7 J µg/L.

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1,1-Dichloroethene (1,1-DCE)

The compound 1,1-DCE was reported in the groundwater samples collected from the following monitoring wells between 1994 and 1995:

- MW-104S at a maximum concentration of 2 µg/L.
- MW-104D at a maximum concentration of 1 µg/L.
- MW-105S at a maximum concentration of 0.8 µg/L.
- MW-105D at a maximum concentration of 1 µg/L.
- MW-107D at a maximum concentration of 0.7 µg/L.
- MW-108D at a maximum concentration of 0.5 µg/L.
- MW-109D at a maximum concentration of 0.8 µg/L.
- MW-110S at a maximum concentration of 0.5 µg/L.

Cis-1,2-dichloroethene (Cis-1,2-DCE)

The compound cis-1,2-DCE was reported in the groundwater samples collected from the following monitoring wells between 1994 and 1995:

- MW-105S at a maximum concentration of 4.7 µg/L.
- MW-105D at a maximum concentration of 5.7 µg/L.
- MW-106D at a maximum concentration of 0.6 J µg/L.
- MW-108D at a maximum concentration of 2.5 µg/L.
- MW-109S at a maximum concentration of 4 µg/L.
- MW-109D at a maximum concentration of 0.7 J µg/L.

4.3 GROUNDWATER SAMPLING 2000 TO 2002

During the 2000 RI activities, a total of 13 CPT borings were completed throughout the Evergreen Manor site and 72 groundwater samples from 10 CPT locations were collected from multiple depths to provide additional vertical VOC contaminant distribution information. In addition, a total of 15 existing monitoring wells and 22 residential wells were sampled during the 2000 RI activities. All groundwater samples were analyzed for VOCs. Eight of the samples, primarily from the deep wells,

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were also analyzed for water quality parameters. The water quality parameters included ammonia, COD, nitrate, nitrite, orthophosphate, sulfate, sulfide, and Fe^{+3}. Each sample was analyzed in the field for dissolved oxygen, oxidation-reduction potential, and Fe^{+2}. A summary of VOC analytical results obtained during the 2000 RI is presented in Appendix I.

During the 2002 investigation, a total of 15 monitoring wells were sampled from 3 April through 16 April 2002. A total of four duplicate samples and two MS and MS duplicates were collected. Seven trip blanks and three field blanks were collected for QA/QC purposes. As part of the April 2002 Investigation, three additional permanent monitoring wells (MW-01A, MW-02, and MW-03) were constructed and sampled for VOCs within the residential area south of Hononegah Road. In addition to the monitoring wells sampled, two NPPWD municipal water supply wells (#6 and #6A) were sampled and analyzed for VOCs. A summary of analytical results obtained during the 2002 investigation is presented in Appendix J Boring logs and field logbook notes for the 2002 investigation are contained in Appendix K. Laboratory data for samples collected during the 2002 investigation are contained in Appendix L.

The location of the residential wells, monitoring wells, municipal wells, and temporary CPT sampling locations sampled between 2000 and 2002 are depicted on Figures 4-5 and 4-6. As shown in these two figures, TCE and PCE were reported at several sampling locations during the 2000 to 2002 sampling events. In 2000, TCE was detected in all eight samples from temporary sampling location CPT-01 (29, 39, 49, 59, 69, 79, 89, and 99 ft bgs) at concentrations ranging from 2 to 4 µg/L. TCE was also detected in monitoring wells MW-101D, MW-105D and MW-105S at concentrations ranging from 2 to 3 µg/L and in residential wells RW-04, RW-07 and RW-19 at concentrations ranging from 0.7 to 6 µg/L. In 2002, TCE was detected in samples collected from monitoring wells MW-105D, MW-105S, MW-105S Duplicate, MW-01A, MW-01A Duplicate, MW-03, MW-104S, MW-104S Duplicate, MW-101D, MW-101S, and MW-109D. Results from the 2000 to 2002 time frame indicate that TCE concentrations ranged from 0.18 µg/L (MW-104S) to 7.2 µg/L (MW-03). The highest TCE concentration was observed in a sample collected from

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monitoring well MW-03 (7.2 µg/L) in 2002.

During the 2000 RI, PCE was detected in sample CPT-10-04 (55 ft bgs) and its duplicate at a concentration of 0.6 µg/L and in sample CPT-10-02 (36 ft bgs) at a concentration of 0.9 µg/L. PCE was also detected in eight samples collected from monitoring wells MW-103D, MW-103S, MW-105D, MW-105S and MW-108D at concentrations ranging from 0.5 to 9 µg/L and in residential wells RW-04 and RW-19 at a concentration of 2 µg/L and 0.9 µg/L, respectively. During the 2002 investigation, PCE was detected in samples collected from monitoring wells MW-109D, MW-109S, MW-104D, MW-104S, MW-104S Duplicate, MW-107D, MW-107S, MW-01A, MW-01A Duplicate, MW-03, MW-105S, MW-105S Duplicate, MW-105D, and MW-103S. PCE concentrations ranged from 0.1 µg/L to 5.9 µg/L. Results from the 2000 to 2002 time frame reported highest levels of PCE in groundwater samples collected from monitoring well MW-103S (9 µg/L) in 2000.

Chloroform was detected at a concentration of 0.23 µg/L in the sample collected from monitoring well MW-02 during the 2002 investigation. Chloroform was also detected at a concentration of 0.9 µg/L in the residential well (estimated depth of 55 to 65 feet bgs) located near Wagon Lane and Straw Lane during the 2000 RI.

The groundwater samples collected in 2002 from the two municipal water supply wells (#6 and #6A) indicated the presence of PCE at concentrations ranging from 0.23 µ/L to 0.61 µg/L, however as will be discussed in more detail in Section 5, a separate U.S. EPA investigation of these two supply wells (WESTON, 2003b) indicated that the interior and exterior surfaces of well piping used during the construction of the wells were treated with a PCE-based coating material for corrosion protection.

The previous discussion has focused on TCE, PCE, and chloroform, however 12 other VOCs were reported in the groundwater samples collected during the 2000 to 2002 time frame. These constituent concentrations are presented in Figures 4-4 and 4-7, and are discussed below.

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Acetone

During the 2000 RI, acetone was reported in 18 of the groundwater samples collected from CPT locations, and in two samples collected from the residential wells. These concentrations ranged from 470 µg/L in CPT-02 (42 ft bgs) to 0.6 µg/L in a sample collected from a residential well located on Straw Lane. Acetone was not reported in any of the groundwater samples collected during the April 2002 Investigation.

Methylene Chloride

During the 2000 RI, methylene chloride was reported at a concentration of 0.5 µg/L in one groundwater sample collected from CPT-03 (84 ft bgs).

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

During the 2000 RI activities, 1,1-DCA was reported in the groundwater sample collected from CPT-11 (93 ft bgs). This location is located south of the apparent source area. No other 1,1-DCA was reported in the groundwater samples collected as part of the 2000 RI. 1,1-DCA was reported in several groundwater samples collected during the April 2002 Investigation. Results of groundwater samples from monitoring wells MW-01A, MW-03, MW-105S, and MW-105D reported 1,1-DCA concentrations ranging from 0.19 to 0.39 µg/L. These sample locations are situated along the southern boundary of the site and just north of Mathew Avenue.

1,1-Dichloroethene (1,1-DCE)

During the April 2002 Investigation, 1,1-DCE was reported in the groundwater samples collected from monitoring wells MW-01A and MW-03 at concentrations ranging from 0.16 µg/L to 0.2 µg/L. These two monitoring wells are located along the southern boundary of the Evergreen Manor site.

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1,1-DCE was not reported in any of the samples collected during the 2000 RI.

2-Butanone

One groundwater sample collected as part of the 2000 RI from CPT-05 (78 ft bgs) was reported with 2-butanone at a concentration of 16 µg/L. 2-Butanone was not reported in any of the groundwater samples collected during the April 2002 Investigation.

Cis-1,2-dichloroethene (Cis-1,2-DCE)

During the 2000 RI, the compound cis-1,2-DCE was reported in groundwater samples collected from CPT-01 (49, 59, 69, 79, and 89 ft bgs), monitoring wells MW-105S and MW-105D, and one residential well. The cis-1,2-DCE concentrations reported during this period ranged from 1 µg/L to 2 µg/L. Cis-1,2-DCE concentrations were also reported in groundwater samples collected from monitoring wells MW-01A, MW-03, MW-105S, and MW-105D in 2002. Cis-1,2-DCE concentrations ranged from 0.16 µg/L to 0.2 µg/L.

1,1,1-Trichloroethane (1,1,1-TCA)

During the 2000 RI, the compound 1,1,1-TCA was reported in groundwater samples collected from the following locations:

- CPT-01 (39, 59, 69, 79, and 89ft bgs), CPT-03 (54, 6892 and 102 ft bgs), CPT-10 (36, 55 and 65 ft bgs), and CPT-11 (70, 93, 102, and 125 ft bgs) (0.7 µg/L to 3 µg/L)
- MW-103D, MW-104S, MW-104D MW-105S, MW-105D, and MW-112 (1 µg/L to 3 µg/L)
- Residential wells located near Blue Spruce Drive and Straw (two wells), Wagon Lane and Straw Lane (two wells), Wagon Lane and Wagon Lane Court (one well), and Tresemer and Valerie Drive (one well) (1 µg/L to 5 µg/L).

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During the 2002 Investigation, 1,1,1-TCA was reported in groundwater samples collected from monitoring wells MW-01A, MW-02, MW-03, MW-103S, MW-103D, MW-104S, MW-104D MW-105S, MW-105D, and MW-109D. Reported concentrations in these wells ranged from 0.29 µg/L to 2.4 µg/L.

Benzene, Toluene, Ethylbenzene, and total Xylenes (BTEX)

BTEX constituents were reported in several of the groundwater samples collected during the 2000 RI activities. The location and concentrations reported are as follows:

- Benzene was detected in samples collected from CPT-09 (two samples at 35 and 88 ft bgs), and CPT-12 (duplicate sample at 81 ft bgs) at concentrations of 0.5 µg/L and 0.6 µg/L, respectively.
- During the 2000 RI, toluene was detected in 75 samples collected from CPT sampling locations and 9 samples collected from residential well locations at concentrations ranging from 0.5 to 3 µg/L. Toluene was also detected in method and field blanks at concentrations of up to 2 µg/L in samples collected during the 2000 RI. Toluene was not reported in groundwater sample collected during the 2002 Investigation.
- Ethylbenzene was detected in a sample collected from CPT-09 (88 ft bgs) at a concentration of 0.6 µg/L.
- Xylenes were detected in samples collected from CPT-02 (three samples at 34, 34 and 84 ft bgs), CPT-06 (35 ft bgs), CPT-09 (88 ft bgs), and CPT-11 (45 ft bgs) at concentrations ranging from 0.5 µg/L to 0.7 µg/L.

Freon 113

During the 2000 RI, the compound Freon 113 was reported in groundwater samples collected from monitoring wells MW-103S and MW-103D (and the duplicate sample) at concentrations ranging from 2 µg/L to 300 µg/L. During the 2002 Investigations, Freon 113 was reported in groundwater

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samples collected from monitoring wells MW-103D and MW-107D at a concentration of 30 µg/L and 6.7 µg/L, respectively.

4.4 SEDIMENT AND SURFACE WATER SAMPLING 2000 TO 2002

During both the 2000 RI and April 2002 Investigation, sediment and surface water samples were collected from the Rock River. The 2000 RI also included sediment and surface water sampling from Dry Creek. The location of the sediment and surface water samples collected during both investigations is depicted in Figure 4-8. The location and concentrations of constituents reported during the two investigations are discussed in the following text.

During the 2000 RI, benzene and toluene were reported in the sediment sample collected from location SED-4, a background sample, at 2 µg/kg and 0.7 µg/kg, respectively. Chloroform and methyl acetate were both detected in the sample collected from sampling location SED-1 at concentrations of 8 µg/kg and 5 µg/kg, respectively. Methyl acetate was also reported in samples SED-2 and SED-5 at a concentration of 9 µg/kg. No VOCs were reported at concentrations above the method detection limits in the associated surface water samples. The sediment sampling data obtained during the 2000 RI are shown in Figure 4-8.

During the 2002 Investigation, a total of eight sediment and surface water samples were collected from locations along the Rock River and analyzed for VOCs. Three VOCs were reported in the sediment samples at concentrations above the method detection limits. Freon 113 was reported in the sediment samples collected from locations SD-01 and SD-02 at a concentration of 8 µg/kg and 2 µg/kg, respectively. Toluene was detected at a concentration of 4 µg/kg in the sample collected from sediment sampling location SD-06. In addition, 2-butanone was detected in the sediment sample collected from SD-04 at a concentration of 3 µg/kg. No VOCs were reported at concentrations above the laboratory reporting limits in the associated surface water samples. The sediment sampling data obtained during the 2002 Investigation are shown in Figure 4-8.

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4.5 SOIL GAS SAMPLING

As described in Section 2, a limited soil gas investigation was conducted in the vicinity of four residences within the Evergreen Manor site. These residences included a home on Mathew Avenue, one near Wagon Lane and Wagon Lane Court, one near Spruce Drive and Straw Lane, and one near Wagon Lane and Tanawingo. Soil gas samples were collected to evaluate the potential of VOCs migrating from the contaminated groundwater plume into the soil in the immediate vicinity of the residences under consideration. Specifically, these soil gas samples were collected from the area around the residences to determine the characteristics of the air migrating through the soil and possibly into each home. Four soil gas samples were collected from each side of the target residences. A Geoprobe® was used to collect soil gas samples from a depth of approximately 8 to 9 feet below ground surface (bgs). The samples were collected approximately 10 feet away from the external walls of the residences and close to the center of each side of the residence. Additional discussions on the soil gas and indoor air sampling activities can be found in Air Sampling Report, Revision 3 (WESTON, 2003a).

The maximum TCE and PCE concentrations reported in soil gas samples and associated "risk levels" are presented in Figure 4-9. Figure 4-9 also shows historical TCE and PCE concentrations (1990 through 2002) observed in groundwater samples collected from nearby residential and monitoring wells. As shown in the figure, the highest PCE and TCE concentrations of 190 $\mu g/m^3$ and 9.5 $\mu g/m^3$, respectively, were reported in the soil gas sample collected from the residence located near Wagon Lane and Wagon Lane Court. This residence is located in the central-western portion of the groundwater plume, where, historically, PCE and TCE concentrations in the residential wells have been either non-detect or detected at concentrations below the drinking water standards. The maximum groundwater TCE concentration detected in the immediate vicinity of Wagon Lane and Wagon Lane Court was 5 $\mu g/L$ (in 1993). No PCE detection has ever been reported in this area of the groundwater plume. Figure 4-9 also shows PCE and TCE concentrations in soil gas samples at much lower levels in the southern and central residential areas of the plume and no TCE and only

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very low PCE levels in soil gas samples collected from the northern residential area of the plume. The southern, the central and the northern portions of the plume lie in areas where, historically, high TCE concentrations have been reported in groundwater samples. In most instances, PCE concentrations in groundwater samples collected from these areas have been either non-detect or detected at concentrations below the drinking water standards. Historically, PCE levels in groundwater samples collected from the northern residential areas have exceeded the drinking water standard only twice, once during the 1990-1993 time period and once during the 1994-1999 time period.

In addition to TCE and PCE, several other chlorinated constituents were reported in the soil gas samples collected during the air sampling event. These constituents included 1,1,1-TCA, cis-1,2-DCE, Freon 113, methylene chloride, and chloroform. Soil gas and groundwater results for these constituents are presented on Figure 4-10. Of the constituents detected, only methylene chloride and chloroform were identified as constituents of potential concern (COPCs) during the evaluation of the air sampling results (WESTON, 2003a).

Chloroform was detected at a maximum concentration of 6 $\mu g/m^3$ in the soil gas sample collected from a residence near Straw Lane and Blue Spruce Drive. However, the area near the residence is not historically associated with chloroform detection in groundwater. Historically, chloroform has been only detected in groundwater samples collected from a home near Wagon Lane and Straw Lane (in 2000) and monitoring well MW-02 (in 2002) at concentrations of 0.9 and 0.23 $\mu g/L$, respectively. As shown on Figure 4-10, these groundwater sampling locations are much closer to a home near Wagon Lane and Wagon Lane Court, where significantly lower chloroform concentrations were observed in the soil gas samples.

The maximum methylene chloride concentration was found in the soil gas sample collected from a residence located near Wagon Lane and Wagon Lane Court. Historically, methylene chloride has been found only once in a groundwater sample collected from a temporary sampling location (CPT-

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03 at 83.5 to 84 ft bgs) at a concentration of 0.5 μg/L. Again, as shown on Figure 4-10, methylene chloride was not detected in groundwater underneath the area of the residence with the highest chloroform concentration in soil gas.

The soil gas samples also indicated the presence of several non-chlorinated VOCs, such as 2-butanone, acetone, benzene, ethylbenzene, xylenes and toluene. The results of soil gas sampling and historical groundwater detections of these compounds are presented on Figure 4-11. During the evaluation of air sampling results, benzene and ethylbenzene were identified as COPCs (WESTON, 2003a). The maximum benzene concentration of 31 $\mu g/m^3$ was found in a soil gas sample collected from a residence on Mathew Avenue, which is located in the northern part of the residential subdivisions. As shown on Figure 4-11, historically, benzene has not been detected in groundwater within the residential subdivisions. Benzene has been detected in groundwater samples collected from two locations during the past investigations. In 2000, benzene was detected in the samples collected from CPT-12 (80.5 to 81 ft bgs) and CPT-09 (34.5 to 35 ft bgs and 87.5 to 88 ft bgs). The maximum concentration of 0.6 μg/L was detected in the sample collected from CPT-09 (87.5 to 88 ft bgs). Benzene has not been detected in any of the samples collected in the close vicinity of a residence on Mathew Avenue.

The highest ethylbenzene concentration of 41 $\mu g/m^3$ was detected in the soil gas sample collected from a residence on Mathew Avenue. In groundwater, ethylbenzene was detected at a concentration of 0.6 μg/L in only one sample collected from CPT-09 (87.5 to 88 feet bgs), which is located approximately 600 feet north of the Mathew residence.

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SECTION 5

DATA EVALUATION

This section presents a detailed evaluation of the field and analytical results described in the previous section. The purpose of this evaluation is to assemble the data obtained from 1990 through 2002 to provide a historical overview of the contaminant distribution and identify trends, if any (i.e., evaluate the nature and determine the horizontal and vertical extent of VOCs in groundwater through time by combining all available data and information). The result of this evaluation is a site conceptual model which provides an understanding of how the plume has developed and been documented through time. These results are used to determine whether the current site boundary has been defined adequately with respect to lateral and vertical extent of contamination, provide a basis for discussion of data gaps and uncertainties (discussed in Section 6), and evaluate whether the current groundwater monitoring network is suitable for monitoring the horizontal and vertical extent of the plume over time.

5.1 EVALUATION CRITERIA

For the purposes of this evaluation, the groundwater analytical results (monitoring well and residential well data) were compared to the following criteria:

1. MCLs for drinking water established under the Safe Drinking Water Act (40 CFR 141.61 - MCLs for Organic Contaminants).

2. IEPA Tier 1 Groundwater Remediation Objectives [Table E in Appendix B of Title 35, Environmental Protection, Part 742, Tiered Approach to Corrective Action Objectives (TACO)] values.

3. Lowest available U.S. EPA Ecotox Thresholds.

4. Most conservative Water Quality Criteria and Guidelines for the Protection of Aquatic Life (WQCAL) obtained from *the Compendium of Environmental Quality Benchmarks* published by Environment Canada.

Analytical results for sediments were compared to the following criteria:

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a. U. S. EPA Region IX Risk-based Criteria based on soil standards for residential properties.

b. IEPA Tier I Soil Remediation Objectives based on soil standards for inhalation and ingestion exposure route for residential properties.

c. Lowest available U.S. EPA Ecotox Thresholds.

d. Most conservative Sediment Quality Criteria and Guidelines for the Protection of Aquatic Life (SQCAL) obtained from *the Compendium of Environmental Quality Benchmarks* published by Environment Canada.

These four criteria and the corresponding values are presented in Table 5-1. It should be noted that the WQCAL values are intended to be used for the protection of aquatic life present in freshwater. Due to the apparent hydrologic connection between the contaminated shallow outwash aquifer beneath the Evergreen Manor site and the downgradient Rock River, this standard has been incorporated to evaluate whether groundwater contaminants discharging to the Rock River could adversely impact the river and warrant further study.

5.2 RESIDENTIAL WELL SAMPLING 1990 THROUGH 1993

The groundwater data that have been evaluated during this time frame consists of TCE and PCE residential well data reported by the IDPH and the IEPA. The MCL and TACO criteria for both TCE and PCE have been established at 5 µg/L. Many of the TCE and PCE concentrations reported in IDPH and IEPA data exceeded these two criteria. The maximum concentrations reported for TCE and PCE from each residence were mapped (Figures 4-1 and 4-2) to provide a view of the groundwater contamination plume during the 1990 to 1993 time frame. The varying contaminant concentrations presented were defined with iso-concentration lines and are presented in Figure 5-1. As shown, a plume of TCE and PCE contaminated groundwater that exceeds the MCLs was present within the Hononegah, Olde Farm, Evergreen Manor, and Tresemer subdivisions between 1990 and 1993. The highest levels, representing the apparent axis of the plume (indicated by TCE levels >25 µg/L) are located along a line extending from Mathew Avenue south along Blue Spruce, east of

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Hayloft, and extending nearly to the Rock River. Due to lack of data, the areas north of Mathew Avenue are only defined by sporadic residential well samples which generally indicated TCE concentrations below MCLs.

To evaluate the vertical extent and distribution of PCE and TCE, a series of cross-sections were developed parallel to the approximate axis of the contaminant plume. The location of this cross section in relation to the site is shown on Figure 5-2. A cross-sectional view of the Hononegah, Olde Farm, Evergreen Manor, and Tresemer subdivisions, depicting the estimated 1990 to1993 vertical extent of the TCE and PCE contamination plume is presented in Figure 5-3. As is shown on the cross-section, the vertical extent of the TCE and PCE must be inferred due to the limited amount of groundwater data available and lack of well depth information for residential wells. Using the average depth of the residential wells in this area, the approximate depth interval at which groundwater was drawn for domestic use has been depicted. However, this information reveals the overall uncertainty in the vertical extent of the VOC contamination as reported in the residential well samples collected between 1990 and 1993.

Cross-sections perpendicular (lateral) to the apparent plume axis were evaluated for inclusion in the report, but were not prepared due to the general lack of analytical data, accurate depth information, and the homogeneity of lithology across the site.

The southern boundary of the plume was defined using a basic hydrologic scenario whereby the groundwater contained within the sand and gravel outwash aquifer is confined to shallow/local flow systems that are influenced by the nearby Rock River. This scenario assumes that the shallow VOC contaminated groundwater flows towards the river, but does not flow beneath and beyond (to the south) the Rock River. This conceptual model assumes that the Rock River acts as a local groundwater discharge zone and vertical gradients are upward in the vicinity of the river. Although this conceptual model is consistent with general hydrogeologic principles and supported by the physical characteristics of the study area, site specific hydrologic data confirming these conditions

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have not been collected to date; therefore, there remains the possibility that an underflow condition is present.

5.3 GROUNDWATER SAMPLING 1994 TO 1999

To further define the extent of the VOC contaminated groundwater plume, additional groundwater monitoring wells were installed and sampled between 1994 and 1996. A majority of the monitoring wells were completed as nested pairs with screen intervals at varying depths to provide a more thorough vertical profile of the contaminant distribution. Groundwater sampling and analysis efforts were continued for the residential wells located within the Hononegah, Olde Farm, Evergreen Manor, and Tresemer subdivisions. Maximum concentrations reported for TCE and PCE from each residence and monitoring well have been mapped (Figure 5-4) to better define the plume boundaries as they existed between 1994 and 1999. Information provided by the sampling results obtained from the expanded monitoring network, indicated that the length of the plume was significantly larger than that shown between 1990 and 1993. This established that the apparent source of the VOC contamination was likely located in the industrial area around Rockton Road and Route 251.

As a result of the expanded monitoring network, additional PCE data were obtained to address the lack of PCE data from the previous reporting time period. As shown in Figures 4-3 and 5-4, elevated PCE concentrations (40 µg/L) were reported in the groundwater sample collected from monitoring well MW-103S (screened from 732 to 722 feet amsl). The highest PCE concentration reported in the adjacent monitoring well MW-103D (screened from 719 to 709 feet amsl) was 1 µg/L. PCE was also reported at concentrations that exceeded the MCL in the groundwater samples collected from monitoring wells MW-109D (screened from 706 to 696 feet amsl) and MW-105S (screened from 700 to 690 feet amsl).

The cross-sectional view of this area (Figure 5-5) shows an extensive zone of TCE contaminated groundwater that extends from north of Dry Creek to the south and into the Rock River. The

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groundwater in the vicinity of Blue Spruce Drive and Straw Lane was reported with a TCE concentration of 26 µg/L. This concentration is significantly lower than the earlier TCE detections that ranged from 50 to 75 µg/L in samples collected from this residential well in late 1990 to early 1991. In 1993, TCE concentrations in this well was reported to be 91 µg/L. Concentrations of PCE that exceed the MCL were reported on the north and south side of Dry Creek, however as shown in Figure 5-5, it appears that PCE is more prevalent and was reported at higher concentrations near monitoring well MW-103 (south of the Ecolab Facility). Despite the addition of the monitoring wells throughout the Evergreen Manor site, the vertical extent of the TCE and PCE contamination plume was not adequately defined during this time period.

The southern boundary of the plume has been defined using the same hydrologic scenario previously described. As a result, the VOC contaminated groundwater is shown to flow to the south and into the Rock River.

In addition to TCE and PCE, several other chlorinated constituents were reported in the groundwater samples collected from the permanent monitoring wells located throughout the Evergreen Manor site (as shown previously on Figure 4-4). These constituents, the distribution of concentrations, and an evaluation of the results with respect to the four regulatory criteria described above are presented below:

- 1,1,1-TCA was reported in the groundwater samples collected from monitoring wells between 1994 and 1995 at concentrations ranging from 0.5 to 16 µg/L. None of the 1,1,1-TCA concentrations reported between 1994 and 1995 exceed any of the 1,1,1-TCA evaluation criteria used in this report.

- 1,1-DCA was reported in the groundwater samples collected from monitoring wells between 1994 and 1995 at concentrations ranging from 0.7 to 2.2 µg/L. The evaluation criteria for 1,1-DCA include TACO (700 µg/L) and Ecotox (47 µg/L) values. The 1,1-DCA reported in these samples are significantly lower than either of these two criteria.

- 1,1-DCE was reported in the groundwater samples collected from monitoring wells

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between 1994 and 1995 at concentrations ranging from 0.5 to 2 µg/L. None of the 1,1-DCE reported exceeds the MCL or TACO value of 7 µg/L.

- Cis-1,2-DCE was reported in the groundwater samples collected from monitoring wells between 1994 and 1995 at concentrations ranging from 0.6 to 5.7 µg/L. None of the cis-1,2-DCE concentrations reported between 1994 and 1995 exceed the MCL or TACO value of 70 µg/L.

5.4 GROUNDWATER SAMPLING 2000 TO 2002

As part of the 2000 RI, a total of 72 groundwater samples were collected from 10 of 13 CPT locations from multiple depths, 15 existing monitoring wells, and 22 residential wells. Eight of the groundwater samples collected from the monitoring wells (primarily deep wells) were analyzed for water quality parameters that included ammonia, chemical oxygen demand (COD), nitrate, nitrite, orthophosphate, sulfate, and sulfide. Three of the residential well samples were also submitted for these same water quality parameters. These parameters were analyzed to evaluate whether conditions are appropriate for the natural attenuation of the VOC contaminants encountered at the Evergreen Manor site. As part of the April 2002 Investigation, three monitoring wells (MW-01A, MW-02, and MW-03) and two NPPWD municipal water supply wells (#6 and #6A) were sampled and analyzed for VOCs.

The analytical results obtained from the 2000 and 2002 sampling events were compared to the four evaluation criteria identified in Subsection 5.1, and are shown on Figures 5-6 and 5-7.

With the exception of chloroform, TCE and PCE were the only two constituents that were reported at concentrations that exceeded the evaluation criteria. The TCE and PCE results obtained from the residential wells, monitoring wells, municipal wells, and temporary CPT sampling locations indicate the presence of VOC groundwater concentrations that exceed the MCL, TACO, and WQCAL values. In particular, PCE was reported at concentrations that exceed the MCL, TACO, and WQCAL values in the groundwater sample collected from monitoring well MW-103S during the 2000 RI, while TCE was reported in only one location (residential well) at a concentration that exceeded the IEPA's Tier

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1 TACO values and the MCL. The 2000 RI groundwater data and a comparison of the data with the MCLs/TACO values and the Ecotox/WQCAL criteria are presented in Tables 5-2 and 5-3, respectively. The MCL exceedance zones for TCE and PCE are depicted on Figure 5-8. TCE was reported in several locations at concentrations that exceeded the WQCAL value of 1 µg/L, however as previously described, the WQCAL is a criteria for the protection of aquatic life and therefore does not consider the same risks as a drinking water standard such as the MCL. As shown on Figure 4-8, neither TCE nor PCE were detected in sediment or surface water samples collected from the Rock River along the estimated discharge zone. The results of sediment and surface water sampling are discussed in Section 5.6.

PCE has been associated with the Evergreen Manor groundwater at concentrations ranging from 0.6 to 9 µg/L in 2000 and 0.1 to 5.9 µg/L in 2002. During the 2000 and 2002 investigative efforts, the highest PCE concentration was observed in the samples collected from monitoring well MW-103S. TCE was detected at concentrations ranging from 0.7 to 6 µg/L in 2000, and 0.18 to 7.2 µg/L during 2002 Investigation. The highest TCE concentration was observed during the 2000 RI in samples collected from RW-04 (near Blue Spruce Drive and Straw Lane). In 2002, the highest concentration was observed in the sample collected from a newly installed monitoring well MW-03. During both the 2000 and the 2002 investigations, PCE and TCE concentrations reported in one or more samples at concentrations that exceeded the MCL, the TACO and the WQCAL values. From Figures 5-6 and 5-7, it is apparent that PCE concentrations in groundwater have declined from 2000 to 2002. Overall, TCE concentrations also appear to show a declining trend, except for part of subdivisions in the downgradient area, where an increase in TCE was observed between 2000 and 2002. This increase in TCE concentration is most likely due to the degradation of PCE into TCE.

As shown in the cross-sectional view (Figure 5-9), a zone of TCE contaminated groundwater that exceeds the MCL was present in the vicinity of monitoring well MW-03 in 2002. In addition, a zone of groundwater, where PCE was reported at concentrations exceeding the MCL, was present in the vicinity of monitoring well MW-103S. This well is located immediately south of the Ecolab facility.

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TCE and PCE were also detected in several soil gas samples from the residential areas of the groundwater plume. The maximum TCE and PCE concentrations reported in soil gas samples and associated "risk levels" are presented in Figure 4-9. Figure 4-9 also shows historical TCE and PCE concentrations (1990 through 2002) observed in groundwater samples collected from nearby residential and monitoring wells. The highest PCE and TCE concentrations of 190 $\mu g/m^3$ and 9.5 $\mu g/m^3$, respectively, were reported in a soil gas sample collected from the residence located near Wagon Lane and Wagon Lane Court. This residence is located in the central-western portion of the groundwater plume, where, historically, PCE and TCE concentrations in the residential wells have been either non-detect or detected at concentrations below the drinking water standards. The maximum groundwater TCE concentration detected in a residential well near Wagon Lane and Wagon Lane Court was 5 $\mu g/L$ (in 1993). No PCE detection has ever been reported in this area of the groundwater plume. PCE and TCE concentrations in soil gas samples were reported at much lower levels in the southern and central residential areas of the plume and no TCE and only very low PCE levels were reported in soil gas samples collected from the northern residential area of the plume. The southern, the central and the northern portions of the plume lie in areas where, historically, high TCE concentrations have been reported in groundwater samples. In most instances, PCE concentrations in groundwater samples collected from these areas have been either non-detect or detected at concentrations below the drinking water standards. Historically, PCE levels in groundwater samples collected from the northern residential areas have exceeded the drinking water standard only twice, once during the 1990-1993 time period and once during the 1994-1999 time period. TCE exceeded the most conservative target RBC in soil gas samples collected from the central, the west-central and the southern residential areas of the groundwater plume. PCE exceeded the most conservative target RBC in a soil gas sample collected from the west-central residential area of the groundwater plume.

A summary of the VOCs detected in the groundwater samples collected during the April 2002 Investigation and a comparison of VOC concentrations with the MCLs/TACO values and the Ecotox/WQCAL criteria is presented in Tables 5-4 and 5-5, respectively.

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During the 2000 RI, chloroform was detected at a concentration of 0.9 µg/L in a residential well RW-08 (near Wagon Lane and Straw Lane). Chloroform was also detected at a concentration of 0.23 µg/L in the groundwater sample collected from monitoring well MW-02 during the 2002 Investigation. In the former case, the chloroform concentration exceeded the corresponding TACO and WQCAL values of 0.2 µg/L and 0.6 µg/L, respectively, but was below the corresponding MCL of 100 µg/L. In the latter case, chloroform concentration barely exceeded the TACO value. It should be noted that monitoring well MW-02 was installed in 2002 to replace the abandoned RW-08. Monitoring well MW-02 is approximately 100 feet south of the former residential well RW-08. Chloroform was also detected in the soil gas samples. It exceeded the most conservative target RBC in soil gas samples collected from the central and southern residential areas of the groundwater plume. Historically, chloroform has not been detected in any other groundwater samples including any of the groundwater samples collected outside the residential area. This indicates that the presence of chloroform is localized. Chloroform was also detected in the associated field blank sample at a concentration greater than 10 times the concentration detected in monitoring well MW-02. The National Functional Guidelines for Organic Analysis recommends that constituents that are present at less than 10 times their respective concentrations in an associated field blank sample be considered as non-detects. Therefore, the presence of chloroform is most likely due to household related activities such as discharge of wastewater into septic systems and disinfection of private wells with chlorine bleach or tablets. It should be noted that chloroform is widely used in many household disinfection products and is also a byproduct of municipal water chlorination and ultimately finds its way into domestic wastewater. Additionally, several trihalomethane constituents including chloroform have been detected in the NPPWD water distribution system at concentrations ranging from 1 µg/L to 12 µg/L. NPPWD trihalomethane testing results are contained in Appendix M. Also, Region IX PRGs indicate that chloroform in household water can cause a one-in-a-million inhalation risk at a concentration of 0.71 µg/L. Based on the localized detection of chloroform in the residential area, its lack of detection in any other groundwater samples collected at the site, and the potential contribution by extraneous sources, the chloroform detected at RW-08/ MW-02 does not appear to be site-related.

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The groundwater samples collected in 2002 from the two NPPWD municipal water supply wells (#6 and #6A) indicate the presence of PCE at concentrations ranging from 0.23 µg/L to 0.61 µg/L. A subsequent detailed U.S. EPA investigation of these two supply wells (WESTON, 2003b) indicated that the well piping used during the construction of the wells appears to have been treated on both the interior and exterior surfaces with a PCE-based corrosion coating material. The investigation concluded that the PCE detected in the groundwater samples from these two wells is most likely attributable to this PCE-based coating. Due to the presence of the PCE-based coating, and the distance between the Evergreen Manor contaminated groundwater plume (both vertically and horizontally), it does not appear that the impacts observed in the groundwater samples collected from the NPPWD municipal wells is attributable to the site based on current data and information. The detections of VOCs reported during this sampling event and their comparison with the MCLs/TACO values and the Ecotox/WQCAL criteria is presented in Tables 5-4 and 5-5, respectively.

Although not sampled during the historical assessments completed at the Evergreen Manor site, two shallow public water supply wells referred to as the Goldie Floberg/Rockton Wells 1 and 2 located at the southwest corner of Rockton Road and Dorr Road have been reported with VOC contamination similar in nature to that observed at the Evergreen Manor site. Based on information provided by the IEPA, it is apparent that these two wells are screened at 85 to 95 feet bgs within the shallow sand and gravel aquifer. Independent groundwater sampling activities conducted between 1987 and 1988, indicate that 1,1-DCA and 1,1,1-TCA have been reported at concentrations up to 8 µg/L and 2 µg/L , respectively. Based on the cross-gradient location of these wells (approximately 1 mile west of the apparent source area) and the relatively low reported pumping rates of 20 to 30 gallons per minute (gpm), it does not appear that the contaminants observed in these two wells are related to the Evergreen Manor site based on current data and information.

The previous discussion has focused on TCE, PCE, and chloroform, however 12 other VOCs were reported in the groundwater samples collected during the 2000 to 2002 time frame as discussed in Section 4 and shown on Figures 4-4 and 4-7. A summary of VOCs detected between 2000 and 2002

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and a comparison of VOC concentrations with the MCLs/TACO values and the Ecotox/WQCAL criteria is presented in Tables 5-2, 5-3, 5-4, and 5-5. These constituents, the distribution of concentrations, and a comparison of the data to the four evaluation criteria described above are presented below:

- During the 2000 RI, acetone was reported in 18 of the groundwater samples collected from the CPT wells, and in two samples collected from the residential wells. Acetone concentrations ranged from 470 µg/L in a sample collected from CPT-02 at a depth of 42 feet bgs to 0.6 µg/L in a sample collected from the residential well located on Straw Lane east of Winchester. During the same time period, acetone, a common laboratory contaminant, was also detected in field blank samples at concentrations up to 12 µg/L, suggesting that some of the groundwater detections may be due to laboratory contamination. The U.S. EPA has not established an MCL or an Ecotox value for acetone, however the TACO value has been established at 700 µg/L. Acetone has not been reported in any groundwater samples at concentrations that exceed the TACO value. Acetone was not reported in any of the groundwater samples collected during the April 2002 Investigation.

  Acetone was also detected in soil gas samples at concentrations that did not exceed the most conservative target RBC and therefore, presents minimal risk to human health via the vapor intrusion pathway.

- During the 2000 RI, methylene chloride was reported in one groundwater sample collected from CPT-03. This reported value was well below the MCL and TACO value of 5 µg/L. It is also below the WQCAL value of 98 µg/L. No U.S. EPA Ecotox value has been established for this compound. Methlylene chloride has not been reported in any sediment and surface water samples.

  Methylene chloride was also detected in soil gas samples at concentrations that did not exceed the most conservative target RBC. Therefore, methylene chloride presents minimal risk to human health via the vapor intrusion pathway.

- During the 2000 RI, 1,1-DCA was reported in a groundwater sample collected at a depth of 93 feet bgs from CPT-11 which is located along Route 251 south of the apparent source area. During the 2002 Investigation, 1,1-DCA was reported in groundwater samples collected from monitoring wells MW-01A, MW-03, MW-105S, and MW-105D. Reported concentrations ranged from 0.19 µg/L to 0.39 µg/L. 1,1-DCA was not reported in any sediment and surface water samples. These sample locations are situated along the southern boundary of the site and just north of Mathew Avenue. The reported 1,1-DCA groundwater concentrations were

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significantly lower than the TACO and Ecotox values of 700 µg/L and 47 µg/L, respectively. No MCL or WQCAL values have been established for this constituent. The soil gas samples collected during the May 2002 air investigation were not analyzed for 1,1-DCA.

- During the 2002 Investigation, 1,1-DCE was reported in groundwater samples collected from monitoring wells MW-01A and MW-03 at concentrations ranging from 0.16 to 0.2 µg/L. None of the reported 1,1-DCE concentrations exceeded the MCL and TACO value of 7 µg/L as well as WQCAL value of 11,600 µg/L. U.S. EPA Ecotox value has not been established for this compound. 1,1-DCE was not reported in any of the groundwater samples collected during the 2000 RI. 1,1-DCE was also not reported in any sediment and surface water samples. The soil gas samples collected during the May 2002 air investigation were not analyzed for 1,1-DCE.

- The compound 2-butanone was detected in one groundwater sample collected during the 2000 RI. It was reported at a concentration of 16 µg/L in a sample collected from CPT-05. 2-Butanone is a common laboratory contaminant and was also detected in field blank samples at concentrations of up to 12 µg/L during the 2000 RI, suggesting that the detections may have been due to laboratory contamination. 2-Butanone was not reported in any of the groundwater samples collected during the April 2002 Investigation. With the exception of the WQCAL criteria (7,200 µg/L), no other criteria have been established for 2-butanone. The 2-butanone concentration reported in CPT-05 was significantly lower than its WQCAL criteria. 2-Butanone was also detected in sediment sample SD-04 at a concentration of 3 µg/kg. This concentration is significantly lower than all the sediment evaluation criteria used in this report. 2-Butanone was also detected in soil gas samples at concentrations that were below the most conservative target RBC, indicating minimal risk to human health via the vapor intrusion pathway.

- During the 2000 RI, cis-1,2-DCE was reported in groundwater samples collected from CPT-01, MW-105S, and MW-105D, and one residential well. The cis-1,2-DCE concentrations reported during this period ranged from 1 µg/L to 2 µg/L. During the 2002 Investigation, cis-1,2-DCE concentrations were reported in groundwater samples collected from MW-01A, MW-03, MW-105S, and MW-105D at concentrations ranging from 0.16 µg/L to 0.2 µg/L. None of the cis-1,2-DCE concentrations reported in 2000 or 2002 exceeded the MCL and the TACO value of 70 µg/L as well as the WQCAL value of 200 µg/L. The U.S. EPA Ecotox value for this constituent has not been established. Cis-1,2-DCE has not been detected in any soil gas samples, sediment samples, and surface water samples collected to date.

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- During the 2000 RI, 1,1,1-TCA was reported in groundwater samples collected from four CPT locations including CPT-01, CPT-3, CPT-10, and CPT-11 at concentrations ranging from 0.7 to 3 µg/L; from six monitoring wells including MW-103D, MW-104S, MW-104D, MW-105S, MW-105D, and MW-112 at concentrations ranging from 1 to 3 µg/L; and from six residential well locations : Two near Blue Spruce Drive and Straw Lane; two near Wagon Lane and Straw Lane; one near Wagon Lane and Wagon Lane Court; and one near Tresemer and Valerie Road, (1 to 5 µg/L). During the 2002 Investigation, 1,1,1-TCA was reported in groundwater samples collected from monitoring wells MW-01A, MW-02, MW-03, MW-103S, MW-103D, MW-104S, MW-104D, MW-105S, MW-105D, and MW-109D at concentrations ranging from 0.29 µg/L to 2.4 µg/L. None of the 1,1,1-TCA concentrations reported in 2000 or 2002 exceeded any of the evaluation criteria. 1,1,1-TCA was not detected any sediment or surface water samples collected to date. Although 1,1,1-TCA was detected in all soil gas samples, reported concentrations were below the most conservative target RBC. Therefore, 1,1,1-TCA presents minimal risk to the human health via vapor intrusion pathway.

- During the 2000 RI, benzene was reported in groundwater samples collected from CPT-09 and CPT-12. In CPT-09, benzene was detected at concentrations of 0.5 µg/L and 0.6 µg/L in samples collected from depths of 35 feet and 88 feet bgs, respectively. In CPT-12, benzene was detected at a concentration of 0.5 µg/L in a sample collected from a depth of 81 feet bgs. All reported concentrations were below the lowest available groundwater and ecological criteria. Benzene has not been detected in residential wells or monitoring wells either during the 2000 RI or the 2002 Investigation. Benzene was detected in soil gas samples at concentrations exceeding the most conservative target RBC.

  Historically, benzene has not been identified as a major groundwater contaminant at the Evergreen Manor site. Benzene has only been detected at low levels (maximum concentration 0.6 µg/L) in groundwater and is not a widespread contaminant. Both CPT samples were collected at temporary roadside locations while traffic was present, suggesting the possibility that the detected benzene may have been related to vehicle exhaust. Given the number of groundwater samples collected across the site and the infrequent benzene detections in distant sampling locations (>100 feet), the likelihood of benzene migrating from groundwater into indoor air of the target residences is minimal. However, elevated benzene levels (greater than the target RBC) in some of the soil gas samples indicate that some of the benzene may be site related, since groundwater at the water table/vadose zone interface has not been

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adequately characterized within the residential area. Before concluding that benzene is site related, due consideration must also be given to the relationship between benzene detections in soil gas samples and extraneous sources such as emissions. Given the known data gaps/limitations, the origin of benzene in air samples remains uncertain.

- Toluene was detected in 75 samples collected from CPT sampling locations and in nine samples collected from residential well locations at concentrations ranging from 0.5 to 3 µg/L Toluene only exceeded the most conservative WQCAL value of 0.8 µg/L. During the 2000 RI, toluene was also detected in method and field blanks at concentrations of up to 2 µg/L, suggesting contamination via extraneous sources. Toluene was also detected in all soil gas samples at concentrations that were below the most conservative target RBC, indicating minimal risk to human health via the vapor intrusion pathway.

- During the 2000 RI, ethylbenzene was detected at a concentration of 0.6 µg/L in a groundwater sample collected from CPT-09. This concentration is below the lowest available groundwater and ecological criteria. Ethylbenzene was not detected in any sediment and surface water samples collected during the 2000 and the 2002 Investigations. Ethylbenzene was also detected at concentrations exceeding the most conservative target RBC in several soil gas samples collected during the 2002 air sampling investigation, suggesting that ethylbenzene may be site-related. However, given the number of groundwater samples collected across the site, the location of detected ethylbenzene in groundwater with respect to target residences, and the general lack of detected ethylbenzene in groundwater, the likelihood of ethylbenzene migrating from the groundwater into area residences is minimal. But the presence of ethylbenzene at significant levels in soil gas indicates that ethylbenzene may be site related, since groundwater at the water table/vadose zone interface has not been adequately characterized within the residential area. Before concluding that ethylbenzene is site related, due consideration must also be given to the effect of extraneous sources such as emissions from vehicles driven in and out of the attached garages and gasoline products stored in the garages of homes. Based on conflicting groundwater and air data, it is uncertain whether vapor intrusion pathway for ethylbenzene is complete at the Evergreen Manor site.

- Xylenes were detected in groundwater samples collected from CPT-02 (three samples), CPT-06, CPT-09, and CPT-11 at concentrations ranging from 0.5 µg/L to 0.7 µg/L. These concentrations were below the lowest groundwater and ecological evaluation criteria used in this report. Xylenes were detected in all the soil gas samples at concentrations that did not exceed the most conservative target RBC, indicating minimal risk to human health via the vapor intrusion pathway. Xylenes were also not detected in any sediment or surface water samples.

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- During the 2000 RI, Freon 113 was reported in the groundwater samples collected from monitoring wells MW-103S and MW-103D (and the duplicate sample) at concentrations ranging from 2 µg/L to 300 µg/L. During the 2002 Investigation, Freon 113 was reported in groundwater samples collected from monitoring wells MW-103D and MW-107D at concentrations of 30 µg/L and 6.7 µg/L, respectively. These detections were found in the upgradient wells, but not in the groundwater samples collected from within the residential subdivisions. The only evaluation criteria established for this constituent is the WQCAL value which is 580 µg/L. Freon 113 was also detected in the background sediment sample SD-01 collected during the 2002 Investigation. The reported concentration was well below the lowest available evaluation criteria. Freon 113 was also detected in all the soil gas samples at concentrations that did not exceed the most conservative target RBC and therefore, presents minimal risk to human health via the vapor intrusion pathway.

- Methyl acetate was only reported in two sediment samples, SED-1 and SED-5, collected during the 2000 RI. The reported concentrations were well below the lowest evaluation criteria used in this report.

5.5 TCE AND PCE GROUNDWATER SUMMARY 1990 THROUGH 2002

Using data and information from all three time periods which have been evaluated, it is possible to illustrate the maximum TCE and PCE concentrations reported from the groundwater assessments conducted between 1990 and 2002. These data are presented on Figures 5-10 and 5-11. As shown, these data were obtained from groundwater samples collected from residential wells, CPT sampling locations, and permanent monitoring wells. In the event that a location was sampled more than one time, the maximum concentration was posted. The varying contaminant concentrations presented have been defined with iso-concentration lines and are presented in Figures 5-12 and 5-13. The information presented in these figures is not meant to represent current plume boundaries, but rather indicate where the maximum TCE and PCE concentrations have been observed.

In addition to the TCE and PCE concentrations, Figures 5-12 and 5-13 include the NPPWD water supply network and the residences that are connected and that are not connected to this system. As shown, all of the residences within the Hononegah, Olde Farm, Evergreen Manor, and Tresemer

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subdivisions that are situated above the maximum extent of both the TCE and PCE plume have been connected to the NPPWD water supply. However, there are several commercial and residential homes located in the vicinity of the TCE and PCE plume near the apparent source area that do not appear to be connected to the municipal water supply. These areas were identified in Figure 3-4 and include the following streets: Metric, East Rockton Road, North Second Street, and Degroff.

5.5.1 TCE AND PCE CONCENTRATION TREND ANALYSIS

In an effort to evaluate trends in the TCE and/or PCE concentrations reported in the groundwater throughout the Evergreen Manor site over time, locations where multiple samples have historically been collected were identified and groundwater sample results assembled. As many as 26 residential wells have been sampled more than once, and in several instances, have been sampled more than three times since 1990. In addition, several of the permanent groundwater monitoring wells installed during the 1994 and 1995 time frame have been sampled on multiple occasions. These locations and the corresponding TCE and PCE data are shown on Figures 5-14 and Figure 5-15, respectively. To provide a more thorough evaluation of the historical data, the groundwater data obtained from the CPT samples collected as part of the 2000 RI have been included on these figures.

As shown in the data plots provided in Figure 5-14, with few exceptions, the TCE concentrations are either stable, or have declined throughout the historical plume boundaries. TCE concentrations tend to be decreasing in the upgradient portion of the plume, north of Straw Lane, and tend to be stable in the downgradient part of the plume. In nearly all cases, the TCE reported in the groundwater samples have declined to concentrations below the MCL (5 μg/L). These observations coupled with the site hydrogeological conditions suggest that the plume as a whole is shrinking, perhaps due to advective transport.

As previously described, the volume of PCE data reported is not consistent with that reported for TCE. However, even with the amount of PCE data, it is evident that PCE concentrations are stable

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at a minimum, and in most cases, are declining throughout the Evergreen Manor site. This is evident in Figure 5-15, where with the exception of monitoring wells MW-104, MW-105, and MW-106, and in the vicinity of Blue Spruce Drive and Straw Lane, concentrations have shown a steady decline. The area where PCE concentrations are not decreasing is limited to the central portion of the plume, where limited groundwater monitoring locations are present. As a result, an accurate depiction of the nature of the PCE plume is not available.

In general, the VOC concentrations reported from the 1990 through 2002 investigations have either declined or have remained stable. The TCE and PCE concentration trends depicted suggest that both TCE and PCE are undergoing natural decay that follows first-order kinetics. In other words, the decay rate is directly proportional to the contaminant concentration and slows with a decline in the contaminant concentration. For example, the TCE concentration associated with monitoring well MW-105D reduces from 15 µg/L at time t=0 (HRS sampling event in 1994) to 3 µg/L at time t=5 years (2000 RI sampling event), representing approximately 80% decline over 5 years. The concentration further declines from 3 µg/L at time t=5 years to 2.8 µg/L at time t=7 years (April 2002 sampling period), a reduction of only 7% in 2 years.

Assuming that the observed contaminant attenuation rate continues in the future, it was projected that the TCE concentration of 7.2 µg/L, observed in monitoring well MW-03 in 2002, could decline to less than 5 µg/L in approximately 1.5 years. This time period was derived by assuming, conservatively, that TCE decay rate will follow the TCE attenuation trend observed in monitoring well MW-105D described above. Similarly, it was projected that by following the PCE attenuation rate observed in monitoring well MW-103S, the 2002 PCE concentration of 5.9 µg/L, observed in monitoring well MW-03, could decline to less than 5 µg/L in approximately 3 years.

Results of the foregoing first order kinetics are consistent with the results of the RI which concluded that constituent concentrations, will continue to decline, primarily due to dispersion, advection, and possibly due to biodegradation, and ultimately decline below MCLs. During the 2000 RI, the

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BIOSCREEN model was used to estimate the time frame during which COPC concentrations would decline below MCLs. The model results predicted that TCE concentrations would reduce below the MCLs in about 6 years after the RI, (approximately 2006). The same model predicted that PCE would reduce below the MCLs in about 15 years after the RI, (in about 2015).

Although the expected TCE attenuation rate predicted by the BIOSCREEN model is similar to the attenuation rate predicted by the kinetic model, the PCE attenuation rates predicted by the two models vary significantly. Apparently, the continuing decline in PCE concentrations, observed during the 2002 Investigation, point to an accelerated decline in PCE concentrations.

5.6 SEDIMENT AND SURFACE WATER SAMPLING RESULTS 2000 TO 2002

As part of both the 2000 RI and the April 2002 Investigation, sediment and surface water samples were collected from the Rock River. During the 2000 RI, sediment and surface water samples were also collected from Dry Creek. As previously mentioned, Dry Creek was classified as a losing stream at the time of the RI, indicating that it would contribute water to the subsurface as well as discharge into the Rock River. This in turn indicates that the Dry Creek may be a source of groundwater contamination for some contaminants.

The location of the sediment and surface water samples collected during both investigations is depicted in Figure 4-8. As shown in Figure 4-8, sediment sample SED-4 and surface water sample SW-4, collected during the 2000 RI, are located to the north of the Evergreen Manor site and were therefore, considered as background samples with respect to the presumed groundwater discharge zone near the Rock River. Similarly, sediment sample SED-1 and surface water sample SW-1, also collected during the 2000 RI, are located upgradient of the confluence of the Rock River and Dry Creek and were also considered as background samples with respect to the presumed groundwater discharge zone near the Rock River. All other surface water and sediment samples collected from locations along the Dry Creek were not considered "background" samples because these locations

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have the potential to be impacted by site-related source materials which could have been discharged into the Dry Creek at one time or another. All other surface water and sediment samples located within the Rock River downgradient of the confluence of the Rock River and Dry Creek were also not considered as "background" samples because these locations have the potential to be impacted by either site-related source materials which could have been discharged in to the Dry Creek or contaminated groundwater which may be discharging into the Rock River.

The sediment sampling data obtained during the 2000 RI and the 2002 Investigation are presented in Tables 5-6 and 5-7, and in Figure 4-8. These constituents, the distribution of concentrations, and a comparison of the data to the four evaluation criteria described above are presented below:

- During the 2000 RI, benzene was reported in a sample collected from SED-4 (a background sample) at a concentration of 2 µg/kg which is well below its respective evaluation criteria used in this report. Benzene was not reported in any other surface water and sediment collected during the 2000 RI. It was also not detected in any sediment and surface water samples collected during the 2002 Investigation. In groundwater, benzene has been detected in groundwater samples collected from CPT-09 (two depths, 0.5 µg/L and 0.6 µg/L), and CPT-12 (0.5 µg/L). Both CPT-09 and CPT-12 are located to the north of the subdivisions, approximately one mile and 1.7 miles upgradient of the Rock River, respectively. All reported benzene concentrations in groundwater were below their respective groundwater and ecological criteria used in this report.

- During the 2000 RI, toluene was reported in a sample collected from SED-4 at a concentration of 0.7 µg/kg. Toluene was also detected at a concentration of 4 µg/kg in a sediment sample collected from SD-06 during the 2002 Investigation. Toluene was not reported in any other sediment and surface water samples. Reported toluene concentrations in sediment samples were below their respective evaluation criteria used in this report. In groundwater, toluene was reported in 75 CPT samples and nine residential well samples collected during the 2000 RI. Toluene concentrations ranged from 0.5 to 3 µg/L. Toluene was also detected in method and field blanks at concentrations of up to 2 µg/L in groundwater samples collected during the 2000 RI. Reported toluene concentrations in groundwater only exceeded the most conservative WQCAL value of 0.8 µg/L. Of the groundwater sampling locations where toluene has been detected, only CPT-01, CPT-02, and CPT-03 are within 1000 feet of the presumed groundwater discharge zone in the Rock River.

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- Chloroform was detected in a sediment sample only during the 2000 RI. It was detected in the sediment sample SED-1, a background sample, at a concentration of 8 µg/kg. This concentration exceeds the most conservative SQCAL value of 0.4 µg/kg. In groundwater, chloroform has been detected at a concentration of 0.23 µg/L in the sample collected from monitoring well MW-02 during the 2002 Investigation. Chloroform has also been detected during the 2000 RI at a concentration of 0.9 µg/L in the residential well located at RW-08 (near Wagon Lane and Straw Lane). These wells are located approximately 2,400 feet north (and upgradient) of the groundwater discharge zone. The 2002 chloroform concentration exceeded the corresponding TACO and WQCAL values but was below the corresponding MCL of 100 µg/L. The 2000 chloroform concentration slightly exceeded the TACO value.

- The compound 2-butanone was only reported during the 2002 Investigation. It was detected in the sediment sample SD-04 at a concentration of 3 µg/kg which is well below the U.S. EPA Region IX risk-based concentration of 7300 µg/kg. No other sediment evaluation criteria used in this report have been established for 2-butanone. 2-Butanone has not been reported in any surface water samples. 2-Butanone has also been detected in one groundwater sample collected during the 2000 RI. It was reported in CPT-05 at a concentration of 16 µg/L. CPT-05 is located approximately 1 mile north of the Rock River. 2-Butanone is a common laboratory contaminant and was also detected in field blank samples collected during the 2000 RI, suggesting that the detections may have been due to laboratory contamination. 2-Butanone was not reported in any of the groundwater samples collected during the April 2002 Investigation. The 2-butanone concentration reported at CPT-05 was significantly lower than its WQCAL criteria of 7,200 µg/L. No other groundwater evaluation criteria used in this report have been established for 2-butanone.

- Freon 113 was only reported in the sediment samples collected during the 2002 Investigation. It was reported in sediment samples SD-01 and SD-02 at concentrations of 8 µg/kg and 2 µg/kg, respectively. These concentrations are well below the U.S. EPA Region IX risk-based concentration of 5600 µg/kg. No other sediment evaluation criteria used in this report have been established for Freon 113. Freon 113 was not reported in any surface water samples. During the 2000 RI, Freon 113 was reported in groundwater samples collected from MW-103S and MW-103D (and the duplicate sample) at concentrations ranging from 2 µg/L to 300 µg/L. During the 2002 Investigation, Freon 113 was reported in groundwater sample collected from MW-103D and MW-107D at concentrations of 30 µg/L and 6.7 µg/L, respectively. These wells are located more than two miles north (and upgradient) of the Rock River. These detections were found in the upgradient wells, but not in the groundwater samples collected within the residential subdivisions. The only evaluation criteria (used in this report) established for this constituent is the WQCAL

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value which is 580 µg/L. The reported Freon 113 concentrations in groundwater are well below this evaluation criteria.

- Methyl acetate was only reported during the 2000 RI. It was reported in sediment sample SED-1 at a concentration of 5 µg/kg. Methyl acetate was also detected at a concentration of 9 µg/kg in samples SED-2 and SED-5. The reported concentrations are well below the U.S. EPA Region IX risk-based concentration of 22,000,000 µg/kg. No other sediment evaluation criteria used in this report have been established for methyl acetate. Methyl acetate has not been reported in any other sediment, surface water, or groundwater samples collected to date.

Although some VOCs were detected in sediment samples, no VOCs have been reported in surface water samples at concentrations above the laboratory reporting limits. These data indicate that although the contaminated groundwater associated with the site is likely discharging to the Rock River, this release is not impacting the surface water conditions, most likely due to dilution.

5.7 SOIL GAS SAMPLING

As described in Section 2, a limited soil gas investigation was conducted in the vicinity of four residences within the Evergreen Manor site that included one home on Mathew Avenue, one home near Wagon Lane and Wagon Lane Court, one home near Blue Spruce Drive and Straw Lane, and one home near Wagon Lane and Tanawingo.

The maximum TCE and PCE concentrations reported from the soil gas samples, and associated "risk levels" for TCE and PCE are presented on Figure 4-9. In addition to the results of the soil gas samples, historical groundwater TCE and PCE concentrations (1990 through 2002) reported from nearby residential and monitoring wells have been included. The potential cancer risks for only TCE and PCE range from 8.4×10^{-5} to 1.3×10^{-7}. Potential cancer risks from all chemicals range from 9.6×10^{-5} (almost 1×10^{-4}) to 9.7×10^{-6} (almost 1×10^{-5}). The soil gas samples were collected from residences that are situated in the northern part of the residential subdivisions, near the center of the plume, central-western edge of the plume, and close to the leading edge of the plume. The TCE and

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PCE soil gas results are also shown on a cross section that depicts the 1990 through 1993 TCE and PCE groundwater results. As shown in Figure 5-16, soil gas samples were collected from areas that have historically contained TCE and PCE concentrations that exceed the MCL, with the exception of the area near Wagon Lane and Wagon Lane Court, the central-western edge of the plume. Three of the soil gas samples were collected from an average depth of 20 feet above the underlying groundwater table. However, the soil gas sample collected near Wagon Lane and Tanawingo was obtained from approximately 10 feet above the water table. Figure 5-16 shows that the soil gas sample collected near Wagon Lane and Wagon Lane Court was reported with the highest concentrations of TCE (9.5 $\mu g/m^3$) and PCE (190 $\mu g/m^3$). This location is situated in an area that historically had the lowest levels of TCE and PCE in the groundwater with no reported MCL exceedances. The results of the soil gas samples indicate the presence of VOCs at elevated concentrations, however it is not known whether a direct correlation exists between the groundwater concentrations and the elevated soil gas concentrations.

In addition to TCE and PCE, several other chlorinated constituents were reported in the soil gas samples collected in May 2002. These include 1,1,1-TCA, cis-1,2-DCE, 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113), methylene chloride, and chloroform. The soil gas and groundwater results for these same constituents are presented on Figure 4-10. The soil gas samples also indicated the presence of 2-butanone, acetone, benzene, ethylbenzene, xylenes and toluene. These non-chlorinated soil gas results and groundwater results for these same constituents are presented in Figure 4-11. Unlike the historical TCE and PCE results, there is very little historical VOC data for the groundwater sample locations in the vicinity of the soil gas sample locations.

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SECTION 6

UNCERTAINTY AND DATA GAP ANALYSIS

This section presents a discussion on the uncertainties and data gaps associated with a number of identified factors related to the assessment and evaluation of the analytical data collected at the Evergreen Manor site between 1990 and 2002. Factors identified with associated uncertainty and data gaps include the following:

- Uncertainty associated with identification of the source area.
- Uncertainty associated with hydrogeologic characteristics of the study area.
- Uncertainty associated with variation in investigation objectives, sampling frequency, parameter analysis, and sampling methods over time.
- Uncertainty associated with the horizontal and vertical extent of the plume.
- Uncertainty associated with the vapor migration pathway
- Uncertainty associated with evidence of natural attenuation processes.
- Uncertainty associated with impact to nearby municipal well systems.

The discussion of data gaps and uncertainty also includes identification of elements that reduce or minimize uncertainty. Recommendations for additional evaluation to address data gaps and uncertainty issues, both general and specific, are detailed in Section 7, Conclusions and Recommendations.

6.1 SOURCE IDENTIFICATION

A review of the historical field and analytical data indicates that the horizontal extent of VOC contaminated groundwater throughout the Evergreen Manor site has been defined to varying degrees

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using all available data and information for evaluation, however the precise source of these impacts has never been adequately determined. Early investigations, including well installation, soil vapor surveys, and groundwater sampling, indicated that the source(s) was likely present in the industrial area surrounding the intersection of Rockton Road and Route 251. Regal-Beloit, AAA Disposal (property now owned by Waste Management) and Ecolab had waste disposal areas on their property near Route 251 and Rockton Road that were all, to some degree, "closed" under IEPA oversight. Information submitted to IEPA by Waste Management, Regal-Beloit and Ecolab during the mid-1990s indicates that the likely sources of the groundwater contamination at the Evergreen Manor site include:

- A landfill at former AAA Disposal System that was covered with soil and granted closure by IEPA in 1977. In 1990, 1,380 cubic yards of material was also excavated from this property and removed by the current property owner, Waste Management. Soil samples collected from the site contained low levels of TCE (13 µg/kg), 1,1-DCA (8 µg/kg), cis-1,2-DCE (15 µg/kg) and PCE (6.8 µg/kg), and higher levels of benzene (1,000 µg/kg), toluene (940 µg/kg) and xylene (7,300 µg/kg). Samples Waste Management collected from the nearby Schewbke property in 1990 also contained PCE at 40 µg/kg.

- Wastewater discharged to a septic field and 5 underground storage tanks at Regal-Beloit which were closed under RCRA in 1987. Soil samples collected from the site contained low levels of TCE (7 µg/kg) and 1,1,1-TCA (2 µg/kg).

- A wastewater lagoon at Ecolab that was removed under IEPA oversight in 1979. MW-103, installed immediately downgradient of Ecolab had the highest concentrations of PCE (40 µg/L) and 1,1,1-TCA (16 µg/L).

Further evaluation during the 2000 RI, including attempts at fracture trace analysis, limited additional intrusive work (CPT), and sampling of existing monitoring wells, did not substantially change the conclusion that the source(s) was likely located near the intersection of Rockton Road and Route 251. Other than sampling of selected existing monitoring wells, no additional efforts were conducted in 2002 to further evaluate the source(s) area. Thus, to date, the specific source(s) of chlorinated VOC groundwater contamination remains uncertain.

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Nevertheless, some conclusions can be drawn. The general trend observed during the evaluation of previous studies indicates an apparent decrease in the contaminant concentrations over different time frames. The PCE concentration in MW-103S, which had the highest PCE concentration ever detected at the site, has declined from 40 µg/L in 1994-1995, to 9 µg/L in 2000 and to 5.9 µg/L in 2002. Similarly, a decrease in TCE concentration is also observed in the samples collected from a residential well near Blue Spruce Drive and Straw Lane, which had the highest TCE concentration ever detected at the site, from 75 µg/L in December 1990, to 50 µg/L in January 1991, to 91 µg/L in September 1991, to 38 µg/L in 1993, to 26 µg/L in 1995 and to 22 µg/L in 1996. Historically, a sample collected from MW-105D had the highest TCE concentration among all the monitoring wells. However, the TCE concentration in MW-105D declined from 15 µg/L in 1994-1995 to 3 µg/L in 2000 to 2.8 µg/L in 2002. Similar decreasing trend has been observed in two residential wells located near Blue Spruce Drive and Straw Lane. TCE concentrations of 38 µg/L reported in both these wells in 1990 declined to 6 µg/L (RW-04; near Blue Spruce Drive and Straw Lane) and to 4 µg/L (RW-19; near Blue Spruce Drive and Straw Lane) by 2000, when these wells were still available for sampling during the RI prior to abandonment.

This trend suggests that the source(s) may not represent a continuing source of groundwater contamination. Questions remain, however, such as whether past releases were in the form of dense non-aqueous phase liquids (DNAPL). These may have resulted in very deep portions of the aquifer being contaminated, and shallower portions only exhibiting patterns of contamination consistent with that of residual contamination.

Although the source(s) of contamination remains unidentified, uncertainty is minimized to some extent by the results of previous investigations which have documented the likely general source area, defined the overall extent of contamination (with uncertainty, as discussed in the following subsections), and shown an overall decreasing trend in chlorinated VOC concentrations with time. However, due to the uncertainty and data gaps identified (discussed here and in subsequent subsections), data may be not be sufficient to adequately determine the location and nature of the

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source(s). Thus, the source(s) of contamination, whether multiple sources, extraneous sources, point source or continuing source, remain unknown, and additional effort may be warranted to address this issue. The level of effort will necessarily be based on anticipated remedial approaches.

6.2 HYDROGEOLOGIC CHARACTERISTICS OF THE STUDY AREA

To date, only limited drilling in scattered areas has been conducted across the entire plume in relation to its apparent size. The majority of work has been undertaken in the residential areas south of McCurry Road where the majority of receptors are located. The residential wells that existed in the past were screened at estimated depths ranging from approximately 720 feet amsl to 655 feet amsl, however, few records exist to document this. The monitoring wells installed from 1994 through 2002 have been screened at various depths in attempts to better define VOC distribution within the affected area. However the maximum depth of these wells extends to 651 feet amsl. Furthermore, the groundwater samples collected via CPT were obtained from a maximum depth of 630 feet amsl. Thus, the hydrostratigraphy of the shallow contaminated sand and gravel aquifer has only been characterized up to a maximum depth of approximately 100 ft. bgs, and not at all locations within the estimated plume boundaries. Uncertainty regarding stratigraphy is minimized to some extent by drilling conducted for the two NPPWD municipal wells east of the plume. It is documented that relatively homogeneous sand and gravel deposits are present, in these wells, to approximately 250 feet bgs and are in contact with sandstone bedrock of the St. Peter Formation. Using this information, as well as other available public information, it is reasonable to assume that similar conditions underlie the Evergreen Manor site, although exact depths are not known.

Other hydrogeologic characterization data and information are also lacking and introduces uncertainty. Although attempts to map groundwater flow across the site conclude that the overall lateral groundwater flow direction is towards the Rock River, insufficient spatial data points are available to evaluate local variation in groundwater flow patterns (direction and velocity). This is especially true with regards to vertical flow characteristics across the site. Additional data would

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be valuable to further evaluate VOC distribution within the plume, aid in determining whether deeper portions of the aquifer are likely to be contaminated, and verify that contaminated groundwater does in fact discharge to the Rock River.

The presence and magnitude of vertical gradients in the vicinity of the Rock River has not been documented; therefore, insufficient evidence is currently available to state that all contaminated groundwater associated with the Evergreen Manor VOC plume discharges to the Rock River, or alternately, that an underflow condition exists. In the event that the VOC contaminated groundwater observed at the site is present at sufficient depths to be influenced more by the regional flow regimes, it is possible that contaminants could be migrating beneath the Rock River. This uncertainty relating to underflow and contaminant transport can be minimized by conducting vertical profiling at appropriate locations on the south side of the Rock River.

Temporal data on water levels, recharge from precipitation, geochemical conditions, flow direction and other hydrogeological data are also limited. These data limitations limit the full evaluation of the sources of variability in VOC concentrations and distributions. Thus, temporal data are needed to more effectively assess the fate of contaminants in the groundwater.

6.3 VARIABILITY IN OBJECTIVES, SAMPLING METHODS, PARAMETERS, AND FREQUENCY

None of the investigations conducted to date represent a comprehensive and consistent evaluation of the overall conditions present at the site. While an overriding objective of determining whether threats to receptors exist from contaminated groundwater, specific project goals and purposes have varied considerably over the years. For example, initial site work focused primarily on assessments to identify affected residences such that interim remedies could be implemented to minimize risk and identify the source(s) area, rather than specifically define the entire horizontal and vertical extent of contamination in groundwater. This is not to say that elements of this objective were not carried out

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over time. These types of investigations continued on through the 2000 RI, which was implemented during the NTCRA with an objective of determining whether groundwater conditions had or had not substantially changed, such that it could be verified that the NTCRA addressed all affected residences. As an example, during the RI, CPT depth intervals were selected based on field-determined direct-sensing stratigraphy data in an attempt to identify more permeable horizons (regardless of thickness). These zones were interpreted to represent preferential pathways and were selected for grab groundwater sampling rather than targeting depths based on older well installations with longer screens for which screen setting rationale was not known. The 2002 investigations were also designed to fill in data gaps identified or not addressed previously (e.g., vapor migration pathway). These are some examples of the difficulty of correlating successive investigation results where purposes and objectives differed. Additionally, these investigations employed different technologies and sampling techniques which were successful to varying degrees. The type of wells used for sampling have differed (residential wells, monitoring wells, CPT grab groundwater sampling locations, etc.), sampling methods have varied over the years, sample parameters analyzed have varied, and sampling frequency has been variable with large time periods passing between sampling events. In many cases, data have been observed not to correlate very well between investigations, which introduces additional uncertainty.

This variability in project objectives, sampling methods, parameters and frequency could lead to erroneous interpretation of data which in turn could lead to misinterpretation of actual site conditions. These uncertainties are minimized to a great extent by the comprehensive data evaluation contained in this report, which is the first attempt to thoroughly and comprehensively evaluate all data and information collected at the site between 1990 and 2002. This has resulted in identification of applicable constituents of concern and yielded an overall conceptual model of the Evergreen Manor site groundwater plume as of 2002, although uncertainties remain, as described throughout this section.

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6.4 HORIZONTAL AND VERTICAL EXTENT OF GROUNDWATER PLUME BOUNDARIES

A certain amount of uncertainty remains with respect to the current horizontal and vertical extent of the Evergreen Manor plume, and the remaining contaminant concentrations within the plume. This is especially true for shallow groundwater which, for the most part, has not been characterized within the residential area, but which poses the greatest risk to residents via the vapor intrusion pathway. Similarly, the location of the center of the plume, horizontally and vertically, is also unclear.

Although same-location sampling data, where available, show significant decreases in contaminant concentrations over time, actual concentrations in other areas of the plume could be somewhat higher than those indicated by the current monitoring well network and CPT sampling, which only provide limited horizontal and vertical data points. Additionally, these data points may not be located in the area and/or zones of highest contamination.

This uncertainty is relevant in terms of where and at what levels chemicals may migrate into homes via the vapor intrusion pathway; whether current or future well supplies are or may be impacted; and whether any chemicals are migrating under and beyond the Rock River.

Uncertainty is also introduced when attempting to correlate vertical groundwater VOC data between nearby wells (both residential and monitoring wells) from differing time periods. An important issue noted during the course of this data evaluation relates to the differences in the screening intervals of the residential and monitoring wells over different time periods. Groundwater data collected from 1990 to 1993 and the majority of the groundwater data collected from 1994 to 1999 have been derived from residential wells, most of which are screened from 65 feet to 80 feet bgs. However, no information regarding the exact locations or addresses of these wells is available. In addition, the record does not show the elevation of ground surface, making it difficult to determine which interval is the most contaminated. For example, if TCE is detected at 50 µg/L at Residence A but the

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concentration of TCE is only 14 µg/L in the adjacent Residence B, the difference may be caused by the screening depths of the wells or by a sharp concentration gradient in a horizontal direction. Since these data points (residential wells) no longer exist, these data cannot be collected in the future. In contrast, most groundwater data collected during recent investigations have been derived from monitoring wells which are screened at various depths ranging from 21 bgs to 100 feet bgs. This large difference in the screened intervals of the residential and monitoring wells could lead to misinterpretation of actual groundwater trends. Some of the remaining data gaps and uncertainties at the site are discussed below :

- During the 2002 Investigation, low levels of TCE (less than 1 µg/L) were found in MW-101S and in MW-101D at 1.8 µg/L. TCE was at also detected in these wells at 3.7 µg/L in MW-101S and at 3 µg/L in MW-101D during the 1994-1999 investigations. However, no groundwater samples were collected from the nearby CPT-07, CPT-08 or CPT-13 sampling locations due to shallow refusal upon multiple attempts at each of these locations. Therefore, it is uncertain whether, and at what depths and concentrations, any groundwater contamination remains in this area.

- During the 1990 to1993 investigation activities, TCE was detected at 9 and 1 µg/L in samples collected from two residential wells located on Degroff Street. Degroff Street is located north of McCurry Road off of Route 251. No other data are available or have been collected in this area. As a result, it is uncertain whether, and at what depths and concentrations any groundwater contamination remains in this area, and whether any residential wells in this area are being impacted.

- During the 2000 and 2002 investigation, TCE was detected in MW-109D. TCE was also detected in MW-112, MW-108S, MW-108D, MW-109S, MW-109D, MW-110S, and MW-110D during the 1994 to1999 investigations. During the same time period, PCE was also detected in MW-107S, MW-107D, MW-103S, MW-103D, MW-109S, and MW-109D. Based on the limited number of horizontal and vertical sampling points over this one mile area, it is uncertain whether, and at what concentrations any groundwater contamination remains in this area.

- During the 1990 to1993 investigations, the maximum TCE concentrations were detected at a home located on Mathew Avenue at 33 to 56 µg/L. In November 1993, the TCE concentration was 20 µg/L. On the other side of the street, at another home on Mathew Avenue, TCE concentrations were 62 µg/L in 1991, 25 µg/L in 1993, 13 µg/L in 1996 and 8 µg/L in 1998. The closest monitoring wells to these homes are

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MW-106S and MW-106D. However, TCE was not detected in MW-106D when it was sampled in 1994-1995, and only 3 µg/L was detected in MW-106S in 1994-1995. MW-105S and MW-105D, which are also nearby, but located closer to homes with less TCE, had no TCE in the shallower well in 1994-1995, but 15 µg/L TCE in the deeper well. Both MW-105 and MW-106 are screened from 55 to 65 ft-bgs and 90 to 100 ft-bgs. However, most of the residential wells in the area are believed to be screened between 60 and 80 ft-bgs. Although uncertainty exists in this area upon trying to correlate the data, the area around MW-105 and MW-106 has not been vertically profiled and MW-105 and MW-106 may not be appropriately located to characterize the horizontal and vertical extent of any remaining groundwater contamination in this area.

- Monitoring well MW-01A was first installed and sampled in 2002 and is located at the intersection of Blue Spruce Drive and Straw Lane, an area where some of the highest TCE concentrations in groundwater have been observed in the past. During the 1990 to1993 residential well sampling events, some of the highest TCE concentrations were detected in samples collected from five residential wells near Blue Spruce Drive and Straw Lane in the immediate vicinity of monitoring well MW-01A. Subsequent sampling of these residences during the 1994-1999 investigation events indicated a marked decline in TCE concentrations in all wells. This declining trend, consistent with historical sampling results, was also observed during the 2002 sampling of MW-01A. Nevertheless, the area around MW-01A may not be appropriately located to facilitate characterization of the horizontal or vertical extent of any remaining groundwater contamination in this area.

- No chlorinated solvents were detected in CPT-05 which was sampled at 35, 43, 51, 57, 69.5, 78 and 87 ft-bgs. CPT-05 was located in the upgradient direction of MW-105S and MW-105D. PCE and TCE were detected in MW-105S (screened from 55 to 65 ft-bgs) at concentrations ranging from 3.1 to 3.5 µg/L and 1.6 to 1.7 µg/L , respectively. PCE and TCE were also detected in the deep well (screened from 90 to 100 ft-bgs) at 3.2 and 2.8 µg/L, respectively. CPT-10, which also appears to be upgradient of the highest areas of contamination in 1991, had low levels of PCE and 1,1,1-TCA (less than 1 µg/L) in the 55 and 60 ft. intervals, and no chlorinated solvents in the 73 or 90 foot intervals. Also, no chlorinated solvents were detected in CPT-06, just east of CPT-10, which was sampled at 42, 53, 62, 74, and 85 ft-bgs. CPT-10, while in the plume, may only be on the edge of the plume. Since CPT-05, CPT-10 and CPT-06 are all located about 600 feet apart from each other, the horizontal and vertical extent of contamination in the area between CPT-10 and CPT-05 and in the area between CPT-10 and CPT-06 is unknown.

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- Low levels of 1,1,1-TCA, PCE and TCE (less than 1 µg/L) were detected in MW-104S (50 to 60 ft-bgs) and MW-104D (90 to 100 ft-bgs). However, no chlorinated solvents were detected in upgradient CPT-04 sampled at 32, 46, 56, 71, 78, 84 and 93 ft-bgs; or in CPT-09 sampled at 35, 45, 55, 68, 75 and 85 ft-bgs. This leads to uncertainty in correlating analytical results as well as expected groundwater flow patterns.

- According to the 1991 sampling, the highest TCE concentrations in the downgradient end of the plume are near Wagon Lane and Tanawingo. These locations are between CPT-03 and CPT-01, and about 300 feet from CPT-01/MW-03 where low levels of TCE were detected in 2000 and 2002. CPT-01 and MW-03, while in the plume, may only be on the edge of the plume, not in the center. Therefore, the horizontal and vertical extent of contamination in this area, where some of the highest TCE concentrations have been observed in the downgradient end of the plume, remains uncertain.

- Low levels of PCE (less than 1 µg/L) were found in MW-108D (55 to 65 ft-bgs), MW-107S (35 to 45 ft-bgs) at less than 1 µg/L, MW-107D (55 to 65 ft-bgs) at 3.3 µg/L, MW-109S (40 to 50 ft-bgs) at 1.6 µg/L and MW-109D (60 to 70 ft-bgs) at 2.6 µg/L, but no chlorinated solvents were found in nearby CPT-12 sampled at 45, 62, 70, 81, 93, 102 and 118 ft-bgs, and only low levels of 1,1,1-TCA (0.7 to 3 µg/L) were found in CPT-11 in the 81, 93, 102 and 125 foot bgs samples. Although uncertainty remains when correlating these data, CPT-11 and CPT-12 are about 500 feet from each other, and are each about 400 feet from MW-107, MW-108 and MW-109. Also, MW-107, MW-108, MW-109 and the area to the west and south of these locations, has not been vertically profiled. As a result, MW-107, MW-108 and MW-109 may not be appropriately located in order to characterize the horizontal and vertical extent of any remaining groundwater contamination in this area.

- As described previously under data gaps related to hydrostratigraphy, the thickness of the shallow sand and gravel aquifer encountered beneath the site has been estimated at approximately 220 feet (approximately 735 feet amsl to 515 feet amsl), or greater based on municipal well logs. The screen intervals for the now abandoned residential wells were believed to have been situated at depths ranging from approximately 720 feet amsl to 655 feet amsl. The monitoring wells installed from 1994 through 2002 have been screened at various depths in an attempt to provide additional vertical distribution data of the plume, however the maximum depth of these wells extends to 651 feet amsl. The groundwater samples collected via CPT were obtained from a maximum depth of 630 feet amsl. A comparison of the aquifer thickness to the maximum depth at which groundwater samples have, or can be

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sampled, indicates that a minimum of 115 feet of the aquifer has not been characterized for VOC contamination.

In order to address these uncertainties, additional vertical profiling using temporary well point sampling, may be required. The information obtained from the vertical profiling should also be used to evaluate the adequacy of the existing monitoring well network for use in a long-term monitoring program. Additionally, results of vertical profiling should be used to identify horizontal and vertical areas where additional monitoring wells are needed. This is discussed in more detail in Section 7.

6.5 VAPOR MIGRATION PATHWAY

One of the objective of the Air Sampling investigation (WESTON, 2003a) was to relate the presence of VOCs in groundwater, both proximate and distant, to the areas of soil gas and indoor air sampling. Based on the groundwater and air data evaluated in that study, there may be a correlation between some constituents detected in groundwater and corresponding constituents detected in soil gas. However, due to many factors, there remains some uncertainty as to whether a direct correlation exists between contaminants found in groundwater and soil gas samples. Fate and transport mechanisms are not well documented at the site and introduce a degree of uncertainty. In general, environmental transport involves the movement of gases, liquids, and solids within a given medium and across interfaces between air and water. Fate and transport mechanisms can usually be simplified into four basic categories: emission (at what rate contaminants are entering the medium); advection (direction and rate of migration through a medium); dispersion (spreading of contaminants), and attenuation (degree of buffering or attenuation). Each of these mechanisms are documented to different degrees at the Evergreen Manor site and increase the level of uncertainty.

Additionally, the rate and amount of migration of VOCs across the groundwater to soil vapor interface, migration through soil, and subsequent vapor intrusion indoors is also subject to many factors. Vapor-phase levels will be subject to change based on any or all of the following factors,

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some of which are chemical-specific and some of which are site-specific. Some chemical specific factors for which little data are available include water solubility, vapor pressure, Henry's Law constant, organic carbon partition coefficient, degradation rates, etc. Site-specific factors include the following:

- Variations in subsurface physical properties such as temperature, soil porosity, bulk density, and moisture content.

- Ambient air temperature conditions, wind speed, and direction.

- Hydrogeologic characteristics, such as depth to water table, hydraulic gradients, seasonal fluctuations, flow rates, aquifer vadose zone permeability, presence/absence of confining layers, and recharge/discharge zones.

- The presence and/or magnitude of barriers to indoor vapor intrusion could cause soil gas and/or indoor air levels of a given VOC to vary. This includes both natural features and manmade objects. Winter frostline depths are variable and may also act as temporary barriers and alter normal air flow patterns towards negative pressure zones, such as basements. Similarly, the presence of higher-permeability channels (e.g., utility conduits) or ground cover (vegetation vs. paved surfaces) may induce channeling effect of vapors along preferential flow path.

- Although not expected to be a significant factor based on the relatively uniform lithology at the site, it is also possible that VOCs could migrate laterally through the vadose zone from more distant areas of the plume with higher concentrations towards area residences. Some or all of the factors described in the preceding bullets may induce this type of migration.

- The vertical distribution of contaminants is not consistently documented. Only CPT groundwater locations during the 2000 RI were vertically profiled resulting in a higher degree of confidence about the vertical distribution of contaminants in the water column only in certain areas. Residential wells and monitoring wells result in discrete sampling depths. Usually the screened zones are selected such that the highest permeability strata are open to the well, theoretically yielding the highest levels of contaminants since these represent preferential flow paths within the aquifer; however, there remains the potential that contaminants located above the screened zones (therefore not necessarily represented in the analytical data) may migrate to the vapor phase. Additional uncertainty arises from the fact that the shallow groundwater (at watertable) characterization at the Evergreen Manor site is

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not complete because the focus of previous investigations was on the characterization of relatively deeper portions of the aquifer rather than the shallow portion (vadose zone and water table, approximately < 30 feet bgs). This lack of data in the shallow aquifers increases the uncertainty in the behavior of volatiles that may originate in the unsaturated zone.

In addition to the uncertainty factors discussed above, some analytical data gaps and limitations that may add to the level of uncertainty also exist. Limited groundwater characterization work has been performed during the 2002 investigation. Only three groundwater data points were installed in selected sections of the residential area; therefore, a large, current sample population within the residential area of the site does not exist. Since these three 2002 groundwater sample locations were selected in conjunction with air sampling zones, the level of uncertainty is deemed insignificant in the immediate vicinity of this recent work, and groundwater characterization for the purpose of air quality evaluation is deemed adequate. This is reinforced by the expectation that the predominant vapor migration direction is vertical from the water table towards the surface based on the presence of uniform permeability sand and gravel throughout the vadose zone and on the lack of any documented confining silt/clay layers. An exception exists in that these wells were screened below the water table and were designed to mimic and evaluate previous residential well constructions (i.e., draw water from depth horizons similar to former residential wells). Also, the highest levels of PCE and TCE concentrations in soil gas were found in an area where the some of the lowest levels of groundwater contamination have been observed. The highest soil gas levels of PCE (190 $\mu g/m^3$) and TCE (9.5 $\mu g/m^3$) were found in a residence near Wagon Lane and Wagon Lane Court located in an area where PCE and TCE concentrations have been historically low. In 1993, TCE concentration in the groundwater sample collected from this residence was reported at 3 $\mu g/L$. In 1991, TCE concentrations in samples collected from the surrounding homes were also reported as less than 5 $\mu g/L$. PCE was not detected in any of these homes. During the 2000 RI, TCE concentration in the groundwater sample collected from another residential well located near Wagon Lane and Wagon Lane Court was reported as 0.7 $\mu g/L$. Again, no PCE was reported. In 2002, both PCE and TCE concentrations in the nearby monitoring well MW-02 (screened from 65 to 70 ft-bgs) were reported

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as non-detect. In order to evaluate whether contaminants in groundwater could be the source of contaminants in air that could theoretically result in vapor intrusion risks of 1×10^{-4}, groundwater concentrations were calculated using the equation provided in the *Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils* (U. S. EPA, 2002b). The calculated groundwater concentrations are presented in Table 6-1. The results show that theoretically, relatively higher groundwater concentrations than those observed would be needed to correspond to a vapor intrusion risk of 1×10^{-4}. For example, theoretically, PCE concentrations in water would have to be 110 μg/L to correspond to indoor air and soil gas concentrations of 81 $\mu g/m^3$ and 810 $\mu g/m^3$ respectively. TCE concentrations in groundwater would theoretically have to be 5.2 μg/L to correspond to indoor air and soil gas concentrations of 2.2 $\mu g/m^3$ and 22 $\mu g/m^3$, respectively. Thus, for the observed PCE and TCE concentrations in groundwater, the corresponding concentrations in soil gas are much higher than the expected theoretical values. Therefore, there is a possibility that contaminants that have not been characterized or quantified may be present near the water table surface or in the vadose zone in these areas, and a vapor migration potential may exist there.

In order to mitigate the above uncertainties, the extent of soil gas and shallow groundwater contamination should be characterized throughout the subdivisions. The soil gas and indoor air monitoring program should target a statistically significant number of homes. The initial sampling should target homes in areas that, historically, have had the highest levels of groundwater contamination (e.g., those along the centerline of the plume), homes in areas where relatively lower level of contamination has been observed and homes that lie outside the plume. Soil gas sampling in addition to groundwater sampling can be used to help identify areas where vapors may collect or be channeled, even if groundwater concentrations are low (e.g., home near Wagon Lane and Wagon Lane Court). Soil samples should be collected adjacent to soil gas samples to differentiate contamination from groundwater and contamination from household sources (e.g., spilling gasoline from a lawn mower). Additional details concerning how the vapor intrusion pathway at Evergreen Manor might be addressed are presented in Section 7.

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6.6 NATURAL ATTENUATION PROCESSES

At present time, the VOC concentrations observed at the Evergreen Manor site are believed to be either stable, or are declining from concentrations reported during the 1990 to 1994 time frame. The horizontal extent of VOC contaminated groundwater throughout the site has been defined to varying degrees depending on location and volume of data available. The overall decrease of the contaminated plume, favorable site conditions, contaminants amenable to natural attenuation substantiated by overall decrease in concentrations, presence of PCE upgradient possibly breaking down to TCE downgradient, and presence of numerous daughter products at low levels throughout the plume and other site-specific data presented in this report, appears to indicate that monitored natural attenuation (MNA) is a likely candidate for use as the cleanup option for the Evergreen Manor site. Although the exact source of the contamination has not been identified, information exists that Regal-Beloit, AAA Disposal (property now owned by Waste Management) and Ecolab all had waste management areas near Route 251 and Rockton Road that were all, to varying degrees, closed under IEPA oversight. Also, the significant decreases seen in same-well sampling points (MW-103S, MW-105D, and two residential wells located near Blue Spruce Drive and Straw Lane) indicate that there are no currently active source areas.

A certain amount of uncertainty remains with respect to the current horizontal and vertical extent of the Evergreen Manor plume, and the remaining contaminant concentrations within the plume. This is especially true for shallow groundwater which, for the most part, has not been characterized within the residential area, but which poses the greatest risk to residents via the vapor intrusion pathway. Similarly, the location of the center of the plume, horizontally and vertically, is also unclear.

Although same-location sampling, where available, shows significant decreases in contaminant concentrations over time, actual concentrations in other areas of the plume could be somewhat higher than the those indicated by the current monitoring well network and CPT sampling, which only

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provide limited horizontal and vertical data points. Additionally, these data points may not be located in the area and/or zones of highest contamination.

This uncertainty is relevant in terms of where and at what levels chemicals may migrate into homes via the vapor intrusion pathway; whether current or future well supplies are or may be impacted; and whether any chemicals are migrating under and beyond the Rock River. However, these uncertainties can be addressed through additional characterization activities and the development and implementation of appropriate monitoring programs and contingency plans.

As part of the 2000 RI, eight groundwater samples collected from the monitoring wells (primarily deep wells) were analyzed for limited water quality parameters that included ammonia, COD, nitrate, nitrite, orthophosphate, sulfate, and sulfide. Three residential well samples were also submitted for these same water quality parameters. These parameters were analyzed to preliminarily evaluate whether conditions are appropriate for the natural attenuation of the VOC contaminants encountered at the Evergreen Manor site. The RI concluded that insufficient evidence of anaerobic biodegradation was present based on the limited data available, although anaerobic biodegradation may be occurring at some level. However, reductions of chlorinated VOCs are likely being achieved taking into account simple advection and dispersion, and assuming a non-continuing source. Modeling during the 2000 RI and subsequent 2002 Investigation (first order kinetic and BIOSCREEN) conducted using available data predicted that TCE and PCE contaminant levels would achieve regulatory levels within specified time frames and show that the MNA remedy may be applicable to the Evergreen Manor site, given that the uncertainties identified for the site are adequately addressed through appropriate characterization activities and that appropriate monitoring programs and contingency plans are developed and implemented.

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6.7 IMPACT TO MUNICIPAL WATER SUPPLY WELLS

The groundwater samples collected from the two NPPWD water supply wells (#6 and #6A) located at the intersection of Hononegah and Cedarbrook in 2002 indicate the presence of PCE at concentrations ranging from 0.23 µg/L to 0.61 µg/L. A subsequent U.S. EPA investigation of these two supply wells indicated that a PCE-based coating applied to the well piping is the most likely source of these impacts. However, several data gaps and uncertainties were identified at the conclusion of this investigation including aquifer degassing during sample collection due to pressure differentials at depth, limited deep aquifer characterization data, and well casing integrity data gaps. Additionally, data gaps identified above with respect to uncertainty for shallow aquifer characterization also play a role since it appears that a confining layer does not exist between shallow documented groundwater contamination associated with the Evergreen manor and Warner Electric sites, and the deeper aquifers. Uncertainty associated with potential impacts to the municipal wells are minimized by the generally low level VOC contamination present in the shallow aquifer and the distance and depth between the two groundwater zones. Although uncertainty remains with respect to potential undocumented upgradient sources. Additional uncertainty and data gap analyses, and recommendations with respect to municipal water supply wells, are discussed in greater detail in the U.S. EPA Deep Well profiling Report (WESTON, 2003b), expected to be finalized in Summer 2003.

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SECTION 7

CONCLUSIONS & RECOMMENDATIONS

This section presents conclusions and recommendations for actions at the Evergreen Manor site, based on the results of this data evaluation. The conclusions subsection summarizes the major findings of this report, and the recommendations subsection presents recommendations for future action.

7.1 CONCLUSIONS

Based on the historical data evaluation, the following are the conclusions of this report:

- Historically, TCE and PCE concentrations in residential wells, monitoring wells, municipal wells, and CPT sampling locations have consistently exceeded the MCL, the TACO and the WQCAL values. TCE and PCE were not detected in any sediment and surface water samples. TCE and PCE were also reported in the soil gas samples. TCE exceeded the most conservative target RBC in soil gas samples collected from the central, the west-central and the southern residential areas of the groundwater plume. PCE exceeded the most conservative target RBC in soil gas sample collected from the west-central residential area of the groundwater plume. The highest PCE and TCE concentrations of 190 $\mu g/m^3$ and 9.5 $\mu g/m^3$, respectively, were reported in a soil gas sample collected from the residence located in the central-western residential area of the groundwater plume, where, historically, PCE and TCE concentrations in the residential wells have been either non-detect or detected at concentrations below the drinking water standards. No PCE detection has ever been reported in this area of the groundwater plume. PCE and TCE were also detected in soil gas samples at much lower levels in the southern and central residential areas of the plume and no TCE and only very low PCE levels in soil gas samples collected from the northern residential area of the plume. The southern, the central and the northern residential portions of the plume lie in areas where, historically, high TCE concentrations have been reported in groundwater samples. In most instances, PCE concentrations in groundwater samples collected from these areas have been either non-detect or detected at concentrations below the drinking water standards. Historically, PCE levels in groundwater samples collected from the northern residential areas have exceeded the drinking water standard only twice, once during the 1990-1993 time period and once during the 1994-1999 time period.

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- Chloroform was detected at a concentration of 0.23 µg/L in the groundwater collected from monitoring well MW-02 during the 2002 Investigation. Chloroform was also detected during the 2000 RI at a concentration of 0.9 µg/L in the residential well RW-08 (located near Wagon Lane and Straw Lane). The 2002 chloroform concentration exceeded the corresponding TACO and WQCAL values but was below the corresponding MCL of 100 µg/L. The 2000 chloroform concentration slightly exceeded the TACO value. Chloroform in sediment sample SED-1 (a background sample) exceeded the most conservative SQCAL value of 0.4 µg/kg. Chloroform was also detected in the soil gas samples collected from the residential areas of the groundwater plume. Chloroform was detected at concentrations that exceeded the most conservative target RBC in soil gas samples collected from the central and southern residential areas of the groundwater plume. However, because chloroform was only detected at low levels in groundwater at one location in the residential area; and because chloroform was also detected in the field blank sample; and, considering potential contributions by extraneous sources such as common household disinfection products, chloroform and other trihalomethanes detected in the public water supply which is discharged into septic systems, and the disinfection of private wells with chlorine bleach or tablets, chloroform does not appear to be site-related.

- During the 2000 RI, acetone was reported in 18 of the groundwater samples collected from the CPT wells, and in two samples collected from the residential wells. During the same time period, acetone, a common laboratory contaminant, was also detected in field blank samples at concentrations up to 12 µg/L, suggesting that some of the groundwater detections may be due to laboratory contamination. Acetone was not reported in any samples collected during the April 2002 Investigation. It was also not detected in any sediment and surface water samples collected during the 2000 RI and 2002 Investigation. The U.S. EPA has not established an MCL or an Ecotox value for acetone: The TACO for acetone value has been established at 700 µg/L. Acetone has not been reported in any groundwater samples at concentrations that exceed the TACO value.

  Acetone was also detected in soil gas samples at concentrations that did not exceed the most conservative target RBC and therefore, presents minimal risk to human health via the vapor intrusion pathway.

- During the 2000 RI, methylene chloride was reported in one groundwater sample collected from CPT-03. This reported value was well below the MCL and TACO value of 5 µg/L. It was also below the WQCAL value of 98 µg/L. No U.S. EPA Ecotox value has been established for this compound. To date, methylene chloride has not been reported in any sediment and surface water samples.

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Methylene chloride was also detected in soil gas samples at concentrations that did not exceed the most conservative target RBC. Therefore, methylene chloride presents minimal risk to human health via the vapor intrusion pathway.

- During groundwater activities conducted from 1994-1999, 1,1-DCA concentrations were reported in several groundwater samples collected from monitoring wells. During the 2000 RI, 1,1-DCA was reported in a groundwater sample collected from CPT-11 which is located along Route 251 south of the apparent source area. During the 2002 Investigation, 1,1-DCA was reported in groundwater samples collected from monitoring wells MW-01A, MW-03, MW-105S, and MW-105D. Concentrations reported ranged from 0.19 µg/L to 0.39 µg/L. The reported 1,1-DCA groundwater concentrations were significantly lower than the TACO and Ecotox values. No MCL or WQCAL values have been established for this constituent. 1,1-DCA was not reported in any sediment and surface water samples. The soil gas samples collected during the May 2002 air investigation were not analyzed for 1,1-DCA.

- The compound 1,1-DCE was reported in several monitoring well samples collected during groundwater sampling activities conducted from 1994-1999. 1,1-DCE was also reported during the April 2002 Investigation in groundwater samples collected from MW-01A and MW-03 at estimated concentrations ranging from 0.16 to 0.2 µg/L. None of the reported 1,1-DCE concentrations exceeded the MCL and TACO value of 7 µg/L and the respective WQCAL value of 11,600 µg/L. U.S. EPA Ecotox value has not been established for this compound. 1,1-DCE was not reported in any of the groundwater samples collected during the 2000 RI. 1,1-DCE was also not reported in any sediment and surface water samples. The soil gas samples collected during the May 2002 air investigation were not analyzed for 1,1-DCE.

- The compound 2-butanone was detected in one groundwater sample during the 2000 RI. It was reported in CPT-05 at a concentration of 16 µg/L. 2-Butanone is a common laboratory contaminant and was also detected in field blank samples at concentrations up to 12 µg/L during the 2000 RI, suggesting that the detections may have been due to laboratory contamination. 2-Butanone was not reported in any of the groundwater samples collected during the April 2002 Investigation. With the exception of the WQCAL criteria (7,200 µg/L), no other evaluation criteria used in this report have been established for 2-butanone. The 2-butanone reported at CPT-05 was significantly lower than its WQCAL criteria. 2-Butanone was also detected in sediment sample SD-04 at a concentration of 3 µg/kg, and in soil gas samples at concentrations that were below the most conservative target RBC, indicating minimal risk to human health via the vapor intrusion pathway.

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- Cis-1,2-DCE was reported in several monitoring well samples collected during groundwater sampling activities conducted from 1994 to 1999. During the 2000 RI, cis-1,2-DCE was reported in groundwater samples collected from CPT-01, MW-105S, and MW-105D, and one residential well. The cis-1,2-DCE concentrations reported during this period ranged from 1 µg/L to 2 µg/L. During the 2002 investigation, cis-1,2-DCE concentrations were reported in groundwater samples collected from MW-01A, MW-03, MW-105S, and MW-105D at concentrations ranging from 0.16 µg/L to 0.2 µg/L. None of the cis-1,2-DCE concentrations reported in 2000 or 2002 exceeded the MCL or TACO value of 70 µg/L as well as the WQCAL value of 200 µg/L. The U.S. EPA Ecotox value for this constituent has not been established. Cis-1,2-DCE was not detected in any soil gas samples, sediment, and surface water samples collected to date.

- The compound 1,1-TCA was reported in several monitoring well samples collected during groundwater sampling activities conducted from 1994-1999. During the 2000 RI, 1,1,1-TCA was reported in groundwater samples collected from four CPT locations including CPT-01, CPT-3, CPT-10, and CPT-11 at concentrations ranging from 0.7 to 3 µg/L; from six monitoring wells including MW-103D, MW-104S, MW-104D MW-105S, MW-105D, and MW-112 at concentrations ranging from 1 to 3 µg/L; and from six residential wells located near Blue Spruce Drive and Straw Lane (two wells), Wagon Lane and Straw Lane (two wells), Tresemer and Valerie Drive (one well), and Wagon Lane and Wagon Lane Court (one well) at concentrations ranging from 1 to 5 µg/L. During the 2002 Investigation, 1,1,1-TCA was reported in groundwater samples collected from monitoring wells MW-01A, MW-02, MW-03, MW-103S, MW-103D, MW-104S, MW-104D MW-105S, MW-105D, and MW-109D at concentrations ranging from 0.29 µg/L to 2.4 µg/L. None of the 1,1,1-TCA concentrations reported in 2000 or 2002 exceeded any of the 1,1.1-TCA evaluation criteria used in this report.

- 1,1,1-TCA was not detected in any sediment or surface water sample collected to date. Although 1,1,1-TCA was detected in all soil gas samples, reported concentrations were below the most conservative target RBC. Therefore, 1,1,1-TCA presents minimal risk to the human health via vapor intrusion pathway.

- During the 2000 RI, benzene was reported in groundwater samples collected from CPT-09 and CPT-12. In CPT-09, benzene was detected at concentrations of 0.5 µg/L and 0.6 µg/L in samples collected from depths of 35 feet and 88 feet bgs, respectively. In CPT-12, benzene was detected at a concentration of 0.5 µg/L in the sample collected from a depth of 81 feet bgs. All reported concentrations were below the lowest available groundwater and ecological criteria used in this report. During the 2000 RI, benzene was reported in the background sediment sample SED-4 at a concentration that was below the lowest available groundwater and ecological

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evaluation criteria used in this report. Benzene has not been detected in any residential well samples, monitoring well samples, and surface water samples collected during the 2000 RI and the 2002 Investigation. Benzene was also detected in soil gas samples at concentrations exceeding the most conservative target RBC, suggesting that benzene may be site related.

- Historically, benzene has not been identified as a major groundwater contaminant at the Evergreen Manor site. Benzene has only been detected at low levels (maximum concentration 0.6 µg/L) in three groundwater samples from two CPT locations (2 samples from CPT-09 and one sample from CPT-12). These CPT samples were collected at temporary roadside locations while traffic was present, suggesting the possibility that the detected benzene may have been related to vehicle exhaust. Given the number of groundwater samples collected across the site and the infrequent benzene detections in distant sampling locations (>100 feet), the likelihood of benzene migrating from groundwater into indoor air of the target residences is minimal. However, elevated benzene levels (greater than the target RBC) in some of the soil gas samples indicate that some of the benzene may be site related, since groundwater at the water table/vadose zone interface has not been adequately characterized within the residential area. Before concluding that benzene is site related, due consideration must also be given to the relationship between benzene detections in soil gas samples and extraneous sources such as vehicle emissions. Given the known data gaps/limitations, the origin of benzene in air samples remains uncertain.

- During the 2000 RI, toluene was detected in 75 samples collected from CPT sampling locations and nine samples collected from residential well locations at concentrations ranging from 0.5 to 3 µg/L. Toluene only exceeded the most conservative WQCAL value of 0.8 µg/L. During the 2000 RI investigation, toluene was also detected in method and field blanks at concentrations of up to 2 µg/L, suggesting contamination via extraneous sources. Toluene was also detected in the sediment sample SD-06 collected during the 2002 Investigation and in sediment sample SED-4, a background sediment sample, collected during the 2000 RI at concentrations that were below the lowest available groundwater and ecological evaluation criteria used in this report. Toluene was not reported in any surface water samples. Toluene was also detected in all soil gas samples at concentrations that were below the most conservative target RBC, indicating minimal risk to human health via the vapor intrusion pathway.

- During the 2000 RI, ethylbenzene was detected in groundwater sample collected from CPT-09 at a concentration of 0.6 µg/L which is below the lowest available groundwater and ecological criteria used in this report. Ethylbenzene was not detected in any sediment and surface water samples collected during the 2000 RI and

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the 2002 Investigation. Ethylbenzene was also detected at concentrations exceeding the most conservative target RBC in several soil gas samples collected during the 2002 air sampling investigation, suggesting that ethylbenzene may be site related. However, given the number of groundwater samples collected across the site, the location of detected ethylbenzene in groundwater with respect to target residences, and the general lack of detected ethylbenzene in groundwater, the likelihood of ethylbenzene migrating from the groundwater into area residences is minimal. But the presence of ethylbenzene at significant levels in soil gas indicates that ethylbenzene may be site related, since groundwater at the water table/vadose zone interface has not been adequately characterized within the residential area. Before concluding that ethylbenzene is site-related, due consideration must also be given to the effect of extraneous sources such as emissions from vehicles driven in and out of the attached garages and gasoline products stored in the garages of homes. Based on conflicting groundwater and air data, it is uncertain whether vapor intrusion pathway for ethylbenzene is complete at the Evergreen Manor site.

- Xylenes were detected in CPT-02 (three samples), CPT-06, CPT-09, and CPT-11 at concentrations ranging from 0.5 µg/L to 0.7 µg/L. These concentrations were below the lowest available groundwater and ecological evaluation criteria used in this report. Xylenes were detected in all the soil gas samples at concentrations that did not exceed the most conservative target RBC, indicating minimal risk to human health via the vapor intrusion pathway.

- During the 2000 RI, Freon 113 was reported in groundwater samples collected from MW-103S and MW-103D (and the duplicate sample) at concentrations ranging from 2 µg/L to 300 µg/L. During the 2002 Investigation, Freon 113 was reported in groundwater samples collected from MW-103D and MW-107D at concentrations of 30 µg/L and 6.7 µg/L, respectively. These detections were found in the upgradient wells, but not in the groundwater samples collected within the residential subdivisions. The only evaluation criterion established for this constituent is the WQCAL value which is 580 µg/L. Freon 113 was also detected in the background sediment sample SD-01 collected during the 2002 Investigation. The reported concentration was well below the lowest available evaluation criteria used in this report. Freon 113 was also detected in all the soil gas samples at concentrations that did not exceed the most conservative target RBC and therefore, presents minimal risk to human health via the vapor intrusion pathway.

- To date, methyl acetate has only been reported in two sediment samples, SED-1 and SED-5, collected during the 2000 RI. The reported concentrations were well below the lowest available evaluation criteria used in this report.

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- A total of 262 residences located within the Evergreen Manor, the Olde Farm, the Tresemer and the Hononegah Heights subdivisions have been connected to the NPPWD water supply. In addition, 19 of the 21 homes included in a "buffer zone" were connected to the NPPWD water supply as a precaution. Upon review of the NPPWD service records, it is apparent that additional residences and/or commercial properties within the vicinity of the Evergreen Manor Site may be using private wells for potable water.

- At the present time, the VOC concentrations observed at the Evergreen Manor site are believed to be either stable, or are declining from concentrations reported during the 1990 to 1994 time frame.

- The overall decrease of the contaminated plume, favorable site conditions, contaminants amenable to natural attenuation substantiated by overall decrease in concentrations, presence of PCE upgradient possibly breaking down to TCE downgradient, and presence of numerous daughter products at low levels throughout the plume and other site-specific data presented in this report, appears to indicate that monitored natural attenuation (MNA) is a likely candidate for use as the cleanup option for the Evergreen Manor site.

- A review of the historical field and analytical data indicates that the horizontal extent of VOC contaminated groundwater throughout the Evergreen Manor site has been defined to varying degrees, however the precise source of these impacts has never been adequately determined. Early investigations, including well installation, soil vapor surveys, and groundwater sampling, indicated that the source(s) was likely present in the industrial area surrounding the intersection of Rockton Road and Route 251.

- Regal-Beloit, AAA Disposal (property now owned by Waste Management) and Ecolab had waste disposal areas on their property near Route 251 and Rockton Road that were all, to some degree, "closed" under IEPA oversight. Information submitted to IEPA by Waste Management, Regal-Beloit and Ecolab during the mid-1990s indicates that the likely sources of the groundwater contamination at the Evergreen Manor site include a landfill at former AAA Disposal System that was covered with soil and granted closure by IEPA in 1977, wastewater discharged to a septic field and 5 underground storage tanks at Regal-Beloit which were closed under RCRA in 1987, and a wastewater lagoon at Ecolab that was closed removed under IEPA oversight in 1979.

- The general trend observed during the evaluation of previous studies indicates an apparent decrease in the contaminant concentrations over different time frames. This trend suggests that the source(s) may not represent a continuing source of

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groundwater contamination. Questions remain, however, such as whether past releases were in the form of dense non-aqueous phase liquids (DNAPL). These may have resulted in very deep portions of the aquifer being contaminated, and shallower portions only exhibiting patterns of contamination consistent with that of residual contamination. Due to the uncertainty and data gaps identified, data may not be sufficient to adequately determine the location and nature of the source(s). Thus, the source(s) of contamination, whether multiple sources, extraneous sources, point source or continuing source, remain unknown, and additional effort may be warranted to address this issue. The level of effort will necessarily be based on anticipated remedial approaches.

- A certain amount of uncertainty remains with respect to the current horizontal and vertical extent of the Evergreen Manor plume, and the remaining contaminant concentrations within the plume. This is especially true for shallow groundwater which, for the most part, has not been characterized within the residential area, but which poses the greatest risk to residents via the vapor intrusion pathway. Similarly, the location of the center of the plume, horizontally and vertically, is also unclear.

- Although same-location sampling, where available, shows significant decreases in contaminant concentrations over time, actual concentrations in other areas of the plume could be somewhat higher than the those indicated by the current monitoring well network and CPT sampling, which only provide limited horizontal and vertical data points. Additionally, these data points may not be located in the area and/or zones of highest contamination.

  This uncertainty is relevant in terms of where and at what levels chemicals may migrate into homes via the vapor intrusion pathway; whether current or future well supplies are or may be impacted; and whether any chemicals are migrating under and beyond the Rock River.

- The hydrostratigraphy of the shallow contaminated sand and gravel aquifer has only been characterized up to a maximum depth of approximately 100 ft. bgs, and not at all locations within the estimated plume boundaries.

- Although attempts to map groundwater flow across the site conclude that the overall lateral groundwater flow direction is towards the Rock River, insufficient spatial data points are available to evaluate local variation in groundwater flow patterns (direction and velocity). This is especially true with regards to vertical flow characteristics across the site.

- The presence and magnitude of vertical gradients in the vicinity of the Rock River have not been documented; therefore, insufficient evidence is currently available to

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state that all contaminated groundwater associated with the Evergreen Manor VOC plume discharges to the Rock River, or that alternately, an underflow condition exists. In the event that the VOC contaminated groundwater observed at the site is present at sufficient depths to be influenced by the more regional flow regimes, it is possible that contaminants could be migrating beneath the Rock River.

- Temporal data on water levels, recharge from precipitation, geochemical conditions, flow direction and other hydrogeological data are also limited. This insufficient data limits the ability to conduct a full evaluation of the sources of variability in VOC concentrations and distributions. These temporal data are needed to more effectively assess the fate of contaminants in the groundwater.

- Some of the highest levels of PCE and TCE concentrations in soil gas were found in an area with some of the lowest levels of groundwater contamination. It is possible that contaminants that have not been characterized or quantified may be present near the water table surface or in the vadose zone in these areas, and a vapor migration potential may exist there.

7.2 RECOMMENDATIONS

The following subsections present recommendations that will address the data gaps and uncertainties identified in Section 6.

7.2.1 Recommendations for Groundwater Issues

Based on the discussions in the previous sections, it is evident that monitored natural attenuation (MNA) may be a likely candidate for use as the remedial option for the Evergreen Manor site. In the event that MNA is determined suitable for implementation as a cleanup remedy, it is equally as important to have an appropriate monitoring network to verify and demonstrate that the cleanup goals established are being met in an appropriate time frame. To address the data gaps and uncertainties identified in Section 6, additional characterization activities would be needed prior to implementing any remedial alternative. These characterization activities should be conducted during the pre-design phase. The characterization activities would be designed to:

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- Sample all private wells within the plume site boundary (as determined by the historical maximum extent of VOCs) and in nearby areas to confirm that these wells are not impacted. This would include sampling approximately nine locations along Metric Road, 19 locations along East Rockton Road, 12 locations along Route 251/2nd Street, 19 locations along Degroff, four locations along McCurry, and 10 locations along Stamford Lane and Waltham Road.

- Confirm groundwater flow. The current monitoring well network may not be appropriately located to determine accurate groundwater flow direction. Confirming the groundwater flow across the site can help identify areas where groundwater contaminants may remain. This can be done by installing approximately 11 piezometers at locations shown in Figure 7-1. Groundwater elevation data from the piezometers should be used to supplement groundwater elevation data from the existing groundwater monitoring well network.

- Evaluate whether existing monitoring wells are appropriately located to monitor the remaining groundwater contamination, and identify the extent and concentrations of the remaining groundwater contamination. This could be done through vertical profiling near existing well locations, with additional vertical profiling in nearby areas to confirm the extent of any remaining contamination. Groundwater flow directions and private well sampling can also be used to help target areas where groundwater contaminants may remain. Vertical profiling could be conducted in the vicinity of the following areas:

  - MW-103, MW-107, MW-108, MW-109 (10 locations)

  - Degroff Street, MW-101, and unsampled CPT-07, CPT-08 and CPT-13 (6 locations)

  - Between CPT-05 and CPT-10 and CPT-10 and CPT-06 (4 locations)

  - In the subdivisions to determine current concentrations in the center of the plume and to confirm plume boundaries (15 locations)

  - On the other side of the Rock River to confirm there is no underflow and contaminant transport to the other side of the Rock River (5 locations)

The actual number of vertical profiling locations could be more or less and would depend on the results of initial vertical profiling locations:

- Use the results of the groundwater elevation data, vertical profiling and residential well sampling to identify horizontal and vertical areas in which additional monitoring

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wells are needed for any long-term monitoring programs. Approximately 10 additional shallow wells and 10 additional deep wells may be needed. The actual number of monitoring wells needed would depend on the results of the pre-design investigations.

7.2.2 Recommendations for Groundwater to Vapor Intrusion Pathway

As noted in Section 6, the extent of soil gas and shallow groundwater contamination should be characterized throughout the subdivisions. The soil gas and indoor air monitoring program should target a statistically significant number of homes. The initial sampling should target homes in areas that, historically, have had the highest levels of groundwater contamination (e.g., those along the centerline of the plume), homes in areas where relatively lower level of contamination has been observed, and homes that lie outside the plume. Soil gas sampling in addition to groundwater sampling should be used to help identify areas where vapors may collect or be channeled, even if groundwater concentrations are low (e.g., home near Wagon Lane and Wagon Lane Court). Soil samples should be collected adjacent to soil gas samples to differentiate contamination from groundwater and contamination from household sources (e.g., spilling gasoline from a lawn mower). The characterization activities, conducted during pre-design, should include:

- Soil gas and shallow groundwater sampling at approximately 50 locations within the subdivisions (20% of homes) to determine the nature and extent of any shallow groundwater and soil gas contamination and target approximately 25 homes for a long-term vapor monitoring program. The actual number of locations could be more or less and would depend on the results of initial soil gas and groundwater results. Approximately three soil gas samples would be collected at each sampling location - one just above the water table, one consistent with the bottom of the home's foundation (about 8 ft) and one in between. Approximately two groundwater samples should be collected at each location - one at the water table and one in the interval below.

- Soil sampling would be needed at locations where groundwater sample results do not correlate well with soil gas sample results to determine whether there are any homeowner-related spills.

- Septic systems, used by most, if not all of the Evergreen Manor subdivision residents, may be a point-source of certain contamination (e.g., use of chemicals to unclog a

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drain). Based on the results of the soil gas and shallow groundwater characterization, it may be necessary to collect additional soil, soil gas and shallow groundwater samples in the vicinity of selected septic systems to determine whether the septic sytem is a source of contamination. However, it should also be noted that, prior to the municipal well-hookup, household water obtained from contaminated private well supplies was discharged to septic systems.

- Based on the results of the soil gas and shallow groundwater sampling, approximately 25 homes should be targeted for soil gas and indoor air monitoring. Monitoring should include 24-hour indoor air samples at two to three locations per home and 24-hour samples at four soil gas locations at foundation depth per home four times a year (spring, summer, fall and winter). One of the indoor air samples could be collected in or near an attached garage to evaluate whether any BTEX compounds are homeowner-related or site-related. Soil samples could also be collected for VOC analysis at each soil gas location to determine whether there were any homeowner-related spills during sampling period. Shallow groundwater samples should also be collected at about 10 locations during each sampling period to correlate groundwater concentrations with soil gas findings. The soil gas and indoor air monitoring should continue for two years until baseline indoor air and soil gas concentrations are established. The soil gas and indoor air monitoring should continue until it is confirmed that vapor intrusion via soil gas is not a threat.

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SECTION 8

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Tables

Table 3-1

April 2002 Groundwater Elevations
Evergreen Manor Site
Roscoe, Illinois

Well I.D.	Elevation of Top of Inner Casing (ft above MSL)	Elevation of Ground Surface (ft above MSL)	Depth to Bottom (ft) April 2002	Total Depth of Well (ft below grade)	Depth to Water (ft) April 2002	Groundwater Elevation
MW-101S	730.29	727.5	42.58	39.8	6.58	723.71
MW-101D	730.34	727.6	81.98	79.2	6.61	723.73
MW-102S	771.09	768.7	47.99	45.6	40.61	730.48
MW-102D	771.49	769.1	67.47	65.1	40.96	730.53
MW-103S	767.21	764.3	45.09	42.2	36.38	730.83
MW-103D	767.27	764.4	59.01	56.1	36.42	730.85
MW-104S	756.13	753.3	62.42	59.6	34.30	721.83
MW-104D	755.59	753.1	102.45	100.0	33.86	721.73
MW-105S	757.95	755.2	67.85	65.1	35.93	722.02
MW-105D	757.79	755.3	101.79	99.3	35.79	722.00
MW-106S	757.20	754.8	NM	NM	NM	NM
MW-106D	756.86	754.5	NM	NM	NM	NM
MW-107S	765.79	763.4	47.34	45.0	37.01	728.78
MW-107D	766.39	763.3	67.41	64.3	37.63	728.76
MW-108S	767.01	764.4	NM	NM	NM	NM
MW-108D	766.96	764.4	NM	NM	NM	NM
MW-109S	769.91	767.3	52.43	49.8	42.25	727.66
MW-109D	769.50	766.9	72.34	69.7	41.88	727.62
MW-110S	748.19	745.4	NM	NM	NM	NM
MW-110D	748.31	745.6	NM	NM	NM	NM
MW-111	770.70	NA	NM	NA	NM	NM
MW-112*	774.2	772.3	NM	NM	NM	NM
MW-01A	751.99	752.5	59.91	60.4	34.40	717.59
MW-02	752.64	753.0	70.31	70.7	35.24	717.40
MW-03	726.14	726.71	75.93	76.5	15.42	710.72
Rock River	711.07				2.95	708.12

NOTES:

* : Elevations for MW-112 should be considered approximate, since the casing has been bent since the last vertical survey.

NA : Information not available

NM: Groundwater depth not measured.

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Table 5-1

Evaluation Criteria for Detected Volatile Organic Compounds
Evergreen Manor
Roscoe, Illinois

GROUNDWATER

Constituent	U.S. EPA	IEPA	U.S. EPA Ecotox Thresholds[1]	Compendium of Environmental Benchmarks
	Maximum Contaminant Level	Tier I Groundwater Remediation Objective, Class I	Lowest Available Ecotox Threshold	Most Conservative Freshwater Quality Criteria and Guidelines for the Protection of Aquatic Life [2]
	(µg/L)	(µg/L)	(µg/L)	(µg/L)
1,1,1-Trichloroethane	200	200	62	35
Freon 113*	NE	NE	NE	NE
1,1-Dichloroethane	NE	700	47	NE
1,1-Dichloroethene	7	7	NE	11,600**
cis-1,2-Dichloroethene	70	70	NE	200
Chloroform	100	0.2	NE	0.6
Tetrachloroethene	5	5	120	5
Acetone	NE	700	NE	NE
Methylene Chloride	5	5	NE	98
2-Butanone	NE	NE	NE	7200
Benzene	5	5	46	5.9
Toluene	1,000	1,000	130	0.8
Ethylbenzene	700	700	290	8
m-&/or p-Xylene	NE	NE	1.8#	2
Xylenes (total)	10,000	10,000	NE	36
Trichloroethene	5	5	350	1

SEDIMENT

Constituent	U.S. EPA Region IX	IEPA	U.S. EPA Ecotox Thresholds[3]	Compendium of Environmental Benchmarks
	Risk Based Concentrations[4]	Tier I Soil Remediation Objective[5]	Lowest Available Ecotox Threshold	Most Conservative Sediment Quality Criteria and Guidelines for the Protection of Aquatic Life [6]
	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
Freon 113*	5600	NE	NE	NE
2-Butanone	7300	NE	NE	NE
Benzene	600	800	57	8
Chloroform	3,600	300	NE	0.4
Methyl Acetate	22,000,000	NE	NE	NE
Toluene	520,000	650,000	670	890

Notes:
NE - Not Established
1. Based on U.S. EPA's Ecotox Update, Ecotox Thresholds, Publication 9345.0-12FSI, EPA 540/F-95/038, January 1996. U.S. EPA chronic ambient water quality criteria (AWQC) or EPA-derived final chronic values (FCVs) (USEPA, 1986a, 1986b, 1987).
2. Based on Appendix 2-4, A Compendium of Environmental Quality Benchmarks, GBEI/BC-99-001 (Environment Canada, 1999)
3. Based on U.S. EPA's Ecotox Update, Ecotox Thresholds, Publication 9345.0-12FSI, EPA 540/F-95/038, January 1996. U.S. EPA sediment quality criteria (SQC) (USEPA, 1993g).
4. Region IX RBCs are based on soil standards for residential property use.
5. Remediation objective is based on soil standard for the inhalation/ingestion exposure route for residential properties.
6. Based on Appendix 3-1, A Compendium of Environmental Quality Benchmarks, GBEI/BC-99-001 (Environment Canada, 1999)

*1,1,2-trichloro-1,2,2-trifluoroethane
** The value is for Total dichloroethenes
# The value is for m-xylene

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Table 5-2

2000 Remedial Investigation
Groundwater Analytical Results - Monitoring Wells
Evaluated against Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			MW-101D	MW-101S	MW-102D	MW-102S	MW-103D	MW-103D-DL	MW-103S	MW-104D
Sample Date:			5/30/2000	5/30/2000	6/1/2000	6/1/2000	5/31/2000	5/31/2000	5/31/2000	6/2/2000
Screened Interval (ft. below ground)			70-80	30-40	55-65	35-45	45-55	45-55	32-42	90-100
Laboratory:			ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Maximum Contaminant Level (ug/L)	IEPA Tier I Groundwater Remediation Objective (ug/L)								
1,1,1-Trichloroethane	200	200	2 U	2 U	2 U	2 U	3 J	50 U	2 U	1 J
1,1-Dichloroethane	NE	700	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
2-Butanone	NE	NE	11 U	11 U	11 U	11 U	11 U	250 U	11 U	11 UJ
Acetone	NE	700	2 U	2 U	2 U	2 U	35 B	50 U	2 U	2 UJ
Benzene	5	5	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Chloroform	100	0.2	3 U	3 U	3 U	3 U	3 U	75 U	3 U	3 U
Cis-1,2-Dichloroethene	70	70	4 U	4 U	4 U	4 U	4 U	100 U	4 U	4 U
Ethylbenzene	700	700	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Freon 113*	NE	NE	2 UJ	2 UJ	2 U	2 UJ	300 J	180 J	2 J	2 UJ
m-&/or p-Xylene	NE	NE	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Methylene Chloride	5	5	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Tetrachloroethene	5	5	1 U	1 U	1 U	1 U	0.5 J	25 U	[redacted]	1 U
Toluene	1,000	1,000	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Trichloroethene	5	5	2 J	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Xylenes (total)	10,000	10,000	---	---	---	---	---	---	---	---

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
--- Indicates compound not analyzed.
[redacted] = Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-2 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - Montoring Wells
Evaluated against Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			MW-104D-DUP	MW-104S	MW-105D	MW-105D-01	MW-105S	MW-108D	MW-108D-01	MW-108D-DUP
Sample Date:			6/2/2000	6/2/2000	6/2/2000	6/2/2000	6/2/2000	6/1/2000	6/1/2000	6/1/2000
Screened Interval (ft. below ground)			90-100	50-60	90-100	90-100	55-65	55-65	55-65	55-65
Laboratory:			ESAT	ESAT	ESAT	MltKem	ESAT	ESAT	MltKem	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Maximum Contaminant Level (ug/L)	IEPA Tier 1 Groundwater Remediation Objective (ug/L)								
1,1,1-Trichloroethane	200	200	1 J	2 J	2 J	3	2 J	2 U	1 U	2 U
1,1-Dichloroethane	NE	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	NE	11 UJ	11 UJ	11 UJ	5 U	11 UJ	11 U	5 U	11 U
Acetone	NE	700	2 UJ	2 UJ	2 UJ	5 U	2 UJ	2 U	5 U	2 U
Benzene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	100	0.2	3 U	3 U	3 U	1 U	3 U	3 U	1 U	3 U
Cis-1,2-Dichloroethene	70	70	4 U	4 U	1 J	2	1 J	4 U	1 U	4 U
Ethylbenzene	700	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	NE	2 UJ	2 UJ	2 UJ	---	2 UJ	2 UJ	---	2 UJ
m-&/or p-Xylene	NE	NE	1 U	1 U	1 U	---	1 U	1 U	---	1 U
Methylene Chloride	5	5	1 U	1 U	1 U	2 U	1 U	1 U	2 U	1 U
Tetrachloroethene	5	5	1 U	1 U	3 J	4	3 J	0.6 J	0.7 J	0.6 J
Toluene	1,000	1,000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	5	1 U	1 U	2 J	3	2 J	1 U	1 U	1 U
Xylenes (total)	10,000	10,000	---	---	---	1 U	---	---	1 U	---

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit
B - Constituent was detected in the method blank.
--- Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-2 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - Monitoring Wells
Evaluated against Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			MW-108S	MW-110D	MW-110S	MW-112
Sample Date:			6/1/2000	6/1/2000	6/1/2000	6/2/2000
Screened Interval (ft. below ground)			35-45	40-50	21-31	38.28-48.77
Laboratory:			ESAT	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Maximum Contaminant Level (ug/L)	IEPA Tier I Groundwater Remediation Objective (ug/L)				
1,1,1-Trichloroethane	200	200	2 U	2 U	2 U	2 J
1,1-Dichloroethane	NE	700	1 U	1 U	1 U	1 U
2-Butanone	NE	NE	11 U	11 U	11 U	11 UJ
Acetone	NE	700	2 U	2 U	2 U	2 UJ
Benzene	5	5	1 U	1 U	1 U	1 U
Chloroform	100	0.2	3 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	70	70	4 U	4 U	4 U	4 U
Ethylbenzene	700	700	1 U	1 U	1 U	1 U
Freon 113*	NE	NE	2 UJ	2 UJ	2 UJ	2 UJ
m-&/or p-Xylene	NE	NE	1 U	1 U	1 U	1 U
Methylene Chloride	5	5	1 U	1 U	1 U	1 U
Tetrachloroethene	5	5	1 U	1 U	1 U	1 U
Toluene	1,000	1,000	1 U	1 U	1 U	1 U
Trichloroethene	5	5	1 U	1 U	1 U	1 U
Xylenes (total)	10,000	10,000	---	---	---	---

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit
B - Constituent was detected in the method blank.
--- Indicates compound not analyzed.
[redacted] = Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-2 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results- CPT
Evaluated against Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-01-01	CPT-01-02	CPT-01-03	CPT-01-04	CPT-01-05	CPT-01-06	CPT-01-07	CPT-01-08
Sample Date:			5/25/2000	5/25/2000	5/25/2000	5/25/2000	5/25/2000	5/25/2000	5/25/2000	5/25/2000
Sample Screen Depth (ft below ground):			99	89	79	69	59	49	39	29
Laboratory:			ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Maximum Contaminant Level (ug/L)	IEPA Tier I Groundwater Remediation Objective (ug/L)								
1,1,1-Trichloroethane	200	200	2 U	1 J	1 J	1 J	1 J	2 U	1 J	2 U
1,1-Dichloroethane	NE	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	NE	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U
Acetone	NE	700	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	15 B	2 UJ
Benzene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	100	0.2	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	70	70	4 U	2 J	1 J	1 J	1 J	1 J	4 U	4 U
Ethylbenzene	700	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	NE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
m-&/or p-Xylene	NE	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	1,000	0.7 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	5	3 J	3 J	4 J	4 J	3 J	4 J	3 J	2 J
Xylenes (total)	10,000	10,000	—	—	—	—	—	—	—	—

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
— Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-2 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results- CPT
Evaluated against Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-02-01	CPT02-01	CPT-02-02	CPT-02-03	CPT02-03	CPT-02-04	CPT-02-05	CPT-02-06
Sample Date:			6/2/2000	6/2/2000	6/2/2000	6/2/2000	6/2/2000	6/2/2000	6/2/2000	6/2/2000
Sample Screen Depth (ft below ground):			28	28	34	42	42	51	68	78
Laboratory:			ESAT	MitKem	ESAT	ESAT	MitKem	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Maximum Contaminant Level (ug/L)	IEPA Tier I Groundwater Remediation Objective (ug/L)								
1,1,1-Trichloroethane	200	200	2 U	1 U	2 U	2 U	5 U	2 U	2 U	2 U
1,1-Dichloroethane	NE	700	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
2-Butanone	NE	NE	11 UJ	5 U	11 UJ	11 UJ	25 U	11 UJ	11 UJ	11 UJ
Acetone	NE	700	2 UJ	5 U	2 UJ	55 J	470	2 UJ	2 UJ	2 UJ
Benzene	5	5	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Chloroform	100	0.2	3 U	1 U	3 U	3 U	5 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	70	70	4 U	1 U	4 U	4 U	5 U	4 U	4 U	4 U
Ethylbenzene	700	700	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Freon 113*	NE	NE	2 UJ	---	2 UJ	2 UJ	---	2 UJ	2 UJ	2 UJ
m-&/or p-Xylene	NE	NE	1 U	---	0.5 J	1 U	---	1 U	1 U	1 U
Methylene Chloride	5	5	1 U	2 U	1 U	1 U	10 U	1 U	1 U	1 U
Tetrachloroethene	5	5	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Toluene	1,000	1,000	0.5 J	0.5 J	0.6 J	0.7 J	5 U	0.5 J	1 J	1 J
Trichloroethene	5	5	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Xylenes (total)	10,000	10,000	---	0.6 J	---	---	5 U	---	---	---

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
--- Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-2 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results- CPT
Evaluated against Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-02-07	CPT-03-01	CPT-03-02	CPT-03-02DP	CPT-03-03	CPT-03-04	CPT-03-05	CPT-03-06
Sample Date:			6/2/2000	5/26/2000	5/26/2000	5/26/2000	5/26/2000	5/26/2000	5/26/2000	6/2/2000
Sample Screen Depth (ft below ground):			84	29	42	42	54		84	92
Laboratory:			ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Maximum Contaminant Level (ug/L)	IEPA Tier 1 Groundwater Remediation Objective (ug/L)								
1,1,1-Trichloroethane	200	200	2 U	2 U	2 U	2 U	1 J	2 J	2 U	0.9 J
1,1-Dichloroethane	NE	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	NE	11 UJ	11 U	11 U	11 U	11 U	11 U	11 U	11 UJ
Acetone	NE	700	2 UJ	20 B	32 B	19 B	20 B	25 B	9 J	2 UJ
Benzene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	100	0.2	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	70	70	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Ethylbenzene	700	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	NE	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ
m-&/or p-Xylene	NE	NE	0.6 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	5	1 U	1 U	1 U	1 U	1 U	1 U	0.5 J	1 U
Tetrachloroethene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	1,000	1 U	0.8 J	1 J	0.8 J	0.6 J	0.8 J	1 J	2 J
Trichloroethene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	10,000	10,000	---	---	---	---	---	---	---	---

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
--- Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-2 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results- CPT
Evaluated against Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT03-06	CPT-03-07	CPT-04-01	CPT-04-02	CPT-04-02DUP	CPT-04-02	CPT04-02DP	CPT-04-03
Sample Date:			6/2/2000	6/2/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000
Sample Screen Depth (ft below ground):			92	102	32	46	46	46	46	56
Laboratory:			MitKem	ESAT	ESAT	ESAT	ESAT	MitKem	MitKem	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Maximum Contaminant Level (ug/L)	IEPA Tier I Groundwater Remediation Objective (ug/L)								
1,1,1-Trichloroethane	200	200	0.9 J	0.8 J	2 U	2 U	2 U	1 U	1 U	2 U
1,1-Dichloroethane	NE	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	NE	5 U	11 UJ	11 U	11 U	11 U	5 U	5 U	11 U
Acetone	NE	700	5 U	2 UJ	2 U	10 B	2 U	5 U	5 U	2 U
Benzene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	100	0.2	1 U	3 U	3 U	3 U	3 U	1 U	1 U	3 U
Cis-1,2-Dichloroethene	70	70	1 U	4 U	4 U	4 U	4 U	1 U	1 U	4 U
Ethylbenzene	700	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	NE	—	2 UJ	2 UJ	2 UJ	2 UJ	—	—	2 UJ
m-&/or p-Xylene	NE	NE	—	1 U	1 U	1 U	1 U	—	—	1 U
Methylene Chloride	5	5	2 U	1 U	1 U	1 U	1 U	2 U	2 U	1 U
Tetrachloroethene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	1,000	2	2 J	1 J	0.8 J	0.9 J	0.6 J	0.8 J	0.8 J
Trichloroethene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	10,000	10,000	1 U	—	—	—	—	1 U	1 U	—

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
— Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-2 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results- CPT
Evaluated against Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-04-04	CPT-04-05	CPT-04-06	CPT-04-07	CPT-05-01	CPT-05-02	CPT-05-03	CPT-05-04
Sample Date:			5/29/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000
Sample Screen Depth (ft below ground):			71	78	84	93	35	43	51	57
Laboratory:			ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Maximum Contaminant Level (ug/L)	IEPA Tier I Groundwater Remediation Objective (ug/L)								
1,1,1-Trichloroethane	200	200	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	NE	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	NE	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U
Acetone	NE	700	2 U	2 U	8 B	9 B	2 U	2 U	2 U	2 U
Benzene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	100	0.2	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	70	70	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Ethylbenzene	700	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	NE	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
m-&/or p-Xylene	NE	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	1,000	0.7 J	1 J	0.8 J	1 J	1 J	1 J	1 J	1 J
Trichloroethene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	10,000	10,000	—	—	—	—	—	—	—	—

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
— Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-2 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results- CPT
Evaluated against Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-05-05	CPT-05-05DUP	CPT-05-06	CPT-05-07	CPT-06-01	CPT-06-02	CPT-06-03	CPT-06-04
Sample Date:			5/30/2000	5/30/2000	5/30/2000	5/30/2000	6/1/2000	6/1/2000	6/1/2000	6/1/2000
Sample Screen Depth (ft below ground):			69.5	69.5	78	87	35	42	53	62
Laboratory:			ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Maximum Contaminant Level (ug/L)	IEPA Tier I Groundwater Remediation Objective (ug/L)								
1,1,1-Trichloroethane	200	200	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	NE	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	NE	11 U	11 U	16 J	11 U	11 U	11 U	11 U	11 U
Acetone	NE	700	2 U	2 U	100 J	2 U	2 U	53 J	11 J	7 J
Benzene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	100	0.2	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	70	70	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Ethylbenzene	700	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	NE	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
m-&/or p-Xylene	NE	NE	1 U	1 U	1 U	1 U	0.7 J	1 U	1 U	1 U
Methylene Chloride	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	1,000	1 J	0.6 J	0.8 J	1 J	0.6 J	0.8 J	0.8 J	1 J
Trichloroethene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	10,000	10,000	—	—	—	—	—	—	—	—

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
— Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-2 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results- CPT
Evaluated against Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-06-05	CPT-06-06	CPT06-06	CPT-06-07	CPT-09-01	CPT-09-02	CPT-09-03	CPT-09-04
Sample Date:			6/1/2000	6/1/2000	6/1/2000	6/1/2000	5/30/2000	5/30/2000	5/30/2000	5/30/2000
Sample Screen Depth (ft below ground):			74	85	85	92	35	45	55	68
Laboratory:			ESAT	ESAT	MitKem	ESAT	ESAT	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Maximum Contaminant Level (ug/L)	IEPA Tier I Groundwater Remediation Objective (ug/L)								
1,1,1-Trichloroethane	200	200	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	NE	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	NE	11 U	11 U	5 U	11 U	11 U	11 U	11 U	11 U
Acetone	NE	700	11 J	2 U	7 U	5 J	2 U	2 U	2 U	2 U
Benzene	5	5	1 U	1 U	1 U	1 U	0.5 J	1 U	1 U	1 U
Chloroform	100	0.2	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	70	70	4 U	4 U	1 U	4 U	4 U	4 U	4 U	4 U
Ethylbenzene	700	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	NE	2 UJ	2 UJ	—	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
m-&/or p-Xylene	NE	NE	1 U	1 U	—	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	5	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	1,000	1 J	2 J	2	1 J	1 J	0.8 J	0.8 J	0.8 J
Trichloroethene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	10,000	10,000	—	—	1 U	—	—	—	—	—

Note. U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
— Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-2 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results- CPT
Evaluated against Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-09-05	CPT-09-06	CPT-09-07	CPT-10-01	CPT-10-02	CPT-10-03	CPT-10-04	CPT-10-05
Sample Date:			5/30/2000	5/30/2000	5/30/2000	5/31/2000	5/31/2000	5/31/2000	6/1/2000	6/1/2000
Sample Screen Depth (ft below ground):			75	85	88	25	36	42	55	65
Laboratory:			ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Maximum Contaminant Level (ug/L)	IEPA Tier I Groundwater Remediation Objective (ug/L)								
1,1,1-Trichloroethane	200	200	2 U	2 U	2 U	2 U	1 J	2 U	1 J	0.8 J
1,1-Dichloroethane	NE	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	NE	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U
Acetone	NE	700	2 U	11 J	8 J	2 U	2 U	40 B	2 U	2 U
Benzene	5	5	1 U	1 U	0.6 J	1 U	1 U	1 U	1 U	1 U
Chloroform	100	0.2	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	70	70	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Ethylbenzene	700	700	1 U	1 U	0.6 J	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	NE	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
m-&/or p-Xylene	NE	NE	1 U	1 U	0.7 J	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	5	1 U	1 U	1 U	1 U	0.9 J	1 U	0.6 J	1 U
Toluene	1,000	1,000	0.5 J	0.8 J	2 J	0.9 J	1 U	1 J	0.5 J	0.9 J
Trichloroethene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	10,000	10,000	—	—	—	—	—	—	—	—

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
— Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-2 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results- CPT
Evaluated against Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-10-06	CPT-10-07	CPT-10-4DUP	CPT-11-01	CPT11-01	CPT-11-02	CPT-11-03	CPT-11-04
Sample Date:			6/1/2000	6/1/2000	6/1/2000	6/3/2000	6/3/2000	6/3/2000	6/3/2000	6/3/2000
Sample Screen Depth (ft below ground):			73	90	55	45	45	58	70	81
Laboratory:			ESAT	ESAT	ESAT	ESAT	MitKem	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Maximum Contaminant Level (ug/L)	IEPA Tier I Groundwater Remediation Objective (ug/L)								
1,1,1-Trichloroethane	200	200	2 U	2 U	1 J	2 U	1 U	2 U	0.8 J	0.8 J
1,1-Dichloroethane	NE	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	NE	11 U	11 U	11 U	11 UJ	5 U	11 UJ	11 UJ	11 UJ
Acetone	NE	700	24 J	2 U	2 U	2 UJ	5 U	2 UJ	9 J	2 UJ
Benzene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	100	0.2	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	70	70	4 U	4 U	4 U	4 U	1 U	4 U	4 U	4 U
Ethylbenzene	700	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	NE	2 UJ	2 UJ	2 UJ	2 UJ	—	2 UJ	2 UJ	2 UJ
m-&/or p-Xylene	NE	NE	1 U	1 U	1 U	1 U	—	1 U	1 U	1 U
Methylene Chloride	5	5	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
Tetrachloroethene	5	5	1 U	1 U	0.6 J	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	1,000	1 J	1 J	1 U	1 U	1 U	1 J	1 J	0.9 J
Trichloroethene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	10,000	10,000	—	—	—	—	0.6 J	—	—	—

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
— Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-2 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results- CPT
Evaluated against Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-11-05	CPT11-05	CPT11-05DP	CPT-11-06	CPT-11-07	CPT11-08	CPT-11-08	CPT-12-01
Sample Date:			6/3/2000	6/3/2000	6/3/2000	6/3/2000	6/3/2000	6/3/2000	6/3/2000	6/5/2000
Sample Screen Depth (ft below ground):			93	93	93	102	114	125	125	45
Laboratory:			ESAT	MitKem	MitKem	ESAT	ESAT	MitKem	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Maximum Contaminant Level (ug/L)	IEPA Tier I Groundwater Remediation Objective (ug/L)								
1,1,1-Trichloroethane	200	200	2 J	2	3	3 J	2 U	0.7 J	2 U	2 U
1,1-Dichloroethene	NE	700	1 U	2	2	1 U	1 U	1 U	1 UJ	1 U
2-Butanone	NE	NE	11 UJ	5 U	5 U	11 UJ	11 UJ	5 U	11 UJ	11 U
Acetone	NE	700	2 UJ	5 U	5 U	9 J	13 J	5 U	2 UJ	1 B
Benzene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	100	0.2	3 U	1 U	1 U	3 U	3 U	1 U	3 U	3 U
Cis-1,2-Dichloroethene	70	70	4 U	1 U	1 U	4 U	4 U	1 U	4 U	4 U
Ethylbenzene	700	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	NE	2 UJ	—	—	2 UJ	2 UJ	—	2 U	2 U
m-&/or p-Xylene	NE	NE	1 U	—	—	1 U	1 U	—	1 U	1 U
Methylene Chloride	5	5	1 U	2 U	2 U	1 U	1 U	2 U	1 U	1 U
Tetrachloroethene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	1,000	1 J	2	0.8 J	1 J	2 J	2	3 J	0.5 J
Trichloroethene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	10,000	10,000	—	1 U	1 U	—	—	1 U	—	—

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
— Indicates compound not analyzed.
[redacted] = Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-2 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results- CPT
Evaluated against Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-12-01DUP	CPT-12-02	CPT-12-03	CPT-12-03	CPT-12-04	CPT-12-04DUP	CPT-12-05	CPT12-06
Sample Date:			6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000
Sample Screen Depth (ft below ground):			45	62	70	70	81	81	93	102
Laboratory:			ESAT	ESAT	ESAT	MitKem	ESAT	ESAT	ESAT	MitKem
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Maximum Contaminant Level (ug/L)	IEPA Tier 1 Groundwater Remediation Objective (ug/L)								
1,1,1-Trichloroethane	200	200	2 U	2 U	2 U	1 U	2 U	2 U	2 U	1 U
1,1-Dichloroethane	NE	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	NE	11 U	11 U	11 U	5 U	11 U	11 U	11 U	5 U
Acetone	NE	700	1 B	1 B	2 B	5 U	2 B	7 B	2	5 U
Benzene	5	5	1 U	1 U	1 U	1 U	1 U	0.5 J	1 U	1 U
Chloroform	100	0.2	3 U	3 U	3 U	1 U	3 U	3 U	3 U	1 U
Cis-1,2-Dichloroethene	70	70	4 U	4 U	4 U	1 U	4 U	4 U	4 U	1 U
Ethylbenzene	700	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	NE	2 U	2 U	2 U	—	2 U	2 U	2 U	—
m-&/or p-Xylene	NE	NE	1 U	1 U	1 U	—	1 U	1 U	1 U	—
Methylene Chloride	5	5	1 U	1 U	1 U	2 U	1 U	1 U	1 U	2 U
Tetrachloroethene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	1,000	0.5 J	1 U	0.9 J	0.8 J	0.9 J	1 U	2 J	1
Trichloroethene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	10,000	10,000	—	—	—	1 U	—	—	—	1 U

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
— Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-2 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - CPT
Evaluated against Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-12-06	CPT-12-07
Sample Date:			6/5/2000	6/5/2000
Sample Screen Depth (ft below ground):			102	118
Laboratory:			ESAT	ESAT
Units:			ug/L	ug/L
Chemical Name	*U.S. EPA Maximum Contaminant Level* (ug/L)	IEPA Tier I Groundwater Remediation Objective (ug/L)		
1,1,1-Trichloroethane	200	200	2 U	2 U
1,1-Dichloroethane	NE	700	1 U	1 U
2-Butanone	NE	NE	11 U	11 U
Acetone	NE	700	2	2
Benzene	5	5	1 U	1 U
Chloroform	100	0.2	3 U	3 U
Cis-1,2-Dichloroethene	70	70	4 U	4 U
Ethylbenzene	700	700	1 U	1 U
Freon 113*	NE	NE	2 U	2 U
m-&/or p-Xylene	NE	NE	1 U	1 U
Methylene Chloride	5	5	1 U	1 U
Tetrachloroethene	5	5	1 U	1 U
Toluene	1,000	1,000	2 J	2 J
Trichloroethene	5	5	1 U	1 U
Xylenes (total)	10,000	10,000	—	—

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
— Indicates compound not analyzed.
[redacted] = Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-2 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - Residential Wells
Evaluated against Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			RW01-01	RW02-01	RW-03	RW-04	RW04-01	RW-05	RW-05DUP	RW-06
Sample Date:			5/31/2000	5/31/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000
Laboratory:			ESAT	ESAT	ESAT	ESAT	MITKEM	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Maximum Contaminant Level (ug/L)	IEPA Tier I Groundwater Remediation Objective (ug/L)								
1,1,1-Trichloroethane	200	200	2 U	2 U	2 J	2 J	2	2 U	2 U	2 U
1,1-Dichloroethane	NE	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	NE	11 U	11 U	11 U	11 U	5 U	11 U	11 U	11 U
Acetone	NE	700	2 U	2 U	0.8	2 U	5 U	2 U	0.6	2 U
Benzene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	100	0.2	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	70	70	4 U	4 U	4 U	1 J	2	4 U	4 U	4 U
Ethylbenzene	700	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	NE	2 UJ	2 UJ	2 U	2 U	---	2 U	2 U	2 U
m-&/or p-Xylene	NE	NE	1 U	1 U	1 U	1 U	---	1 U	1 U	1 U
Methylene Chloride	5	5	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
Tetrachloroethene	5	5	1 U	1 U	1 U	2 J	2	1 U	1 U	1 U
Toluene	1,000	1,000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	5	1 U	1 U	1 U	5 J	[redacted]	1 U	1 U	1 U
Xylenes (total)	10,000	10,000	---	---	---	---	1 U	---	---	---

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
--- Indicates compound not analyzed.
[redacted] = Exceeds the lowest standard shown above
* - 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-2 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - Residential Wells
Evaluated against Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			RW-07	RW-08	RW-09	RW-10	RW-11	RW11-01	RW11-01DP	RW-11DUP
Sample Date:			6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000
Laboratory:			ESAT	ESAT	ESAT	ESAT	ESAT	MITKEM	MITKEM	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Maximum Contaminant Level (ug/L)	IEPA Tier I Groundwater Remediation Objective (ug/L)								
1,1,1-Trichloroethane	200	200	5 J	0.9 J	2 U	2 U	1 J	1	1	1 J
1,1-Dichloroethane	NE	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	NE	11 U	11 U	11 U	11 U	11 U	5 U	5 U	11 U
Acetone	NE	700	2 U	2 U	2 U	2 U	2 U	5 U	5 U	2 U
Benzene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	100	0.2	3 U	0.5 J	3 U	3 U	3 U	1 U	1 U	3 U
Cis-1,2-Dichloroethene	70	70	4 U	4 U	4 U	4 U	4 U	1 U	1 U	4 U
Ethylbenzene	700	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	NE	2 U	2 U	2 U	2 U	2 U	—	—	2 U
m-&/or p-Xylene	NE	NE	1 U	1 U	1 U	1 U	1 U	—	—	1 U
Methylene Chloride	5	5	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 U
Tetrachloroethene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1,000	1,000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	5	0.7 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	10,000	10,000	—	—	—	—	—	1 U	1 U	—

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
— Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-2 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - Residential Wells
Evaluated against Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			RW-12	RW-13	RW-14	RW-15	RW-16	RW-17	RW-18	RW-19
Sample Date:			6/5/2000	6/6/2000	6/6/2000	6/6/2000	6/6/2000	6/6/2000	6/6/2000	6/6/2000
Laboratory:			ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Maximum Contaminant Level (ug/L)	IEPA Tier I Groundwater Remediation Objective (ug/L)								
1,1,1-Trichloroethane	200	200	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 J
1,1-Dichloroethane	NE	700	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2-Butanone	NE	NE	11 U	11 UJ	11 UJ	11 UJ	11 UJ	11 UJ	11 UJ	11 UJ
Acetone	NE	700	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Benzene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	100	0.2	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	70	70	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Ethylbenzene	700	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	NE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
m-&/or p-Xylene	NE	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.9 J
Toluene	1,000	1,000	1 U	2 B	2 B	2 B	1 U	2 B	2 B	1 B
Trichloroethene	5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 J
Xylenes (total)	10,000	10,000	---	---	---	---	---	---	---	---

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
--- Indicates compound not analyzed.
[redacted] = Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-2 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - Residential Wells
Evaluated against Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			RW-19DUP	RW-20	RW-21	RW-22
Sample Date:			6/6/2000	6/6/2000	6/6/2000	6/6/2000
Laboratory:			ESAT	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Maximum Contaminant Level (ug/L)	IEPA Tier I Groundwater Remediation Objective (ug/L)				
1,1,1-Trichloroethane	200	200	0.6 J	2 U	2 U	2 U
1,1-Dichloroethane	NE	700	1 UJ	1 UJ	1 UJ	1 UJ
2-Butanone	NE	NE	11 UJ	11 UJ	11 UJ	11 UJ
Acetone	NE	700	2 UJ	2 UJ	2 UJ	2 UJ
Benzene	5	5	1 U	1 U	1 U	1 U
Chloroform	100	0.2	3 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	70	70	4 U	4 U	4 U	4 U
Ethylbenzene	700	700	1 U	1 U	1 U	1 U
Freon 113*	NE	NE	2 U	2 U	2 U	2 U
m-&/or p-Xylene	NE	NE	1 U	1 U	1 U	1 U
Methylene Chloride	5	5	1 U	1 U	1 U	1 U
Tetrachloroethene	5	5	0.9 J	1 U	1 U	1 U
Toluene	1,000	1,000	2 B	1 B	1 B	2 B
Trichloroethene	5	5	4 J	1 U	1 U	1 U
Xylenes (total)	10,000	10,000	---	---	---	---

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
--- Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-3

2000 Remedial Investigation
Groundwater Analytical Results - CPT
Evaluated against Ecotox Freshwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-01-01	CPT-01-02	CPT-01-03	CPT-01-04	CPT-01-05	CPT-01-06	CPT-01-07	CPT-01-08
Sample Date:			5/25/2000	5/25/2000	5/25/2000	5/25/2000	5/25/2000	5/25/2000	5/25/2000	5/25/2000
Sample Screen Depth (ft below ground):			99	89	79	69	59	49	39	29
Laboratory:			ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Ecotox Thresholds Lowest Available Ecotox Threshold (ug/L)	Canadian Compendium Most Conservative Freshwater Quality Criteria and Guideline for the Protection of Aquatic Life (ug/L)								
1,1,1-Trichloroethane	62	35	2 U	1 J	1 J	1 J	1 J	2 U	1 J	2 U
1,1-Dichloroethane	47	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	7,200	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U
Acetone	NE	NE	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	15 B	2 UJ
Benzene	46	5.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	NE	0.6	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	NE	200	4 U	2 J	1 J	1 J	1 J	1 J	4 U	4 U
Ethylbenzene	290	8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	580	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
m-&/or p-Xylene	1.8	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	NE	98	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	120	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	130	0.8	0.7 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	350	1	[illegible]	3 J	4 J	4 J	3 J	4 J	3 J	2 J
Xylenes (total)	NE	36	---	---	---	---	---	---	---	---

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
--- Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-3 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - CPT
Evaluated against Ecotox Freshwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-02-01	CPT02-01	CPT-02-02	CPT-02-03	CPT02-03	CPT-02-04	CPT-02-05	CPT-02-06
Sample Date:			6/2/2000	6/2/2000	6/2/2000	6/2/2000	6/2/2000	6/2/2000	6/2/2000	6/2/2000
Sample Screen Depth (ft below ground):			28	28	34	42	42	51	68	78
Laboratory:			ESAT	MitKem	ESAT	ESAT	MitKem	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Ecotox Thresholds Lowest Available Ecotox Threshold (ug/L)	Canadian Compendium Most Conservative Freshwater Quality Criteria and Guideline for the Protection of Aquatic Life (ug/L)								
1,1,1-Trichloroethane	62	35	2 U	1 U	2 U	2 U	5 U	2 U	2 U	2 U
1,1-Dichloroethane	47	NE	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
2-Butanone	NE	7,200	11 UJ	5 U	11 UJ	11 UJ	25 U	11 UJ	11 UJ	11 UJ
Acetone	NE	NE	2 UJ	5 U	2 UJ	55 J	470	2 UJ	2 UJ	2 UJ
Benzene	46	5.9	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Chloroform	NE	0.6	3 U	1 U	3 U	3 U	5 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	NE	200	4 U	1 U	4 U	4 U	5 U	4 U	4 U	4 U
Ethylbenzene	290	8	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Freon 113*	NE	580	2 UJ	---	2 UJ	2 UJ	---	2 UJ	2 UJ	2 UJ
m-&/or p-Xylene	1.8	2	1 U	---	0.5 J	1 U	---	1 U	1 U	1 U
Methylene Chloride	NE	98	1 U	2 U	1 U	1 U	10 U	1 U	1 U	1 U
Tetrachloroethene	120	5	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Toluene	130	0.8	0.5 J	0.5 J	0.6 J	0.7 J	5 U	0.5 J	1 U	1 U
Trichloroethene	350	1	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Xylenes (total)	NE	36	---	0.6 J	---	---	5 U	---	---	---

Note U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
--- Indicates compound not analyzed
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-3 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - CPT
Evaluated against Ecotox Freshwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-02-07	CPT-03-01	CPT-03-02	CPT-03-02DP	CPT-03-03	CPT-03-04	CPT-03-05	CPT-03-06
Sample Date:			6/2/2000	5/26/2000	5/26/2000	5/26/2000	5/26/2000	5/26/2000	5/26/2000	6/2/2000
Sample Screen Depth (ft below ground):			84	29	42	42	54	68	84	92
Laboratory:			ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Ecotox Thresholds Lowest Available Ecotox Threshold (ug/L)	Canadian Compendium Most Conservative Freshwater Quality Criteria and Guideline for the Protection of Aquatic Life (ug/L)								
1,1,1-Trichloroethane	62	35	2 U	2 U	2 U	2 U	1 J	2 J	2 U	0.9 J
1,1-Dichloroethane	47	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	7,200	11 UJ	11 U	11 U	11 U	11 U	11 U	11 U	11 UJ
Acetone	NE	NE	2 UJ	20 B	32 B	19 B	20 B	25 B	9 J	2 UJ
Benzene	46	5.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	NE	0.6	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	NE	200	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Ethylbenzene	290	8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	580	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ
m-&/or p-Xylene	1.8	2	0.6 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	NE	98	1 U	1 U	1 U	1 U	1 U	1 U	0.5 J	1 U
Tetrachloroethene	120	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	130	0.8	1 U	0.8 J	1 J	0.8 J	0.6 J	0.8 J	1 J	2 J
Trichloroethene	350	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	NE	36	---	---	---	---	---	---	---	---

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit
B - Constituent was detected in the method blank.
--- Indicates compound not analyzed
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-3 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - CPT
Evaluated against Ecotox Freshwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT03-06	CPT-03-07	CPT-04-01	CPT-04-02	CPT-04-02DUP	CPT-04-02	CPT04-02DP	CPT-04-03
Sample Date:			6/2/2000	6/2/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000
Sample Screen Depth (ft below ground):			92	102	32	46	46	46	46	56
Laboratory:			MitKem	ESAT	ESAT	ESAT	ESAT	MitKem	MitKem	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Ecotox Thresholds Lowest Available Ecotox Threshold (ug/L)	Canadian Compendium Most Conservative Freshwater Quality Criteria and Guideline for the Protection of Aquatic Life (ug/L)								
1,1,1-Trichloroethane	62	35	0.9 J	0.8 J	2 U	2 U	2 U	1 U	1 U	2 U
1,1-Dichloroethane	47	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	7,200	5 U	11 UJ	11 U	11 U	11 U	5 U	5 U	11 U
Acetone	NE	NE	5 U	2 UJ	2 U	10 B	2 U	5 U	5 U	2 U
Benzene	46	5.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	NE	0.6	1 U	3 U	3 U	3 U	3 U	1 U	1 U	3 U
Cis-1,2-Dichloroethene	NE	200	1 U	4 U	4 U	4 U	4 U	1 U	1 U	4 U
Ethylbenzene	290	8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	580	---	2 UJ	2 UJ	2 UJ	2 UJ	---	---	2 UJ
m-&/or p-Xylene	1.8	2	---	1 U	1 U	1 U	1 U	---	---	1 U
Methylene Chloride	NE	98	2 U	1 U	1 U	1 U	1 U	2 U	2 U	1 U
Tetrachloroethene	120	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	130	0.8	[illegible]	2 J	1 J	0.8 J	0.9 J	0.6 J	0.8 J	0.8 J
Trichloroethene	350	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	NE	36	1 U	---	---	---	---	1 U	1 U	---

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - *The analyte was not detected above the reported sample quantition limit.*
B - Constituent was detected in the method blank.
--- Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-3 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - CPT
Evaluated against Ecotox Freshwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-04-04	CPT-04-05	CPT-04-06	CPT-04-07	CPT-05-01	CPT-05-02	CPT-05-03	CPT-05-04
Sample Date:			5/29/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000
Sample Screen Depth (ft below ground):			71	78	84	93	35	43	51	57
Laboratory:			ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Ecotox Thresholds Lowest Available Ecotox Threshold (ug/L)	Canadian Compendium Most Conservative Freshwater Quality Criteria and Guideline for the Protection of Aquatic Life (ug/L)								
1,1,1-Trichloroethane	62	35	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	47	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	7,200	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U
Acetone	NE	NE	2 U	2 U	8 B	9 B	2 U	2 U	2 U	2 U
Benzene	46	5.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	NE	0.6	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	NE	200	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Ethylbenzene	290	8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	580	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
m-&/or p-Xylene	1.8	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	NE	98	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	120	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	130	0.8	0.7 J	1 J	0.8 J	1 J	1 J	1 J	1 J	1 J
Trichloroethene	350	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	NE	36	---	---	---	---	---	---	---	---

Note: U - Constituent not detected at or above the reporting limit
J - *Estimated Concentrations*
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank
--- Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-3 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - CPT
Evaluated against Ecotox Freshwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-05-05	CPT-05-05DUP	CPT-05-06	CPT-05-07	CPT-06-01	CPT-06-02	CPT-06-03	CPT-06-04
Sample Date:			5/30/2000	5/30/2000	5/30/2000	5/30/2000	6/1/2000	6/1/2000	6/1/2000	6/1/2000
Sample Screen Depth (ft below ground):			69.5	69.5	78	87	35	42	53	62
Laboratory:			ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Ecotox Thresholds Lowest Available Ecotox Threshold (ug/L)	Canadian Compendium Most Conservative Freshwater Quality Criteria and Guideline for the Protection of Aquatic Life (ug/L)								
1,1,1-Trichloroethane	62	35	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	47	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	7,200	11 U	11 U	16 J	11 U	11 U	11 U	11 U	11 U
Acetone	NE	NE	2 U	2 U	100 J	2 U	2 U	53 J	11 J	7 J
Benzene	46	5.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	NE	0.6	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	NE	200	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Ethylbenzene	290	8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	580	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
m-&/or p-Xylene	1.8	2	1 U	1 U	1 U	1 U	0.7 J	1 U	1 U	1 U
Methylene Chloride	NE	98	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	120	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	130	0.8	[illegible]	0.6 J	0.8 J	[illegible]	0.6 J	0.8 J	0.8 J	[illegible]
Trichloroethene	350	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	NE	36	---	---	---	---	---	---	---	---

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit
B - Constituent was detected in the method blank
--- Indicates compound not analyzed
[illegible] = Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-3 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - CPT
Evaluated against Ecotox Freshwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-06-05	CPT-06-06	CPT06-06	CPT-06-07	CPT-09-01	CPT-09-02	CPT-09-03	CPT-09-04
Sample Date:			6/1/2000	6/1/2000	6/1/2000	6/1/2000	5/30/2000	5/30/2000	5/30/2000	5/30/2000
Sample Screen Depth (ft below ground):			74	85	85	92	35	45	55	68
Laboratory:			ESAT	ESAT	MitKem	ESAT	ESAT	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Ecotox Thresholds Lowest Available Ecotox Threshold (ug/L)	Canadian Compendium Most Conservative Freshwater Quality Criteria and Guideline for the Protection of Aquatic Life (ug/L)								
1,1,1-Trichloroethane	62	35	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	47	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	7,200	11 U	11 U	5 U	11 U	11 U	11 U	11 U	11 U
Acetone	NE	NE	11 J	2 U	7 U	5 J	2 U	2 U	2 U	2 U
Benzene	46	5.9	1 U	1 U	1 U	1 U	0.5 J	1 U	1 U	1 U
Chloroform	NE	0.6	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	NE	200	4 U	4 U	1 U	4 U	4 U	4 U	4 U	4 U
Ethylbenzene	290	8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	580	2 UJ	2 UJ	---	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
m-&/or p-Xylene	1.8	2	1 U	1 U	---	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	NE	98	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	120	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	130	0.8	[illegible]	2 J	2 J	1 J	1 UJ	0.8 J	0.8 J	0.8 J
Trichloroethene	350	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	NE	36	---	---	1 U	---	---	---	---	---

Note U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit
B - Constituent was detected in the method blank
--- Indicates compound not analyzed
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-3 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - CPT
Evaluated against Ecotox Freshwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-09-05	CPT-09-06	CPT-09-07	CPT-10-01	CPT-10-02	CPT-10-03	CPT-10-04	CPT-10-05
Sample Date:			5/30/2000	5/30/2000	5/30/2000	5/31/2000	5/31/2000	5/31/2000	6/1/2000	6/1/2000
Sample Screen Depth (ft below ground):			75	85	88	25	36	42	55	65
Laboratory:			ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Ecotox Thresholds Lowest Available Ecotox Threshold (ug/L)	Canadian Compendium Most Conservative Freshwater Quality Criteria and Guideline for the Protection of Aquatic Life (ug/L)								
1,1,1-Trichloroethane	62	35	2 U	2 U	2 U	2 U	1 J	2 U	1 J	0.8 J
1,1-Dichloroethane	47	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	7,200	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U
Acetone	NE	NE	2 U	11 J	8 J	2 U	2 U	40 B	2 U	2 U
Benzene	46	5.9	1 U	1 U	0.6 J	1 U	1 U	1 U	1 U	1 U
Chloroform	NE	0.6	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	NE	200	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Ethylbenzene	290	8	1 U	1 U	0.6 J	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	580	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
m-&/or p-Xylene	1.8	2	1 U	1 U	0.7 J	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	NE	98	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	120	5	1 U	1 U	1 U	1 U	0.9 J	1 U	0.6 J	1 U
Toluene	130	0.8	0.5 J	0.8 J	2 J	0.9 J	1 U	1 J	0.5 J	0.9 J
Trichloroethene	350	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	NE	36	---	---	---	---	---	---	---	---

Note U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - *The analyte was not detected above the reported sample quantition limit.*
B - Constituent was detected in the method blank
--- Indicates compound not analyzed
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-3 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - CPT
Evaluated against Ecotox Freshwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-10-06	CPT-10-07	CPT-10-4DUP	CPT-11-01	CPT11-01	CPT-11-02	CPT-11-03	CPT-11-04
Sample Date:			6/1/2000	6/1/2000	6/1/2000	6/3/2000	6/3/2000	6/3/2000	6/3/2000	6/3/2000
Sample Screen Depth (ft below ground):			73	90	55	45	45	58	70	81
Laboratory:			ESAT	ESAT	ESAT	ESAT	MitKem	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Ecotox Thresholds Lowest Available Ecotox Threshold (ug/L)	Canadian Compendium Most Conservative Freshwater Quality Criteria and Guideline for the Protection of Aquatic Life (ug/L)								
1,1,1-Trichloroethane	62	35	2 U	2 U	1 J	2 U	1 U	2 U	0 8 J	0 8 J
1,1-Dichloroethane	47	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	7,200	11 U	11 U	11 U	11 UJ	5 U	11 UJ	11 UJ	11 UJ
Acetone	NE	NE	24 J	2 U	2 U	2 UJ	5 U	2 UJ	9 J	2 UJ
Benzene	46	5 9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	NE	0 6	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	NE	200	4 U	4 U	4 U	4 U	1 U	4 U	4 U	4 U
Ethylbenzene	290	8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	580	2 UJ	2 UJ	2 UJ	2 UJ	---	2 UJ	2 UJ	2 UJ
m-&/or p-Xylene	1 8	2	1 U	1 U	1 U	1 U	---	1 U	1 U	1 U
Methylene Chloride	NE	98	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
Tetrachloroethene	120	5	1 U	1 U	0 6 J	1 U	1 U	1 U	1 U	1 U
Toluene	130	0 8	[illegible]	1 J	1 U	1 U	1 U	[illegible]	1 J	0.9 J
Trichloroethene	350	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	NE	36	---	---	---	---	0 6 J	---	---	---

Note U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - *The analyte was not detected above the reported sample quantition limit.*
B - Constituent was detected in the method blank.
--- Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-3 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - CPT
Evaluated against Ecotox Freshwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-11-05	CPT11-05	CPT11-05DP	CPT-11-06	CPT-11-07	CPT11-08	CPT-11-08	CPT-12-01
Sample Date:			6/3/2000	6/3/2000	6/3/2000	6/3/2000	6/3/2000	6/3/2000	6/3/2000	6/5/2000
Sample Screen Depth (ft below ground):			93	93	93	102	114	125	125	45
Laboratory:			ESAT	MitKem	MitKem	ESAT	ESAT	MitKem	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Ecotox Thresholds Lowest Available Ecotox Threshold (ug/L)	Canadian Compendium Most Conservative Freshwater Quality Criteria and Guideline for the Protection of Aquatic Life (ug/L)								
1,1,1-Trichloroethane	62	35	2 J	2	3	3 J	2 U	0.7 J	2 U	2 U
1,1-Dichloroethane	47	NE	1 U	2	2	1 U	1 U	1 U	1 UJ	1 U
2-Butanone	NE	7,200	11 UJ	5 U	5 U	11 UJ	11 UJ	5 U	11 UJ	11 U
Acetone	NE	NE	2 UJ	5 U	5 U	9 J	13 J	5 U	2 UJ	1 B
Benzene	46	5.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	NE	0.6	3 U	1 U	1 U	3 U	3 U	1 U	3 U	3 U
Cis-1,2-Dichloroethene	NE	200	4 U	1 U	1 U	4 U	4 U	1 U	4 U	4 U
Ethylbenzene	290	8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	580	2 UJ	---	---	2 UJ	2 UJ	---	2 U	2 U
m-&/or p-Xylene	1.8	2	1 U	---	---	1 U	1 U	---	1 U	1 U
Methylene Chloride	NE	98	1 U	2 U	2 U	1 U	1 U	2 U	1 U	1 U
Tetrachloroethene	120	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	130	0.8	1 J	2	0.8 J	1 J	2 J	2	3 J	0.5 J
Trichloroethene	350	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	NE	36	---	1 U	1 U	---	---	1 U	---	---

Note: U - *Constituent not detected at or above the reporting limit*
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
--- Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-3 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - CPT
Evaluated against Ecotox Freshwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			CPT-12-01DUP	CPT-12-02	CPT-12-03	CPT-12-03	CPT-12-04	CPT-12-04DUP	CPT-12-05	CPT12-06
Sample Date:			6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000
Sample Screen Depth (ft below ground):			45	62	70	70	81	81	93	102
Laboratory:			ESAT	ESAT	ESAT	MitKem	ESAT	ESAT	ESAT	MitKem
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Ecotox Thresholds Lowest Available Ecotox Threshold (ug/L)	Canadian Compendium Most Conservative Freshwater Quality Criteria and Guideline for the Protection of Aquatic Life (ug/L)								
1,1,1-Trichloroethane	62	35	2 U	2 U	2 U	1 U	2 U	2 U	2 U	1 U
1,1-Dichloroethane	47	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	7,200	11 U	11 U	11 U	5 U	11 U	11 U	11 U	5 U
Acetone	NE	NE	1 B	1 B	2 B	5 U	2 B	7 B	2	5 U
Benzene	46	5 9	1 U	1 U	1 U	1 U	1 U	0 5 J	1 U	1 U
Chloroform	NE	0 6	3 U	3 U	3 U	1 U	3 U	3 U	3 U	1 U
Cis-1,2-Dichloroethene	NE	200	4 U	4 U	4 U	1 U	4 U	4 U	4 U	1 U
Ethylbenzene	290	8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	580	2 U	2 U	2 U	---	2 U	2 U	2 U	---
m-&/or p-Xylene	1 8	2	1 U	1 U	1 U	---	1 U	1 U	1 U	---
Methylene Chloride	NE	98	1 U	1 U	1 U	2 U	1 U	1 U	1 U	2 U
Tetrachloroethene	120	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	130	0 8	0.5 J	1 U	0.9 J	0.8 J	0.9 J	1 U	2 J	1 U
Trichloroethene	350	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	NE	36	---	---	---	1 U	---	---	---	1 U

Note U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
--- Indicates compound not analyzed
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-3 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - CPT
Evaluated against Ecotox Freshwater Criteria
Evergreen Manor, Roscoe, Illinois

Sample ID:			CPT-12-06	CPT-12-07
Sample Date:			6/5/2000	6/5/2000
Sample Screen Depth (ft below ground):			102	118
Laboratory:			ESAT	ESAT
Units:			ug/L	ug/L
Chemical Name	U.S. EPA Ecotox Thresholds Lowest Available Ecotox Threshold (ug/L)	Canadian Compendium Most Conservative Freshwater Quality Criteria and Guideline for the Protection of Aquatic Life (ug/L)		
1,1,1-Trichloroethane	62	35	2 U	2 U
1,1-Dichloroethane	47	NE	1 U	1 U
2-Butanone	NE	7,200	11 U	11 U
Acetone	NE	NE	2	2
Benzene	46	5.9	1 U	1 U
Chloroform	NE	0.6	3 U	3 U
Cis-1,2-Dichloroethene	NE	200	4 U	4 U
Ethylbenzene	290	8	1 U	1 U
Freon 113*	NE	580	2 U	2 U
m-&/or p-Xylene	1.8	2	1 U	1 U
Methylene Chloride	NE	98	1 U	1 U
Tetrachloroethene	120	5	1 U	1 U
Toluene	130	0.8	2 J	2 J
Trichloroethene	350	1	1 U	1 U
Xylenes (total)	NE	36	---	---

Note: U - Constituent not detected at or above the reporting limit
J - Estimated Concentrations
UJ - The analyte was not detected above the reported sample quantition limit
B - Constituent was detected in the method blank.
--- Indicates compound not analyzed
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoroethane

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Table 5-3 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - Monitoring Wells
Evaluated against Ecotox Freshwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			MW-101D	MW-101S	MW-102D	MW-102S	MW-103D	MW-103D-DL	MW-103S	MW-104D
Sample Date:			5/30/2000	5/30/2000	6/1/2000	6/1/2000	5/31/2000	5/31/2000	5/31/2000	6/2/2000
Screened Interval (ft. below ground)			70-80	30-40	55-65	35-45	45-55	45-55	32-42	90-100
Laboratory:			ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Ecotox Thresholds Lowest Available Ecotox Threshold (ug/L)	Canadian Compendium Most Conservative Freshwater Quality Criteria and Guideline for the Protection of Aquatic Life (ug/L)								
1,1,1-Trichloroethane	62	35	2 U	2 U	2 U	2 U	3 J	50 U	2 U	1 J
1,1-Dichloroethane	47	NE	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
2-Butanone	NE	7200	11 U	11 U	11 U	11 U	11 U	250 U	11 U	11 UJ
Acetone	NE	NE	2 U	2 U	2 U	2 U	35 B	50 U	2 U	2 UJ
Benzene	46	5.9	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Chloroform	NE	0.6	3 U	3 U	3 U	3 U	3 U	75 U	3 U	3 U
Cis-1,2-Dichloroethene	NE	200	4 U	4 U	4 U	4 U	4 U	100 U	4 U	4 U
Ethylbenzene	290	8	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Freon 113*	NE	580	2 UJ	2 UJ	2 U	2 UJ	300 J	180 J	2 J	2 UJ
m-&/or p-Xylene	1.8	2	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Methylene Chloride	NE	98	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Tetrachloroethene	120	5	1 U	1 U	1 U	1 U	0.5 J	25 U	9 J	1 U
Toluene	130	0.8	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Trichloroethene	350	1	2 J	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Xylenes (total)	NE	36	---	---	---	---	---	---	---	---

Note U - Constituent not detected, reporting limit (RL) of the analysis reported.
J - Concentration reported is an estimated value
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoromethane

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Table 5-3 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - Monitoring Wells
Evaluated against Ecotox Freshwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			MW-104D-DUP	MW-104S	MW-105D	MW-105D-01	MW-105S	MW-108D	MW-108D-01	MW-108D-DUP
Sample Date:			6/2/2000	6/2/2000	6/2/2000	6/2/2000	6/2/2000	6/1/2000	6/1/2000	6/1/2000
Screened Interval (ft. below ground)			90-100	50-60	90-100	90-100	55-65	55-65	55-65	55-65
Laboratory:			ESAT	ESAT	ESAT	MitKem	ESAT	ESAT	MitKem	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Ecotox Thresholds Lowest Available Ecotox Threshold (ug/L)	Canadian Compendium Most Conservative Freshwater Quality Criteria and Guideline for the Protection of Aquatic Life (ug/L)								
1,1,1-Trichloroethane	62	35	1 J	2 J	2 J	3	2 J	2 U	1 U	2 U
1,1-Dichloroethane	47	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	7200	11 UJ	11 UJ	11 UJ	5 U	11 UJ	11 U	5 U	11 U
Acetone	NE	NE	2 UJ	2 UJ	2 UJ	5 U	2 UJ	2 U	5 U	2 U
Benzene	46	5.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	NE	0.6	3 U	3 U	3 U	1 U	3 U	3 U	1 U	3 U
Cis-1,2-Dichloroethene	NE	200	4 U	4 U	1 J	2	1 J	4 U	1 U	4 U
Ethylbenzene	290	8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	580	2 UJ	2 UJ	2 UJ	---	2 UJ	2 UJ	---	2 UJ
m-&/or p-Xylene	1.8	2	1 U	1 U	1 U	---	1 U	1 U	---	1 U
Methylene Chloride	NE	98	1 U	1 U	1 U	2 U	1 U	1 U	2 U	1 U
Tetrachloroethene	120	5	1 U	1 U	3 J	4	3 J	0.6 J	0.7 J	0.6 J
Toluene	130	0.8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	350	1	1 U	1 U	2 J	3	2 J	1 U	1 U	1 U
Xylenes (total)	NE	36	---	---	---	1 U	---	---	1 U	---

Note U - Constituent not detected, reporting limit (RL) of the analysis reported
J - Concentration reported is an estimated value
UJ - The analyte was not detected above the reported sample quantition limit
B - Constituent was detected in the method blank
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoromethane

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Table 5-3 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - Monitoring Wells
Evaluated against Ecotox Freshwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			MW-108S	MW-110D	MW-110S	MW-112
Sample Date:			6/1/2000	6/1/2000	6/1/2000	6/2/2000
Screened Interval (ft. below ground)			35-45	40-50	21-31	38.28-48.77
Laboratory:			ESAT	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Ecotox Thresholds Lowest Available Ecotox Threshold (ug/L)	Canadian Compendium Most Conservative Freshwater Quality Criteria and Guideline for the Protection of Aquatic Life (ug/L)				
1,1,1-Trichloroethane	62	35	2 U	2 U	2 U	2 J
1,1-Dichloroethane	47	NE	1 U	1 U	1 U	1 U
2-Butanone	NE	7200	11 U	11 U	11 U	11 UJ
Acetone	NE	NE	2 U	2 U	2 U	2 UJ
Benzene	46	5.9	1 U	1 U	1 U	1 U
Chloroform	NE	0.6	3 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	NE	200	4 U	4 U	4 U	4 U
Ethylbenzene	290	8	1 U	1 U	1 U	1 U
Freon 113*	NE	580	2 UJ	2 UJ	2 UJ	2 UJ
m-&/or p-Xylene	1.8	2	1 U	1 U	1 U	1 U
Methylene Chloride	NE	98	1 U	1 U	1 U	1 U
Tetrachloroethene	120	5	1 U	1 U	1 U	1 U
Toluene	130	0.8	1 U	1 U	1 U	1 U
Trichloroethene	350	1	1 U	1 U	1 U	1 U
Xylenes (total)	NE	36	---	---	---	---

Note: U - Constituent not detected; reporting limit (RL) of the analysis reported.
J - Concentration reported is an estimated value.
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
[redacted] = Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoromethane

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Table 5-3 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - Residential Wells
Evaluated Against Ecotox Freshwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			RW01-01	RW02-01	RW-03	RW-04	RW04-01	RW-05	RW-05DUP	RW-06
Sample Date:			5/31/2000	5/31/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000
Laboratory:			ESAT	ESAT	ESAT	ESAT	MITKEM	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	U.S. EPA Ecotox Thresholds Lowest Available Ecotox Threshold (ug/L)	Canadian Compendium Most Conservative Freshwater Quality Criteria and Guideline for the Protection of Aquatic Life (ug/L)								
1,1,1-Trichloroethane	62	35	2 U	2 U	2 J	2 J	2	2 U	2 U	2 U
1,1-Dichloroethane	47	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	7200	11 U	11 U	11 U	11 U	5 U	11 U	11 U	11 U
Acetone	NE	NE	2 U	2 U	0.8	2 U	5 U	2 U	0.6	2 U
Benzene	46	5.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	NE	0.6	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	NE	200	4 U	4 U	4 U	1 J	2	4 U	4 U	4 U
Ethylbenzene	290	8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	NE	2 UJ	2 UJ	2 U	2 U	---	2 U	2 U	2 U
m-&/or p-Xylene	1.8	2	1 U	1 U	1 U	1 U	---	1 U	1 U	1 U
Methylene Chloride	NE	98	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
Tetrachloroethene	120	5	1 U	1 U	1 U	2 J	2	1 U	1 U	1 U
Toluene	130	0.8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	350	1	1 U	1 U	1 U	5 J	6	1 U	1 U	1 U
Xylenes (total)	NE	36	---	---	---	---	1 U	---	---	---

Note: U - Constituent not detected; reporting limit (RL) of the analysis reported.
J - Concentration reported is an estimated value.
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
--- Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoromethane

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Table 5-3 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - Residential Wells
Evaluated Against Ecotox Freshwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			RW-07	RW-08	RW-09	RW-10	RW-11	RW11-01	RW11-01DP	RW-11DUP
Sample Date:			6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000
Laboratory:			ESAT	ESAT	ESAT	ESAT	ESAT	MITKEM	MITKEM	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Ecotox Thresholds Lowest Available Ecotox Threshold (ug/L)	Canadian Compendium Most Conservative Freshwater Quality Criteria and Guideline for the Protection of Aquatic Life (ug/L)								
1,1,1-Trichloroethane	62	35	5 J	0.9 J	2 U	2 U	1 J	1	1	1 J
1,1-Dichloroethane	47	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	NE	7200	11 U	11 U	11 U	11 U	11 U	5 U	5 U	11 U
Acetone	NE	NE	2 U	2 U	2 U	2 U	2 U	5 U	5 U	2 U
Benzene	46	5.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	NE	0.6	3 U	0.9 J	3 U	3 U	3 U	1 U	1 U	3 U
Cis-1,2-Dichloroethene	NE	200	4 U	4 U	4 U	4 U	4 U	1 U	1 U	4 U
Ethylbenzene	290	8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	NE	2 U	2 U	2 U	2 U	2 U	---	---	2 U
m-&/or p-Xylene	1.8	2	1 U	1 U	1 U	1 U	1 U	---	---	1 U
Methylene Chloride	NE	98	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 U
Tetrachloroethene	120	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	130	0.8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	350	1	0.7 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	NE	36	---	---	---	---	---	1 U	1 U	---

Note: U - Constituent not detected, reporting limit (RL) of the analysis reported.
J - Concentration reported is an estimated value.
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
--- Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoromethane

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Table 5-3 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - Residential Wells
Evaluated Against Ecotox Freshwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			RW-12	RW-13	RW-14	RW-15	RW-16	RW-17	RW-18	RW-19
Sample Date:			6/5/2000	6/6/2000	6/6/2000	6/6/2000	6/6/2000	6/6/2000	6/6/2000	6/6/2000
Laboratory:			ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Ecotox Thresholds Lowest Available Ecotox Threshold (ug/L)	Canadian Compendium Most Conservative Freshwater Quality Criteria and Guideline for the Protection of Aquatic Life (ug/L)								
1,1,1-Trichloroethane	62	35	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 J
1,1-Dichloroethane	47	NE	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
2-Butanone	NE	7200	11 U	11 UJ	11 UJ	11 UJ	11 UJ	11 UJ	11 UJ	11 UJ
Acetone	NE	NE	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Benzene	46	5.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	NE	0.6	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	NE	200	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Ethylbenzene	290	8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Freon 113*	NE	NE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
m-&/or p-Xylene	1.8	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	NE	98	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	120	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.9 J
Toluene	130	0.8	1 U	2 B	2 B	2 B	1 U	2 B	2 B	1 B
Trichloroethene	350	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 J
Xylenes (total)	NE	36	---	---	---	---	---	---	---	---

Note: U - Constituent not detected; reporting limit (RL) of the analysis reported.
J - Concentration reported is an estimated value.
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
--- Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoromethane

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Table 5-3 (Continued)

2000 Remedial Investigation
Groundwater Analytical Results - Residential Wells
Evaluated Against Ecotox Freshwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Sample ID:			RW-19DUP	RW-20	RW-21	RW-22
Sample Date:			6/6/2000	6/6/2000	6/6/2000	6/6/2000
Laboratory:			ESAT	ESAT	ESAT	ESAT
Units:			ug/L	ug/L	ug/L	ug/L
Chemical Name	U.S. EPA Ecotox Thresholds Lowest Available Ecotox Threshold (ug/L)	Canadian Compendium Most Conservative Freshwater Quality Criteria and Guideline for the Protection of Aquatic Life (ug/L)				
1,1,1-Trichloroethane	62	35	0.6 J	2 U	2 U	2 U
1,1-Dichloroethane	47	NE	1 UJ	1 UJ	1 UJ	1 UJ
2-Butanone	NE	7200	11 UJ	11 UJ	11 UJ	11 UJ
Acetone	NE	NE	2 UJ	2 UJ	2 UJ	2 UJ
Benzene	46	5.9	1 U	1 U	1 U	1 U
Chloroform	NE	0.6	3 U	3 U	3 U	3 U
Cis-1,2-Dichloroethene	NE	200	4 U	4 U	4 U	4 U
Ethylbenzene	290	8	1 U	1 U	1 U	1 U
Freon 113*	NE	NE	2 U	2 U	2 U	2 U
m-&/or p-Xylene	1.8	2	1 U	1 U	1 U	1 U
Methylene Chloride	NE	98	1 U	1 U	1 U	1 U
Tetrachloroethene	120	5	0.9 J	1 U	1 U	1 U
Toluene	130	0.8	2 B	1 B	1 B	2 B
Trichloroethene	350	1	4 J	1 U	1 U	1 U
Xylenes (total)	NE	36	---	---	---	---

Note: U - Constituent not detected; reporting limit (RL) of the analysis reported.
J - Concentration reported is an estimated value.
UJ - The analyte was not detected above the reported sample quantition limit.
B - Constituent was detected in the method blank.
--- Indicates compound not analyzed.
= Exceeds the lowest standard shown above
*- 1,1,2-Trichloro-1,2,2-trifluoromethane

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Table 5-4

Summary of Detected VOCs in Groundwater
2002 Investigation Results
Evaluated Aganist Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Location ID			MW-101D	MW-101S	MW-103D	MW-103S	MW-104D	MW-104S	MW-104S	MW-105D	MW-105S	MW-105S	MW-107D	MW-107S
Sample ID			E0064	E0065	E0092	E0093	E0057	E0058	E0059	E0090	E0088	E0089	E0062	E0063
Sample Date			4/4/2002	4/4/2002	4/8/2002	4/8/2002	4/3/2002	4/3/2002	4/3/2002	4/8/2002	4/8/2002	4/8/2002	4/4/2002	4/4/2002
Lab Name			A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4
Unit			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Chemical Name	U.S. EPA Maximum Contaminant Level (µg/L)	IEPA Tier I Groundwater Remediation Objective - "Class I" (µg/L)												
1,1,1-TRICHLOROETHANE	200	200	0.5 U	0.5 U	0.56	0.63	0.87	0.9	1	2.2	1.9	1.8	1.3	0.5 U
FREON 113*	NE	NE	0.5 U	0.5 U	30 D	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	6.7	0.5 U
1,1-DICHLOROETHANE	NE	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.39 J	0.21 J	0.19 J	0.5 U	0.5 U
1,1-DICHLOROETHYLENE	7	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-DICHLOROETHENE	70	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3	0.47 J	0.39 J	0.5 U	0.5 U
CHLOROFORM[1]	100	0.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TETRACHLOROETHENE	5	5	0.5 U	0.5 U	0.54 J	5.9	0.18 J	0.48 J	0.52	3.2	3.5	3.1	3.3	0.17 J
TRICHLOROETHENE	5	5	1.8	0.21 J	0.5 U	0.5 U	0.5 U	0.18 J	0.19 J	2.8	1.7	1.6	0.5 U	0.5 U

Notes:
1 Chloroform concentration in MW-02 was 10 times less than that detected in the field blank sample
U = The analyte was not detected above the reported sample quantitation limit
J = The analyte was positively identified, the associated numerical value is an estimated concentration of the analyte in the sample
UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is estimated
*1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE
= Exceeds the lowest standard shown above

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Table 5-4 (Continued)

Summary of Detected VOCs in Groundwater
2002 Investigation Results
Evaluated Aganist Groundwater Criteria
Evergreen Manor Site
Roscoe, Illinois

Location ID			MW-109D	MW-109S	GWMU1A	GWMU1A	GWMU1B	GWMU2A	GWMU2B	MW-01A	MW-01A	MW-02	MW-03
Sample ID			E0095	E0094	E0098	E0099	E00A0RE	E00A1	E00A2RE	E00A7	E00A8	E00B2	E00A9
Sample Date			4/9/2002	4/9/2002	4/9/2002	4/9/2002	4/9/2002	4/9/2002	4/9/2002	4/16/2002	4/16/2002	4/16/2002	4/16/2002
Lab Name			A4	A4	A4	A4	A4	A4	A4	LIBRTY	LIBRTY	LIBRTY	LIBRTY
Unit			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Chemical Name	U.S. EPA Maximum Contaminant Level (µg/L)	IEPA Tier I Groundwater Remediation Objective (µg/L)											
1,1,1-TRICHLOROETHANE	200	200	0.44 J	0.29 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.4	2	1.7	2.1
FREON 113*	NE	NE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-DICHLOROETHANE	NE	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.34 J	0.34 J	0.5 U	0.26 J
1,1-DICHLOROETHENE	7	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.19 J	0.16 J	0.5 U	0.2 J
cis-1,2-DICHLOROETHENE	70	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	1.5	1.4	0.5 U	1.1
CHLOROFORM[1]	100	0.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.23 J	0.5 U
TETRACHLOROETHENE	5	5	2.6	1.6	0.34 J	0.25 J	0.23 J	0.61 J	0.61 J	1.7	1.7	0.5 U	0.1 J
TRICHLOROETHENE	5	5	0.24 J	0.5 U	0.5 U	0.5 U	0.5 R	0.5 U	0.5 UJ	4.7	4.4	0.54	7.2 J

Note

1 Chloroform concentration in MW-2 was 10 times less than that detected in the field blank sample

U = The analyte was not detected above the reported sample quantitation limit

J = The analyte was positively identified, the associated numerical value is an estimated concentration of the analyte in the sample.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is estimated.

*1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE

= Exceeds the lowest standard shown above

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Table 5-5

Summary of Detected VOCs in Groundwater
2002 Investigation Results
Evaluated Aganist Ecotox Criteria
Evergreen Manor Site
Roscoe, Illinois

Location ID			MW-101D	MW-101S	MW-103D	MW-103S	MW-104D	MW-104S	MW-104S	MW-105D	MW-105S	MW-105S	MW-107D	MW-107S
Sample ID			E0064	E0065	E0092	E0093	E0057	E0058	E0059	E0090	E0088	E0089	E0062	E0063
Sample Date			4/4/2002	4/4/2002	4/8/2002	4/8/2002	4/3/2002	4/3/2002	4/3/2002	4/8/2002	4/8/2002	4/8/2002	4/4/2002	4/4/2002
Lab Name			A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4	A4
Unit			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Chemical Name	U.S. EPA Ecotox Thresholds[1] - Lowest Available Ecotox Threshold (µg/L)	Canadian Compendium- Most Conservative Water Quality Criteria and Guidelines for the Protection of Aquatic Life[3] (µg/L)												
1,1,1-TRICHLOROETHANE	62	35	0.5 U	0.5 U	0.56	0.63	0.87	0.9	1	2.2	1.9	1.8	1.3	0.5 U
FREON 113*	NE	NE	0.5 U	0.5 U	30 D	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	6.7	0.5 U
1,1-DICHLOROETHANE	47	NE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.39 J	0.21 J	0.19 J	0.5 U	0.5 U
1,1-DICHLOROETHENE	NE	11,600**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-DICHLOROETHENE	NE	200	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3	0.47 J	0.39 J	0.5 U	0.5 U
CHLOROFORM[1]	NE	0.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TETRACHLOROETHENE	120	5	0.5 U	0.5 U	0.54 J	5.9	0.18 J	0.48 J	0.52	3.2	3.5	3.1	3.3	0.17 J
TRICHLOROETHENE	350	1	1.8	0.21 J	0.5 U	0.5 U	0.5 U	0.18 J	0.19 J	2.8	1.7	1.6	0.5 U	0.5 U

Notes:

1. Chloroform concentration in MW-02 was 10 times less than that detected in the field blank sample
2. Based on U.S. EPA's Ecotox Update, Ecotox Thresholds, Publication 9345 0-12FSI, EPA 540/F-95/038, January 1996. U.S. EPA chronic ambient water quality criteria (AWQC) or EPA-derived final chronic values (FCVs) (USEPA, 1986a, 1986b, 1987)
3. Based on Appendix 2-4, A Compendium of Environmental Quality Benchmarks, GBEI/EC-99-001 (Environment Canada, 1999)

U = The analyte was not detected above the reported sample quantitation limit.
J = The analyte was positively identified, the associated numerical value is an estimated concentration of the analyte in the sample
UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is estimated.
*1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE
** The value is for Total dichloroethenes
= Exceeds the lowest standard shown above

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Table 5-5 (Continued)

Summary of Detected VOCs in Groundwater
2002 Investigation Results
Evaluated Aganist Ecotox Criteria
Evergreen Manor Site
Roscoe, Illinois

Location ID			MW-109D	MW-109S	GWMU1A	GWMU1A	GWMU1B	GWMU2A	GWMU2B	MW-01A	MW-01A	MW-02	MW-03
Sample ID			E0095	E0094	E0098	E0099	E00A0RE	E00A1	E00A2RE	E00A7	E00A8	E00B2	E00A9
Sample Date			4/9/2002	4/9/2002	4/9/2002	4/9/2002	4/9/2002	4/9/2002	4/9/2002	4/16/2002	4/16/2002	4/16/2002	4/16/2002
Lab Name			A4	A4	A4	A4	A4	A4	A4	LIBRTY	LIBRTY	LIBRTY	LIBRTY
Unit			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Chemical Name	U.S. EPA Ecotox Thresholds[1]-Lowest Available Ecotox Threshold (µg/L)	Environment Canada (Canadian Compendium)- Most Conservative Freshwater Quality Criteria and Guidelines for the Protection of Aquatic Life [3] (µg/L)											
1,1,1-TRICHLOROETHANE	62	35	0.44 J	0.29 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.4	2	1.7	2.1
FREON 113*	NE	NE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-DICHLOROETHANE	47	NE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.34 J	0.34 J	0.5 U	0.26 J
1,1-DICHLOROETHENE	NE	11,600**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.19 J	0.16 J	0.5 U	0.2 J
cis-1,2-DICHLOROETHENE	NE	200	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	1.5	1.4	0.5 U	1.1
CHLOROFORM[1]	NE	0.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.23 J	0.5 U
TETRACHLOROETHENE	120	5	2.6	1.6	0.34 J	0.25 J	0.23 J	0.61 J	0.61 J	1.7	1.7	0.5 U	0.1 J
TRICHLOROETHENE	350	1	0.24 J	0.5 U	0.5 U	0.5 U	0.5 R	0.5 U	0.5 UJ	4.7	4.4	0.54	2 J

Note:

1. Chloroform concentration in MW-02 was 10 times less than that detected in the field blank sample.

2. Based on U.S. EPA's Ecotox Update, Ecotox Thresholds, Publication 9345.0-12FSI, EPA 540/F-95/038, January 1996. U.S. EPA chronic ambient water quality criteria (AWQC) or EPA-derived final chronic values (FCVs) (USEPA, 1986a, 1986b, 1987).

3. Based on Appendix 2-4, A Compendium of Environmental Quality Benchmarks, GBEI/EC-99-001 (Environment Canada, 1999)

U = The analyte was not detected above the reported sample quantitation limit.

J = The analyte was positively identified; the associated numerical value is an estimated concentration of the analyte in the sample.

UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is estimated.

*1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE

** The value is for Total dichloroethenes

= Exceeds the lowest standard shown above.

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Table 5-6

Summary of Detected VOCs in Sediment
2000 and 2002 Investigation Results
Evaluated Aganist Soil Criteria
Evergreen Manor Site
Roscoe, Illinois

Location ID			SED-1-01[3]	SED-1-01DUP[3]	SED-2-01	SED-3-01	SED-4-01[3]	SED-4-01[3]	SED-4-01DP[3]	SED-5-01	SED-6-01
Sample ID			—	—	—	—	—	EABQ9	EABR1	—	—
Sample Date			5/24/2000	5/24/2000	5/23/2000	5/23/2000	5/24/2000	5/24/2000	5/24/2000	5/24/2000	5/23/2000
Lab Name			ESAT	ESAT	ESAT	ESAT	ESAT	DATACHEM	DATACHEM	ESAT	ESAT
Unit			µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Chemical Name	U.S. EPA Region IX Risk Based Concentrations[1] (µg/kg)	IEPA Tier I Soil Remediation Objective[2] (µg/kg)									
2-Butanone	7300	NE	25 U	25 U	25 U	25 U	25 U	12 U	12 U	25 U	25 U
Benzene	600	800	5 U	5 U	5 U	5 U	5 U	12 U	2 J	5 U	5 U
Chloroform	3,600	300	8 J	50 UJ	50 UJ	50 UJ	50 UJ	12 U	12 U	50 UJ	50 UJ
Freon 113*	5600	NE	5 U	5 U	5 U	5 U	5 U	12 U	12 U	5 U	5 U
Methyl Acetate	22,000,000	NE	5 J	15 U	9 J	15 U	15 U	12 U	12 U	9 J	15 U
Toluene	520,000	650,000	5 U	5 U	5 U	5 U	5 U	12 U	0.7 J	5 U	5 U

Note:
U = The analyte was not detected above the reported sample quanitation limit
J = The analyte was positively identified; the associated numerical value is an estimated concentration of the analyte in the sample.
UJ = The analyte was not detected above the reported sample quanitation limit However, the reported quanitation limit is estimated.
R= Rejected Values
1. Region IX RBCs are based on soil standard for residential property use
2. Remediation objective is based on soil standard for inhalation/ingestion exposure route for residential properties.
3. *Sample is considered a background sample*

*1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE

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Table 5-6 (Continued)

Summary of Detected VOCs in Sediment
2000 and 2002 Investigation Results
Evaluated Aganist Soil Criteria
Evergreen Manor Site
Roscoe, Illinois

Location ID			SD-01	SD-02	SD-03	SD-03	SD-04	SD-05	SD-06	SD-07	SD-08
Sample ID			E0078	E0079	E0080	E0081	E0082	E0084	E0084	E0085	E0086
Sample Date			4/5/2002	4/5/2002	4/5/2002	4/5/2002	4/5/2002	4/5/2002	4/5/2002	4/5/2002	4/5/2002
Lab Name			ENVSYS	ENVSYS	ENVSYS	ENVSYS	ENVSYS	ENVSYS	ENVSYS	ENVSYS	ENVSYS
Unit			µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Chemical Name	U.S. EPA Region IX Risk Based Concentrations[1] (µg/kg)	IEPA Tier I Soil Remediation Objective[2] (µg/kg)									
2-Butanone	7300	NE	17	17 UJ	13 UJ	15 UJ	3 J	32 UJ	32 UJ	26 UJ	17 UJ
Benzene	600	800	17 U	17 U	13 U	15 U	14 U	11 U	32 U	26 U	17 U
Chloroform	3,600	300	17 U	17 U	13 U	15 U	14 U	11 U	32 U	26 U	17 U
Freon 113*	5600	NE	8	2 J	13 UJ	15 UJ	14 U	32 UJ	32 UJ	26 UJ	17 UJ
Methyl Acetate	22,000,000	NE	17 U	17 U	13 U	15 U	14 U	11 U	32 U	26 U	17 U
Toluene	520,000	650,000	17	17 U	13 U	15 U	14 U	11 U	4 J	26 U	17 U

Note
U = The analyte was not detected above the reported sample quanitation limit.
J = The analyte was positively identified, the associated numerical value is an estimated concentration of the analyte in the sample.
UJ = The analyte was not detected above the reported sample quanitation limit. However, the reported quanitation limit is estimated.
R= Rejected Values
1. Region IX RBCs are based on soil standard for residential property use.
2. Remediation objective is based on soil standard for inhalation/ingestion exposure route for residential properties.

*1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE

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Table 5-7

Summary of Detected VOCs in Sediment
2000 and 2002 Investigation Results
Evaluated Aganist Ecotox Sediment Criteria
Evergreen Manor Site
Roscoe, Illinois

Location ID			SED-1-01[3]	SED-1-01DUP[3]	SED-2-01	SED-3-01	SED-4-01[3]	SED-4-01[3]	SED-4-01DP[3]	SED-5-01	SED-6-01
Sample ID			—	—	—	—	—	EABQ9	EABR1	—	—
Sample Date			5/24/2000	5/24/2000	5/23/2000	5/23/2000	5/24/2000	5/24/2000	5/24/2000	5/24/2000	5/23/2000
Lab Name			ESAT	ESAT	ESAT	ESAT	ESAT	DATACHEM	DATACHEM	ESAT	ESAT
Unit			µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Chemical Name	U.S. EPA Lowest Available Ecotox Threshold (µg/kg)[1]	Canadian Compendium Most Conservative Sediment Quality Criteria and Guidelines for the Protection of Aquatic Life (µg/kg)[2]									
2-Butanone	NE	NE	25 U	25 U	25 U	25 U	25 U	12 U	12 U	25 U	25 U
Benzene	57	8	5 U	5 U	5 U	5 U	5 U	12 U	2 J	5 U	5 U
Chloroform	NE	0.4	[redacted]	50 UJ	50 UJ	50 UJ	50 UJ	12 U	12 U	50 UJ	50 UJ
Freon 113*	NE	NE	5 U	5 U	5 U	5 U	5 U	12 U	12 U	5 U	5 U
Methyl Acetate	NE	NE	5 J	15 U	9 J	15 U	15 U	12 U	12 U	9 J	15 U
Toluene	670	890	5 U	5 U	5 U	5 U	5 U	12 U	0.7 J	5 U	5 U

Note:
U = The analyte was not detected above the reported sample quanitation limit.
J = The analyte was positively identified; the associated numerical value is an estimated concentration of the analyte in the sample.
UJ = The analyte was not detected above the reported sample quanitation limit. However, the reported quanitation limit is estimated.
1. Based on U.S. EPA's Ecotox Update, Ecotox Thresholds, Publication 9345-0-12FSI, EPA 540/F-95/F-95/038, January 1996. U.S. EPA Sediment quality criteria (SQC) (U.S. EPA, 1993g)
2. Based on Apprendix 3-1, A compendium of Environmental Quality Benchmarkds, GBEI/EC-99-001 (Environment Canada, 1999)
3. Sample is considered a background sample
*1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE
[redacted] = Exceeds the lowest standard shown above.

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Table 5-7 (Continued)

Summary of Detected VOCs in Sediment
2000 and 2002 Investigation Results
Evaluated Aganist Ecotox Sediment Criteria
Evergreen Manor Site
Roscoe, Illinois

Location ID			SD-01	SD-02	SD-03	SD-03	SD-04	SD-05	SD-06	SD-07	SD-08
Sample ID			E0078	E0079	E0080	E0081	E0082	E0084	E0084	E0085	E0086
Sample Date			4/5/2002	4/5/2002	4/5/2002	4/5/2002	4/5/2002	4/5/2002	4/5/2002	4/5/2002	4/5/2002
Lab Name			ENVSYS	ENVSYS	ENVSYS	ENVSYS	ENVSYS	ENVSYS	ENVSYS	ENVSYS	ENVSYS
Unit			µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Chemical Name	U.S. EPA Lowest Available Ecotox Threshold (µg/kg) [1]	Canadian Compendium Most Conservative Sediment Quality Criteria and Guidelines for the Protection of Aquatic Life (µg/kg) [2]									
2-Butanone	NE	NE	17	17 UJ	13 UJ	15 UJ	3 J	32 UJ	32 UJ	26 UJ	17 UJ
Benzene	57	8	17 U	17 U	13 U	15 U	14 U	11 U	32 U	26 U	17 U
Chloroform	NE	0.4	17 U	17 U	13 U	15 U	14 U	11 U	32 U	26 U	17 U
Freon 113*	NE	NE	8	2 J	13 UJ	15 UJ	14 U	32 UJ	32 UJ	26 UJ	17 UJ
Methyl Acetate	NE	NE	17 U	17 U	13 U	15 U	14 U	11 U	32 U	26 U	17 U
Toluene	670	890	17	17 U	13 U	15 U	14 U	11 U	4 J	26 U	17 U

Note:
U = The analyte was not detected above the reported sample quanitation limit.
J = The analyte was positively identified. the associated numerical value is an estimated concentration of the analyte in the sample.
UJ = The analyte was not detected above the reported sample quanitation limit. However, the reported quanitation limit is estimated.
1. Based on U.S. EPA's Ecotox Update, Ecotox Thresholds, Publication 9345-0-12FSI, EPA 540/F-95/F-95/038, January 1996. U.S. EPA Sediment quality criteria (SQC) (U.S. EPA, 1993g)
2. Based on Apprendix 3-1, A compendium of Environmental Quality Benchmarkds, GBEI/EC-99-001 (Environment Canada, 1999)

*1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE
[redacted] = Exceeds the lowest standard shown above

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Table 6-1

Calculation of Target Groundwater Concentration Corresponding to the Target Cancer Risk Level of One in Ten Thousand Homes Due to Vapor Intrusion
Evergreen Manor Site
Roscoe, Illinois

Compound	H	α	C(target, ia)	C(gw)
1,1,1-Trichloroethane	7.05E-01	0.001	2.20E+03	3.1E+03
2-Butanone	1.10E-03	0.001	1.00E+03	9.1E+05
Acetone	1.59E-03	0.001	3.50E+02	2.2E+05
Benzene	2.28E-01	0.001	3.10E+01	1.4E+02
Chloroform	1.50E-01	0.001	1.10E+01	7.3E+01
cis-1,2-dichloroethene	1.67E-01	0.001	3.50E+01	2.1E+02
Ethylbenzene	3.23E-01	0.001	2.20E+02	6.8E+02
Freon 113	2.10E+01	0.001	3.00E+04	1.4E+03
m-xylene	3.01E-01	0.001	7.00E+03	2.3E+04
p-xyelene	3.14E-01	0.001	7.00E+03	2.2E+04
Methylene Chloride	8.98E-02	0.001	5.20E+02	5.8E+03
o-xylene	2.13E-01	0.001	7.00E+03	3.3E+04
Tetrachloroethene	7.54E-01	0.001	8.10E+01	1.1E+02
Toluene	2.72E-01	0.001	4.00E+02	1.5E+03
Trichloroethene	4.22E-01	0.001	2.20E+00	5.2E+00

Equation Used :

$C(gw)\ [\mu g/L] = C(target, ia)\ [\mu g/m^3] \times 10^{-3}\ m^3/L \times 1/H \times 1/\alpha$

Source : Vapor Intrusion Guidance (U.S. EPA, 2002)

where C(gw)= Target Groundwater Concentration

α = Attenuation Factor

H = dimensionless Henry's constant at 25℃ [(mg/L-vapor)/ (mg/L-H_2O)

C(target, ia)= Target Indoor Air Concentration at 10^{-4} Risk Level

Assumptions:

1. Target Indoor Air Concentration for each compound was given in Table 2a of the U.S. EPA's Vapor Intrusion Guidance
2. Risk Level was for 1 x 10-4 (one in ten thousand)
3. Ideal Conditions: Temperature at 25 C and pressure at 1 atmosphere.
4. Partitioning across the water table obeys Henry's Law and no other physical factors affect the process

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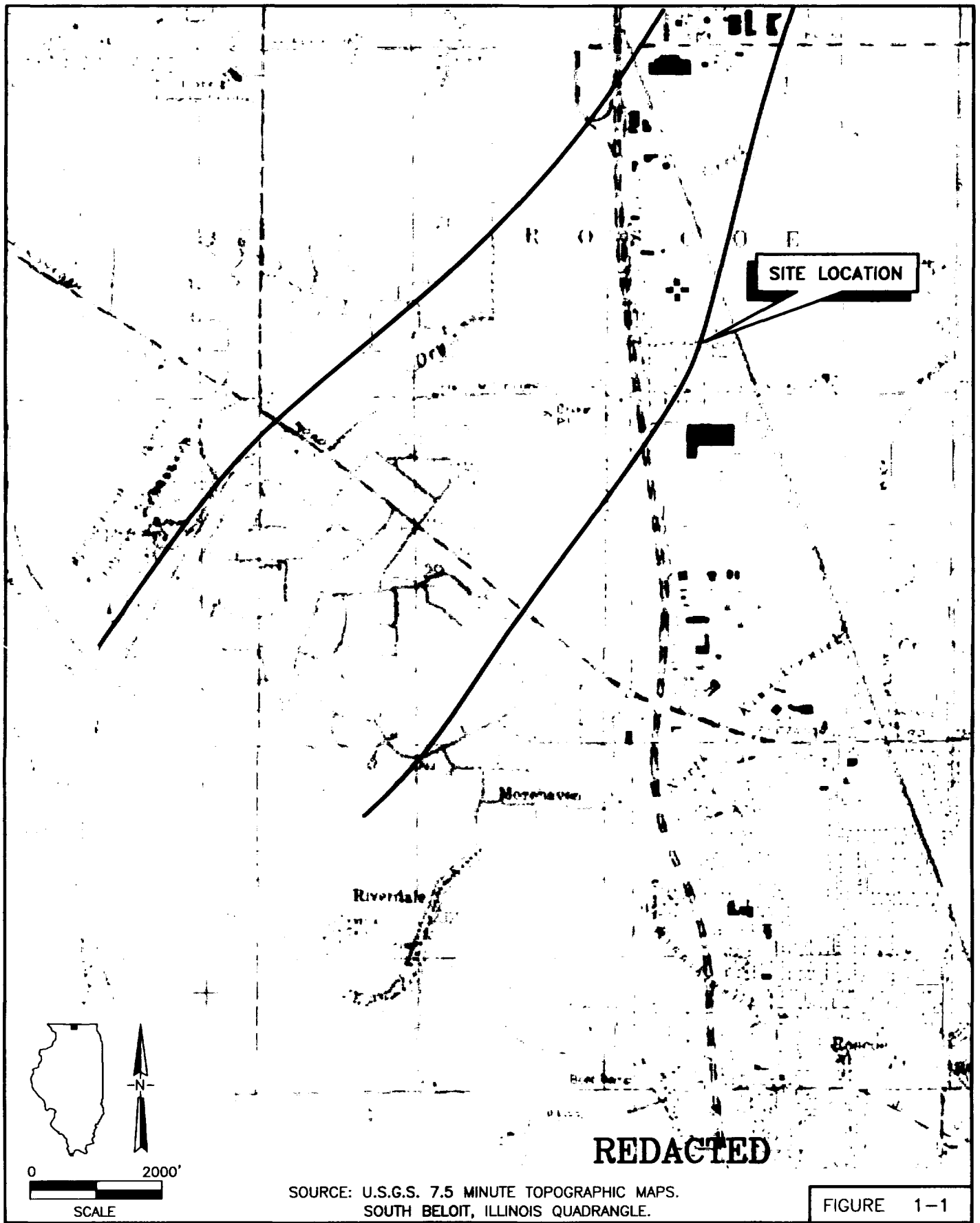
Figures



SOURCE: U.S.G.S. 7.5 MINUTE TOPOGRAPHIC MAPS.
SOUTH BELOIT, ILLINOIS QUADRANGLE.

FIGURE 1-1

RESPONSE ACTION CONTRACT	PROJECT LOCATION MAP
U.S. EPA CONTRACT No. 68-W7-0026 WORK ASSIGNMENT No. 139-RICO-05MZ DOCUMENT CONTROL No. RFW139-2A-ANOJ	EVERGREEN MANOR SITE Roscoe, Illinois

LEGEND

- SURFACE WATER
- MUNICIPAL WELL
- GROUNDWATER MONITORING WELL
- S,D IDENTIFIES WELL CLUSTERS WITH A SHALLOW AND DEEP WELL
- CPT SAMPLING LOCATION
- MUNICIPAL WATER MAIN (NOT ALL HOMES ALONG THE WATER MAIN ARE CONNECTED)
- SITE BOUNDARY (BASED ON MAXIMUM EXTENT OF VOC)

NOTES:

1. BASE MAP ADAPTED FROM CAD FILES PROVIDED BY WINNEBAGO COUNTY AND ORTHO (USGS, 1999).
2. WATERMAIN LOCATIONS ADAPTED FROM NORTH PARK WATER DISTRICT BY McCLURE ENGINEERING ASSOCIATES, INC. (2002 VERSION) AND VILLAGE OF ROCKTON WATER DEPARTMENT (1998 VERSION).

SOURCES:

- USGS EARTH SOURCES OBSERVATION SYSTEMS DATA CENTER DATED: 1999/04/24.

N

0 1200'
SCALE

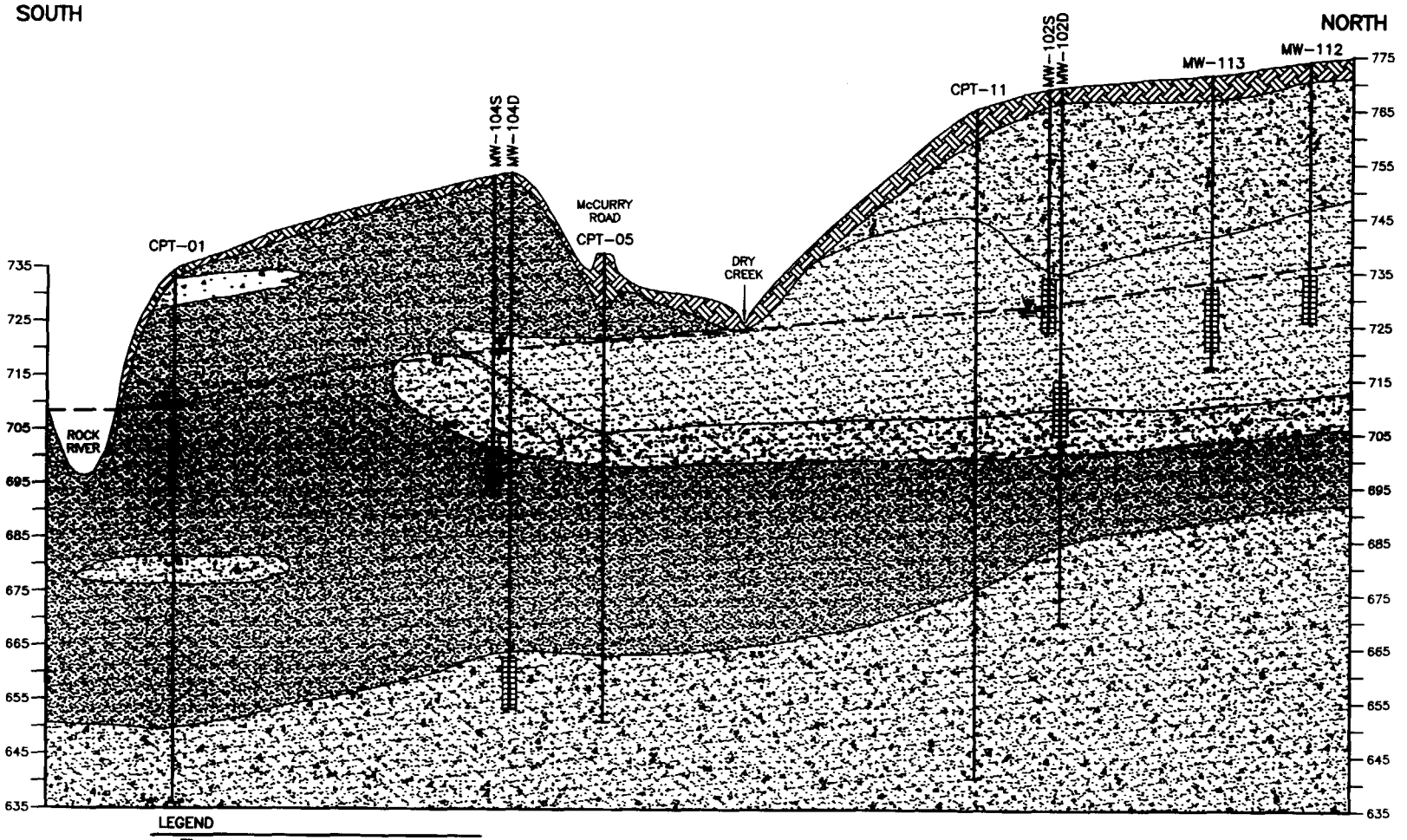
FIGURE 1-2

REDACTED

RESPONSE ACTION CONTRACT
U.S. EPA CONTRACT No. 68-W7-0026
WORK ASSIGNMENT No. 139-RICO-05MZ
DOCUMENT CONTROL No. RFW139-2A-ANOJ

SITE PLAN
EVERGREEN MANOR SITE
Roscoe, Illinois

REDACTED
LEGEND
NOTES
SOURCE
RESPONSE ACTION CONTRACT
HOMES THAT WERE CONNECTED TO NPPWD SYSTEM BY THE U.S. EPA (1999-2000)



LEGEND

- APRIL 2002 GROUNDWATER ELEVATION
- SCREENED INTERVAL
- FILL, TOPSOIL AND/OR ORGANICS
- WELL SORTED SAND, TRACE GRAVEL
- SAND WITH UP TO ABOUT 40% GRAVEL, AND LOCALIZED SILTY ZONES
- SAND WITH GREATER THAN ABOUT 40% GRAVEL, AND SOME SILT OR SILTY ZONES

VERTICAL 20' 0'
HORIZONTAL 200'

NOTE:
MW-3 WATER LEVEL USED AT CPT-01 LOCATION.

REDACTED

FIGURE 3-1

RESPONSE ACTION CONTRACT
U.S. EPA CONTRACT No. 68-W7-0026
WORK ASSIGNMENT No. 139-RICO-05MZ
DOCUMENT CONTROL No. RFW139-2A-ANOJ

TYPICAL LITHOLOGY
EVERGREEN MANOR SITE
Roscoe, Illinois

LEGEND

- SURFACE WATER
- MUNICIPAL WELL
- GROUNDWATER MONITORING WELL
- S,D IDENTIFIES WELL CLUSTERS WITH A SHALLOW AND DEEP WELL
- STAFF GAUGE
- CPT SAMPLING LOCATION
- MUNICIPAL WATER MAIN (NOT ALL HOMES ALONG THE WATER MAIN ARE CONNECTED)
- SITE BOUNDARY (BASED ON MAXIMUM EXTENT OF VOC)

NOTES:

1. BASE MAP ADAPTED FROM CAD FILES PROVIDED BY WINNEBAGO COUNTY AND ORTHO (USGS, 1999).
2. WATERMAIN LOCATIONS ADAPTED FROM NORTH PARK WATER DISTRICT BY McCLURE ENGINEERING ASSOCIATES, INC. (2002 VERSION) AND VILLAGE OF ROCKTON WATER DEPARTMENT (1998 VERSION).

SOURCES:

- USGS EARTH SOURCES OBSERVATION SYSTEMS DATA CENTER DATED: 1999/04/24.

N

0 1200'
SCALE

FIGURE 3-2

RESPONSE ACTION CONTRACT
U.S. EPA CONTRACT No. 68-W7-0026
WORK ASSIGNMENT No. 139-RICO-05MZ
DOCUMENT CONTROL No. RFW139-2A-ANOJ

POTENTIOMETRIC SURFACE MAP
EVERGREEN MANOR SITE
Roscoe, Illinois

REDACTED

MW-112
MW-113
MW-111
MW-1035,D
MW-1025,D
MW-1075,D
MW-1085,D
MW-1085,D
CPT-12
MW-1105,D
CPT-13
CPT-07
CPT-08
CPT-06
CPT-10
CPT-09
CPT-04
MW-1045,D
MW-1085,D
MW-1085,D
MW-1015,D
MW-03
MW-01
CPT-03
MW-03
CPT-01
CPT-02
MUNICIPAL WELL 6
MUNICIPAL WELL 4
LEGEND
REDACTED
FIGURE 3-3
RESPONSE ACTION CONTRACT
NORTH PARK PUBLIC WATER DISTRIBUTION NETWORK

LEGEND

- SURFACE WATER
- MUNICIPAL WELL
- GROUNDWATER MONITORING WELL
- S,D IDENTIFIES WELL CLUSTERS WITH A SHALLOW AND DEEP WELL
- CPT SAMPLING LOCATION
- MUNICIPAL WATER MAIN (NOT ALL HOMES ALONG THE WATER MAIN ARE CONNECTED)
- SITE BOUNDARY (BASED ON MAXIMUM EXTENT OF VOC)

NOTES:

1. BASE MAP ADAPTED FROM CAD FILES PROVIDED BY WINNEBAGO COUNTY AND ORTHO (USGS, 1999).
2. WATERMAIN LOCATIONS ADAPTED FROM NORTH PARK WATER DISTRICT BY McCLURE ENGINEERING ASSOCIATES, INC. (2002 VERSION) AND VILLAGE OF ROCKTON WATER DEPARTMENT (1998 VERSION).
3. THE ADDRESSES SHOWN ON THIS FIGURE MAY INCLUDE NON RESIDENTIAL (INDUSTRIAL) PROPERTIES.

SOURCES:

- POLK CITY DIRECTORIES – ROCKFORD AND BELVIDERE, IL (2002)
- PARTIAL LIST OF ADDRESSES PROVIDED BY WINNEBAGO COUNTY HEALTH DEPARTMENT.
- USGS EARTH SOURCES OBSERVATION SYSTEMS DATA CENTER DATED: 1999/04/24.

N

0 1200'
SCALE

FIGURE 3-4

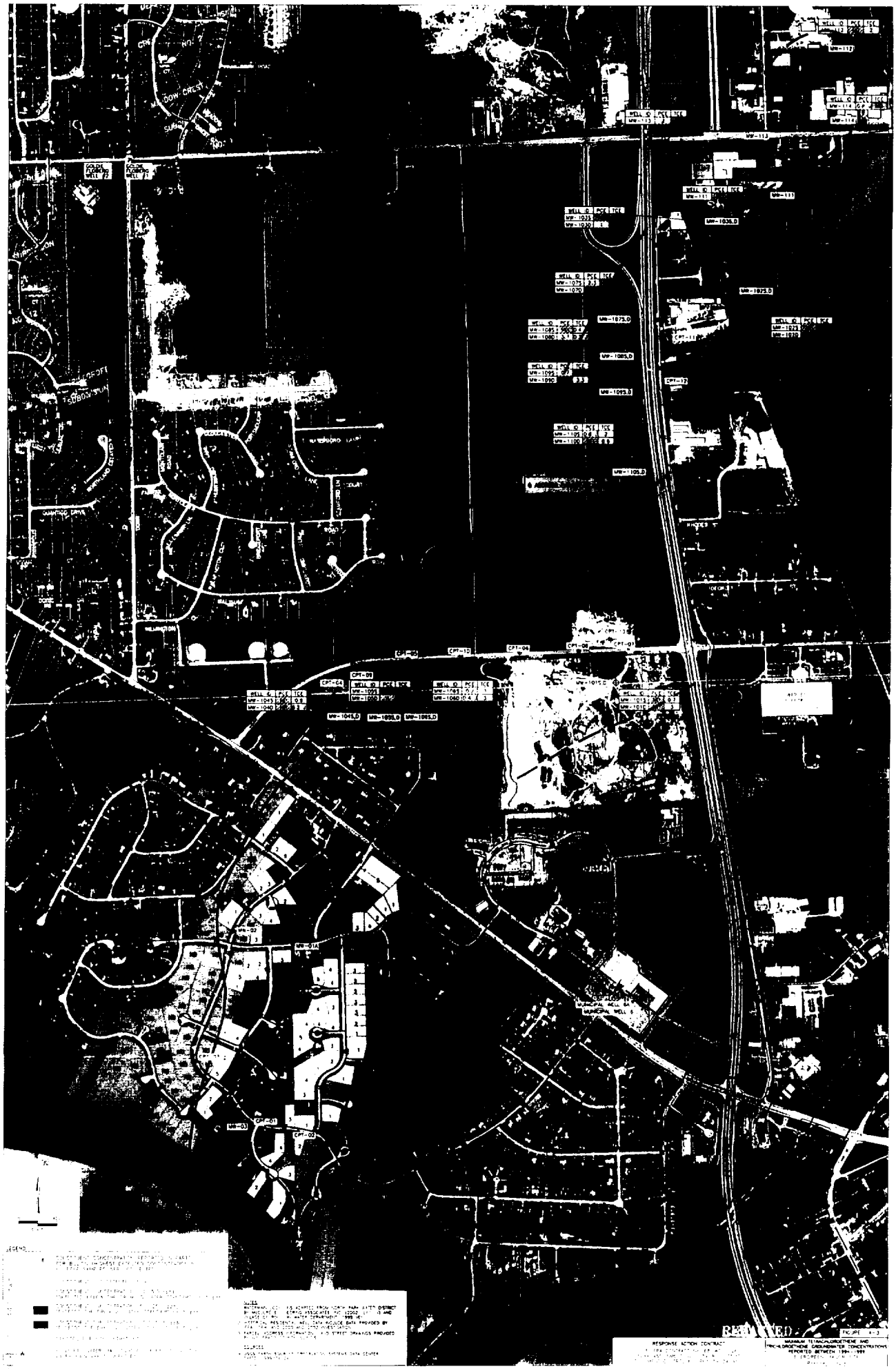
REDACTED

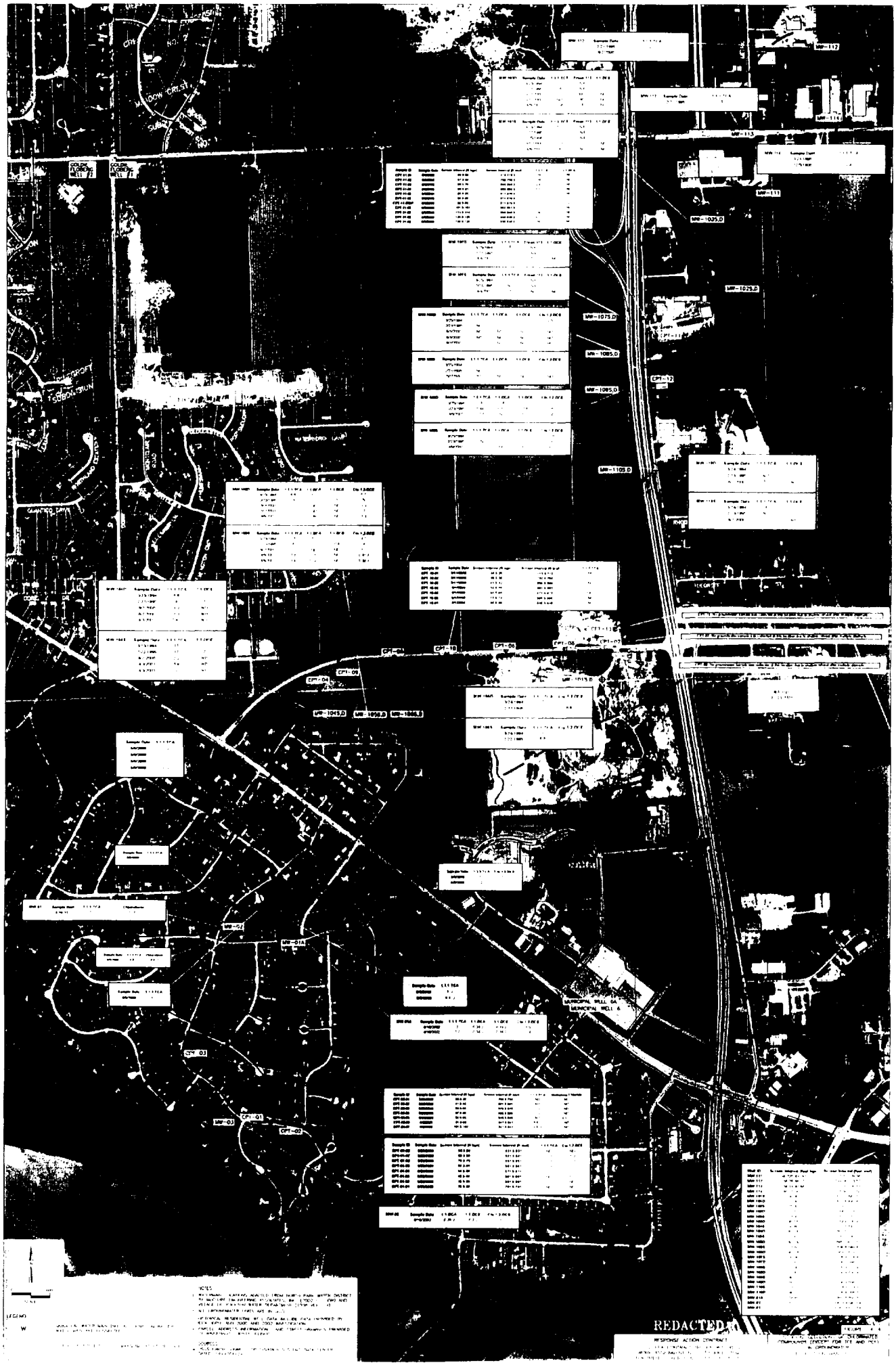
RESPONSE ACTION CONTRACT
U.S. EPA CONTRACT No. 68-W7-0026
WORK ASSIGNMENT No. 139-RICO-05MZ
DOCUMENT CONTROL No. RFW139-2A-ANOJ

POTENTIAL RESIDENCES NOT CONNECTED TO THE NPPWD
EVERGREEN MANOR SITE
Roscoe, Illinois

MW-112
MW-113
MW-111
MW-1035.D
MW-1075.D
MW-1085.D
N SECOND ST
MW-1095.D
MW-1105.D
CPT-12
CPT-13
CPT-07
CPT-10
CPT-06
CPT-04
CPT-08
MW-1015.D
MW-1040.D
MW-1060.D
MW-1065.D
MW-07
MW-01A
CPT-03
MW-03
CPT-01
CPT-02
MUNICIPAL WELL 6
MUNICIPAL WELL 8
WATERFORD LANE
WILMINGTON
CTED
RESPONSE ACTION CONTRACT
1990-1993 MAXIMUM TRICHLOROETHENE GROUNDWATER CONCENTRATIONS

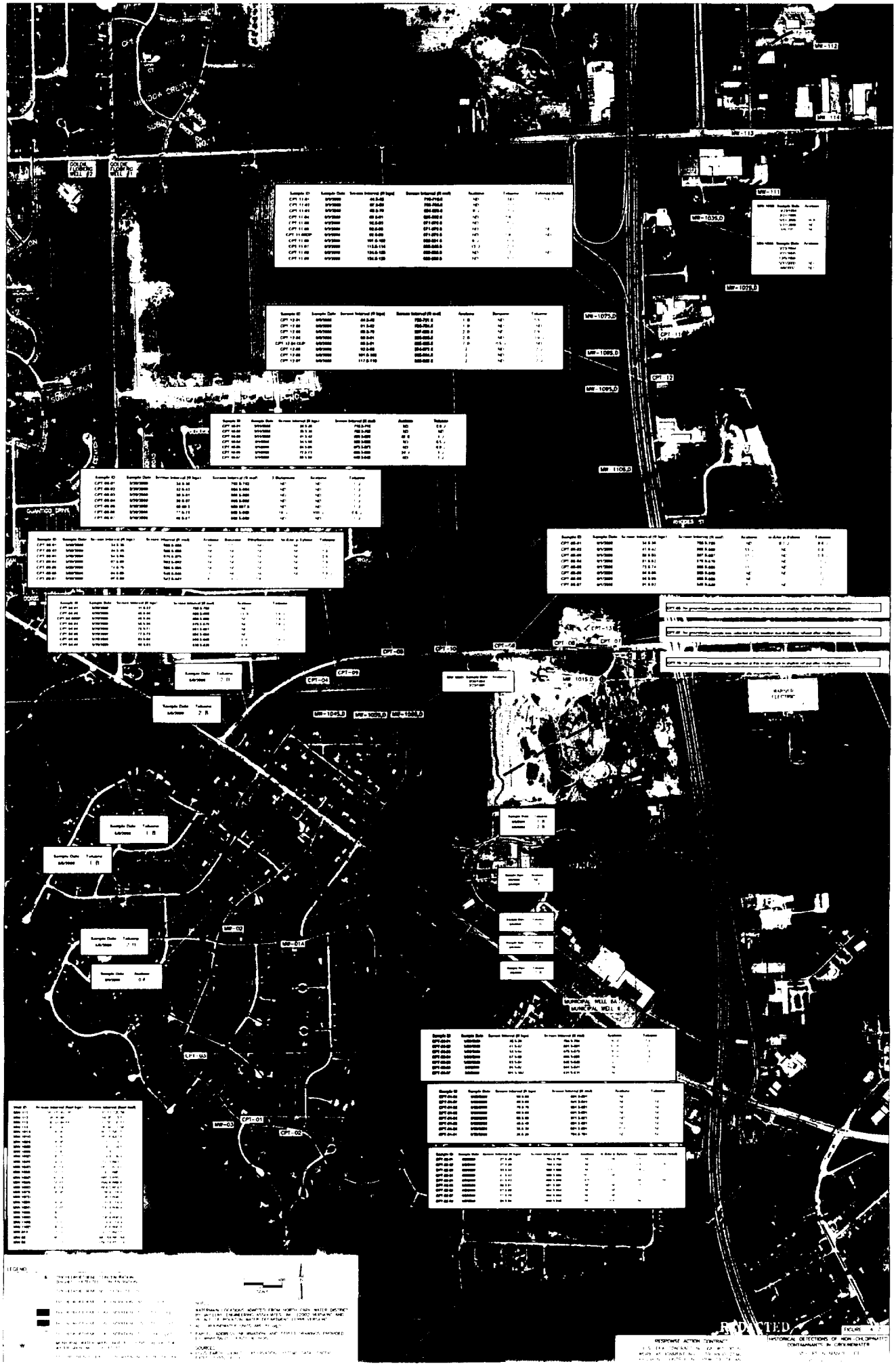
E. ROCKTON
MW-112
MW-114
MW-113
MW-111
E. ROCKTON
MW-1035,D
MW-1025,D
MW-1075,D
MW-1085,D
N. SECOND ST
MW-1085,D
(3 ADDRESS CANNOT BE LOCATED)
MW-1105,D
CPT-12
CPT-13
CPT-07
CPT-06
CPT-10
CPT-08
CPT-04
MW-1045,D
MW-1056,D
MW-1065,D
MW-02
MW-01A
CPT-03
MW-03
CPT-01
CPT-02
MUNICIPAL WELL #4
MUNICIPAL WELL #5
WALLACE DR
REDACTED
LEGEND
NOTES
SOURCES
RESPONSE ACTION CONTRACT
1990-1993 TETRACHLOROETHENE MAXIMUM GROUNDWATER CONCENTRATIONS


MW-113
MW-111
MW-1036,D
MW-1075,D
MW-1085,D
MW-1095,D
MW-1105,D
MW-1045,D
MW-1055,D
MW-1065,D
MW-02
MW-01A
MW-03
CPT-01
CPT-02
CPT-04
CPT-10
CPT-09
CPT-08
CPT-07
CPT-12
CPT-11
MUNICIPAL WELL 6A
MUNICIPAL WELL 6
LEGEND
NOTES
RESPONSE ACTION CONTRACT
FIGURE 4-3
MAXIMUM TETRACHLOROETHENE AND TRICHLOROETHENE GROUNDWATER CONCENTRATIONS REPORTED BETWEEN 1994-1999

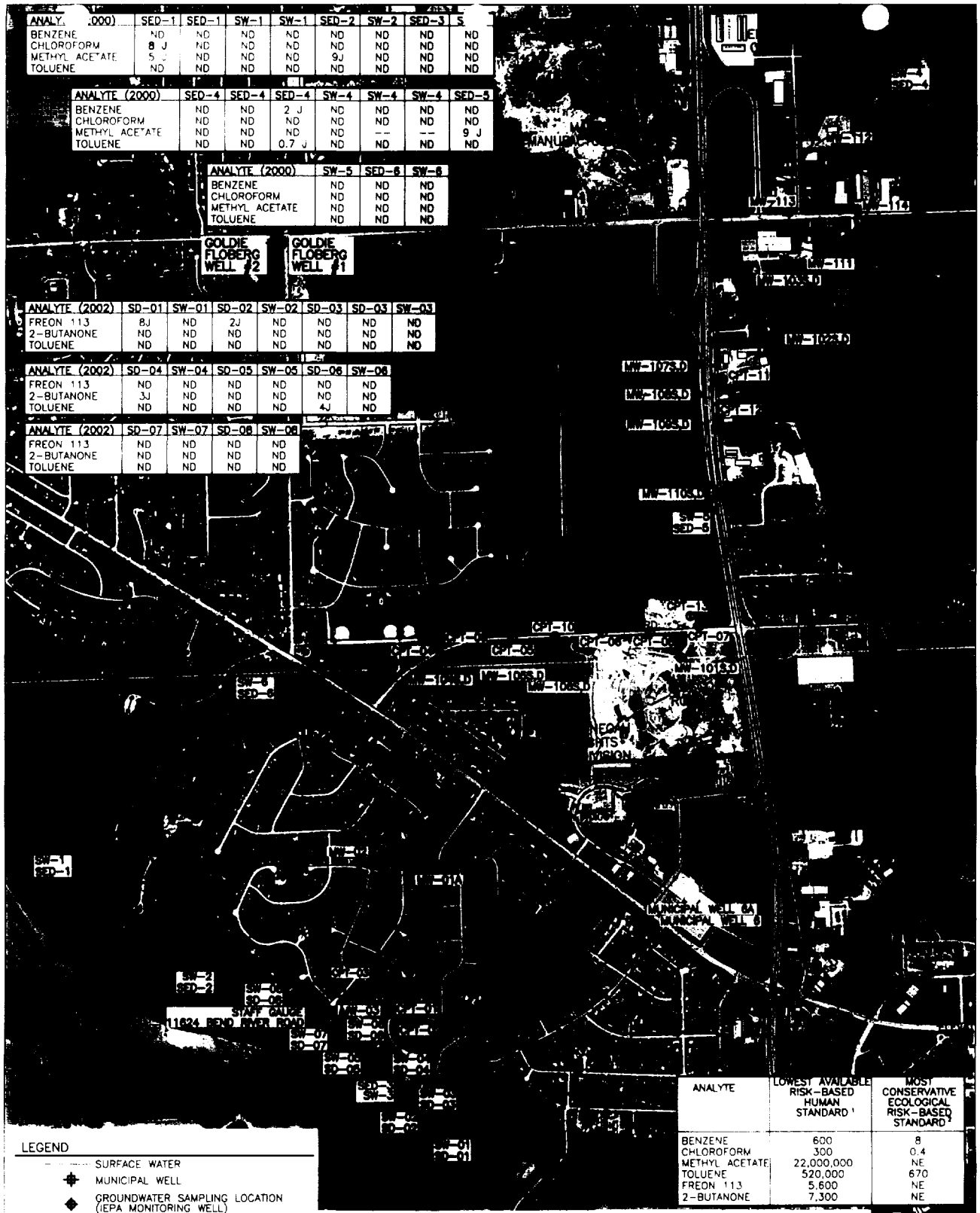

MW-112
MW-114
MW-113
MW-111
MW-1035.D
MW-1025.D
MW-1075.D
MW-1085.D
MW-1095.D
MW-1105.D
CPT-12
CPT-04
CPT-10
CPT-06
CPT-08
CPT-07
CPT-09
MW-1045.D
MW-1055.D
MW-1065.D
MW-1015.D
MW-02
MW-01A
CPT-03
MW-03
CPT-01
CPT-02
MUNICIPAL WELL 6A
MUNICIPAL WELL 6
GOLDIE FLOBERG WELL 2
GOLDIE FLOBERG WELL 1
MEADOW CREST
GUANTICO DRIVE
LEGEND
NOTES
REDACTED

MW-112
MW-114
MW-113
MW-111
MW-1035,D
MW-1025,D
MW-1075,D
MW-1085,D
MW-1095,D
MW-1105,D
CPT-11
CPT-12
GOLDIE FLOWERS WELL 2
GOLDIE FLOWERS WELL 1
MAIDEN CREST
SUBDIVISION
QUANTICO DRIVE
WILMINGTON
PHOENIX ST
IDEROFT
NO GROUNDWATER SAMPLES WERE TAKEN DUE TO SHALLOW REFUSAL AFTER MULTIPLE ATTEMPTS
NO GROUNDWATER SAMPLES WERE TAKEN DUE TO SHALLOW REFUSAL AFTER MULTIPLE ATTEMPTS
NO GROUNDWATER SAMPLES WERE TAKEN DUE TO SHALLOW REFUSAL AFTER MULTIPLE ATTEMPTS
CPT-10
CPT-06
CPT-08
CPT-07
CPT-09
CPT-04
MW-1045,D
MW-1055,D
MW-1065,D
MW-02
MW-01A
CPT-03
MW-03
CPT-01
CPT-02
MUNICIPAL WELL 6A
MUNICIPAL WELL 6
LEGEND
RESPONSE ACTION CONTRACT
MAXIMUM TRICHLOROETHENE GROUNDWATER CONCENTRATIONS REPORTED BETWEEN 2000 & 2002

SAMPLE ID
SCREEN INTERVAL (FT BGS)
SCREEN INTERVAL (FT MSL)
PCE (ug/L)
CPT-10-02
35.5
702-702.5
0.9 J
NO GROUNDWATER SAMPLES WERE TAKEN DUE TO SHALLOW REFUSAL AFTER MULTIPLE ATTEMPTS
NO GROUNDWATER SAMPLES WERE TAKEN DUE TO SHALLOW REFUSAL AFTER MULTIPLE ATTEMPTS
NO GROUNDWATER SAMPLES WERE TAKEN DUE TO SHALLOW REFUSAL AFTER MULTIPLE ATTEMPTS
MUNICIPAL WELL 6A
MUNICIPAL WELL 6
REDACTED



MW-112
MW-114
MW-113
MW-111
MW-1035,D
MW-1075,D
MW-1095,D
MW-1105,D
CPT-11
CPT-12
CPT-13
CPT-07
CPT-08
CPT-10
CPT-09
CPT-04
CPT-06
CPT-05
CPT-03
CPT-01
CPT-02
MW-1015,D
MW-1045,D
MW-1055,D
MW-1065,D
MW-02
MW-01A
MW-03
MUNICIPAL WELL 8A
MUNICIPAL WELL 8
GOLDIE FLOBERG WELL #2
GOLDIE FLOBERG WELL #1
QUANTICO DRIVE
RIKERS ST
LEGEND
RESPONSE ACTION CONTRACT
HISTORICAL DETECTIONS OF NON-CHLORINATED CONTAMINANTS IN GROUNDWATER



ANALYTE (2000)	SED-1	SED-1	SW-1	SW-1	SED-2	SW-2	SED-3	S
BENZENE	ND	ND	ND	ND	ND	ND	ND	ND
CHLOROFORM	8 J	ND	ND	ND	ND	ND	ND	ND
METHYL ACETATE	5 J	ND	ND	ND	9J	ND	ND	ND
TOLUENE	ND	ND	ND	ND	ND	ND	ND	ND

ANALYTE (2000)	SED-4	SED-4	SED-4	SW-4	SW-4	SW-4	SED-5
BENZENE	ND	ND	2 J	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND	ND	ND
METHYL ACETATE	ND	ND	ND	ND	--	--	9 J
TOLUENE	ND	ND	0.7 J	ND	ND	ND	ND

ANALYTE (2000)	SW-5	SED-6	SW-6
BENZENE	ND	ND	ND
CHLOROFORM	ND	ND	ND
METHYL ACETATE	ND	ND	ND
TOLUENE	ND	ND	ND

ANALYTE (2002)	SD-01	SW-01	SD-02	SW-02	SD-03	SD-03	SW-03
FREON 113	8J	ND	2J	ND	ND	ND	ND
2-BUTANONE	ND	ND	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND	ND	ND	ND

ANALYTE (2002)	SD-04	SW-04	SD-05	SW-05	SD-06	SW-06
FREON 113	ND	ND	ND	ND	ND	ND
2-BUTANONE	3J	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND	4J	ND

ANALYTE (2002)	SD-07	SW-07	SD-08	SW-08
FREON 113	ND	ND	ND	ND
2-BUTANONE	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND

ANALYTE	LOWEST AVAILABLE RISK-BASED HUMAN STANDARD [1]	MOST CONSERVATIVE ECOLOGICAL RISK-BASED STANDARD [2]
BENZENE	600	8
CHLOROFORM	300	0.4
METHYL ACETATE	22,000,000	NE
TOLUENE	520,000	670
FREON 113	5,600	NE
2-BUTANONE	7,300	NE

LEGEND

- SURFACE WATER
- MUNICIPAL WELL
- GROUNDWATER SAMPLING LOCATION (IEPA MONITORING WELL)
- S,D IDENTIFIES WELL CLUSTERS WITH A SHALLOW AND DEEP WELL
- STAFF GAUGE
- SURFACE WATER AND SEDIMENT SAMPLING LOCATION (APRIL 2002)
- APPROXIMATE SEDIMENT AND SURFACE WATER SAMPLING LOCATION (MAY 2000)
- MUNICIPAL WATER MAIN (NOT ALL HOMES ALONG THE WATER MAIN ARE CONNECTED)
- SITE BOUNDARY (BASED ON MAXIMUM EXTENT OF VOC)

CONSTITUENT EXCEEDS LOWEST AVAILABLE ECOTOX FRESHWATER STANDARDS

NOTES:

1. CONSTITUENT EXCEEDS THE LOWEST SEDIMENT STANDARDS AS DEFINED BY U.S. EPA REGION IX PRELIMINARY REMEDIATION GOALS (PRGs) AND IEPA SOIL REMEDIATION FOR RESIDENTIAL USAGE.
2. CONSTITUENT EXCEEDS THE LOWEST SEDIMENT STANDARDS AS DEFINED BY U.S. EPA ECOTOX THRESHOLDS FOR SEDIMENT AND THE MOST CONSERVATIVE SEDIMENT CRITERIA LISTED IN THE COMPENDIUM OF ENVIRONMENTAL BENCHMARKS (ENVIRONMENT CANADA, 1990)
3. SEDIMENT RESULTS = ug/kg
   SURFACE WATER RESULTS = ug/L
4. PARCEL, ADDRESS INFORMATION, AND STREET DRAWINGS PROVIDED BY WINNEBAGO COUNTY, ILLINOIS.
5. WATERMAIN LOCATIONS ADAPTED FROM NORTH PARK WATER DISTRICT BY McCLURE ENGINEERING ASSOCIATES, INC. (2002 VERSION) AND VILLAGE OF ROCKTON WATER DEPARTMENT (1998 VERSION).

SOURCE:

- USGS EARTH SOURCES OBSERVATION SYSTEMS DATA CENTER DATED: 1999/04/24.

N

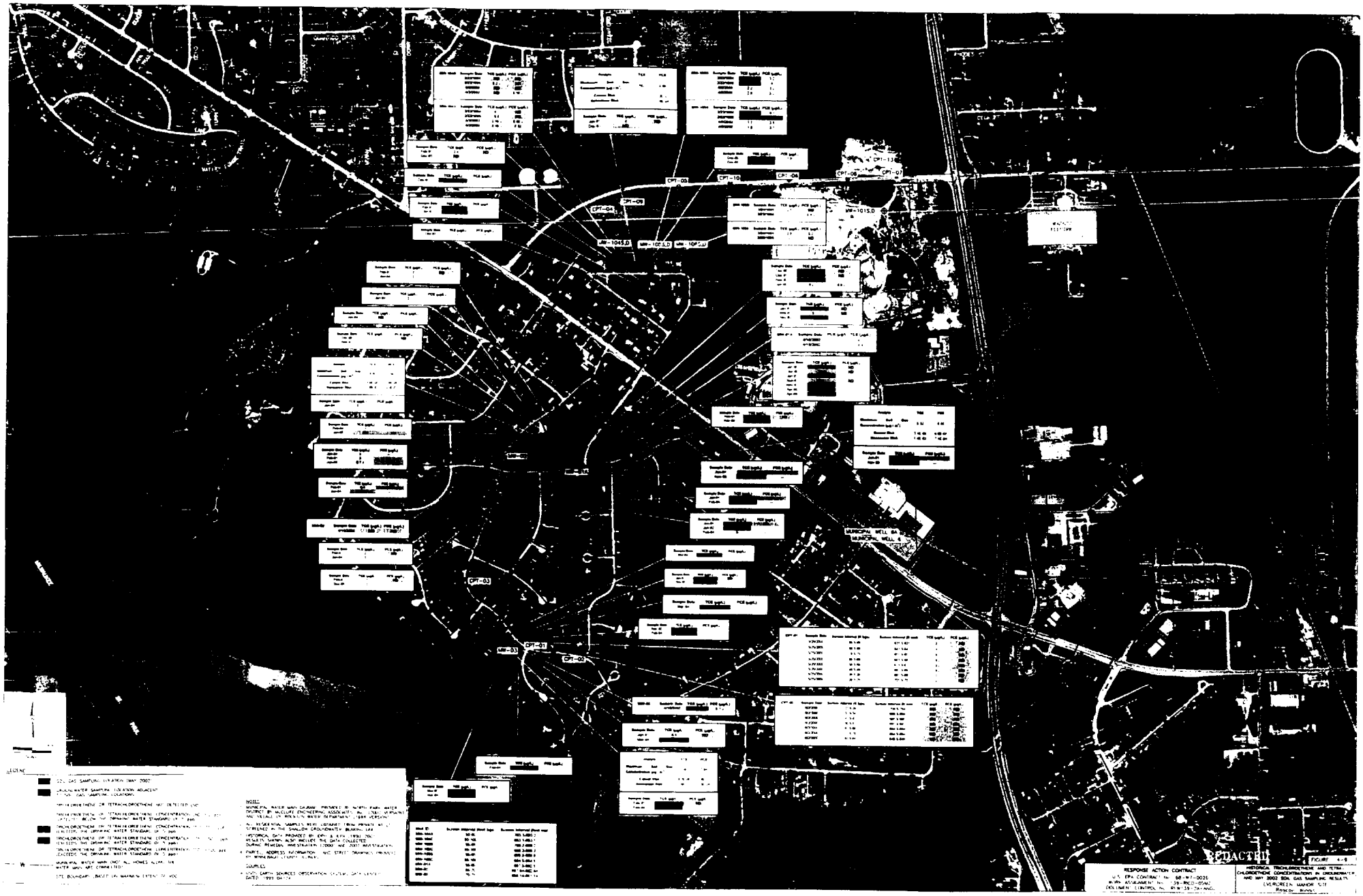
0 1200'
SCALE

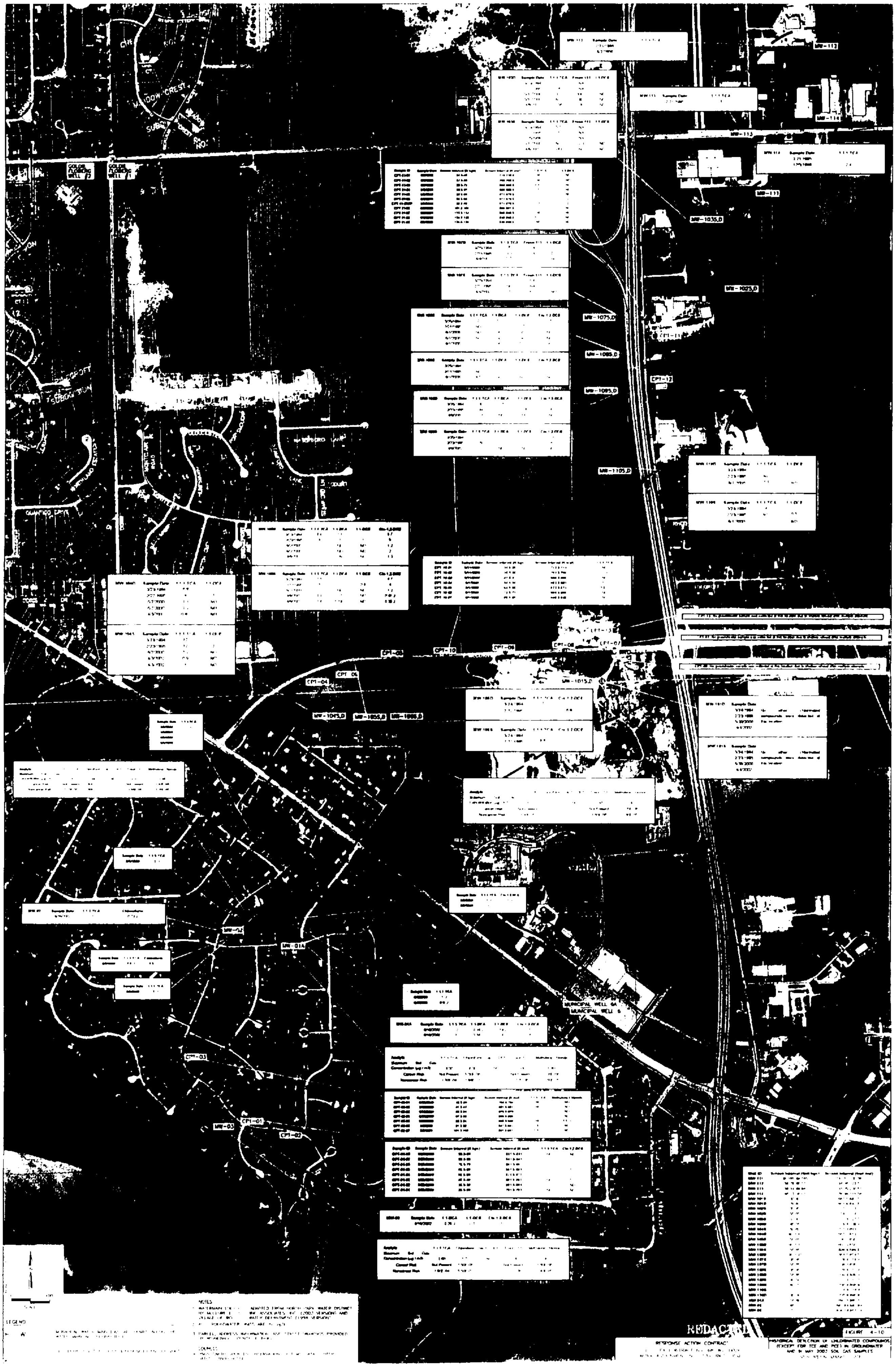
FIGURE 4-8

REDACTED

RESPONSE ACTION CONTRACT
U.S. EPA CONTRACT No. 68-W7-0026
WORK ASSIGNMENT No. 139-RICO-05MZ
DOCUMENT CONTROL No. RFW139-2A-ANOJ

2000 AND 2002 REMEDIAL INVESTIGATION SEDIMENT AND SURFACE WATER ANALYTICAL RESULTS
EVERGREEN MANOR SITE
Roscoe, Illinois

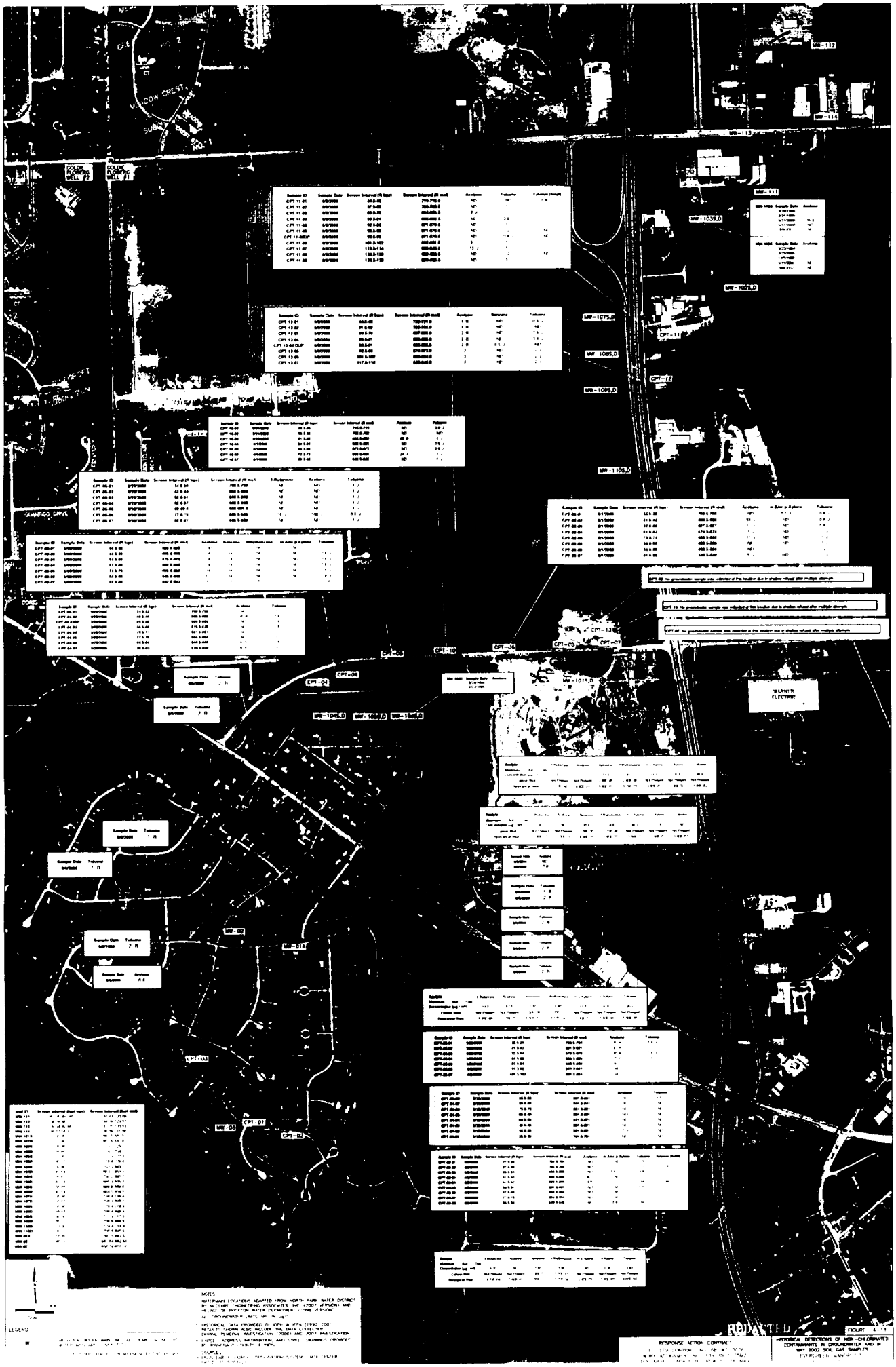

CPT-03
CPT-10
CPT-06
CPT-09
CPT-07
CPT-13
CPT-04
CPT-01
CPT-02
MW-1015D
MW-1045D
MW-1055D
MW-1065D
MUNICIPAL WELL 6A
MUNICIPAL WELL 6
REDACTED
LEGEND
GOOD GAS SAMPLING LOCATION (MAY 2002)
GROUNDWATER SAMPLING LOCATION ADJACENT TO GOOD GAS SAMPLING LOCATIONS
TRICHLOROETHENE OR TETRACHLOROETHENE NOT DETECTED (ND)
TRICHLOROETHENE OR TETRACHLOROETHENE CONCENTRATION DETECTED BELOW THE DRINKING WATER STANDARD OF 5 ppb
TRICHLOROETHENE OR TETRACHLOROETHENE CONCENTRATION DETECTED THE DRINKING WATER STANDARD OF 5 ppb
TRICHLOROETHENE OR TETRACHLOROETHENE CONCENTRATION DETECTED THE DRINKING WATER STANDARD OF 5 ppb
MUNICIPAL WATER MAIN (NOT ALL HOMES ALONG THE WATER MAIN ARE CONNECTED)
SITE BOUNDARY (BASED ON MAXIMUM EXTENT OF VOC
NOTES:
MUNICIPAL WATER MAIN DIAGRAM PROVIDED BY NORTH PARK WATER DISTRICT BY MCCLURE ENGINEERING ASSOCIATES, INC. (DELIVERED VIA EMAIL IN RESULTS WATER DEPARTMENT SUBMISSION)
ALL RESIDENTIAL SAMPLES WERE OBTAINED FROM PRIVATE WELLS SCREENED IN THE SHALLOW GROUNDWATER BEARING UNIT
HISTORICAL DATA PROVIDED BY EPA & EPA (1991, 2001)
RESULTS SHOWN ARE INCLUSIVE THE DATA COLLECTED DURING REMEDIAL INVESTIGATION (1999) AND POST INVESTIGATION
PARTS ADDRESS INFORMATION NOT STREET GRAPHICS PROVIDED BY RIVERSIDE COUNTY GIS MAP
SOURCES
GOOD EARTH SOURCES INFORMATION SYSTEM DATA (ESRI DATED 1993 04 12)
RESPONSE ACTION CONTRACT
U.S. EPA CONTRACT No. 68-W1-0026
WORK ASSIGNMENT No. 39-RCO-05MC
DOCUMENT CONTROL No. RW-39-2A-ANG
FIGURE 4-8
HISTORICAL TRICHLOROETHENE AND TETRACHLOROETHENE CONCENTRATIONS IN GROUNDWATER AND MAY 2002 SOIL GAS SAMPLING RESULTS
LOCKHEED MARTIN SITE
ROSEDALE, BAKERSFIELD



RESPONSE ACTION CONTRACT

FIGURE 4-10

HISTORICAL DETECTION OF CHLORINATED COMPOUNDS (EXCEPT FOR TCE AND PCE) IN GROUNDWATER AND IN MAY 2002 SOIL GAS SAMPLES



MW-112
MW-114
MW-113
MW-111
MW-1035,D
MW-1025,D
MW-1075,D
MW-1085,D
MW-1095,D
MW-1105,D
CPT-11
CPT-12
CPT-13
CPT-07
CPT-10
CPT-09
CPT-04
MW-1015,D
MW-1045,D
MW-1085,D
MW-1095,D
MW-02
MW-01A
MW-03
CPT-01
CPT-02
GOLDIE FLOWERS WELL #2
GOLDIE FLOWERS WELL #1
WARNER ELECTRIC
LEGEND
NOTES
RESPONSE ACTION CONTRACT
HISTORICAL DETECTIONS OF NON-CHLORINATED CONTAMINANTS IN GROUNDWATER AND IN MAY 2002 SOIL GAS SAMPLES

MW-112
MW-114
MW-113
MW-111
MW-1035,D
MW-1025,D
MW-1075,D
MW-1105,D
GOLDIE FLOWERS WELL 7
GOLDIE FLOWERS WELL 1
MUNICIPAL WELL 8
LEGEND
RESPONSE ACTION CONTRACT
1990-1993 GROUNDWATER RESULTS
MAXIMUM EXTENT OF TRICHLOROETHENE
AND TETRACHLOROETHENE PLUME

LEGEND

- SURFACE WATER
- MUNICIPAL WELL
- GROUNDWATER MONITORING WELL
- S,D IDENTIFIES WELL CLUSTERS WITH A SHALLOW AND DEEP WELL
- MUNICIPAL WATER MAIN (NOT ALL HOMES ALONG THE WATER MAIN ARE CONNECTED)
- SITE BOUNDARY (BASED ON MAXIMUM EXTENT OF VOC)

NOTES:

1. WATERMAIN LOCATIONS ADAPTED FROM NORTH PARK WATER DISTRICT BY McCLURE ENGINEERING ASSOCIATES, INC. (2002 VERSION) AND VILLAGE OF ROCKTON WATER DEPARTMENT (1998 VERSION).
2. PARCEL, STREET DRAWINGS, AND ADDRESS INFORMATION PROVIDED BY WINNEBAGO COUNTY.

SOURCE:

- USGS EARTH SOURCES OBSERVATION SYSTEMS DATA CENTER DATED: 1999/04/24.

N

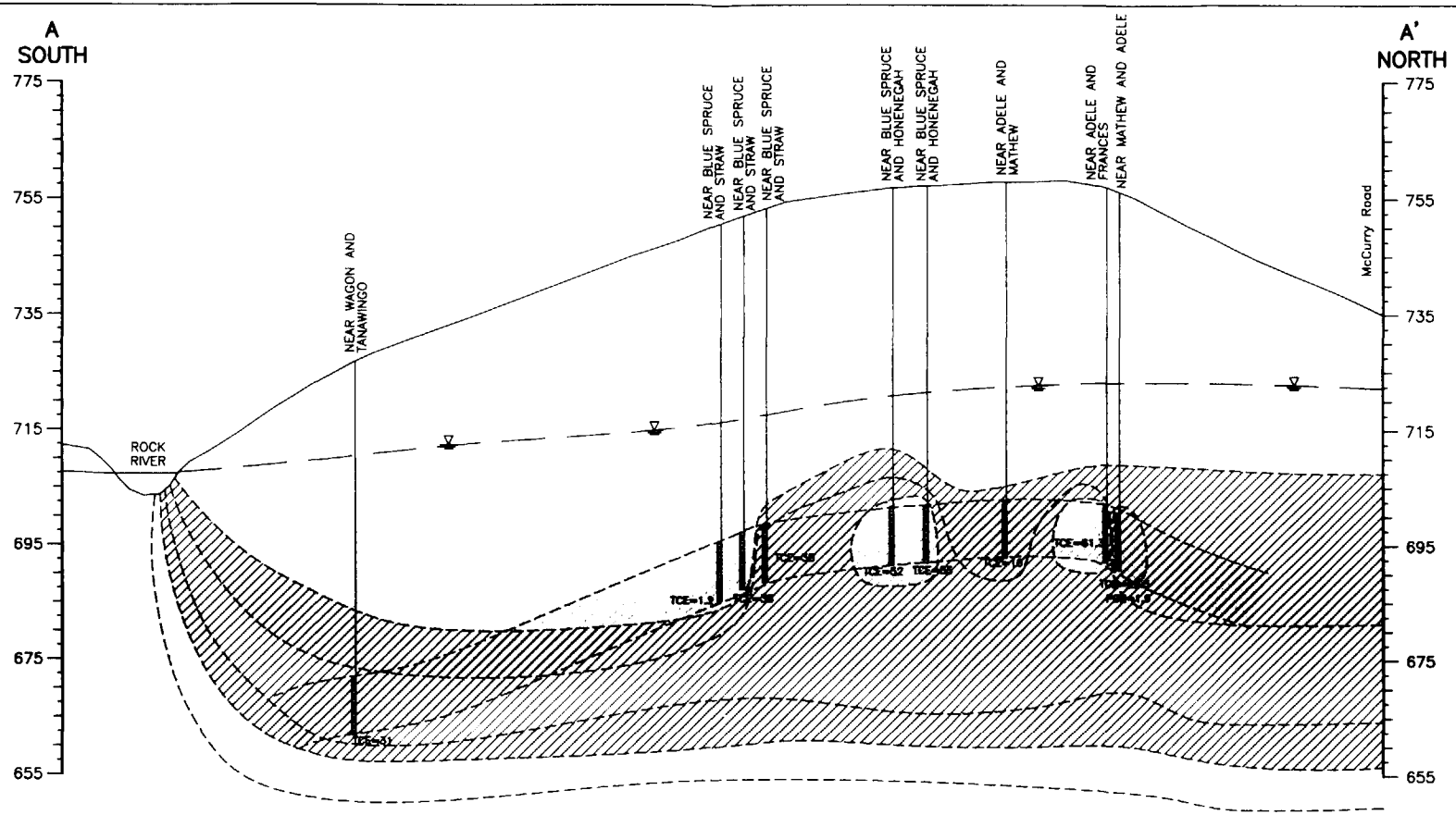
0 1200'
SCALE

FIGURE 5-2

REDACTED

RESPONSE ACTION CONTRACT
U.S. EPA CONTRACT No. 68-W7-0026
WORK ASSIGNMENT No. 139-RICO-05MZ
DOCUMENT CONTROL No. REW139-2A-ANO1

CROSS SECTION LOCATION MAP
EVERGREEN MANOR SITE



LEGEND

4445 ADELE — WELL OR SAMPLE POINT DESIGNATION

SCREENED INTERVAL

TYPICAL RESIDENTIAL WELL SCREEN INTERVAL

GROUNDWATER ELEVATION ESTIMATION BASED ON MONITORING WELL DATA FROM APRIL 2002

TRICHLOROETHENE CONCENTRATION (ND–5.0 ppb) (DETECTED BELOW THE DRINKING WATER STANDARD OF 5 ppb)

TRICHLOROETHENE CONCENTRATION (5.1–25.0 ppb) (EXCEEDS THE DRINKING WATER STANDARD OF 5 ppb)

TRICHLOROETHENE CONCENTRATION (25.1–50.0 ppb) (EXCEEDS THE DRINKING WATER STANDARD OF 5 ppb)

TRICHLOROETHENE CONCENTRATION (25.1–50.0 ppb) (EXCEEDS THE DRINKING WATER STANDARD OF 5 ppb)

TETRACHLOROETHENE CONCENTRATION (ND–5.0 ppb) (DETECTED BELOW THE DRINKING WATER STANDARD OF 5 ppb)

NOTES:

1. MAXIMUM CONCENTRATION DETECTED AT EACH SAMPLING LOCATION WAS USED IF MULTIPLE SAMPLES WERE COLLECTED.
2. RESIDENTIAL WELL SCREENING INTERVALS WERE ASSUMED TO BE SET AT AN AVERAGE DEPTH OF 55–65 FT BGS.
3. GROUNDWATER DATA SHOWN IS REPORTED IN ug/L (ppb).
4. INCLUDE DATA PROVIDED BY IDPH AND IEPA.

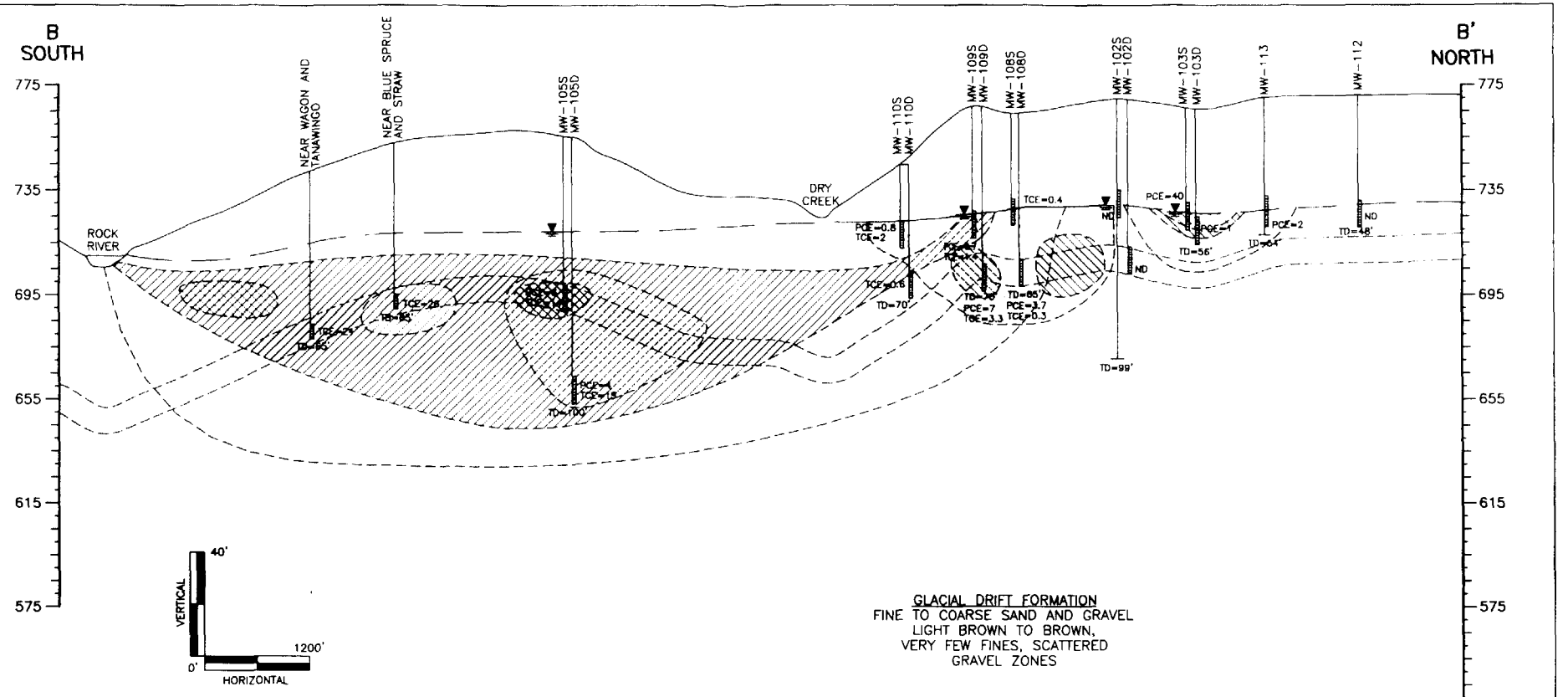
REDACTED

FIGURE 5–3

RESPONSE ACTION CONTRACT
U.S. EPA CONTRACT No. 68–W7–0026
WORK ASSIGNMENT No. 139–RICO–05MZ
DOCUMENT CONTROL No. RFW139–2A–ANOJ

1990–1993 EXTENT OF TRICHLOROETHENE AND TETRACHLOROETHENE IN GROUNDWATER (FROM McCURRY ROAD TO ROCK RIVER)
EVERGREEN MANOR SITE
Roscoe, Illinois

WARNER ELECTRIC
MUNICIPAL WELL 6A
MUNICIPAL WELL 6
SCALE
LEGEND
TRICHLOROETHENE CONCENTRATION (ND-5.0 ppb)
(DETECTED BELOW THE DRINKING WATER STANDARD OF 5 ppb)
TRICHLOROETHENE CONCENTRATION (5.1-25.0 ppb)
(EXCEEDS THE DRINKING WATER STANDARD OF 5 ppb)
TRICHLOROETHENE CONCENTRATION (25.1-50.0 ppb)
(EXCEEDS THE DRINKING WATER STANDARD OF 5 ppb)
TETRACHLOROETHENE CONCENTRATION (ND-5.0 ppb)
(DETECTED BELOW THE DRINKING WATER STANDARD OF 5 ppb)
TETRACHLOROETHENE CONCENTRATION (5.1-25.0 ppb)
(EXCEEDS THE DRINKING WATER STANDARD OF 5 ppb)
TETRACHLOROETHENE CONCENTRATION (25.1-50.0 ppb)
(EXCEEDS THE DRINKING WATER STANDARD OF 5 ppb)
W
NOTES:
1. WATERMAIN LOCATIONS ADAPTED FROM NORTH PARK WATER DISTRICT BY McCLURE ENGINEERING ASSOCIATES, INC. (2002 VERSION) AND VILLAGE OF ROCKTON WATER DEPARTMENT (1998 VERSION).
2. HISTORICAL RESIDENTIAL WELL DATA INCLUDE DATA PROVIDED BY EPA, IDPH, AND 2000 AND 2007 INVESTIGATION.
3. PARCEL ADDRESS INFORMATION AND STREET DRAWINGS PROVIDED BY WINNEBAGO COUNTY, ILLINOIS.
SOURCES:
4. USGS EARTH SOURCES INFORMATION SYSTEMS DATA CENTER
REDACTED
FIGURE 5-4
RESPONSE ACTION CONTRACT
U.S. EPA CONTRACT No. 68-W7-0025
1994-1998 GROUNDWATER RESULTS
MAXIMUM TETRACHLOROETHENE AND
TRICHLOROETHENE GROUNDWATER PLUME



GLACIAL DRIFT FORMATION
FINE TO COARSE SAND AND GRAVEL
LIGHT BROWN TO BROWN,
VERY FEW FINES, SCATTERED
GRAVEL ZONES

DEEP BEDROCK FORMATIONS
APPROXIMATE ELEVATIONS INTERPOLATED
FROM NPPWD MUNICIPAL
WELL LOGS #6 AND #6A AT
INTERSECTION OF HONONEGAH AND
CEDARBROOK DR. APPROXIMATELY
1300 FT EAST OF CROSS SECTION LINE

ST. PETER SANDSTONE
WHITE TO RED UNIFORM SANDSTONE
WITH MINOR SHALE STREAKS IN UPPER
PORTION. ESTIMATED THICKNESS 50-FEET

TREMPEALEAU (POTOSI) DOLOMITE
INTERBEDDED LIMESTONE, DOLOMITE
AND SANDSTONE WITH SCATTERED SHALE
LAYERS. ESTIMATED THICKNESS 75-FEET

NOTES:

1. MAXIMUM CONCENTRATION DETECTED AT EACH SAMPLING LOCATION WAS USED IF MULTIPLE SAMPLES WERE COLLECTED.
2. RESIDENTIAL WELL SCREENING INTERVALS WERE ASSUMED TO BE SET AT AN AVERAGE DEPTH OF 55-65 FT BGS.
3. GROUNDWATER DATA SHOWN ARE REPORTED IN ug/L (ppb).
4. INCLUDE IDPH, IEPA, 2000 & 2002 INVESTIGATION DATA.

LEGEND

MW-112 WELL OR SAMPLE POINT DESIGNATION

SCREENED INTERVAL

TD=100' TOTAL DEPTH (FT BGS)

TYPICAL RESIDENTIAL WELL SCREEN INTERVAL

WATER LEVEL APRIL 2002

TRICHLOROETHENE CONCENTRATION (ND-5.0 ppb) (DETECTED BELOW THE DRINKING WATER STANDARD OF 5 ppb)

TRICHLOROETHENE CONCENTRATION (5.1-25.0 ppb) (EXCEEDS THE DRINKING WATER STANDARD OF 5 ppb)

TRICHLOROETHENE CONCENTRATION (25.1-50.0 ppb) (EXCEEDS THE DRINKING WATER STANDARD OF 5 ppb)

TETRACHLOROETHENE CONCENTRATION (ND-5.0 ppb) (DETECTED BELOW THE DRINKING WATER STANDARD OF 5 ppb)

TETRACHLOROETHENE CONCENTRATION (5.1-25.0 ppb) (EXCEEDS THE DRINKING WATER STANDARD OF 5 ppb)

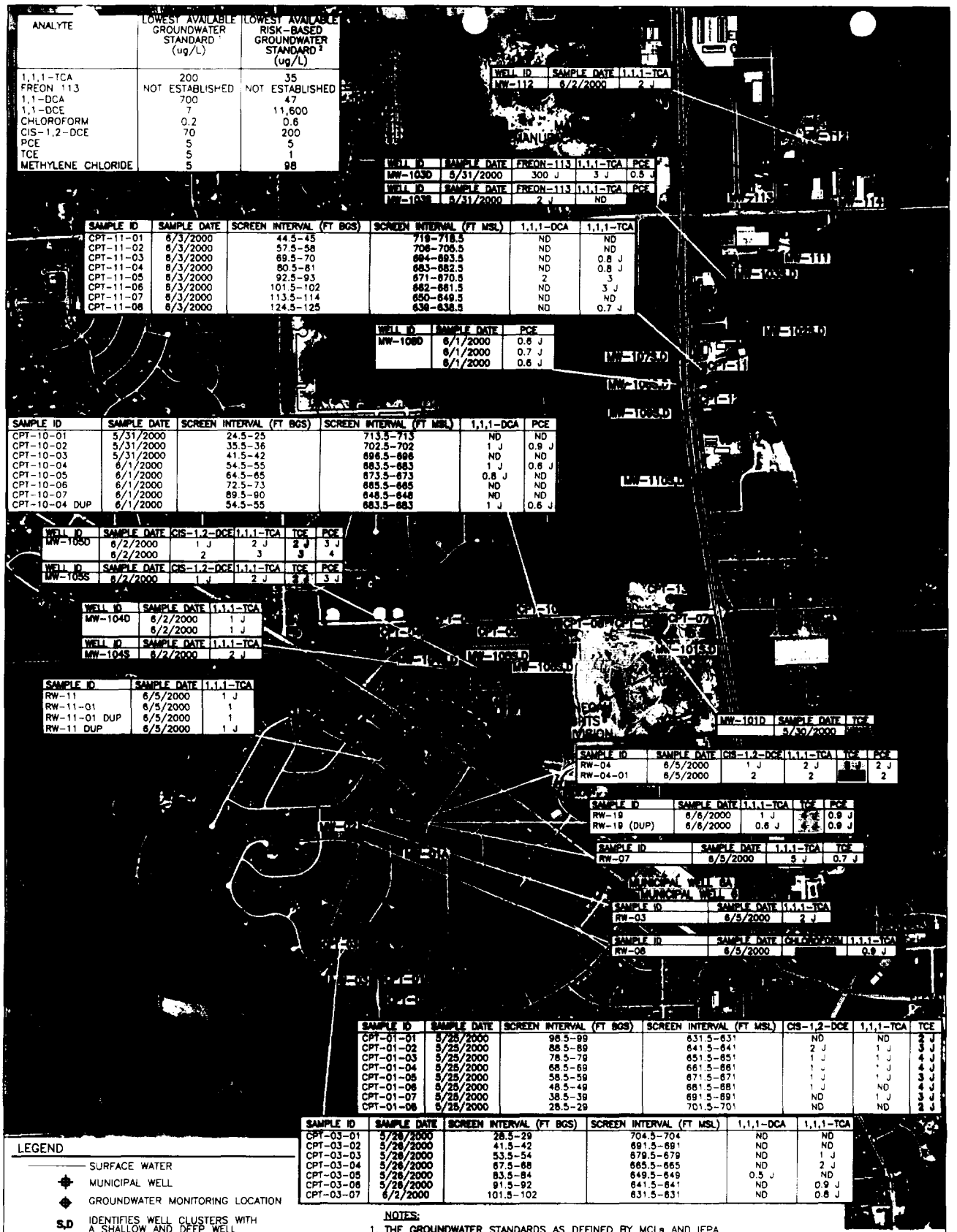
TETRACHLOROETHENE CONCENTRATION (25.1-50.0 ppb) (EXCEEDS THE DRINKING WATER STANDARD OF 5 ppb)

REDACTED

FIGURE 5-5

RESPONSE ACTION CONTRACT
U.S. EPA CONTRACT No. 68-W7-0026
WORK ASSIGNMENT No. 139-RICO-05MZ
DOCUMENT CONTROL No. RFW139-2A-ANOJ

1994-1999 EXTENT OF TRICHLOROETHENE AND TETRACHLOROETHENE IN GROUNDWATER (MW-112 TO ROCK RIVER)
EVERGREEN MANOR SITE
Roscoe, Illinois



ANALYTE	LOWEST AVAILABLE GROUNDWATER STANDARD [1] (ug/L)	LOWEST AVAILABLE RISK-BASED GROUNDWATER STANDARD [2] (ug/L)
1,1,1-TCA	200	35
FREON 113	NOT ESTABLISHED	NOT ESTABLISHED
1,1-DCA	700	47
1,1-DCE	7	11,600
CHLOROFORM	0.2	0.6
CIS-1,2-DCE	70	200
PCE	5	5
TCE	5	1
METHYLENE CHLORIDE	5	98

WELL ID	SAMPLE DATE	1,1,1-TCA
MW-112	6/2/2000	2 J

WELL ID	SAMPLE DATE	FREON-113	1,1,1-TCA	PCE
MW-103D	5/31/2000	300 J	3 J	0.5 J

WELL ID	SAMPLE DATE	FREON-113	1,1,1-TCA	PCE
MW-103S	5/31/2000	2 J	ND	

SAMPLE ID	SAMPLE DATE	SCREEN INTERVAL (FT BGS)	SCREEN INTERVAL (FT MSL)	1,1,1-DCA	1,1,1-TCA
CPT-11-01	6/3/2000	44.5-45	718-718.5	ND	ND
CPT-11-02	6/3/2000	57.5-58	706-706.5	ND	ND
CPT-11-03	6/3/2000	69.5-70	694-693.5	ND	0.8 J
CPT-11-04	6/3/2000	80.5-81	683-682.5	ND	0.8 J
CPT-11-05	6/3/2000	92.5-93	671-670.5	2	3
CPT-11-06	6/3/2000	101.5-102	662-661.5	ND	3 J
CPT-11-07	6/3/2000	113.5-114	650-649.5	ND	ND
CPT-11-08	6/3/2000	124.5-125	639-638.5	ND	0.7 J

WELL ID	SAMPLE DATE	PCE
MW-106D	6/1/2000	0.6 J
	6/1/2000	0.7 J
	6/1/2000	0.6 J

SAMPLE ID	SAMPLE DATE	SCREEN INTERVAL (FT BGS)	SCREEN INTERVAL (FT MSL)	1,1,1-DCA	PCE
CPT-10-01	5/31/2000	24.5-25	713.5-713	ND	ND
CPT-10-02	5/31/2000	35.5-36	702.5-702	1 J	0.9 J
CPT-10-03	5/31/2000	41.5-42	696.5-696	ND	ND
CPT-10-04	6/1/2000	54.5-55	683.5-683	1 J	0.6 J
CPT-10-05	6/1/2000	64.5-65	673.5-673	0.8 J	ND
CPT-10-06	6/1/2000	72.5-73	665.5-665	ND	ND
CPT-10-07	6/1/2000	89.5-90	648.5-648	ND	ND
CPT-10-04 DUP	6/1/2000	54.5-55	683.5-683	1 J	0.6 J

WELL ID	SAMPLE DATE	CIS-1,2-DCE	1,1,1-TCA	TCE	PCE
MW-105D	6/2/2000	1 J	2 J	2 J	3 J
	6/2/2000	2	3	3	4

WELL ID	SAMPLE DATE	CIS-1,2-DCE	1,1,1-TCA	TCE	PCE
MW-105S	6/2/2000	1 J	2 J	2 J	3 J

WELL ID	SAMPLE DATE	1,1,1-TCA
MW-104D	6/2/2000	1 J
	6/2/2000	1 J

WELL ID	SAMPLE DATE	1,1,1-TCA
MW-104S	6/2/2000	2 J

SAMPLE ID	SAMPLE DATE	1,1,1-TCA
RW-11	6/5/2000	1 J
RW-11-01	6/5/2000	1
RW-11-01 DUP	6/5/2000	1
RW-11 DUP	6/5/2000	1 J

MW-101D	SAMPLE DATE	TCE
	5/30/2000	

SAMPLE ID	SAMPLE DATE	CIS-1,2-DCE	1,1,1-TCA	TCE	PCE
RW-04	6/5/2000	1 J	2 J	[illegible]	2 J
RW-04-01	6/5/2000	2	2	[illegible]	2

SAMPLE ID	SAMPLE DATE	1,1,1-TCA	TCE	PCE
RW-19	6/6/2000	1 J	[illegible]	0.9 J
RW-19 (DUP)	6/6/2000	0.6 J	[illegible]	0.9 J

SAMPLE ID	SAMPLE DATE	1,1,1-TCA	TCE
RW-07	6/5/2000	5 J	0.7 J

SAMPLE ID	SAMPLE DATE	1,1,1-TCA
RW-03	6/5/2000	2 J

SAMPLE ID	SAMPLE DATE	CHLOROFORM	1,1,1-TCA
RW-08	6/5/2000		0.9 J

SAMPLE ID	SAMPLE DATE	SCREEN INTERVAL (FT BGS)	SCREEN INTERVAL (FT MSL)	CIS-1,2-DCE	1,1,1-TCA	TCE
CPT-01-01	5/25/2000	98.5-99	631.5-631	ND	ND	2 J
CPT-01-02	5/25/2000	88.5-89	641.5-641	2 J	1 J	3 J
CPT-01-03	5/25/2000	78.5-79	651.5-651	1 J	1 J	4 J
CPT-01-04	5/25/2000	68.5-69	661.5-661	1 J	1 J	4 J
CPT-01-05	5/25/2000	58.5-59	671.5-671	1 J	1 J	3 J
CPT-01-06	5/25/2000	48.5-49	681.5-681	1 J	ND	4 J
CPT-01-07	5/25/2000	38.5-39	691.5-691	ND	1 J	3 J
CPT-01-08	5/25/2000	28.5-29	701.5-701	ND	ND	2 J

SAMPLE ID	SAMPLE DATE	SCREEN INTERVAL (FT BGS)	SCREEN INTERVAL (FT MSL)	1,1,1-DCA	1,1,1-TCA
CPT-03-01	5/26/2000	28.5-29	704.5-704	ND	ND
CPT-03-02	5/26/2000	41.5-42	691.5-691	ND	ND
CPT-03-03	5/26/2000	53.5-54	679.5-679	ND	1 J
CPT-03-04	5/26/2000	67.5-68	665.5-665	ND	2 J
CPT-03-05	5/26/2000	83.5-84	649.5-649	0.5 J	ND
CPT-03-06	5/26/2000	91.5-92	641.5-641	ND	0.9 J
CPT-03-07	6/2/2000	101.5-102	631.5-631	ND	0.8 J

LEGEND

- SURFACE WATER
- MUNICIPAL WELL
- GROUNDWATER MONITORING LOCATION
- S,D — IDENTIFIES WELL CLUSTERS WITH A SHALLOW AND DEEP WELL
- MUNICIPAL WATER MAIN (NOT ALL HOMES ALONG THE WATER MAIN ARE CONNECTED)
- SITE BOUNDARY (BASED ON MAXIMUM EXTENT OF VOC)
- CONSTITUENT EXCEEDS LOWEST AVAILABLE ECOTOX FRESHWATER STANDARDS BUT IS BELOW THE LOWEST GROUNDWATER STANDARDS
- CONSTITUENT EXCEEDS BOTH GROUNDWATER STANDARDS AND ECOTOX FRESHWATER STANDARDS

NOTES:

1. THE GROUNDWATER STANDARDS AS DEFINED BY MCLs AND IEPA TIER I GROUNDWATER REMEDIATION OBJECTIVES.
2. THE LOWEST ECOLOGICAL RISK-BASED FRESHWATER STANDARD, AS DEFINED BY THE LOWEST AVAILABLE U.S.EPA ECOTOX THRESHOLDS AND THE MOST CONSERVATIVE WATER QUALITY CRITERIA FOR THE PROTECTION OF ACQUATIC LIFE LISTED IN THE COMPENDIUM OF ENVIRONMENTAL BENCHMARKS (ENVIRONMENT CANADA 1999).
3. PARCEL, ADDRESS INFORMATION, AND STREET DRAWINGS PROVIDED BY WINNEBAGO COUNTY, ILLINOIS.
4. WATERMAIN LOCATIONS ADAPTED FROM NORTH PARK WATER DISTRICT BY McCLURE ENGINEERING ASSOCIATES, INC. (2002 VERSION) AND VILLAGE OF ROCKTON WATER DEPARTMENT (1998 VERSION).
5. ALL UNITS ARE IN ug/L.

SOURCE:

- USGS EARTH SOURCES OBSERVATION SYSTEMS DATA CENTER DATED: 1999/04/24.

-N-

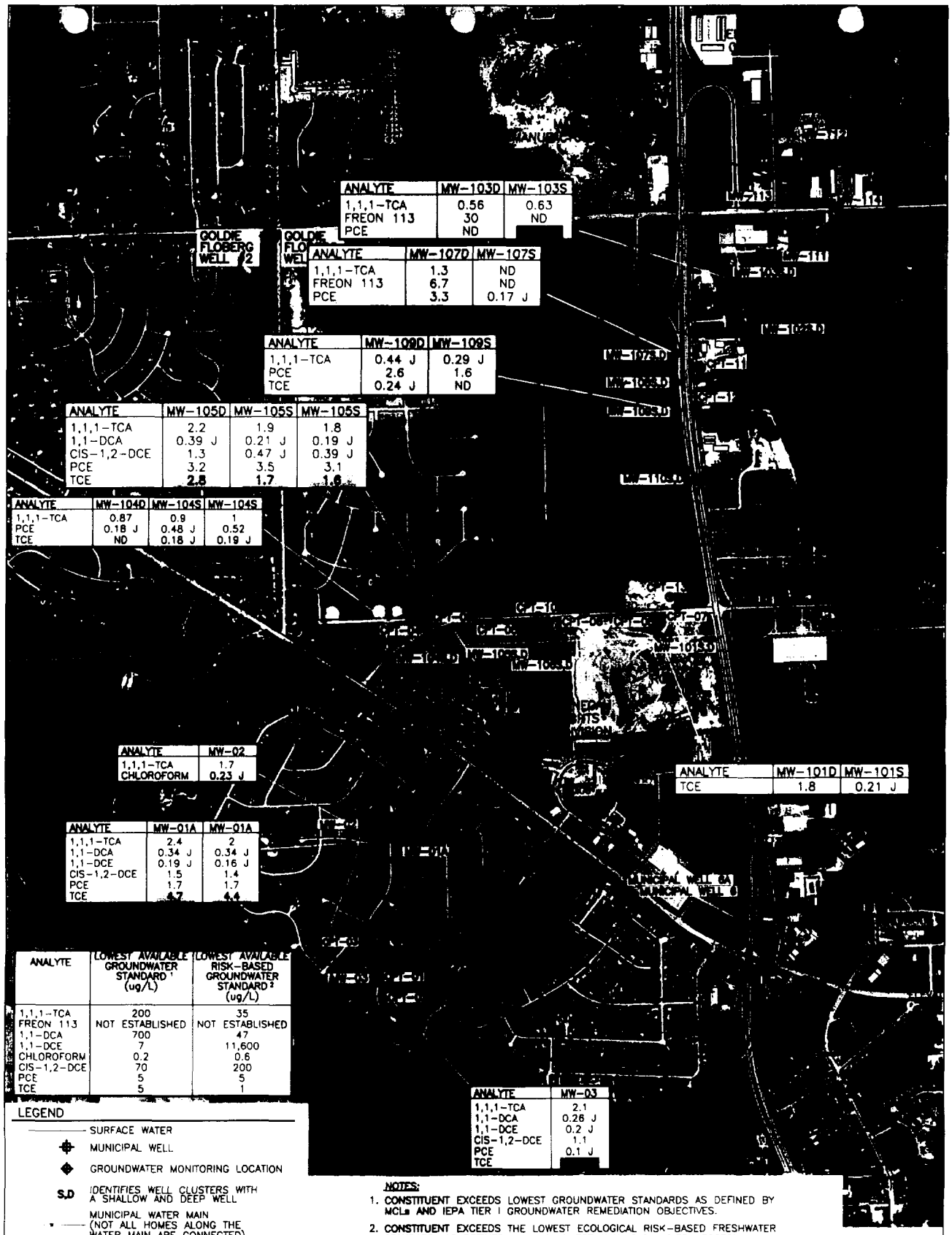
0 1200'
SCALE

FIGURE 5-6

REDACTED

RESPONSE ACTION CONTRACT
U.S. EPA CONTRACT No. 68-W7-0026
WORK ASSIGNMENT No. 139-RICO-05MZ
DOCUMENT CONTROL No. RFW139-2A-ANOJ

2000 REMEDIAL INVESTIGATION GROUNDWATER ANALYTICAL RESULTS
EVERGREEN MANOR SITE
Roscoe, Illinois



ANALYTE	MW-103D	MW-103S
1,1,1-TCA	0.56	0.63
FREON 113	30	ND
PCE	ND	

ANALYTE	MW-107D	MW-107S
1,1,1-TCA	1.3	ND
FREON 113	6.7	ND
PCE	3.3	0.17 J

ANALYTE	MW-109D	MW-109S
1,1,1-TCA	0.44 J	0.29 J
PCE	2.6	1.6
TCE	0.24 J	ND

ANALYTE	MW-105D	MW-105S	MW-105S
1,1,1-TCA	2.2	1.9	1.8
1,1-DCA	0.39 J	0.21 J	0.19 J
CIS-1,2-DCE	1.3	0.47 J	0.39 J
PCE	3.2	3.5	3.1
TCE	2.8	1.7	1.6

ANALYTE	MW-104D	MW-104S	MW-104S
1,1,1-TCA	0.87	0.9	1
PCE	0.18 J	0.48 J	0.52
TCE	ND	0.18 J	0.19 J

ANALYTE	MW-02
1,1,1-TCA	1.7
CHLOROFORM	0.23 J

ANALYTE	MW-101D	MW-101S
TCE	1.8	0.21 J

ANALYTE	MW-01A	MW-01A
1,1,1-TCA	2.4	2
1,1-DCA	0.34 J	0.34 J
1,1-DCE	0.19 J	0.16 J
CIS-1,2-DCE	1.5	1.4
PCE	1.7	1.7
TCE	4.7	4.4

ANALYTE	LOWEST AVAILABLE GROUNDWATER STANDARD[1] (ug/L)	LOWEST AVAILABLE RISK-BASED GROUNDWATER STANDARD[2] (ug/L)
1,1,1-TCA	200	35
FREON 113	NOT ESTABLISHED	NOT ESTABLISHED
1,1-DCA	700	47
1,1-DCE	7	11,600
CHLOROFORM	0.2	0.6
CIS-1,2-DCE	70	200
PCE	5	5
TCE	5	1

ANALYTE	MW-03
1,1,1-TCA	2.1
1,1-DCA	0.28 J
1,1-DCE	0.2 J
CIS-1,2-DCE	1.1
PCE	0.1 J
TCE	

LEGEND

- SURFACE WATER
- MUNICIPAL WELL
- GROUNDWATER MONITORING LOCATION
- S,D IDENTIFIES WELL CLUSTERS WITH A SHALLOW AND DEEP WELL
- MUNICIPAL WATER MAIN (NOT ALL HOMES ALONG THE WATER MAIN ARE CONNECTED)
- EXTENT OF DETECTIONS – DASHED WHERE INFERRED
- CONSTITUENT EXCEEDS BOTH GROUNDWATER STANDARDS AND ECOTOX STANDARDS
- CONSTITUENT EXCEEDS LOWEST AVAILABLE ECOTOX FRESHWATER STANDARDS BUT IS BELOW THE LOWEST GROUNDWATER STANDARDS
- CONSTITUENT EXCEEDS LOWEST GROUNDWATER STANDARDS BUT IS BELOW THE LOWEST ECOLOGICAL FRESHWATER STANDARD

NOTES:

1. CONSTITUENT EXCEEDS LOWEST GROUNDWATER STANDARDS AS DEFINED BY MCLs AND IEPA TIER I GROUNDWATER REMEDIATION OBJECTIVES.
2. CONSTITUENT EXCEEDS THE LOWEST ECOLOGICAL RISK-BASED FRESHWATER STANDARD, AS DEFINED BY THE LOWEST AVAILABLE U.S.EPA ECOTOX THRESHOLDS AND THE MOST CONSERVATIVE WATER QUALITY CRITERIA FOR THE PROTECTION OF ACQUATIC LIFE LISTED IN THE COMPENDIUM OF ENVIRONMENTAL BENCHMARKS (ENVIRONMENT CANADA 1999).
3. PARCEL, STREET DRAWINGS, AND ADDRESS INFORMATION PROVIDED BY WINNEBAGO COUNTY.
4. WATERMAIN LOCATIONS ADAPTED FROM NORTH PARK WATER DISTRICT BY McCLURE ENGINEERING ASSOCIATES, INC. (2002 VERSION) AND VILLAGE OF ROCKTON WATER DEPARTMENT (1998 VERSION).
5. ALL UNITS ARE IN ug/L.

SOURCE:

- USGS EARTH SOURCES OBSERVATION SYSTEMS DATA CENTER DATED: 1999/04/24.

N

0 1200'
SCALE

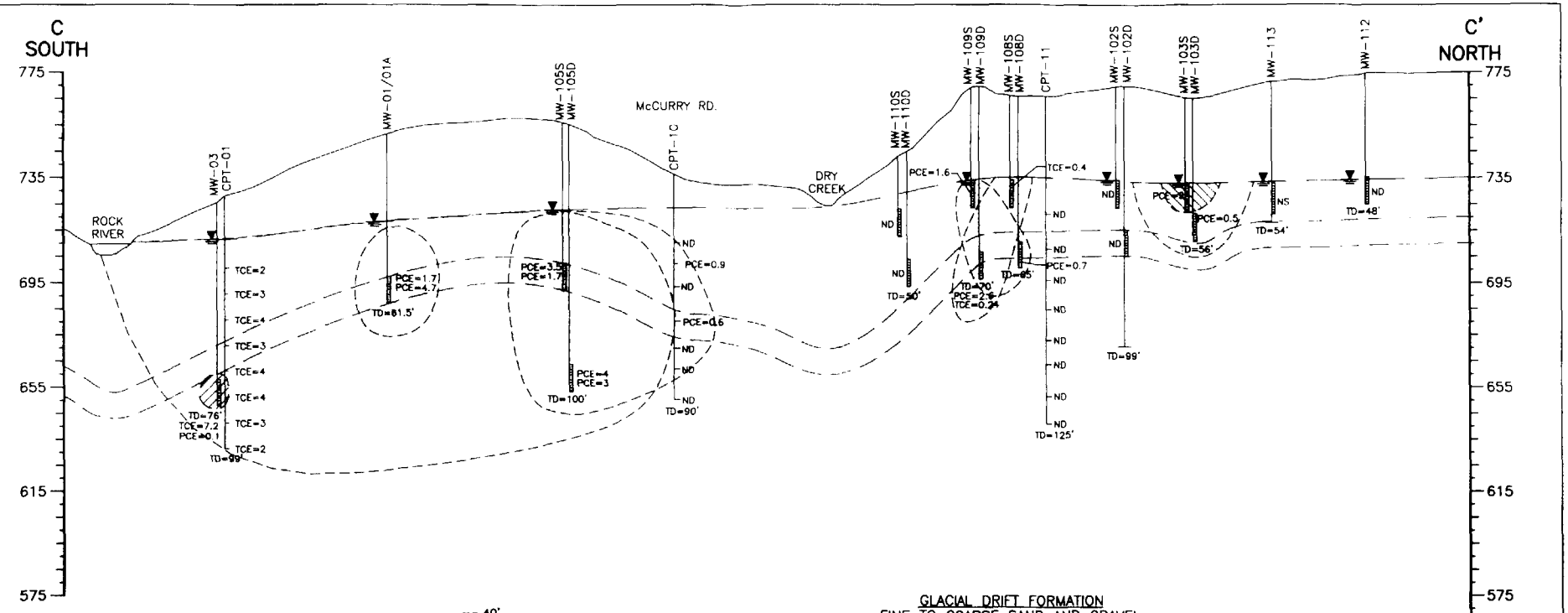
FIGURE 5-7

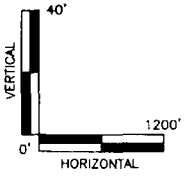
REDACTED

RESPONSE ACTION CONTRACT
U.S. EPA CONTRACT No. 68-W7-0026
WORK ASSIGNMENT No. 139-RICO-05MZ
DOCUMENT CONTROL No. RFW139-2A-ANOJ

APRIL 2002 GROUNDWATER ANALYTICAL RESULTS
EVERGREEN MANOR SITE
Roscoe, Illinois

MUNICIPAL WELL 8A
MUNICIPAL WELL 8
LEGEND
NOTES:
MUNICIPAL WATER MAIN DIGRAMS PROVIDED BY NORTH PARK WATER DISTRICT BY MCCLURE ENGINEERING ASSOCIATES INC. (2002 VERSION) AND VILLAGE OF ROCKTON WATER DEPARTMENT (1998 VERSION)
ALL RESIDENTIAL SAMPLES WERE OBTAINED FROM PRIVATE WELLS SERVICED IN THE SHALLOW GROUNDWATER BEARING UNIT
HISTORICAL DATA PROVIDED BY IDPH & IEPA (1990-2001)
RESULTS SHOWN ALSO INCLUDE THE DATA COLLECTED DURING REMEDIAL INVESTIGATION (2000) AND 2002 INVESTIGATION
PARCEL STREET DRAWINGS AND ADDRESS INFORMATION PROVIDED BY WINNEBAGO COUNTY
SOURCES:
USGS EARTH SOURCES OBSERVATION SYSTEMS DATA CENTER DATED 1999/04/14
REDACTED
RESPONSE ACTION CONTRACT
FIGURE 5-8
2000 TO 2002 GROUNDWATER RESULTS
MAXIMUM EXTENT OF TRICHLOROETHENE AND TETRACHLOROETHENE PLUME





GLACIAL DRIFT FORMATION
FINE TO COARSE SAND AND GRAVEL
LIGHT BROWN TO BROWN,
VERY FEW FINES, SCATTERED
GRAVEL ZONES

NOTES:

1. MAXIMUM CONCENTRATION DETECTED AT EACH SAMPLING LOCATION WAS USED IF MULTIPLE SAMPLES WERE COLLECTED.
2. RESIDENTIAL WELL SCREENING INTERVALS WERE ASSUMED TO BE SET AT AN AVERAGE DEPTH OF 55-65 FT BGS.
3. GROUNDWATER DATA SHOWN WAS REPORTED IN ug/L (ppb).
4. INCLUDE IDPH, IEPA, 2000 & 2002 INVESTIGATION DATA.

LEGEND

MW-112	WELL OR SAMPLE POINT DESIGNATION
	GRAB SAMPLE DEPTH (CPT)
	SCREENED INTERVAL
TD=90'	TOTAL DEPTH (FT BGS)
	WATER LEVEL APRIL 2002
	TYPICAL RESIDENTIAL WELL SUPPLY INTERVAL DEPTH
ND	-NOT DETECTED
NS	-NOT SAMPLED

DEEP BEDROCK FORMATIONS
APPROXIMATE ELEVATIONS INTERPOLATED
FROM NPWD MUNICIPAL
WELL LOGS 6 AND 6A AT
INTERSECTION OF HONONEGAH AND
CEDARBROOK DR. APPROXIMATELY
1300 FT EAST OF CROSS SECTION LINE

ST. PETER SANDSTONE
WHITE TO RED UNIFORM SANDSTONE
WITH MINOR SHALE STREAKS IN UPPER
PORTION. ESTIMATED THICKNESS 50-FEET

TREMPEALEAU (POTOSI) DOLOMITE
INTERBEDDED LIMESTONE, DOLOMITE
AND SANDSTONE WITH SCATTERED SHALE
LAYERS. ESTIMATED THICKNESS 75-FEET

TRICHLOROETHENE CONCENTRATION (ND-5.0 ppb)
(DETECTED BELOW THE DRINKING WATER STANDARD OF 5 ppb)

TRICHLOROETHENE CONCENTRATION (5.1-25.0 ppb)
(EXCEEDS THE DRINKING WATER STANDARD OF 5 ppb)

TETRACHLOROETHENE CONCENTRATION (ND-5.0 ppb)
(DETECTED BELOW THE DRINKING WATER STANDARD OF 5 ppb)

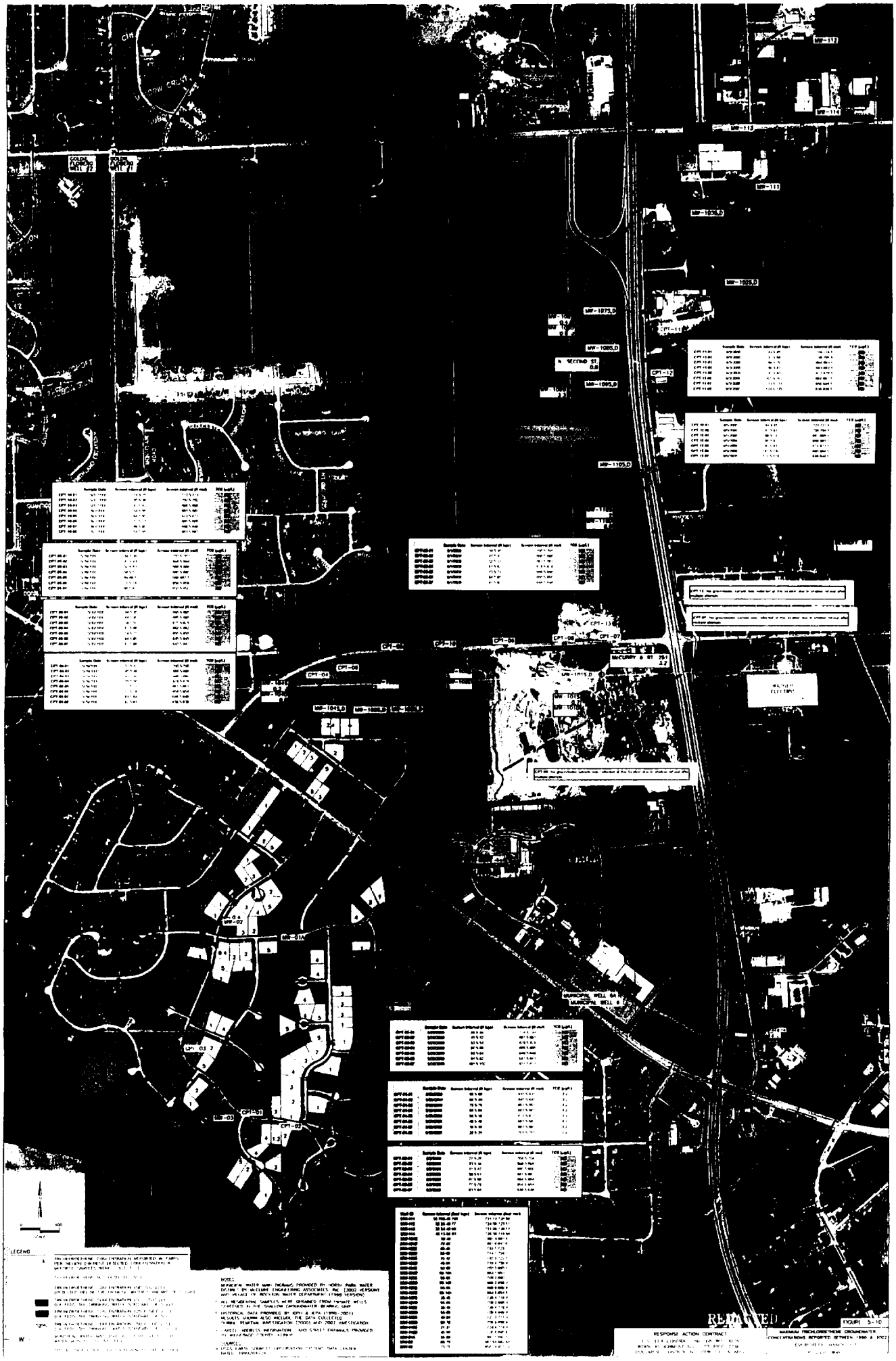
TETRACHLOROETHENE CONCENTRATION (5.1-25.0 ppb)
(EXCEEDS THE DRINKING WATER STANDARD OF 5 ppb)

REDACTED

FIGURE 5-9

RESPONSE ACTION CONTRACT
U.S. EPA CONTRACT No. 68-W7-0026
WORK ASSIGNMENT No. 139-RICO-05MZ
DOCUMENT CONTROL No. RFW139-2A-ANOJ

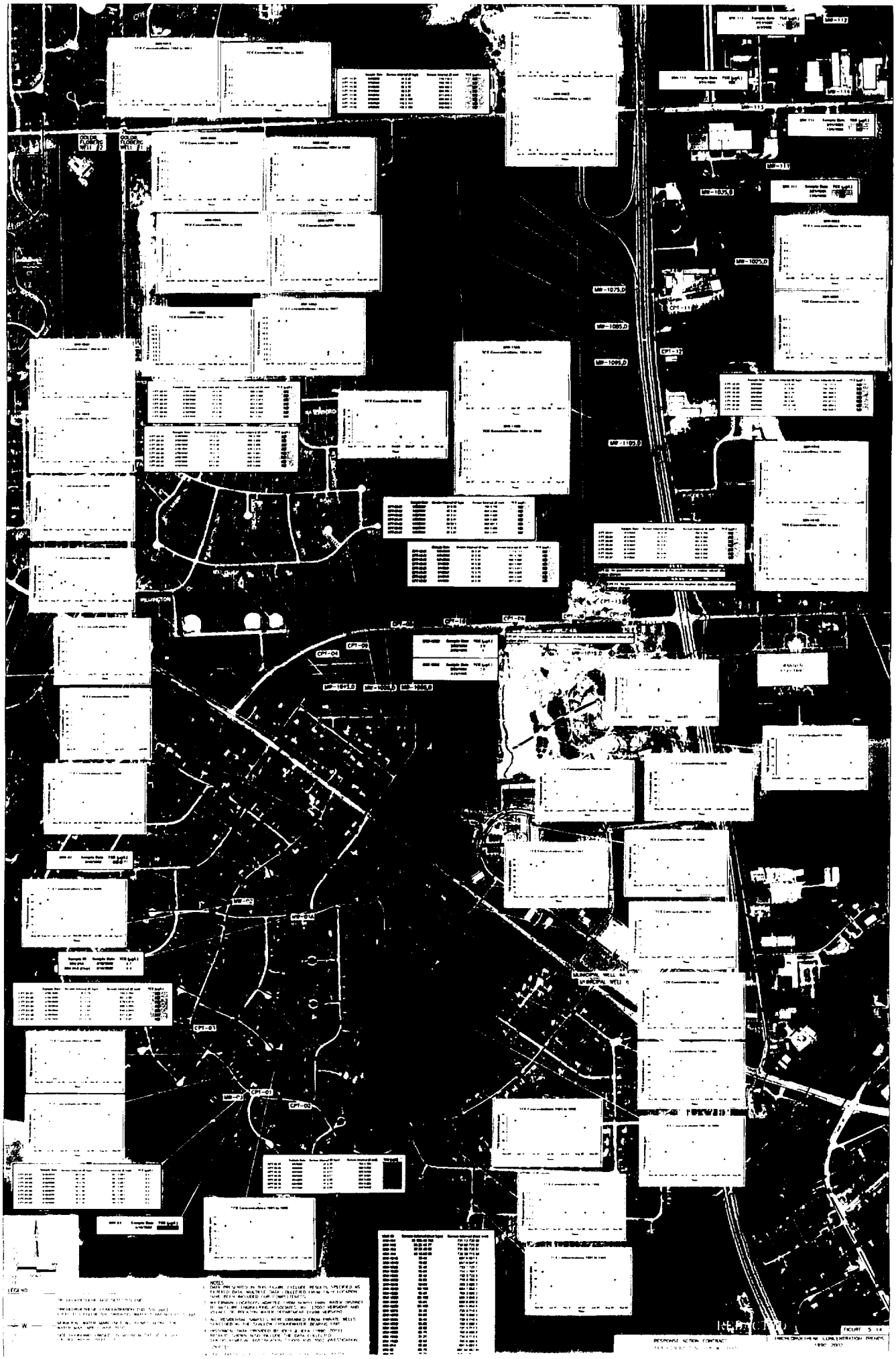
2000-2002 EXTENT OF TRICHLOROETHENE AND TETRACHLOROETHENE IN GROUNDWATER
(MW-112 TO ROCK RIVER)
EVERGREEN MANOR SITE
Roscoe, Illinois


LEGEND
NOTES:
REDACTED
FIGURE 5-10
RESPONSE ACTION CONTRACT
MAXIMUM TRICHLOROETHENE GROUNDWATER CONCENTRATIONS REPORTED BETWEEN 1996 & 2002

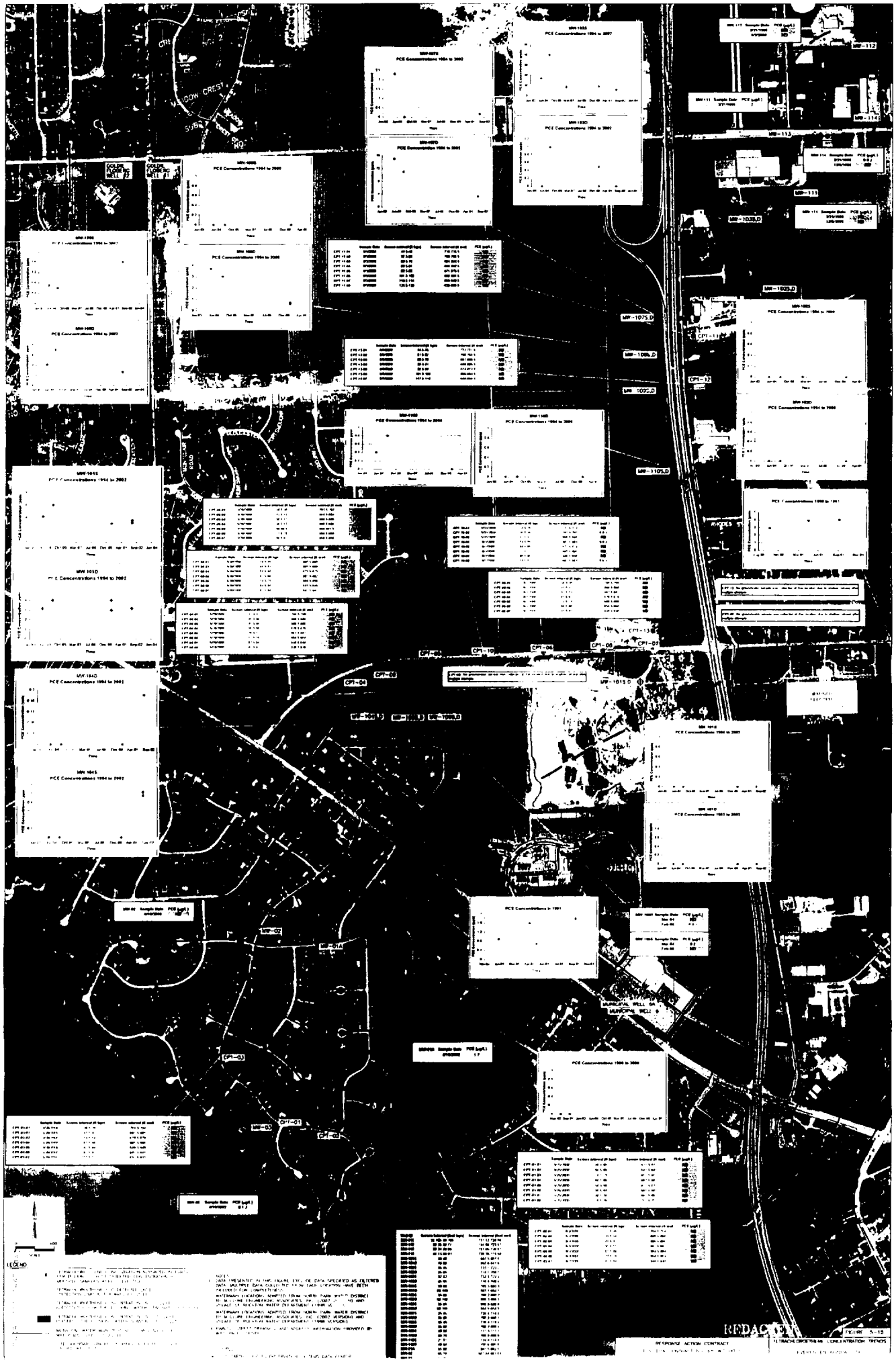
E. ROCKTON
MW-112
MW-114
MW-113
MW-111
MW-105S,D
MW-107S,D
MW-107D,D
MW-108S,D
MW-108D,D
MW-109S,D
MW-110S,D
MW-110D,D
MW-106S,D
W. SECOND ST
RT. 25
MW-115S,D
MW-115D,D
MW-101S,D
MW-101D,D
MW-102S,D
MW-102D,D
MW-103S,D
MW-103D,D
MW-104S,D
MW-104D,D
CPT-01
CPT-02
CPT-03
CPT-04
CPT-05
CPT-06
CPT-07
CPT-08
CPT-09
CPT-10
CPT-11
CPT-12
CPT-13
MW-01A
MW-02
MW-03
MW-04
MW-05
MW-06
MW-07
MW-08
MW-09
MW-10
MW-11
MW-12
MW-13
MW-14
MW-15
MW-16
MW-17
MW-18
MW-19
MW-20
MW-21
MW-22
MW-23
MW-24
MW-25
MW-26
MW-27
MW-28
MW-29
MW-30
MW-31
MW-32
MW-33
MW-34
MW-35
MW-36
MW-37
MW-38
MW-39
MW-40
MW-41

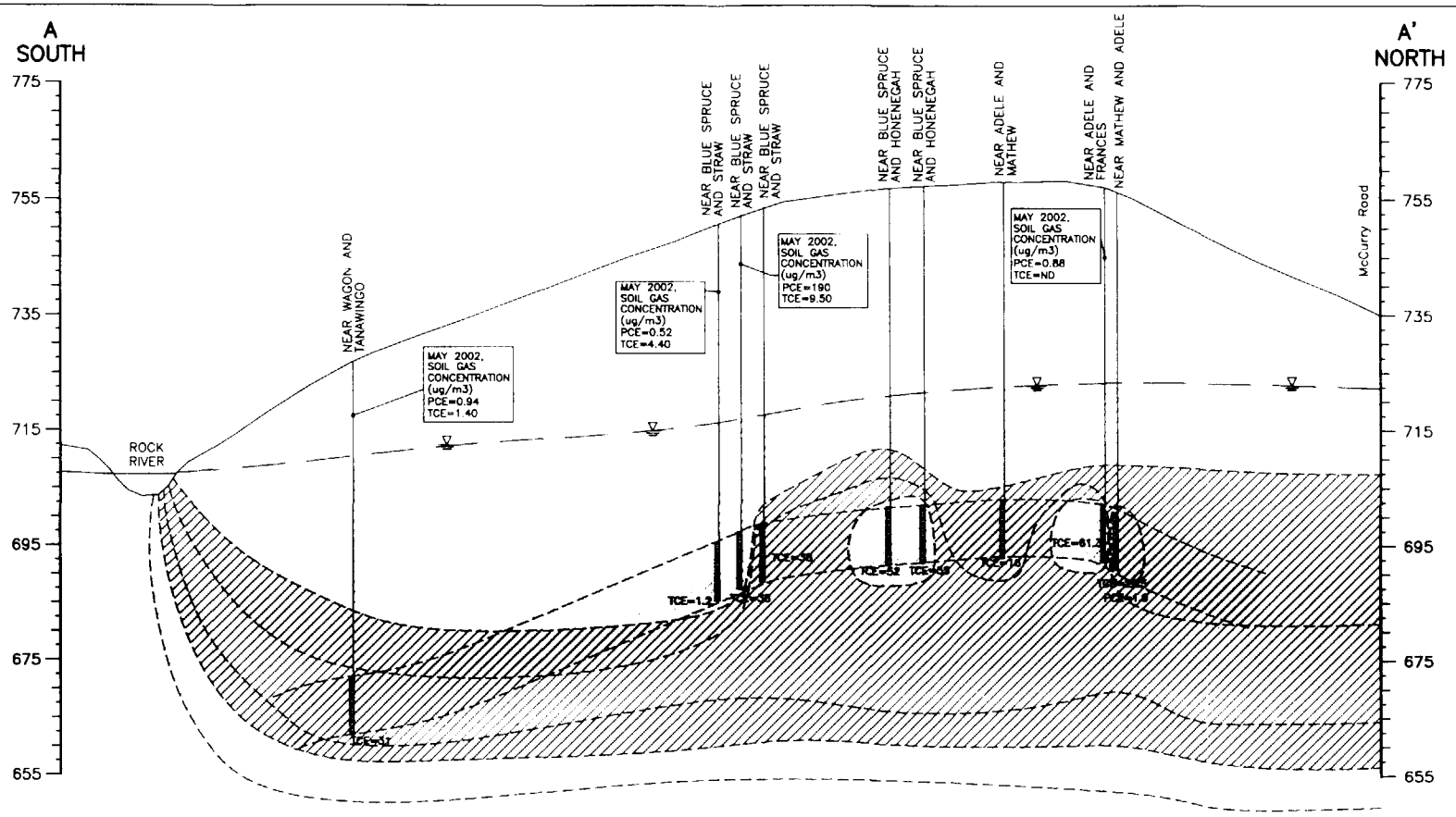
LEGEND
NOTES:
REDACTED
RESPONSE ACTION CONTRACT
1990 TO 2002 GROUNDWATER RESULTS
MAXIMUM EXTENT OF TRICHLOROETHENE PLUME

LEGEND
NOTES
REDACTED
FIGURE 5-13
1990 TO 2002 GROUNDWATER RESULTS
MAXIMUM EXTENT OF TETRACHLOROETHENE PLUME



MW-112
MW-113
MW-114
MW-116
MW-1035,D
MW-1075,D
MW-1085,D
MW-1095,D
MW-1105,D
CPT-11
CPT-12
CPT-13
CPT-07
CPT-08
CPT-09
CPT-04
MW-1045,D
MW-1055,D
MW-1065,D
MW-02
MW-01A
CPT-01
MW-03
CPT-02
MUNICIPAL WELL
LEGEND
NOTES
FIGURE 5-14
RESPONSE ACTION CONTRACT


MW-112
MW-114
MW-113
MW-111
MW-103S,D
MW-102S,D
MW-107S,D
MW-108S,D
MW-109S,D
MW-110S,D
CPT-11
CPT-12
CPT-13
CPT-07
CPT-08
CPT-04
CPT-10
CPT-09
MW-101S,D
MW-104S,D
MW-105S,D
MW-106S,D
MW-107S,D
MW-108S,D
MW-109S,D
MW-110S,D
MW-101S,D
MW-102
MW-01A
CPT-03
MW-03
CPT-01
CPT-02
MUNICIPAL WELL 6A
MUNICIPAL WELL 6
LEGEND
REDACTED
FIGURE 5-15
RESPONSE ACTION CONTRACT
TETRACHLOROETHENE CONCENTRATION TRENDS



LEGEND

4445 ADELE — WELL OR SAMPLE POINT DESIGNATION

SCREENED INTERVAL

TYPICAL RESIDENTIAL WELL SCREEN INTERVAL

GROUNDWATER ELEVATION ESTIMATION BASED ON MONITORING WELL DATA FROM APRIL 2002

TRICHLOROETHENE CONCENTRATION (ND–5.0 ppb) (DETECTED BELOW THE DRINKING WATER STANDARD OF 5 ppb)

TRICHLOROETHENE CONCENTRATION (5.1–25.0 ppb) (EXCEEDS THE DRINKING WATER STANDARD OF 5 ppb)

TRICHLOROETHENE CONCENTRATION (25.1–50.0 ppb) (EXCEEDS THE DRINKING WATER STANDARD OF 5 ppb)

TRICHLOROETHENE CONCENTRATION (25.1–50.0 ppb) (EXCEEDS THE DRINKING WATER STANDARD OF 5 ppb)

TETRACHLOROETHENE CONCENTRATION (ND–5.0 ppb) (DETECTED BELOW THE DRINKING WATER STANDARD OF 5 ppb)

NOTES:

1. MAXIMUM CONCENTRATION DETECTED AT EACH SAMPLING LOCATION WAS USED IF MULTIPLE SAMPLES WERE COLLECTED.
2. RESIDENTIAL WELL SCREENING INTERVALS WERE ASSUMED TO BE SET AT AN AVERAGE DEPTH OF 55–65 FT BGS.
3. GROUNDWATER DATA SHOWN IS REPORTED IN ug/L (ppb).
4. INCLUDE DATA PROVIDED BY IDPH AND IEPA.

REDACTED

FIGURE 5–16

RESPONSE ACTION CONTRACT
U.S. EPA CONTRACT No. 68–W7–0026
WORK ASSIGNMENT No. 139–RICO–05MZ
DOCUMENT CONTROL No. RFW139–2A–ANOJ

1990–1993 EXTENT OF GROUNDWATER TRICHLOROETHENE AND TETRACHLOROETHENE & SOIL GAS RESULTS (FROM McCURRY ROAD TO ROCK RIVER)
EVERGREEN MANOR SITE
Roscoe, Illinois

LEGEND

- SURFACE WATER
- MUNICIPAL WELL
- GROUNDWATER MONITORING WELL
- S,D IDENTIFIES WELL CLUSTERS WITH A SHALLOW AND DEEP WELL
- STAFF GAUGE
- CPT SAMPLING LOCATION
- MUNICIPAL WATER MAIN (NOT ALL HOMES ALONG THE WATER MAIN ARE CONNECTED)
- SITE BOUNDARY (BASED ON MAXIMUM EXTENT OF VOC)
- PROPOSED PIEZOMETER LOCATION

NOTES:

1. BASE MAP ADAPTED FROM CAD FILES PROVIDED BY WINNEBAGO COUNTY AND ORTHO (USGS, 1999).
2. WATERMAIN LOCATIONS ADAPTED FROM NORTH PARK WATER DISTRICT BY McCLURE ENGINEERING ASSOCIATES, INC. (2002 VERSION) AND VILLAGE OF ROCKTON WATER DEPARTMENT (1998 VERSION).

SOURCES:

- USGS EARTH SOURCES OBSERVATION SYSTEMS DATA CENTER DATED: 1999/04/24.

N

0 1200'
SCALE

FIGURE 7-1

REDACTED

RESPONSE ACTION CONTRACT
U.S. EPA CONTRACT No. 68-W7-0026
WORK ASSIGNMENT No. 139-RICO-05MZ
DOCUMENT CONTROL No. RFW139-2A-AN01

PROPOSED PIEZOMETER LOCATIONS
EVERGREEN MANOR SITE

(OFFICE) (USE ONLY)	FIPS	TWN	RNG	SC	PL	OWNER	DRILLER	DATE	PERMIT	DPTH	REC	US	TY	AQ
228043	201	46N	02E	29		[redacted]	MARTIN	07/10/1986	124641	61	RG	DO	--	UN
169191	201	46N	02E	29		[redacted]	OLSON	07/12/1985	118984	60	RG	DO	--	--
228048	201	46N	02E	29		[redacted]	MARTIN	08/07/1986	125169	60	RG	DO	--	UN
228050	201	46N	02E	29		[redacted]	MARTIN	08/08/1986	125647	60	RG	DO	--	UN
169197	201	46N	02E	29		[redacted]	OLSON	08/14/1984	114097	63	RG	DO	--	--
228051	201	46N	02E	29		[redacted]	MARTIN	08/16/1987	133847	64	RG	DO	--	UN
228049	201	46N	02E	29		[redacted]	MARTIN	08/29/1986	125646	62	RG	DO	--	UN
228052	201	46N	02E	29		[redacted]	MARTIN	09/02/1986	125648	63	RG	DO	--	UN
167720	201	46N	02E	29		[redacted]	OLSON	10/05/1979	090078	63	RG	DO	--	--
167716	201	46N	02E	29		[redacted]	OLSON	10/05/1979	090077	63	RG	DO	--	--
167717	201	46N	02E	29		[redacted]	OLSON	10/05/1979	090079	63	RG	DO	--	--
169189	201	46N	02E	29		[redacted]	OLSON	10/25/1985	121144	57	RG	DO	--	--
169198	201	46N	02E	29		[redacted]	OLSON	10/26/1984	115587	63	RG	DO	--	--
228044	201	46N	02E	29		[redacted]	MARTIN	11/14/1986	127276	61	RG	DO	--	UN
228041	201	46N	02E	29		[redacted]	MARTIN	11/26/1986	127275	62	RG	DO	--	UN
169182	201	46N	02E	29		[redacted]	OLSON	12/18/1985	121837	60	RG	DO	--	--
167750	201	46N	02E	29		[redacted]	BEAMAN	01/24/1978	070912	62	RG	DO	--	--
167722.	201	46N	02E	29		[redacted]	OLSON	04/27/1984	112066	63	RG	DO	--	--
167675	201	46N	02E	29		[redacted]	OLSON	08/14/1984	114096	63	RG	DO	--	--
167721	201	46N	02E	29		[redacted]	BEAMAN	10/05/1977	067748	62	RG	DO	--	--
169478	201	46N	02E	29		[redacted]	BEAMAN	10/18/1977	068226	62	RG	DO	--	--
169477	201	46N	02E	29		[redacted]	BEAMAN	10/18/1977	068227	62	RG	DO	--	--
167762	201	46N	02E	29		[redacted]	BEAMAN	11/00/1976	054401	62	RG	DO	--	--
167761	201	46N	02E	29		[redacted]	BEAMAN	11/04/1976	054402	65	RG	DO	--	--
167755	201	46N	02E	29		[redacted]	BEAMAN	02/18/1977	056893	63	RG	DO	--	--
167763	201	46N	02E	29		[redacted]	BEAMAN	02/18/1977	056896	63	RG	DO	--	--
167754	201	46N	02E	29		[redacted]	BEAMAN	02/18/1977	056894	63	RG	DO	--	--
167753	201	46N	02E	29		[redacted]	BEAMAN	02/18/1977	056895	63	RG	DO	--	--
167644	201	46N	02E	29		[redacted]	GREENFIELD	03/01/1984	111369	67	RG	DO	--	--
167751	201	46N	02E	29		[redacted]	BEAMAN	03/03/1977	057341	63	RG	DO	--	--
167752	201	46N	02E	29		[redacted]	BEAMAN	03/03/1977	057342	63	RG	DO	--	--
169479	201	46N	02E	29		[redacted]	BEAMAN	03/03/1977	057344	63	RG	DO	--	--
194436	201	46N	02E	29		[redacted]	GREENFIELD	05/02/1989	X10473	60	RG	DO	--	UN
167766	201	46N	02E	29		[redacted]	BEAMAN	06/07/1977	061773	62	RG	DO	--	--
167765	201	46N	02E	29		[redacted]	BEAMAN	06/07/1977	061774	62	RG	DO	--	--
167768	201	46N	02E	29		[redacted]	BEAMAN	06/08/1977	061780	62	RG	DO	--	--
167767	201	46N	02E	29		[redacted]	BEAMAN	06/08/1977	061781	62	RG	DO	--	--
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167769	201	46N	02E	29		[redacted]	BEAMAN	06/28/1977	062901	62	RG	DO	--	--
167821	201	46N	02E	29		[redacted]	BEAMAN	08/22/1977	065661	62	RG	DO	--	--
167822	201	46N	02E	29		[redacted]	BEAMAN	10/05/1977	067749	62	RG	DO	--	--
167725	201	46N	02E	29		[redacted]	BEAMAN	10/05/1977	067747	62	RG	DO	--	--
167724	201	46N	02E	29		[redacted]	BEAMAN	10/05/1977	067750	62	RG	DO	--	--
167723	201	46N	02E	29		[redacted]	MCKINNEY	10/05/1979	090047	68	RG	DO	--	--
167757	201	46N	02E	29		[redacted]	BEAMAN	10/13/1976	053497	60	RG	DO	--	--

(OFFICE) (USE ONLY)	FIPS	TWN	RNG	SC	PL	OWNER	DRILLER	DATE	PERMIT	DPTH	REC	US	TY	AQ
167764	201	46N	02E	29		[redacted]	BEAMAN	10/13/1976	053498	62	RG	DO	--	--
169481	201	46N	02E	29		[redacted]	BEAMAN	10/18/1977	068231	62	RG	DO	--	--
169482	201	46N	02E	29		[redacted]	BEAMAN	10/18/1977	068229	62	RG	DO	--	--
169480	201	46N	02E	29		[redacted]	BEAMAN	10/18/1977	068230	62	RG	DO	--	--
167756	201	46N	02E	29		[redacted]	BEAMAN	10/20/1976	053814	62	RG	DO	--	--
167738	201	46N	02E	29		[redacted]	BEAMAN	11/16/1977	069296	62	RG	DO	--	--
167739	201	46N	02E	29		[redacted]	BEAMAN	06/28/1978	076238	64	RG	DO	--	--
167715	201	46N	02E	29		[redacted]	GREENFIELD	08/18/1980	095596	70	RG	DO	--	--
167770	201	46N	02E	29		[redacted]	BLOYER	02/08/1971	010130	69	RG	DO	--	--
167339	201	46N	02E	29		[redacted]		03/00/1934		75	RG	DO	--	--
167340	201	46N	02E	29		[redacted]		03/00/1934		51	RG	DO	--	--
167771	201	46N	02E	29		[redacted]	GREENFIELD	03/21/1978	072189	67	RG	DO	--	--
167726	201	46N	02E	29		[redacted]	GREENFIELD	05/03/1977	059957	70	RG	DO	--	--
167772	201	46N	02E	29		[redacted]	GREENFIELD	10/13/1978	080788	71	RG	DO	--	--
292306	201	46N	02E	29		[redacted]	BEAMAN	07/20/1996	1803	85	RG	DO	DL	UN
167773	201	46N	02E	29		[redacted]	HINKLE	00/00/1968	005409	65	RG	DO	--	--
167681	201	46N	02E	29		[redacted]	BEAMAN	04/13/1983	106746	68	RG	DO	--	--
167774	201	46N	02E	29		[redacted]	GREENFIELD	06/07/1978	075192	63	RG	DO	--	--
167727	201	46N	02E	29		[redacted]	ROSENQUIST	07/28/1983	108439	81	RG	DO	--	--
167645	201	46N	02E	29		[redacted]	BEAMAN	08/20/1986	126154	65	RG	DO	--	--
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167775	201	46N	02E	29		[redacted]	GREENFIELD	11/01/1978	081483	65	RG	DO	--	--
167776	201	46N	02E	29		[redacted]	OLSON	04/23/1974	029167	64	RG	DO	--	--
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167728	201	46N	02E	29		[redacted]	HINKLE	09/22/1982	104943	65	RG	DO	--	--
167730	201	46N	02E	29		[redacted]	OLSON	03/12/1985	116766	63	RG	DO	--	--
167777	201	46N	02E	29		[redacted]	OLSON	03/24/1977	058149	63	RG	DO	--	--
167729	201	46N	02E	29		[redacted]	OLSON	08/15/1979	088745	63	RG	DO	--	--
167740	201	46N	02E	29		[redacted]	BULL	09/21/1978	079803	70	RG	DO	--	--
167342	201	46N	02E	29		[redacted]		03/00/1934		45	RG	DO	--	--
167341	201	46N	02E	29		[redacted]		03/00/1934		80	RG	DO	--	--
167732	201	46N	02E	29		[redacted]	GREENFIELD	03/11/1977	057602	65	RG	DO	--	--
167780	201	46N	02E	29		[redacted]	GREENFIELD	03/20/0000	028230	65	RG	DO	--	--
167779	201	46N	02E	29		[redacted]	OLSON	03/20/1973	018208	64	RG	DO	--	--
167778	201	46N	02E	29		[redacted]	OLSON	03/20/1973	018209	64	RG	DO	--	--
167731	201	46N	02E	29		[redacted]	GREENFIELD	05/02/1979	085116	70	RG	DO	--	--
167784	201	46N	02E	29		[redacted]	GREENFIELD	05/26/1976	047789	66	RG	DO	--	--
167783	201	46N	02E	29		[redacted]	GREENFIELD	05/26/1976	047788	66	RG	DO	--	--
167827	201	46N	02E	29		[redacted]	BEAMAN	06/15/1978	075555	65	RG	DO	--	--
167823	201	46N	02E	29		[redacted]	RANEY	08/02/1977	064512	69	RG	DO	--	--
167742	201	46N	02E	29		[redacted]	BEAMAN	08/18/1977	065473	72	RG	DO	--	--
167788	201	46N	02E	29		[redacted]	BEAMAN	09/23/1977	067198	64	RG	DO	--	--
167786	201	46N	02E	29		[redacted]	BEAMAN	09/23/1977	067197	66	RG	DO	--	--
167741	201	46N	02E	29		[redacted]	BEAMAN	10/26/1978	081264	65	RG	DO	--	--
167785	201	46N	02E	29		[redacted]	GREENFIELD	10/27/0000	054074	65	RG	DO	--	--

{ OFFICE } (USE ONLY)	FIPS	TWN	RNG	SC	PL	OWNER	DRILLER	DATE	PERMIT	DPTH	REC	US	TY	AQ
167787	201	46N	02E	29		[redacted]	OLSON	11/07/1980	|097231	63	RG	DO	--	--
167790	201	46N	02E	29		[redacted]	BEAMAN	11/16/1977	|069295	65	RG	DO	--	--
167789	201	46N	02E	29		[redacted]	BEAMAN	11/16/1977	|069294	65	RG	DO	--	--
167781	201	46N	02E	29		[redacted]	GREENFIELD	11/17/0000	|043094	65	RG	DO	--	--
167782	201	46N	02E	29		[redacted]	GREENFIELD	12/04/1975	|043541	65	RG	DO	--	--
167791	201	46N	02E	29		[redacted]	HINKLE	03/31/1978	|072477	69	RG	DO	--	--
167792	201	46N	02E	29		[redacted]	HINKLE	04/16/1986	|123058	73	RG	DO	--	--
228055	201	46N	02E	29		[redacted]	HINKLE	04/20/1987	130736	66	RG	DO	--	UN
209684	201	46N	02E	29		[redacted]	HINKLE	04/20/1987	X130736	66	RGX	DO	--	UN
167733	201	46N	02E	29		[redacted]	HINKLE	05/27/1983	|107377	82	RG	DO	--	--
247443	201	46N	02E	29		[redacted]	GREENFIELD	10/08/1991	171	60	RG	DO	--	UN
REMARKS: LOT 169														
228056	201	46N	02E	29		[redacted]	HINKLE	11/11/1987	134603	63	RG	DO	--	UN
167819	201	46N	02E	29		[redacted]	BEAMAN	03/24/1977	|058137	60	RG	DO	--	--
167798	201	46N	02E	29		[redacted]	OLSON	06/10/1976	|048365	63	RG	DO	--	--
167799	201	46N	02E	29		[redacted]	OLSON	06/25/1976	|048964	63	RG	DO	--	--
167793	201	46N	02E	29		[redacted]	OLSON	06/30/1978	|076379	63	RG	DO	--	--
167796	201	46N	02E	29		[redacted]	OLSON	09/09/1974	|032833	63	RG	DO	--	--
167797	201	46N	02E	29		[redacted]	OLSON	09/09/1974	|032831	63	RG	DO	--	--
167743	201	46N	02E	29		[redacted]	BULL	03/13/1978	|071940	71	RG	DO	--	--
167800	201	46N	02E	29		[redacted]	OLSON	04/23/1974	|029169	64	RG	DO	--	--
167801	201	46N	02E	29		[redacted]	OLSON	04/23/1974	|029168	64	RG	DO	--	--
167646	201	46N	02E	29		[redacted]	OLSON	05/06/1976	|046906	63	RG	DO	--	--
167805	201	46N	02E	29		[redacted]	OLSON	05/20/1976	|047565	63	RG	DO	--	--
167803	201	46N	02E	29		[redacted]	OLSON	06/10/1976	|048367	63	RG	DO	--	--
167804	201	46N	02E	29		[redacted]	OLSON	06/10/1976	|048366	63	RG	DO	--	--
167647	201	46N	02E	29		[redacted]	OLSON	06/10/1976	|048372	63	RG	DO	--	--
167806	201	46N	02E	29		[redacted]	OLSON	07/16/1976	|049782	63	RG	DO	--	--
167811	201	46N	02E	29		[redacted]	BEAMAN	08/05/1986	|125761	57	RG	DO	--	--
167802	201	46N	02E	29		[redacted]	OLSON	12/17/1975	|035376	63	RG	DO	--	--
167807	201	46N	02E	29		[redacted]	OLSON	04/23/1974	|029166	64	RG	DO	--	--
167809	201	46N	02E	29		[redacted]	OLSON	04/23/1974	|029170	64	RG	DO	--	--
167648	201	46N	02E	29		[redacted]	OLSON	05/06/1976	|046907	64	RG	DO	--	--
167810	201	46N	02E	29		[redacted]	MCKINNEY	05/20/1977	|060997	65	RG	DO	--	--
167808	201	46N	02E	29		[redacted]		00/00/0000	|	68	C	DO	--	--
167744	201	46N	02E	29		[redacted]	BEAMAN	04/11/1979	|084558	65	RG	DO	--	--
167745	201	46N	02E	29		[redacted]	BEAMAN	04/11/1979	|084559	65	RG	DO	--	--
242236	201	46N	02E	29		[redacted]	GREENFIELD	09/29/1992	458	71	RG	DO	--	UN
REMARKS: Tresemer Lot 118														
242235	201	46N	02E	29		[redacted]	GREENFIELD	09/29/1992	455	67	RG	DO	--	UN
REMARKS: Tresemer Lot 103														
167817	201	46N	02E	29		[redacted]	BULL	07/18/1985	|119057	66	RG	DO	--	--
167816	201	46N	02E	29		[redacted]	GREENFIELD	07/23/0000	|050074	65	RG	DO	--	--
167814	201	46N	02E	29		[redacted]	GREENFIELD	08/25/1976	|051320	65	RG	DO	--	--
167815	201	46N	02E	29		[redacted]	GREENFIELD	08/25/1976	|051319	65	RG	DO	--	--

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(OFFICE) (USE ONLY)	FIPS	TWN	RNG	SC	PL	OWNER	DRILLER	DATE	PERMIT	DPTH	REC	US	TY	AQ
167825	201	46N	02E	29		[redacted]	GREENFIELD	09/14/1977	066772	65	RG	DO	--	--
167794	201	46N	02E	29		[redacted]	OLSON	09/24/1976	052669	63	RG	DO	--	--
167734	201	46N	02E	29		[redacted]	RANEY	10/18/1979	090665	66	RG	DO	--	--
167735	201	46N	02E	29		[redacted]	OLSON	11/14/1977	069206	63	RG	DO	--	--
167795	201	46N	02E	29		[redacted]	OLSON	11/15/1976	054680	63	RG	DO	--	--
167812	201	46N	02E	29		[redacted]	GREENFIELD	12/04/1975	043539	65	RG	DO	--	--
167824	201	46N	02E	29		[redacted]	OLSON	12/08/1977	070028	63	RG	DO	--	--
167813	201	46N	02E	29		[redacted]	GREENFIELD	12/09/1975	043679	65	RG	DO	--	--
167746	201	46N	02E	29		[redacted]	OLSON	12/22/1977	070385	63	RG	DO	--	--
167826	201	46N	02E	29		[redacted]	OLSON	12/22/1977	070386	63	RG	DO	--	--
167736	201	46N	02E	29		[redacted]	GREENFIELD	05/08/1979	085369	57	RG	IC	--	--
167828	201	46N	02E	29		[redacted]	OLSON	08/00/1987	077922	60	RG	DO	--	--
167818	201	46N	02E	29		[redacted]	GREENFIELD	08/05/1976	050622	65	RG	DO	--	--
167820	201	46N	02E	29		[redacted]	MCKINNEY	08/24/1977	065802	69	RG	DO	--	--
169412	201	46N	02E	29		[redacted]	BEAMAN	11/23/1978	069610	62	RG	DO	--	--

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Query the PICS Database through the World Wide Web
http://gwinfo.sws.uiuc.edu/gwdb-query.html

County: Winnebago

Township Code: 46N
Range Code: 2E
Section Codes: 29

3 records were found for the specified locations.

Questions : Contact the Illinois State Water Survey's Ground Water Division @ (217)333-7223
Publication: Please cite the Illinois State Water Survey's PICS (Public-Industrial-Commercial) Database in all publications based wholly or partially on this information.

Please Note:

The data in the PICS Database is a listing of municipal and large industrial and commercial wells which are known to the Illinois State Water Survey (ISWS). The information was initially entered from public water supply data and supplemented with the Illinois Water Inventory Project data. This database is updated as additional information is received and verified.

SWS ID	Name	No.	Status	Location	Depth	Type log	Year constructed	Driller
20131930	[redacted]	1	I	20146N02E291H	70	D	1992	EDWIN D GREENFIELD
20195500	[redacted]	7	E	20146N02E291B	780	D	1984	ALBRECHT WELL DRLG
20195500	[redacted]	6	E	20146N02E291B	780	D	1984	ALBRECHT WELL DRLG

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Appendix E
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Appendix E
Redacted

DATE 04/1[illegible] TIME 04:18 NORTH PARK WATER, ROCKFORD IL PAGE
FROM: 9800000000 TO 9899999999

SERVICE SEQUENCE LISTING

SEQ#	ACCOUNT#	NAME	SERVICE CODE	METER NO.	PROPERTY LOCATION		STATUS
[redacted]	[redacted]	[redacted]	CL	01	ELEVATOR RD	[redacted]	
			CL	01	ELEVATOR RD		
			MR	01	ELEVATOR RD		
			GR	01	ELEVATOR RD		
			CL	01	CLAYTON CIR		
			MR	01	ANDREWS DR		
			MR	01	ANDREWS DR		
			MR	01	ANDREWS DR		
			MR	01	ANDREWS DR		
			GR	01	CLAYTON CIR		
			MR	01	PARKWAY DR		
			MR	01	ANDREWS DR		
			MR	01	ANDREWS DR		
			MR	01	ANDREWS DR		
			MR	01	ANDREWS DR		
			MR	01	ANDREWS DR		
			MR	01	ANDREWS DR		
			MR	01	PARKWAY DR		
			MR	01	PARKWAY DR		
			CH	01	CLAYTON CIR		
			CL	01	MAIN ST		
			CL	01	MAIN ST		
			CH	01	MAIN ST		
			CL	01	MAIN ST		
			CL	01	MAIN ST		
			MR	01	ELEVATOR RD		
			MR	01	MAIN ST		
			CL	01	MAIN ST		
			CL	02	MAIN ST		
			CL	01	MAIN ST		
			CL	01	SECOND ST	N	
			CL	01	SECOND ST	N	
			CH	01	ROCKTON RD		
			CL	01	METRIC RD		
			CL	01	METRIC RD		
			CH	01	ROCKTON RD		
			CH	01	WILLOWROOK RD		
			MR	01	FLAGLER DR		
			MR	01	FLAGLER DR		
			MR	01	FLAGLER DR		
			MR	01	FLAGLER DR		
			MR	01	FLAGLER DR		
			MR	01	CROCKER CT		
			MR	01	CROCKER CT		
			MR	01	CROCKER CT		
			GR	01	ELEVATOR RD		
			GR	02	ELEVATOR RD		
			CL	01	ELEVATOR RD		
			CL	01	ELEVATOR RD		
			CL	01	ELEVATOR RD		ON WORK-ORDR

SERVICE SEQUENCE LISTING

SEQ#	ACCOUNT#	NAME	SERVICE CODE	METER NO.	PROPERTY LOCATION		STATUS
[redacted]	[redacted]	[redacted]	CH	01	ELEVATOR RD	[redacted]	
[redacted]	[redacted]	[redacted]	CL	01	ELEVATOR RD	[redacted]	
[redacted]	[redacted]	[redacted]	CL	01	HONONEGAH RD	[redacted]	
[redacted]	[redacted]	[redacted]	CH	01	HONONEGAH RD	[redacted]	
[redacted]	[redacted]	[redacted]	CH	01	HONONEGAH RD	[redacted]	
[redacted]	[redacted]	[redacted]	CH	01	HONONEGAH RD	[redacted]	
[redacted]	[redacted]	[redacted]	CH	01	HONONEGAH RD	[redacted]	
[redacted]	[redacted]	[redacted]	CH	02	HONONEGAH RD	[redacted]	
[redacted]	[redacted]	[redacted]	CL	01	PRAIRIE ROSE DR	[redacted]	
[redacted]	[redacted]	[redacted]	MR	01	BANEBERRY DR	[redacted]	
[redacted]	[redacted]	[redacted]	MR	01	BANEBERRY DR	[redacted]	
[redacted]	[redacted]	[redacted]	CH	01	BLUESTEM RD	[redacted]	
[redacted]	[redacted]	[redacted]	CL	01	BLUESTEM RD	[redacted]	
[redacted]	[redacted]	[redacted]	CH	01	BLUESTEM RD	[redacted]	
[redacted]	[redacted]	[redacted]	CL	01	BLUESTEM RD	[redacted]	
[redacted]	[redacted]	[redacted]	CL	01	BLUESTEM RD	[redacted]	
[redacted]	[redacted]	[redacted]	CL	01	BLUESTEM RD	[redacted]	
[redacted]	[redacted]	[redacted]	CL	01	BLUESTEM RD	[redacted]	
[redacted]	[redacted]	[redacted]	CL	01	BLUESTEM RD	[redacted]	
[redacted]	[redacted]	[redacted]	CL	01	BLUESTEM RD	[redacted]	
[redacted]	[redacted]	[redacted]	CL	01	CHECKERBERRY	[redacted]	
[redacted]	[redacted]	[redacted]	CL	01	BLUESTEM RD	[redacted]	ON WORK-ORDR
[redacted]	[redacted]	[redacted]	CL	01	PRAIRIE ROSE DR	[redacted]	
[redacted]	[redacted]	[redacted]	CL	01	HONONEGAH RD	[redacted]	
[redacted]	[redacted]	[redacted]	CL	01	EDGEMERE TERR	[redacted]	
[redacted]	[redacted]	[redacted]	CH	01	EDGEMERE CT	[redacted]	
[redacted]	[redacted]	[redacted]	CL	01	EDGEMERE CT	[redacted]	
[redacted]	[redacted]	[redacted]	CL	01	EDGEMERE CT	[redacted]	
[redacted]	[redacted]	[redacted]	CL	01	HONONEGAH RD	[redacted]	

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SERVICE SEQUENCE LISTING

SEQ#	ACCOUNT#	NAME	SERVICE CODE	METER NO.	PROPERTY LOCATION	STATUS
[redacted]	[redacted]	[redacted]	RG	01	HONONEGAH RD	[redacted]
			RG	01	HONONEGAH RD	
			RG	01	HONONEGAH RD	
			RG	01	HONONEGAH RD	
			RG	01	HONONEGAH RD	
			RG	01	HONONEGAH RD	
			RG	01	HONONEGAH RD	
			RG	01	HONONEGAH RD	
			RG	01	HONONEGAH RD	
			RG	01	HONONEGAH RD	
			RG	01	BEECHER DR	
			RG	01	ADELE ST	
			RG	01	ADELE ST	
			RG	01	ADELE ST	
			RG	01	ADELE ST	
			RG	01	ADELE ST	
			RG	01	ADELE ST	
			RG	01	ADELE ST	
			RG	01	ADELE ST	
			RG	01	ADELE ST	
			RG	01	FRANCES LN	
			RG	01	ADELE ST	
			RG	01	ADELE ST	
			RG	01	ADELE ST	
			RG	01	ADELE ST	
			RG	01	ADELE ST	
			RG	01	MATHEW AVE	
			RG	01	MATHEW AVE	
			RG	01	MATHEW AVE	
			RG	01	MATHEW AVE	
			RG	01	MATHEW AVE	
			RG	01	FRANCES LN	
			RG	01	FRANCES LN	
			RG	01	FRANCIS LN	
			RG	01	FRANCES LN	
			RG	01	FRANCES LN	
			RG	01	MATHEW AVE	
			RG	01	MATHEW AVE	
			RG	01	MATHEW AVE	
			RG	01	MATHEW AVE	
			RG	01	MATHEW AVE	
			RG	01	MATHEW AVE	
			RG	01	MATHEW AVE	
			RG	01	BEECHER DR	
			RG	01	STRAW LN	
			RG	01	STRAW LN	
			RG	01	STRAW LN	
			RG	01	STRAW LN	
			RG	01	STRAW LN	
			RG	01	STRAW LN	

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SERVICE SEQUENCE LISTING

SEQ#	ACCOUNT#	NAME	SERVICE CODE	METER NO.	PROPERTY LOCATION	STATUS
[redacted]	[redacted]	[redacted]	RG	01	STRAW LN	[redacted]
			RG	01	WINCHESTER LN	
			RG	01	WINCHESTER LN	
			RG	01	WINCHESTER LN	
			RG	01	ROLLINGSFORD LN	
			RG	01	WINCHESTER LN	
			RG	01	WINCHESTER LN	
			RG	01	STRAW LN	
			RG	01	STRAW LN	
			RG	01	STRAW LN	
			RG	01	STRAW LN	
			RG	01	BALSA LN	
			RG	01	BALSA LN	
			RG	01	HONEY LOCUST LN	
			RG	01	HONEY LOCUST LN	
			RG	01	HONEY LOCUST LN	
			RG	01	HONEY LOCUST LN	
			RG	01	HONEY LOCUST LN	
			RG	01	BALSA LN	
			RG	01	BALSA LN	
			RG	01	PFISTER LN	
			RG	01	PFISTER LN	
			RG	01	PFISTER LN	
			RG	01	PFISTER LN	
			RG	01	PFISTER LN	
			RG	01	PFISTER LN	
			RG	01	BALSA LN	
			RG	01	BALSA LN	
			RG	01	BALSA LN	
			RG	01	BALSA LN	
			RG	01	BALSA LN	
			RG	01	LEEASH CT	
			RG	01	LEEASH CT	
			RG	01	LEEASH CT	
			RG	01	LEEASH CT	
			RG	01	LEEASH CT	
			RG	01	BALSA LN	
			RG	01	JENNIFER LN	
			RG	01	BALSA LN	
			RG	01	BALSA LN	
			RG	01	BALSA LN	
			RG	01	BALSA LN	
			RG	01	BALSA LN	
			RG	01	BALSA LN	
			RG	01	BALSA LN	
			RG	01	BALSA LN	
			RG	01	STRAW LN	
			RG	01	GRAINERY RD	
			RG	01	GRAINERY RD	
			RG	01	GRAINERY RD	

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SERVICE SEQUENCE LISTING

SEQ#	ACCOUNT#	NAME	SERVICE CODE	METER NO.	PROPERTY LOCATION	STATUS
[redacted]	[redacted]	[redacted]	RG	01	GRAINERY RD	[redacted]
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	BEND RIVER RD	
			RG	01	BEND RIVER RD	
			RG	01	BEND RIVER RD	
			RG	01	BEND RIVER RD	
			RG	01	BEND RIVER RD	
			RG	01	BEND RIVER RD	
			RG	01	BEND RIVER RD	
			RG	01	BEND RIVER RD	
			RG	01	BEND RIVER RD	
			RG	01	BEND RIVER RD	
			RG	01	OATSEED TR	
			RG	01	OATSEED TR	
			RG	01	OATSEED TR	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	TANAWINGO TR	
			RG	01	TANAWINGO TR	
			RG	01	TANAWINGO TR	
			RG	01	TANAWINGO TR	
			RG	01	TANAWINGO TR	
			RG	01	TANAWINGO TR	
			RG	01	TANAWINGO TR	
			RG	01	TANAWINGO TR	
			RG	01	TANAWINGO TR	
			RG	01	TANAWINGO TR	
			RG	01	TANAWINGO TR	
			RG	01	TANAWINGO TR	
			RG	01	TANAWINGO TR	
			RG	01	GRAINERY RD	
			RG	01	GRAINERY RD	
			RG	01	GRAINERY RD	
			RG	01	GRAINERY RD	
			RG	01	GRAINERY RD	
			RG	01	CEDARBROOK RD	
			RG	01	VALENTINE CT	

SERVICE SEQUENCE LISTING

SEQ#	ACCOUNT#	NAME	SERVICE CODE	METER NO.	PROPERTY LOCATION	STATUS
[redacted]	[redacted]	[redacted]	RG	01	VALENTINE CT	[redacted]
			RG	01	VALENTINE CT	
			RG	01	VALENTINE CT	
			RG	01	VALENTINE CT	
			RG	01	VALENTINE CT	
			RG	01	VALENTINE CT	
			RG	01	VALENTINE CT	
			RG	01	CEDARBROOK RD	
			RG	01	CEDARBROOK RD	
			RG	01	CEDARBROOK RD	
			RG	01	CEDARBROOK RD	
			RG	01	CEDARBROOK RD	
			RG	01	CEDARBROOK RD	
			RG	01	CEDARBROOK RD	
			RG	01	CEDARBROOK RD	
			RG	01	BALSA LN	
			RG	01	BUGGY WHIP LN	
			RG	01	BUGGY WHIP LN	
			RG	01	BUGGY WHIP LN	
			RG	01	BUGGYWHIP LN	
			RG	01	BUGGY WHIP LN	
			RG	01	BUGGY WHIP LN	
			RG	01	BUGGY WHIP LN	
			RG	01	BUGGY WHIP LN	
			RG	01	BUGGY WHIP LN	
			RG	01	BUGGY WHIP LN	
			RG	01	HAYLOFT LN	
			RG	01	HAYLOFT LN	
			RG	01	HAYLOFT LN	
			RG	01	HAYLOFT LN	
			RG	01	HAYLOFT LN	
			RG	01	HAYLOFT LN	
			RG	01	HAYLOFT LN	
			RG	01	HAYLOFT LN	
			RG	01	HAYLOFT LN	
			RG	01	HAYLOFT LN	
			RG	01	HAYLOFT LN	
			RG	01	HAYLOFT LN	
			RG	01	HAYLOFT LN	
			RG	01	HAYLOFT LN	
			RG	01	HAYLOFT LN	
			RG	01	HAYLOFT LN	
			RG	01	HAYLOFT LN	
			RG	01	BUGGY WHIP LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	

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SERVICE SEQUENCE LISTING

SEQ#	ACCOUNT#	NAME	SERVICE CODE	METER NO.	PROPERTY LOCATION	STATUS
[redacted]	[redacted]	[redacted]	RG	01	WAGON LN	[redacted]
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	STRAW LN	
			RG	01	STRAW LN	
			RG	01	STRAW LN	
			RG	01	STRAW LN	
			RG	01	STRAW LN	
			RG	01	STRAW LN	
			RG	01	STRAW LN	
			RG	01	BLUE SPRUCE DR	
			RG	01	BLUE SPRUCE DR	
			RG	01	BLUE SPRUCE DR	
			RG	01	BLUE SPRUCE DR	
			RG	01	BLUE SPRUCE DR	
			RG	01	BLUE SPRUCE DR	
			RG	01	HONONEGAH RD	
			RG	01	BLUE SPRUCE DR	
			RG	01	BLUE SPRUCE DR	
			RG	01	BLUE SPRUCE DR	
			RG	01	BLUE SPRUCE DR	
			RG	01	BLUE SPRUCE DR	
			RG	01	BLUE SPRUCE DR	
			RG	01	BLUE SPRUCE DR	
			RG	01	BLUE SPRUCE DR	
			RG	01	BLUE SPRUCE DR	
			RG	01	BLUE SPRUCE DR	
			RG	01	BLUE SPRUCE DR	
			RG	01	STRAW LN	
			RG	01	STRAW LN	
			RG	01	STRAW LN	
			RG	01	STRAW LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	
			RG	01	WAGON LN	

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SERVICE SEQUENCE LISTING

SEQ#	ACCOUNT#	NAME	SERVICE CODE	METER NO.	PROPERTY LOCATION		STATUS
[redacted]	[redacted]	[redacted]	RG	01	WAGON LN	[redacted]	
			RG	01	WAGON LN		
			RG	01	WAGON LN		ON WORK-ORDR
			RG	01	WAGON LN		
			RG	01	VALERIE RD		
			RG	01	WAGON LN		
			RG	01	WAGON LN		
			RG	01	WAGON LN		
			RG	01	WAGON LN		
			RG	01	WAGON LN		
			RG	01	WAGON LN		
			RG	01	WAGON LN		
			RG	01	STRAW LN		
			RG	01	STRAW LN		
			RG	01	WAGON LN		
			RG	01	TRESEMER RD		
			RG	01	TRESEMER RD		
			RG	01	TRESEMER RD		
			RG	01	TRESEMER RD		
			RG	01	TRESEMER RD		
			RG	01	TRESEMER RD		
			RG	01	VALERIE RD		
			RG	01	VALERIE RD		
			RG	01	VALERIE RD		
			RG	01	VALERIE RD		
			RG	01	VALERIE RD		
			RG	01	TRESEMER RD		
			RG	01	TRESEMER RD		
			RG	01	TRESEMER RD		
			RG	01	TRESEMER RD		
			RG	01	TRESEMER CIR		
			RG	01	TRESEMER CIR		
			RG	01	HONONEGAH RD		
			RG	01	HONONEGAH RD		
			RG	01	HONONEGAH RD		

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SERVICE SEQUENCE LISTING

SEQ#	ACCOUNT#	NAME	SERVICE CODE	METER NO.	PROPERTY LOCATION	STATUS
[redacted]	[redacted]	[redacted]	RG	01	HONONEGAH RD	
			RG	01	EDGEMERE TERR	
			RG	01	EDGEMERE TERR	
			RG	01	EDGEMERE TERR	
			RG	01	EDGEMERE TERR	
			RG	01	EDGEMERE TERR	
			RG	01	CROWN POINT RD	
			RG	01	WILD DEER TR	
			RG	01	WILD DEER TR	
			RG	01	WILD DEER TR	
			RG	01	WILD DEER TR	
			RG	01	WILD DEER TR	
			RG	01	WILD DEER TR	
			RG	01	WILD DEER TR	
			RG	01	WILD DEER TR	
			RG	01	WILD DEER TR	
			RG	01	WILD DEER TR	
			RG	01	WILD DEER TR	
			RG	01	WILD DEER TR	
			RG	01	WILD DEER TR	
			RG	01	WILD DEER TR	
			RG	01	WILD DEER TR	
			RG	01	WILD DEER TR	
			RG	01	WILD DEER TR	
			RG	01	ROLLINGSFORD LN	
			RG	01	ROLLINGSFORD LN	
			RG	01	ROLLINGSFORD LN	
			RG	01	ROLLINGSFORD LN	
			RG	01	ROLLINGSFORD LN	
			RG	01	ROLLINGSFORD LN	
			RG	01	ROLLINGSFORD LN	
			RG	01	ROLLINGSFORD LN	
			RG	01	WILD DEER TR	
			RG	01	WILD DEER TR	
			RG	01	WILD DEER TR	
			RG	01	CROWN POINT RD	ON WORK-ORDR
			RG	01	CROWN POINT RD	
			RG	01	CROWN POINT RD	
			RG	01	CROWN POINT RD	
			RG	01	CROWN POINT CIR	
			RG	01	CROWN POINT CIR	
			RG	01	CROWN POINT RD	
			RG	01	CROWN POINT CIR	
			RG	01	CROWN POINT RD	
			RG	01	CROWN POINT RD	
			RG	01	CROWN POINT RD	
			RG	01	CROWN POINT RD	
			RG	01	CROWN POINT RD	
			RG	01	CROWN POINT RD	
			RG	01	CROWN POINT RD	

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SERVICE SEQUENCE LISTING

SEQ#	ACCOUNT#	NAME	SERVICE CODE	METER NO.	PROPERTY LOCATION	STATUS
[redacted]	[redacted]	[redacted]	RG	01	CROWN POINT RD [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	CROWN POINT RD [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	CROWN POINT RD [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	CROWN POINT RD [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	CROWN POINT RD [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	CROWN POINT RD [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	CROWN POINT RD [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	EDGEMERE TERR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	MT VERNON RD [redacted]	

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SERVICE SEQUENCE LISTING

SEQ#	ACCOUNT#	NAME	SERVICE CODE	METER NO.	PROPERTY LOCATION	STATUS
[redacted]	[redacted]	[redacted]	RG	01	MT VERNON RD [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	MT VERNON RD [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER CT [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER CT [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER CT [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER CT [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER CT [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	CRAIGMONT [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	CRAIGMONT [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	CRAIGMONT [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	CRAIGMONT [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	WILD DEER TR [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	CEDARBROOK RD [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	CEDARBROOK RD [redacted]	

SERVICE SEQUENCE LISTING

SEQ#	ACCOUNT#	NAME	SERVICE CODE	METER NO.	PROPERTY LOCATION	STATUS
[redacted]	[redacted]	[redacted]	RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	WILD DEER TR [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	ROLLINGSFORD LN [redacted]	
			RG	01	ROLLINGSFORD LN [redacted]	
			RG	01	ROLLINGSFORD LN [redacted]	
			RG	01	GRAYSTONE CIR [redacted]	
			RG	01	GRAYSTONE CIR [redacted]	
			RG	01	GRAYSTONE CIR [redacted]	
			RG	01	GRAYSTONE CIR [redacted]	
			RG	01	GRAYSTONE CIR [redacted]	
			RG	01	GRAYSTONE CIR [redacted]	
			RG	01	GRAYSTONE CIR [redacted]	ON WORK-ORDR
			RG	01	GRAYSTONE CIR [redacted]	
			RG	01	GRAYSTONE CIR [redacted]	
			RG	01	GRAYSTONE CIR [redacted]	
			RG	01	GRAYSTONE CIR [redacted]	
			RG	01	ROLLINGSFORD LN [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	
			RG	01	CEDARBROOK RD [redacted]	

DATE 04/ 3 TIME 03:16 NORTH PARK WATER, XFORD IL PAGE
FROM: 1800000000 TO 1899999999

SERVICE SEQUENCE LISTING

SEQ#	ACCOUNT#	NAME	SERVICE CODE	METER NO.	PROPERTY LOCATION	STATUS
[redacted]	[redacted]	[redacted]	RG	01	CEDARBROOK RD	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY LN	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY DR SPKR	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY DR	
			RG	01	BANEBERRY DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	INDIGO PL	
			RG	01	INDIGO PL	
			RG	01	INDIGO PL	
			RG	01	INDIGO PL	
			RG	01	INDIGO PL	
			RG	01	INDIGO PL	
			RG	01	INDIGO PL	
			RG	01	INDIGO PL	
			RG	01	INDIGO PL	

FROM: 1800000000 TO 1899999999

SERVICE SEQUENCE LISTING

SEQ#	ACCOUNT#	NAME	SERVICE CODE	METER NO.	PROPERTY LOCATION	STATUS
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
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[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
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[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL [redacted]	

DATE 04/[illegible] TIME 03:16 NORTH PARK WATER, RC[illegible]ORD IL PAGE [illegible]
FROM: 1800[illegible]000 TO 1899999999

SERVICE SEQUENCE LISTING

SEQ#	ACCOUNT#	NAME	SERVICE CODE	METER NO.	PROPERTY LOCATION	STATUS
[redacted]	[redacted]	[redacted]	RG	01	INDIGO PL	[redacted]
			RG	01	INDIGO PL	
			RG	01	INDIGO PL	
			RG	01	INDIGO PL	
			RG	01	INDIGO PL	
			RG	01	BLUESTEM RD	
			RG	01	BLUESTEM RD	
			RG	01	BLUESTEM RD	
			RG	01	BLUESTEM RD	
			RG	01	BLUESTEM RD	
			RG	01	BLUESTEM RD	
			RG	01	BLUESTEM RD	
			RG	01	BLUESTEM RD	
			RG	01	BLUESTEM RD	
			RG	01	BLUESTEM RD	
			RG	01	BLUESTEM RD	
			RG	01	BLUESTEM RD	
			RG	01	BLUESTEM RD	
			RG	01	BLUESTEM RD	
			RG	01	BLUESTEM RD	
			RG	01	BLUESTEM RD	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	PRAIRIE ROSE DR	
			RG	01	VIOLET WALK	
			RG	01	VIOLET WALK	
			RG	01	VIOLET WALK	
			RG	01	VIOLET WALK	
			RG	01	PRAIRIE ROSE DR	
			RG	01	VIOLET WALK	
			RG	01	VIOLET WALK	
			RG	01	VIOLET WALK	
			RG	01	VIOLET WALK	
			RG	01	VIOLET WALK	
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			RG	01	VIOLET WALK	
			RG	01	VIOLET WALK	

SERVICE SEQUENCE LISTING

SEQ#	ACCOUNT#	NAME	SERVICE CODE	METER NO.	PROPERTY LOCATION		STATUS
[redacted]	[redacted]	[redacted]	RG	01	VIOLET WALK	[redacted]	
			RG	01	VIOLET WALK		
			RG	01	VIOLET WALK		
			RG	01	VIOLET WALK		
			RG	01	VIOLET WALK		
			RG	01	VIOLET WALK		
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			RG	01	VIOLET WALK		
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			RG	01	VIOLET WALK		
			RG	01	VIOLET WALK		
			RG	01	VIOLET WALK		
			RG	01	DEGROFF ST		
			RG	01	SECOND ST	N	

TOTAL READS: 367

DATE 04/2[illegible] TIME 03:16 NORTH PARK WATER, RO[illegible]FORD IL PAGE
FROM: 9805760000 TO 9808160000

SERVICE SEQUENCE LISTING

SEQ#	ACCOUNT#	NAME	SERVICE CODE	METER NO.	PROPERTY LOCATION	STATUS
[redacted]	[redacted]	[redacted]	CL	01	HONONEGAH RD	
			CH	01	HONONEGAH RD	
			CH	01	HONONEGAH RD	
			CH	01	HONONEGAH RD	
			CH	01	HONONEGAH RD	
			CH	02	HONONEGAH RD	
			CL	01	PRAIRIE ROSE DR	
			MR	01	BANEBERRY DR	
			MR	01	BANEBERRY DR	
			CH	01	BLUESTEM RD	
			CL	01	BLUESTEM RD	
			CH	01	BLUESTEM RD	
			CL	01	BLUESTEM RD	
			CL	01	BLUESTEM RD	
			CL	01	BLUESTEM RD	
			CL	01	BLUESTEM RD	
			CL	01	BLUESTEM RD	
			CL	01	BLUESTEM RD	
			CL	01	CHECKERBERRY	
			CL	01	BLUESTEM RD	ON WORK-ORDR
			CL	01	PRAIRIE ROSE DR	
			CL	01	HONONEGAH RD	
			CL	01	EDGEMERE TERR	
			CH	01	EDGEMERE CT	
			CL	01	EDGEMERE CT	
			CL	01	EDGEMERE CT	
			CL	01	HONONEGAH RD	

TOTAL READS: 27

Appendix F
Redacted

Appendix F
Redacted

STEVE JOHNSON
<SJOHNSON@idph.state.il.us>

To: Karen Cibulskis
Subject: Residential Well Inventory for Evergreen Manor

03/18/03 09:44 AM

Karen, I'm faxing two memo's from Theisen dated 8/8/00 and 9/29/00. The 9/29/00 is the last memo detailing the final hookups.

I assume that you're looking for the results and address for the 5 wells sampled in May 2001. I am faxing that information (along with a map which I hope is readable). The information includes the 2 locations that did not connect to public water. The map is from USEPA and I think detailed the original project area, it was from a fact sheet dated 11/99. I used it to indicate the location of the wells we sampled in May 2001 (shaded lots).

The master list you referred to in your other email is the list of wells IDPH has been sampling since 1991. The master list is titled "VOC Sample Results Roscoe Area (Note 999 = sample results not quantified)" . I put that list together and was responsible for maintaining it. It includes results from IEPA and possibly USEPA when USEPA provided IDPH with the results. The last sample date you should find on the list is 1999. With computer and software upgrades it became hard to maintain the list after then.

If you need anything else please feel free to call.

Steve Johnson
Illinois Department of Public Health
Rockford Region
(815) 987-7511

Evergreen Manor

Address	Sample Date & Results				
	5/1/01				
[redacted]	ND				
[redacted]	ND				
[redacted]	ND				
[redacted] Bend River [redacted]	ND				
[redacted] Valentine Ct [redacted]	ND				

The two households that refused to connect to public water are

[redacted] Valentine Ct
Roscoe, IL 61073
[redacted]

[redacted] Cedarbrook Rd
Roscoe, IL 61073
[redacted]

Appendix G

WINNEBAGO COUNTY CODE ARTICLE III

Water Supply and Service

DEPARTMENT OF PUBLIC HEALTH
WINNEBAGO COUNTY

Winnebago County Department of Public Health
401 Division Street
Rockford, Illinois 61104
(815)962-5092

November 1999

WINNEBAGO COUNTY
PRIVATE WATER WELL CODE

Division 1. Definition of Terms

Sec. 86-106. Definitions

Division 2. General Provisions

Sec. 86-107. Private water supply standards
Sec. 86-108. Owner's responsibility
Sec. 86-109. Building occupancy
Sec. 86-110. Maintenance
Sec. 86-111. Public water supplies; when required
Sec. 86-112. Individual service

Division 3. Adoption of Illinois Water Well Construction Code and Illinois Water Well Pump Installation Code

Sec. 86-113. Adoption of state codes

Division 4. Permit Requirements

Sec. 86-114. General provisions
Sec. 86-115. Contractor requirements
Sec. 86-116. Permit fee
Sec. 86-117. Permit application requirements
Sec. 86-118. Expiration
Sec. 86-119. Inspections
Sec. 86-120. Notification
Sec. 86-121. Well specification log

Division 5. Construction of Wells Generally

Sec. 86-122. Location of well sites
Sec. 86-123. Platforms
Sec. 86-124. Casings
Sec. 86-125. Wells in basements
Sec. 86-126. Wells with buried seals
Sec. 86-127. Well pits
Sec. 86-128. Pressure tanks
Sec. 86-129. Pumping equipment
Sec. 86-130. Pump suction lines
Sec. 86-131. Water distribution lines
Sec. 86-132. Backflow protection
Sec. 86-133. Unsafe water supply
Sec. 86-134. Disinfection
Sec. 86-135. Abandonment of wells
Sec. 86- 136. Capping of wells

Division 6. Water Quality Standards

Sec. 86-137. General provisions
Sec. 86-138. Microbiological standards
Sec. 86-139. Adoption of other water quality standards
Sec. 86-140. Sampling point

Division 7. Administration

Sec. 86-141. Enforcement
Sec. 86-142. Revocation or suspension of permit
Sec. 86-143. Interpretation, purpose, and conflict

DIVISION 1. DEFINITIONS

Sec. 86-106. Definition of Terms.
a) As used in this Ordinance, unless the context specifies otherwise:

ABANDONED WELL means a water or monitoring well which is no longer used to supply water, or which is in such a state of disrepair that the well or boring has the potential for transmitting contaminants into an aquifer or otherwise threatens the public health or safety.

APPLICANT means the owner as defined herein or his or its authorized agent.

AQUIFER means a water bearing formation that transmits water in sufficient quantity to supply a well.

DEPARTMENT means the Winnebago County Department of Public Health.

MODIFICATION means any change, replacement, or other alteration of a water well. This includes, but is not limited to, deepening of a well, installation of a pitless adapter, replacing or repairing a casing or a well screen, capping a well, and any other changes of a well structure. It does not include replacement of a pump or well cap.

MONITORING WELL means a water well intended for the purpose of determining groundwater quantity,

quality and/or piezometric measurements.

OWNER means the person or corporation or other legal entity in whose name the property appears on the records of the County Recorder.

POTABLE WATER means water that is bacteriologically and chemically safe for human consumption.

SHOCK CHLORINATION means a one-time addition of a disinfectant (bleach) in order to remove bacterial contamination from the water supply.

WATER WELL means any excavation that is drilled, cored, bored, washed, driven, dug, jetted or otherwise constructed when the intended use of such excavation is for the location, diversion, artificial recharge or acquisition of ground water, except monitoring wells.

WELL CAP means an arrangement or device used to establish a watertight gasket at the junction of a well pump or piping with the well casing cover at the upper terminal of the well, the purpose of which is to prevent contaminated water or other material from entering the well.

b) Terms not herein defined shall have the meaning customarily assigned to them, except for those terms defined elsewhere in this ordinance.

DIVISION 2. GENERAL PROVISIONS

Sec. 86-107. Private Water Supply Standards.
All private sources of water, as well as the distribution system of water shall be located, constructed, and maintained in strict conformance with this Division.

Sec. 86-108. Owner's Responsibility.
The owners of each building in which people live, work, or assemble shall provide a potable water supply sufficient in quality, quantity and pressure to adequately serve all fixtures therein.

Sec. 86-109. Building Occupancy.
No person shall occupy or permit occupancy of any building not in compliance with Section 86-108 of this Ordinance.

Sec. 86-110. Maintenance.
The owner of each private water supply system shall maintain all components of that system so that they function property and are in good repair.

Sec. 86-111.Public Water Supplies;When Required.
a) Where a public water supply main is within 200 feet, as measured along a public right-of-way or existing easement, of the property line of the property proposed to be served by a private well, no permit for such a well shall be issued and the property shall connect to the public water supply if water service is desired. Furthermore, no permit shall be

issued for a private well on any property which is already connected to and served by a public water system, except that non-residential properties may be permitted to install a well for non-potable purposes, provided it is approved by the appropriate water utility and the system complies with all applicable cross connection controls and ordinances.

b) The regulations imposed by subsection (a) of this Section shall not apply if, as a condition of connection to a public water supply, the owner of the property will be required to annex or to sign a pre-annexation agreement with any municipality, unless the owner voluntarily wishes to do so, excepting all industrial users.

Sec. 86-112. Individual Service.
Each residential property, business building, or enterprise shall be served by its own separate water well located on the property whereon it is located except where the residence, building, or enterprise is connected to a community or public water supply.

DIVISION 3. ADOPTION OF ILLINOIS WATER WELL CONSTRUCTION CODE AND ILLINOIS WATER WELL PUMP INSTALLATION CODE.

Sec. 86-113. Adoption of State Codes.
The Illinois Water Well Code, 1994, and the Illinois Water Well Pump Installation Code, 1992, as now

enacted or hereafter amended, are adopted and incorporated by reference.

DIVISION 4. PERMIT REQUIREMENTS.

Sec. 86-114. General Provisions.

No person shall construct, modify, or cap a well until a permit for such work has been issued by the Department. Applications for permits shall be in writing on forms provided by the Department and shall be signed by the applicant. Permits are not transferable.

Sec. 86.115. Contractor Requirements.

All well drilling contractors, well pump installation contractors, and other authorized constructors of wells doing business in the County of Winnebago shall be licensed by the State of Illinois.

Sec. 86-116. Permit Fee.

The fee to construct or deepen a well shall be $100.00 and shall be paid to the Department prior to granting of a permit. There shall be no fee for otherwise modifying a well.

Sec. 86-117. Permit Application Requirements.

a) Application for a permit to construct a well shall be accompanied by a site plan drawn to scale and fully dimensioned with specifications as necessary to fully describe the system. The site plan shall indicate the locations of the following (existing or proposed):

(1) Location of the well in relation to two adjacent lot lines.
(2) Lot boundaries.
(3) Private sewage disposal systems or sanitary sewer lines.
(4) Buildings.
(5) Driveways.
(6) Sidewalks, decks and patios.
(7) Private sewage disposal systems and sewer lines on adjoining lots.
(8) Above or below ground swimming pools.

b) Application for a permit to modify a well shall be accompanied by a site plan drawing indicating the following:

(1) Lot boundaries.
(2) Location of the well in relation to two adjacent lot lines.
(3) Potential sources of contamination that may affect the well.

c) The permit application shall contain the following information:

(1) Property address.
(2) Contractor's name, license number and address.
(3) Name and address of property owner.
(4) Public water availability.
(5) Construction method of well (drilled, driven, other).
(6) Estimate of well depth and depth to bedrock.

(7) Type and expected use of well.
(8) Section, Township, Range, & Quarter Sections of well site.

Sec. 86-118. Expiration.
The permit shall be void if construction has not commenced within one year of the date of issuance. Any excavation or installation at the end of one year shall require an additional fee of $100.00. At no time shall any permit fee be returned.

Sec. 86-119. Inspection.
Department personnel shall have access to the property at any reasonable time after a permit application has been filed in order to determine satisfactory compliance with the provisions set forth in this ordinance. Access shall be deemed essential, but not limited, to the following:

1) Any stage of construction or modification of a system.
2) Final inspection.
3) Sampling of private water supply system.

Sec. 86-120. Notification.
The owner or contractor shall give 48 hours advance notice, exclusive of weekends and/or state holidays, to the Department before beginning the construction of a new well or the capping or sealing of an existing well except in emergencies in which case the contractor must provide notification during the next business day. Emergencies are defined as instances where loss of

water is experienced for any reason. No work on the water well shall be done until the notification is given. The owner or contractor shall give the Department as much notice as possible before beginning work to modify an existing water well. No work shall begin until the Department has been notified.

Sec. 86-121. Well Specification Log.
All persons digging, drilling, or driving wells shall maintain a log of the specifications of the constructed well which shall be submitted to the health officer of the county within 30 days of construction of each well.

DIVISION 5. CONSTRUCTION OF WELLS GENERALLY

Sec. 86-122. Location of Well Sites.
All well sites shall be located at a point of high elevation and as far removed from known possible sources of contamination as the general layout of the premises permit. Minimum distance between the well and sources of contamination shall be maintained as follows:

1. Dry wells or Class I injection wells.....200 feet
2. Cesspools.....150 feet
3. Subsurface seepage tile.....100 feet
4. Seepage pits.....100 feet
5. Privy vaults.....75 feet
6. Manure piles.....75 feet
7. Tile sewers and drains.....50 feet

8. Barnyard or animal confinement lots.....50 feet
9. Septic tanks.....50 feet
10. Cast iron sewers having leaded or mechanical joints.....10 feet
11. Potential contamination sources unspecified above must be evaluated for each particular instance and distances arrived at based on the pertinent facts.

Note: These distances listed apply only in clay and loam soils. In gravel and sand formations safe distances will be variable being greater than for clay or loam soils.

Refer to Illinois Water Well Construction Code for applicable minimum distances.

Sec. 86-123. Platforms.
Well platforms shall be of watertight, reinforced concrete placed on an earth fill higher than the natural grade.

Sec. 86-124. Casings.
Well casings shall terminate a minimum of eight (8) inches above the grade of the natural ground surface. Well casings for drilled wells shall be of not less than four (4) inches inside diameter. All well casing must be of new material.

Sec. 86-125. Wells in Basements.

New wells shall not be constructed in basements. An existing well located in a basement shall conform to the following conditions:

a) The casing shall extend a least twelve (12) inches above the basement floor or the highest known flood elevation, whichever is higher.

b) The well casing shall have a well seal which prevents contaminants from entering the well.

c) An approved floor drain or approved sump pump shall be provided.

Sec. 86-126. Wells with Buried Seals.
Existing wells with buried seals shall be acceptable until removal of the seal becomes necessary for any reason. At that time the well must be brought into compliance with this Ordinance or connection made to a community or public water supply as herein provided.

Sec. 86-127. Well Pits.
New wells shall not be constructed in pits. Existing pit installations may be accepted if the following conditions exist:

a) The well pit shall be structurally sound and watertight. The casing shall extend at least twelve (12) inches above the pit floor and have a well seal to prevent contamination from entering the well.

b) A watertight cover must be provided for the well pit.

Sec. 86-128. Pressure Tanks.
For each residential structure a pressure tank shall be installed. For buildings to be used for other than residential purposes, the minimum pressure storage capacity shall be consistent with the proposed use of the building. The pressure storage tank shall be installed in a location which is not subject to flooding and which is convenient for maintenance or replacement.

Sec. 86-129. Pumping Equipment.
A sanitary seal shall be provided for the annular space between the drop pipe and the casing. Pump room floors shall be of impervious construction and shall slope away from the pump pedestal. In every instance the pump base and the well casing, or well opening, shall be at least eight (8) inches above the floor.

Sec. 86-130. Pump Suction Lines.
All buried suction lines shall be enclosed in a pressure discharge line maintained at system pressure.

Sec. 86-131. Water Distribution Lines.
a.) The water supply shall not have a physical connection with any non-potable water supply. On new installations all water lines and sewer lines shall be not less than ten (10) feet apart horizontally and shall be separated by undisturbed earth.

b) Water and sewer lines shall not cross except where such condition cannot be reasonably avoided. At necessary crossings the water line shall be kept at least eighteen (18) inches above the top of the sewer line, while vertical separation shall be maintained at least ten (10) feet from the sewer line on each side of the crossing. The sewer shall be constructed of cast iron pipe with watertight joints for a distance of ten (10) feet from the water line.

Sec. 86-132. Backflow Protection

All plumbing fixtures and other equipment connected to the water supply lines shall be so constructed and installed as to safeguard the water supply from the possibility of contamination through cross connections or back siphoning.

Sec. 86-133. Unsafe Water Supply.

a) If water samples collected from a private water supply indicate the water to be bacteriologically unsafe, as determined by the Department, the supply will not be approved for use.

b) No water that has been condemned as unfit for human consumption after analysis shall be used for human consumption until the water supply has been declared safe by the Health Officer of the County.

Sec. 86-134. Disinfection.

a) Where a chemical injection system is directly connected to a water well system, it shall not permit

direct feeding of disinfectants or other chemicals into the aquifer through the well casing.

b) Disinfection of a source of water will not be accepted as a substitute for good sanitary practice including proper location and construction of water facilities.

Sec. 86-135. Abandonment of Wells.
Abandoned wells, borings, and monitoring wells shall be sealed in accordance with the requirements of the Illinois Department of Public Health. Abandoned water wells shall be sealed by a licensed water well driller. An individual who is not so licensed may seal a well, provided the well is located on land which is owned or leased by such individual for farming purposes or such person's place of abode and provided a request is made to the Department prior to the commencement of sealing indicating how the water well is to be sealed and the materials used. The Department shall approve the request provided the methods and materials are in compliance with State code requirements.

Sec. 86-136. Capping of Wells.
Wells with discontinued use, but intended to be brought back into service, and meeting all other provisions of this code, may be capped for a period not to exceed one year by written agreement with the Health Officer. Capped wells shall have the pump removed and a watertight cap or welded plate placed atop the casing. The casing of a capped well shall be

painted orange as an indication of status. Capped wells not brought into compliance with said agreement shall be properly sealed.

DIVISION 6. WATER QUALITY STANDARDS

Sec. 86-137. General Provisions.

For a private water supply to be deemed safe for use, it shall produce water of a quality consistent with the standards described in this Article. A safe water supply shall be considered that which has been sampled and approved in a manner consistent with the state water well code. Sampling of a shock chlorinated water supply shall be performed no less than ten days after chlorination to assure bacteriological conformance with Section 86-138.

Sec. 86-138. Microbiological Standards.

The following maximum contaminant level for coliform bacteria is applicable to all private water supply systems:

a) Colilert - When utilizing this technique, there shall be no positive indication of enzymatic activity defining the presence of coliform bacteria in the sample.

b) Membrane Filter - When utilizing this technique, there shall be no coliform bacteria present per 100 milliliters in the sample.

c) Fermentation Tube - When utilizing this technique (in either 10 or 100 milliliter standard portions), there shall be no indication of coliform bacteria present in any portion of the sample.

Sec. 86-139. Adoption of Other Water Quality Standards.

In addition to the microbiological standards described in Section 86-138 of this Ordinance, this Ordinance shall adopt, by reference, the water quality standards described in the Federal National Primary Drinking Water Regulations (40 CFR 141 and 142, 1988; 52 Federal Regulations 25690 through 25717, July 8, 1987; and 53 Federal Regulations 25801 through 25111, July 1, 1988) and any subsequent amendments or revisions thereto.

Sec. 86-140. Sampling Point.

Water samples shall be taken at points which are representative of the conditions within the distribution system. For non-potable wells, an easily accessible sampling point shall be provided.

DIVISION 7. ADMINISTRATION

Sec. 86-141. Enforcement.

Violations of this article shall be punishable as provided under Chapter I. Section 1-11 of the Winnebago County Code. The State's attorney may in addition bring action to restrain such action or enjoin the operation of any such persons.

Sec. 86-142. Revocation or Suspension of Permit. The Department shall have the authority to revoke or suspend permits when they are issued in error, or where the provisions of this Ordinance are violated. The reason for the revocation or suspension of a permit shall be posted in writing at the site, or mailed to the applicant at the address provided in the permit application.

Sec. 86-143.Interpretation, Purpose, and Conflict. The provisions of this Article shall be held to be the minimum requirements for the promotion of public health, safety, and general welfare.

a In any case where a provision of this Article is found to be in conflict with a provision of any zoning, building, safety, or health ordinance or code in force in the incorporated areas existing on the effective date of this Article, the provision which establishes the higher standard for the promotion and protection of the health and safety of the people shall prevail.

b. Should any section, clause, or provision of this Article be declared by a court of competent jurisdiction to be invalid, such decision shall not effect the validity of the Article as a whole or any part thereof, other than the part so declared to be invalid.

11/99

Appendix H
Redacted

Appendix H
Redacted

VOC Sample Results
Roscoe Area
(note 999 = sample results not quantified)

feet

number	sample date	name	TCE	DCE	1,1,1 TCA	other	total
			(parts per billion)				
Adele							
[redacted]	02/05/91	[redacted]	1	0	8	0	9
	12/17/93				5		5
	01/10/91		2	0	13	0	15
	12/17/93				7		7
	03/19/91		3	0	15	0	18
	12/17/93				11		11
	01/10/91		5	3	23	1	32
	12/17/93		2		22	3	27
	12/17/93		2		20		22
	12/17/93		6	2	30	4	42
	09/24/91		13	3	39	6	61
	12/17/93		12		22	5	39
	04/04/95	(before)	9	2	15	5	31
	04/04/95	(after)	9	2	16	5	32
	05/22/98		4	1	4	6	15
	02/19/91		27	3	37	7	74
	12/17/93		7		20	4	31
	12/17/93		18		23	11	52
	11/01/93		16	2	20	4	42
	12/17/93		13		16	7	36
	02/05/91		61	4	37	11	113
	03/??/94		23	1	16	12	52
	01/10/91		59	7	47	13	126
	04/23/91		58	6	38	15	117
	04/23/91	(filtered)	0	0	0	0	0
	09/24/91	(filtered)	0	0	0	0	0
	09/24/91	(unfilter)	67	4	47	13	131
	06/09/92	(raw)	36	4	30	12	82
	11/10/92	(raw)	41	2	28	11	82
	11/01/93	(filtered)	0	0	1	0	1
	11/01/93	(unfilter)	31	2	24	6	63
	04/04/95	(before)	18	2	15	11	46
	04/04/95	(after)		2	26	3	31
	04/22/96	(raw)	9	1	10	9	29
	05/22/98		7	1	4	10	22
	01/10/91		60	3	31	10	104
	11/??/93		25		16	8	49
	04/23/91		70	5	29	14	118
	11/??/93		29		21	8	58

39 samples taken on Adele

Balsa Ln

[redacted]	02/01/94						0
	01/10/91		0	0	0	0	0
	11/10/92	[redacted]	2	0	0	0	2
	11/01/93		2	0	0	0	2
	01/31/94		3			1	4
	01/31/94		4				4

[redacted]	01/31/94		1			1
	03/19/91	[redacted]	2	0	0	1	3
	02/01/94		1			1
	04/22/96	[redacted]	1			1
	05/22/98		1			1
	01/22/91		0	0	0	0	0
	02/01/94					0
	05/22/98	[redacted]	1			1
	02/??/94		2			2
	01/31/94		1			1
	03/09/92	[redacted]	5	0	1	1	7
	01/31/94		4			4
	01/22/91	[redacted]	3	0	1	1	5
	02/??/94		2			2
	01/31/94		3			3
	01/15/91	[redacted]	8	0	2	1	11
	02/01/94		3			3
	02/??/94	[redacted]	3			3
	01/22/91		8	0	1	2	11
	02/01/94		3			3
	02/01/94		4			4
	01/15/91	[redacted]	7	0	2	1	10
	01/31/94		3			3
	07/09/91	[redacted]	7	0	1	1	9
	02/02/94		3			3
	02/??/94	[redacted]	4			4

32 samples taken on Balsa Ln

Beecher Dr

[redacted]	12/17/93	[redacted]			4		4
	11/01/93		0	0	4	0	4

2 samples taken on Beecher Dr

Bend River

[redacted]	01/10/91	[redacted]	0	0	0	0	0
	02/01/94				3		3
	02/??/94	[redacted]			3		3
	02/05/91		0	0	1	0	1
	02/??/94				3		3
	01/??/94				3		3
	04/08/99				3	1	4
	02/01/94						0
	05/14/99				3		3
	04/08/99				2		2
	05/14/99						0
	05/14/99						0
	05/14/99						0
	05/14/99						0
	05/14/99						0
	05/14/99						0
	05/14/99						0
	05/14/99						0
	04/04/95	[redacted]					0
	05/14/99						0
	05/14/99						0
	01/22/91	[redacted]	0	0	0	0	0
	02/??/94						0
	01/22/91		0	0	0	0	0

24 samples taken on Bend River

P e Spruce

[redacted]	01/15/91	[redacted]		38	6	30	6	80
[redacted]	11/??/93	[redacted]		23		12	3	38
[redacted]	12/11/90	[redacted]		38	999	25	0	65
[redacted]	12/03/91	[redacted]		43	3	24	5	75
[redacted]	11/??/93	[redacted]		18		11	3	32
[redacted]	12/11/90	[redacted]		75	5	52	11	143
[redacted]	01/10/91	[redacted]		50	4	35	8	97
[redacted]	09/24/91	[redacted]		91	5	47	9	152
[redacted]	11/??/93	[redacted]		38	3	23	9	73
[redacted]	04/04/95	[redacted]	(before)	26	1	12	5	44
[redacted]	04/04/95	[redacted]	(after)	9	1	3	1	14
[redacted]	04/22/96	[redacted]	(filtered)	1				1
[redacted]	04/22/96	[redacted]	(raw)	22	1	11	5	39
[redacted]	12/11/90	[redacted]		38	2	25	4	69
[redacted]	11/??/93	[redacted]		17		10	3	30
[redacted]	12/11/90	[redacted]		40	2	27	8	77
[redacted]	11/??/93	[redacted]		20		15	3	38
[redacted]	12/11/90	[redacted]		69	5	40	10	124
[redacted]	11/10/92	[redacted]	(raw)	60	2	24	7	93
[redacted]	11/10/92	[redacted]	(filtered)	17	0	7	2	26
[redacted]	11/??/93	[redacted]		36	2	20	9	67
[redacted]	01/10/91	[redacted]		76	5	58	10	149
[redacted]	09/24/91	[redacted]		86	6	43	10	145
[redacted]	11/??/93	[redacted]		35		24	5	64
[redacted]	12/11/90	[redacted]		63	2	34	8	107
[redacted]	08/04/92	[redacted]	(filtered)	0	0	1	3	4
[redacted]	11/??/93	[redacted]		27	1	15	6	49
[redacted]	05/22/98	[redacted]		13	1	4	5	23
[redacted]	12/11/90	[redacted]		52	3	31	6	92
[redacted]	03/19/91	[redacted]		49	4	35	8	96
[redacted]	07/09/91	[redacted]	(after)	0	0	0	1	1
[redacted]	07/09/91	[redacted]	(before)	56	4	29	7	96
[redacted]	11/??/93	[redacted]		23		14	3	40
[redacted]	12/11/90	[redacted]		50	2	25	5	82
[redacted]	06/04/91	[redacted]		54	4	27	7	92
[redacted]	06/04/91	[redacted]	(drink filter)	0	0	0	0	0
[redacted]	06/04/91	[redacted]	(w.h. filter)	1	0	0	0	1
[redacted]	11/??/93	[redacted]		27		18	6	51
[redacted]	12/11/90	[redacted]		20	1	19	7	47
[redacted]	11/??/93	[redacted]		20		13	3	36
[redacted]	12/11/90	[redacted]		54	2	27	7	90
[redacted]	11/??/93	[redacted]		24	1	12	6	43
[redacted]	12/11/90	[redacted]		52	3	28	6	89
[redacted]	11/01/93	[redacted]	(filtered)	0	0	0	0	0
[redacted]	11/01/93	[redacted]	(unfiltered)	29	1	28	4	62
[redacted]	11/??/93	[redacted]		23			4	27
[redacted]	12/11/90	[redacted]		43	999	15	5	65
[redacted]	11/??/93	[redacted]		19		9	4	32
[redacted]	01/10/91	[redacted]		76	3	40	9	128
[redacted]	11/??/93	[redacted]		31			5	36
[redacted]	12/11/90	[redacted]		55	3	28	8	94
[redacted]	03/09/92	[redacted]	(sink f.)	5	0	7	1	13
[redacted]	03/09/92	[redacted]	(raw sample)	47	2	28	7	84
[redacted]	03/09/92	[redacted]	(W. house f)	17	1	17	4	39
[redacted]	01/??/94	[redacted]		27	1	14	6	48

[redacted]	12/21/93	[redacted]	34		13	6	53

56 samples taken on Blue Spruce

Buggywhip

[redacted]	01/??/94	[redacted]	1		7		8
[redacted]	01/??/94	[redacted]	1		5		6
[redacted]	04/22/96	[redacted]	2	1	7		10
[redacted]	01/??/94	[redacted]	12	1	12	2	27
[redacted]	03/??/94	[redacted]	27	2	26	6	61
[redacted]	01/15/91	[redacted]	19	3	23	6	51
[redacted]	01/??/94	[redacted]	38	3	25	8	74
[redacted]	03/19/91	[redacted]	13	2	17	5	37
[redacted]	11/??/93	[redacted]	23	3	22	6	54
[redacted]	01/10/91	[redacted]	12	2	16	5	35
[redacted]	01/??/94	[redacted]	31	2	20	6	59
[redacted]	11/??/93	[redacted]	28	3	21	7	59
[redacted]	06/04/91	[redacted]	38	5	32	10	85
[redacted]	11/??/93	[redacted]	30	2	17	7	56
[redacted]	07/09/91	[redacted]	25	2	13	6	46
[redacted]	11/??/93	[redacted]	19		9	3	31
[redacted]	02/05/91	[redacted]	19	0	12	6	37
[redacted]	11/??/93	[redacted]	22	1	11	5	39
[redacted]	05/22/98	[redacted]	11	1	3	2	17

19 samples taken on Buggywhip

Burnside Ln

[redacted]	01/22/91	[redacted]	0	0	0	0	0

1 samples taken on Burnside Ln

Cedarbrook

[redacted]	02/02/94						0
[redacted]	01/10/91	[redacted]	0	0	0	0	0
[redacted]	01/10/91	[redacted]	0	0	0	0	0
[redacted]	01/10/91	[redacted]	0	0	0	0	0

4 samples taken on Cedarbrook

DeGroff

[redacted]	07/09/91	[redacted]	9	0	0	0	9
[redacted]	07/09/91	[redacted]	1	0	0	0	1

2 samples taken on DeGroff

Doreen

[redacted]	11/??/93	[redacted]					0

1 samples taken on Doreen

Edgemere Ter

[redacted]	11/01/93	[redacted]	1	0	0	0	1

1 samples taken on Edgemere Ter

Elevator

[redacted]	01/15/91	[redacted]	0	0	0	0	0

1 samples taken on Elevator

Frances Ln

[redacted]	02/19/91	[redacted]	29	1	13	5	48
[redacted]	12/17/93	[redacted]	22		9	8	39
[redacted]	02/05/91	[redacted]	44	3	18	7	72
[redacted]	11/??/93	[redacted]	18		13	4	35

[redacted]	01/10/91	[redacted]	8	0	2	0	10
	12/17/93		3				3
	12/03/91		18	0	6	3	27
	03/??/94		9		3	3	15
	12/17/93		6		2	2	10
	01/10/91		8	0	2	0	10
	12/03/91		7	0	1	0	8
	12/17/93		3				3

12 samples taken on Frances Ln

Glouster

[redacted]	04/04/95	[redacted]					0

1 samples taken on Glouster

Grainery

[redacted]	02/01/94						0
	02/??/94	[redacted]	1				1
	03/??/94		2				2
	09/24/91		1	0	0	1	2
	02/01/94		3		2	1	6
	01/31/94		4			1	5
	09/24/91	[redacted]	10	0	2	3	15
	01/31/94		7			2	9
	03/??/94	[redacted]	10		3	3	16
	01/10/91		4	0	5	3	12
	03/??/94		11		6	1	18

11 samples taken on Grainery

F bft

[redacted]	02/05/91	[redacted]	22	4	28	3	57
	01/31/94		23	2	25	5	55
	02/01/94		4	1	9	2	16
	02/01/94		19	1	18	4	42
	01/10/91	[redacted]	11	2	21	2	36
	02/01/94		11	1	16	3	31
	01/15/91	[redacted]	39	7	35	17	98
	11/??/93		29	3	19	2	53
	02/05/91		33	2	24	6	65
	11/??/93		24	2	14	5	45
	03/19/91		33	4	31	6	74
	02/08/93	(new owner)	38	2	27	6	73
	11/??/93		25	2	17	6	50
	02/19/91		12	1	18	2	33
	03/??/94		11	1	16	3	31
	02/19/91		31	4	28	3	66
	02/01/94		22	2	17	4	45
	02/19/91	[redacted]	11	2	17	2	32
	01/31/94		13	2	18	3	36
	04/23/91		25	4	26	5	60
	03/??/94		17	1	16	4	38
	02/05/91		12	1	16	2	31
	01/31/94		11	1	12	3	27
	02/19/91	[redacted]	26	3	28	4	61
	01/??/94		20	2	19	3	44
	01/10/91		4	0	8	0	12
	02/01/94		6	1	12	2	21
	02/01/94		10	1	11	2	24
	02/05/91	[redacted]	3	0	8	0	11

[redacted]	02/01/94		4	1	9	1	15
	02/01/94		12	1	14	2	29

31 samples taken on Hayloft

Honey Locust

[redacted]	01/15/91	[redacted]	13	0	7	3	23
	11/??/93		9		4	1	14
	01/22/91		10	0	4	2	16
	11/??/93						0
	01/15/91		11	0	5	3	19
	02/??/94		7		2		9
	03/??/94		4				4
	01/10/91		8	0	3	1	12
	06/09/92		12	0	4	2	18
	02/??/94		5		2		7

10 samples taken on Honey Locust

Hononegah

[redacted]	01/??/94	[redacted]			5	2	7
	01/??/94		1		9		10
	12/17/93				8		8
	12/17/93				9	2	11
	12/17/93				11	2	13
	02/19/91		10	1	23	3	37
	12/17/93		4		19		23
	01/22/91		11	2	16	2	31
	12/21/93		7		21		28
	12/17/93	(tenant)	5		20	2	27
	12/17/93		3		13		16
	02/19/91		31	3	33	2	69
	12/17/93		20	5	33	6	64
	09/24/91		55	5	34	9	103
	11/??/93		24	1	29	8	62
	02/19/91		67	4	37	11	119
	08/04/92		40	2	23	11	76
	11/??/93		27		20	8	55
	01/10/91		55	3	28	8	94
	08/04/92		36	2	17	9	64
	11/??/93		23		12	5	40
	04/22/96		12		6	8	26
	05/22/98		7	1	2	5	15
	12/11/90		12	0	4	1	17
	02/01/94		5		1	1	7
	01/10/91		0	0	0	0	0

26 samples taken on Hononegah

Hwy 251

[redacted]	07/09/91	[redacted]	0	0	0	0	0
	06/07/94						0
	03/09/92		0	0	0	0	0
	03/09/92		0	0	0	0	0

4 samples taken on Hwy 251

Jennifer

[redacted]	01/10/91	[redacted]	0	0	0	0	0
	02/??/94						0

2 samples taken on Jennifer

Joan

[redacted]	01/22/91	[redacted]	0	0	0	0	0
	01/??/94						0
	01/??/94				1		1
	04/08/99						0
	02/05/91		0	0	1	0	1
	01/??/94				2		2
	04/08/99						0
	01/15/91		0	0	1	0	1
	01/??/94				2		2

9 samples taken on Joan

Lee Ash Ct

[redacted]	02/??/94	[redacted]	1				1
	02/??/94						0
	04/08/99						0
	04/08/99						0
	04/08/99						0

5 samples taken on Lee Ash Ct

M[redacted]hew Ave

[redacted]	04/22/91	[redacted]	0	0	3	0	3
	12/17/93						0
	02/05/91		2	0	18	0	20
	12/17/93				10		10
	01/10/91		4	3	37	1	45
	12/17/93				15		15
	12/17/93		6		21	4	31
	12/11/90		22	3	34	7	66
	12/17/93		6		18	4	28
	12/17/93		10		21	7	38
	01/10/91		37	6	47	10	100
	12/21/93		10		17	6	33
	12/17/93		22		18	20	60
	03/09/92		26	3	42	9	80
	12/17/93		15		21	9	45
	01/??/94		15	1	21	10	47
	04/22/96		5		7	8	20
	05/22/98		5	1	5	8	19
	02/19/91		62	2	27	12	103
	11/??/93		25		14	8	47
	04/22/96	(n-well)	13		6	11	30
	05/22/98		8	1	4	9	22
	05/16/91		33	2	30	3	68
	12/03/91		56	4	35	18	113
	11/??/93		20		22	11	53
	12/11/90		34	1	15	7	57
	06/04/91		39	2	19	6	66
	11/??/93		17		9	7	33

28 samples taken on Mathew Ave

McCurry

[redacted]	01/10/91	[redacted]	0	0	0	0	0
	03/09/92		0	0	0	0	0

2 samples taken on McCurry

McCurry & 251

	01/10/91	[redacted]	3	0	0	0	3

1 samples taken on McCurry & 251

Metric

[redacted]	06/07/94					0
[redacted]	06/07/94					0
[redacted]	06/07/94					0

3 samples taken on Metric

Metric Rd

[redacted]	06/??/94	[redacted]	0	0	0	0	0

1 samples taken on Metric Rd

Oatseed

[redacted]	02/19/91	[redacted]	0	0	4	0	4
[redacted]	03/??/94	[redacted]	1		6	1	8
[redacted]	02/??/94	[redacted]	2		6	1	9

3 samples taken on Oatseed

Pfister Ln

[redacted]	02/??/94	[redacted]	5			5
[redacted]	04/22/91	[redacted]	8	0	1	2	11
[redacted]	03/??/94	[redacted]	4			4
[redacted]	01/22/91	[redacted]	9	0	2	2	13
[redacted]	02/??/94	[redacted]	4			4
[redacted]	01/22/91	[redacted]	7	0	1	2	10
[redacted]	11/02/93	[redacted]	4	0	1	0	5
[redacted]	01/15/91	[redacted]	3	0	1	1	5
[redacted]	02/??/94	[redacted]	4			3	7
[redacted]	01/15/91	[redacted]	5	0	1	2	8
[redacted]	02/??/94	[redacted]	3				3

11 samples taken on Pfister Ln

Rae Ann

[redacted]	01/22/91	[redacted]	0	0	0	0	0

1 samples taken on Rae Ann

Rockton Rd

[redacted]	06/??/94	[redacted]	0	0	0	0	0
[redacted]	06/??/94	[redacted]	0	0	0	0	0

2 samples taken on Rockton Rd

Rockton Rd East

[redacted]	01/10/91	[redacted]	0	0	0	0	0
[redacted]	07/09/91	[redacted]	0	0	0	0	0
[redacted]	07/09/91	[redacted]	0	0	0	0	0
[redacted]	12/17/93	[redacted]			24	15	39
[redacted]	03/??/94	[redacted]			19	5	24
[redacted]	06/??/94	[redacted]	0	0	0	0	0
[redacted]	12/17/93	[redacted]					0

7 samples taken on Rockton Rd East

Rollingsford

[redacted]	01/22/91	[redacted]	0	0	0	0	0
[redacted]	12/11/90	[redacted]	0	0	0	0	0
[redacted]	01/22/91	[redacted]	0	0	0	0	0
[redacted]	01/15/91	[redacted]	0	0	0	0	0
[redacted]	01/22/91	[redacted]	0	0	0	0	0

5 samples taken on Rollingsford

Stamford

[redacted]	01/10/91	[redacted]	0	0	0	0	0

1 samples taken on Stamford

Stanford Ct

[redacted]	04/04/95	[redacted]					0

1 samples taken on Stanford Ct

Straw Ln

[redacted]	01/??/94	[redacted]			9		9
[redacted]	01/??/94	[redacted]			5	1	6
[redacted]	02/05/91	[redacted]	0	0	3	0	3
[redacted]	03/??/94	[redacted]			3		3
[redacted]	01/15/91	[redacted]	1	0	5	0	6
[redacted]	01/??/94	[redacted]	2	1	8		11
[redacted]	01/15/91	[redacted]	1	0	4	0	5
[redacted]	03/??/94	[redacted]	2		9	1	12
[redacted]	02/19/91	[redacted]	2	0	5	0	7
[redacted]	01/??/94	[redacted]	3		14	1	18
[redacted]	02/19/91	[redacted]	1	0	4	0	5
[redacted]	12/29/93	[redacted]	2	1	11		14
[redacted]	12/11/90	[redacted]	8	1	14	1	24
[redacted]	01/??/94	[redacted]	12	2	30	4	48
[redacted]	02/05/91	[redacted]	16	2	20	1	39
[redacted]	01/??/94	[redacted]	5	1	20	2	28
[redacted]	03/19/91	[redacted]	13	2	19	2	36
[redacted]	01/??/94	[redacted]	10		11	1	22
[redacted]	02/19/91	[redacted]	37	2	25	4	68
[redacted]	11/??/93	[redacted]	22	1	13	5	41
[redacted]	01/15/91	[redacted]	37	2	22	6	67
[redacted]	11/??/93	[redacted]	18	1	10	14	43
[redacted]	01/15/91	[redacted]	55	0	36	9	100
[redacted]	11/??/93	[redacted]	31	2	22	6	61
[redacted]	01/22/91	[redacted]	23	0	9	4	36
[redacted]	01/??/94	[redacted]	11		5	1	17
[redacted]	01/10/91	[redacted]	14	0	4	0	18
[redacted]	01/??/94	[redacted]	6		2	1	9
[redacted]	01/15/91	[redacted]	8	0	2	2	12
[redacted]	12/29/93	[redacted]	3		1		4
[redacted]	01/15/91	[redacted]	10	0	2	1	13
[redacted]	01/??/94	[redacted]	3		1		4
[redacted]	01/??/94	[redacted]	4		1		5
[redacted]	02/05/91	[redacted]	6	0	1	1	8
[redacted]	01/??/94	[redacted]	2				2
[redacted]	12/11/90	[redacted]	3	0	0	0	3
[redacted]	03/??/94	[redacted]	1				1
[redacted]	04/08/99	[redacted]					0
[redacted]	01/??/94	[redacted]	1				1
[redacted]	01/??/94	[redacted]					0
[redacted]	04/08/99	[redacted]					0
[redacted]	02/05/91	[redacted]	0	0	0	0	0
[redacted]	01/22/91	[redacted]	0	0	0	0	0
[redacted]	12/11/90	[redacted]	0	0	0	0	0
[redacted]	04/08/99	[redacted]					0
[redacted]	01/10/91	[redacted]	0	0	0	0	0

46 samples taken on Straw Ln

Tanawingo

[redacted]	09/24/91	[redacted]	0	0	0	0	0
	02/??/94		1				1
	05/22/98		1		1		2
	01/10/91		0	0	0	0	0
	02/??/94		3				3
	02/??/94						0
	03/??/94		2				2
	02/??/94		4				4
	12/03/91		5	0	1	2	8
	11/??/93						0
	02/??/94		11			3	14
	02/05/91		9	0	5	6	20
	11/??/93		11		4	3	18
	02/??/94		17	1	10	3	31
	03/09/92		6	1	15	3	25
	03/??/94		12	1	14	2	29

16 samples taken on Tanawingo

Tresemer

[redacted]	01/22/91	[redacted]	0	0	0	0	0
	11/01/93		0	0	0	0	0
	11/01/93		0	0	1	0	1
	01/??/94				5		5
	12/29/93				4		4
	01/31/94				4		4
	01/??/94				4		4
	01/??/94				4		4
	01/??/94				4		4
	01/??/94				5		5
	01/??/94				8		8
	01/??/94				6		6

12 samples taken on Tresemer

Tresemer Circle

[redacted]	12/11/90	[redacted]	0	0	0	0	0

1 samples taken on Tresemer Circle

Valentine Ct

[redacted]	04/08/99						0
	01/22/91		0	0	0	0	0
	02/??/94						0
	02/??/94						0
	04/08/99						0
	04/08/99						0
	03/??/94						0
	04/08/99						0
	04/08/99						0

9 samples taken on Valentine Ct

Valerie

[redacted]	02/05/91	[redacted]	0	0	0	0	0
	02/05/91		0	0	0	0	0
	11/??/93						0
	06/04/91		0	0	0	0	0
	09/24/91		0	0	0	0	0
	05/22/98						0
	01/??/94		1		9		10

[redacted]	01/??/94	[redacted]			5	5
	01/??/94		2	1	10	13
	01/??/94		1		8	9
	12/11/90		5	0	10	0	15
	01/??/94		5	2	21	2	30

12 samples taken on Valerie

Wagon Ln

[redacted]	01/10/91	[redacted]		14	0	11	5	30
	11/??/93			18		10	5	33
	01/10/91			18	3	29	3	53
	01/10/91			17	3	27	3	50
	11/??/93			34	4	37	7	82
	02/05/91			20	2	17	8	47
	02/??/94			31	1	16	6	54
	03/??/94			28	1	16	6	51
	11/10/92			25	3	28	7	63
	02/??/94			25	2	19	2	48
	03/??/94			39	3	29	7	78
	03/19/91			28	5	38	6	77
	11/??/93			40	4	33	8	85
	01/15/91			34	6	42	3	85
	11/??/93			35	4	34	7	80
	02/19/91			14	2	24	3	43
	03/09/92			0	0	6	1	7
	06/09/92		(wh filter)	0	0	2	0	2
	02/??/94			24	3	29	5	61
	04/04/95		(after)		2	17	3	22
	04/04/95		(before)	22	4	24	3	53
	04/22/96		(filtered)	1	1	19	4	25
	05/22/98			18	2	16	3	39
	02/05/91			2	0	9	0	11
	02/??/94			5	-1	11	2	19
	02/19/91			0	0	1	0	1
	02/??/94					3		3
	01/??/94					4		4
	02/19/91			0	0	0	0	0
	02/??/94					2		2
	01/??/94					2		2
	02/??/94					2		2
	03/??/94					2		2
	01/22/91			0	0	1	0	1
	03/??/94							0
	03/??/94							0
	03/??/94							0
	02/??/94							0
	01/??/94					2		2
	01/??/94					2		2
	01/??/94					4		4
	01/??/94					4		4
	03/19/91			0	0	1	0	1
	03/??/94					3		3
	03/??/94						1	1
	01/??/94					3		3
	12/11/90			0	0	2	0	2
	01/??/94					4		4
	01/??/94			1		5		6
	01/??/94					3		3

[redacted]	03/??/94	[redacted]	5		4		9
[redacted]	01/??/94	[redacted]	1		5		6
[redacted]	03/??/94	[redacted]			4		4
[redacted]	01/??/94	[redacted]			2	1	3
[redacted]	01/15/91	[redacted]	0	0	3	0	3
[redacted]	01/??/94	[redacted]	1		8		9
[redacted]	02/19/91	[redacted]	0	0	2	0	2
[redacted]	01/??/94	[redacted]			3	1	4
[redacted]	02/??/94	[redacted]	1		6		7
[redacted]	01/??/94	[redacted]	3	1	9		13
[redacted]	01/??/94	[redacted]			6		6
[redacted]	01/??/94	[redacted]	4	1	9		14
[redacted]	01/??/94	[redacted]	2		9		11
[redacted]	11/01/93	[redacted]	5	1	14	1	21
[redacted]	03/19/91	[redacted]	2	0	6	1	9
[redacted]	01/??/94	[redacted]	3	1	10		14
[redacted]	02/05/91	[redacted]	2	0	5	0	7
[redacted]	01/??/94	[redacted]	2	1	12		15
[redacted]	01/??/94	[redacted]	6	2	21	1	30
[redacted]	01/??/94	[redacted]	6	2	26	1	35
[redacted]	01/??/94	[redacted]	7	1	19	2	29
[redacted]	01/??/94	[redacted]	8	2	20	2	32
[redacted]	01/??/94	[redacted]	6	2	28	1	37
[redacted]	12/11/90	[redacted]	15	999	22	0	37
[redacted]	01/??/94	[redacted]	15	2	34	4	55
[redacted]	12/21/93	[redacted]	30	2	32	8	72
[redacted]	02/19/91	[redacted]	37	3	35	6	81
[redacted]	01/??/94	[redacted]	25	2	32	12	71

78 samples taken on Wagon Ln

Wagon Ln Ct

[redacted]	02/05/91	[redacted]	3	0	7	0	10
[redacted]	12/11/90	[redacted]	3	0	6	0	9

2 samples taken on Wagon Ln Ct

Wallace Dr

[redacted]	11/10/92	[redacted]	0	0	0	0	0

1 samples taken on Wallace Dr

Watham

[redacted]	01/10/91	[redacted]	0	0	0	0	0

1 samples taken on Watham

Winchester

[redacted]	01/10/91	[redacted]	0	0	0	0	0
[redacted]	01/10/91	[redacted]	0	0	0	0	0
[redacted]	02/05/91	[redacted]	1	0	0	0	1
[redacted]	04/08/99						0
[redacted]	01/22/91	[redacted]	0	0	0	0	0

5 samples taken on Winchester

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542 total samples

TCE = trichloroethlyne
1,1,1-TCA = 1,1,1-trichloroethane
DCE = 1,1-dichloroethene

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APPPENDIX H
Table H-1
Discrepancies Identified in the Illinois Department of Public Health Data inventory
Evergreen Manor Site
Roscoe, Illinois

Address	Discrepancy
Edgemere Terrace	parcel information not available
Highway 251	could not be located
Highway 251	could not be located
Highway 251	could not be located
Lee Ash Court	could not be located
Straw Lane	could not be located
Valentine Court	could not be located
Valentine Court	could not be located
Wagon Lane	could not be located

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Appendix I
Redacted

Table 5-1
Groundwater Analytical Results - CPT - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	CPT-01-01	CPT-01-02	CPT-01-03	CPT-01-04	CPT-01-05	CPT-01-06	CPT-01-07	CPT-01-08
Sample Number:	---	---	---	---	---	---	---	---
Sample Date:	5/25/2000	5/25/2000	5/25/2000	5/25/2000	5/25/2000	5/25/2000	5/25/2000	5/25/2000
Laboratory:	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Sample Screen Depth (ft below ground):	99	89	79	69	59	49	39	29
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter:								
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoromethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	15 B	2 UJ
Carbon Disulfide	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U
Cis-1,2-Dichloroethene	4 U	2 J	1 J	1 J	1 J	1 J	4 U	4 U
Methyl tert-Butyl Ether	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Carbon Tetrachloride	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1,1-Trichloroethane	2 U	1 J	1 J	1 J	1 J	2 U	1 J	2 U
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	2 J	3 J	4 J	4 J	3 J	4 J	3 J	2 J
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	0.7 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m-&/or p-Xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
o-xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	---	---	---	---	---	---	---	---
Styrene	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
1,1,2,2-Tetrachloroethane	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	---	---	---	---	---	---	---	---
1,2-Dibromo-3-chloropropane	---	---	---	---	---	---	---	---
Bromochloromethane	---	---	---	---	---	---	---	---

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Table 5-1
Groundwater Analytical Results - CPT - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	CPT-02-01	CPT02-01	CPT-02-02	CPT-02-03	CPT02-03	CPT-02-04	CPT-02-05	CPT-02-06
Sample Number:	—	EABX3	—	—	EABX4	—	—	—
Sample Date:	6/2/2000	6/2/2000	6/2/2000	6/2/2000	6/2/2000	6/2/2000	6/2/2000	6/2/2000
Laboratory:	ESAT	MitKem	ESAT	ESAT	MitKem	ESAT	ESAT	ESAT
Sample Screen Depth (ft below ground):	28	28	34	42	42	51	68	78
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter:								
Dichlorodifluoromethane	1 U	—	1 U	1 U	—	1 U	1 U	1 U
chloromethane	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Trichlorofluoromethane	1 U	—	1 U	1 U	—	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoromethane	2 UJ	—	2 UJ	2 UJ	—	2 UJ	2 UJ	2 UJ
1,1-Dichloroethene	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Acetone	2 UJ	5 U	2 UJ	55 J	470	2 UJ	2 UJ	2 UJ
Carbon Disulfide	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Methylene Chloride	1 U	2 U	1 U	1 U	10 U	1 U	1 U	1 U
Methyl Acetate	1 UJ	—	1 UJ	1 UJ	—	1 UJ	1 UJ	1 UJ
Trans-1,2-Dichloroethene	2 U	1 U	2 U	2 U	5 U	2 U	2 U	2 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
2-Butanone	11 UJ	5 U	11 UJ	11 UJ	25 U	11 UJ	11 UJ	11 UJ
Cis-1,2-Dichloroethene	4 U	1 U	4 U	4 U	5 U	4 U	4 U	4 U
Methyl tert-Butyl Ether	1 UJ	—	1 UJ	1 UJ	—	1 UJ	1 UJ	1 UJ
1,2-Dichloroethane	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Chloroform	3 U	1 U	3 U	3 U	5 U	3 U	3 U	3 U
Carbon Tetrachloride	2 U	1 U	2 U	2 U	5 U	2 U	2 U	2 U
1,1,1-Trichloroethane	2 U	1 U	2 U	2 U	5 U	2 U	2 U	2 U
Benzene	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U
Toluene	0.5 J	0.5 J	0.6 J	0.7 J	5 U	0.5 J	1 J	1 J
Tetrachloroethene	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
2-Hexanone	5 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
m-&/or p-Xylene	1 U	—	0.5 J	1 U	—	1 U	1 U	1 U
o-xylene	1 U	—	1 U	1 U	—	1 U	1 U	1 U
Xylenes (total)	—	0.6 J	—	—	5 U	—	—	—
Styrene	3 UJ	1 U	3 UJ	3 UJ	5 U	3 UJ	3 UJ	3 UJ
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	—	1 U	—	—	5 U	—	—	—
1,2-Dibromo-3-chloropropane	—	1 R	—	—	5 R	—	—	—
Bromochloromethane	—	1 U	—	—	5 U	—	—	—

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Table 5-1
Groundwater Analytical Results - CPT - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	CPT-02-07	CPT-03-01	CPT-03-02	CPT-03-02DP	CPT-03-03	CPT-03-04	CPT-03-05	CPT-03-06
Sample Number:	---	---	---	---	---	---	---	---
Sample Date:	6/2/2000	5/26/2000	5/26/2000	5/26/2000	5/26/2000	5/26/2000	5/26/2000	6/2/2000
Laboratory:	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Sample Screen Depth (ft below ground):	84	29	42	42	54		84	92
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter:								
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoromethane	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	2 UJ	20 B	32 B	19 B	20 B	25 B	9 J	2 UJ
Carbon Disulfide	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	1 U	1 U	1 U	1 U	1 U	1 U	0.5 J	1 U
Methyl Acetate	1 UJ	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ
Trans-1,2-Dichloroethene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	11 UJ	11 U	11 U	11 U	11 U	11 U	11 U	11 UJ
Cis-1,2-Dichloroethene	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Methyl tert-Butyl Ether	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Carbon Tetrachloride	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1,1-Trichloroethane	2 U	2 U	2 U	2 U	1 J	2 J	2 U	0.9 J
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	1 U	0.8 J	1 J	0.8 J	0.6 J	0.8 J	1 J	2 J
Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m-&/or p-Xylene	0.6 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
o-xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	---	---	---	---	---	---	---	---
Styrene	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	---	---	---	---	---	---	---	---
1,2-Dibromo-3-chloropropane	---	---	---	---	---	---	---	---
Bromochloromethane	---	---	---	---	---	---	---	---

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Table 5-1
Groundwater Analytical Results - CPT - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	CPT03-06	CPT-03-07	CPT-04-01	CPT-04-02	CPT-04-02DUP	CPT-04-02	CPT04-02DP	CPT-04-03
Sample Number:	EABX5	—	—	—	—	EABW5	EABW6	—
Sample Date:	6/2/2000	6/2/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000
Laboratory:	MKKem	ESAT	ESAT	ESAT	ESAT	MKKem	MKKem	ESAT
Sample Screen Depth (ft below ground):	92	102	32	46	46	46	46	56
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter:								
Dichlorodifluoromethane	—	1 U	1 U	1 U	1 U	—	—	1 U
chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	—	1 U	1 U	1 U	1 U	—	—	1 U
1,1,2-Trichloro-1,2,2-trifluoromethane	—	2 UJ	2 UJ	2 UJ	2 UJ	—	—	2 UJ
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	5 U	2 UJ	2 U	10 B	2 U	5 U	5 U	2 U
Carbon Disulfide	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	2 U	1 U	1 U	1 U	1 U	2 U	2 U	1 U
Methyl Acetate	—	1 UJ	1 UJ	1 UJ	1 UJ	—	—	1 UJ
Trans-1,2-Dichloroethene	1 U	2 U	2 U	2 U	2 U	1 U	1 U	2 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	5 U	11 UJ	11 U	11 U	11 U	5 U	5 U	11 U
Cis-1,2-Dichloroethene	1 U	4 U	4 U	4 U	4 U	1 U	1 U	4 U
Methyl tert-Butyl Ether	—	1 UJ	1 U	1 U	1 U	—	—	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	1 U	3 U	3 U	3 U	3 U	1 U	1 U	3 U
Carbon Tetrachloride	1 U	2 U	2 U	2 U	2 U	1 U	1 U	2 U
1,1,1-Trichloroethane	0.9 J	0.8 J	2 U	2 U	2 U	1 U	1 U	2 U
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	2	2 J	1 J	0.8 J	0.9 J	0.6 J	0.8 J	0.8 J
Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m-&/or p-Xylene	—	1 U	1 U	1 U	1 U	—	—	1 U
o-xylene	—	1 U	1 U	1 U	1 U	—	—	1 U
Xylenes (total)	1 U	—	—	—	—	1 U	1 U	—
Styrene	1 U	3 UJ	3 U	3 U	3 U	1 U	1 U	3 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	1 U	—	—	—	—	1 U	1 U	—
1,2-Dibromo-3-chloropropane	1 R	—	—	—	—	1 R	1 R	—
Bromochloromethane	1 U	—	—	—	—	1 U	1 U	—

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Table 5-1
Groundwater Analytical Results - CPT - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	CPT-04-04	CPT-04-05	CPT-04-06	CPT-04-07	CPT-05-01	CPT-05-02	CPT-05-03	CPT-05-04
Sample Number:	—	—	—	—	—	—	—	—
Sample Date:	5/29/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000	5/29/2000
Laboratory:	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Sample Screen Depth (ft below ground):	71	78	84	93	35	43	51	57
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter:								
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoromethane	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	2 U	2 U	8 B	9 B	2 U	2 U	2 U	2 U
Carbon Disulfide	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Trans-1,2-Dichloroethene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U
Cis-1,2-Dichloroethene	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Methyl tert-Butyl Ether	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Carbon Tetrachloride	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1,1-Trichloroethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	0.7 J	1 J	0.8 J	1 J	1 J	1 J	1 J	1 J
Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m-&/or p-Xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
o-xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	—	—	—	—	—	—	—	—
Styrene	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	—	—	—	—	—	—	—	—
1,2-Dibromo-3-chloropropane	—	—	—	—	—	—	—	—
Bromochloromethane	—	—	—	—	—	—	—	—

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Table 5-1
Groundwater Analytical Results - CPT - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	CPT-05-05	CPT-05-06DUP	CPT-05-06	CPT-06-07	CPT-06-01	CPT-06-02	CPT-06-03	CPT-06-04
Sample Number:	---	---	---	---	---	---	---	---
Sample Date:	5/30/2000	5/30/2000	5/30/2000	5/30/2000	6/1/2000	6/1/2000	6/1/2000	6/1/2000
Laboratory:	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Sample Screen Depth (ft below ground):	69.5	69.5	78	87	35	42	53	62
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter:								
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoromethane	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	2 U	2 U	100 J	2 U	2 U	53 J	11 J	7 J
Carbon Disulfide	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Trans-1,2-Dichloroethene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	11 U	11 U	16 J	11 U	11 U	11 U	11 U	11 U
Cis-1,2-Dichloroethene	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Methyl tert-Butyl Ether	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Carbon Tetrachloride	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1,1-Trichloroethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	1 J	0.6 J	0.8 J	1 J	0.6 J	0.8 J	0.8 J	1 J
Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m-&/or p-Xylene	1 U	1 U	1 U	1 U	0.7 J	1 U	1 U	1 U
o-xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	---	---	---	---	---	---	---	---
Styrene	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 UJ	3 UJ
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	---	---	---	---	---	---	---	---
1,2-Dibromo-3-chloropropane	---	---	---	---	---	---	---	---
Bromochloromethane	---	---	---	---	---	---	---	---

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Table 5-1
Groundwater Analytical Results - CPT - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	CPT-06-05	CPT-06-06	CPT06-06	CPT-06-07	CPT-09-01	CPT-09-02	CPT-09-03	CPT-09-04
Sample Number:	—	—	EABW9	—	—	—	—	—
Sample Date:	6/1/2000	6/1/2000	6/1/2000	6/1/2000	5/30/2000	5/30/2000	5/30/2000	5/30/2000
Laboratory:	ESAT	ESAT	MKKem	ESAT	ESAT	ESAT	ESAT	ESAT
Sample Screen Depth (ft below ground):	74	85	85	92	35	45	55	68
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter:								
Dichlorodifluoromethane	1 U	1 U	—	1 U	1 U	1 U	1 U	1 U
chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	1 U	1 U	—	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoromethane	2 UJ	2 UJ	—	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	11 J	2 U	7 U	5 J	2 U	2 U	2 U	2 U
Carbon Disulfide	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	1 UJ	1 UJ	—	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Trans-1,2-Dichloroethene	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	11 U	11 U	5 U	11 U	11 U	11 U	11 U	11 U
Cis-1,2-Dichloroethene	4 U	4 U	1 U	4 U	4 U	4 U	4 U	4 U
Methyl tert-Butyl Ether	1 U	1 U	—	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U
Carbon Tetrachloride	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U
1,1,1-Trichloroethane	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U
Benzene	1 U	1 U	1 U	1 U	0.5 J	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	1 J	2 J	2	1 J	1 J	0.8 J	0.8 J	0.8 J
Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m-&/or p-Xylene	1 U	1 U	—	1 U	1 U	1 U	1 U	1 U
o-xylene	1 U	1 U	—	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	—	—	1 U	—	—	—	—	—
Styrene	3 UJ	3 UJ	1 U	3 UJ	3 U	3 U	3 U	3 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	—	—	1 U	—	—	—	—	—
1,2-Dibromo-3-chloropropane	—	—	1 R	—	—	—	—	—
Bromochloromethane	—	—	1 U	—	—	—	—	—

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Table 5-1
Groundwater Analytical Results - CPT - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	CPT-09-05	CPT-09-06	CPT-09-07	CPT-10-01	CPT-10-02	CPT-10-03	CPT-10-04	CPT-10-05
Sample Number:	—	—	—	—	—	—	—	—
Sample Date:	5/30/2000	5/30/2000	5/30/2000	5/31/2000	5/31/2000	5/31/2000	6/1/2000	6/1/2000
Laboratory:	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Sample Screen Depth (ft below ground):	75	85	88	25	36	42	55	65
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter:								
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoromethane	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	2 U	11 J	8 J	2 U	2 U	40 B	2 U	2 U
Carbon Disulfide	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 UJ	1 U
Trans-1,2-Dichloroethene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U
Cis-1,2-Dichloroethene	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Methyl tert-Butyl Ether	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Carbon Tetrachloride	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1,1-Trichloroethane	2 U	2 U	2 U	2 U	1 J	2 U	1 J	0.8 J
Benzene	1 U	1 U	0.6 J	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	0.5 J	0.8 J	2 J	0.9 J	1 U	1 J	0.5 J	0.9 J
Tetrachloroethene	1 U	1 U	1 U	1 U	0.9 J	1 U	0.6 J	1 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	0.6 J	1 U	1 U	1 U	1 U	1 U
m-&/or p-Xylene	1 U	1 U	0.7 J	1 U	1 U	1 U	1 U	1 U
o-xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	—	—	—	—	—	—	—	—
Styrene	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	—	—	—	—	—	—	—	—
1,2-Dibromo-3-chloropropane	—	—	—	—	—	—	—	—
Bromochloromethane	—	—	—	—	—	—	—	—

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Table 5-1
Groundwater Analytical Results - CPT - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	CPT-10-06	CPT-10-07	CPT-10-4DUP	CPT-11-01	CPT11-01	CPT-11-02	CPT-11-03	CPT-11-04
Sample Number:	---	---	---	---	EABX7	---	---	---
Sample Date:	6/1/2000	6/1/2000	6/1/2000	6/3/2000	6/3/2000	6/3/2000	6/3/2000	6/3/2000
Laboratory:	ESAT	ESAT	ESAT	ESAT	MitKem	ESAT	ESAT	ESAT
Sample Screen Depth (ft below ground):	73	90	55	45	45	58	70	81
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter:								
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	---	1 U	1 U	1 U
chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	---	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoromethane	2 UJ	2 UJ	2 UJ	2 UJ	---	2 UJ	2 UJ	2 UJ
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	24 J	2 U	2 U	2 UJ	5 U	2 UJ	9 J	2 UJ
Carbon Disulfide	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
Methyl Acetate	1 UJ	1 UJ	1 UJ	1 UJ	---	1 UJ	1 UJ	1 UJ
Trans-1,2-Dichloroethene	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	11 U	11 U	11 U	11 UJ	5 U	11 UJ	11 UJ	11 UJ
Cis-1,2-Dichloroethene	4 U	4 U	4 U	4 U	1 U	4 U	4 U	4 U
Methyl tert-Butyl Ether	1 U	1 U	1 U	1 UJ	---	1 UJ	1 UJ	1 UJ
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U
Carbon Tetrachloride	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U
1,1,1-Trichloroethane	2 U	2 U	1 J	2 U	1 U	2 U	0.8 J	0.8 J
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ
4-Methyl-2-pentanone	5 U	5 U	5 U	5 UJ	5 U	5 UJ	5 UJ	5 UJ
Toluene	1 J	1 J	1 U	1 U	1 U	1 J	1 J	0.9 J
Tetrachloroethene	1 U	1 U	0.6 J	1 U	1 U	1 U	1 U	1 U
2-Hexanone	5 U	5 U	5 U	5 UJ	5 U	5 UJ	5 UJ	5 UJ
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m-&/or p-Xylene	1 U	1 U	1 U	1 U	---	1 U	1 U	1 U
o-xylene	1 U	1 U	1 U	1 U	---	1 U	1 U	1 U
Xylenes (total)	---	---	---	---	0.6 J	---	---	---
Styrene	3 UJ	3 UJ	3 UJ	3 U	1 U	3 U	3 U	3 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	---	---	---	---	1 U	---	---	---
1,2-Dibromo-3-chloropropane	---	---	---	---	1 R	---	---	---
Bromochloromethane	---	---	---	---	1 U	---	---	---

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Table 5-1
Groundwater Analytical Results - CPT - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	CPT-11-05	CPT11-05	CPT11-05DP	CPT-11-06	CPT-11-07	CPT11-08	CPT-11-08	CPT-12-01
Sample Number:	---	EABX9	EABQ1	---	---	EABQ2	---	---
Sample Date:	6/3/2000	6/3/2000	6/3/2000	6/3/2000	6/3/2000	6/3/2000	6/3/2000	6/5/2000
Laboratory:	ESAT	MitKem	MitKem	ESAT	ESAT	MitKem	ESAT	ESAT
Sample Screen Depth (ft below ground):	93	93	93	102	114	125	125	45
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter:								
Dichlorodifluoromethane	1 U	---	---	1 U	1 U	---	1 U	1 U
chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U
Vinyl Chloride	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	1 U	---	---	1 U	1 U	---	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoromethane	2 UJ	---	---	2 UJ	2 UJ	---	2 U	2 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	2 UJ	5 U	5 U	9 J	13 J	5 U	2 UJ	1 B
Carbon Disulfide	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	1 U	2 U	2 U	1 U	1 U	2 U	1 U	1 U
Methyl Acetate	1 UJ	---	---	1 UJ	1 UJ	---	1 UJ	1 UJ
Trans-1,2-Dichloroethene	2 U	1 U	1 U	2 U	2 U	1 U	2 U	2 U
1,1-Dichloroethane	1 U	2	2	1 U	1 U	1 U	1 UJ	1 U
2-Butanone	11 UJ	5 U	5 U	11 UJ	11 UJ	5 U	11 UJ	11 U
Cis-1,2-Dichloroethene	4 U	1 U	1 U	4 U	4 U	1 U	4 U	4 U
Methyl tert-Butyl Ether	1 UJ	---	---	1 UJ	1 UJ	---	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	3 U	1 U	1 U	3 U	3 U	1 U	3 U	3 U
Carbon Tetrachloride	2 U	1 U	1 U	2 U	2 U	1 U	2 U	2 U
1,1,1-Trichloroethane	2 J	2	3	3 J	2 U	0.7 J	2 U	2 U
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U
4-Methyl-2-pentanone	5 UJ	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U
Toluene	1 J	2	0.8 J	1 J	2 J	2	3 J	0.5 J
Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Hexanone	5 UJ	5 U	5 U	5 UJ	5 UJ	5 U	5 UJ	5 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m-&/or p-Xylene	1 U	---	---	1 U	1 U	---	1 U	1 U
o-xylene	1 U	---	---	1 U	1 U	---	1 U	1 U
Xylenes (total)	---	1 U	1 U	---	---	1 U	---	---
Styrene	3 U	1 U	1 U	3 U	3 U	1 U	3 U	3 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	---	1 U	1 U	---	---	1 U	---	---
1,2-Dibromo-3-chloropropane	---	1 R	1 R	---	---	1 R	---	---
Bromochloromethane	---	1 U	1 U	---	---	1 U	---	---

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Table 5-1
Groundwater Analytical Results - CPT - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	CPT-12-01DUP	CPT-12-02	CPT-12-03	CPT-12-03	CPT-12-04	CPT-12-04DUP	CPT-12-05	CPT12-06
Sample Number:	—	—	—	EABQ3	—	—	—	EABQ7
Sample Date:	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000
Laboratory:	ESAT	ESAT	ESAT	MktKem	ESAT	ESAT	ESAT	MktKem
Sample Screen Depth (ft below ground):		62	70	70	81	81	93	102
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Parameter:								
Dichlorodifluoromethane	1 U	1 U	1 U	—	1 U	1 U	1 U	—
chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	1 U	1 U	1 U	—	1 U	1 U	1 U	—
1,1,2-Trichloro-1,2,2-trifluoromethane	2 U	2 U	2 U	—	2 U	2 U	2 U	—
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	1 B	1 B	2 B	5 U	2 B	7 B	2	5 U
Carbon Disulfide	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	1 U	1 U	1 U	2 U	1 U	1 U	1 U	2 U
Methyl Acetate	1 UJ	1 UJ	1 UJ	—	1 UJ	1 UJ	1 UJ	—
Trans-1,2-Dichloroethene	2 U	2 U	2 U	1 U	2 U	2 U	2 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	11 U	11 U	11 U	5 U	11 U	11 U	11 U	5 U
Cis-1,2-Dichloroethene	4 U	4 U	4 U	1 U	4 U	4 U	4 U	1 U
Methyl tert-Butyl Ether	1 U	1 U	1 U	—	1 U	1 U	1 U	—
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	3 U	3 U	3 U	1 U	3 U	3 U	3 U	1 U
Carbon Tetrachloride	2 U	2 U	2 U	1 U	2 U	2 U	2 U	1 U
1,1,1-Trichloroethane	2 U	2 U	2 U	1 U	2 U	2 U	2 U	1 U
Benzene	1 U	1 U	1 U	1 U	1 U	0.5 J	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	0.5 J	1 U	0.9 J	0.8 J	0.9 J	1 U	2 J	1
Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m-&/or p-Xylene	1 U	1 U	1 U	—	1 U	1 U	1 U	—
o-xylene	1 U	1 U	1 U	—	1 U	1 U	1 U	—
Xylenes (total)	—	—	—	1 U	—	—	—	1 U
Styrene	3 U	3 U	3 U	1 U	3 U	3 U	3 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	—	—	—	1 U	—	—	—	1 U
1,2-Dibromo-3-chloropropane	—	—	—	1 R	—	—	—	1 R
Bromochloromethane	—	—	—	1 U	—	—	—	1 U

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Table 5-1
Groundwater Analytical Results - CPT - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	CPT-12-06	CPT-12-07
Sample Number:	---	---
Sample Date:	6/5/2000	6/5/2000
Laboratory:	ESAT	ESAT
Sample Screen Depth (ft below ground):	102	118
Units:	ug/L	ug/L
Parameter:		
Dichlorodifluoromethane	1 U	1 U
chloromethane	1 U	1 U
Vinyl Chloride	1 U	1 U
Bromomethane	1 U	1 U
Chloroethane	1 U	1 U
Trichlorofluoromethane	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoromethane	2 U	2 U
1,1-Dichloroethene	1 U	1 U
Acetone	2	2
Carbon Disulfide	1 U	1 U
Methylene Chloride	1 U	1 U
Methyl Acetate	1 UJ	1 UJ
Trans-1,2-Dichloroethene	2 U	2 U
1,1-Dichloroethane	1 U	1 U
2-Butanone	11 U	11 U
Cis-1,2-Dichloroethene	4 U	4 U
Methyl tert-Butyl Ether	1 U	1 U
1,2-Dichloroethane	1 U	1 U
Chloroform	3 U	3 U
Carbon Tetrachloride	2 U	2 U
1,1,1-Trichloroethane	2 U	2 U
Benzene	1 U	1 U
Trichloroethene	1 U	1 U
1,2-Dichloropropane	1 U	1 U
Bromodichloromethane	1 U	1 U
Cis-1,3-Dichloropropene	1 U	1 U
Trans-1,3-Dichloropropene	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U
Dibromochloromethane	1 U	1 U
Bromoform	1 U	1 U
4-Methyl-2-pentanone	5 U	5 U
Toluene	2 J	2 J
Tetrachloroethene	1 U	1 U
2-Hexanone	5 U	5 U
1,2-Dibromoethane	1 U	1 U
Chlorobenzene	1 U	1 U
Ethylbenzene	1 U	1 U
m-&/or p-Xylene	1 U	1 U
o-xylene	1 U	1 U
Xylenes (total)	---	---
Styrene	3 U	3 U
1,1,2,2-Tetrachloroethane	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U
1,2,4-Trichlorobenzene	---	---
1,2-Dibromo-3-chloropropane	---	---
Bromochloromethane	---	---

Note:
U - Constituent not detected; method detection limit (MDL) of the analysis reported.
J - Concentration reported is an estimated value.
UJ - The analyte was not detected above the reported sample quantition limit.
B - Designates the constituent was detected in the method blank.
R - The sample results are rejected due to deficiencies in the ability to analyze the sample and i
--- Indicates compound not analyzed.

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Table 5-2
Groundwater Analytical Results - Monitoring Wells - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	MW101D	MW101S	MW102D	MW102S	MW103D	MW103D-DL	MW103S	MW104D
Sample Number:	—	—	—	—	—	—	—	—
Sample Date:	5/30/2000	5/30/2000	6/1/2000	6/1/2000	5/31/2000	5/31/2000	5/31/2000	6/2/2000
Laboratory:	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
PARAMETER								
1,1,1-Trichloroethane	2 U	2 U	2 U	2 U	3 J	50 U	2 U	1 J
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoromethane	2 UJ	2 UJ	2 U	2 UJ	300 J	180 J	2 J	2 UJ
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
1,2,4-Trichlorobenzene	—	—	—	—	—	—	—	—
1,2-Dibromo-3-chloropropane	—	—	—	—	—	—	—	—
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
2-Butanone	11 U	11 U	11 U	11 U	11 U	250 U	11 U	11 UJ
2-Hexanone	5 U	5 U	5 U	5 U	5 U	125 U	5 U	5 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	125 U	5 U	5 U
Acetone	2 U	2 U	2 U	2 U	35 B	50 U	2 U	2 UJ
Benzene	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Bromochloromethane	—	—	—	—	—	—	—	—
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Carbon Disulfide	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Carbon Tetrachloride	2 U	2 U	2 U	2 U	2 U	50 U	2 U	2 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Chloroform	3 U	3 U	3 U	3 U	3 U	75 U	3 U	3 U
Chloromethane	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Cis-1,2-Dichloroethene	4 U	4 U	4 U	4 U	4 U	100 U	4 U	4 U
Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
m-&/or p-Xylene	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Methyl Acetate	1 UJ	1 UJ	1 U	1 UJ	1 UJ	25 U	1 UJ	1 UJ
Methyl tert-Butyl Ether	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 UJ
Methylene Chloride	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
o-xylene	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Styrene	3 U	3 U	3 U	3 UJ	3 UJ	75 UJ	3 UJ	3 UJ
Tetrachloroethene	1 U	1 U	1 U	1 U	0.5 J	25 U	9 J	1 U
Toluene	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Xylenes (total)	—	—	—	—	—	—	—	—
Trans-1,2-Dichloroethene	2 U	2 U	2 U	2 U	2 U	50 U	2 U	2 U
Trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Trichloroethene	2 J	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U

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Table 5-2
Groundwater Analytical Results - Monitoring Wells - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	MW104D-DUP	MW104S	MW105D	MW105D-01	MW105S	MW108D	MW108D-01	MW108D-DUP
Sample Number:	—	—	—	EABX1	—	—	EABW8	—
Sample Date:	6/2/2000	6/2/2000	6/2/2000	6/2/2000	6/2/2000	6/1/2000	6/1/2000	6/1/2000
Laboratory:	ESAT	ESAT	ESAT	MltKem	ESAT	ESAT	MltKem	ESAT
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
PARAMETER								
1,1,1-Trichloroethane	1 J	2 J	2 J	3	2 J	2 U	1 U	2 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoromethane	2 UJ	2 UJ	2 UJ	—	2 UJ	2 UJ	—	2 UJ
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	—	—	—	1 U	—	—	1 U	—
1,2-Dibromo-3-chloropropane	—	—	—	1 R	—	—	1 R	—
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	11 UJ	11 UJ	11 UJ	5 U	11 UJ	11 U	5 U	11 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	2 UJ	2 UJ	2 UJ	5 U	2 UJ	2 U	5 U	2 U
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	—	—	—	1 U	—	—	1 U	—
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	2 U	2 U	2 U	1 U	2 U	2 U	1 U	2 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	3 U	3 U	3 U	1 U	3 U	3 U	1 U	3 U
Chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethene	4 U	4 U	1 J	2	1 J	4 U	1 U	4 U
Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	1 U	1 U	1 U	—	1 U	1 U	—	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m-&/or p-Xylene	1 U	1 U	1 U	—	1 U	1 U	—	1 U
Methyl Acetate	1 UJ	1 UJ	1 UJ	—	1 UJ	1 UJ	—	1 UJ
Methyl tert-Butyl Ether	1 UJ	1 UJ	1 UJ	—	1 UJ	1 U	—	1 U
Methylene Chloride	1 U	1 U	1 U	2 U	1 U	1 U	2 U	1 U
o-xylene	1 U	1 U	1 U	—	1 U	1 U	—	1 U
Styrene	3 UJ	3 UJ	3 UJ	1 U	3 UJ	3 UJ	1 U	3 UJ
Tetrachloroethene	1 U	1 U	3 J	4	3 J	0.6 J	0.7 J	0.6 J
Toluene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	—	—	—	1 U	—	—	1 U	—
Trans-1,2-Dichloroethene	2 U	2 U	2 U	1 U	2 U	2 U	1 U	2 U
Trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	2 J	3	2 J	1 U	1 U	1 U
Trichlorofluoromethane	1 U	1 U	1 U	—	1 U	1 U	—	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

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Table 5-2
Groundwater Analytical Results - Monitoring Wells - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	MW108S	MW110D	MW110S	MW112
Sample Number:	—	—	—	—
Sample Date:	6/1/2000	6/1/2000	6/1/2000	6/2/2000
Laboratory:	ESAT	ESAT	ESAT	ESAT
Units	ug/L	ug/L	ug/L	ug/L
PARAMETER				
1,1,1-Trichloroethane	2 U	2 U	2 U	2 J
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoromethane	2 UJ	2 UJ	2 UJ	2 UJ
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	—	—	—	—
1,2-Dibromo-3-chloropropane	—	—	—	—
1,2-Dibromoethane	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U
2-Butanone	11 U	11 U	11 U	11 UJ
2-Hexanone	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U
Acetone	2 U	2 U	2 U	2 UJ
Benzene	1 U	1 U	1 U	1 U
Bromochloromethane	—	—	—	—
Bromodichloromethane	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U
Carbon Disulfide	1 U	1 U	1 U	1 U
Carbon Tetrachloride	2 U	2 U	2 U	2 U
Chlorobenzene	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Chloroform	3 U	3 U	3 U	3 U
Chloromethane	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethene	4 U	4 U	4 U	4 U
Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U
m-&/or p-Xylene	1 U	1 U	1 U	1 U
Methyl Acetate	1 UJ	1 UJ	1 UJ	1 UJ
Methyl tert-Butyl Ether	1 U	1 U	1 U	1 UJ
Methylene Chloride	1 U	1 U	1 U	1 U
o-xylene	1 U	1 U	1 U	1 U
Styrene	3 UJ	3 UJ	3 UJ	3 UJ
Tetrachloroethene	1 U	1 U	1 U	1 U
Toluene	1 U	1 U	1 U	1 U
Xylenes (total)	—	—	—	—
Trans-1,2-Dichloroethene	2 U	2 U	2 U	2 U
Trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U

U - Constituent not detected; method detection limit (MDL) of the analysis is reported.
J - Concentration reported is an estimated value.
UJ - The analyte was not detected above the reported sample quantitation limit.
DL - Designetes sample was diluted.
B - Designates the constituent was detected in the method blank.
— Indicates compound not analyzed.

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Table 5-3
Groundwater Analytical Results - Monitoring Wells- Water Quality Parameters
Evergreen Manor, Roscoe, Illinois

Sample ID:	MW101D-01	MW102D-01	MW103D-01	MW104D-01	MW105D-01	MW108D-01	MW108D-01DP	MW110D-01	MW112-01
Sample Number:	S07	S11	S08	S15	S14	S12	D12	S13	S16
Sample Date:	5/30/2000	6/1/2000	5/30/2000	6/2/2000	6/2/2000	6/1/2000	6/1/2000	6/1/2000	6/2/2000
Laboratory:	CHEMTECH	CHEMTECH	CHEMTECH	CHEMTECH	CHEMTECH	CHEMTECH	CHEMTECH	CHEMTECH	CHEMTECH
Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Parameter:									
Chemical Oxygen Demand	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	10
Nitrogen, Ammonia	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nitrogen, Nitrite	7.8	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nitrogen, Nitrate	7.7	5.8	7.5	5.4	4.5	8.3	8.5	6.6	3.3
Ortho Phosphate	0.025	<0.01	0.69	0.016	<0.01	<0.01	0.011	0.014	0.031
Total Sulfide	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Sulfate	27	15	22	25	25	25	22	24	22
Field Measurements									
Dissolved Oxygen	6.02	6.95	6.09	---	2.77	5.57	5.57	5.88	7.61
Ferrous Iron	0.0	0.0	0.0	---	0.0	0.0	0.0	0.0	0.0
Units:	mV	mV	mV	mV	mV	mV	mV	mV	mV
Oxidation/Reduction Potential	137	84	28	213	149	174	174	136	167

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Table 5-4
Groundwater Analytical Results - Residential Wells - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	RW01-01	RW02-01	RW-03	RW-04	RW04-01	RW-05	RW-05DUP	RW-06
Sample Number:	—	—	—	—	EABQ4	—	—	—
Sample Date:	5/31/2000	5/31/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000
Address:	Tresemer	Tresemer	Wagon Ln.	Blue Spruce Dr.	Blue Spruce Dr.	Straw Ln.	Straw Ln.	Straw Ln.
Laboratory:	ESAT	ESAT	ESAT	ESAT	MITKEM	ESAT	ESAT	ESAT
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
PARAMETER								
1,1,1-Trichloroethane	2 U	2 U	2 J	2 J	2	2 U	2 U	2 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoromethane	2 UJ	2 UJ	2 U	2 U	—	2 U	2 U	2 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	—	—	—	—	1 U	—	—	—
1,2-Dibromo-3-chloropropane	—	—	—	—	1 R	—	—	—
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	11 U	11 U	11 U	11 U	5 U	11 U	11 U	11 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	2 U	2 U	0.8	2 U	5 U	2 U	0.6	2 U
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	—	—	—	—	1 U	—	—	—
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	2 U	2 U	2 U	2 U	—	2 U	2 U	2 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U
Chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethene	4 U	4 U	4 U	1 J	2	4 U	4 U	4 U
Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	—	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m-&/or p-Xylene	1 U	1 U	1 U	1 U	—	1 U	1 U	1 U
Methyl Acetate	1 UJ	1 UJ	1 UJ	1 UJ	—	1 UJ	1 UJ	1 UJ
Methyl tert-Butyl Ether	1 U	1 U	1 U	1 U	—	1 U	1 U	1 U
Methylene Chloride	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U
o-xylene	1 U	1 U	1 U	1 U	—	1 U	1 U	1 U
Styrene	3 UJ	3 UJ	3 U	3 U	1 U	3 U	3 U	3 U
Tetrachloroethene	1 U	1 U	1 U	2 J	2	1 U	1 U	1 U
Toluene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	—	—	—	—	1 U	—	—	—
Trans-1,2-Dichloroethene	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U
Trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	5 J	6	1 U	1 U	1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	—	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

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Table 5-4
Groundwater Analytical Results - Residential Wells - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	RW-07	RW-08	RW-09	RW-10	RW-11	RW11-01	RW11-01DP	RW-11DUP
Sample Number:	—	—	—	—	—	EABQ5	EABQ6	—
Sample Date:	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000
Address:	Wagon Ln. Ct.	Wagon Ln.	Valerie Dr.	Valerie Dr.	Valerie Dr.	Valerie Dr.	Valerie Dr.	Valerie Dr.
Laboratory:	ESAT	ESAT	ESAT	ESAT	ESAT	MITKEM	MITKEM	ESAT
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
PARAMETER								
1,1,1-Trichloroethane	5 J	0.9 J	2 U	2 U	1 J	1	1	1 J
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoromethane	2 U	2 U	2 U	2 U	2 U	—	—	2 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	—	—	—	—	—	1 U	1 U	—
1,2-Dibromo-3-chloropropane	—	—	—	—	—	1 R	1 R	—
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	11 U	11 U	11 U	11 U	11 U	5 U	5 U	11 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	2 U	2 U	2 U	2 U	2 U	5 U	5 U	2 U
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	—	—	—	—	—	1 U	1 U	—
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	2 U	2 U	2 U	2 U	2 U	—	—	2 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	3 U	0.9 J	3 U	3 U	3 U	1 U	1 U	3 U
Chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethene	4 U	4 U	4 U	4 U	4 U	1 U	1 U	4 U
Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	—	—	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m-&/or p-Xylene	1 U	1 U	1 U	1 U	1 U	—	—	1 U
Methyl Acetate	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	—	—	1 UJ
Methyl tert-Butyl Ether	1 U	1 U	1 U	1 U	1 U	—	—	1 U
Methylene Chloride	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 U
o-xylene	1 U	1 U	1 U	1 U	1 U	—	—	1 U
Styrene	3 U	3 U	3 U	3 U	3 U	1 U	1 U	3 U
Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	—	—	—	—	—	1 U	1 U	—
Trans-1,2-Dichloroethene	2 U	2 U	2 U	2 U	2 U	1 U	1 U	2 U
Trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	0.7 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	—	—	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

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Table 5-4
Groundwater Analytical Results - Residential Wells - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	RW-12	RW-13	RW-14	RW-15	RW-16	RW-17	RW-18	RW-19
Sample Number:	—	—	—	—	—	—	—	—
Sample Date:	6/5/2000	6/6/2000	6/6/2000	6/6/2000	6/6/2000	6/6/2000	6/6/2000	6/6/2000
Address:	Valerie Dr.	Straw Ln.	Straw Ln.	Straw Ln.	Straw Ln.	Hononegah	Hononegah	Blue Spruce Dr.
Laboratory:	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT	ESAT
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
PARAMETER								
1,1,1-Trichloroethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 J
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoromethane	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1,2-Trichloroethane	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
1,1-Dichloroethane	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	—	—	—	—	—	—	—	—
1,2-Dibromo-3-chloropropane	—	—	—	—	—	—	—	—
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	11 U	11 UJ	11 UJ	11 UJ	11 UJ	11 UJ	11 UJ	11 UJ
2-Hexanone	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	—	—	—	—	—	—	—	—
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Chloromethane	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Cis-1,2-Dichloroethene	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m-&/or p-Xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Acetate	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Methyl tert-Butyl Ether	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
o-xylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.9 J
Toluene	1 U	2 B	2 B	2 B	1 U	2 B	2 B	1 B
Xylenes (total)	—	—	—	—	—	—	—	—
Trans-1,2-Dichloroethene	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 J
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

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Table 5-4
Groundwater Analytical Results - Residential Wells - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	RW-19DUP	RW-20	RW-21	RW-22
Sample Number:	—	—	—	—
Sample Date:	6/6/2000	6/6/2000	6/6/2000	6/6/2000
Address:	Blue Spruce Dr.	Tresemer	Tresemer	Tresemer
Laboratory:	ESAT	ESAT	ESAT	ESAT
Units	ug/L	ug/L	ug/L	ug/L
PARAMETER				
1,1,1-Trichloroethane	0.6 J	2 U	2 U	2 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoromethane	2 U	2 U	2 U	2 U
1,1,2-Trichloroethane	1 UJ	1 UJ	1 UJ	1 UJ
1,1-Dichloroethane	1 UJ	1 UJ	1 UJ	1 UJ
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	—	—	—	—
1,2-Dibromo-3-chloropropane	—	—	—	—
1,2-Dibromoethane	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U
2-Butanone	11 UJ	11 UJ	11 UJ	11 UJ
2-Hexanone	5 UJ	5 UJ	5 UJ	5 UJ
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U
Acetone	2 UJ	2 UJ	2 UJ	2 UJ
Benzene	1 U	1 U	1 U	1 U
Bromochloromethane	—	—	—	—
Bromodichloromethane	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U
Carbon Disulfide	1 U	1 U	1 U	1 U
Carbon Tetrachloride	2 U	2 U	2 U	2 U
Chlorobenzene	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U
Chloroform	3 U	3 U	3 U	3 U
Chloromethane	1 UJ	1 UJ	1 UJ	1 UJ
Cis-1,2-Dichloroethene	4 U	4 U	4 U	4 U
Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U
m-&/or p-Xylene	1 U	1 U	1 U	1 U
Methyl Acetate	1 UJ	1 UJ	1 UJ	1 UJ
Methyl tert-Butyl Ether	1 U	1 U	1 U	1 U
Methylene Chloride	1 U	1 U	1 U	1 U
o-xylene	1 U	1 U	1 U	1 U
Styrene	3 U	3 U	3 U	3 U
Tetrachloroethene	0.9 J	1 U	1 U	1 U
Toluene	2 B	1 B	1 B	2 B
Xylenes (total)	—	—	—	—
Trans-1,2-Dichloroethene	2 U	2 U	2 U	2 U
Trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Trichloroethene	4 J	1 U	1 U	1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U

U - Constituent not detected; method detection limit (MDL) of the analysis reported.
J - Concentration reported is an estimated value.
UJ - The analyte was not detected above the reported sample quantition limit.
B - Designates the constituent was detected in the method blank.
— Indicates compound not analyzed.

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Table 5-5
Groundwater Analytical Results - Residential Wells - Water Quality Parameters
Evergreen Manor, Roscoe, Illinois

Sample ID:	RW01-01	RW01-01DP	RW02-01	RW03-01	RW04-01	RW05-01	RW07-01
Sample Number:	S10	D10	S09	S17	S18	S19	S20
Sample Date:	5/31/2000	5/31/2000	5/31/2000	6/5/2000	6/5/2000	6/5/2000	6/5/2000
Laboratory:	CHEMTECH	CHEMTECH	CHEMTECH	CHEMTECH	CHEMTECH	CHEMTECH	CHEMTECH
Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Parameter:							
Chemical Oxygen Demand	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Nitrogen, Ammonia	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nitrogen, Nitrite	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nitrogen, Nitrate	4.4	4.2	3.9	6.2	6.3	4.4	5.5
Ortho Phosphate	0.048	0.051	0.048	0.051	0.031	0.038	0.029
Total Sulfide	<1.0	<1.0	<1.0	2.4	1.6	<1.0	<1.0
Sulfate	22	27	24	22	19	26	28
Field Measurements							
Dissolved Oxygen	7.03	7.03	7.17	7.70	5.36	5.60	5.39
Ferrous Iron	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Units:	mV	mV	mV	mV	mV	mV	mV
Oxidation/Reduction Potential	88	88	88	222	209	165	176

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Table 5-6
Sediment Analytical Results - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	SD01-01	SD01-01DUP	SD02-01	SD03-01	SD04-01	SD04-01	SD04-01DP
Sample Number:	—	—	—	—	—	EABQ9	EABR1
Sample Date:	5/24/2000	5/24/2000	5/23/2000	5/23/2000	5/24/2000	5/24/2000	5/24/2000
Laboratory:	ESAT	ESAT	ESAT	ESAT	ESAT	DATACHEM	DATACHEM
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
PARAMETER							
1,1,1-Trichloroethane	25 U	25 U	25 U	25 U	25 U	12 U	12 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 U	12 U	12 U
1,1,2-Trichloro-1,2,2-trifluoromethane	5 U	5 U	5 U	5 U	5 U	12 U	12 U
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U	5 U	12 U	12 U
1,1-Dichloroethane	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	12 U	12 U
1,1-Dichloroethene	5 U	5 U	5 U	5 U	5 U	12 U	12 U
1,2,4-trichlorobenzene	—	—	—	—	—	—	—
1,2-Dibromo-3-chloropropane	—	—	—	—	—	12 U	12 U
1,2-Dibromoethane	5 U	5 U	5 U	5 U	5 U	12 UJ	12 UJ
1,2-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	12 U	12 U
1,2-Dichloroethane	5 U	5 U	5 U	5 U	5 U	12 U	12 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U	5 U	12 U	12 U
1,3-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	12 U	12 U
1,4-Dichlorobenzene	5 U	5 U	5 U	5 U	5 U	12 U	12 U
2-Butanone	25 U	25 U	25 U	25 U	25 U	12 U	12 U
2-Hexanone	25 U	25 U	25 U	25 U	25 U	12 U	12 U
4-Methyl-2-pentanone	25 U	25 U	25 U	25 U	25 U	12 U	12 U
Acetone	25 U	25 U	25 U	25 U	25 U	12 U	12 U
Benzene	5 U	5 U	5 U	5 U	5 U	12 U	2 J
Bromodichloromethane	5 U	5 U	5 U	5 U	5 U	12 U	12 U
Bromoform	5 U	5 U	5 U	5 U	5 U	12 U	12 U
Bromomethane	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	12 U	12 U
Carbon Disulfide	5 U	5 U	5 U	5 U	5 U	12 U	12 U
Carbon Tetrachloride	5 U	5 U	5 U	5 U	5 U	12 U	12 U
Chlorobenzene	5 U	5 U	5 U	5 U	5 U	12 U	12 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	—	—
Chloroform	8 J	50 UJ	50 UJ	50 UJ	50 UJ	12 U	12 U
Chloromethane	5 U	5 U	5 U	5 U	5 U	12 U	12 U
Cis-1,2-Dichloroethene	25 U	25 U	25 U	25 U	25 U	12 U	12 U
Cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 U	12 U	12 U
Cyclohexane	—	—	—	—	—	12 U	12 U
Dibromochloromethane	5 U	5 U	5 U	5 U	5 U	12 U	12 U
Dichlorodifluoromethane	5 U	5 U	5 U	5 U	5 U	12 U	12 U
Ethylbenzene	5 U	5 U	5 U	5 U	5 U	12 U	12 U
Isopropylbenzene	—	—	—	—	—	12 U	12 U
m-&/or p-Xylene	5 U	5 U	5 U	5 U	5 U	—	—
Methyl Acetate	5 J	15 U	9 J	15 U	15 U	12 U	12 U
Methyl tert-Butyl Ether	25 U	25 U	25 U	25 U	25 U	12 U	12 U
Methylcyclohexane	—	—	—	—	—	12 U	12 U
Methylene Chloride	10 U	10 U	10 U	10 U	10 U	12 U	12 U
o-xylene	5 U	5 U	5 U	5 U	5 U	—	—
Styrene	5 U	5 U	5 U	5 U	5 U	12 U	12 U
Tetrachloroethene	5 U	5 U	5 U	5 U	5 U	12 U	12 U
Toluene	5 U	5 U	5 U	5 U	5 U	12 U	0.7 J
Trans-1,2-Dichloroethene	50 U	50 U	50 U	50 U	50 U	12 U	12 U
Trans-1,3-Dichloropropene	5 U	5 U	5 U	5 U	5 U	12 U	12 U
Trichloroethene	5 U	5 U	5 U	5 U	5 U	12 U	12 U
Trichlorofluoromethane	5 U	5 U	5 U	5 U	5 U	12 U	12 U
Vinyl Chloride	15 UJ	15 UJ	15 UJ	15 UJ	15 UJ	12 U	12 U
Xylenes (total)	—	—	—	—	—	12 U	12 U

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Table 5-6
Sediment Analytical Results - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	SD05-01	SD06-01
Sample Number:	—	—
Sample Date:	5/24/2000	5/23/2000
Laboratory:	ESAT	ESAT
Units	ug/kg	ug/kg
PARAMETER		
1,1,1-Trichloroethane	25 U	25 U
1,1,2,2-Tetrachloroethane	5 U	5 U
1,1,2-Trichloro-1,2,2-trifluoromethane	5 U	5 U
1,1,2-Trichloroethane	5 U	5 U
1,1-Dichloroethane	10 UJ	10 UJ
1,1-Dichloroethene	5 U	5 U
1,2,4-trichlorobenzene	—	—
1,2-Dibromo-3-chloropropane	—	—
1,2-Dibromoethane	5 U	5 U
1,2-Dichlorobenzene	5 U	5 U
1,2-Dichloroethane	5 U	5 U
1,2-Dichloropropane	5 U	5 U
1,3-Dichlorobenzene	5 U	5 U
1,4-Dichlorobenzene	5 U	5 U
2-Butanone	25 U	25 U
2-Hexanone	25 U	25 U
4-Methyl-2-pentanone	25 U	25 U
Acetone	25 U	25 U
Benzene	5 U	5 U
Bromodichloromethane	5 U	5 U
Bromoform	5 U	5 U
Bromomethane	20 UJ	20 UJ
Carbon Disulfide	5 U	5 U
Carbon Tetrachloride	5 U	5 U
Chlorobenzene	5 U	5 U
Chloroethane	10 U	10 U
Chloroform	50 UJ	50 UJ
Chloromethane	5 U	5 U
Cis-1,2-Dichloroethene	25 U	25 U
Cis-1,3-Dichloropropene	5 U	5 U
Cyclohexane	—	—
Dibromochloromethane	5 U	5 U
Dichlorodifluoromethane	5 U	5 U
Ethylbenzene	5 U	5 U
Isopropylbenzene	—	—
m-&/or p-Xylene	5 U	5 U
Methyl Acetate	9 J	15 U
Methyl tert-Butyl Ether	25 U	25 U
Methylcyclohexane	—	—
Methylene Chloride	10 U	10 U
o-xylene	5 U	5 U
Styrene	5 U	5 U
Tetrachloroethene	5 U	5 U
Toluene	5 U	5 U
Trans-1,2-Dichloroethene	50 U	50 U
Trans-1,3-Dichloropropene	5 U	5 U
Trichloroethene	5 U	5 U
Trichlorofluoromethane	5 U	5 U
Vinyl Chloride	15 UJ	15 UJ
Xylenes (total)	—	—

U - Constituent not detected; method detection limit (MDL) of the analysis reported.
J - Concentration reported is an estimated value.
UJ - The analyte was not detected above the reported sample quantition limit.
— Indicates compound not analyzed.

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Table 5-7
Sediment Analytical Results- Total Organic Carbon
Evergreen Manor, Roscoe, Illinois

Sample ID:	SD01-01	SD02-01	SD03-01	SD04-01	SD05-01	SD06-01	SD06-01DP
Sample Number:	S03	S02	S01	S06	S05	S04	D01
Sample Date:	5/23/2000	5/23/2000	5/23/2000	5/24/2000	5/24/2000	5/23/2000	5/23/2000
Laboratory:	CHEMTECH	CHEMTECH	CHEMTECH	CHEMTECH	CHEMTECH	CHEMTECH	CHEMTECH
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Parameter:							
Total Organic Carbon	30000	17000	11000	4200	24000	4700	5000

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Table 5-8
Surface Water Analytical Results - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	SW01-01	SW01-01DUP	SW02-01	SW03-01	SW04-01	SW04-01
Sample Number:	—	—	—	—	—	EABW2
Sample Date:	5/23/2000	5/23/2000	5/23/2000	5/23/2000	5/23/2000	5/29/2000
Laboratory:	ESAT	ESAT	ESAT	ESAT	ESAT	MitKem
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
PARAMETER						
1,1,1-Trichloroethane	2 U	2 U	2 U	2 U	2 U	1 U
1,1,2,2-Tetrachloroethane	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
1,1,2-Trichloro-1,2,2-trifluoromethane	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	—
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
1,2,4-trichlorobenzene	—	—	—	—	—	1 U
1,2-dibromo-3-chloropropane	—	—	—	—	—	1 R
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 UJ
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	11 U	11 U	11 U	11 U	11 U	5 U
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	5 U
Benzene	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	2 U	2 U	2 U	2 U	2 U	1 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	3 U	3 U	3 U	3 U	3 U	1 U
Chloromethane	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethene	4 U	4 U	4 U	4 U	4 U	1 U
Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	—
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U
m-&/or p-Xylene	1 U	1 U	1 U	1 U	1 U	—
Methyl Acetate	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	—
Methyl tert-Butyl Ether	1 U	1 U	1 U	1 U	1 U	—
Methylene Chloride	1 U	1 U	1 U	1 U	1 U	2 U
o-xylene	1 U	1 U	1 U	1 U	1 U	—
Styrene	3 U	3 U	3 U	3 U	3 U	1 U
Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	2 U	2 U	2 U	2 U	2 U	1 U
Trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	—
Vinyl Chloride	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)	—	—	—	—	—	1 U

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Table 5-8
Surface Water Analytical Results - VOCs
Evergreen Manor, Roscoe, Illinois

Sample ID:	SW04-01DP	SW06-01
Sample Number:	EABW1	—
Sample Date:	6/29/2000	5/23/2000
Laboratory:	MKKem	ESAT
Units	ug/L	ug/L
PARAMETER		
1,1,1-Trichloroethane	1 U	2 U
1,1,2,2-Tetrachloroethane	1 U	1 UJ
1,1,2-Trichloro-1,2,2-trifluoromethane	---	2 UJ
1,1,2-Trichloroethane	1 U	1 U
1,1-Dichloroethane	1 U	1 U
1,1-Dichloroethene	1 U	1 UJ
1,2,4-trichlorobenzene	1 U	---
1,2-dibromo-3-chloropropane	1 R	---
1,2-Dibromoethane	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U
1,2-Dichloroethane	1 UJ	1 U
1,2-Dichloropropane	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U
2-Butanone	5 U	11 U
2-Hexanone	5 U	5 U
4-Methyl-2-pentanone	5 U	5 U
Acetone	5 U	2 UJ
Benzene	1 U	1 U
Bromodichloromethane	1 U	1 U
Bromoform	1 U	1 U
Bromomethane	1 U	1 U
Carbon Disulfide	1 U	1 U
Carbon Tetrachloride	1 U	2 U
Chlorobenzene	1 U	1 U
Chloroethane	1 U	1 U
Chloroform	1 U	3 U
Chloromethane	1 U	1 U
Cis-1,2-Dichloroethene	1 U	4 U
Cis-1,3-Dichloropropene	1 U	1 U
Dibromochloromethane	1 U	1 U
Dichlorodifluoromethane	---	1 U
Ethylbenzene	1 U	1 U
m-&/or p-Xylene	---	1 U
Methyl Acetate	---	1 UJ
Methyl tert-Butyl Ether	---	1 U
Methylene Chloride	2 U	1 U
o-xylene	---	1 U
Styrene	1 U	3 U
Tetrachloroethene	1 U	1 U
Toluene	1 U	1 U
Trans-1,2-Dichloroethene	1 U	2 U
Trans-1,3-Dichloropropene	1 U	1 U
Trichloroethene	1 U	1 UJ
Trichlorofluoromethane	---	1 U
Vinyl Chloride	1 U	1 U
Xylenes (total)	1 U	---

U - Constituent not detected; method detection limit (MDL) of the analysis is reported.
J - Concentration reported is an estimated value.
R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria.
UJ - The analyte was not detected above the reported sample quantitation limit.
— Indicates compound not analyzed.

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Appendix J

Appendix J
Table J-1
April 2002 Groundwater Analytical Results
Evergreen Manor Site
Roscoe, Illinois

Location ID:	MW-101D		MW-101S		MW-103D		MW-103S		MW-104D		MW-104S		MW-104S	
Sample ID:	E0064		E0065		E0092		E0093		E0057		E0058		E0059	
Sample Date:	04/04/02		04/04/02		04/08/02		04/08/02		04/03/02		04/03/02		04/03/02	
Lab Name:	A4		A4		A4		A4		A4		A4		A4	
Unit:	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
PARAMETER														
1,1,1-TRICHLOROETHANE	0.5	U	0.5	U	0.56		0.63		0.87		0.9		1	
1,1,2,2-TETRACHLOROETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.5	U	0.5	U	30	D	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-TRICHLOROETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-DICHLOROETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-DICHLOROETHYLENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-TRICHLOROBENZENE	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U
1,2,4-TRICHLOROBENZENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-DIBROMETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U
1,2-DICHLOROBENZENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-DICHLOROETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-DICHLOROPROPANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-DICHLOROBENZENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-BUTANONE	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-METHYL-2-PENTANONE	5	U	5	U	5	U	5	U	5	U	5	U	5	U
ACETONE	5	UJ	5	UJ	5	U	5	U	5	UJ	5	UJ	5	UJ
BENZENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
BROMODICHLOROMETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
BROMOMETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
CARBON DISULFIDE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
CARBON TETRACHLORIDE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
CHLOROBENZENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
CHLOROBROMOMETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
CHLORODIBROMOMETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
CHLOROETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
CHLOROFORM	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
CHLOROMETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-DICHLOROETHENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-DICHLOROPROPENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
CYCLOHEXANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DICHLORDIFLOUROMETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DICHLOROMETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
ETHYLBENZENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
ISOPROPYLBENENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
M-DICHLOROBENZENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
METHYL ACETATE	0.5	R	0.5	R	0.5	R	0.5	R	0.5	R	0.5	R	0.5	R
METHYL N-BUTYL KETONE	5	U	5	U	5	U	5	U	5	U	5	U	5	U
METHYLCYLOHEXANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
METHYLTERT-BUTYLETHER	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
STYRENE (MONOMER)	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
TETRACHLOROETHENE	0.5	U	0.5	U	0.5	U	5.9		0.18	J	0.48	J	0.52	
TOLUENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-DICHLOROETHENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-DICHLOROPROPENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
TRIBOMOMETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
TRICHLOFLUOROMETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
TRICHLOROETHYLENE	1.8		0.21	J	0.5	U	0.5	U	0.5	U	0.18	J	0.19	J
VINYLCHLORIDE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
XYLENES(TOTAL)	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Note:
U = The analyte was analyzed for, but was not detected above the reported sample quanitation limit.
J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ = The analyte was not detected above the reported sample quanitation limit. However, the reported quanitation limit is approximate.
R = The data are unusable. The compound may or may not be present.

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Appendix J
Table J-1 (Continued)
April 2002 Groundwater Analytical Results
Evergreen Manor Site
Roscoe, Illinois

Location ID:	MW-105D		MW-105S		MW-105S		MW-107D		MW-107S		MW-109D		MW-109S	
Sample ID:	E0090		E0088		E0089		E0062		E0063		E0095		E0094	
Sample Date:	04/08/02		04/08/02		04/08/02		04/04/02		04/04/02		04/09/02		04/09/02	
Lab Name:	A4		A4		A4		A4		A4		A4		A4	
Unit:	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
PARAMETER														
1,1,1-TRICHLOROETHANE	2.2		1.9		1.8		1.3		0.5	U	0.44	J	0.29	J
1,1,2,2-TETRACHLOROETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.5	U	0.5	U	0.5	U	6.7		0.5	U	0.5	U	0.5	U
1,1,2-TRICHLOROETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-DICHLOROETHANE	0.39	J	0.21	J	0.19	J	0.5	U	0.5	U	0.5	U	0.5	U
1,1-DICHLOROETHYLENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-TRICHLOROBENZENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ
1,2,4-TRICHLOROBENZENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-DIBROMETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ
1,2-DICHLOROBENZENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-DICHLOROETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-DICHLOROPROPANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-DICHLOROBENZENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-BUTANONE	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-METHYL-2-PENTANONE	5	U	5	U	5	U	5	U	5	U	5	U	5	U
ACETONE	5	U	5	U	5	U	5	UJ	5	UJ	5	U	5	U
BENZENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
BROMODICHLOROMETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
BROMOMETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
CARBON DISULFIDE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
CARBON TETRACHLORIDE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
CHLOROBENZENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
CHLOROBROMOMETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
CHLORODIBROMOMETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
CHLOROETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
CHLOROFORM	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
CHLOROMETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-DICHLOROETHENE	1.3		0.47	J	0.39	J	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-DICHLOROPROPENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
CYCLOHEXANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DICHLORDIFLOUROMETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
DICHLOROMETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
ETHYLBENZENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
ISOPROPYLBENENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
M-DICHLOROBENZENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
METHYL ACETATE	0.5	R	0.5	R	0.5	R	0.5	R	0.5	R	0.5	R	0.5	R
METHYL N-BUTYL KETONE	5	U	5	U	5	U	5	U	5	U	5	U	5	U
METHYLCYLOHEXANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
METHYLTERT-BUTYLETHER	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
STYRENE (MONOMER)	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
TETRACHLOROETHENE	3.2		3.5		3.1		3.3		0.17	J	2.6		1.6	
TOLUENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-DICHLOROETHENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-DICHLOROPROPENE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
TRIBOMOMETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
TRICHLOFLUOROMETHANE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
TRICHLOROETHYLENE	2.8		1.7		1.6		0.5	U	0.5	U	0.24	J	0.5	U
VINYLCHLORIDE	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
XYLENES(TOTAL)	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Note:
U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ = The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate.
R = The data are unusable. The compound may or may not be present.

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Appendix J
Table J-1 (Continued)
April 2002 Groundwater Analytical Results
Evergreen Manor Site
Roscoe, Illinois

Location ID:	GWMU1A	GWMU1A	GWMU1B	GWMU2A	GWMU2B
Sample ID:	E0098	E0099	E00A0RE	E00A1	E00A2RE
Sample Date:	4/9/2002	4/9/2002	4/9/2002	4/9/2002	4/9/2002
Lab Name:	A4	A4	A4	A4	A4
Unit:	µg/L	µg/L	µg/L	µg/L	µg/L
PARAMETER					
1,1,1-TRICHLOROETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-TETRACHLOROETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-TRICHLOROETHANE	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ
1,1-DICHLOROETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-DICHLOROETHYLENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-TRICHLOROBENZENE	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
1,2,4-TRICHLOROBENZENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-DIBROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
1,2-DICHLOROBENZENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-DICHLOROETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-DICHLOROPROPANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-DICHLOROBENZENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-BUTANONE	5 U	5 U	5 U	5 U	5 U
4-METHYL-2-PENTANONE	5 U	5 U	5 U	5 U	5 U
ACETONE	5 U	5 U	5 U	5 U	5 U
BENZENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BROMODICHLOROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BROMOMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CARBON DISULFIDE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CARBON TETRACHLORIDE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROBENZENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROBROMOMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLORODIBROMOMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROFORM	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-DICHLOROETHENE	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ
cis-1,3-DICHLOROPROPENE	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ
CYCLOHEXANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
DICHLORDIFLOUROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
DICHLOROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
ETHYLBENZENE	0.5 U	0.5 U	0.5 R	0.5 U	0.5 UJ
ISOPROPYLBENENE	0.5 U	0.5 U	0.5 R	0.5 U	0.5 UJ
M-DICHLOROBENZENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
METHYL ACETATE	0.5 R	0.5 R	0.5 R	0.5 R	0.5 R
METHYL N-BUTYL KETONE	5 U	5 U	5 U	5 U	5 U
METHYLCYLOHEXANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
METHYLTERT-BUTYLETHER	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
STYRENE (MONOMER)	0.5 U	0.5 U	0.5 R	0.5 U	0.5 UJ
TETRACHLOROETHENE	0.34 J	0.25 J	0.23 J	0.61 J	0.61 J
TOLUENE	0.5 U	0.5 U	0.5 R	0.5 U	0.5 UJ
trans-1,2-DICHLOROETHENE	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ
trans-1,3-DICHLOROPROPENE	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ
TRIBOMOMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRICHLOFLUOROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRICHLOROETHYLENE	0.5 U	0.5 U	0.5 R	0.5 U	0.5 UJ
VINYLCHLORIDE	0.5 U	0.5 U	0.5 R	0.5 U	0.5 R
XYLENES(TOTAL)	0.5 U	0.5 U	0.5 R	0.5 U	0.5 UJ

Note:
U = The analyte was analyzed for, but was not detected above the reported sample quanitation limit.
J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ = The analyte was not detected above the reported sample quanitation limit. However, the reported quanitation limit is approximate.
R = The data are unusable. The compound may or may not be present.

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Appendix J
Table J-1 (Continued)
April 2002 Groundwater Analytical Results
Evergreen Manor Site
Roscoe, Illinois

Location ID:	MW-01A		MW-01A		MW-02		MW-03	
Sample ID:	E00A7		E00A8		E00B2		E00A9	
Sample Date:	04/16/02		04/16/02		04/16/02		04/16/02	
Lab Name:	LIBRTY		LIBRTY		LIBRTY		LIBRTY	
Unit:	µg/L		µg/L		µg/L		µg/L	
PARAMETER								
1,1,1-TRICHLOROETHANE	2.4		2		1.7		2.1	
1,1,2,2-TETRACHLOROETHANE	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-TRICHLOROETHANE	0.5	U	0.5	U	0.5	U	0.5	U
1,1-DICHLOROETHANE	0.34	J	0.34	J	0.5	U	0.26	J
1,1-DICHLOROETHYLENE	0.19	J	0.16	J	0.5	U	0.2	J
1,2,3-TRICHLOROBENZENE	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-TRICHLOROBENZENE	0.5	U	0.5	U	0.5	U	0.5	U
1,2-DIBROMETHANE	0.5	U	0.5	U	0.5	U	0.5	U
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0.5	U	0.5	U	0.5	U	0.5	U
1,2-DICHLOROBENZENE	0.5	U	0.5	U	0.5	U	0.5	U
1,2-DICHLOROETHANE	0.5	U	0.5	U	0.5	U	0.5	U
1,2-DICHLOROPROPANE	0.5	U	0.5	U	0.5	U	0.5	U
1,4-DICHLOROBENZENE	0.5	U	0.5	U	0.5	U	0.5	U
2-BUTANONE	5	U	5	U	5	U	5	U
4-METHYL-2-PENTANONE	5	U	5	U	5	U	5	U
ACETONE	5	U	5	U	5	U	5	U
BENZENE	0.5	U	0.5	U	0.5	U	0.5	U
BROMODICHLOROMETHANE	0.5	U	0.5	U	0.5	U	0.5	U
BROMOMETHANE	0.5	U	0.5	U	0.5	U	0.5	U
CARBON DISULFIDE	0.5	U	0.5	U	0.5	U	0.5	U
CARBON TETRACHLORIDE	0.5	U	0.5	U	0.5	U	0.5	U
CHLOROBENZENE	0.5	U	0.5	U	0.5	U	0.5	U
CHLOROBROMOMETHANE	0.5	U	0.5	U	0.5	U	0.5	U
CHLORODIBROMOMETHANE	0.5	U	0.5	U	0.5	U	0.5	U
CHLOROETHANE	0.5	U	0.5	U	0.5	U	0.5	U
CHLOROFORM[1]	0.5	U	0.5	U	0.23	J	0.5	U
CHLOROMETHANE	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-DICHLOROETHENE	1.5		1.4		0.5	U	1.1	
cis-1,3-DICHLOROPROPENE	0.5	U	0.5	U	0.5	U	0.5	U
CYCLOHEXANE	0.5	U	0.5	U	0.5	U	0.5	U
DICHLORDIFLOUROMETHANE	0.5	U	0.5	U	0.5	U	0.5	U
DICHLOROMETHANE	0.5	U	0.5	U	0.5	U	0.5	U
ETHYLBENZENE	0.5	U	0.5	U	0.5	U	0.5	U
ISOPROPYLBENENE	0.5	U	0.5	U	0.5	U	0.5	U
M-DICHLOROBENZENE	0.5	U	0.5	U	0.5	U	0.5	U
METHYL ACETATE	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
METHYL N-BUTYL KETONE	5	U	5	U	5	U	5	U
METHYLCYLOHEXANE	0.5	U	0.5	U	0.5	U	0.5	U
METHYLTERT-BUTYLETHER	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
STYRENE (MONOMER)	0.5	U	0.5	U	0.5	U	0.5	U
TETRACHLOROETHENE	1.7		1.7		0.5	U	0.1	J
TOLUENE	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-DICHLOROETHENE	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-DICHLOROPROPENE	0.5	U	0.5	U	0.5	U	0.5	U
TRIBOMOMETHANE	0.51	U	0.61	U	0.54	U	0.5	U
TRICHLOFLUOROMETHANE	0.5	U	0.5	U	0.5	U	0.5	U
TRICHLOROETHYLENE	4.7		4.4		0.5	U	7.2	J
VINYLCHLORIDE	0.5	U	0.5	U	0.5	U	0.5	U
XYLENES(TOTAL)	0.5	U	0.5	U	0.5	U	0.5	U

Note:
U = The analyte was analyzed for, but was not detected above the reported sample quanitation limit.
J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ = The analyte was not detected above the reported sample quanitation limit. However, the reported quanitation limit is approximate.
R = The data are unusable. The compound may or may not be present.
1. Chloroform concentration in MW-2 was 10 times less than that detected in the field blank sample.

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Appendix J
Table J-2
April 2002 Sediment Analytical Results
Evergreen Manor Site
Roscoe, Illinois

Location ID:	SD01		SD-02		SD-03		SD-03		SD-04		SD-05	
Sample ID:	E0078		E0079		E0080		E0081		E0082		E0083	
Sample Date:	04/05/02		04/05/02		04/05/02		04/05/02		04/05/02		04/05/02	
Lab Name:	ENVSYS		ENVSYS		ENVSYS		ENVSYS		ENVSYS		ENVSYS	
Unit:	µg/kg		µg/kg		µg/kg		µg/kg		µg/kg		µg/kg	
PARAMETER												
1,1,1-TRICHLOROETHANE	17	U	17	U	13	U	15	U	14	U	11	U
1,1,2,2-TETRACHLOROETHANE	17	U	17	U	13	U	15	U	14	U	11	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	8	J	2	J	13	UJ	15	UJ	14	U	11	UJ
1,1,2-TRICHLOROETHANE	17	U	17	U	13	U	15	U	14	U	11	U
1,1-DICHLOROETHANE	17	U	17	U	13	U	15	U	14	U	11	U
1,1-DICHLOROETHYLENE	17	U	17	U	13	U	15	U	14	U	11	U
1,2,4-TRICHLOROBENZENE	17	U	17	U	13	U	15	U	14	U	11	U
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	17	R	17	R	13	R	15	R	14	R	11	R
1,2-DIBROMOETHANE	17	U	17	U	13	U	15	U	14	U	11	U
1,2-DICHLOROBENZENE	17	U	17	U	13	U	15	U	14	U	11	U
1,2-DICHLOROETHANE	17	U	17	U	13	U	15	U	14	U	11	U
1,2-DICHLOROPROPANE	17	U	17	U	13	U	15	U	14	U	11	U
1,4-DICHLOROBENZENE	17	U	17	U	13	U	15	U	14	U	11	U
2-BUTANONE	17	UJ	17	UJ	13	UJ	15	UJ	3	J	11	UJ
4-METHYL-2-PENTANONE	17	U	17	U	13	U	15	U	14	U	11	U
ACETONE	11	UJ	17	UJ	13	UJ	15	UJ	14	UJ	11	UJ
BENZENE	17	U	17	U	13	U	15	U	14	U	11	U
BROMODICHLOROMETHANE	17	U	17	U	13	U	15	U	14	U	11	U
BROMOMETHANE	17	UJ	17	UJ	13	UJ	15	UJ	14	UJ	11	UJ
CARBON DISULFIDE	17	U	17	U	13	U	15	U	14	U	11	U
CARBON TETRACHLORIDE	17	U	17	U	13	U	15	U	14	U	11	U
CHLOROBENZENE	17	U	17	U	13	U	15	U	14	U	11	U
CHLORODIBROMOMETHANE	17	U	17	U	13	U	15	U	14	U	11	U
CHLOROETHANE	17	UJ	17	UJ	13	UJ	15	UJ	14	UJ	11	UJ
CHLOROFORM	17	U	17	U	13	U	15	U	14	U	11	U
CHLOROMETHANE	17	U	17	U	13	U	15	U	14	U	11	U
cis-1,2-DICHLOROETHENE	17	U	17	U	13	U	15	U	14	U	11	U
cis-1,3-DICHLOROPROPENE	17	U	17	U	13	U	15	U	14	U	11	U
CYCLOHEXANE	17	U	17	U	13	U	15	U	14	U	11	U
DICHLORODIFLUOROMETHANE	17	U	17	U	13	U	15	U	14	U	11	U
DICHLOROMETHANE	17	U	17	U	13	U	15	U	14	U	11	U
ETHYLBENZENE	17	U	17	U	13	U	15	U	14	U	11	U
ISOPROPYLBENZENE	17	U	17	U	13	U	15	U	14	U	11	U
M-DICHLOROBENZENE	17	U	17	U	13	U	15	U	14	U	11	U
METHYL ACETATE	17	U	17	U	13	U	15	U	14	U	11	U
METHYL N-BUTYL KETONE	17	U	17	U	13	U	15	U	14	U	11	U
METHYLCYLOHEXANE	17	U	17	U	13	U	15	U	14	U	11	U
METHYLTERT-BUTYLETHER	17	U	17	U	13	U	15	U	14	U	11	U
STYRENE (MONOMER)	17	U	17	U	13	U	15	U	14	U	11	U
TETRACHLOROETHENE	17	U	17	U	13	U	15	U	14	U	11	U
TOLUENE	17	U	17	U	13	U	15	U	14	U	11	U
trans-1,2-DICHLOROETHENE	17	U	17	U	13	U	15	U	14	U	11	U
trans-1,3-DICHLOROPROPENE	17	U	17	U	13	U	15	U	14	U	11	U
TRIBOMOMETHANE	17	U	17	U	13	U	15	U	14	U	11	U
TRICHLOROETHYLENE	17	U	17	U	13	U	15	U	14	U	11	U
TRICHLOROFLUORMETHANE	17	U	17	U	13	U	15	U	14	U	11	U
VINYLCHLORIDE	17	U	17	U	13	U	15	U	14	U	11	U
XYLENES(TOTAL)	17	U	17	U	13	U	15	U	14	U	11	U

Note:

U = The analyte was analyzed for, but was not detected above the reported sample quanitation limit.

J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.

UJ = The analyte was not detected above the reported sample quanitation limit. However, the reported quanitation limit is approximate.

R = The data are unusable. The compound may or may not be present.

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Appendix J
Table J-2 (Continued)
April 2002 Sediment Analytical Results
Evergreen Manor Site
Roscoe, Illinois

Location ID:	SD-06		SD-07		SD-08	
Sample ID:	E0084		E0085		E0086	
Sample Date:	04/05/02		04/05/02		04/05/02	
Lab Name:	ENVSYS		ENVSYS		ENVSYS	
Unit:	µg/kg		µg/kg		µg/kg	
PARAMETER						
1,1,1-TRICHLOROETHANE	32	U	26	U	17	U
1,1,2,2-TETRACHLOROETHANE	32	U	26	U	17	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	32	UJ	26	UJ	17	UJ
1,1,2-TRICHLOROETHANE	32	U	26	U	17	U
1,1-DICHLOROETHANE	32	U	26	U	17	U
1,1-DICHLOROETHYLENE	32	U	26	U	17	U
1,2,4-TRICHLOROBENZENE	32	U	26	U	17	U
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	32	R	26	R	17	R
1,2-DIBROMOETHANE	32	U	26	U	17	U
1,2-DICHLOROBENZENE	32	U	26	U	17	U
1,2-DICHLOROETHANE	32	U	26	U	17	U
1,2-DICHLOROPROPANE	32	U	26	U	17	U
1,4-DICHLOROBENZENE	32	U	26	U	17	U
2-BUTANONE	32	UJ	26	UJ	17	UJ
4-METHYL-2-PENTANONE	32	U	26	U	17	U
ACETONE	32	UJ	26	UJ	17	UJ
BENZENE	32	U	26	U	17	U
BROMODICHLOROMETHANE	32	U	26	U	17	U
BROMOMETHANE	32	UJ	26	UJ	17	UJ
CARBON DISULFIDE	32	U	26	U	17	U
CARBON TETRACHLORIDE	32	U	26	U	17	U
CHLOROBENZENE	32	U	26	U	17	U
CHLORODIBROMOMETHANE	32	U	26	U	17	U
CHLOROETHANE	32	UJ	26	UJ	17	UJ
CHLOROFORM	32	U	26	U	17	U
CHLOROMETHANE	32	U	26	U	17	U
cis-1,2-DICHLOROETHENE	32	U	26	U	17	U
cis-1,3-DICHLOROPROPENE	32	U	26	U	17	U
CYCLOHEXANE	32	U	26	U	17	U
DICHLORODIFLUOROMETHANE	32	U	26	U	17	U
DICHLOROMETHANE	32	U	26	U	17	U
ETHYLBENZENE	32	U	26	U	17	U
ISOPROPYLBENZENE	32	U	26	U	17	U
M-DICHLOROBENZENE	32	U	26	U	17	U
METHYL ACETATE	32	U	26	U	17	U
METHYL N-BUTYL KETONE	32	U	26	U	17	U
METHYLCYLOHEXANE	32	U	26	U	17	U
METHYLTERT-BUTYLETHER	32	U	26	U	17	U
STYRENE (MONOMER)	32	U	26	U	17	U
TETRACHLOROETHENE	32	U	26	U	17	U
TOLUENE	4	J	26	U	17	U
trans-1,2-DICHLOROETHENE	32	U	26	U	17	U
trans-1,3-DICHLOROPROPENE	32	U	26	U	17	U
TRIBOMOMETHANE	32	U	26	U	17	U
TRICHLOROETHYLENE	32	U	26	U	17	U
TRICHLOROFLUORMETHANE	32	U	26	U	17	U
VINYLCHLORIDE	32	U	26	U	17	U
XYLENES(TOTAL)	32	U	26	U	17	U

Note:
U = The analyte was analyzed for, but was not detected above the reported sample quanitation limit.
J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ = The analyte was not detected above the reported sample quanitation limit. However, the reported quanitation limit is approximate.
R = The data are unusable. The compound may or may not be present.

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Appendix J
Table J-3
April 2002 Surface Water Analytical Results
Evergreen Manor Site
Roscoe, Illinois

Location ID	SW-01	SW-02	SW02	SW-03	SW-04	SW-05	SW-06
Sample ID	E0067	E0068	E0069	E0070	E0071	E0072	E0073
Sample Date	4/5/2002	4/5/2002	4/5/2002	4/5/2002	4/5/2002	4/5/2002	4/5/2002
Lab Name	A4	A4	A4	A4	A4	A4	A4
Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Chemical Name							
1,1,1-TRICHLOROETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-TETRACHLOROETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETH	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ
1,1,2-TRICHLOROETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-DICHLOROETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-DICHLOROETHYLENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-TRICHLOROBENZENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-TRICHLOROBENZENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-DIBROMO-3-CHLOROPROPANE (DBC	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-DIBROMOMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-DICHLOROBENZENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-DICHLOROETHANE	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ
1,2-DICHLOROPROPANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-DICHLOROBENZENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-BUTANONE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-METHYL-2-PENTANONE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ACETONE	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
BENZENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BROMODICHLOROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BROMOMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CARBON DISULFIDE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CARBON TETRACHLORIDE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROBENZENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROBROMOMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLORODIBROMOMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROFORM	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CHLOROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CIS-1,2-DICHLOROETHENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CIS-1,3-DICHLOROPROPENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
CYCLOHEXANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
DICHLORODIFLUOROMETHANE	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ
DICHLOROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
ETHYLBENZENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
ISOPROPYLBENZENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
M-DICHLOROBENZENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
METHYL ACETATE	0.5 R	0.5 R	0.5 R	0.5 R	0.5 R	0.5 R	0.5 R
METHYL N-BUTYL KETONE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
METHYLCYLOHEXANE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
METHYLTERT-BUTYLETHER	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
STYRENE (MONOMER)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TETRACHLOROETHENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TOLUENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRANS-1,2-DICHLOROETHENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRANS-1,3-DICLOROPROPENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRIBOMOMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRICHLOROETHYLENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TRICHLOROFLUOROMETHANE	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ
VINLYL CHLORIDE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
XYLENES (TOTAL)	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Note:
U = The analyte was analyzed for, but was not detected above the reported sample quanitation limit.
J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ = The analyte was not detected above the reported sample quanitation limit. However, the reported quanitation limit is approximate.
R = The data are unusable. The compound may or may not be present.

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Appendix J
Table J-3 (Continued)
April 2002 Surface Water Analytical Results
Evergreen Manor Site
Roscoe, Illinois

Location ID	SW-07		SW-08	
Sample ID	E0074		E0075	
Sample Date	4/5/2002		4/5/2002	
Lab Name	A4		A4	
Unit	µg/L		µg/L	
Chemical Name				
1,1,1-TRICHLOROETHANE	0.5	U	0.5	U
1,1,2,2-TETRACHLOROETHANE	0.5	U	0.5	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.5	UJ	0.5	UJ
1,1,2-TRICHLOROETHANE	0.5	U	0.5	U
1,1-DICHLOROETHANE	0.5	U	0.5	U
1,1-DICHLOROETHYLENE	0.5	U	0.5	U
1,2,3-TRICHLOROBENZENE	0.5	U	0.5	U
1,2,4-TRICHLOROBENZENE	0.5	U	0.5	U
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0.5	U	0.5	U
1,2-DIBROMOMETHANE	0.5	U	0.5	U
1,2-DICHLOROBENZENE	0.5	U	0.5	U
1,2-DICHLOROETHANE	0.5	UJ	0.5	UJ
1,2-DICHLOROPROPANE	0.5	U	0.5	U
1,4-DICHLOROBENZENE	0.5	U	0.5	U
2-BUTANONE	5	U	5	U
4-METHYL-2-PENTANONE	5	U	5	U
ACETONE	5	UJ	5	UJ
BENZENE	0.5	U	0.5	U
BROMODICHLOROMETHANE	0.5	U	0.5	U
BROMOMETHANE	0.5	U	0.5	U
CARBON DISULFIDE	0.5	U	0.5	U
CARBON TETRACHLORIDE	0.5	U	0.5	U
CHLOROBENZENE	0.5	U	0.5	U
CHLOROBROMOMETHANE	0.5	U	0.5	U
CHLORODIBROMOMETHANE	0.5	U	0.5	U
CHLOROETHANE	0.5	U	0.5	U
CHLOROFORM	0.5	U	0.5	U
CHLOROMETHANE	0.5	U	0.5	U
CIS-1,2-DICHLOROETHENE	0.5	U	0.5	U
CIS-1,3-DICHLOROPROPENE	0.5	U	0.5	U
CYCLOHEXANE	0.5	U	0.5	U
DICHLORODIFLUOROMETHANE	0.5	UJ	0.5	UJ
DICHLOROMETHANE	0.5	U	0.5	U
ETHYLBENZENE	0.5	U	0.5	U
ISOPROPYLBENZENE	0.5	U	0.5	U
M-DICHLOROBENZENE	0.5	U	0.5	U
METHYL ACETATE	0.5	R	0.5	R
METHYL N-BUTYL KETONE	0.5	U	0.5	U
METHYLCYLOHEXANE	5	U	5	U
METHYLTERT-BUTYLETHER	0.5	U	0.5	U
STYRENE (MONOMER)	0.5	U	0.5	U
TETRACHLOROETHENE	0.5	U	0.5	U
TOLUENE	0.5	U	0.5	U
TRANS-1,2-DICHLOROETHENE	0.5	U	0.5	U
TRANS-1,3-DICLOROPROPENE	0.5	U	0.5	U
TRIBOMOMETHANE	0.5	U	0.5	U
TRICHLOROETHYLENE	0.5	U	0.5	U
TRICHLOROFLUOROMETHANE	0.5	UJ	0.5	UJ
VINLYL CHLORIDE	0.5	U	0.5	U
XYLENES (TOTAL)	0.5	U	0.5	U

Note:
U = The analyte was analyzed for, but was not detected above the reported sample quanitation limit.
J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ = The analyte was not detected above the reported sample quanitation limit. However, the reported quanitation limit is approximate.
R = The data are unusable. The compound may or may not be present.

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Appendix K
Redacted

Appendix K
Redacted

4/5/02

0715 Meyer arrives at Burger King in Roscoe.

0740 B. Crawford and A. Slessers arrive. Crew meets to discuss days activities.

0850 Crew returns to BK after touring well locations and meeting B. Majarick (MAJCHRZAK) (sp?) to go over Health & Safety issues. SM

0900 Arrive at first well location.

0925 Well # G104 Deep.
Water level = 33.86 ft.
Well depth = 102.45 ft.
Instrument calibration by J. Meyer
YSI 3500 (#10561) calibrated with 12.88 mS solution reads 6.67 mS/cm, 4.9°C @ 20 ATC.
With buffer 7.0 pH probe read 7.23+. This is out of range. Reset to 7.0. Adjusted slope to 4.0 with 4.0 buffer. Set @ 25°C, No auto temp control.
Conductivity recalibrated not for auto temp control with same solution of 12.88 mS reads 0.103 @ 5.2°C set at 2.
ORP (mV) with Zobell soln reads -240 mV @ 6.3°C.
No cuvette was sent with the turbidity meter.

0950 Began pumping. Flow rate 300 ml/minute.

	VOL	pH	COND (mS/cm)	ORP (mV)	TEMP (°C)	depth to water
1026		5.24	.550	-329	9.5	33.86
1034		5.73	.522	-347	9.7	33.8[illegible]
1040		5.90	.493	-351	10.1	33.86
1046		5.88	.489	-348	10.2	33.86
1050		5.90	.491	-352	10.5	33.86

1053 Sampling begins for MS/MSD sample, 09 VOC vials.

1105 Sampling completed. DO meter turned on and a reading taken = 13.5 mg/L. This is an uncalibrated meter, and this seems out of range.

1117 Well #G104S
DTW = 34.30 ft DTB = 62.42 ft
Pump and tubing and depth meter have been deconned. Pump being lowered to well G104S.

[illegible]

DO	VOL	pH	COND	ORP	TEMP	depth to water
1136		6.21	.447	-364	6.8	34.41
1146		6.38	.475	-369	8.8	34.42
1156		6.36	.477	-367	8.8	34.42
10/Bridge 1206		6.44	0.480	-370	9.2	34.42 ft

1210 Samples taken (3) and a duplicate (3). Trip blanks (3) made with ePure water.

1225 Pump, tubing and depth gauge are deconned.

New lab for SOR/SED
ENVIRO SYSTEMS
9200 RUMSEY RD
SUITE B102
COLUMBIA, MD 21045
410-964-0330
Tonya Bella called with this information ~1130

1230 ePure water used to collect field blank through Grundfos Pump.

1300 Crew breaks for lunch.

1540 Creating COC and labels for samples

MS/MSD ①	EM2-G104P-01	E0057	99498 99
②	-G104S-01	E0058	507-509 500-506
DP	G104S-01DP	E0059	510-512
TB	GWTB01-01	E0060	513-515
FB	GWFB01-01	E0061	516-518

1715 Forms II lite paperwork completed, samples packed in a cooler with ice and brought to Mailboxes, Etc in Rescue for Fed Ex pickup. Note: there was no Temp Blank in cooler to lab.

4/4/02

0700 L. Crawford and K. Meyer met to review and discuss daily activity. Plan to sample wells 107, 109 S.D and 101 S.D if time allows. Also, waiting for call from L. Mickens regarding municipal well sampling.

0730 Arrived at well 6107 S+D.

0754 DTW = 37.63 ft. DTB = 67.41 ft in well 6107 S.D

YSI meter has been calibrated for pH (7 and 4 buffers).

0830 Flow rate for 6107 S.D = 250 ml/min

Vol	pH	COND	ORP	Temp	DO mg/L	depth to water
0831	5.29	.266	-354	8.1	11.0	37.6
0841	5.88	.266	-360	8.4	10.0	37.6
0851	6.14	.279	-361	9.8	9.5	37.6
0856	6.17	.285	-360	10.7	9.5	37.62
0901	6.26	.537	-352	11.3	9.0	37.62
0906	6.22	.535	-358	11.3	10.0	37.62
0911	6.27	.536	-358	10.8	10.5	37.62

0915 Samples taken - 3 VOC vials.

0925 All equipment has been decanted. Starting to work on well 6107 S. Flow rate = 450 ml/min

DTB = 47.34 ft DTW = 37.01 ft.

	Vol	pH	COND	ORP	Temp	DO	depth to water
0938		6.46	.758	-353	9.8	13.5	37.01
0949		6.66	.819	-346	11.1	14.0	37.01
0959		6.57	.827	-343	11.0	15.0	37.02
1009		6.65	.828	-337	11.7	15.0	37.02

1012 Samples taken, 3 VOC vials. Decon begins.

1030 Decon complete. Packing van to move to next rest. Decon is Alcenox soln, then tap water, then DI water. SM

1110 Crew used bathrooms, talked to A. Slissers on phone and dumped purge water in drums at Roscoe Township Offices off Elevator Road. SM

1125 Crew stops to speak with Bob Maichauk at drilling site. On site for groundwater sampling today are Barry Crawford and Sarah Meyer.

BACKNOTE On site yesterday 4/3/02 for groundwater sampling were Barry Crawford Sarah Meyer and Andris Slissers.

1130 Crew has picked up package from Mailbexes etc from warehouse. Package includes a cuvette for turbidity meter, ORP probe, Conductivity and pH solutions. The ORP probe looks better, but was not stored properly (no solution in cap), and there was no filler in package to prevent breakage of anything

1148 On site at G101D
DTW = 6.61 ft DTB 81.98 ft

1150	Calibrating turbidity meter with cell from warehouse & use. Turbidity meter adjusted to 0.02 NTU with 0.02 NTU standard.							
1200	Flow rate = 350 ml/min							
1206	Vol	pH	COND	ORP	Temp	DO	Turb	depth to water
		6.91	.452	267	8.2	14.0	330	6.61
1216		7.03	.438	198	7.7	14.0	180	6.61
1225		7.25	.454	158	8.3	11.2	59.3	6.61
1232		7.27	.465	150	8.9	12.5	43.9	6.61
1237		7.24	.455	138	9.2	12.5	32.4	6.6
1244		7.29	.463	132	9.2	12.0	23.3	6.61
1250		7.23	.468	125	9.0	12.5	14.9	
1256		7.32	.465	114	9.0	13.0	12.0	6.61
1302		7.34	.467	110	9.0	13.2	7.1	6.61
BACK NOTE 1230	Trip blank #2 prepared (TB02-01, 3 VOC vials) for Fed Ex Shipment today.							
	TABLE RESUMES.....							
1307		7.32	.468	105	9.0	12.5	6.3	
1314		7.28	.470	104	9.2	12.0	4.9	
1315	Sampling begins for G101D, 3 VOC vials.							
1332	All equipment has been decontaminated. Starting on well G101S. DTW = 6.58 ft. DTB = 42.58 ft							
1345	Flow rate = 450 mL/min.							
	Vol	pH	COND	ORP	Temp	DO	Turb	depth to water
1348		7.29	.293	082	9.3	14.0	348	6.60
1359		7.20	.487	086	8.3	15.0	124	6.60
1409		7.40	.469	071	9.0	14.0	69.2	6.60
1415		7.12	.493	083	8.9	14.0	54.1	6.60
1421		7.38	.261	064	8.8	14.0	44.4	6.60

Table Resumes

1426	7.16	.489	075	8.6	13.5	34.5	6.60
1431	7.37	.479	057	8.6	14.5	29.2	
1439	7.40	.276	059	8.8	14.0	21.2	
1443	7.42	.491	057	8.7	14.5	17.2	6.60
1449	7.37	.268	066	8.8	14.5	13.3	6.60
1455	7.36	.495	056	9.0	14.0	11.0	6.60
1500	7.28	0.486	065	8.3	14.0	4.7	6.60

1505 Samples taken, 3 VOC vials.

1525 All equipment decomned and van packed up. — sn

1535 Arrive at RPW to drop off waste water. Drillers are on site decomning. — sn

1550 Crew takes lunch and preps samples for shipment

			TAG #
(3)	G107D	E0062	99519-21
(4)	G107S	E0063	99522-24
	~~TB02-01~~ sn		
(5)	G101D	E0064	99525-27
(6)	G101S	E0065	99528-30
	TB02-01	E0066	99531-33

1715 Crew off site, to bring cooler to Fed EX. — sn

4/5/02

0700 Crew (Crawford + Meyer) meet in Roscoe. Plan for day, gather supplies, recon on river. SM

0920 Crew arrives at first sampling location, ~100 yards downstream of first house on Valentine Court. There is a gravel access road right to the river here. 5 photos taken: ① gravel road as it meets river, facing W. ② from road facing downstream, S, ③ from road facing upstream N. SM

0930 Crew is assembling pump and tubing SM

0945 Samples taken SW01, 9 VOC vials to include MS/MSD.

0946 Photo taken of water sampling apparatus, C facing W.

1022 Sediment samples collected into encore samplers - 5 caps, (2 for MS/MSD). EM2-SD01. Photo taken of area that was sampled for sediment, a quiet area in tree roots 5 yards upstream of water sampling location. SM

1040 Arrive at home at [redacted] Tanawingo Rd to sample river. They are home and ok the access here

1050 Walked downstream from that house

approximately 50 yards downstream of SW
to take next sample

1103 ~~Sed~~ SW Surface water sampling completed SW02 and SW02 Dup (6 VOC vials taken here).

1125 Sediment sampling completed SD02, 3 encore caps. Thin layer of soft sediment over gravel here. Moving back to [redacted] house to sample.

1128 2 photos taken of river sampling location #2 facing downstream, sampling right at shoreline

1130 Drive back at [redacted] house to begin sampling off steps to shore

1145 Water sampling SW03 SW completed. Photo taken of B. Crawford at bottom of stairs to shore where sampling is being done, facing downstream.

1148 Sediment sampling begins at GM2-SD03 and duplicate.

1205 Sediment sampling completed, SD03 and SD03-DP (3 caps each)

1240 At property with spring. Are preparing to take samples here. 2 photos taken of shoreline. Foot points at shore are where spring is supposedly located. We will sample 15 feet downstream of here.

1252 Surface sampling completed 3 VOCs

taken for water SW04.

1309 Sediment sampling complete at GM2-SD04. 3 encore caps taken. To walk ~100 yds upstream to next sample location.

1338 Sediment and water sampling finished at SW05 and SD05. Photo taken of sand/rock outcrop (manmade) where sampling was done, ~80 yards upstream of "spray" at SD0 along the shore here there appeared to be numerous areas where groundwater appeared to be coming out of the shore and flowing into the river. A lot of gravel has been dumped in this area.

Gray house where samples SD05 and SW05 were taken by [redacted] Tanawingo Cr.

1403 Photo taken of sampling location SW06 and SD06.

NOTE: Around this morning, currently 100% overcast, occasional sun, low 40's F, slight breeze.

1412 Water sampling finished. 3 VOC tubes collected SW06.

1421 Sediment samples completed at SD06 - 3 caps taken.

1453 Surface water sampling

completed at SW07 at the
[illegible] of house on Bird River Rd
3 vol vials taken
1502 Sediment sampling at SD07
Completed. Photo taken of
[illegible] sm sampling area.
1510 Photo taken of staff gauge
placement at [illegible] House.
DTW from top of staff
gauge = 4.08 feet.
House address of gauge and
[illegible] SD07, SW07 is
[redacted] Bird River Rd.
1516 Field Blank #2 prepared
SWFB02-01 — sm
1531 Field Blank 2 and Trip
Blank #3 completed. — sm
1535 Stopped at [redacted] Bird River Rd
to sample final location.
This will be sample location SW08.
1606 Sampling at SW08/SD08 Completed.
Photo taken of sample location at
[illegible] edge. — sm
1643 Crew breaks for a meal and
to put samples together.

MS/MSD	SW01	E00667	99534 - 43
	SW02	E00668	99543 - 45
	SW02-DP	E00668	99536 - 38
	SW03	E00669 70	99539 - 41
	SW04	E00707 71	99542 - 44
	SW05	E00717 72	99545 - 47
	SW06	E00723	99548 - 50
	SW07	E00734	99551 - 53
	SW08	E00745	99554 - 56

	SWF802--	E00 75 76	99557-59
	TB03	E00 76 77	99560-62
MS/MSD	SD01	E00 77 78	99563-65
	SD02	E00 78 79	68-70
	SD03	E00 79 80	71-73
	SD03-DP	E00 80 81	74-76
	SD04	E00 81 82	77-79
	SD05	E00 82 83	80-82
	SD06	E00 83 84	83-85
	SD07	E00 84 85	86-88
	SD08	E00 85 86	89-91

4/7/02

1940 In office looking at paperwork.
Spoke to Tonya. She asked us
to get the certification
sheet out of Ephire boxes b/c
we've been getting chloroform
hits on trip and field blanks.
- 2pm meet at Ecolab. — SC
- Hold samples overnight — SC
- get hotel rooms 800-338-2103 — SC
- Check out Dry Cleaners + take photos

4/7/02

4/8/02

0700 S. Meyer and J. Zebrowski meet in Racer to develop plan for the day.

0745 Crew arrives at wells G105S, D and begins instrument calibration and set up.

Checking calibration of instrument
YSI 3500 WATER QUALITY MONITOR
PH check PH 4 CHECK SOLN READ 3.93
PH 7 CHECK SOLN READ 6.93
ADJUSTED TO 4.0

G105S
DTB = 67.83 ft
FLOW out 375 ml/min
DTW = 35.93 ft

~~TIME TEMP PH COND~~ 4/8/02

	VOL	PH	COND	ORP	THROTEMP	DO mg/l	DTW
0827		6.91	.559	54.	61.9	10.6	10.0
0840		7.18	.502	36.	21.8	11.1	9.2
0850		7.27	.539	28	17.9	11.6	9.0
0900		7.27	.532	28	13.7	11.8	9.2
0910		7.34	.522	26	11.2	11.8	9.2
0920		7.36	.544	22	9.0	12.0	9.6	35.93
0930		7.44	.549	20	8.2	12.1	9.2	35.93
0940		7.42	.550	22	6.8	12.1	9.1	35.93
0950		7.40	.549	24	5.8	12.1	9.6	
1000		7.42	.543	23	4.7	12.1	9.6	35.93

Well 105D
10:00 DTB = 101.79 ft DTW = 35.79 ft.
10:10 Samples taken for well 105S. and 105S Duplicate.
10:30 flow rate 335 ml/min for 105D.

WELL 105D

1035	VOL	PH	CON	ORP	TURB	TEMP	DO	DTW
		7.52	.522	3	4.8	10.7	4.2	35.51
1045		7.74	.521	-6	5.7	10.9	8.0	35.51
945	BACKNOTE - TRIP BLANK MADE							
1056 ~~1046~~		7.81	.525	-6	4.4	11.2	7.2	35.51
1100	FLOW RATE 340 ml/min							
1108 ~~1058~~		7.81	.534	-6	5.4	11.7	7.2	35.51
1118		7.79	.532	-7	7.0	11.9	7.4	
1128		7.63	.539	2	9.2	11.7	8.4	
1154		7.65	.536	-4	11.8	11.7	10.2	

1260 Samples taken for well 105D. Increasing rain was the reason for taking the samples despite the parameters not stablizing.

1343 Crew has dumped purge water at DPW, packed A.M. samples and dropped them off at Mailboxes ETC. Spoke with Andrea about the weather. It is raining steadily and the ground is very wet. He called Ecolab and they said their consultant is already on his way, so we will go to Ecolab at 2pm to meet them. There are H+S concerns as well as sample handling concerns due to weather.

1426 At well 6103D
DTB = 59.01 ft DTW = 36.42 ft

G103D

	VOL	PH	CON	ORP	TURB	TEMP	DO	DT
1457		6.89	.599	34	~~54.4~~ 544	11.5	12.6	36.4
1508		6.95	.599	30	~~57~~ 189	12.0	12.6	36.4
1519		7.01	.593	25	71	12.0	11.8	36.4
1529		7.04	.599	27	25	12.1	12.0	36.4
1538		~~7.10~~ 936.98	.602	27	19	12.5	12.4	36.4
1546		7.09	.597	25	13	12.1	10.8	36.4
1558		7.06	.596	26	6.0	11.6	13.0	

1605 Sampled 3 VOC vials G103D

WELL G103S follows

1616 DTB 45.09

DTW 36.38

G103S	VOL	PH	CON	ORP	TURB	TEMP	DO	DTW
1643		7.09	.559	10	175	11.1	14.0	36.40
1700		7.01	.664	13	246	10.8	13.8	36.39
1721		7.21	.697	8	44.0	12.1	11.8	
1733		7.08	.690	17	5.2	12.5	12.2	36.1
1741		7.01	.692	22	1.5	12.2	12.8	36.1

1745 Sampled 3 VIALS for VOC G103S

1800 Attempted to get water level readings at G102S and G102D, but the depth tape was not operating. Sean Carter said he would speak with Ecolab about us going out their tomorrow to take readings. Then we will fax water level results to Sean. Also, spoke with Dick Ferguson (Ecolab) and he said that would be okay and we should stop

by his office when we arrived at
Geolab to do that tomorrow
1845 Drove by 2 dry cleaners
in Roscoe. Will take photos
of them tomorrow.
To collect tomorrow:
1 Field Blank
1 Duplicate
4 Municipal Samples/2 wells/each before & after Chlorine add
2 wells, G109S, D
1 Trip Blank
Meet Greg Kirby of North Park
water district at 1100.
Gry cell 815-988-6165.
NOTE: Samples sent out today:

TB#4	E0087	
G105S	E0088	
G105S-DP	E0089	
G105D	E0090	599620-22

Samples taken today & ship tomorrow

TB#5	E0091	99623-25
G103D	E0092	99626-28
G103S	E0093	99629-31

2020 Called T. Balla with today's sample shipment info.

[signature] 4/8/02

4/9/02

0700 S. Meyer and J. Zebrowski meet in Roscoe. SM

0740 Have dumped purge water spoken with drillers and taken 3 photos of Town & Country Dry Cleaning property at [redacted] Clayton Cr Elevator Rd SM The drillers stated that they were planning to abandon Well #1 today and begin re-installation. They also stated that the wells have not been developed yet. SM

0750 Bought buckets and ice. Took 2 photos at Jim Dandy Cleaners behind [redacted] Elevator Rd. Dry Cleaners note: There are no visible signs of contamination at either location. Town & Country has a field behind the shop with berms and ditches surrounding it. No discolored soil or vegetation. Jim Dandy Cleaners has a paved service area behind it that ~~and~~ SM is sloped toward a storm drain. There is a field behind this and beyond the field is a river/creek, approx 50 m away.

0815 Crew arrives at G109S, D to begin sampling.

0830 ADJUSTED PH METER OF YSI 3500 SO THAT PH 4 AND PH 7 BUFFERED SOLUTIONS READ ACCURATELY.

0840 WELL 109S DTB = 52.43 ft DTW = 42.25 ft

C	VOL	PH	CON	ORP	TURB	TEMP	DO	DTW
0908		6.25	1.537	24	1075	10.4	16.2	42.25
0920		6.75	1.293	23	682	11.9	15.2	
0932		7.02	1.247	24	321	12.2	14.8	42.24
0942		7.18	1.210	25	182	12.0	14.6	42.24
0953		7.29	1.217	19	85.4	11.8	14.8	
1005		7.40	1.216	28	45.7	11.1	14.0	
1015		7.41	1.197	22	42.0	10.9	14.8	42.24
					72.3			
1041		7.41	1.191	26	69.5	12.9	14.5	
1046		7.43	1.220	30	32.0	12.7	13.5	42.24
1050		7.44	1.219	27	21.3	13.0	14.2	42.24
1055		7.45	1.225	32	14.9	12.7	14.5	42.24
1100		7.48	1.044	29	9.1	12.6	14.5	42.24
1105		7.49	1.233	34	5.0	12.4	15.0	

1107 Samples taken 3 vials for VOC at G109S.

NOTE Purge rate varied from 250-500 ml/min during purge of G109S.

1110 All non-dedicated equipment being decon'd to move to G109D.

1125 Began pumping at G109D
DTW = 41.88 ft DTB = 72.34 ft
Initial purge rate 450 ml/min

	Vol	pH	COND	ORP	TURB	TEMP	DO	
1131		7.47	.723	26	315	10.5	11.5	41.
1143		7.38	.711	23	145.2	10.7	12.0	41.
1155		7.44	.692	9	255	13.3	10.5	41.
1206		7.37	.694	16	92.4	11.8	11.5	41.8
1217		7.35	.684	18.9	99.8	12.3	13.5	41.8
1230		7.65	.694	4	17.4	12.4	11.5	41.8
1235		7.51	.702	6	17.6	12.0	12.0	
1246		7.61	.684	5	18	12.9	12.5	

NOTE: Pump speed irregular. Unable to control pump well. — [illegible]

1249 Samples taken from G109D 3 vials

1300 Returned from obtaining municipal water samples. municipality has 2 wells. The wells were sequentially purged for 30 minutes each followed by purging of the entire water line up to treatment center. Samples from municipal wells 1 and 2 were collected both before and after treatment (3 vials each). A duplicate sample (3 vials) of well 1 prior to treatment was taken also. TOTAL gallons run through the water facility was ~ 10,000 gallons. Samples taken at 1240

1330 Field Blank GWPB-04 made with Grundfos setup and new batch of ePure water that arrived today. — Ben

1400 Made trip blanks with new ePure water, TB05 and TB06 — [illegible]

1510 Dropped purge water at DPW into 55-gallon, labelled drums.

Sad spoke with B. Maschauk about drilling operations. J. Zebrowski signed site HASP.

1537 1025 1020 measured:

DTW = 40.61 ft DTW = 40.96 ft Depths of wells

DTB 47.99 ft DTB = 67.47

TALKED TO RICHARD FERGUSON OF ECOLAB PRIOR TO TAKING DEPTH MEASUREMENTS. SHOWED US A PATH TO THE WELL.

1705 Preparing a second shipment of VOCs for A4 Analytical lab today.

GM2-G109S-01	E0094	99632-34
GM2-G109D-01	E0095	99635-37
GM2-GWFB02-01	E0096	99638-40
GM2-TB06-01	E0097	99641-43
GM2-GWMU1A-01	E0098	99644-46
GM2-GWMU1A-01DP	E0099	99647-49
GM2-GWMU1B-01	~~E0100~~ E00A0 SM	99650-52
GM2-GWMU2A-01	~~E0101~~ E00A1 SM	99653-55
GM2-GWMU2B-01	~~E0102~~ E00A2 SM	99656-58

Where GWMU1A = Municipal well #1 prior to treatment.

GWMU1B = Mun. well #1 after treatment

GWMU2A = Mun. well #2 prior to treatment

GWMU2B = Mun. well #2 after treatment.

4/10/02

1130 Sent all samples from yesterday off via Fed Ex last night

1145 Sent well 102 data to Sean Cordier, CRA via fax today.
Sean fax 773-380-9025
home 847-625-1730

[signature] 4/10/02

4/16/02

0700 Meyer and Zebrowski meet in Lacon to begin day of sampling.

0730 Crew arrives at DPW to begin waste sampling.

- SL1DW-01, SL1DW-01DP homogenized in a flat pan and aliquoted to 2-2oz jars and 3 vacuum caps.
TOOK SAMPLES FROM DRUM MW-3 DRUM 4 of 4 and MW-1A DRUM 3 of 4. USED FOR SL1DW-01 and SL1DW-01DP

0800 Soil composite was homogenized and packed into sample containers

0855 Collected GW1DW-01 water sample from a PURGE WATER drum labeled "PURGE WATER 4-9-02"

0915 collected GW1DW-02 water sample from a drum labeled "MW-2 water 3 of 3"

0920 Meyer returns from Fed Ex in Rockford where Grundfos pump was picked up.

0955 Setting up a well MW-1A.
OTW (from top of inner casing) = 34.40 ft
OTB (" ") = 59.91 ft

1010 Starting setting up and calibrating instruments
PH calibration and slope adjusted
Standard 4.0 solution read 4.00
Standard 7.0 solution read 6.99
Conductivity standard read 10.91 mS
ORP standard read as -306 mV

1022 Switched ORP electrode. New electrode read standard solution as 182 mV
WELL PUMP (GRUNDFOS) BEHAVING ERRATICALLY
WELL MW-1A

	VOL	PH	COND	ORP	TURB	TEMP	DO	DTW
1030		6.78	.84	67	5.10	16.5	14.8	34.40
1040		7.10	.774	40	1.30	14.5	14.0	
1050		7.27	.760	20	1.26	15.7	13.4	34.3
1100		7.30	.757	13	1.30	15.3	14.2	
1105		7.32	.771	8	2.60	13.5	14.0	

1110 Sample and duplicate taken.
1120 Discovered that 2 bottles of ePure water have broken; no liquid left. Called T-Bolla about field blank prep.
1145 Brought purge water to DPW.
1230 At well MW-3. Spoke with VH1 Warehouse and Houston Warehouse about pump problems. Houston eventually said it was likely a problem with the control box. VH1 knew nothing about it. Pump voltage is extremely irregular and uncontrollable. Flow rates only as low as ~2000 ml/minute and at times much greater.
DTW (from top of inner casing) = 15.42 ft
DTB (") = 75.93 ft

	VOL	PH	COND	ORP	TURB	TEMP	DO	DTW
1246		7.28	.791	-65	845	13.5	10.3	
1254		7.25	.730	-38	12.2	13.2	10.2	
1258		7.26	.740	-31	6.5	13.4	11.0	

	VOL	PH	COND	ORP	TURB	TEMP	DO	DTW
1302		7.26	.749	-29	5.7	13.1	10.6	
1307		7.28	.736	-26	3.1	13.4	10.8	
1320	TOOK SAMPLES FROM MW3 / MS / MSD							
1330	DTW = 15.42 ft							
1410	Arrive at DPW to drop off waste water.							

NOTE Field blank made after taking sample MW3. The water used for this field blank was a full dacon (Alcanox, spring and DI water), followed by a purge with the old, contaminated ePure water. 2 bottles of the new ePure water broke in transit at some point. Therefore, the smaller 1-L bottles were used to collect field blank. That is, the 1-L bottles of new ePure water. Trip Blank 7 was collected with new ePure first. Then the remaining ~35 L of new ePure was mixed with a minimum of the old, contaminated ePure to run through pump for field blank.

NOTE Trip blank collected at B40. Field blank collected at 1350.

NOTE The pump is still not responding properly, voltage is very uncontrollable and

jumps from 50 to 250 Hz at a slight touch. Flow rates have been as high as 1 gal/minute on average. ——— SN

1440 Crew arrives at MW-2 to begin pumping for sampling

1446 DTW = 35.24 ft DTB = 70.31 ft

	VOL	PH	COND	ORP	TURB	TEMP	DO	DTW
1458		7.24	.402	-30	54.5	19.8	13.2	
1506		7.30	.802	-17	448	13.6	13.4	
1511		7.27	.773	-20	140	14.5	13.2	
1516		7.29	.771	-22	44.8	14.8	13.0	3[illegible]
1521		7.31	.792	-24	52.5	14.4	12.8	
1525		7.32	.755	-27	58.7	18.3	13.0	35.2
1529		7.35	.770	-25	41.8	14.9	12.6	
1534		7.36	.774	-13	20.5	15.6	12.3	35.[illegible]
1538		7.37	.774	-18	10.1	14.3	12.7	
1541		7.37	.780	-24	11.02	14.1	13.1	
1545		7.44	.760	-27	7.10	16.3	12.8	
1549		7.45	.765	-27	7.82	16.9	12.6	35.[illegible]

Sample Taken @ 1600, 3 VOCs. [illegible]

✓ MS/MSD	SL1DW-01 5 caps + 2 oz	E00A3	5-99659-66, [illegible]
✓	SL1DW-01 DP 3 caps + 2 oz	A4	66-67, 68
✓	GW1DW-01	A5	69-71
✓	GW1DW-02	A6	72-74
✓	MW-1A-01	A7	75-77
✓	MW1A-01DP	A8	78-80
MS/MSD	MW3-01	A9	81-89
	FB03-01	B0	90-92
	TB07-01	B1	93-95
	MW2-01	B2	96-98

1600 3 photos taken of drum storage @ DPW.

LOG OF BORING MW-1

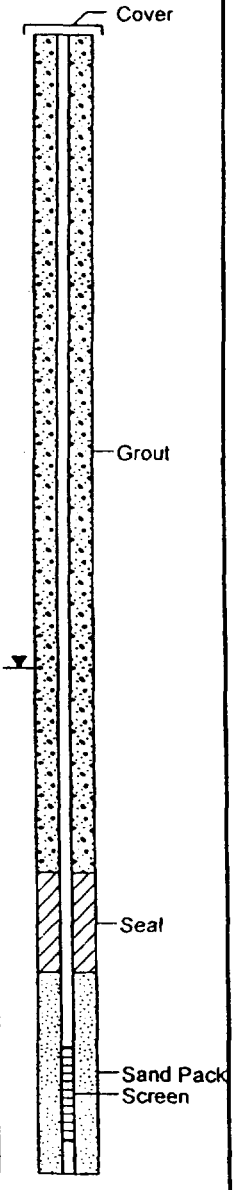
WESTON — MANAGERS DESIGNERS/CONSULTANTS

United States Environmental Protection Agency
Evergreen Manor Superfund Site
Roscoe, IL
Monitoring Well Installation
MW-1 ABANDONED 9 APRIL 2002

Date Started	: 1 April 2002	Drillers	: Chuck, Alex
Date Completed	: 2 April 2002	Drill Rig	: CME-75
Drilling Company	: Harriss Drilling Services, Inc.	Logged By	: R. Majchrzak
Drilling Method	: Hollow Stem Auger	Weather	: Snow, 31
Sampling Method	: Split Spoon	Address	: 11952 Blue Spruce Lane

Well: MW-1
Elev.: 0.0

Depth in Feet	Surf. Elev. 751.92	DESCRIPTION	USCS	Blow Count	PID (PPM)	Samples	REMARKS
0	752	SILTY CLAY LOAM, black, stiff, moist, traces of roots	CL				
		GRAVEL AND SAND, light brown, loose to very dense, dry, poorly sorted, no fines (clean), fine to coarse grained sand, fine gravel, subrounded particles, no odor or staining					No PID due to snow
5	747			5-12-13-15		1	Drilled to 25 feet 1 April 2002
10	742			5-12-15-18		2	
15	737			10-13-20-26		3	
20	732		GP	6-12-15-21		4	
25	727	Slightly Moist		6-13-15-15		5	Continued 2 April 2002
30	722			8-16-22-18	0.0	6	
35	717	Wet		8-10-10-6	0.0	7	
40	712			3-6-5-10	0.0	8	Use water to flush augers from 40 feet to 61 feet
45	707	SAND, light brown, medium dense, wet, poorly sorted, fine to coarse grained, with trace fine gravel, very few fines (clean), no odor or staining		3-4-4-10	0.0	9	
50	702		SP	1-3-8-18	0.0	10	
55	697			4-5-6-7	0.0	11	
60	692	End of Boring @ 61.5 Feet		1-4-7-11	None	12	No sample recovery
65	687						MW-1 ABANDONED 9 APRIL 2002. BACKFILLED WITH BENTONITE CHIPS
70							



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LOG OF BORING MW-1A

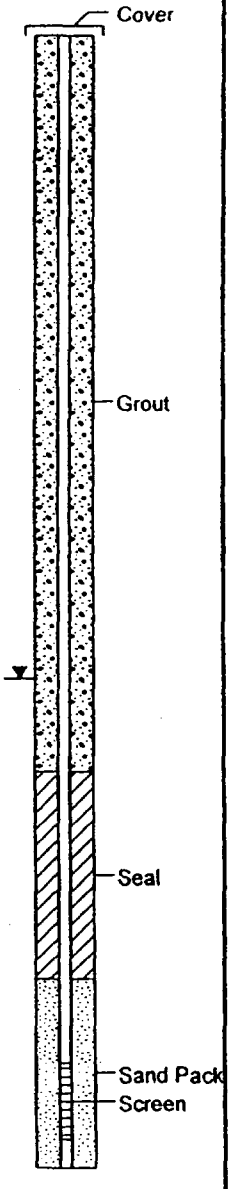
WESTON — MANAGERS DESIGNERS/CONSULTANTS

United States Environmental Protection Agency
Evergreen Manor Superfund Site
Roscoe, IL
Monitoring Well Installation

Date Started	: 10 April 2002	Drillers	: Chuck, Alex
Date Completed	: 11 April 2002	Drill Rig	: CME-75
Drilling Company	: Harriss Drilling Services, Inc.	Logged By	: R. Majchrzak
Drilling Method	: Hollow Stem Auger	Weather	: Sun, 72
Sampling Method	: Split Spoon	Address	: 11952 Blue Spruce Lane

Well: MW-1A
Elev.: 751.99

Depth in Feet	Surf. Elev. 752.50	DESCRIPTION	USCS	GRAPHIC	Blow Count	PID (PPM)	Samples	REMARKS
0	752							
5	747							Drilled to 54 Feet. Sampled at 55 and 60 feet to confirm geology.
10	742							Refer to MW-1 boring log for complete geology.
15	737							
20	732							Drilled to 25 feet 10 April 2002
25	727							Continued 11 April 2002
30	722							
35	717	Wet						
40	712							Use water to flush augers from 40 feet to 61 feet
45	707							
50	702							
55	697	SAND, light brown, medium dense, wet, poorly sorted, fine to coarse grained, with trace fine gravel, very few fines (clean), no odor or staining	SP		3-4-6	0.0	1	300 gallons water used to flush augers
60	692	End of Boring @ 61 Feet			3-4-8-10	0.0	2	
65	687							
70								



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WESTON MANAGERS DESIGNERS/CONSULTANTS

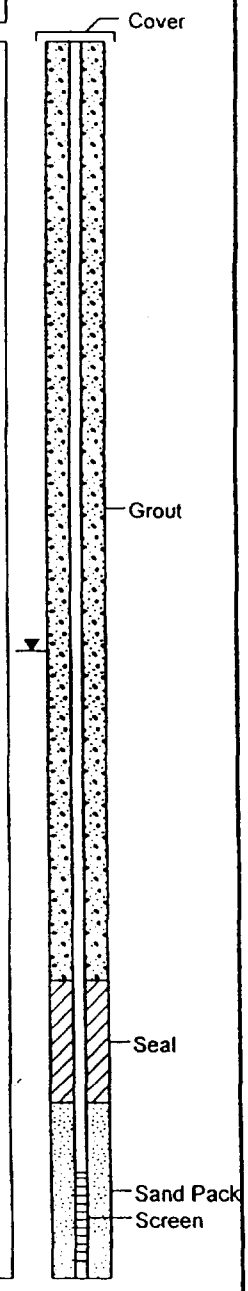
LOG OF BORING MW-2

United States Environmental Protection Agency
Evergreen Manor Superfund Site
Roscoe, IL
Monitoring Well Installation

Date Started	: 3 April 2002	Drillers	: Chuck, Alex
Date Completed	: 3 April 2002	Drill Rig	: CME-75
Drilling Company	: Harriss Drilling Services, Inc.	Logged By	: R. Majchrzak
Drilling Method	: Hollow Stem Auger	Weather	: Cloudy/Snow, 31
Sampling Method	: Split Spoon	Address	: 11943 Wagon Lane

Depth in Feet	Surf. Elev. 753.00	DESCRIPTION	USCS	GRAPHIC	Blow Count	PID (PPM)	Samples	REMARKS
0	753	SILTY CLAY LOAM, black, stiff, moist, traces of roots	CL					
5	748	GRAVEL AND SAND, light brown, loose to dense, dry, poorly sorted, no fines (clean), fine to coarse grained sand, fine gravel, subrounded particles, no odor or staining	GP		4-12-12-12	0.0	1	
10	743				10-16-16-16	0.0	2	
15	738				12-17-16-14	0.0	3	
20	733	SAND, light brown, medium dense, dry, fine to coarse grained, no fines (clean), poorly sorted, no odor or staining	SP		8-7-9-10	0.0	4	
25	728	SAND, light brown, medium dense, dry, medium grained, well sorted, no odor or staining	SW		3-6-7-9	0.0	5	
30	723				3-5-7-14	0.0	6	
35	718	wet			4-5-8-10	0.0	7	
40	713				2-3-5-7	0.2	8	Use water to flush augers from 40 feet to 71 feet
45	708	SAND, light brown, medium dense, wet, poorly sorted, fine to coarse grained, with trace fine gravel, no odor or staining	SP		1-3-6-8	0.0	9	
50	703				1-2-5-12	0.2	10	Problems with sand in augers
55	698	with little fine gravel			7-11-17-17	0.4	11	
60	693				4-5-13-18	none	12	No sample recovery
65	688	with trace fine gravel			2-3-4-8	0.3	13	625 gallons water used to flush augers
70	683	End of Boring @ 71.5 Feet			4-7-12-17	0.2	14	
75								

Well: MW-2
Elev.: 752.64



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WESTON
MANAGERS DESIGNERS/CONSULTANTS

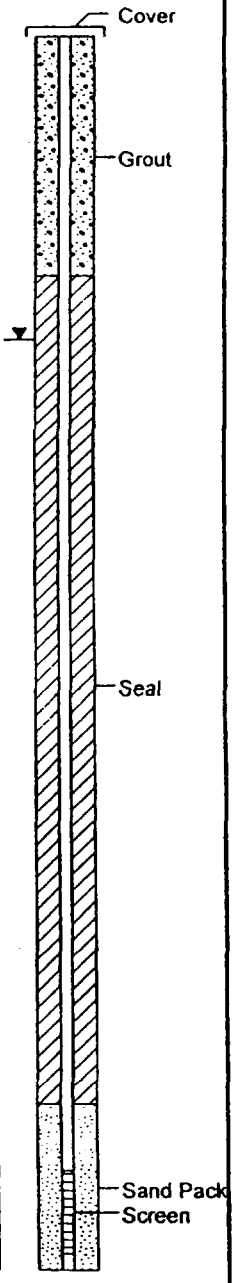
LOG OF BORING MW-3

United States Environmental Protection Agency
Evergreen Manor Superfund Site
Roscoe, IL
Monitoring Well Installation

Date Started	: 4 April 2002	Drillers	: Chuck, Alex
Date Completed	: 9 April 2002	Drill Rig	: CME-75
Drilling Company	: Harriss Drilling Services, Inc.	Logged By	: R. Majchrzak
Drilling Method	: Hollow Stem Auger	Weather	: Cloudy, 38
Sampling Method	: Split Spoon	Address	: 11512 Wagon Lane

Well: MW-3
Elev.: 726.14

Depth in Feet	Surf. Elev. 726.71	DESCRIPTION	USCS	GRAPHIC	Blow Count	PID (PPM)	Samples	REMARKS
0	727	SILTY CLAY LOAM, black, stiff, moist, traces of roots	CL					
5	722	SANDY LOAM FILL, dark brown, very loose, moist to very moist, no odor or staining	SM		1-1-0-0		1	No PID due to equipment malfunction
10	717	SAND, light brown, loose, moist, fine to coarse grained, poorly sorted, with trace fine gravel, silt, clay, no odor or staining	SP		1-2-3-2		2	
15	712				1-3-3-5		3	Drilled to 21 feet 4 April 2002
20	707	GRAVEL, brown, loose, wet, fine grained, well sorted, no sand, no odor or staining	GW SW		1-4-4-4		4	Drilled to 46 feet 5 April 2002
25	702	SAND, light brown, loose, wet, fine grained, well sorted, trace silt/clay, no odor or staining	SP		2-4-6-12		5	
30	697	SAND, light brown, medium dense, wet, fine to coarse grained, poorly sorted, with trace to little fine gravel, no odor or staining	GP		2-3-7-9		6	Use water to flush augers from 20 feet to 76 feet
35	692	GRAVEL and SAND, light brown, medium dense, wet, fine to coarse grained sand, fine gravel, with trace silt, clay, poorly sorted			1-5-8-11		7	
40	687	SAND, light brown, medium dense, wet, poorly sorted, fine to coarse grained, with trace fine gravel, no fines (clean), no odor or staining			1-4-7-14		8	
45	682				3-7-13-24		9	Continued 9 April 2002
50	677				4-7-12-15	0.0	10	
55	672		SP		3-6-8-15	44.0	11	Problems with sand in augers 50 to 65 feet
60	667				2-6-10-19	0.0	12	
65	662				2-3-11-20	0.0	13	
70	657				3-5-9-20	0.0	14	625 gallons water used to flush augers
75	652	End of Boring @ 76 Feet			4-9-12-16	0.0	15	
80								



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Appendix L

REDACTED

FIGURE 2-1

HOMES THAT WERE CONNECTED TO NPPWD SYSTEM BY THE U.S. EPA (1999-2000)
EVERGREEN MANOR SITE
Roscoe, Illinois

SE ACTION CONTRACT
NTRACT No. 68-W7-0026
MENT No. 139-RICO-05MZ
NTROL No. RFW139-2A-ANOJ

REDACTED

FIGURE 3-3

SE ACTION CONTRACT
NTRACT No. 68-W7-0026
ENT No. 139-RICO-05MZ
TROL No. RFW139-2A-ANOJ

NORTH PARK PUBLIC WATER DISTRIBUTION NETWORK
EVERGREEN MANOR SITE
Roscoe, Illinois

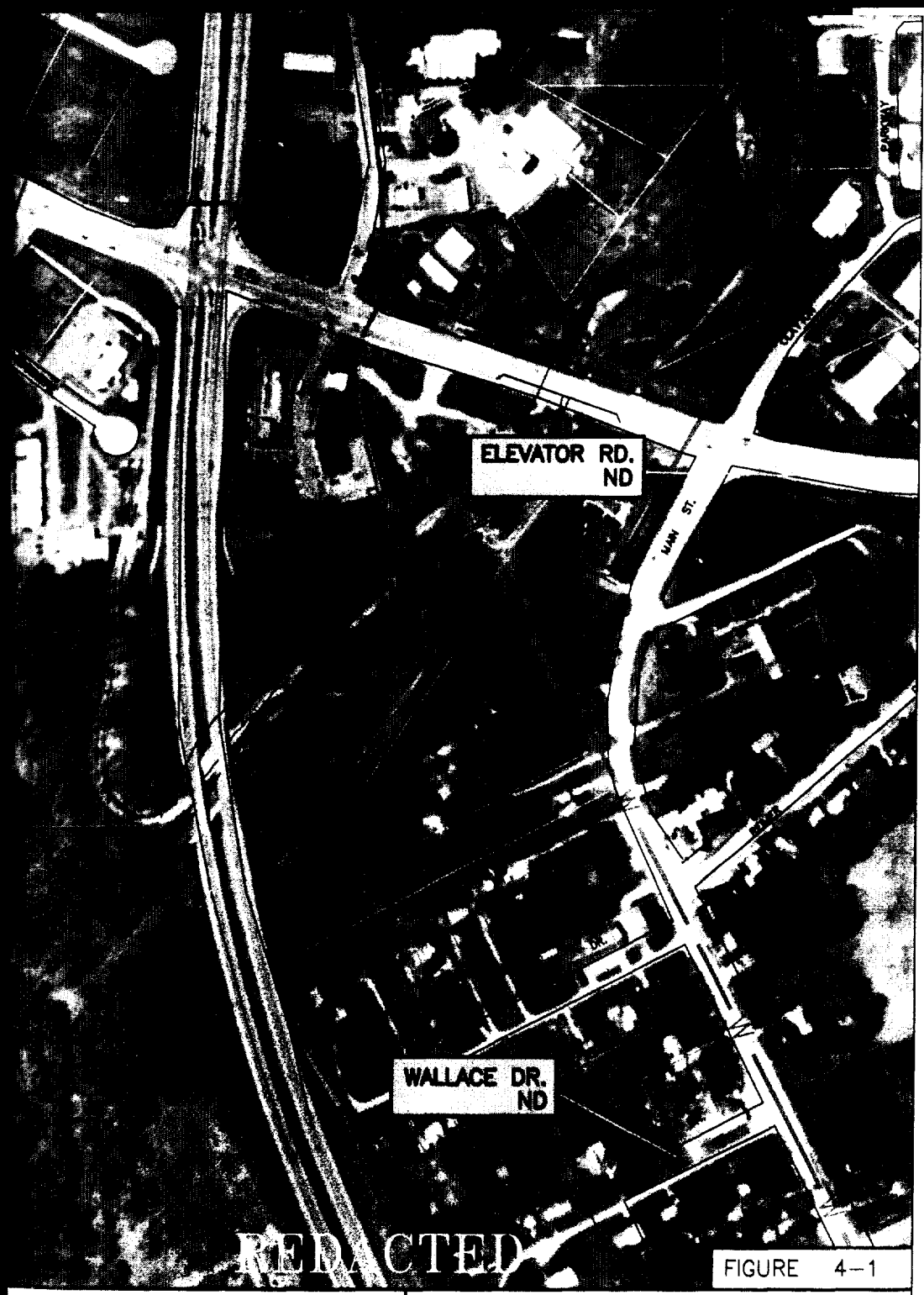

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FIGURE 4-1

NSE ACTION CONTRACT
ONTRACT No. 68-W7-0026
MENT No. 139-RICO-05MZ
NTROL No. RFW139-2A-ANOJ

1990-1993 MAXIMUM TRICHLOROETHENE GROUNDWATER CONCENTRATIONS
EVERGREEN MANOR SITE
Roscoe, Illinois

REDACTED

FIGURE 4-2

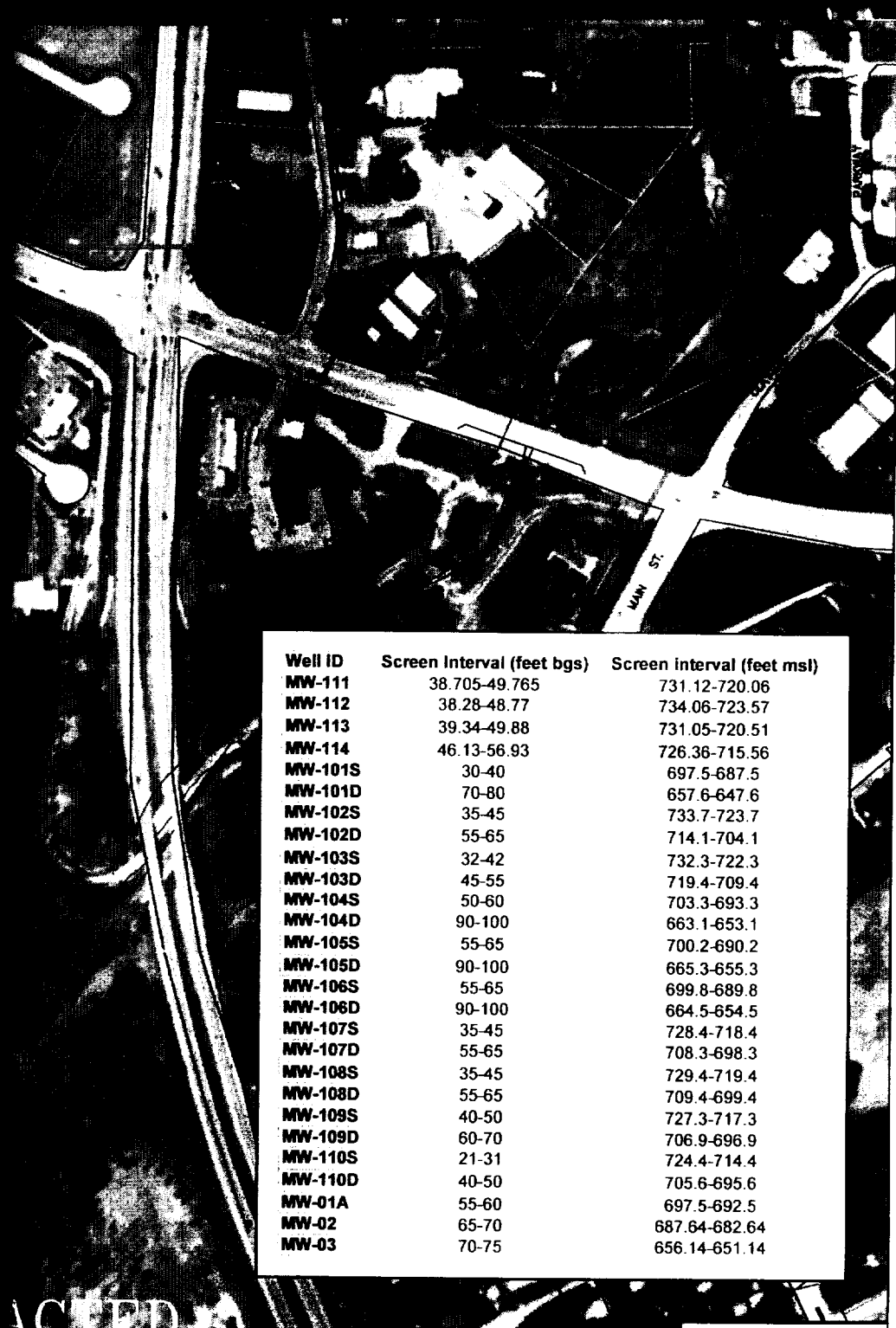
SE ACTION CONTRACT
NTRACT No. 68-W7-0026
ENT No. 139-RICO-05MZ
TROL No. RFW139-2A-ANOJ

1990-1993 TETRACHLOROETHENE MAXIMUM GROUNDWATER CONCENTRATIONS
EVERGREEN MANOR SITE
Roscoe, Illinois

FIGURE 4-3

SE ACTION CONTRACT
NTRACT No. 68-W7-0026
ENT No. 139-RICO-05MZ
TROL No. RFW139-2A-ANOJ

MAXIMUM TETRACHLOROETHENE AND TRICHLOROETHENE GROUNDWATER CONCENTRATIONS REPORTED BETWEEN 1994-1999
EVERGREEN MANOR SITE
Roscoe, Illinois



Well ID	Screen Interval (feet bgs)	Screen interval (feet msl)
MW-111	38.705-49.765	731.12-720.06
MW-112	38.28-48.77	734.06-723.57
MW-113	39.34-49.88	731.05-720.51
MW-114	46.13-56.93	726.36-715.56
MW-101S	30-40	697.5-687.5
MW-101D	70-80	657.6-647.6
MW-102S	35-45	733.7-723.7
MW-102D	55-65	714.1-704.1
MW-103S	32-42	732.3-722.3
MW-103D	45-55	719.4-709.4
MW-104S	50-60	703.3-693.3
MW-104D	90-100	663.1-653.1
MW-105S	55-65	700.2-690.2
MW-105D	90-100	665.3-655.3
MW-106S	55-65	699.8-689.8
MW-106D	90-100	664.5-654.5
MW-107S	35-45	728.4-718.4
MW-107D	55-65	708.3-698.3
MW-108S	35-45	729.4-719.4
MW-108D	55-65	709.4-699.4
MW-109S	40-50	727.3-717.3
MW-109D	60-70	706.9-696.9
MW-110S	21-31	724.4-714.4
MW-110D	40-50	705.6-695.6
MW-01A	55-60	697.5-692.5
MW-02	65-70	687.64-682.64
MW-03	70-75	656.14-651.14

FIGURE 4-4

ACTION CONTRACT
ACT No. 68-W7-0026
No. 139-RICO-05MZ
L No. RFW139-2A-ANOJ

HISTORICAL DETECTIONS OF CHLORINATED COMPOUNDS (EXCEPT FOR TCE AND PCE) IN GROUNDWATER
EVERGREEN MANOR SITE
Roscoe, Illinois

FIGURE 4-5

SE ACTION CONTRACT
NTRACT No. 68-W7-0026
MENT No. 139-RICO-05MZ
NTROL No. RFW139-2A-ANOJ

MAXIMUM TRICHLOROETHENE GROUNDWATER CONCENTRATIONS REPORTED BETWEEN 2000 & 2002
EVERGREEN MANOR SITE
Roscoe, Illinois

REDACTED

FIGURE 4-6

SE ACTION CONTRACT
NTRACT No. 68-W7-0026
ENT No. 139-RICO-05MZ
TROL No. RFW139-2A-ANOJ

MAXIMUM TETRACHLOROETHENE GROUNDWATER CONCENTRATIONS REPORTED BETWEEN 2000 & 2002
EVERGREEN MANOR SITE
Roscoe, Illinois

FIGURE 4-7

HISTORICAL DETECTIONS OF NON-CHLORINATED CONTAMINANTS IN GROUNDWATER

EVERGREEN MANOR SITE

Roscoe, Illinois

TION CONTRACT
T No. 68-W7-0026
No. 139-RICO-05MZ
No. RFW139-2A-ANOJ

FIGURE 4-9

HISTORICAL TRICHLOROETHENE AND TETRA-CHLOROETHENE CONCENTRATIONS IN GROUNDWATER AND MAY 2002 SOIL GAS SAMPLING RESULTS

EVERGREEN MANOR SITE
Roscoe, Illinois

RESPONSE ACTION CONTRACT
U.S. EPA CONTRACT No. 68-W7-0026
WORK ASSIGNMENT No. 139-RICO-05MZ
DOCUMENT CONTROL No. RFW139-2A-ANOJ

Well ID	Screen Interval (feet bgs)	Screen interval (feet msl)
MW-111	38.705-49.765	731.12-720.06
MW-112	38.28-48.77	734.06-723.57
MW-113	39.34-49.88	731.05-720.51
MW-114	46.13-56.93	726.36-715.56
MW-101S	30-40	697.5-687.5
MW-101D	70-80	657.6-647.6
MW-102S	35-45	733.7-723.7
MW-102D	55-65	714.1-704.1
MW-103S	32-42	732.3-722.3
MW-103D	45-55	719.4-709.4
MW-104S	50-60	703.3-693.3
MW-104D	90-100	663.1-653.1
MW-105S	55-65	700.2-690.2
MW-105D	90-100	665.3-655.3
MW-106S	55-65	699.8-689.8
MW-106D	90-100	664.5-654.5
MW-107S	35-45	728.4-718.4
MW-107D	55-65	708.3-698.3
MW-108S	35-45	729.4-719.4
MW-108D	55-65	709.4-699.4
MW-109S	40-50	727.3-717.3
MW-109D	60-70	706.9-696.9
MW-110S	21-31	724.4-714.4
MW-110D	40-50	705.6-695.6
MW-01A	55-60	697.5-692.5
MW-02	65-70	687.64-682.64
MW-03	70-75	656.14-651.14

REDACTED

FIGURE 4-10

ACTION CONTRACT
ACT No. 68-W7-0026
No. 139-RICO-05MZ
L No. RFW139-2A-ANOJ

HISTORICAL DETECTION OF CHLORINATED COMPOUNDS (EXCEPT FOR TCE AND PCE) IN GROUNDWATER AND IN MAY 2002 SOIL GAS SAMPLES
EVERGREEN MANOR SITE
Roscoe, Illinois

REDACTED

FIGURE 4-11

ACTION CONTRACT
RACT No. 68-W7-0026
T No. 139-RICO-05MZ
OL No. RFW139-2A-ANOJ

HISTORICAL DETECTIONS OF NON-CHLORINATED CONTAMINANTS IN GROUNDWATER AND IN MAY 2002 SOIL GAS SAMPLES
EVERGREEN MANOR SITE
Roscoe, Illinois

REDACTED

FIGURE 5-1

NSE ACTION CONTRACT
ONTRACT No. 68-W7-0026
MENT No. 139-RICO-05MZ
NTROL No. RFW139-2A-ANOJ

1990-1993 GROUNDWATER RESULTS
MAXIMUM EXTENT OF TRICHLOROETHENE
AND TETRACHLOROETHENE PLUME
EVERGREEN MANOR SITE
Roscoe, Illinois

REDACTED

FIGURE 5-4

SE ACTION CONTRACT
NTRACT No. 68-W7-0026
ENT No. 139-RICO-05MZ
TROL No. RFW139-2A-ANOJ

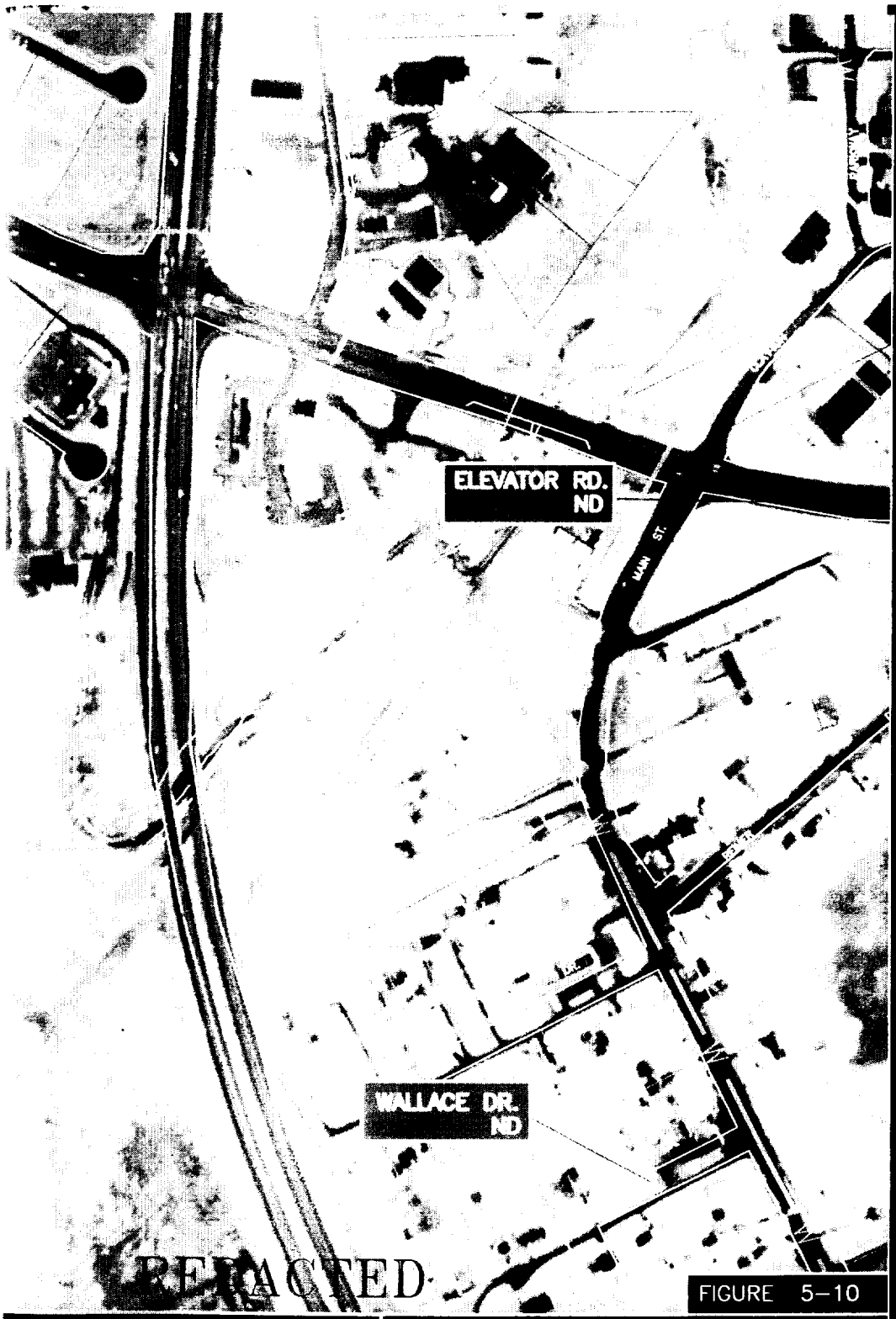
1994-1999 GROUNDWATER RESULTS
MAXIMUM TETRACHLOROETHENE AND
TRICHLOROETHENE GROUNDWATER PLUME
EVERGREEN MANOR SITE
Roscoe, Illinois

REDACTED

FIGURE 5-8

SE ACTION CONTRACT
NTRACT No. 68-W7-0026
ENT No. 139-RICO-05MZ
TROL No. RFW139-2A-ANOJ

2000 TO 2002 GROUNDWATER RESULTS
MAXIMUM EXTENT OF TRICHLOROETHENE AND TETRACHLOROETHENE PLUME
EVERGREEN MANOR SITE
Roscoe, Illinois



REDACTED

FIGURE 5-10

E ACTION CONTRACT
TRACT No. 68-W7-0026
ENT No. 139-RICO-05MZ
TROL No. RFW139-2A-ANOJ

MAXIMUM TRICHLOROETHENE GROUNDWATER CONCENTRATIONS REPORTED BETWEEN 1990 & 2002

EVERGREEN MANOR SITE

Roscoe, Illinois

REDACTED

FIGURE 5-11

ACTION CONTRACT
RACT No. 68-W7-0026
NT No. 139-RICO-05MZ
ROL No. RFW139-2A-ANOJ

GROUNDWATER SAMPLING LOCATIONS AND
TETRACHLOROETHENE RESULTS FROM 1990 TO 2002
EVERGREEN MANOR SITE
Roscoe, Illinois

REDACTED

FIGURE 5-12

SE ACTION CONTRACT
NTRACT No. 68-W7-0026
MENT No. **139-RICO-05MZ**
NTROL No. RFW139-2A-ANOJ

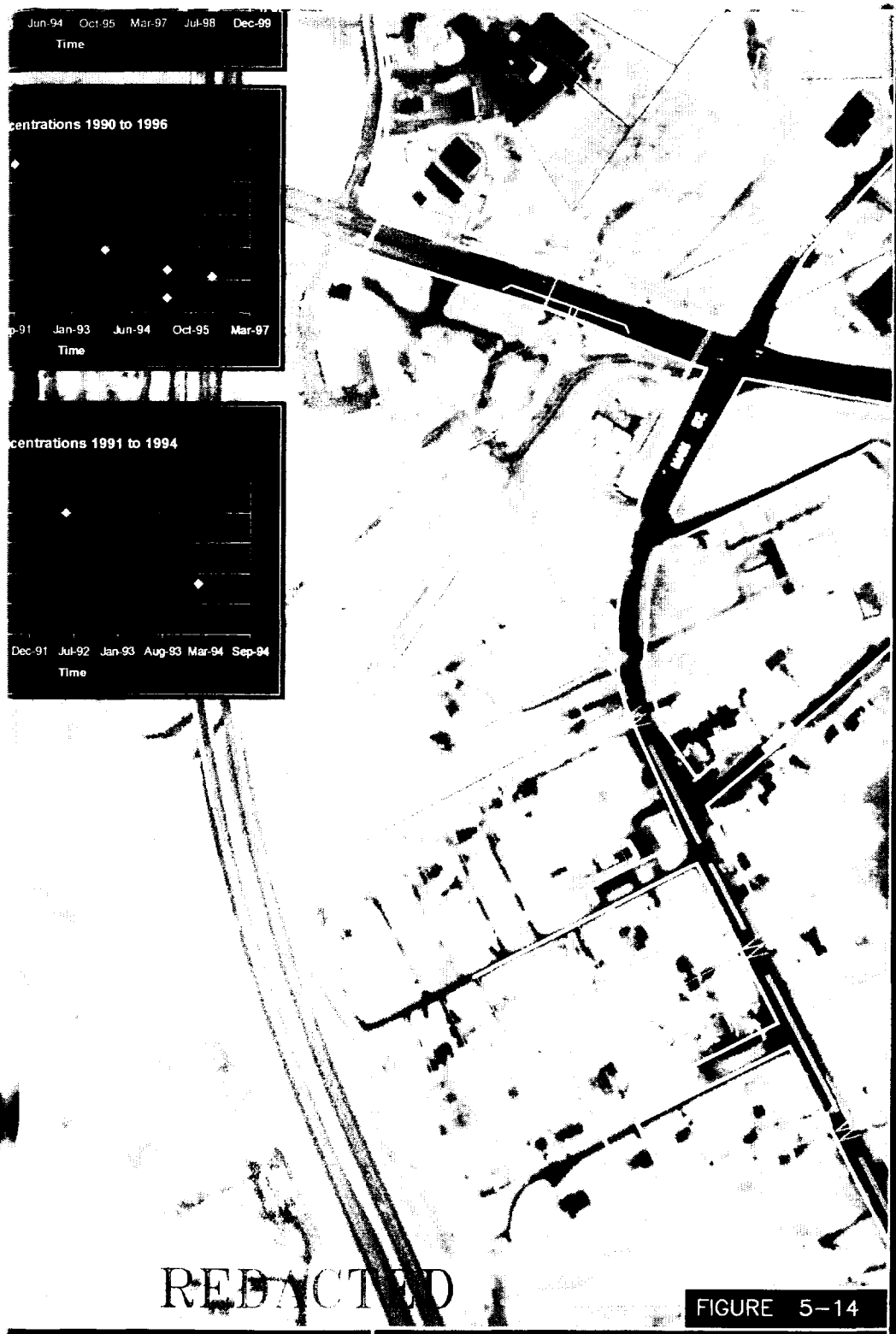
1990 TO 2002 GROUNDWATER RESULTS
MAXIMUM EXTENT OF TRICHLOROETHENE PLUME
EVERGREEN MANOR SITE
Roscoe, Illinois

REDACTED

FIGURE 5-13

ONSE ACTION CONTRACT
CONTRACT No. 68-W7-0026
NMENT No. **139-RICO-05MZ**
ONTROL No. RFW139-2A-ANOJ

1990 TO 2002 GROUNDWATER RESULTS
MAXIMUM EXTENT OF TETRACHLOROETHENE PLUME
EVERGREEN MANOR SITE
Roscoe, Illinois



REDACTED

FIGURE 5-14

ACTION CONTRACT
RACT No. 68-W7-0026
NT No. 139-RICO-05MZ
OL No. RFW139-2A-ANOJ

TRICHLOROETHENE CONCENTRATION TRENDS
1990-2002
EVERGREEN MANOR SITE
Roscoe, Illinois

REDACTED

FIGURE 5–15

CTION CONTRACT
CT No. 68–W7–0026
No. 139–RICO–05MZ
No. RFW139–2A–ANOJ

TETRACHLOROETHENE CONCENTRATION TRENDS

EVERGREEN MANOR SITE

Roscoe, Illinois

Appendix A
Redacted

Appendix A
Redacted

EvcRGREEN MANOR GROU ATER CONTAMINATION

VOC SAMPLE RESULTS

Street	Number	Sample Date	Name	TCE	PCE	1,1 DCE	1,1,1 TCA	Carbon Tet	Cis1,2 DCE	1,1 DCA	1,1,2 TCA
				Concentrations in Parts Per Billion (ppb)							
Adele											
	[redacted]	02/05/91	[redacted]	1.0	--	--	7.8	--	--	--	--
	[redacted]	01/10/91	[redacted]	1.8	--	--	13.2	--	--	--	--
	[redacted]	03/19/91	[redacted]	3.0	--	--	15.0	--	--	--	--
	[redacted]	01/10/91	[redacted]	4.9	--	2.5	23.1	--	0.4	1.1	--
	[redacted]	09/23/91	[redacted]	12.5	0.4	2.9	38.7	--	2.6	2.9	--
	[redacted]	02/19/91	[redacted]	26.6	1.0	3.4	37.3	--	4.0	1.7	--
	[redacted]	02/05/91	[redacted]	61.3	1.2	3.6	37.4	--	9.7	2.1	0.4
	[redacted]	01/10/91	[redacted]	59.0	0.9	7.2	46.7	--	9.0	2.8	0.3
	[redacted]	04/23/91	[redacted]	58.1	1.6	5.6	37.7	--	9.0	3.1	0.5
	[redacted]	05/16/91	[redacted]	24.0	0.7	1.7	24.0	--	--	1.5	--
	[redacted]	09/24/91	[redacted]	66.5	1.8	4.4	46.5	--	9.3	1.5	--
	[redacted]	09/24/91	[redacted]	--	--	--	--	--	--	--	--
	[redacted]	01/10/91	[redacted]	59.5	0.4	3.2	30.7	--	7.7	1.7	0.3
	[redacted]	04/23/91	[redacted]	69.9	0.8	4.8	29.3	--	9.4	2.6	--
Balsa Lane											
	[redacted]	01/10/91		--	--	--	--	--	--	--	--
	[redacted]	03/19/91	[redacted]	2.0	--	--	--	--	--	--	--
	[redacted]	01/22/91	[redacted]	--	--	--	--	--	--	--	--
	[redacted]	01/22/91	[redacted]	3.0	--	--	1.0	--	--	--	--
	[redacted]	01/15/91	[redacted]	8.1	--	--	1.7	--	1.3	--	--
	[redacted]	01/22/91	[redacted]	8.0	--	--	1.0	--	--	--	--
	[redacted]	01/15/91	[redacted]	7.4	--	--	1.5	--	1.0	--	--
	[redacted]	07/09/91	[redacted]	6.6	--	--	1.0	--	0.9	--	--
Bend River											
	[redacted]	01/10/91	[redacted]	--	--	--	--	--	--	--	--
	[redacted]	02/05/91	[redacted]	--	--	--	0.4	--	--	--	--
	[redacted]	01/22/91	[redacted]	--	--	--	--	--	--	--	--
	[redacted]	01/22/91	[redacted]	--	--	--	--	--	--	--	--

Street	Number	Sample Date	Name	TCE	PCE	1,1 DCE	1,1,1 TCA	Carbon Tet	Cis1,2 DCE	1,1 DCA	1,1,2 TCA
				Concentrations in Parts per Billion (ppb)							
Blue Spruce											
	[redacted]	01/15/91	[redacted]	37.7	--	5.6	30.4	--	4.0	2.3	--
	[redacted]	05/16/91	[redacted]	0.7	--	4.4	26.0	--	0.4	10.0	--
	[redacted]	12/11/90	[redacted]	37.7	--	--	24.9	--	--	--	--
	[redacted]	12/03/91	[redacted]	43.2	--	2.8	24.0	--	4.3	1.0	--
	[redacted]	12/11/90	[redacted]	75.4	--	5.3	51.5	--	6.4	4.8	0.4
	[redacted]	01/10/90	[redacted]	50.0	--	3.0	34.8	--	5.0	2.6	--
	[redacted]	09/23/91	[redacted]	90.9	--	4.5	47.0	--	7.3	2.3	--
	[redacted]	12/11/90	[redacted]	37.5	0.3	2.2	25.2	--	2.6	1.4	0.2
	[redacted]	12/11/90	[redacted]	40.2	--	2.1	27.3	--	3.3	1.8	0.2
	[redacted]	12/11/90	[redacted]	68.6	--	5.1	39.5	--	6.5	2.7	0.3
	[redacted]	01/10/91	[redacted]	76.0	--	5.1	57.5	--	6.7	3.4	0.2
	[redacted]	09/24/91	[redacted]	86.1	--	5.9	43.4	--	7.7	2.1	--
	[redacted]	12/11/90	[redacted]	63.4	--	2.1	33.5	--	5.1	2.5	0.4
	[redacted]	12/11/90	[redacted]	51.9	--	3.4	30.8	--	4.0	2.0	0.3
	[redacted]	07/19/91	[redacted]	56.3	--	4.2	28.5	--	5.1	1.8	--
	[redacted]	12/11/90	[redacted]	49.5	--	2.2	24.6	--	4.1	1.4	0.3
	[redacted]	06/04/91	[redacted]	53.6	--	3.6	27.4	--	4.7	1.8	--
	[redacted]	06/04/91	[redacted]	--	--	--	--	--	--	--	--
	[redacted]	12/11/90	[redacted]	20.0	--	1.3	19.0	2.5	3.5	--	--
	[redacted]	12/11/90	[redacted]	53.9	--	1.8	26.5	--	4.6	1.8	--
	[redacted]	12/11/90	[redacted]	51.8	--	2.8	28.1	--	4.0	2.0	0.2
	[redacted]	12/11/90	[redacted]	42.9	--	--	14.8	--	4.9	--	--
	[redacted]	01/10/91	[redacted]	76.0	--	2.9	39.5	--	6.5	1.8	--
	[redacted]	12/11/90	[redacted]	54.7	--	2.8	28.4	--	5.5	1.8	0.3
Buggywhip											
	[redacted]	01/15/91	[redacted]	18.5	--	3.1	22.9	--	3.1	3.1	--
	[redacted]	03/19/91	[redacted]	13.0	--	2.0	17.0	--	--	--	--
	[redacted]	01/10/91	[redacted]	12.2	--	1.7	16.1	--	2.7	2.2	--
	[redacted]	06/04/91	[redacted]	37.7	--	4.7	32.4	--	6.5	3.0	--
	[redacted]	07/9/91	[redacted]	24.5	--	1.9	12.5	--	4.9	1.3	--
	[redacted]	02/05/91	[redacted]	19.0	--	--	11.6	--	4.6	1.1	--

Street	Number	Sample Date	Name	TCE	PCE	1,1 DCE	1,1,1 TCA	Carbon Tet	Cis1,2 DCE	1,1 DCA	1,1,2 TCA
				Concentrations in Parts Billion (ppb)							
Burnside Lane											
	[redacted]	01/22/91	[redacted]	--	--	--	--	--	--	--	--
Cedarbrook											
	[redacted]	01/10/91	[redacted]	--	--	--	--	--	--	--	--
	[redacted]	01/10/91	[redacted]	--	--	--	--	--	--	--	--
	[redacted]	01/10/91	[redacted]	--	--	--	--	--	--	--	--
DeGroff											
	[redacted]	07/19/91	[redacted]	8.6	--	--	--	--	--	--	--
	[redacted]	07/19/91	[redacted]	0.7	--	--	--	--	--	--	--
Elevator Road											
	[redacted]	01/15/91	[redacted]	--	--	--	--	--	--	--	--
Frances Lane											
	[redacted]	02/19/91	[redacted]	28.6	0.2	0.9	12.5	--	3.5	0.7	--
	[redacted]	02/05/91	[redacted]	43.9	0.3	2.6	17.9	--	5.6	1.3	--
	[redacted]	01/10/91	[redacted]	8.2	0.2	--	2.0	--	0.4	--	--
	[redacted]	12/03/91	[redacted]	18.4	0.6	--	5.7	--	2.3	--	--
	[redacted]	01/10/91	[redacted]	8.4	--	--	2.3	--	0.4	--	--
	[redacted]	12/03/91	[redacted]	6.5	--	--	1.3	--	0.4	--	--
Grainery Road											
	[redacted]	09/23/91	[redacted]	1.2	--	--	--	--	0.9	--	--
	[redacted]	09/23/91	[redacted]	10.0	--	--	1.6	--	3.1	--	--
	[redacted]	01/10/91	[redacted]	4.4	--	--	5.2	--	2.2	--	--
Hayloft											
	[redacted]	02/05/91	[redacted]	22.2	--	3.6	27.7	--	1.4	1.8	--
	[redacted]	01/10/91	[redacted]	11.0	--	2.2	21.1	--	0.6	0.8	--
	[redacted]	01/15/91	[redacted]	38.5	--	6.6	34.6	--	3.8	12.9	--
	[redacted]	05/16/91	[redacted]	21.0	--	3.1	24.0	--	--	2.1	--

Street	Number	Sample Date	Name	TCE	PCE	1,1 DCE	1,1,1 TCA	Carbon Tet	Cis1,2 DCE	1,1 DCA	1,1,2 TCA
				Concentrations in Parts Per Billion (ppb)							
Hayloft (cont.)											
	[redacted]	02/05/91	[redacted]	33.0	--	1.9	23.9	--	3.5	1.6	--
	[redacted]	03/19/91	[redacted]	33.0	--	4.0	31.0	--	--	--	--
	[redacted]	02/19/91	[redacted]	11.6	--	1.4	18.3	--	0.8	0.9	--
	[redacted]	02/19/91	[redacted]	31.1	0.4	4.0	27.6	--	2.3	1.3	--
	[redacted]	02/19/91	[redacted]	11.1	--	2.1	16.7	--	0.9	0.6	--
	[redacted]	04/23/91	[redacted]	24.7	0.6	4.0	26.4	--	2.0	1.9	--
	[redacted]	02/05/91	[redacted]	11.5	--	1.0	15.8	--	0.9	0.6	--
	[redacted]	02/19/91	[redacted]	25.8	0.2	2.5	28.1	--	1.8	1.5	--
	[redacted]	01/10/91	[redacted]	3.9	--	--	8.1	--	--	--	--
	[redacted]	02/05/91	[redacted]	2.9	--	--	8.0	--	--	--	--
Honey Locust Lane											
	[redacted]	01/15/91	[redacted]	12.9	--	0.6	6.6	--	1.6	--	--
	[redacted]	01/22/91	[redacted]	10.0	--	--	4.0	--	--	--	--
	[redacted]	01/15/91	[redacted]	11.2	--	--	5.3	--	1.5	0.5	--
	[redacted]	01/10/91	[redacted]	7.9	--	--	3.3	--	1.0	--	--
Hononegh											
	[redacted]	02/19/91	[redacted]	9.9	--	0.9	22.6	--	1.5	0.7	--
	[redacted]	01/22/91	[redacted]	11.0	--	2.0	16.0	--	--	--	--
	[redacted]	02/19/91	[redacted]	30.5	--	3.2	33.4	--	--	1.9	--
	[redacted]	09/23/91	[redacted]	55.3	0.5	4.7	34.4	--	6.8	1.2	--
	[redacted]	02/19/91	[redacted]	66.5	0.4	3.5	37.2	--	9.0	2.0	--
	[redacted]	01/10/91	[redacted]	55.1	0.1	3.4	28.1	--	6.4	1.8	0.2
	[redacted]	12/11/90	[redacted]	12.4	0.1	0.3	3.8	--	1.4	--	--
	[redacted]	01/10/91	[redacted]	--	--	--	--	--	--	--	--
Jennifer Lane											
	[redacted]	01/10/91	[redacted]	--	--	--	--	--	--	--	--

Concentrations in Parts Per Billion (ppb)

Street	Number	Sample Date	Name	TCE	PCE	1,1 DCE	1,1,1 TCA	Carbon Tet	Cis1,2 DCE	1,1 DCA	1,1,2 TCA
Joan Drive											
	[redacted]	01/22/91	[redacted]	--	--	--	--	--	--	--	--
	[redacted]	02/05/91	[redacted]	--	--	--	0.3	--	--	--	--
	[redacted]	01/15/91	[redacted]	--	--	--	0.7	--	--	--	--
Mathew											
	[redacted]	04/23/91	[redacted]	--	--	--	2.5	--	--	--	--
	[redacted]	02/05/91	[redacted]	2.4	--	--	18.3	--	--	0.3	--
	[redacted]	01/10/91	[redacted]	4.0	--	2.5	36.8	--	0.3	0.5	--
	[redacted]	12/11/90	[redacted]	22.5	1.9	3.3	34.0	--	3.3	1.9	0.2
	[redacted]	01/10/91	[redacted]	36.6	2.6	6.3	47.3	--	5.4	1.8	--
	[redacted]	02/19/91	[redacted]	61.9	0.6	2.2	26.5	--	8.9	1.8	--
	[redacted]	05/16/91	[redacted]	33.0	2.7	2.2	30.o	--	--	--	--
	[redacted]	05/16/91	[redacted]	19.0	1.7	2.3	29.0	--	--	1.6	--
	[redacted]	12/03/91	[redacted]	56.1	5.8	3.5	35.4	--	10.4	1.6	--
	[redacted]	12/11/90	[redacted]	34.2	0.8	1.2	15.0	--	4.6	1.3	0.3
	[redacted]	06/04/91	[redacted]	39.3	1.1	1.5	19.1	--	5.3	--	--
McCurry & Rte. 251											
		01/10/91	[redacted]	3.2	--	--	--	--	--	--	--
McCurry Road											
	[redacted]	01/10/91	[redacted]	--	--	--	--	--	--	--	--
North Second											
	[redacted]	07/19/91	[redacted]	--	--	--	--	--	--	--	--
	[redacted]	10/10/90	[redacted]	0.2	2.9	--	35.0	--	10.7	6.6	--
	[redacted]	04/24/91	[redacted]	0.8	3.9	1.3	29.6	--	10.2	7.4	--
	[redacted]	09/25/91	[redacted]	0.6	4.0	1.9	40.8	--	10.9	8.8	--
Oatseed Trail											
	[redacted]	02/19/91	[redacted]	0.3	--	--	3.7	--	--	--	--

Concentrations in Parts Per Billion (ppb)

Street Number	Sample Date	Name	TCE	PCE	1,1 DCE	1,1, TCA	Carbon Tet	Cis1,2 DCE	1,1 DCA	1,1,2 TCA
Pfister Lane										
[redacted]	04/23/91	[redacted]	7.9	--	--	1.3	--	2.2	--	--
[redacted]	01/22/91	[redacted]	9.0	--	--	2.0	--	--	--	--
[redacted]	01/22/91	[redacted]	7.0	--	--	1.0	--	--	--	--
[redacted]	01/15/91	[redacted]	2.5	--	--	0.9	--	0.5	--	--
[redacted]	01/15/91	[redacted]	4.7	--	--	0.9	--	1.5	--	--
Rae Ann										
[redacted]	01/22/91	[redacted]	--	--	--	--	--	--	--	--
Rockton Road (East)										
[redacted]	01/10/91	[redacted]	--	--	--	--	--	--	--	--
[redacted]	07/19/91	[redacted]	--	--	--	--	--	--	--	--
[redacted]	07/19/91	[redacted]	--	--	--	--	--	--	--	--
Rollingsford										
[redacted]	01/22/91	[redacted]	--	--	--	--	--	--	--	--
[redacted]	12/11/90	[redacted]	--	--	--	--	--	--	--	--
[redacted]	01/22/91	[redacted]	--	--	--	--	--	--	--	--
[redacted]	01/15/91	[redacted]	--	--	--	--	--	--	--	--
[redacted]	01/22/91	[redacted]	--	--	--	--	--	--	--	--
Stamford										
[redacted]	01/10/91	[redacted]	--	--	--	--	--	--	--	--
Straw Lane										
[redacted]	02/05/91	[redacted]	0.4	--	--	2.5	--	--	--	--
[redacted]	01/15/91	[redacted]	1.3	--	--	4.5	--	--	0.2	--
[redacted]	01/15/91	[redacted]	0.8	--	--	4.3	--	--	0.3	--
[redacted]	02/19/91	[redacted]	1.5	--	--	5.1	--	0.1	--	--
[redacted]	02/19/91	[redacted]	0.8	--	--	3.5	--	--	--	--
[redacted]	12/11/90	[redacted]	7.9	--	0.9	13.9	1.7	0.7	--	--
[redacted]	02/05/91	[redacted]	15.8	--	1.6	19.7	--	--	0.9	--

Street	Number	Sample Date	Name	TCE	PCE	1,1 DCE	1,1,1 TCA	Carbon Tet	Cis1,2 DCE	1,1 DCA	1,1,2 TCA
				Concentrations in Parts Per Billion (ppb)							
Straw Lane (cont.)											
	[redacted]	03/19/91	[redacted]	13.0	--	2.0	19.0	--	--	--	--
	[redacted]	02/19/91	[redacted]	36.6	--	2.1	24.7	--	3.4	1.4	--
	[redacted]	01/15/91	[redacted]	37.0	--	2.3	22.1	--	3.7	1.6	--
	[redacted]	01/15/91	[redacted]	54.9	--	--	35.9	--	5.9	2.5	0.3
	[redacted]	01/22/91	[redacted]	23.0	--	--	9.0	--	--	--	--
	[redacted]	01/10/91	[redacted]	14.3	--	--	3.9	--	--	--	--
	[redacted]	01/15/91	[redacted]	8.1	--	--	2.3	--	1.6	0.3	--
	[redacted]	01/15/91	[redacted]	9.5	--	--	2.1	--	1.1	0.3	--
	[redacted]	02/05/91	[redacted]	5.5	--	--	0.6	--	0.8	--	--
	[redacted]	12/11/90	[redacted]	2.7	--	--	0.2	--	--	--	--
	[redacted]	02/05/91	[redacted]	--	--	--	--	--	--	--	--
	[redacted]	01/22/91	[redacted]	--	--	--	--	--	--	--	--
	[redacted]	12/11/90	[redacted]	--	--	--	--	--	--	--	--
	[redacted]	01/10/91	[redacted]	--	--	--	--	--	--	--	--
Tanawingo											
	[redacted]	09/23/91	[redacted]	--	--	--	--	--	--	--	--
	[redacted]	01/10/91	[redacted]	--	--	--	--	--	--	--	--
	[redacted]	12/03/91	[redacted]	4.7	--	--	1.4	--	2.3	--	--
	[redacted]	02/05/91	[redacted]	8.8	--	--	4.7	--	5.2	0.6	--
Tresemer											
	[redacted]	01/22/91	[redacted]	--	--	--	--	--	--	--	--
Tresemer Circle											
	[redacted]	12/11/90	[redacted]	--	--	--	--	--	--	--	--
Valentine Court											
	[redacted]	01/22/91	[redacted]	--	--	--	--	--	--	--	--
Valerie											
	[redacted]	02/05/91	[redacted]	--	--	--	--	--	--	--	--

Street Number	Sample Date	Name	TCE	PCE	1,1 DCE	1,1,1 TCA	Carbon Tet	Cis1,2 DCE	1,1 DCA	1,1,2 TCA
			Concentrations in Parts Per Billion (ppb)							
Valerie (cont.)										
[redacted]	02/05/91	[redacted]	--	--	--	--	--	--	--	--
[redacted]	06/04/91	[redacted]	--	--	--	--	--	--	--	--
[redacted]	09/23/91	[redacted]	--	--	--	--	--	--	--	--
[redacted]	12/11/90	[redacted]	4.5	--	--	9.5	--	--	0.4	--
Wagon Lane										
[redacted]	01/10/91	[redacted]	13.6	--	--	10.9	--	3.6	1.3	--
[redacted]	01/10/91	[redacted]	17.6	--	2.8	29.1	--	1.3	2.1	--
[redacted]	01/10/91	[redacted]	17.9	--	2.5	26.9	--	1.3	2.0	--
[redacted]	02/05/91	[redacted]	20.2	--	1.8	17.1	--	5.6	1.8	--
[redacted]	03/19/91	[redacted]	28.0	--	5.0	38.0	--	--	--	--
[redacted]	01/15/91	[redacted]	33.8	--	5.8	41.8	--	2.6	--	0.3
[redacted]	05/16/91	[redacted]	28.0	--	2.6	36.0	--	--	3.2	--
[redacted]	02/19/91	[redacted]	13.6	--	1.7	24.2	--	1.0	1.7	--
[redacted]	02/05/91	[redacted]	1.5	--	--	9.1	--	--	0.3	--
[redacted]	02/19/91	[redacted]	--	--	--	1.2	--	--	--	--
[redacted]	02/19/91	[redacted]	--	--	--	0.4	--	--	--	--
[redacted]	01/22/91	[redacted]	--	--	--	1.0	--	--	--	--
[redacted]	03/19/91	[redacted]	--	--	--	1.0	--	--	--	--
[redacted]	12/11/90	[redacted]	--	--	--	1.6	--	--	--	--
[redacted]	01/15/91	[redacted]	0.4	--	--	3.0	--	--	--	--
[redacted]	02/19/91	[redacted]	0.4	--	--	2.1	--	--	--	--
[redacted]	02/05/91	[redacted]	2.6	--	--	7.3	--	--	--	--
[redacted]	12/11/90	[redacted]	2.5	--	--	6.3	--	--	0.3	--
[redacted]	03/19/91	[redacted]	2.0	--	--	6.0	--	--	--	--
[redacted]	02/05/91	[redacted]	1.8	--	--	5.2	--	--	0.2	--
[redacted]	12/11/90	[redacted]	14.6	--	--	22.3	--	--	--	--
[redacted]	02/19/91	[redacted]	37.3	--	2.7	34.6	--	4.1	1.7	0.2
Watham Lane										
[redacted]	01/10/91	[redacted]	--	--	--	--	--	--	--	--

Concentrations in Parts Per Billion (ppb)

Street	Number	Sample Date	Name	TCE	PCE	1,1 DCE	1,1,1 TCA	Carbon Tet	Cis1,2 DCE	1,1 DCA	1,1,2 TCA
Winchester											
	[redacted]	01/10/91	[redacted]	--	--	--	--	--	--	--	--
	[redacted]	02/05/91	[redacted]	0.5	--	--	--	--	--	--	--
	[redacted]	01/22/91	[redacted]	--	--	--	--	--	--	--	--

* Indicates value was rounded.

CONCENTRATIONS IN UG/L (PPB)

Well	Date	TCE	PCE	1,1-DCE	1,1-DCA	1,1,1 TCA	cis-1,2 DCE	Trans-1,2-DCE
G101S	03-24-94	0.7	--	--	--	--	--	--
	02-23-95	0.6	--	--	--	--	--	--
G101D	03-24-94	1.6	--	--	--	--	--	--
	02-23-95	3.0	--	--	--	--	--	--
G102S	03-23-94	--	--	--	--	--	--	--
	02-21-95	--	--	--	--	--	--	--
	12-05-96	--	--	--	--	--	--	
G102D	03-23-94	--	--	--	--	--	--	--
	02-21-95	--	--	--	--	--	--	--
G103S	03-23-94	--	17.0	--	--	5.7	--	--
	02-21-95	--	40.0	--	--	3.0	--	--
	12-05-96	--	8.6	--	--	--	--	
G103D	03-23-94	--	--	--	--	--	--	--
	02-21-95	--	1.0	1.0	--	16.0	--	--
G104S	03-23-94	0.7	--	--	--	12.0	--	--
	02-22-95	0.9	--	2.0	--	12.0	--	--
G104D	03-23-94	--	--	--	--	8.9	--	--
	02-22-95	0.2J	--	1.0	--	9.0	--	--
G105S	03-23-94	14.0	4.1	--	0.7	7.5	4.7	--
	02-22-95	14.0	6.0	0.8	0.7	6.0	4.0	--
G105D	03-23-94	15.0	3.2	--	1.1	8.9	5.7	--
	02-22-95	15.0	4.0	1.0	1.0	9.0	5.0	--
G106S	03-24-94	2.9	0.2	--	--	--	--	--
	02-22-95	3.0	--	--	--	1.0	--	--
G106D	03-24-94	2.5	--	--	--	--	--	--
	02-22-95	3.0	0.4J	--	--	2.0	0.6J	--
G107S	03-25-94	--	2.3	--	--	0.5	--	--
	02-21-95	--	--	--	--	--	--	--
G107D	03-25-94	--	15.0	--	--	8.8	--	--
	02-21-95	--	11.0	0.7	--	8.0	--	--
G108S	03-25-94	--	--	--	--	--	--	--
	02-21-95	0.4J	--	--	--	1.0	--	--
G108D	03-25-94	--	3.7	--	2.2	9.0	2.5	--
	02-21-95	0.3J	3.0	0.5	--	7.0	--	--
G109S	03-25-94	1.4	0.7	--	--	0.4	2.9	--
	02-23-95	6.0	0.6J	--	--	2.0	4.0	--
G109D	03-25-94	3.3	4.1	--	0.6	9.5	7.0	--
	02-23-95	3.0	7.0	0.8	0.7J	8.0	6.0	--
G110S	03-24-94	1.2	0.4	--	--	3.3	--	--
	02-23-95	2.0	0.8J	0.5	--	4.0	--	--
G110D	03-24-94	0.5	--	--	--	--	--	--
	02-23-95	0.6	--	--	--	--	--	--
G111	02-21-95	--	--	--	--	--	--	--
	12-05-96	--	--	--	--	--	--	
G112	02-21-95	--	--	--	--	--	--	--
G113	02-21-95	--	2.0	--	--	--	--	--
G114	02-21-95	--	0.8J	--	--	3.0	--	--
	12-05-96	--	--	--	--	--	--	

NOTES:

TCE - Trichloroethene
1,1-DCE - 1,1-Dichloroethene
1,1,1-TCA - 1,1,1-Trichloroethane
trans-1,2-DCE - trans-1,2-Dichloroethene

PCE - Tetrachloroethene
1,1-DCA - 1,1-Dichloroethane
cis-1,2-DCE - cis-1,2-Dichloroethene
J - indicates an estimated value

Appendix B
Redacted

Appendix B
Redacted

EPA

'his fact sheet will give you...

Plans for constructing the water main extension project
Signing up for connection to the North Park Public Water System
Local public meeting and sign-up dates
A brief history and background.
Getting more information

ublic Meeting

.S. EPA will hold a public meeting to :es information about the construction : the water main extension project. The eeting will be held at:

Kinnikinnick School
5410 Pine Lane
Roscoe, IL 61073
Date: July 28, 1999
Time: 7:00 p.m.

ign-up Dates

.S. EPA representatives will be signing) residents for connection to the water 'stem at:

Kinnikinnick School
Date: July 28, 1999
Time: 2:00 p.m. until 7;00 p.m.

esidents may also sign up for connection the water system at:

North Park Public Water District*
1350 Turret Drive
Machesney Park, IL 61115
(815) 633-5461
Dates: July 29, 30, and August 2 through 6, 1999
Time: 8:00 a.m. until 4:30 p.m.

The. will not be any U.S. EPA representatives ailable at the North Park Public Water District ıring the sign up period to answer questions.

United States Environmental Protection Agency

Office of Public Affairs
77 West Jackson Blvd.
Chicago, Illinois 60604

Illinois Indiana
Michigan Minnesota
Wisconsin Ohio

Construction of Water Main Extension Project to Begin at the Evergreen Manor Groundwater Contamination Site

Winnebago County, Illinois **July 1999**

Introduction

The United States Environmental Protection Agency (U.S. EPA) is planning to begin construction of a water supply system for the Evergreen Manor Groundwater Contamination site. Construction is anticipated to begin in September 1999. U.S. EPA needs to know which property owners will want their homes connected to the system before any construction begins. This fact sheet contains a consent form that must be completed by all eligible property owners who want their homes connected to the North Park Public Water System.

Addresses of eligible property owners are listed in Table 1 (see also Figure 1). Connection to the water system is voluntary; however, U.S. EPA strongly recommends that all eligible property owners connect to the water system to prevent exposure to potentially harmful chemicals. By refusing to allow U.S. EPA to connect a home to the water system, a property owner accepts responsibility for all costs associated with connecting to the system if he or she decides to do so at a later time. Please read the enclosed form carefully and fill it out completely. Bring the consent form with you when you sign up for connection to the water system. Representatives from the U.S. EPA , Illinois Department of Public Health (IDPH), and the North Park Public Water District will be in the Kinnikinnick School, 5410 Pine Lane, Roscoe on Wednesday, July 28 from 2:00 p.m. to 7:00 p.m. to sign up property owners for connections to the system. Property owners may also sign up at the North Park Public Water District, 1350 Turret Drive, Machesney Park, on weekdays from Thursday July 29 through Friday August 6, 1999, between the hours of 9:00 a.m. and 4:30 p.m. U.S. EPA will host a public meeting at the Kinnikinnick School on Wednesday, July 28 at 7:00 p.m.

Site Description and History

The Evergreen Manor Site is located approximately 1.5 miles northwest of the Village of Roscoe in Winnebago County, Illinois, in the south ½ of Section 16, the west ½ of Sections 21 and 29, and the East ½ of Sections 20 and 30, Township 46 North, Range 2 East. The Site is currently defined by the areal extent of groundwater contamination in this area. **More specifically, the area addressed by this action includes properties located in the residential areas of Evergreen Manor subdivision, Hononegah Heights subdivision, and the Olde Farm subdivision (see Table 1 and Figure 1).** The Site includes approximately 250 homes with an estimated total population of 700 persons.

Groundwater samples taken by the Illinois Environmental Protection Agency (Illinois EPA), the IDPH, and U.S. EPA reveal that the Site is contaminated with trichloroethene (TCE) and tetrachloroethene (PCE) in excess of Maximum Contaminant Levels (MCL). Concentrations of TCE in samples collected from the Site have ranged from a high of 90.9 ppb in 1991 to a high of 18 ppb in 1998. Concentrations of PCE in samples collected from the Site have ranged from a high of 5.8 ppb in 1991 to a high of 5.3 ppb in 1998. The MCL for TCE and PCE is 5 ppb.

An Engineering Evaluation/Cost Analysis (EE/CA) was completed by U.S. EPA in November 1998. The EE/CA evaluated three options to abate the threat(s) to human health from exposure to contaminated drinking water: 1) construction of a water main extension project to bring potable water from the North Park Public Water District to the individual residences threatened by contaminated water; 2) point-of-entry residential treatment involving the use of carbon filters at the outlet of the well; and 3) point-of-use residential treatment involving the use of carbon filters at the kitchen faucet.

Through the EE/CA, U.S. EPA determined that residences at the Evergreen Manor Site will be best served if they are hooked up to the North Park Public Water District water supply. As described in the EE/CA report, this alternative meets U.S. EPA's evaluation criteria and best addresses the objective of protecting residents from contaminants in groundwater.

Upcoming Water System Construction Activities

U.S. EPA is in the process of selecting construction contractors for the water main extension project. All residents whose address appears in Table 1 are eligible for connection to the water system.

Construction is anticipated to begin in September. Water mains will be installed under the streets in the site area. The water mains will be installed along the right-of-way of one side of each street. Curb stops, the connections needed to eventually bring water from the main to the house, will be installed in front of each home that consented to being connected. Homes will then be connected to the North Park Public Water District water system. The water mains will then be covered up and the streets and yards restored. Requesting residents should be connected by the end of the 1999 calendar year.

During construction, U.S. EPA and their contractors will do everything they can to minimize inconveniences to residents.

Consent Forms Must Be Completed By August 6, 1999

Eligible property owners must complete the enclosed form and return it to the North Park Public Water District by August 6, 1999, to arrange for connection to the water system. (By refusing to allow U.S. EPA to connect a home to the water system, a property owner accepts responsibility for all costs associated with connecting to the system if he or she decides to do so at a later time.) The form can also be given to U.S. EPA representatives prior to the public meeting on July 28, 1999, (see information on the front page of this fact sheet).

IMPORTANT -- PLEASE TAKE NOTE!

- **Connecting to the North Park Public Water District water system is voluntary, but U.S. EPA strongly recommends that you connect to this system.**
- **You must agree to let U.S. EPA abandon your current well before we can connect you to the alternate water system.**
- **All requesting residences whose address appears in Table 1 are eligible for free connection to the alternate water system.**
- **U.S. EPA will pay for all connection work, but it cannot pay for upgrading inadequate plumbing in a home.**
- **If you are renting your home you cannot sign the consent forms; please give these forms to your landlord**
- **You must bring proof of ownership (e.g., deed, tax bill, letter from mortgage company) with you when signing up for connection to the new system.**

FOR MORE INFORMATION

To learn more about the Evergreen Manor Groundwater Contamination Site or the Superfund process, please review the main information repository for these sites. The repository is located at the following address:

The North Suburban District Public Library
5562 Clayton Circle
Roscoe, Illinois
(815) 623-6266

An Administrative Record file, which contains the information that is the basis for site cleanup decisions, has been established at the location above and the U.S. EPA Region 5 office in Chicago.

For further information on the Evergreen Manor Groundwater Contamination Site, please contact:

Mike Ribordy
Remedial Project Manager
Superfund Division
U.S. EPA - Region 5 (SR-6J)
77 West Jackson Blvd.
Chicago, IL 60604
(312) 886-4592
e-mail: ribordy.mike@epa.gov

Janet Pope
Community Involvement Coordinator
Office of Public Affairs
U.S. EPA - Region 5 (P-19J)
77 West Jackson Blvd.
Chicago, IL 60604
(312) 353-0628

toll free: 1-800-621-8431

EVERGREEN MANOR
AREA OF CONCERN

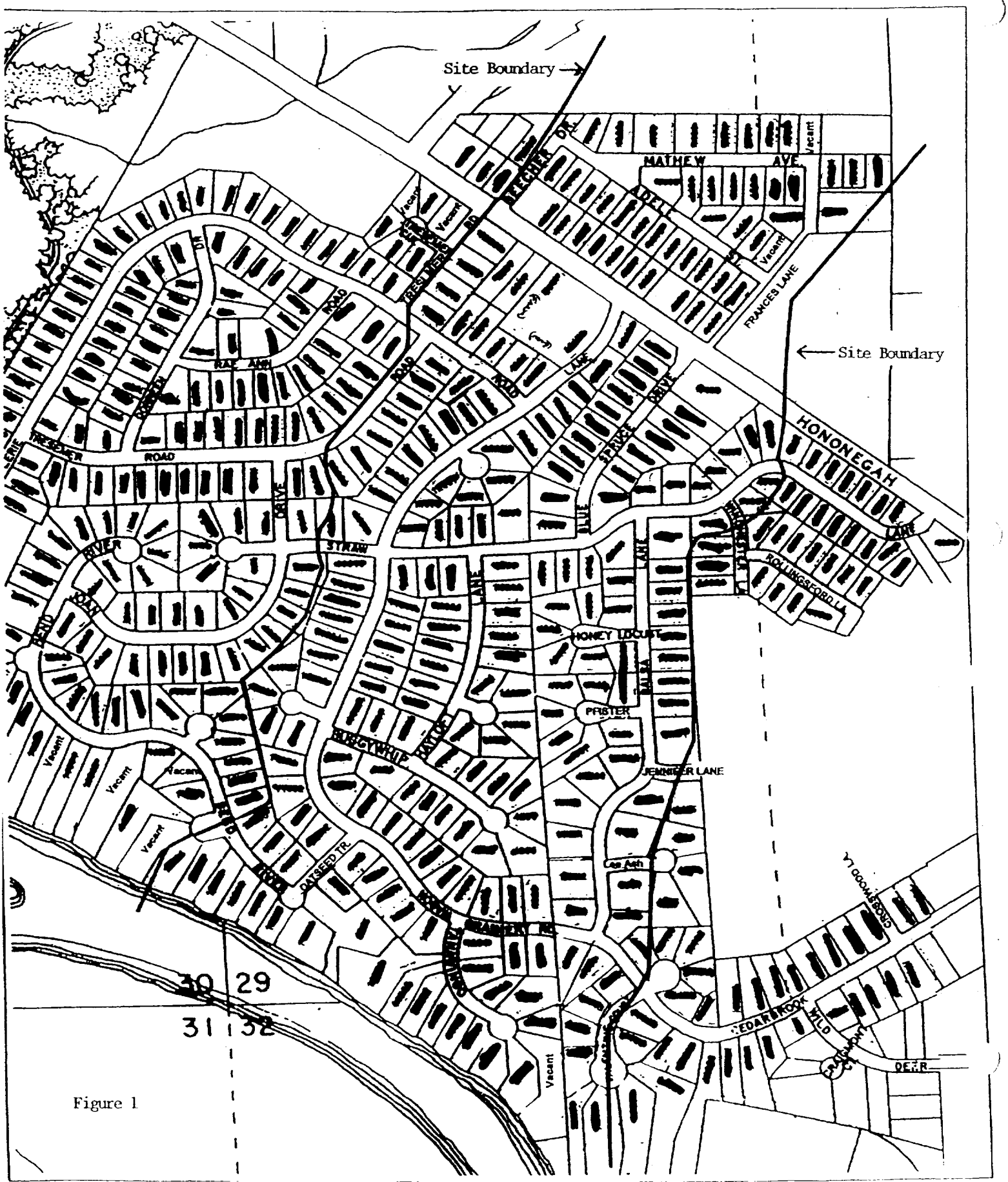


Figure 1

Appendix C

Appendix C

APPENDIX C

ENVIRONMENTAL INVESTIGATION PROCEDURES

In April 2002, additional field work was conducted to evaluate the current condition of the contaminants within groundwater, surface water and sediment at the Evergreen Manor Site. The investigation was conducted between 1 April 2002 and 23 April 2002 and consisted of the following activities:

- Monitoring Well Sampling
- Municipal Well Sampling
- Sediment Sampling
- Surface Water Sampling
- Monitoring Wel' Installation and Development

Prior to starting field activities, a site-specific Health and Safety Plan (HASP) (WESTON, 2000), and a QAPP/FSP (Amendment No. 1) (WESTON, 2002) were prepared. The HASP describes the safety protocols for field activities. The HASP was prepared in accordance with the Occupational Safety and Health Administration (OSHA) requirements as outlined in 29 CFR 1910 and other applicable requirements. The QAPP/FSP presents the organization, objectives, functional activities, and specific Quality Assurance and Quality Control (QA/QC) activities associated with the field activities. The QAPP/FSP also describes the specific protocols for sampling, sample handling and storage, chain of custody, and laboratory and field analysis. The QAPP/FSP was prepared in accordance with U.S. EPA QAPP guidance documents; in particular, the *Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans* (QAMS-005/80) (U.S. EPA, 1980), *Region V Content Requirements for QAPPs* (U.S. EPA, 1989b), and the *Region V Model QAPP* (U.S. EPA, 1991d).

The laboratory analysis was performed by three different laboratories. VOC analysis of water samples were performed by A4 Scientific of Woodlands, TX and Liberty Analytical Corporation of

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Durham, NC. VOC analysis of soil samples was performed by Envirosystems of Columbia, MD.

C.1 MUNICIPAL WELL SAMPLING

Two municipal wells were sampled on 9 April 2002 for VOCs. The municipal wells are part of the North Park Water District and are located in Roscoe Township, Winnebago County, Illinois (Figure 2-1). The QAPP requirement was to purge three well volumes from each well prior to sampling. However, due to the inconsistency between the calculated well volumes and the observed volume (based on the flow meter reading), this requirement may not have been met.

Based on the well casing diameter of 12-inches, depth to water of 30-feet, total water column height of 750-feet, and a flow rate of 450 gallons/minute, the calculated well volume for each municipal well was 4,405 gallons. Thus, three well volumes would equal 13,215 gallons. Based on a pumping rate of 450 gallons/minute, which is slightly less than the rated flow rate of 480 gallons/minute, the time to pump three well volumes from one well was calculated to be approximately 29 minutes.

Each well was purged for 30 minutes followed by purging the entire water line leading to the treatment plant. Based on this purge time, approximately 26,000 gallons of water would have been purged through both wells and water lines before water samples were collected. However, based on the reading recorded from an on-site flow meter, the volume of water pumped from both wells was approximately 10,000 gallons. This total well volume equates to 5,000 gallons per well which is slightly greater then the calculated well volume of 4,405 gallons per well. Obviously, the observed volume is inconsistent with the calculated volume. This inconsistency could be either due to a malfunctioning pump or flow meter or due to potentially incorrect well data used for calculating the well volumes. WESTON has been unable to determine the exact cause of this anomaly. In any case, WESTON believes that the samples are representative of formation groundwater quality because a minimum of one casing volume was removed using the most conservative data.

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Samples from Municipal Wells 1 (#6) and 2 (#6A) were collected both before and after treatment which consists of chlorination and fluorination. One duplicate sample was collected from Well 1 prior to treatment. All samples were collected in 40-mL VOA vials which were preserved with 0.2 mL of HCL and then stored at 4°C in a sampling cooler.

C.2 SEDIMENT SAMPLING

In order to confirm the results of previous sampling and bridge the existing data gap, a total of eight sediment samples were collected from the Rock River from locations that are within, upstream, and downstream of the presumed discharge area of the contaminant plume. The eight locations will be spaced at approximately 300 foot intervals, as shown on Figure 4-8. Sediment samples were collected in areas where sediments are readily deposited and within approximately 5 feet of the shore. In the instance where sediments are not present at the predetermined locations (e.g., where sediment is gravel-dominated), the sediment sampling location were offset by the smallest distance possible, based on field conditions. A total of eight sediment samples (SD-01 through SD-08), one QC duplicate, and two MS/MS duplicates were collected from the Rock River on 5 April 2002, at locations shown on Figure 4-8. Sediment sampling was conducted from downstream to upstream locations, to minimize the impact of sediment disturbance and/or cross contamination of samples. To the extent possible, sediment samples were collected at the same locations as surface water samples and analyzed for VOCs in accordance with methods prescribed in the QAPP and the FSP.

The sediment samples were collected by inserting an Encore sampler into the sediment of the river. All samples were cooled to 4° centigrade after collection. All reusable field sampling equipment used for sediment sampling was decontaminated between sample locations.

C.3 SURFACE WATER SAMPLING

A total of eight surface water samples (SW01-SW08), one duplicate, two MS/MS duplicates, one

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field blank, and one trip blank were collected from the Rock River at locations shown on Figure 4-1 on 5 April 2002. The surface water samples were collected to determine if site contaminants were migrating into the Rock River. Surface water samples were collected at approximately the same locations as sediment samples and prior to collection of sediment samples. Surface water samples were collected from the bank directly into 40-mL VOC vials preserved with 0.2 mL of HCL. A peristaltic pump was used to pump the surface water into the sample vial by attaching tubing to a rod (10 feet long) and submerging the end of the rod to within 1-2 inches above the sediment/water interface. Visual observation was used to ensure that the open end of the tubing was positioned 1 to 2 inches above the sediment/water interface. Care was taken not to stir up sediment. The sampling progressed from downstream to upstream locations to minimize the impact of sediment disturbance and/or cross contamination of water samples. All tools, equipment, and personnel were decontaminated following sample collection at each location.

Following surface water sampling, one location was chosen for surface water elevation measurement. A staff gauge was driven into the river bed and the distance from its top to the water surface will be measured. A licensed surveyor was used to survey the top of the staff gauge.

C.4 MONITORING WELL INSTALLATION, DEVELOPMENT AND SAMPLING

In order to evaluate current groundwater conditions, 12 existing monitoring wells (installed by the IEPA) were sampled between 3 April and 9 April, 2002. The existing monitoring wells, a subset of 24 existing monitoring wells, include MW-101D, MW-101S, MW-103D, MW-103S, MW-104D, MW-104S, MW-105D, MW-105S, MW-107S, MW-107D, MW-109S and MW-109D. The rationale for sampling or not sampling each existing well is given below:

- MW-101S - This well is nested with monitoring well MW-101D in which TCE was detected. This shallow well also happens to be near the edge of the delineated groundwater plume. The primary reason for sampling this well was to determine if there is any change in the vertical profile of contaminant concentration.

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- MW-101D - This well is nested with monitoring well MW-101S. This a deep well near the edge of the delineated groundwater plume. During the 2000 RI, TCE was detected in this well at concentrations below the MCLs. The primary reason for sampling this well was to determine if there is any change in the previously delineated groundwater plume.

- MW-103S - This well is located near the former source areas and within the delineated groundwater plume. Previous RI results indicate that PCE was detected in this well at concentration above its MCL. This was sampled to determine if there has been any change in the contaminant concentration.

- MW-103D - This well is nested with Well No. MW-103S. During the RI, 1,1,1-TCA and TCE were detected at concentrations below their MCLs. This well was sampled to evaluate any change in the contaminant concentrations.

- MW-104S - This is a downgradient well near the edge of the delineated groundwater plume. RI results indicated that a number of contaminants were detected at concentrations below the MCLs. The reason for sampling this well was to determine if there is any change in the previously delineated groundwater plume.

- MW-104D - This well was sampled for the reasons cited above for monitoring well MW-104S.

- MW-105S - This is a downgradient well near the center of the delineated groundwater plume. RI results indicated that a number of contaminants were detected at concentrations well below the MCLs. The reason for sampling this well was to determine whether any change in the contaminant concentration has occurred since the RI.

- MW-105D - This well was sampled for the reasons cited above for monitoring well MW-105S.

- MW-107S - This well is nested with MW-107D which had PCE concentrations at 15 µg/L in 1994 and 11 µg/L in 1995. Contaminants were also detected in this well at concentrations below the MCLs. The primary reason for sampling this well was to determine if there is any change in the vertical profile of contaminant concentrations.

- MW-107D - This deep well was sampled to determine if there is any change in the contaminant concentration.

- MW-109S - This well is nested with monitoring well. MW-109D and is located in

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the center of the groundwater plume close to the source areas. Analytical results of samples collected from this well in 1995 indicate that TCE was present at 6 µg/L. This well was sampled to determine if there is any change in the contaminant concentration.

- MW-109D - This well was sampled for reasons similar to those cited for monitoring well MW-109S.

- The remaining existing monitoring wells including MW-102S, MW-102D, MW-106S, MW-106D, MW-108S, MW-108D, MW-110S, MW-110D, MW-111, MW-112, MW-113, and MW-114 were not sampled for one or more following reasons: the well is located outside of the contaminant plume, results from the RI indicated that contaminants were not detected in the well, the well has been destroyed, the well is located between a source area (s) and other downgradient wells, and/or the well is in close proximity to a well which is proposed to be sampled.

In addition to sampling pre-existing monitoring wells, three permanent monitoring wells (MW-01A, MW-02, and MW-03) were installed within the limits of the plume. Two of these wells were installed in the vicinity of previously abandoned residential wells where contaminants were detected at concentrations exceeding MCLs or IEPA criteria during 2000 RI. Monitoring well MW-01A was installed near the intersection of Blue Spruce Drive and Straw Lane, an area where some of the highest TCE concentrations in groundwater have been observed in the past. During the 1990-1993 residential well sampling events, some of the highest TCE concentration were detected in samples collected from residential wells in the immediate vicinity of monitoring well MW-01A. Subsequent sampling of these residences during the 1994-1999 investigation events indicated a marked decline in TCE concentrations in all wells. Based on information in the HRS Package, the residential well RW-04, which was sampled in 2000 and contained TCE at a concentration of 6ug/l, was screened at approximately 50 to 60 feet bgs. Consequently, the proposed well MW-01 is screened from 55 to 60 feet bgs (697.5 to 692.5 feet msl). Monitoring well MW-02 was installed near Wagon Lane and Straw Lane, where a detection of chloroform exceeded MCLs/IEPA criteria. The exact screened depth interval from this former residential well is unknown, however, most of the residential wells in the area are, or were, screened between 60 and 80 ft bgs (687.5 to 682.5 feet msl). Therefore, MW-02 is screened from 65 to 70 feet bgs (656.7 to 651.7 msl). Monitoring well MW-03 was

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installed near the leading edge of the plume, and in the vicinity of temporary sampling point CPT-01 where contaminants were detected during 2000 RI. The purpose of MW-03 was to collect additional data close to the leading edge of the plume as well as comparing the data to the contaminant concentrations detected during the RI. In 2000, TCE was detected at CPT-01 location at depths from 29 to 99 feet bgs, at concentrations ranging from 2 to 4 μg/L. Samples collected from CPT-01 at depths of 69 and 79 feet bgs, resulted in detections of TCE at 4 μg/L. This is the most apparent zone of contamination, and therefore monitoring well MW-03 is screened from 70 to 75 feet bgs. At each monitoring well location, the geology was characterized by sampling with a decontaminated split-spoon sampler advanced at five-foot intervals. The soil recovered in the sampler was characterized and logged by a WESTON geologist in order to determine appropriate groundwater sampling intervals (i.e. not screen across a fine grained deposit).

Monitoring wells were installed in accordance with Section 3.3.3 of the FSP. One deviation from this section is that 5-foot screens (instead of 10-foot) were installed, as required by the QAPP, Amendment 1. All monitoring wells were installed in the grassy ROW along roadways. All drilling equipment and tools were decontaminated with a high-pressure steam cleaner before drilling. All wells were completed with a concrete pad, flush-mount protective cover, and a locked well cap. All disturbed areas within the limits of work were restored to the original condition at each location.

A total of four monitoring wells, including MW-01, MW-01A, MW-02, and MW-03 were installed during the period from 1 April 2002 through 11 April 2002 with a truck-mounted drill rig in the Evergreen Manor site.

One of the newly installed wells, MW-01, located at 11952 Blue Spruce Lane, was lost due to grout intrusion. Consequently, this well was abandoned in accordance with the Winnebago County Health Department regulations. First, the well was backfilled with bentonite chips from the bottom to approximately 2-feet below the ground surface (bgs). The well casing was then removed from the surface to approximately 2-feet bgs. The bentonite chips were hydrated and approximately 2 ounces

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of bleach was added to the well. Finally, the existing concrete pad was removed and the area was backfilled with clean topsoil. Monitoring well MW-01A, a replacement for monitoring well MW-01, was installed near the abandoned well MW-01. The distance between MW-01 and MW-01A is approximately 13 feet.

The monitoring wells were developed as stated in Section 3.3.3 of the FSP. In general, this included surging and purging each monitoring well for a minimum of 30 minutes. Water was used to flush augers that were filled with heaving sands during the drilling process. The amount of water injected in the augers during the drilling process equated the amount of water that was purged during the development of each well. Consequently the minimum development time and volume standards established in the FSP were exceeded. Well development occurred at least 24 hours after the completion of the appropriate well. All development water was collected in 55-gallon drums and handled in accordance with the QAPP and FSP.

Each monitoring well was purged and sampled using a decontaminated Grundfos™ pump and tubing. All wells were purged and sampled using the U.S. EPA's low-flow purging method (Puls and Barcelona, 1996). In addition to investigative samples, four duplicate samples and five MS and MS duplicates were collected. Seven trip blanks were collected using Pure distilled water. Three field blanks were collected for QA/QC standards. Prior to sampling, the depth to water in the well and the total depth of the well were measured with an electrical sounding device. The top of the inner well casing was used as the reference point for these measurements. These measurements were used to calculate well volume. A minimum of three purge volumes were removed from the wells. After removing the third well volume, field measurements of pH, specific conductivity, dissolved oxygen (DO), oxygen reduction potential (ORP), temperature, and turbidity were recorded in the field logbook (Table C-1 and Appendix J).

Stabilization was considered achieved when three consecutive readings of the following parameters, within the following tolerances, were measured:

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- pH - +/- 0.1 standard pH units;
- Specific conductivity - +/- 3%;
- Turbidity - 10% for values greater than 5 NTU; or any reading below 5 NTU;
- ORP - +/- 10 mV;
- DO - +/- 10%;

These stabilization criteria correspond to criteria published in U.S. EPA's *Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures* (Puls and Barcelona, 1996). Measurements of temperature were recorded, but were not used to determine stabilization. If stable conditions were not achieved within three hours of pumping at low-flow rates, the field team leader (FTL) used his best professional judgement to determine whether it was appropriate to sample or to continue monitoring of the stabilization parameters. Table C-1 summarizes and discusses groundwater stabilization measurements recorded for each monitoring well during this sampling event. Areas shown in shading are parameters and/or individual readings that were slightly outside stabilization criteria, requiring the FTL to make a field judgement sampling decision. In general, the groundwater measurements at each well location approached stabilization relatively rapidly (~30 to 60 minutes).

Prior to collecting the samples, the monitoring wells were purged at rates between 250 mL/min to 500 mL/min. Monitoring wells MW-104S, MW-103D, MW-103S, MW-01A, MW-02, and MW-03 flow rates' are unknown as the rates were not recorded in the field logbook. Discussions with the field personnel indicate that with few exceptions, the flow rates associated with these wells ranged between 250 mL/min to 500 mL/min. During purging of monitoring well MW-03, flow rate exceeded the allowable flow range at certain times. However, the field personnel were able to quickly adjust the flow rate to within the allowable range.

The sample intake for all monitoring wells was located at the middle of the screened interval. WESTON measured the depth to the bottom of the well, lowered the Grundfos pump to the bottom of the well, then raised the pump up the distance of the difference between the bottom of the well and the top of the screen.

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Each sample collected from the monitoring wells was analyzed for VOCs. Sample containers (40 mL VOA vial preserved with 0.2 mL of HCL) were filled directly from the pump tubing. Care was taken to fill the VOC vials at an angle to minimize splashing and bubbling, and to ensure that they were closed with no headspace. All samples were cooled to 4° centigrade after collection.
All tools, equipment, and personnel were decontaminated after the collection of samples from each well. Investigative-derived waste (IDW) generated from each well was collected and stored in 55-gallon drums at a central storage area. IDW water samples were collected from a 55-gallon drum labeled "Purge Water, 9 April 2002" and from a 55-gallon drum labeled "MW-02 Water, 3 of 3". The collected samples were analyzed for VOCs.

C.5 MUNICIPAL SUPPLY WELL SAMPLING

In addition to sampling of monitoring wells, two municipal wells supplying potable water to the City of Roscoe were sampled. Samples were collected form sampling ports used by the North Park Water District. Sampling protocols were similar to those used by the North Park Water District.

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APPENDIX C
Table C-1

April 2002 Groundwater Stabilization Data
Evergreen Manor Site
Roscoe, Illinois

Well Number	Date	Time	pH (standard unit)	Specific Conductance (µohms/cm)	ORP (mV)	Temperature (C)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Comments
MW-104D	4/3/2002	10:26	5.24	0.55	-329	9.5	NM	NM	Stabilization criteria met. Turbidity and DO meter malfunction
		10:34	5.73	0.522	-347	9.7	NM	NM	
		10:40	5.9	0.493	-351	10.1	NM	NM	
		10:46	5.88	0.489	-348	10.2	NM	NM	
		10:50	5.9	0.491	-352	10.5	NM	NM	
		11:05	NM	NM	NM	NM	13.5	NM	
MW-104S	4/3/2002	11:36	6.21	0.447	-364	6.8	NM	NM	Stabilization criteria met. Turbidity and DO meter malfunction
		11:46	6.38	0.475	-369	8.8	NM	NM	
		11:56	6.36	0.477	-367	8.8	NM	NM	
		12:06	6.44	0.48	-370	9.2	NM	NM	
MW-107D	4/4/2002	8:31	5.29	0.266	-354	8.1	11.0	NM	Stabilization criteria met. Turbidity meter malfunction
		8:41	5.88	0.266	-360	8.4	10.0	NM	
		8:51	6.14	0.279	-361	9.8	9.5	NM	
		8:56	6.17	0.285	-360	10.7	9.5	NM	
		9:01	6.26	0.537	-352	11.3	9.0	NM	
		9:06	6.22	0.535	-358	11.3	10.0	NM	
		9:11	6.27	0.536	-358	10.8	10.5	NM	
MW-107S	4/4/2002	9:38	6.46	0.758	-353	9.8	13.5	NM	Stabilization criteria met. Turbidity meter malfunction
		9:49	6.66	0.819	-346	11.1	14	NM	
		9:59	6.57	0.827	-343	11	15	NM	
		10:09	6.65	0.828	-337	11.7	15	NM	
MW-101D	4/4/2002	12:06	6.91	0.452	267	8.2	14	330	Stabilization criteria met with exception of ORP and turbidity. Although ORP is decreasing, rate appears to be diminishing. Turbidity dropped substantially during purge cycle and rate also diminishing. Based on low value between 5 and 10 NTU, FTL proceeds to sample
		12:16	7.13	0.438	198	7.7	14	180	
		12:26	7.25	0.454	158	8.3	11.2	59.3	
		12:32	7.27	0.465	150	8.9	12.5	43.9	
		12:37	7.24	0.455	138	9.2	12.5	32.4	
		12:44	7.29	0.463	132	9.2	12	23.3	
		12:50	7.23	0.468	126	9	12.3	14.9	
		12:56	7.32	0.465	114	9	13	12	
		13:02	7.34	0.467	110	9	13.2	7.1	

FTL - Field Team Leader; NM - Not measured; ORP - Oxidation Reduction Potential

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APPENDIX C
Table C-1 (Continued)

April 2002 Groundwater Stabilization Data
Evergreen Manor Site
Roscoe, Illinois

Well Number	Date	Time	pH (standard unit)	Specific Conductance (µohms/cm)	ORP (mV)	Temperature (C)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Comments
MW-101S	4/4/2002	13:48	7.29	0.293	82	9.3	14	348	Specific conductance values appear to be stable between 0.480 and 0.495 based on trend. The 0.268 value in last three consecutive readings appears anomalous. Since turbidity below 5, FTL proceeds to sample
		13:59	7.2	0.487	86	8.3	15	124	
		14:09	7.4	0.469	71	9	14	69.2	
		14:15	7.12	0.493	83	8.9	14	54.1	
		14:21	7.38	0.261	64	8.8	14	44.4	
		14:26	7.16	0.489	75	8.6	13.5	34.5	
		14:31	7.37	0.479	57	8.6	14.5	29.2	
		14:39	7.4	0.276	59	8.8	14	21.2	
		14:43	7.42	0.491	57	8.7	14.5	17.2	
		14:49	7.37	0.268	66	8.8	14.5	13.3	
		14:55	7.36	0.495	56	9	14.5	11	
		15:00	7.28	0.486	65	8.3	14	4.7	
MW-105S	4/8/2002	8:27	6.91	0.559	54	10.6	10	61.9	Stabilization criteria met
		8:40	7.18	0.502	36	11.1	9.2	21.8	
		8:50	7.27	0.539	28	11.6	9	17.9	
		9:00	7.27	0.532	28	11.8	9.2	13.7	
		9:10	7.34	0.522	26	11.8	9.2	11.2	
		9:20	7.36	0.544	22	12	9.6	9	
		9:30	7.44	0.549	20	12.1	9.2	8.2	
		9:40	7.42	0.55	22	12.1	9.1	6.8	
		9:50	7.4	0.549	24	12.1	9.6	5.8	
		10:00	7.42	0.543	23	12.1	9.6	4.7	
MW-105D	4/8/2002	10:35	7.52	0.522	3	10.7	4.2	4.8	Purging and sampling took place during a rain event. Stabilization substantially complete. FTL elected to proceed with sampling due to increase in rainfall near end of purge cycle
		10:45	7.74	0.521	-6	10.9	8	5.7	
		10:56	7.81	0.525	-6	11.2	7.2	4.4	
		11:08	7.81	0.534	-6	11.7	7.2	5.4	
		11:18	7.79	0.532	-7	11.9	7.4	4.7	
		11:28	7.63	0.539	2	11.7	8.4	9.2	
		11:54	7.65	0.536	-4	11.7	10.2	11.8	

FTL - Field Team Leader; NM - Not measured; ORP - Oxidation Reduction Potential

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APPENDIX C
Table C-1 (Continued)

April 2002 Groundwater Stabilization Data
Evergreen Manor Site
Roscoe, Illinois

Well Number	Date	Time	pH (standard unit)	Specific Conductance (µohms/cm)	ORP (mV)	Temperature (C)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Comments
MW-103D	4/8/2002	14:57	6.89	0.599	34	11.5	12.6	544	Stabilization criteria met, except pH, which only very slightly off and indicates a trend reversal. Based on achieving turbidity of 5, FTL proceeds to sample in lieu of slight variation in pH
		15:08	6.95	0.599	30	12	12.6	189	
		15:19	7.01	0.593	25	12	11.8	71	
		15:29	7.04	0.599	27	12.1	12	25	
		15:38	6.98	0.602	27	12.5	10.4	19	
		15:46	7.09	0.597	25	12.1	10.8	13	
		15:58	7.06	0.596	28	11.6	13	5	
MW-103S	4/8/2002	16:43	7.09	0.559	10	11.1	11	175	Stabilization criteria met with exception of pH. pH appears stable in range of 7.01 to 7.09 based on trend. Value of 7.21 in last three consecutive readings appears anomalous. Based on very low turbidity, FTL proceeds to sample
		17:00	7.01	0.664	13	10.8	13.8	246	
		17:21	7.21	0.697	8	12.1	11.8	44	
		17:33	7.08	0.69	17	12.5	12.2	5.2	
		17:41	7.01	0.692	22	12.2	12.8	1.5	
MW-109S	4/9/2002	9:08	6.25	1.537	24	10.4	15.2	1075	Stabilization criteria met with exception of specific conductance. Spec conductance appears stable around 1.2225 based on trend. Value of 1.044 in last three consecutive appears anomalous. Based on low turbidity, FTL proceeds to sample
		9:20	6.75	1.293	23	11.9	15.2	682	
		9:32	7.02	1.247	24	12.2	14.8	321	
		9:42	7.18	1.21	25	12	14.6	182	
		9:53	7.29	1.217	19	11.8	14.8	85.9	
		10:05	7.4	1.216	28	11.1	14	45.7	
		10:15	7.41	1.197	22	10.9	14.8	42	
		10:41	7.41	1.191	26	12.8	14.5	69.5	
		10:46	7.43	1.22	30	12.7	13.5	32	
		10:50	7.44	1.219	27	13	14.2	21.3	
		10:55	7.45	1.225	32	12.7	14.5	14.9	
		11:00	7.48	1.044	29	12.6	14.5	9.2	
		11:05	7.49	1.233	34	12.4	15	5	
		11:43	7.38	0.711	23	10.7	12	145.2	
		11:55	7.44	0.692	9	13.3	10.5	255	
		12:06	7.37	0.694	16	11.8	11.5	92.4	
		12:17	7.35	0.684	9	12.3	13.5	99.8	
		12:30	7.61	0.694	4	12.4	11.5	17.4	
		12:35	7.51	0.702	6	12	12	17.6	
		12:46	7.61	0.694	5	12.9	12.5	18	

FTL - Field Team Leader; NM - Not measured, ORP - Oxidation Reduction Potential

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APPENDIX C
Table C-1 (Continued)

April 2002 Groundwater Stabilization Data
Evergreen Manor Site
Roscoe, Illinois

Well Number	Date	Time	pH (standard unit)	Specific Conductance (µohms/cm)	ORP (mV)	Temperature (C)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Comments
MW-01A	4/16/2002	10:30	6.78	0.84	67	16.5	14.8	5.1	Stabilization criteria met.
		10:40	7.1	0.774	40	14.5	14	1.3	
		10:50	7.27	0.76	20	15.7	13.4	1.26	
		11:00	7.3	0.757	13	15.3	14.2	1.3	
		11:05	7.32	0.771	8	13.5	14	2.6	
MW-02	4/16/2002	14:58	7.24	0.402	-30	19.8	13.2	54.5	Stabilization criteria met with exception of turbidity. FTL proceeds to sample since values dropped substantially during purging and appear stable between 7 and 8 NTU.
		15:05	7.3	0.802	-17	13.6	13.4	448	
		15:11	7.27	0.773	-20	14.5	13.2	140	
		15:16	7.29	0.771	-22	14.8	13	44.8	
		15:21	7.31	0.792	-24	14.4	12.8	52.5	
		15:25	7.32	0.755	-27	14.3	13	54.7	
		15:29	7.35	0.77	-25	14.9	12.6	41.8	
		15:34	7.36	0.774	-13	15	12.3	20.5	
		15:38	7.37	0.774	-18	14.3	12.7	10.1	
		15:41	7.37	0.78	-24	14.1	13.1	11.02	
		15:45	7.44	0.76	-27	16.3	12.8	7.1	
		15:49	7.45	0.765	-27	16.9	12.6	7.82	
MW-03	4/16/2002	12:46	7.28	0.791	-65	13.5	10.3	845	Stabilization criteria met.
		12:54	7.25	0.73	-38	13.2	10.2	12.2	
		12:58	7.26	0.74	-31	13.4	11	6.5	
		13:02	7.26	0.749	-29	13.1	10.6	5.7	
		13:07	7.28	0.736	-26	13.4	10.8	3.1	

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Appendix D
Redacted

Query the Private Well Database through the World Wide Web
http://gwinfo.sws.uiuc.edu/gwdb-query.html

County: Winnebago

Township Code: 46N
Range Code: 2E
Section Codes: 29

452 records were found for the specified locations.

Questions : Contact the Illinois State Water Survey's Ground Water Division @ (217)333-9043
Publication: Please cite the Illinois State Water Survey's Private-Well Database in all publications based wholly or partially on this information.

Please Note:

The data in the Private Well Inventory Database is a listing of those non-municipal wells which are known to the Illinois State Water Survey (ISWS). This information has been entered verbatim from well logs submitted by the driller, chemical analysis reports, well sealing forms, well inventory forms from the 1930-1934 well survey, and other special projects. The accuracy of this data is controlled by those who submitted the form. Information in the private well database has not been verified.

(OFFICE) (USB ONLY)	FIPS	TWN	RNG	SC	PL	OWNER	DRILLER	DATE	PERMIT	DPTH	REC	US	TY	AQ
167627	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		60	A	DO	--	--
167618	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		66	A	DO	--	--
167619	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		64	A	DO	--	--
167620	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		63	A	DO	--	--
167621	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		65	A	DO	--	--
167622	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		65	A	DO	--	--
167623	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		66	A	DO	--	--
167624	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		64	A	DO	--	--
167625	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		65	A	DO	--	--
167626	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		66	A	DO	--	--
167615	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		62	A	IC	--	--
167629	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		61	A	DO	--	--
167630	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		45	A	DO	--	--
167631	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		62	A	DO	--	--
167632	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		64	A	DO	--	--
167628	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		64	A	DO	--	--
167633	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		65	A	DO	--	--
167636	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		63	A	DO	--	--
167634	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		64	A	DO	--	--
167635	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		63	A	DO	--	--
169169	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		63	A	DO	--	--
169167	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		6	A	DO	--	--
169179	201	46N	02E	29		[redacted]	ALBRECHT	00/00/0000		63	A	DO	--	--
167637	201	46N	02E	29		[redacted]	BLOYER	00/00/1965		67	RG	DO	--	--
169067	201	46N	02E	29		[redacted]	HINKLE	00/00/1976	042903	64	RG	DO	--	--
228028	201	46N	02E	29		[redacted]	ALBRECHT	00/00/1984		61	A	DO	--	UN
RENARKS: contaminated														
228029	201	46N	02E	29		[redacted]	MARTIN & SONS WELL	01/29/1991		60	A	DO	--	--
169105	201	46N	02E	29		[redacted]	OLSON	02/23/1978	071470	63	RG	DO	--	--
169116	201	46N	02E	29		[redacted]	OLSON	02/23/1978	071468	63	RG	DO	--	--
169137	201	46N	02E	29		[redacted]	OLSON	02/23/1978	071474	63	RGA	DO	--	--
169126	201	46N	02E	29		[redacted]	OLSON	02/23/1978	071471	63	RGA	DO	--	--
169130	201	46N	02E	29		[redacted]	OLSON	02/23/1978	071469	63	RGA	DO	--	--
169134	201	46N	02E	29		[redacted]	OLSON	02/23/1978	071473	63	RG	DO	--	--
169136	201	46N	02E	29		[redacted]	OLSON	02/23/1978	071472	63	RGA	DO	--	--
169092	201	46N	02E	29		[redacted]	OLSON	02/23/1979	071467	63	RG	DO	--	--
167662	201	46N	02E	29		[redacted]	OLSON	02/24/1977	057039	63	RG	DO	--	--
167659	201	46N	02E	29		[redacted]	OLSON	02/24/1977	057938	63	RG	DO	--	--
167653	201	46N	02E	29		[redacted]	HINKLE	02/27/1976	044934	67	RG	DO	--	--
167652	201	46N	02E	29		[redacted]	HINKLE	03/01/1976	044993	65	RG	DO	--	--
169081	201	46N	02E	29		[redacted]	HINKLE	03/01/1976	044989	65	RG	DO	--	--
169128	201	46N	02E	29		[redacted]	OLSON	03/10/1978	072746	63	RGA	DO	--	--
167663	201	46N	02E	29		[redacted]	OLSON	03/18/1977	057915	63	RG	DO	--	--
169118	201	46N	02E	29		[redacted]	OLSON	03/24/1977	058154	63	RG	DO	--	--
169101	201	46N	02E	29		[redacted]	OLSON	03/24/1977	058153	62	RG	DO	--	--

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(OFFICE) (USE ONLY)	FIPS	TWN	RNG	SC	PL	OWNER	DRILLER	DATE	PERMIT	DPTH	REC	US	TY	AQ
169102	201	46N	02E	29		[redacted]	OLSON	03/24/1977	058152	62	RGA	DO	--	--
169088	201	46N	02E	29		[redacted]	OLSON	03/24/1977	058155	63	RG	DO	--	--
169090	201	46N	02E	29		[redacted]	OLSON	03/24/1977	058156	63	RG	DO	--	--
169087	201	46N	02E	29		[redacted]	OLSON	03/24/1977	058159	63	RG	DO	--	--
169084	201	46N	02E	29		[redacted]	OLSON	03/24/1977	058151	63	RG	DO	--	--
169085	201	46N	02E	29		[redacted]	OLSON	03/24/1977	058158	63	RG	DO	--	--
169124	201	46N	02E	29		[redacted]	OLSON	04/10/1978	072748	63	RGA	DO	--	--
169122	201	46N	02E	29		[redacted]	OLSON	04/10/1978	072742	61	RGA	DO	--	--
169125	201	46N	02E	29		[redacted]	OLSON	04/10/1978	072747	63	RG	DO	--	--
169140	201	46N	02E	29		[redacted]	OLSON	04/10/1978	072744	63	RG	DO	--	--
169135	201	46N	02E	29		[redacted]	OLSON	04/10/1978	072745	63	RGA	DO	--	--
169123	201	46N	02E	29		[redacted]	OLSON	04/10/1978	072743	63	RGA	DO	--	--
252680	201	46N	02E	29		[redacted]	GREENFIELD	04/10/1990	6330	70	RG	DO	--	UN
REMARKS: LOT 79 EVERGREEN MANOR														
169141	201	46N	02E	29		[redacted]	OLSON	04/14/1977	069208	63	RGA	DO	--	--
169109	201	46N	02E	29		[redacted]	OLSON	04/14/1978	069213	63	RG	DO	--	--
167649	201	46N	02E	29		[redacted]	HINKLE	04/22/1971	012343	80	RG	DO	--	--
169073	201	46N	02E	29		[redacted]	OLSON	04/26/1977	059406	63	RG	DO	--	--
167650	201	46N	02E	29		[redacted]	HINKLE	04/29/1975	037332	62	RG	DO	--	--
167667	201	46N	02E	29		[redacted]	OLSON	04/29/1977	059762	63	RG	DO	--	--
169079	201	46N	02E	29		[redacted]	HINKLE	05/00/1976	047047	65	RG	DO	--	--
167668	201	46N	02E	29		[redacted]	BEAMAN	05/04/1977	059997	62	RG	DO	--	--
167666	201	46N	02E	29		[redacted]	BEAMAN	05/04/1977	059998	62	RG	DO	--	--
167665	201	46N	02E	29		[redacted]	BEAMAN	05/04/1977	059999	63	RG	DO	--	--
167664	201	46N	02E	29		[redacted]	BEAMAN	05/04/1977	060000	63	RG	DO	--	--
169083	201	46N	02E	29		[redacted]	HINKLE	05/10/1976	047043	65	RG	DO	--	--
169078	201	46N	02E	29		[redacted]	HINKLE	05/10/1976	047045	65	RG	DO	--	--
169086	201	46N	02E	29		[redacted]	HINKLE	05/10/1976	047042	65	RG	DO	--	--
169192	201	46N	02E	29		[redacted]	LIVINGSTON	05/23/1983	106261	64	RG	DO	--	--
169115	201	46N	02E	29		[redacted]	OLSON	05/24/1977	058150	63	RG	DO	--	--
169119	201	46N	02E	29		[redacted]	OLSON	06/21/1977	062420	63	RG	DO	--	--
169099	201	46N	02E	29		[redacted]	OLSON	06/21/1977	062419	63	RG	DO	--	--
169094	201	46N	02E	29		[redacted]	OLSON	06/21/1977	062422	63	RG	DO	--	--
169100	201	46N	02E	29		[redacted]	OLSON	06/21/1977	062425	63	RG	DO	--	--
169097	201	46N	02E	29		[redacted]	OLSON	06/21/1977	062424	64	RG	DO	--	--
167670	201	46N	02E	29		[redacted]	OLSON	06/30/1977	063105	63	RG	DO	--	--
167669	201	46N	02E	29		[redacted]	OLSON	06/30/1977	063104	63	RG	DO	--	--
167671	201	46N	02E	29		[redacted]	OLSON	06/30/1977	063110	65	RG	DO	--	--
167677	201	46N	02E	29		[redacted]	OLSON	06/30/1977	063101	63	RG	DO	--	--
169082	201	46N	02E	29		[redacted]	HINKLE	07/02/1976	049243	65	RG	DO	--	--
169107	201	46N	02E	29		[redacted]	HINKLE	07/08/1977	063368	79	RGA	DO	--	--
167672	201	46N	02E	29		[redacted]	OLSON	07/14/1977	063498	63	RG	DO	--	--
169074	201	46N	02E	29		[redacted]	OLSON	07/18/1977	063575	63	RGA	DO	--	--
167658	201	46N	02E	29		[redacted]	BEAMAN	07/28/1976	050237	64	RG	DO	--	--
167651	201	46N	02E	29		[redacted]	HINKLE	08/13/1975	040119	64	RG	DO	--	--

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(OFFICE) (USE ONLY)	FIPS	TWN	RNG	SC	PL	OWNER	DRILLER	DATE	PERMIT	DPTH	REC	US	TY	AQ
169111	201	46N	02E	29		[redacted]	OLSON	08/25/1977	062421	65	RG	DO	--	--
169095	201	46N	02E	29		[redacted]	OLSON	08/26/1977	062423	64	RG	DO	--	--
228032	201	46N	02E	29		[redacted] LOT 70	OLSON WELL CO	08/26/1977	063102	65	RG	DO	--	UN
169056	201	46N	02E	29		[redacted]	HINKLE	08/29/1975	040692	65	RG	DO	--	--
228025	201	46N	02E	29		[redacted]	ALBRECHT WELL DRLG	08/30/1984		62	A	DO	--	UN
REMARKS: contaminated														
228027	201	46N	02E	29		[redacted]	ALBRECHT WELL DRLG	08/30/1984		63	A	DO	--	UN
REMARKS: contaminated														
228023	201	46N	02E	29		[redacted]	ALBRECHT WELL DRLG	08/30/1984		65	A	DO	--	UN
REMARKS: contaminated														
228022	201	46N	02E	29		[redacted]	ALBRECHT WELL DRILG	08/30/1984		62	A	DO	--	UN
REMARKS: contaminated														
228021	201	46N	02E	29		[redacted]	ALBRECHT WELL DRLG	08/30/1984		63	A	DO	--	UN
REMARKS: contaminated														
228026	201	46N	02E	29		[redacted]	ALBRECHT WELL DRLG	08/30/1984		64	A	DO	--	UN
REMARKS: continated														
169077	201	46N	02E	29		[redacted]	HINKLE	09/02/1976	051754	65	RG	DO	--	--
169080	201	46N	02E	29		[redacted]	HINKLE	09/02/1976	051756	65	RG	DO	--	--
169058	201	46N	02E	29		[redacted]	HINKLE	09/05/1975	040885	65	RG	DO	--	--
169069	201	46N	02E	29		[redacted]	OLSON	09/09/1977	066564	63	RGA	DO	--	--
169064	201	46N	02E	29		[redacted]	OLSON	09/09/1977	066563	63	RG	DO	--	--
169093	201	46N	02E	29		[redacted]	OLSON	09/09/1977	066562	63	RG	DO	--	--
169072	201	46N	02E	29		[redacted]	OLSON	09/09/1977	066560	63	RG	DO	--	--
169113	201	46N	02E	29		[redacted]	OLSON	09/09/1977	066557	63	RG	DO	--	--
169110	201	46N	02E	29		[redacted]	OLSON	09/09/1977	066558	63	RG	DO	--	--
169112	201	46N	02E	29		[redacted]	OLSON	09/09/1977	066556	63	RG	DO	--	--
169120	201	46N	02E	29		[redacted]	OLSON	09/09/1977	066559	63	RG	DO	--	--
228031	201	46N	02E	29		[redacted]	MARTIN	09/28/1987	135454	70	RG	DO	--	UN
169098	201	46N	02E	29		[redacted]	OLSON	10/10/1977	066553	63	RG	DO	--	--
167657	201	46N	02E	29		[redacted]	BEAMAN	10/14/1967	053512	65	RG	DO	--	--
167656	201	46N	02E	29		[redacted]	BEAMAN	10/14/1976	053511	65	RG	DO	--	--
167655	201	46N	02E	29		[redacted]	BEAMAN	10/14/1976	053510	65	RG	DO	--	--
228033	201	46N	02E	29		[redacted]	MARTIN	10/21/1987	135451	67	RG	DO	--	UN
169063	201	46N	02E	29		[redacted]	HINKLE	10/22/1975	042195	65	RG	DO	--	--
169060	201	46N	02E	29		[redacted]	HINKLE	10/22/1975	042194	65	RG	DO	--	--
169091	201	46N	02E	29		[redacted]	OLSON	10/24/1977	068506	63	RGA	DO	--	--
169076	201	46N	02E	29		[redacted]	OLSON	10/24/1977	068505	63	RG	DO	--	--
169096	201	46N	02E	29		[redacted]	OLSON	10/24/1977	068510	63	RG	DO	--	--
169104	201	46N	02E	29		[redacted]	OLSON	10/24/1977	068507	63	RGA	DO	--	--
169114	201	46N	02E	29		[redacted]	OLSON	10/24/1977	068508	63	RG	DO	--	--
169121	201	46N	02E	29		[redacted]	OLSON	10/24/1977	068509	63	RGA	DO	--	--
169106	201	46N	02E	29		[redacted]	OLSON	10/28/1977	066555	63	RG	DO	--	--
169062	201	46N	02E	29		[redacted]	OLSON	10/28/1977	066561	63	RG	DO	--	--
169108	201	46N	02E	29		[redacted]	OLSON	11/09/1977	066554	63	RG	DO	--	--
169103	201	46N	02E	29		[redacted]	OLSON	11/14/1977	069207	63	RGA	DO	--	--

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(OFFICE) (USE ONLY)	FIPS	TWN	RNG	SC	PL	OWNER	DRILLER	DATE	PERMIT	DPTH	REC	US	TY	AQ
169131	201	46N	02E	29		[redacted]	OLSON	11/14/1977	069211	63	RGA	DO	--	--
169117	201	46N	02E	29		[redacted]	OLSON	11/14/1977	069209	63	RG	DO	--	--
169075	201	46N	02E	29		[redacted]	OLSON	11/14/1977	069212	63	RG	DO	--	--
169142	201	46N	02E	29		[redacted]	OLSON	11/14/1977	069210	63	RGA	DO	--	--
169196	201	46N	02E	29		[redacted]	LIVINGSTON	11/17/1982	105652	65	RG	DO	--	--
169066	201	46N	02E	29		[redacted]	HINKLE	11/18/1976	054904	65	RG	DO	--	--
169054	201	46N	02E	29		[redacted]	HINKLE	11/24/1975	043314	65	RG	DO	--	--
167673	201	46N	02E	29		[redacted]	OLSON	11/30/1984	116025	63	RG	DO	--	--
167660	201	46N	02E	29		[redacted]	BEAMAN	12/10/1976	055578	63	RG	DO	--	--
167661	201	46N	02E	29		[redacted]	BEAMAN	12/10/1976	055579	62	RG	DO	--	--
209706	201	46N	02E	29		[redacted]	GREENFIELD	12/26/1989	X6329	60	RG	DO	--	UN
167343	201	46N	02E	29		[redacted]		03/00/1934		43	RG	DO	--	--
167747	201	46N	02E	29		[redacted]	MCKINNEY	05/02/1977	059827	64	RG	DO	--	--
167758	201	46N	02E	29		[redacted]	MCKINNEY	10/11/1974	033792	84	RG	DO	--	--
167679	201	46N	02E	29		[redacted]	OLSON	04/20/1982	103118	63	RG	DO	--	--
167680	201	46N	02E	29		[redacted]	OLSON	06/09/1983	107537	63	RG	DO	--	--
169166	201	46N	02E	29		[redacted]	OLSON	08/08/1978	077923	60	RGA	DO	--	--
169158	201	46N	02E	29		[redacted]	OLSON	08/08/1978	077921	60	RG	DO	--	--
169180	201	46N	02E	29		[redacted]	BEAMAN	03/06/1981	098615	63	RGA	DO	--	--
167759	201	46N	02E	29		[redacted]	MCKINNEY	04/15/1977	059030	62	RG	DO	--	--
169187	201	46N	02E	29		[redacted]	GREENFIELD	07/18/1985	119048	68	RG	DO	--	--
169185	201	46N	02E	29		[redacted]	BEAMAN	01/24/1986	122059	65	RG	DO	--	--
169172	201	46N	02E	29		[redacted]	BEAMAN	01/25/1982	102576	65	RGA	DO	--	--
169171	201	46N	02E	29		[redacted]	BEAMAN	01/25/1982	102575	65	RG	DO	--	--
167682	201	46N	02E	29		[redacted]	GREENFIELD	03/21/1978	072191	65	RG	DO	--	--
167685	201	46N	02E	29		[redacted]	BEAMAN	02/09/1987	128400	70	RG	DO	--	--
167686	201	46N	02E	29		[redacted]	BEAMAN	03/27/1987	130226	70	RG	DO	--	--
167684	201	46N	02E	29		[redacted]	BEAMAN	04/28/1987	131417	75	RG	DO	--	--
167639	201	46N	02E	29		[redacted]	BEAMAN	04/28/1987	131418	70	RG	DO	--	--
169186	201	46N	02E	29		[redacted]	BEAMAN	10/26/1984	115581	67	RG	DO	--	--
167638	201	46N	02E	29		[redacted]	MCKINNEY	01/30/1984	111095	74	RG	DO	--	--
167683	201	46N	02E	29		[redacted]	MCKINNEY	01/30/1984	111996	66	RG	DO	--	--
194405	201	46N	02E	29		[redacted]	GREENFIELD	07/11/1989	X12792	60	RG	DO	--	UN
194406	201	46N	02E	29		[redacted]	GREENFIELD	07/13/1989	X12791	60	RG	DO	--	UN
194404	201	46N	02E	29		[redacted]	GREENFIELD	07/13/1989	X12793	60	RG	DO	--	UN
194407	201	46N	02E	29		[redacted]	GREENFIELD	07/28/1989	X12794	59	RG	DO	--	UN
228034	201	46N	02E	29		[redacted]	GREENFIELD	08/23/1989	013473	60	RG	DO	--	UN
167674	201	46N	02E	29		[redacted]	MCKINNEY	08/20/1984	114260	64	RG	DO	--	--
169183	201	46N	02E	29		[redacted]	GREENFIELD	03/22/1985	116937	68	RG	DO	--	--
167687	201	46N	02E	29		[redacted]	OLSON	04/12/1979	084571	63	RG	DO	--	--
169199	201	46N	02E	29		[redacted]	BEAMAN	04/20/1984	112019	69	RG	DO	--	--
194445	201	46N	02E	29		[redacted]	GREENFIELD	05/02/1989	X9407	60	RG	DO	--	UN
169194	201	46N	02E	29		[redacted]	GREENFIELD	05/14/1985	117827	68	RG	DO	--	--
167688	201	46N	02E	29		[redacted]	OLSON	06/03/1981	099969	63	RG	DO	--	--
169133	201	46N	02E	29		[redacted]	OLSON	08/04/1978	077864	63	RG	DO	--	--

(OFFICE) (USE ONLY)	FIPS	TWN	RNG	SC	PL	OWNER	DRILLER	DATE	PERMIT	DPTH	REC	US	TY	AQ
209773	201	46N	02E	29		[redacted]	BEAMAN	08/14/1989	X12351	71	RGX	DO	--	UN
167689	201	46N	02E	29		[redacted]	OLSON	09/09/1981	101243	60	RG	DO	--	--
167690	201	46N	02E	29		[redacted]	BULL	11/22/1982	105712	70	RG	DO	--	--
167337	201	46N	02E	29		[redacted]		03/00/1934		48	RG	DO	--	--
241597	201	46N	02E	29		[redacted]	BULL	01/28/1993	0742-92	65	RG	DO	--	UN
REMARKS: Evergreen Manor Subd. Lot 58														
167691	201	46N	02E	29		[redacted]	BEAMAN	07/28/1982	104284	67	RG	DO	--	--
167678	201	46N	02E	29		[redacted]	BEAMAN	07/28/1982	104282	67	RG	DO	--	--
167676	201	46N	02E	29		[redacted]	OLSON	07/29/1981	100754	60	RG	DO	--	--
167597	201	46N	02E	29		[redacted]	BEAMAN	08/24/1979	089095	65	RG	DO	--	--
167692	201	46N	02E	29		[redacted]	BEAMAN	08/28/1982	104283	67	RG	DO	--	--
169184	201	46N	02E	29		[redacted]	BEAMAN	09/23/1982	104784	65	RG	DO	--	--
228030	201	46N	02E	29		[redacted]	BEAMAN	11/01/1982	104784	65	RG	DO	--	UN
169414	201	46N	02E	29		[redacted]	BEAMAN	08/04/1977	064721	62	RG	DO	--	--
169413	201	46N	02E	29		[redacted]	BEAMAN	08/04/1977	064720	62	RG	DO	--	--
169415	201	46N	02E	29		[redacted]	BEAMAN	08/04/1977	064722	62	RG	DO	--	--
169417	201	46N	02E	29		[redacted]	BEAMAN	11/23/1977	069611	62	RG	DO	--	--
169416	201	46N	02E	29		[redacted]	BEAMAN	11/23/1977	069609	62	RG	DO	--	--
169418	201	46N	02E	29		[redacted]	BEAMAN	11/23/1977	069612	62	RG	DO	--	--
169471	201	46N	02E	29		[redacted]	BEAMAN	00/00/1979	089091	62	RG	DO	--	--
169472	201	46N	02E	29		[redacted]	BEAMAN	02/08/1978	071604	62	RG	DO	--	--
169433	201	46N	02E	29		[redacted]	BEAMAN	02/08/1978	071607	62	RG	DO	--	--
169443	201	46N	02E	29		[redacted]	BEAMAN	02/25/1978	071605	62	RG	DO	--	--
169427	201	46N	02E	29		[redacted]	BEAMAN	02/28/1978	071608	62	RG	DO	--	--
169444	201	46N	02E	29		[redacted]	BEAMAN	02/28/1978	071606	62	RG	DO	--	--
169435	201	46N	02E	29		[redacted]	BEAMAN	02/28/1978	071612	62	RG	DO	--	--
169428	201	46N	02E	29		[redacted]	BEAMAN	02/28/1978	071610	62	RG	DO	--	--
169424	201	46N	02E	29		[redacted]	BEAMAN	02/28/1978	071609	62	RG	DO	--	--
169423	201	46N	02E	29		[redacted]	BEAMAN	02/28/1978	071613	62	RG	DO	--	--
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169473	201	46N	02E	29		[redacted]	BEAMAN	02/28/1978	071615	62	RG	DO	--	--
169469	201	46N	02E	29		[redacted]	BEAMAN	04/12/1978	072931	62	RG	DO	--	--
169429	201	46N	02E	29		[redacted]	BEAMAN	04/12/1978	072932	62	RG	DO	--	--
169431	201	46N	02E	29		[redacted]	BEAMAN	04/12/1978	072926	62	RG	DO	--	--
169468	201	46N	02E	29		[redacted]	BEAMAN	04/12/1978	072930	62	RG	DO	--	--
169467	201	46N	02E	29		[redacted]	BEAMAN	04/12/1978	072929	62	RG	DO	--	--
169466	201	46N	02E	29		[redacted]	BEAMAN	04/12/1978	072927	62	RG	DO	--	--
169463	201	46N	02E	29		[redacted]	BEAMAN	04/24/1978	084878	62	RG	DO	--	--
169453	201	46N	02E	29		[redacted]	BEAMAN	04/24/1979	084881	62	RG	DO	--	--
169454	201	46N	02E	29		[redacted]	BEAMAN	04/24/1979	084882	62	RG	DO	--	--
169460	201	46N	02E	29		[redacted]	BEAMAN	04/24/1979	084883	62	RG	DO	--	--
169462	201	46N	02E	29		[redacted]	BEAMAN	04/24/1979	084886	62	RG	DO	--	--
169452	201	46N	02E	29		[redacted]	BEAMAN	04/24/1979	084885	62	RG	DO	--	--
169451	201	46N	02E	29		[redacted]	BEAMAN	04/24/1979	084888	62	RG	DO	--	--
169461	201	46N	02E	29		[redacted]	BEAMAN	04/24/1979	084884	62	RG	DO	--	--

05/29/97 THU 11:03 FAX 217 244 0777 IL STATE WATER SURVEY 008

(OFFICE) (USE ONLY)	FIPS	TWN	RNG	SC	PL	OWNER	DRILLER	DATE	PERMIT	DPTH	REC	US	TY	AQ
169465	201	46N	02E	29		[redacted]	BEAMAN	04/24/1979	084880	62	RG	DO	--	--
169464	201	46N	02E	29		[redacted]	BEAMAN	04/24/1979	084879	62	RG	DO	--	--
169440	201	46N	02E	29		[redacted]	BEAMAN	04/24/1979	084887	64	RG	DO	--	--
169438	201	46N	02E	29		[redacted]	BEAMAN	04/24/1979	084890	62	RG	DO	--	--
169470	201	46N	02E	29		[redacted]	BEAMAN	04/24/1979	084889	62	RG	DO	--	--
167748	201	46N	02E	29		[redacted]	BEAMAN	05/10/1977	060288	63	RG	DO	--	--
167600	201	46N	02E	29		[redacted]	BEAMAN	07/00/1979	089089	62	RG	DO	--	--
169425	201	46N	02E	29		[redacted]	BEAMAN	07/13/1978	076792	62	RG	DO	--	--
169436	201	46N	02E	29		[redacted]	BEAMAN	08/24/1979	089094	62	RG	DO	--	--
169447	201	46N	02E	29		[redacted]	BEAMAN	08/24/1979	089097	62	RG	DO	--	--
169448	201	46N	02E	29		[redacted]	BEAMAN	08/24/1979	089096	62	RG	DO	--	--
167601	201	46N	02E	29		[redacted]	BEAMAN	08/24/1979	089090	62	RG	DO	--	--
167602	201	46N	02E	29		[redacted]	BEAMAN	08/24/1979	089092	62	RG	DO	--	--
167599	201	46N	02E	29		[redacted]	BEAMAN	08/24/1979	089088	62	RG	DO	--	--
167603	201	46N	02E	29		[redacted]	BEAMAN	08/24/1979	089093	62	RG	DO	--	--
169432	201	46N	02E	29		[redacted]	BEAMAN	09/13/1978	076793	62	RG	DO	--	--
169437	201	46N	02E	29		[redacted]	BEAMAN	09/15/1978	079492	62	RG	DO	--	--
169439	201	46N	02E	29		[redacted]	BEAMAN	09/15/1978	079493	62	RG	DO	--	--
169441	201	46N	02E	29		[redacted]	BEAMAN	09/15/1978	079495	62	RG	DO	--	--
169426	201	46N	02E	29		[redacted]	BEAMAN	10/18/1977	068228	62	RG	DO	--	--
169445	201	46N	02E	29		[redacted]	BEAMAN	10/20/1978	081047	62	RG	DO	--	--
167598	201	46N	02E	29		[redacted]	BEAMAN	10/20/1978	081051	62	RG	DO	--	--
169193	201	46N	02E	29		[redacted]	BEAMAN	10/22/1985	121018	65	RG	DO	--	--
169430	201	46N	02E	29		[redacted]	BEAMAN	11/12/1978	072928	62	RG	DO	--	--
169420	201	46N	02E	29		[redacted]	BEAMAN	11/23/1977	069608	62	RG	DO	--	--
169421	201	46N	02E	29		[redacted]	BEAMAN	11/23/1977	069615	62	RG	DO	--	--
169419	201	46N	02E	29		[redacted]	BEAMAN	11/23/1977	069616	62	RG	DO	--	--
169476	201	46N	02E	29		[redacted]	BEAMAN	11/23/1977	069607	62	RG	DO	--	--
169475	201	46N	02E	29		[redacted]	BEAMAN	11/23/1977	069613	62	RG	DO	--	--
169474	201	46N	02E	29		[redacted]	BEAMAN	11/23/1977	069617	62	RG	DO	--	--
169188	201	46N	02E	29		[redacted]	BEAMAN	11/30/1983	110618	62	RG	DO	--	--
169434	201	46N	02E	29		[redacted]	BEAMAN	12/01/1978	082618	62	RG	DO	--	--
169442	201	46N	02E	29		[redacted]	BEAMAN	12/01/1978	082625	62	RG	DO	--	--
169446	201	46N	02E	29		[redacted]	BEAMAN	12/01/1978	082619	62	RG	DO	--	--
169457	201	46N	02E	29		[redacted]	BEAMAN	12/01/1978	082622	62	RG	DO	--	--
169455	201	46N	02E	29		[redacted]	BEAMAN	12/01/1978	082624	62	RG	DO	--	--
169458	201	46N	02E	29		[redacted]	BEAQMAN	12/01/1978	082621	62	RG	DO	--	--
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169449	201	46N	02E	29		[redacted]	BEAMAN	12/01/1978	082617	62	RG	DO	--	--
167694	201	46N	02E	29		[redacted]	OLSON	03/30/1982	102950	60	RG	DO	--	--
167693	201	46N	02E	29		[redacted]	OLSON	04/29/1980	093571	63	RG	DO	--	--
167695	201	46N	02E	29		[redacted]	OLSON	04/29/1980	093569	63	RG	DO	--	--
167699	201	46N	02E	29		[redacted]	MCKINNEY	06/17/1983	107711	70	RG	DO	--	--

(OFFICE) (USE ONLY)	FIPS	TWN	RNG	SC	PL	OWNER	DRILLER	DATE	PERMIT	DPTH	REC	US	TY	AQ
167640	201	46N	02E	29		[redacted]	BULL	08/22/1986	|126232	62	RG	DO	--	--
167696	201	46N	02E	29		[redacted]	OLSON	09/29/1980	|096339	63	RG	DO	--	--
167697	201	46N	02E	29		[redacted]	OLSON	10/09/1980	|096596	63	RG	DO	--	--
167698	201	46N	02E	29		[redacted]	GREENFIELD	12/29/1980	|098015	65	RG	DO	--	--
167338	201	46N	02E	29		[redacted]		03/00/1934	|	70	RG	DO	--	--
228035	201	46N	02E	29		[redacted]	MARTIN	03/28/1986	122154	60	RG	DO	--	UN
167641	201	46N	02E	29		[redacted]	OLSON	04/04/1984	|111727	63	RG	DO	--	--
167709	201	46N	02E	29		[redacted]	OLSON	04/10/1981	|099181	63	RG	DO	--	--
167713	201	46N	02E	29		[redacted]	BEAMAN	04/23/1982	|104785	65	RG	DO	--	--
167712	201	46N	02E	29		[redacted]	OLSON	04/28/1981	|098178	63	RG	DO	--	--
167710	201	46N	02E	29		[redacted]	OLSON	04/29/1980	|093570	63	RG	DO	--	--
228038	201	46N	02E	29		[redacted]	MARTIN	05/07/1986	122813	62	RG	DO	--	UN
228036	201	46N	02E	29		[redacted]	MARTIN	07/08/1986	123812	63	RG	DO	--	UN
167701	201	46N	02E	29		[redacted]	OLSON	07/13/1983	|108055	62	RG	DO	--	--
167702	201	46N	02E	29		[redacted]	OLSON	07/13/1983	|108056	62	RG	DO	--	--
167706	201	46N	02E	29		[redacted]	OLSON	08/04/1980	|095335	63	RG	DO	--	--
228037	201	46N	02E	29		[redacted]	MARTIN	08/07/1986	122812	62	RG	DO	--	UN
167703	201	46N	02E	29		[redacted]	OLSON	08/12/1983	|108776	63	RG	DO	--	--
167704	201	46N	02E	29		[redacted]	OLSON	08/12/1983	|108777	63	RG	DO	--	--
228040	201	46N	02E	29		[redacted]	MARTIN	09/14/1987	133848	65	RG	DO	--	UN
167705	201	46N	02E	29		[redacted]	OLSON	09/27/1979	|089834	64	RG	DO	--	--
167700	201	46N	02E	29		[redacted]	OLSON	09/27/1979	|089833	63	RG	DO	--	--
167714	201	46N	02E	29		[redacted]	OLSON	10/13/1983	|109930	63	RG	DO	--	--
167642	201	46N	02E	29		[redacted]	OLSON	10/25/1985	|121142	60	RG	DO	--	--
167711	201	46N	02E	29		[redacted]	OLSON	11/07/1980	|097227	63	RG	DO	--	--
167749	201	46N	02E	29		[redacted]	OLSON	11/07/1980	|097230	63	RG	DO	--	--
228039	201	46N	02E	29		[redacted]	MARTIN	11/28/1986	128371	61	RG	DO	--	UN
167707	201	46N	02E	29		[redacted]	OLSON	12/10/1980	|097713	63	RG	DO	--	--
167708	201	46N	02E	29		[redacted]	OLSON	12/10/1980	|097712	63	RG	DO	--	--
167643	201	46N	02E	29		[redacted]	GREENFIELD	02/06/1984	|111160	67	RG	DO	--	--
241674	201	46N	02E	29		[redacted]	GREENFIELD	12/10/1992	684	105	RG	DO	--	UN
REMARKS: Hononegah Ests. Lot 4A														
167604	201	46N	02E	29		[redacted]	BEAMAN	09/00/1978	|079494	62	RG	DO	--	--
167605	201	46N	02E	29		[redacted]	BEAMAN	09/00/1978	|079496	62	RG	DO	--	--
167607	201	46N	02E	29		[redacted]	BEAMAN	09/15/1978	|079491	62	RG	DO	--	--
167608	201	46N	02E	29		[redacted]	BEAMAN	09/15/1978	|079495	62	RG	DO	--	--
167606	201	46N	02E	29		[redacted]	BEAMAN	09/15/1978	|079497	62	RG	DO	--	--
167760	201	46N	02E	29		[redacted]	OLSON	11/11/1971	|012837	70	RG	DO	--	--
169190	201	46N	02E	29		[redacted]	OLSON	01/10/1986	|121998	60	RG	DO	--	--
228045	201	46N	02E	29		[redacted]	MARTIN	01/21/1986	121998	62	RG	DO	--	UN
167718	201	46N	02E	29		[redacted]	OLSON	04/28/1981	|098661	63	RG	DO	--	--
228042	201	46N	02E	29		[redacted]	MARTIN	05/00/1987	129608	63	RG	DO	--	UN
228046	201	46N	02E	29		[redacted]	MARTIN	05/08/1986	122811	61	RG	DO	--	UN
228047	201	46N	02E	29		[redacted]	MARTIN	06/11/1986	123813	62	RG	DO	--	UN
167719	201	46N	02E	29		[redacted]	MCKINNEY	06/17/1983	|107710	70	RG	DO	--	--

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: _____

SUBJECT: Review of Data
Received for Review on April 12, 2002

FROM: Stephen L. Ostrodka, Chief (SMF-4J)
Superfund Field Services Section

TO: Data User: WESTON

We have reviewed the data for the following case:

SITE NAME: Evergreen Manor (IL)
CASE NUMBER: 30351 SDG NUMBER: E0057
Number and Type of Samples: 10 Waters
Sample Numbers: E0057 - E0066
Laboratory: A4 Scientific Hrs. for Review: _____

Following are our findings:

CC: Cecilia Moore
Region 5 TPO
Mail Code: SMF-4J

:ase Number : 30351 SDG Number: E0057
;ite Name: EVERGREEN MANOR (IL) Laboratory: A4 SCIENTIFIC

Below is a summary of the out-of-control audits and the possible effects on the data for this :ase:

Ten (10) preserved water samples, numbered *E0057* through *E0066,* were collected *April 3 - 4, 2002.* The lab received the samples on *April 5, 2002* in good condition. All samples were analyzed for only the volatile list of organic analytes. All were analyzed according to CLP SOW *OLM03.2* 6/01.

Reviewed By: Allison Harvey/IITRI-ESAT
Date: April 23, 2002

:a Number : 30351 SDG Number: E0057
Site Name: EVERGREEN MANOR (IL) Laboratory: A4 SCIENTIFIC

I. HOLDING TIME

No defects found.

2. GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

No defects found.

3. CALIBRATION

The following volatile samples are associated with a continuing calibration whose corresponding initial ca ation has relative response factors (RRFs) outside primary criteria. Hits are flagged "J" and non-detect are qualified "R".

Methyl Acetate
E0057, E0057MS, E0057MSD, E0058, E0059, E0060, E0061, E0062, E0063, E0064, E0065, E0066, VBLK24, VBLK25, VBLK26, VHBLK01

Th llowing volatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria. Hits are qualified "J" and non-detects are qualified "UJ".

Dichlorodifluoromethane, Trichlorofluoromethane, 1,1,2-Trichloro-1,2,2-trifluoroethane, 1,2-Dichloroethane
E0066, VBLK25

Acetone
E0057, E0057MS, E0057MSD, E0058, E0059, E0060, E0061, E0062, E0063, E0064, E0065, E0066, VBLK24, VBLK25, VBLK26, VHBLK01

The following volatile samples are associated with a continuing calibration relative response factor (RRF5) outside primary criteria. Hits are flagged "J" and non-detects are qualified "R".

Methyl Acetate
E0057, E0057MS, E0057MSD, E0058, E0059, E0060, E0061, E0062, E0063, E0064, E0065, E0066, VBLK24, VBLK25, VBLK26, VHBLK01

4. BLANKS

The following volatile samples were analyzed after a highly contaminated sample and have no preceding ns ent blank.

Reviewed By: Allison Harvey/IITRI-ESAT
Date: April 23, 2002

ase Number : 30351 SDG Number: E0057
ite Name: EVERGREEN MANOR (IL) Laboratory: A4 SCIENTIFIC

1,1,2-Trichloro-1,2,2-trifluoroethane
E0061, E0063, E0064, E0065

Samples E0061, E0063, E0064 and E0065 were analyzed after sample E0062. E0062 reported 1,1,2-Trichloro-1,2,2-trifluoroethane at 6.7 µg/L. Sample E0063 was analyzed immediately following sample E0062 and reported no 1,1,2-Trichloro-1,2,2-trifluoroethane; therefore, there was no evidence carryover.

Chloroform
E0057, E0062

Neither sample E0057 nor sample E0062 reported any Chloroform; therefore, there was no evidence carryover.

Trichloroethene
E0058, E0059, E0060

Samples E0058, E0059 and E0060 were analyzed after sample E0057MSD. E0057MSD reporte Trichloroethene at 5.1 µg/L. Samples E0058 was analyzed first and reported Trichloroethene at 0.18 µg/L. This concentration was confirmed by the analysis of the field duplicate, E0059, reporting Trichloroethene at 0.19 µg/L. Sample E0060 reported no detection of Trichloroethene. Therefore, th was no evidence of carryover.

5. SYSTEM MONITORING COMPOUND AND SURROGATE RECOVERY

The following volatile method blanks have DMC recovery outside criteria. Hits are qualified "J" and non-dete are qualified "UJ".

VBLK25
trans-1,2-Dichloroethene, cis-1,2-Dichloroethene

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

No defects found.

7. FIELD BLANK AND FIELD DUPLICATE

Samples *E0060* and *E0066* are trip blanks. Sample *E0061* is a field blank. Sample *E0059* is a field duplicat of Sample *E0058*. Results are summarized in the following table:

:a. Number : 30351 SDG Number: E0057
Site Name: EVERGREEN MANOR (IL) Laboratory: A4 SCIENTIFIC

Analytes	E0058 µg/L	E0059 µg/L	E0060 µg/L	E0061 µg/L	E0066 µg/L
Chloroform			8.6	14	9.1
1,1,1-Trichloroethane	0.90	1.0			
Trichloroethene	0.18 J	0.19 J			
Tetrachloroethene	0.48 J	0.52 J			
VOA TICs		1			

Re ıts are not qualified based upon the results of the field blank or field duplicates.

3. INTERNAL STANDARDS

No defects found.

9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all VOA compounds were properly identified.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The following volatile samples have analyte concentrations below the quantitation limit (CRQL). All results be. .v the CRQL are qualified "J".

E0057, E0063
Tetrachloroethene

E0057MS, E0057MSD
Methylene Chloride, Tetrachloroethene

E0058
Trichloroethene, Tetrachloroethene

E0059, E0065
Trichloroethene

Reviewed By: Allison Harvey/IITRI-ESAT
Date: April 23, 2002

Case Number : 30351 SDG Number: E0057
Site Name: EVERGREEN MANOR (IL) Laboratory: A4 SCIENTIFIC

11. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance.

12. ADDITIONAL INFORMATION

None.

Reviewed By: Allison Harvey/IITRI-ESAT
Date: April 23, 2002

CADRE Data Qualifier Sheet

Qualifiers	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The anlayte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the present of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	The analysis indicates the present of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present)

TICS

Low Concentration Volatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E0059
Sample Type: Routine Sample
Lab ID: A4
Case No.: 30351
SDG No.: E0057
Location: EM2-G104S-01DP
Matrix/Level: Water/
File Name: E0057

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
000141786	ETHYL ACETATE	5.95	0.58	JN

Q: Laboratory Qualifier

Low Concentration Volatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E0062
Sample Type: Routine Sample
Lab ID: A4
Case No.: 30351
SDG No.: E0057
Location: EM2-G107D-01
Matrix/Level: Water/
File Name: E0057

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	3.60	0.52	J

Q: Laboratory Qualifier

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0057

Site : EVERGREEN MANOR

A4

Number of Soil Samples : 0

Number of Water Samples : 10

Reviewer :

Date :

Sample Number :	E0057		E0057MS		E0057MSD		E0058		E0059	
Sampling Location :	EM2-G104D-01		EM2-G104D-01		EM2-G104D-01		EM2-G104S-01		EM2-G104S-01DP	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	04/03/2002		04/03/2002		04/03/2002		04/03/2002		04/03/2002	
Time Sampled :	10:53		10:53		10:53		12:10		12:10	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.5	U			0.5	U	0.5	U	0.5	U
Chloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	0.5	U			0.5	U	0.5	U	0.5	U
Bromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U			0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene	0.5	U			0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Acetone	5	U			5	U	5	U	5	U
Carbon Disulfide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	0.5	R			0.5	R	0.5	R	0.5	R
Methylene Chloride	0.5	U	0.2	J	0.2	J	0.5	U	0.5	U
trans-1,2-Dichloroethene	0.5	U			0.5	U	0.5	U	0.5	U
Tert-Butyl Methyl Ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U			0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	5	U			5	U	5	U	5	U
Bromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U			0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.9		0.8		0.8		0.9		1	
Cyclohexane	0.5	U			0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U			0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	0.5	U			0.5	U	0.5	U	0.5	U
Methylcyclohexane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U			0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U			0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	5	U
Toluene	0.5	U			0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U			0.5	U	0.5	U	0.5	U

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0057
Site : EVERGREEN MANOR
Lab. : A4
Reviewer :
Date :

Sample Number :	E0057		E0057MS		E0057MSD		E0058		E0059	
Sampling Location :	EM2-G104D-01		EM2-G104D-01		EM2-G104D-01		EM2-G104S-01		EM2-G104S-01DP	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	04/03/2002		04/03/2002		04/03/2002		04/03/2002		04/03/2002	
Time Sampled :	10:53		10:53		10:53		12:10		12:10	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2-Hexanone	5	U	5	U	5	U	5	U	5	U
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1,2-Dibromoethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Isopropylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0057

Site : EVERGREEN MANOR

A4

Reviewer :

Date :

Sample Number :	E0060		E0061		E0062		E0063		E0064	
Sampling Location :	EM2-TB01-01		EM2-GWFB01-01		EM2-G107D-01		EM2-G107S-01		EM2-G101D-01	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	04/03/2002		04/03/2002		04/04/2002		04/04/2002		04/04/2002	
Time Sampled :	12:00		12:30		09:15		10:12		13:15	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	U	0.5	U	7		0.5	U	0.5	U
Acetone	5	UJ	5	UJ	5	UJ	5	UJ	5	UJ
Carbon Disulfide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	0.5	R	0.5	R	0.5	R	0.5	R	0.5	R
Methylene Chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
t-Butyl Methyl Ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.9		0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	1		0.5	U	0.5	U
Cyclohexane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	0.3	U	0.5	U	0.5	U	0.5	U	2	
Methylcyclohexane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0057
Site : EVERGREEN MANOR
Lab. : A4
Reviewer :
Date :

Sample Number :	E0060		E0061		E0062		E0063		E0064	
Sampling Location :	EM2-TB01-01		EM2-GWFB01-01		EM2-G107D-01		EM2-G107S-01		EM2-G101D-01	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	04/03/2002		04/03/2002		04/04/2002		04/04/2002		04/04/2002	
Time Sampled :	12:00		12:30		09:15		10:12		13:15	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Hexanone	5	U	5	U	5	U	5	U	5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylenes (total)	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0057
Site : EVERGREEN MANOR
: A4
ewer :
Date :

Sample Number :	E0065		E0066		VBLK24		VBLK25		VBLK26	
Sampling Location :	EM2-G101S-01		EM2-TB02-01							
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/l		ug/L	
Date Sampled :	04/04/2002		04/04/2002							
Time Sampled :	15:05		12:30							
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.5	U	0.5	UJ	0.5	U	0.5	UJ	0.5	U
Chloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	UJ	0.5	U	0.5	UJ	0.5	U
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	U	0.5	UJ	0.5	U	0.5	UJ	0.5	U
Acetone	5	UJ	5	UJ	5	UJ	5	UJ	5	UJ
Carbon Disulfide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	0.5	R	0.5	R	0.5	R	0.5	R	0.5	R
Methylene Chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U
Butyl Methyl Ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U
2-Butanone	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cyclohexane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	UJ	0.5	U	0.5	UJ	0.5	U
Trichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylcyclohexane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0057
Site : EVERGREEN MANOR
Lab. : A4
Reviewer :
Date :

Sample Number :	E0065		E0066		VBLK24		VBLK25		VBLK26	
Sampling Location :	EM2-G101S-01		EM2-TB02-01							
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	04/04/2002		04/04/2002							
Time Sampled :	15:05		12:30							
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Hexanone	5	U	5	U	5	U	5	U	5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylenes (total)	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Analytical Results (Qualified Data)

Case # 30351 SDG : E0057

Site : EVERGREEN MANOR

A4

Reviewer :

Date :

Sample Number :	VHBLK01									
Sampling Location :										
Matrix :	Water									
Units :	ug/L									
Date Sampled :										
Time Sampled :										
%Moisture :	N/A									
pH :										
Dilution Factor :	1.0									
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.5	U								
Chloromethane	0.5	U								
Vinyl Chloride	0.5	U								
Bromomethane	0.5	U								
Chloroethane	0.5	U								
Trichlorofluoromethane	0.5	U								
1,1-Dichloroethene	0.5	U								
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	U								
Acetone	5	UJ								
Carbon Disulfide	0.5	U								
Methyl Acetate	0.5	R								
Methylene Chloride	0.5	U								
trans-1,2-Dichloroethene	0.5	U								
Tert-Butyl Methyl Ether	0.5	U								
1,1-Dichloroethane	0.5	U								
cis-1,2-Dichloroethene	0.5	U								
2-Butanone	5	U								
Bromochloromethane	0.5	U								
Chloroform	0.5	U								
1,1,1-Trichloroethane	0.5	U								
Cyclohexane	0.5	U								
Carbon Tetrachloride	0.5	U								
Benzene	0.5	U								
1,2-Dichloroethane	0.5	U								
Trichloroethene	0.5	U								
Methylcyclohexane	0.5	U								
1,2-Dichloropropane	0.5	U								
Bromodichloromethane	0.5	U								
cis-1,3-Dichloropropene	0.5	U								
4-Methyl-2-pentanone	5	U								
Toluene	0.5	U								
trans-1,3-Dichloropropene	0.5	U								
1,1,2-Trichloroethane	0.5	U								

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0057
Site : EVERGREEN MANOR
Lab. : A4
Reviewer :
Date :

Sample Number :	VHBLK01									
Sampling Location :										
Matrix :	Water									
Units :	ug/L									
Date Sampled :										
Time Sampled :										
%Moisture :	N/A									
pH :										
Dilution Factor :	1.0									
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.5	U								
2-Hexanone	5	U								
Dibromochloromethane	0.5	U								
1,2-Dibromoethane	0.5	U								
Chlorobenzene	0.5	U								
Ethylbenzene	0.5	U								
Xylenes (total)	0.5	U								
Styrene	0.5	U								
Bromoform	0.5	U								
Isopropylbenzene	0.5	U								
1,1,2,2-Tetrachloroethane	0.5	U								
1,3-Dichlorobenzene	0.5	U								
1,4-Dichlorobenzene	0.5	U								
1,2-Dichlorobenzene	0.5	U								
1,2-Dibromo-3-chloropropane	0.5	U								
1,2,4-Trichlorobenzene	0.5	U								
1,2,3-Trichlorobenzene	0.5	U								

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: April 24, 2002

SUBJECT: Review of Data
Received for Review on April 18, 2002

FROM: Stephen L. Ostrodka, Chief (SMF-4J)
Superfund Field Services Section

TO: Data User: Weston

We have reviewed the data for the following case:

SITE NAME: Evergreen Manor (IL)
CASE NUMBER: 30351 SDG NUMBER: E0067
Number and Type of Samples: 18 (Water)
Sample Numbers: E0067-77 and E0087-93
Laboratory: A 4 Scientific Hrs. for Review:

Following are our findings:

CC: Cecilia Moore
Region 5 TPO
Mail Code: SMF-4J

:ase Number : 30351 SDG Number: E0067
:ite Name: Evergreen Manor (IL) Laboratory: A4 Scientific

Below is a summary of the out-of-control audits and the possible effects on the data for this :ase:

Eighteen *(18)* water samples, numbered E0067-77 and E0087-93, were collected on April 5-9, 2002. The lab received the samples on April 6-10, 2002 in good condition. All samples were analyzed for only the volatile list of organic analytes. All were analyzed according to CLP SOW *OLC03.2* 6/01.

Reviewed By: Richard Baltrus/IITRI-ESAT
Date: April 25, 2002

a. Number : 30351 SDG Number: E0067
ite Name: Evergreen Manor (IL) Laboratory: A4 Scientific

. **HOLDING TIME**

No defects found.

:. **GC/MS TUNING AND GC INSTRUMENT PERFORMANCE**

No defects found.

I. **CALIBRATION**

The following volatile samples are associated with an initial calibration with relative es nse factors (RRFs) outside primary criteria. Hits are flagged "J" and non-detects are qualified "R".

Methyl Acetate
E0091, E0092, VBLK28

The following volatile samples are associated with a continuing calibration whose corr es ding initial calibration has relative response factors (RRFs) outside primary criteria. Hits are flagged "J" and non-detects are qualified "R".

Methyl Acetate
E0067, E0067MS, E0067MSD, E0068, E0069, E0070, E0071, E0072, E0073, E0074, E0075, E0076, E0077, E0087, E0088, E0089, E0090, E0091, E0092, E0092DL, E0093 VBLK24, VBLK25, VBLK27, VBLK28, VBLK29, VBLK33, VHBLK01

The following volatile samples are associated with an initial calibration percent relative standard deviation (%RSD) outside primary criteria. Hits are qualified "J" and non-detects are flagged "UJ".

1,2,3-Trichlorobenzene
E0091, E0092, VBLK28

The following volatile samples are associated with a continuing calibration whose corr esponding initial calibration has percent relative standard deviation (%RSD) outside primary criteria. Hits are qualified "J" and non-detects are flagged "UJ".

1,2,3-Trichlorobenzene
E0092DL, E0093, VBLK29, VBLK33, VHBLK01

The following volatile samples are associated with a continuing calibration relative response

'actor (RRF5) outside primary criteria. Hits are flagged "J" and non-detects are qualified "R".

Methyl Acetate
E0067, E0067MS, E0067MSD, E0068, E0069, E0070, E0071, E0072, E0073, E0074, E0075, E0076, E0077, E0092DL, E0093, VBLK24, VBLK25, VBLK29, VBLK33, VHBLK01

The following volatile samples are associated with a continuing calibration percent difference '%D) outside expanded criteria. Hits are flaged "J" and non-detects are flagged "UJ".

Dichlorodifluoromethane, Trichlorofluoromethane, 1,1,2-Trichloro-1,2,2-trifluoroethane, 1,2 Dichloroethane
E0067, E0067MS, E0067MSD, E0068, E0069, E0070, E0072, E0073, E0074, E0075, E0076, E0077, VBLK25

Acetone
E0067, E0067MS, E0067MSD, E0068, E0069, E0070, E0071, E0072, E0073, E0074, E0075, E0076, E0077, VBLK24, VBLK25

1,2-Dibromo-3-chloropropane
E0092DL, E0093, VBLK29, VBLK33, VHBLK01

4. BLANKS

The following volatile sample was analyzed after a highly contaminated sample and have no preceding instrument blank.

Chloroform
E0077

The presence of Chloroform in the sample E0077 at 9.6 µg/L and in the sample analyzed immediatel prior to it, E0076 at 8.9 µg/L, suggest that there is a possibility of carryover.

5. SYSTEM MONITORING COMPOUND AND SURROGATE RECOVERY

The following volatile method blanks have DMC recovery outside criteria. Hits are estimated "J"and non-detects are estimated "UJ".

VBLK25
trans-1,2-Dichloroethene, cis-1,2-Dichloroethene

'a Number : 30351 SDG Number: E0067
'ite Name: Evergreen Manor (IL) Laboratory: A4 Scientific

The following volatile samples have DMC recoveries above the upper limit of the criteria window. Hits are qualified "J" and non-detects are not flagged.

E0067MSD, E0070, E0073, E0076, E0077, E0089, E0091, E0092, E0092DL
Dibromochloromethane, 1,2-Dibromoethane, Bromoform

The following volatile samples have one or more DMC recovery values below the lower limit of the criteria window. Hits are biased low and qualified "J" and non-detects are qualified "UJ".

E0067MS
1,1-Dichloroethane, Bromochloromethane, Chloroform

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

No defects found.

7. FIELD BLANK AND FIELD DUPLICATE

Sample E0076 a field blank. Samples E0069 and E0089 are field duplicates of Samples E0068 and E0088. Samples E0077, E0087, and E0091 are Trip blanks. Results are not qualified based upon the resul of the field blank or field duplicates. Summary of target analytes are in the following table:

	E0068	E0069	E0076	E0077	E0087	E0088	E0089	E0091
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Toluene	0.22J	0.22J	0.32J					0.45J
Chloroform			8.9	9.6	10			
1,1-dichloroethane						0.21J	0.19J	
cis-1,2-Dichloroethene						0.47J	0.39J	
1,1,1-Trichloroethane						1.9	1.8	
Trichloroethene						1.7	1.6	
Tetrachloroethene						3.5	3.1	
TICs								2

Reviewed By: Richard Baltrus/IITRI-ESAT
Date: April 25, 2002

ase Number : 30351 SDG Number: E0067
ite Name: Evergreen Manor (IL) Laboratory: A4 Scientific

8. INTERNAL STANDARDS

No defects found.

9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all VOA compounds were properly identified.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The following volatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

E0067MS, E0067MSD
Methylene Chloride

E0068, E0069, E0070, E0071, E0072, E0073, E0074, E0075, E0076, E0091
Toluene

E0088, E0089
1,1-Dichloroethane, cis-1,2-Dichloroethene

E0090
1,1-Dichloroethane

E0092
Tetrachloroethene

E0092DL
1,1,1-Trichloroethane, Tetrachloroethene

11. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance.

12. ADDITIONAL INFORMATION

The following volatile sample has a analyte that exceed the instrument's calibration range. For an analyte that exceeded the calibration range the results from the diluted sample should be considered

Reviewed By: Richard Baltrus/IITRI-ESAT
Date: April 25, 2002

the final concentration.

E0092
1,1,2-Trichloro-1,2,2-Trifluoroethane

Reviewed By: Richard Baltrus/IITRI-ESAT
Date: April 25, 2002

Low Concentration Volatile Sample Analysis

Tentatively Identified Compounds

		Sample No.:	E0091
Sample Type:	Field Blank		
Lab ID:	A4	Location:	EM2-TB05-01
Case No.:	30351	Matrix/Level:	Water/
SDG No.:	E0067	File Name:	E0067

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	5.02	0.69	J
	UNKNOWN	5.76	1.1	J

Analytical Results (Qualified Data)

Case # 30351 SDG # E0067

Site: EVERGREEN MANOR

A-4

Number of Soil Samples: 0

Number of Water Samples: 19

Reviewer:

Date:

Sample Number:	E0067		E0067MS		E0067MSD		E0068		E0069	
Sampling Location:	EM2-SW01-01		EM2-SW01-01		EM2-SW01-01		EM2-SW02-01		EM2-SW02-01DP	
Matrix:	Water		Water		Water		Water		Water	
Units:	ug/l		ug/L		ug/L		ug/l		ug/l	
Date Sampled:	04/05/2002		04/05/2002		04/05/2002		04/05/2002		04/05/2002	
Time Sampled:	09:45		09:45		09:45		11:03		11:03	
%Moisture:	N/A		N/A		N/A		N/A		N/A	
pH:										
Dilution Factor:	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
Chloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
Acetone	5	UJ	5	UJ	5	UJ	5	UJ	5	UJ
Carbon Disulfide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	0.5	R	0.5	R	0.5	R	0.5	R	0.5	R
Methylene Chloride	0.5	U	0.2	J	0.2	J	0.5	U	0.5	U
trans-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Butyl Methyl Ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cyclohexane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	6		6		0.5	U	0.5	U
1,2-Dichloroethane	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
Trichloroethene	0.5	U	5		6		0.5	U	0.5	U
Methylcyclohexane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	5	U
Toluene	0.5	U	6		6		0.5 ~~0.2~~	~~J~~ U	0.5 ~~0.2~~	~~J~~ U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

TB

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0067
Site EVERGREEN MANOR
Lab. : A4
Reviewer :
Date :

Sample Number :	E0067		E0067MS		E0067MSD		E0068		E0069	
Sampling Location :	EM2-SW01-01		EM2-SW01-01		EM2-SW01-01		EM2-SW02-01		EM2-SW02-01DP	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	04/05/2002		04/05/2002		04/05/2002		04/05/2002		04/05/2002	
Time Sampled :	09:45		09:45		09:45		11:03		11:03	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Hexanone	5	U	5	U	5	U	5	U	5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	6		6		0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylenes (total)	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Analytical Results (Qualified Data)

Case # 30351 SDG : E0067
Site: EVERGREEN MANOR
A4
Date:

Sample Number :	E0070		E0071		E0072		E0073		E0074	
Sampling Location :	EM2-SW03-01		EM2-SW04-01		EM2-SW05-01		EM2-SW06-01		EM2-SW07-01	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	04/05/2002		04/05/2002		04/05/2002		04/05/2002		04/05/2002	
Time Sampled :	11:45		12:52		13:38		14:12		14:53	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
Chloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	UJ	0.5	U	0.5	UJ	0.5	UJ	0.5	UJ
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	UJ	0.5	U	0.5	UJ	0.5	UJ	0.5	UJ
Acetone	5	UJ	5	UJ	5	UJ	5	UJ	5	UJ
Carbon Disulfide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	0.5	R	0.5	R	0.5	R	0.5	R	0.5	R
Methylene Chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butyl Methyl Ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cyclohexane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	UJ	0.5	U	0.5	UJ	0.5	UJ	0.5	UJ
Trichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylcyclohexane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	5	U
Toluene	0.5 ~~0.5~~	J U	0.5 ~~0.5~~	J U	0.5 ~~0.2~~	J U	0.5 ~~0.2~~	J U	0.5 ~~0.2~~	J U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0067
Site : EVERGREEN MANOR
Lab. : A4
Reviewer :
Date :

Sample Number :	E0070		E0071		E0072		E0073		E0074	
Sampling Location :	EM2-SW03-01		EM2-SW04-01		EM2-SW05-01		EM2-SW06-01		EM2-SW07-01	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	04/05/2002		04/05/2002		04/05/2002		04/05/2002		04/05/2002	
Time Sampled :	11:45		12:52		13:38		14:12		14:53	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Hexanone	5	U	5	U	5	U	5	U	5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylenes (total)	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Analytical Results (Qualified Data)

Case # 30351 SDG E0067
Site EVERGREEN MANOR
A-4
Lower
Date

Sample Number	E0075		E0076		E0077		E0087		E0088	
Sampling Location	EM2-SW08-01		EM2-SWFB01-01		EM2-TB03-01		EM2-TB04-01		EM2-G105S-01	
Matrix	Water		Water		Water		Water		Water	
Units	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled	04/05/2002		04/05/2002		04/05/2002		04/08/2002		04/08/2002	
Time Sampled	16:08		15:31		15:31		09:45		10:10	
%Moisture	N/A		N/A		N/A		N/A		N/A	
pH										
Dilution Factor	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.5	UJ	0.5	UJ	0.5	UJ	0.5	U	0.5	U
Chloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	UJ	0.5	UJ	0.5	UJ	0.5	U	0.5	U
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	UJ	0.5	UJ	0.5	UJ	0.5	U	0.5	U
Acetone	5	UJ	5	UJ	5	UJ	5	U	5	U
Carbon Disulfide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	0.5	R	0.5	R	0.5	R	0.5	R	0.5	R
Methylene Chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
t-Butyl Methyl Ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.2	J
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	J
2-Butanone	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.3	J	10		10		0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	2	
Cyclohexane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	UJ	0.5	UJ	0.5	UJ	0.5	U	0.5	U
Trichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.2	J
Methylcyclohexane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	5	U
Toluene	0.5	~~U~~ J U	0.3	J	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0067
Site EVERGREEN MANOR
Lab : A4
Reviewer :
Date :

Sample Number :	E0075		E0076		E0077		E0087		E0088	
Sampling Location :	EM2-SW08-01		EM2-SWFB01-01		EM2-TB03-01		EM2-TB04-01		EM2-G105S-01	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	04/05/2002		04/05/2002		04/05/2002		04/08/2002		04/08/2002	
Time Sampled :	16:08		15:31		15:31		09:45		10:10	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Hexanone	5	U	5	U	5	U	5	U	5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylenes (total)	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Analytical Results (Qualified Data)

Case # 30351 SDG : E0067

Site : EVERGREEN MANOR

A4

Date

Sample Number :	E0089		E0090		E0091		E0092		E0092DI	
Sampling Location :	EM2-G105S-01DP		EM2-G105D-01		EM2-TB05-01		EM2-G103D-01		EM2-G103D-01	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	04/08/2002		04/08/2002		04/09/2002		04/08/2002		04/08/2002	
Time Sampled :	10:10		12:00		09:45		16:05		16:05	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		2.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	1	U
Chloromethane	0.5	U	0.5	U	0.5	U	0.5	U	1	U
Vinyl Chloride	0.5	U	0.5	U	0.5	U	0.5	U	1	U
Bromomethane	0.5	U	0.5	U	0.5	U	0.5	U	1	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	1	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	1	U
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	1	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	U	0.5	U	0.5	U	32		30	
Acetone	5	U	3	U	5	U	5	U	10	U
Carbon Disulfide	0.5	U	0.5	U	0.5	U	0.5	U	1	U
Methyl Acetate	0.5	R	0.5	R	0.5	R	0.5	R	1	R
Methylene Chloride	0.5	U	0.5	U	0.5	U	0.5	U	1	U
trans-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	1	U
tert-Butyl Methyl Ether	0.5	U	0.5	U	0.5	U	0.5	U	1	U
1,1-Dichloroethane	0.2	J	0.4	J	0.5	U	0.5	U	1	U
cis-1,2-Dichloroethene	0.4	J	1		0.5	U	0.5	U	1	U
2-Butanone	5	U	3	U	5	U	5	U	8/10	U
Bromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	1	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	1	U
1,1,1-Trichloroethane	2		2		0.5	U	0.6		0.5	J
Cyclohexane	0.5	U	0.5	U	0.5	U	0.5	U	1	U
Carbon Tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	1	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	1	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	1	U
Trichloroethene	2		0.5	U	0.5	U	0.5	U	1	U
Methylcyclohexane	0.5	U	0.5	U	0.5	U	0.5	U	1	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	1	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	1	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	1	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	10	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	1	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	1	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	1	U

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0067
Site : EVERGREEN MANOR
Lab. A4
Reviewer :
Date :

Sample Number :	E0089		E0090		E0091		E0092		E0092DL	
Sampling Location :	EM2-G105S-01DP		EM2-G105D-01		EM2-TB05-01		EM2-G103D-01		EM2-G103D-01	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	04/08/2002		04/08/2002		04/09/2002		04/08/2002		04/08/2002	
Time Sampled :	10:10		12:00		09:45		16:05		16:05	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		2.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	3		3		0.5	U	0.4	J	0.4	J
2-Hexanone	5	U	5	U	5	U	5	U	10	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	1	U
1,2-Dibromoethane	0.5	U	0.5	U	0.5	U	0.5	U	1	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	1	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	1	U
Xylenes (total)	0.5	U	0.5	U	0.5	U	0.5	U	1	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	1	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	1	U
Isopropylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	1	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	1	U
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	1	U
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	1	U
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	1	U
1,2-Dibromo-3-chloropropane	0.5	U	0.5	U	0.5	U	0.5	U	1	UJ
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	1	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	UJ	0.5	UJ	1	UJ

Analytical Results (Qualified Data)

Case # 30351 SDG : E0067

Site : EVERGREEN MANOR

A4

Reviewer

Date

Sample Number :	E0093		VBLK24		VBLK25		VBLK27		VBLK28	
Sampling Location :	EM2-G103S-01									
Matrix	Water		Water		Water		Water		Water	
Units :	ug/l		ug/L		ug/L		ug/l		ug/L	
Date Sampled :	04/08/2002									
Time Sampled	17:45									
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U
Chloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
loroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
richlorofluoromethane	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U
Acetone	5	U	5	UJ	5	UJ	5	U	5	U
Carbon Disulfide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	0.5	R	0.5	R	0.5	R	0.5	R	0.5	R
Methylene Chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
rans-1,2-Dichloroethene	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U
-Butyl Methyl Ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U
2-Butanone	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.6		0.5	U	0.5	U	0.5	U	0.5	U
Cyclohexane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
nzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U
Trichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylcyclohexane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0067
Site EVERGREEN MANOR
Lab : A4
Reviewer :
Date :

Sample Number :	E0093		VBLK24		VBLK25		VBLK27		VBLK28	
Sampling Location :	EM2-G103S-01									
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	04/08/2002									
Time Sampled :	17:45									
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	5		0.5	U	0.5	U	0.5	U	0.5	U
2-Hexanone	5	U	5	U	5	U	5	U	5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylenes (total)	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-chloropropane	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ

Analytical Results (Qualified Data)

Case # 30351 SDG : F0067
Site : EVERGREEN MANOR
A4
Reviewer
Date

Sample Number :	VBLK29		VBLK33		VHBLK01					
Sampling Location										
Matrix :	Water		Water		Water					
Units :	ug/L		ug/L		ug/L					
Date Sampled										
Time Sampled										
%Moisture	N/A		N/A		N/A					
pH :										
Dilution Factor :	1.0		1.0		1.0					
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U				
Chloromethane	0.5	U	0.5	U	0.5	U				
Vinyl Chloride	0.5	U	0.5	U	0.5	U				
Bromomethane	0.5	U	0.5	U	0.5	U				
hloroethane	0.5	U	0.5	U	0.5	U				
richlorofluoromethane	0.5	U	0.5	U	0.5	U				
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U				
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	U	0.5	U	0.5	U				
Acetone	5	U	5	U	5	U				
Carbon Disulfide	0.5	U	0.5	U	0.5	U				
Methyl Acetate	0.5	R	0.5	R	0.5	R				
Methylene Chloride	0.5	U	0.5	U	0.5	U				
ans-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U				
Butyl Methyl Ether	0.5	U	0.5	U	0.5	U				
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U				
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U				
2-Butanone	5	U	5	U	5	U				
Bromochloromethane	0.5	U	0.5	U	0.5	U				
Chloroform	0.5	U	0.5	U	0.5	U				
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U				
Cyclohexane	0.5	U	0.5	U	0.5	U				
Carbon Tetrachloride	0.5	U	0.5	U	0.5	U				
enzene	0.5	U	0.5	U	0.5	U				
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U				
Trichloroethene	0.5	U	0.5	U	0.5	U				
Methylcyclohexane	0.5	U	0.5	U	0.5	U				
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U				
Bromodichloromethane	0.5	U	0.5	U	0.5	U				
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U				
4-Methyl-2-pentanone	5	U	5	U	5	U				
Toluene	0.5	U	0.5	U	0.5	U				
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U				
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U				

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0067
Site EVERGREEN MANOR
Lab. A4
Reviewer :
Date

Sample Number :	VBLK29		VBLK33		VHBLK01					
Sampling Location :										
Matrix :	Water		Water		Water					
Units :	ug/L		ug/L		ug/L					
Date Sampled :										
Time Sampled :										
%Moisture :	N/A		N/A		N/A					
pH :										
Dilution Factor :	1.0		1.0		1.0					
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.5	U	0.5	U	0.5	U				
2-Hexanone	5	U	5	U	5	U				
Dibromochloromethane	0.5	UJ	0.5	UJ	0.5	UJ				
1,2-Dibromoethane	0.5	U	0.5	U	0.5	U				
Chlorobenzene	0.5	U	0.5	U	0.5	U				
Ethylbenzene	0.5	U	0.5	U	0.5	U				
Xylenes (total)	0.5	U	0.5	U	0.5	U				
Styrene	0.5	U	0.5	U	0.5	U				
Bromoform	0.5	U	0.5	U	0.5	U				
Isopropylbenzene	0.5	U	0.5	U	0.5	U				
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U				
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U				
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U				
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U				
1,2-Dibromo-3-chloropropane	0.5	UJ	0.5	UJ	0.5	UJ				
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U				
1,2,3-Trichlorobenzene	0.5	UJ	0.5	UJ	0.5	UJ				

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: April 22, 2002

SUBJECT: Review of Data
Received for Review on April 11, 2002

FROM: Stephen L. Ostrodka, Chief (SMF-4J)
Superfund Field Services Section

): Data User: Weston

We have reviewed the data for the following case:

SITE NAME: Evergreen Manor, Illinois
CASE NUMBER: 30351 SDG NUMBER: E0078
Number and Type of Samples: 9 (soil)
Sample Numbers: E0078-86
Laboratory: Envirosystems Hrs. for Review:
Following are our findings:

CC: Cecilia Moore
Region 5 TPO
Mail Code: SMF-4J

Case Number : 30351 SDG Number: E0078
Site Name: Evergreen Manor (IL) Laboratory: Envirosystems

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Nine *(9)* Soil samples, numbered E0078 through E0086, were collected on April 5, 2002. The lab received the samples on April 6, 2002 in good condition. All samples were analyzed only for the volatile list of organic analytes. All were analyzed according to CLP SOW *OLM04.2* 5/99.

Reviewed By: Richard Baltrus/IITRI-ESAT
Date: April 22, 2002

a Number : 30351 SDG Number: E0078
ite Name: Evergreen Manor (IL) Laboratory: Envirosystems

. **HOLDING TIME**

No problems found for this qualification.

. **GC/MS TUNING AND GC INSTRUMENT PERFORMANCE**

No problems found for this qualification.

. **CALIBRATION**

The following volatile samples are associated with a continuing calibration whose corresponding initia calibration has relative response factor (RRFs) outside the primary criteria. His are qualified "J" and non-detects are qualified "R".

1,2-Dibromo-3Chloropropane
E0078, E0078MS, E0078MSD, E0079, E0080, E0081, E0082, E0083, E0084, E0085, E0086, VBLKFV, VBLKFX, VHBLKFX

The following volatile samples are associated with a continuing calibration percent difference (%D) outside the primary criteria. Hits are qualified "J" and non-detects are qualified "UJ".

1,1,2-Trichloro-1,2,2-Trifloroethane, 2-Butanone
E0078, E0078MS, E0078MSD, E0079, E0080, E0081, E0083, E0084, E0085, E0086

Bromomethane, Chloroethane
E0082, VBLKFX, VHBLKFX

The following volatile samples are associated with a continuing calibration whose corresponding initia calibration has a percent relative standard deviation (%RSD) outside the primary criteria. Hits are qualified "J" and non-detects are qualified "UJ".

Bromomethane, Chloroethane, Acetone
E0078, E0078MS, E0078MSD, E0079, E0080, E0081, E0082, E0083, E0084, E0085, E0086, VBLKFV, VBLKFX, VHBLKFX

I. **BLANKS**

The following volatile samples have analyte concentration reported below the CRQL and less than or equal to ten times (10x) the associated method blank concentration. The reported sample concentrat have been elevated to the CRQL. Hits are qualified "U" or "UJ" and non-detects are not flagged.

'ase Number : 30351 SDG Number: E0078
ite Name: Evergreen Manor (IL) Laboratory: Envirosystems

Acetone, Methylene Chloride
E0078, E0078MS, E0078MSD, E0079, E0080, E0081, E0082, E0083, E0084, E0085, E0086, VHBLKFX

5. SYSTEM MONITORING COMPOUND AND SURROGATE RECOVERY

No problems found for this qualification.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

No problems found for this qualification.

7. FIELD BLANK AND FIELD DUPLICATE

Sample E0081 is a field duplicate of Sample E0080. Results are not qualified based upon the results of the ield blank or field duplicates. The samples were free of contaminates and had no TICs.

8. INTERNAL STANDARDS

No problems found for this qualification.

9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all VOA compounds were properly identified.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The following volatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

E0078, E0079
1,1,2-Trichloro-1,2,2-trifluoroethane

E0082
2-Butanone

E0084
Toluene

VBLKFV

Case Number : 30351 SDG Number: E0078
Site Name: Evergreen Manor (IL) Laboratory: Envirosystems

Acetone , Methylene Chloride

VBLKFX
Acetone , Methylene Chloride , 1,2,4-Trichlorobenzene

I1. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance. The GC baseline for the pesticide analysis was acceptable.

I2. ADDITIONAL INFORMATION

None.

Reviewed By: Richard Baltrus/IITRI ESAT
Date: April 22, 2002

Volatile Analysis Data - E0084

Tentatively Identified Compounds

CASE NO: 30351 LABORATORY: ENVIROSYSTEMS, INC.

SDG NO: E0078

CAS NUMBER	COMPOUND NAME	RT	ESTIMATED CONCENTRATION	Q
75-18-3	DIMETHYL SULFIDE	7.71	26.000	NJ

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0078

Site: EVERGREEN MANOR

ENVSYS

Number of Soil Samples: [illegible]

Number of Water Samples: [illegible]

[illegible]wer :

Date :

Sample Number :	E0078		E0078MS		E0078MSD		E0079		E0080	
Sampling Location :	EM2-SD01-01		EM2-SD01-01		EM2-SD01-01		EM2-SD02-01		EM2-SD03-01	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	04/05/2002		04/05/2002		04/05/2002		04/05/2002		04/05/2002	
Time Sampled :	10:22		10:22		10:22		11:25		11:48	
%Moisture :	39		39		39		38		33	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	17	U	19	U	17	U	17	U	13	U
Chloromethane	17	U	19	U	17	U	17	U	13	U
Vinyl Chloride	17	U	19	U	17	U	17	U	13	U
Bromomethane	17	UJ	19	UJ	17	UJ	17	UJ	13	UJ
Chloroethane	17	UJ	19	UJ	17	UJ	17	UJ	13	UJ
[illegible]chlorofluoromethane	17	U	19	U	17	U	17	U	13	U
1,1-Dichloroethene	17	U	57		54		17	U	13	U
1,1,2-Trichloro-1,2,2-trifluoroethane	8	J	19	UJ	17	UJ	2	J	13	UJ
Acetone	17	UJ	19	UJ	17	UJ	17	UJ	13	UJ
Carbon Disulfide	17	U	19	U	17	U	17	U	13	U
Methyl Acetate	17	U	19	U	17	U	17	U	13	U
Methylene Chloride	17	U	19	U	17	U	17	U	13	U
trans-1,2-Dichloroethene	17	U	19	U	17	U	17	U	13	U
[illegible]hyl tert-Butyl Ether	17	U	19	U	17	U	17	U	13	U
[illegible]-Dichloroethane	17	U	19	U	17	U	17	U	13	U
cis-1,2-Dichloroethene	17	U	19	U	17	U	17	U	13	U
2-Butanone	17	UJ	19	UJ	17	UJ	17	UJ	13	UJ
Chloroform	17	U	19	U	17	U	17	U	13	U
1,1,1-Trichloroethane	17	U	19	U	17	U	17	U	13	U
Cyclohexane	17	U	19	U	17	U	17	U	13	U
Carbon Tetrachloride	17	U	19	U	17	U	17	U	13	U
Benzene	17	U	65		62		17	U	13	U
[illegible]2-Dichloroethane	17	U	19	U	17	U	17	U	13	U
Trichloroethene	17	U	62		60		17	U	13	U
Methylcyclohexane	17	U	19	U	17	U	17	U	13	U
1,2-Dichloropropane	17	U	19	U	17	U	17	U	13	U
Bromodichloromethane	17	U	19	U	17	U	17	U	13	U
cis-1,3-Dichloropropene	17	U	19	U	17	U	17	U	13	U
4-Methyl-2-pentanone	17	U	19	U	17	U	17	U	13	U
Toluene	17	U	63		61		17	U	13	U
trans-1,3-Dichloropropene	17	U	19	U	17	U	17	U	13	U
1,1,2-Trichloroethane	17	U	19	U	17	U	17	U	13	U
Tetrachloroethene	17	U	19	U	17	U	17	U	13	U

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0078
Site : EVERGREEN MANOR
Lab : ENVSYS
Reviewer :
Date :

Sample Number :	E0078		E0078MS		E0078MSD		E0079		E0080	
Sampling Location :	EM2-SD01-01		EM2-SD01-01		EM2-SD01-01		EM2-SD02-01		EM2-SD03-01	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	04/05/2002		04/05/2002		04/05/2002		04/05/2002		04/05/2002	
Time Sampled :	10:22		10:22		10:22		11:25		11:48	
%Moisture :	39		39		39		38		33	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2-Hexanone	17	U	19	U	17	U	17	U	13	U
Dibromochloromethane	17	U	19	U	17	U	17	U	13	U
1,2-Dibromoethane	17	U	19	U	17	U	17	U	13	U
Chlorobenzene	17	U	58		56		17	U	13	U
Ethylbenzene	17	U	19	U	17	U	17	U	13	U
Xylenes (total)	17	U	19	U	17	U	17	U	13	U
Styrene	17	U	19	U	17	U	17	U	13	U
Bromoform	17	U	19	U	17	U	17	U	13	U
Isopropylbenzene	17	U	19	U	17	U	17	U	13	U
1,1,2,2-Tetrachloroethane	17	U	19	U	17	U	17	U	13	U
1,3-Dichlorobenzene	17	U	19	U	17	U	17	U	13	U
1,4-Dichlorobenzene	17	U	19	U	17	U	17	U	13	U
1,2-Dichlorobenzene	17	U	19	U	17	U	17	U	13	U
1,2-Dibromo-3-chloropropane	17	R	19	R	17	R	17	R	13	R
1,2,4-Trichlorobenzene	17	U	19	U	17	U	17	U	13	U

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0078
Site : EVERGREEN MANOR
[illegible] ENVSYS
[illegible]wer :
Date :

Sample Number :	E0081		E0082		E0083		E0084		E0085	
Sampling Location :	EM2-SD03-01DP		EM2-SD04-01		EM2-SD05-D1		EM2-SD06-01		EM2-SD07-01	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	04/05/2002		04/05/2002		04/05/2002		04/05/2002		04/05/2002	
Time Sampled :	11:48		13:09		13:38		14:21		15:10	
%Moisture :	31		34		20		54		49	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	15	U			11	U	32	U	26	U
Chloromethane	15	U	14	U	11	U	32	U	26	U
Vinyl Chloride	15	U			11	U	32	U	26	U
Bromomethane	15	UJ	14	UJ	11	UJ	32	UJ	26	UJ
Chloroethane	15	UJ			11	UJ	32	UJ	26	UJ
chlorofluoromethane	15	U	14	U	11	U	32	U	26	U
1,1-Dichloroethene	15	U			11	U	32	U	26	U
1,1,2-Trichloro-1,2,2-trifluoroethane	15	UJ	14	U	11	UJ	32	UJ	26	UJ
Acetone	15	UJ			11	UJ	32	UJ	26	UJ
Carbon Disulfide	15	U	14	U	11	U	32	U	26	U
Methyl Acetate	15	U			11	U	32	U	26	U
Methylene Chloride	15	U	14	U	11	U	32	U	26	U
trans-1,2-Dichloroethene	15	U			11	U	32	U	26	U
hyl tert-Butyl Ether	15	U	14	U	11	U	32	U	26	U
Dichloroethane	15	U			11	U	32	U	26	U
cis-1,2-Dichloroethene	15	U	14	U	11	U	32	U	26	U
2-Butanone	15	UJ			11	UJ	32	UJ	26	UJ
Chloroform	15	U	14	U	11	U	32	U	26	U
1,1,1-Trichloroethane	15	U			11	U	32	U	26	U
Cyclohexane	15	U	14	U	11	U	32	U	26	U
Carbon Tetrachloride	15	U			11	U	32	U	26	U
Benzene	15	U	14	U	11	U	32	U	26	U
2-Dichloroethane	15	U			11	U	32	U	26	U
richloroethene	15	U	14	U	11	U	32	U	26	U
Methylcyclohexane	15	U			11	U	32	U	26	U
1,2-Dichloropropane	15	U	14	U	11	U	32	U	26	U
Bromodichloromethane	15	U			11	U	32	U	26	U
cis-1,3-Dichloropropene	15	U	14	U	11	U	32	U	26	U
4-Methyl-2-pentanone	15	UJ			11	UJ	32	UJ	26	UJ
Toluene	15	U	14	U	11	U	4	J	26	U
trans-1,3-Dichloropropene	15	U			11	U	32	U	26	U
1,1,2-Trichloroethane	15	U	14	U	11	U	32	U	26	U
Tetrachloroethene	15	U			11	U	32	U	26	U

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0078
Site : EVERGREEN MANOR
Lab. : ENVSYS
Reviewer :
Date :

Sample Number :	E0081		E0082		E0083		E0084		E0085	
Sampling Location :	EM2-SD03-01DP		EM2-SD04-01		EM2-SD05-D1		EM2-SD06-01		EM2-SD07-01	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	04/05/2002		04/05/2002		04/05/2002		04/05/2002		04/05/2002	
Time Sampled :	11:48		13:09		13:38		14:21		15:10	
%Moisture :	31		34		20		54		49	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Dibromochloromethane	15	U	14	U	11	U	32	U	26	U
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Chlorobenzene	15	U	14	U	11	U	32	U	26	U
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Xylenes (total)	15	U	14	U	11	U	32	U	26	U
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Bromoform	15	U	14	U	11	U	32	U	26	U
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1,1,2,2-Tetrachloroethane	15	U	14	U	11	U	32	U	26	U
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1,4-Dichlorobenzene	15	U	14	U	11	U	32	U	26	U
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1,2-Dibromo-3-chloropropane	15	R	14	R	11	R	32	R	26	R
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0078
Site : EVERGREEN MANOR
ENVSYS
Reviewer :
Date :

Sample Number :	E0086		VBLKFV		VBLKFX		VHBLKFX			
Sampling Location :	EM2-SD08-01									
Matrix :	Soil		Soil		Soil		Soil			
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg			
Date Sampled :	04/05/2002									
Time Sampled :	16:08									
%Moisture :	35		N/A		N/A		0			
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0			
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	17	U	10	U	10	U	10	U		
Chloromethane	17	U	10	U	10	U	10	U		
Vinyl Chloride	17	U	10	U	10	U	10	U		
Bromomethane	17	UJ	10	UJ	10	UJ	10	UJ		
Chloroethane	17	UJ	10	UJ	10	UJ	10	UJ		
Trichlorofluoromethane	17	U	10	U	10	U	10	U		
1,1-Dichloroethene	17	U	10	U	10	U	10	U		
1,1,2-Trichloro-1,2,2-trifluoroethane	17	UJ	10	U	10	U	10	U		
Acetone	17	UJ	10	U	10	U	10	UJ		
Carbon Disulfide	17	U	10	U	10	U	10	U		
Methyl Acetate	17	U	10	U	10	U	10	U		
Methylene Chloride	17	U	5	J	3	J	10	U		
trans-1,2-Dichloroethene	17	U	10	U	10	U	10	U		
Methyl tert-Butyl Ether	17	U	10	U	10	U	10	U		
1,1-Dichloroethane	17	U	10	U	10	U	10	U		
cis-1,2-Dichloroethene	17	U	10	U	10	U	10	U		
2-Butanone	17	UJ	10	U	10	U	10	U		
Chloroform	17	U	10	U	10	U	10	U		
1,1,1-Trichloroethane	17	U	10	U	10	U	10	U		
Cyclohexane	17	U	10	U	10	U	10	U		
Carbon Tetrachloride	17	U	10	U	10	U	10	U		
Benzene	17	U	10	U	10	U	10	U		
1,2-Dichloroethane	17	U	10	U	10	U	10	U		
Trichloroethene	17	U	10	U	10	U	10	U		
Methylcyclohexane	17	U	10	U	10	U	10	U		
1,2-Dichloropropane	17	U	10	U	10	U	10	U		
Bromodichloromethane	17	U	10	U	10	U	10	U		
cis-1,3-Dichloropropene	17	U	10	U	10	U	10	U		
4-Methyl-2-pentanone	17	U	10	U	10	U	10	U		
Toluene	17	U	10	U	10	U	10	U		
trans-1,3-Dichloropropene	17	U	10	U	10	U	10	U		
1,1,2-Trichloroethane	17	U	10	U	10	U	10	U		
Tetrachloroethene	17	U	10	U	10	U	10	U		

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0078
Site : EVERGREEN MANOR
Lab. : ENVSYS
Reviewer :
Date :

Sample Number :	E0086		VBLKFV		VBLKFX		VHBLKFX			
Sampling Location :	EM2-SD08-01									
Matrix :	Soil		Soil		Soil		Soil			
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg			
Date Sampled :	04/05/2002									
Time Sampled :	16:08									
%Moisture :	35		N/A		N/A		0			
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0			
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2-Hexanone	17	U	10	U	10	U	10	U		
Dibromochloromethane	17	U	10	U	10	U	10	U		
1,2-Dibromoethane	17	U	10	U	10	U	10	U		
Chlorobenzene	17	U	10	U	10	U	10	U		
Ethylbenzene	17	U	10	U	10	U	10	U		
Xylenes (total)	17	U	10	U	10	U	10	U		
Styrene	17	U	10	U	10	U	10	U		
Bromoform	17	U	10	U	10	U	10	U		
Isopropylbenzene	17	U	10	U	10	U	10	U		
1,1,2,2-Tetrachloroethane	17	U	10	U	10	U	10	U		
1,3-Dichlorobenzene	17	U	10	U	10	U	10	U		
1,4-Dichlorobenzene	17	U	10	U	10	U	10	U		
1,2-Dichlorobenzene	17	U	10	U	10	U	10	U		
1,2-Dibromo-3-chloropropane	17	R	10	R	10	R	10	R		
1,2,4-Trichlorobenzene	17	U	10	U	10	U	10	U		

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: April 25, 2002

UBJECT: Review of Data
Received for Review on April 17, 2002

FROM: Stephen L. Ostrodka, Chief (SMF-4J)
Superfund Field Services Section

O: Data User: Weston

Ve have reviewed the data for the following case:

ITE NAME: Evergreen Manor (IL)
ASE NUMBER: 30351 SDG NUMBER: E0094
lu er and Type of Samples: 9 (Water)
ample Numbers: E0094-99 and E00A0-2
aboratory: A 4 Scientific Hrs. for Review:

ollowing are our findings:

C: Cecilia Moore
Region 5 TPO
Mail Code: SMF-4J

'ase Number : 30351 SDG Number: E0094
ite Name: Evergreen Manor (IL) Laboratory: A4 Scientific

Below is a summary of the out-of-control audits and the possible effects on the data for this ase:

Nine (9) water samples, numbered E0094-99 and E00A0-2, were collected on April 9, 2002. The lab received the samples on April 10, 2002 in good condition. All samples were analyzed for only the volatile list of organic analytes. All were analyzed according to CLP SOW OLC03.2 6/01.

Reviewed By: Richard Baltrus/IITRI-ESAT
Date: April 30, 2002

'a: Number : 30351 SDG Number: E0094
ite Name: Evergreen Manor (IL) Laboratory: A4 Scientific

. **HOLDING TIME**

Jo defects found.

:. **GC/MS TUNING AND GC INSTRUMENT PERFORMANCE**

Jo defects found.

:. **CALIBRATION**

'he following volatile samples are associated with a continuing calibration whose corresponding initial :a' ation has relative response factors (RRFs) outside primary criteria. Hits are flagged "J" and non-detect ıre qualified "R".

Methyl Acetate
E0094, E0095, E0096, E0097, E0098, E0099, E00A0, E00A0RE, E00A1, E00A2, E00A2RE, VBLK29, VBLK33, VHBLK01

Th llowing volatile samples are associated with a continuing calibration whose corresponding initial :alibration has percent relative standard deviation (%RSD) outside primary criteria. Hits are qualified "J" and ıon-detects are flagged "UJ".

1,2,3-Trichlorobenzene
E0094, E0095, E0096, E0097, E0098, E0099, E00A0, E00A0RE, E00A1, E00A2, E00A2RE, VBLK29, VBLK33, VHBLK01

'he following volatile samples are associated with a continuing calibration percent difference (%D) outside ›rimary criteria. Hits are qualified "J" and non-detects are qualified "UJ".

1,2-Dibromo-3-chloropropane
E0094, E0095, E0096, E0097, E0098, E0099, E00A0, E00A0RE, E00A1, E00A2, E00A2RE, VBLK29, VBLK33, VHBLK01

'he following volatile samples are associated with a continuing calibration relative response factor (RRF5) ›utside primary criteria. Hits are flagged "J" and non-detects are qualified "R".

Methyl Acetate
E0094, E0095, E0096, E0097, E0098, E0099, E00A0, E00A0RE, E00A1, E00A2, E00A2RE, VBLK29, VBLK33, VHBLK01

Reviewed By: Richard Baltrus/IITRI-ESAT
Date: April 30, 2002

ase Number : 30351 SDG Number: E0094
ite Name: Evergreen Manor (IL) Laboratory: A4 Scientific

. **BLANKS**

lo defects found.

. **SYSTEM MONITORING COMPOUND AND SURROGATE RECOVERY**

'he following volatile samples have DMC recoveries above the upper limit of the criteria window. Hits are ualified "J" and non-detects are not flagged.

E0094, E0096, E0098, E0099, E00A0RE, E00A1, E00A2RE
Dibromochloromethane, 1,2-Dibromoethane, Bromoform

'he following volatile samples have one or more DMC recovery values below the lower limit of the criteria vindow. Hits are biased low and qualified "J" and non-detects are qualified "UJ".

E00A0RE, E00A2
trans-1,2-Dichloroethene, cis-1,2-Dichloroethane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene 1,1,2-trichchloroethane

E00A2RE
trans-1,2-Dichloroethene, cis-1,2-Dichloroethane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene 1,1,2-trichchloroethane, Trichloroethene, Toluene, Tetrachloroethene, Ethylbenzene, Xylene (total), Styrene, Isopropylbenzene

'he following volatile samples have DMC recoveries outside the expanded lower criteria. Hits are qualified J" and non-detects are qualified "R".

E00A0
Vinyl Chloride, trans-1,2-Dichloroethene, cis-1,2-Dichloroethane, Trichloroethene, cis-1,3-Dichloropropene, Toluene, trans-1,3-Dichloropropene, 1,1,2-trichchloroethane, Tetrachloroethene, Ethylbenzene, Xylene (total), Styrene, Isopropylbenzene,

E00A0RE, E00A2
Vinyl Chloride, Trichloroethene, Toluene, Tetrachloroethene, Ethylbenzene, Xylene (total), Styrene, Isopropylbenzene

E00A2RE
Vinyl Chloride

. **MATRIX SPIKE/MATRIX SPIKE DUPLICATE**

as. Number : 30351 SDG Number: E0094
ite Name: Evergreen Manor (IL) Laboratory: A4 Scientific

o volatile matrix spike data was reported for this SDG.

. FIELD BLANK AND FIELD DUPLICATE

ample E0096 a field blank. Sample E0099 is a field duplicate of Sample E0098. Sample E0097 is a trip lank. Results are not qualified based upon the results of the field blank or field duplicates. Summary of tar nalytes are in the following table:

Volatile Analytes	E0096	E0097	E0098	E0099
	µg/L	µg/L	µg/L	µg/L
Toluene	0.5	0.45 J		
Tetrachloroethene	0.16 J		0.34 J	0.25 J
TICs	1	2		

:. INTERNAL STANDARDS

Jo defects found.

). COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all VOA compounds were properly dentified.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The following volatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

E0094
1,1,1-Trichloroethane

E0095
1,1,1-Trichloroethane, Trichloroethene

E0096, E0098, E0099, E00A0, E00A0RE
Tetrachloroethene

E0097

ase Number : 30351 SDG Number: E0094
ite Name: Evergreen Manor (IL) Laboratory: A4 Scientific

Toluene

1. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance. The GC baseline for the volatile analysis was acceptable.

2. ADDITIONAL INFORMATION

lone.

Reviewed By: Richard Baltrus/IITRI-ESAT
Date: April 30, 2002

Low Concentration Volatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E0096

Sa. e Type: Routine Sample
Lab ID: A4
Case No.: 30351
SDG No.: E0094

Location: EM2-GWFB02-01
Matrix/Level: Water/
File Name: E0094

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	5.76	0.85	J

Low Concentration Volatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E0097

Sample Type: Routine Sample
Lab ID: A4
Case No.: 30351
SDG No.: E0094

Location: EM2-TB06-01
Matrix/Level: Water/
File Name: E0094

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	5.02	0.57	J
	UNKNOWN	5.76	1.1	J

Low Concentration Volatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E00A0

Sample Type: Routine Sample
Lab ID: A4
Case No.: 30351
SDG No.: E0094

Location: EM2-GWMU1B-01
Matrix/Level: Water/
File Name: E0094

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	14.16	2.6	J
	UNKNOWN	14.35	0.99	J
	UNKNOWN	16.22	1.6	J

Low Concentration Volatile Sample Analysis
Tentatively Identified Compounds

Sample No.: E00A0RE

Sample Type: Routine Sample
Lab ID: A4
Case No.: 30351
SDG No.: E0094

Location: EM2-GWMU1B-01
Matrix/Level: Water/
File Name: E0094

CAS No.	Compound Name	RT	Concentration (UG/L)	Q*
	UNKNOWN	14.16	2.1	J

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0094
Site : EVERGREEN MANOR
Lab. : A4
Reviewer :
Date :

Number of Soil Samples : 0
Number of Water Samples : 9

Sample Number :	E00A0		E00A0RE		E00A1		E00A2		E00A2RE	
Sampling Location :	EM2-GWMU1B-01		EM2-GWMU1B-01		EM2-GWMU2A-01		EM2-GWMU2B-01		EM2-GWMU2B-01	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	04/09/2002		04/09/2002		04/09/2002		04/09/2002		04/09/2002	
Time Sampled :	12:40		12:40		12:40		12:40		12:40	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	0.5	R	0.5	R	0.5	U	0.5	R	0.5	R
Bromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Acetone	5	U	5	U	5	U	5	U	5	U
Carbon Disulfide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	0.5	R	0.5	R	0.5	R	0.5	R	0.5	R
Methylene Chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	0.5	R	0.5	UJ	0.5	U	0.5	U	0.5	UJ
tert-Butyl Methyl Ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	0.5	R	0.5	UJ	0.5	U	0.5	UJ	0.5	UJ
2-Butanone	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cyclohexane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	0.5	R	0.5	R	0.5	U	0.5	R	0.5	UJ
Methylcyclohexane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	R	0.5	UJ	0.5	U	0.5	UJ	0.5	UJ
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	5	U
Toluene	0.5	R	0.5	R	0.5	U	0.5	R	0.5	UJ
trans-1,3-Dichloropropene	0.5	R	0.5	UJ	0.5	U	0.5	UJ	0.5	UJ
1,1,2-Trichloroethane	0.5	R	0.5	UJ	0.5	U	0.5	UJ	0.5	UJ

use RE results

use RE results

Analytical Results (Qualified Data)

Case # 30751 SDG # E0094
Site EVERGREEN MANOR
A4
Reviewer
Date

Sample Number	E00A0		E00A0RE		E00A1		E00A2		E00A2RE	
Sampling Location	EM2-GWMU1B-01		EM2-GWMU1B-01		EM2-GWMU2A-01		EM2-GWMU2B-01		EM2-GWMU2B-01	
Matrix	Water		Water		Water		Water		Water	
Units	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled	04/09/2002		04/09/2002		04/09/2002		04/09/2002		04/09/2002	
Time Sampled	12:40		12:40		12:40		12:40		12:40	
%Moisture	N/A		N/A		N/A		N/A		N/A	
pH										
Dilution Factor	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.3	UJ	0.2	UJ	0.6	UJ	0.8	UJ	0.6	UJ
2-Hexanone	5	U	5	U	5	U	5	U	5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ
1,2-Dibromoethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	R	0.5	R	0.5	U	0.5	R	0.5	UJ
Xylenes (total)	0.5	R	0.5	R	0.5	U	0.5	R	0.5	UJ
Styrene	0.5	R	0.5	R	0.5	U	0.5	R	0.5	UJ
Bromoform	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U
Isopropylbenzene	0.5	R	0.5	R	0.5	U	0.5	R	0.5	UJ
1,1,2,2-Tetrachloroethane	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-chloropropane	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0094
Site : EVERGREEN MANOR
Lab. : A4
Reviewer
Date :

Sample Number :	E0094		E0095		E0096		E0097		E0098	
Sampling Location :	EM2-G109S-01		EM2-G109D-01		EM2-GWFB02-01		EM2-TB06-01		EM2-GWMU1A-01	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	04/09/2002		04/09/2002		04/09/2002		04/09/2002		04/09/2002	
Time Sampled :	11:07		12:49		13:30		14:00		12:40	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Acetone	5	U	5	U	5	U	5	U	5	U
Carbon Disulfide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	0.5	R	0.5	R	0.5	R	0.5	R	0.5	R
Methylene Chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
tert-Butyl Methyl Ether	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	0.3	J	0.4	J	0.5	U	0.5	U	0.5	U
Cyclohexane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	0.5	U	0.2	J	0.5	U	0.5	U	0.5	U
Methylcyclohexane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Analytical Results (Qualified Data)

Case # 30351 SDG E0094
Site : EVERGREEN MANOR
: A4
Viewer :
Date :

Sample Number :	E0094		E0095		E0096		E0097		E0098	
Sampling Location :	EM2-G109S-01		EM2-G109D-01		EM2-GWFB02-01		EM2-TB06-01		EM2-GWMU1A-01	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled	04/09/2002		04/09/2002		04/09/2002		04/09/2002		04/09/2002	
Time Sampled	11:07		12:49		13:30		14:00		12:40	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	2		3		0.2	J	0.5	U	0.3	J
2-Hexanone	5	U	5	U	5	U	5	U	5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylenes (total)	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-chloropropane	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ

Analytical Results (Qualified Data)

Case #: 30351 SDG : E0094
Site EVERGREEN MANOR
Lab A4
Reviewer :
Date :

Sample Number :	E0099		VBLK29		VBLK33		VHBLK01			
Sampling Location :	EM2-GWMU1A-01DP									
Matrix :	Water		Water		Water		Water			
Units :	ug/L		ug/L		ug/l		ug/L			
Date Sampled :	04/09/2002									
Time Sampled :	12:40									
%Moisture :	N/A		N/A		N/A		N/A			
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0			
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U		
Chloromethane	0.5	U	0.5	U	0.5	U	0.5	U		
Vinyl Chloride	0.5	U	0.5	U	0.5	U	0.5	U		
Bromomethane	0.5	U	0.5	U	0.5	U	0.5	U		
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U		
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U		
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U		
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	U	0.5	U	0.5	U	0.5	U		
Acetone	5	U	5	U	5	U	5	U		
Carbon Disulfide	0.5	U	0.5	U	0.5	U	0.5	U		
Methyl Acetate	0.5	R	0.5	R	0.5	R	0.5	R		
Methylene Chloride	0.5	U	0.5	U	0.5	U	0.5	U		
trans-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U		
tert-Butyl Methyl Ether	0.5	U	0.5	U	0.5	U	0.5	U		
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U		
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U		
2-Butanone	5	U	5	U	5	U	5	U		
Bromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U		
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U		
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U		
Cyclohexane	0.5	U	0.5	U	0.5	U	0.5	U		
Carbon Tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U		
Benzene	0.5	U	0.5	U	0.5	U	0.5	U		
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U		
Trichloroethene	0.5	U	0.5	U	0.5	U	0.5	U		
Methylcyclohexane	0.5	U	0.5	U	0.5	U	0.5	U		
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U		
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U		
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U		
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U		
Toluene	0.5	U	0.5	U	0.5	U	0.5	U		
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U		
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U		

Analytical Results (Qualified Data)

Case # 30351 SDG : E0094
Site : EVERGREEN MANOR
[illegible] : A4
Reviewer :
Date :

Sample Number :	E0099		VBLK29		VBLK33		VHBLK01			
Sampling Location :	EM2 GWMU1A 01DP									
Matrix :	Water		Water		Water		Water			
Units :	ug/L		ug/L		ug/L		ug/L			
Date Sampled :	04/09/2002									
Time Sampled :	12:40									
%Moisture :	N/A		N/A		N/A		N/A			
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0			
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.3	U	0.5	U	0.5	U	0.5	U		
2-Hexanone	5	U	5	U	5	U	5	U		
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U		
1,2-Dibromoethane	0.5	U	0.5	U	0.5	U	0.5	U		
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U		
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U		
Xylenes (total)	0.5	U	0.5	U	0.5	U	0.5	U		
Styrene	0.5	U	0.5	U	0.5	U	0.5	U		
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U		
Isopropylbenzene	0.5	U	0.5	U	0.5	U	0.5	U		
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U		
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U		
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U		
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U		
1,2-Dibromo-3-chloropropane	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ		
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U		
1,2,3-Trichlorobenzene	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ		

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: April 30, 2002

SUBJECT: Review of Data
Received for Review on April 23, 2002

FROM: Stephen L. Ostrodka, Chief (SMF-4J)
Superfund Field Services Section

TO: Data User: Weston

We have reviewed the data for the following case:

SITE NAME: Evergreen Manor (IL)

CASE NUMBER: 30395 SDG NUMBER: E00A3
Number and Type of Samples: 2 (Soil)
Sample Numbers: E00A3 and E00A4
Laboratory: Envirosystems Hrs. for Review:

Following are our findings:

CC: Cecilia Moore
Region 5 TPO
Mail Code: SMF-4J

:a Number : 30395 SDG Number: E00A3
:ite Name: Evergreen Manor (IL) Laboratory: Envirosystems

Below is a summary of the out-of-control audits and the possible effects on the data for this :ase:

Two (2) soil samples, numbered E00A3 and E00A4, were collected on April 16, 2002. The lab received the samples on April 17, 2002 in good condition. All samples were analyzed only for the volatile list of organic analytes. All were analyzed according to CLP SOW OLM04.2 5/99.

Reviewed By: Richard Baltrus/IITRI-ESAT
Date: April 30, 2002

Case Number : 30395 SDG Number: E00A3
Site Name: Evergreen Manor (IL) Laboratory: Envirosystems

1. HOLDING TIME

No problems found for this qualification

2. GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

No problems found for this qualification

3. CALIBRATION

The following volatile samples are associated with a continuing calibration whose corresponding initia calibration has relative response factors (RRF) outside the primary criteria. Hits are qualified "J" a non-detects are qualified "R".

1,2-Dibromo-3-chloropropane
E00A3, E00A3MS, E00A3MSD, E00A4, VBLKFG, VHBLKF4

The following volatile samples are associated with a continuing initial calibration has a percent relativ standard deviation (%RSD) outside the primary criteria. Hits are qualified "J" and non-detects are qualified "UJ".

Bromomethane, Chloroethane, Acetone
E00A3, E00A3MS, E00A3MSD, E00A4, VBLKFG, VHBLKF4

The following volatile samples are associated with a continuing initial calibration has a percent difference (%D) outside the primary criteria. Hits are qualified "J" and non-detects are qualified "U

4,Methyl-2-Pentanone, Isopropylbenzene
E00A3, E00A3MS, E00A3MSD, E00A4, VBLKFG, VHBLKF4

4. BLANKS

The following volatile sample have analyte concentration report below the CRQL and less than or equ to ten times (10X) the associated method blank concentration. Reported sample concentrations have been elevated to the CRQL. Hit are qualified "U or UJ" and non-detects are not qualified.

Acetone, Methylene Chloride
E00A3, E00A3MS, E00A3MSD, E00A4, VHBLKF4

5. SYSTEM MONITORING COMPOUND AND SURROGATE RECOVERY

No problems found for this qualification.

Reviewed By: Richard Baltrus/IITRI-ESAT
Date: April 30, 2002

:a. Number : 30395 SDG Number: E00A3
;ite Name: Evergreen Manor (IL) Laboratory: Envirosystems

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

No problems found for this qualification.

7. FIELD BLANK AND FIELD DUPLICATE

There is no field blank. Sample E00A4 is a field duplicate of Sample E00A3. Results are not qualifie based upon the results of the field blank or field duplicates. There were no target analytes or TICs foı in the samples E00A3 and E00A4.

8. INTERNAL STANDARDS

No problems found for this qualification.

9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all VOA compounds were properly identified.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The following volatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

VBLKFG
Acetone , Methylene Chloride , 1,2,4-Trichlorobenzene

11. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance. The GC baseline for the pesticide analysis was acceptable.

12. ADDITIONAL INFORMATION

None.

Reviewed By: Richard Baltrus/IITRI-ESAT
Date: April 30, 2002

Analytical Results (Qualified Data)

Case #: 30395 SDG : E00A3
Site : EVERGREEN MANOR
Lab. : ENVSYS
Reviewer :
Date :

Number of Soil Samples : 2
Number of Water Samples : 0

Sample Number :	E00A3		E00A3MS		E00A3MSD		E00A4		VBLKFG	
Sampling Location :	EM2-SLIDW-01		EM2-SLIDW-01		EM2-SLIDW-01		EM2-SLIDW-01DP			
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	04/16/2002		04/16/2002		04/16/2002		04/16/2002			
Time Sampled :	07:45		07:45		07:45		07:45			
%Moisture :	25		25		25		25		N/A	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	12	U	12	U	12	U	11	U	10	U
Chloromethane	12	U	12	U	12	U	11	U	10	U
Vinyl Chloride	12	U	12	U	12	U	11	U	10	U
Bromomethane	12	UJ	12	UJ	12	UJ	11	UJ	10	UJ
Chloroethane	12	UJ	12	UJ	12	UJ	11	UJ	10	UJ
Trichlorofluoromethane	12	U	12	U	12	U	11	U	10	U
1,1-Dichloroethene	12	U	45		45		11	U	10	U
1,1,2-Trichloro-1,2,2-trifluoroethane	12	U	12	U	12	U	11	U	10	U
Acetone	12	UJ	12	UJ	12	UJ	11	UJ	4	J
Carbon Disulfide	12	U	12	U	12	U	11	U	10	U
Methyl Acetate	12	U	12	U	12	U	11	U	10	U
Methylene Chloride	25	U	27	U	26	U	14	U	4	J
trans-1,2-Dichloroethene	12	U	12	U	12	U	11	U	10	U
Methyl tert-Butyl Ether	12	U	12	U	12	U	11	U	10	U
1,1-Dichloroethane	12	U	12	U	12	U	11	U	10	U
cis-1,2-Dichloroethene	12	U	12	U	12	U	11	U	10	U
2-Butanone	12	U	12	U	12	U	11	U	10	U
Chloroform	12	U	12	U	12	U	11	U	10	U
1,1,1-Trichloroethane	12	U	12	U	12	U	11	U	10	U
Cyclohexane	12	U	12	U	12	U	11	U	10	U
Carbon Tetrachloride	12	U	12	U	12	U	11	U	10	U
Benzene	12	U	49		49		11	U	10	U
1,2-Dichloroethane	12	U	12	U	12	U	11	U	10	U
Trichloroethene	12	U	46		47		11	U	10	U
Methylcyclohexane	12	U	12	U	12	U	11	U	10	U
1,2-Dichloropropane	12	U	12	U	12	U	11	U	10	U
Bromodichloromethane	12	U	12	U	12	U	11	U	10	U
cis-1,3-Dichloropropene	12	U	12	U	12	U	11	U	10	U
4-Methyl-2-pentanone	12	UJ	12	UJ	12	UJ	11	UJ	10	UJ
Toluene	12	U	51		53		11	U	10	U
trans-1,3-Dichloropropene	12	U	12	U	12	U	11	U	10	U
1,1,2-Trichloroethane	12	U	12	U	12	U	11	U	10	U
Tetrachloroethene	12	UJ	12	UJ	12	UJ	11	UJ	10	UJ

Analytical Results (Qualified Data)

Case #: 30395 SDG : E00A3
Site : EVERGREEN MANOR
[illegible] : ENVSYS
Reviewer :
Date :

Sample Number :	E00A3		E00A3MS		E00A3MSD		E00A4		VBLKFG	
Sampling Location :	EM2-SLIDW-01		EM2-SLIDW-01		EM2-SLIDW-01		EM2-SLIDW-01DP			
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	04/16/2002		04/16/2002		04/16/2002		04/16/2002			
Time Sampled :	07:45		07:45		07:45		07:45			
%Moisture :	25		25		25		25		N/A	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2-Hexanone	12	U			12	U	11	U	10	U
Dibromochloromethane	12	U	12	U	12	U	11	U	10	U
1,2-Dibromoethane	12	U			12	U	11	U	10	U
Chlorobenzene	12	U	50		53		11	U	10	U
Ethylbenzene	12	U			12	U	11	U	10	U
Xylenes (total)	12	U	12	U	12	U	11	U	10	U
Styrene	12	U			12	U	11	U	10	U
Bromoform	12	U	12	U	12	U	11	U	10	U
Isopropylbenzene	12	U			12	U	11	U	10	U
1,1,2,2-Tetrachloroethane	12	U	12	U	12	U	11	U	10	U
1,3-Dichlorobenzene	12	U			12	U	11	U	10	U
1,4-Dichlorobenzene	12	U	12	U	12	U	11	U	10	U
1,2-Dichlorobenzene	12	U			12	U	11	U	10	U
1,2-Dibromo-3-chloropropane	12	R	12	R	12	R	11	R	10	R
1,2,4-Trichlorobenzene	12	U			12	U	11	U		

Analytical Results (Qualified Data)

Case #: 30395 SDG : E00A3
Site : EVERGREEN MANOR
Lab. : ENVSYS
Reviewer :
Date :

Sample Number :	VHBLKF4									
Sampling Location :										
Matrix :	Soil									
Units :	ug/Kg									
Date Sampled :										
Time Sampled :										
%Moisture :	0									
pH :										
Dilution Factor :	1.0									
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	10	U								
Chloromethane	10	U								
Vinyl Chloride	10	U								
Bromomethane	10	UJ								
Chloroethane	10	UJ								
Trichlorofluoromethane	10	U								
1,1-Dichloroethene	10	U								
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U								
Acetone	10	UJ								
Carbon Disulfide	10	U								
Methyl Acetate	10	U								
Methylene Chloride	15	U								
trans-1,2-Dichloroethene	10	U								
Methyl tert-Butyl Ether	10	U								
1,1-Dichloroethane	10	U								
cis-1,2-Dichloroethene	10	U								
2-Butanone	10	U								
Chloroform	10	U								
1,1,1-Trichloroethane	10	U								
Cyclohexane	10	U								
Carbon Tetrachloride	10	U								
Benzene	10	U								
1,2-Dichloroethane	10	U								
Trichloroethene	10	U								
Methylcyclohexane	10	U								
1,2-Dichloropropane	10	U								
Bromodichloromethane	10	U								
cis-1,3-Dichloropropene	10	U								
4-Methyl-2-pentanone	10	UJ								
Toluene	10	U								
trans-1,3-Dichloropropene	10	U								
1,1,2-Trichloroethane	10	U								
Tetrachloroethene	10	U								

Analytical Results (Qualified Data)

Case # 30385 SDG # E00A3

Site EVERGREEN MANOR

ENVSYS

Date

Sample Number :	VHBLKE4									
Sampling Location :										
Matrix	Soil									
Units:	ug/Kg									
Date Sampled										
Time Sampled :										
%Moisture :	0									
pH :										
Dilution Factor :	1.0									
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2-Hexanone	10	U								
Dibromochloromethane	10	U								
1,2-Dibromoethane	10	U								
Chlorobenzene	10	U								
Ethylbenzene	10	U								
Xylenes (total)	10	U								
Styrene	10	U								
Bromoform	10	U								
Isopropylbenzene	10	UJ								
1,1,2,2-Tetrachloroethane	10	U								
1,3-Dichlorobenzene	10	U								
1,4-Dichlorobenzene	10	U								
1,2-Dichlorobenzene	10	U								
1,2-Dibromo-3-chloropropane	10	R								
1,2,4-Trichlorobenzene	10	U								

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: _____

SUBJECT: Review of Data
Received for Review on April 22, 2002

FROM: Stephen L. Ostrodka, Chief (SMF-4J)
Superfund Field Services Section

TO: Data User: WESTON

We have reviewed the data for the following case:

SITE NAME: EVERGREEN MANOR (IL)
CASE NUMBER: 30395 SDG NUMBER: E00A5
Number and Type of Samples: 8 Waters (VOAs)
Sample Numbers: E00A5 - E00A9, E00B0 - E00B2
Laboratory: Compuchem Hrs. for Review: _____

Following are our findings:

CC: Cecilia Moore
Region 5 TPO
Mail Code: SMF-4J

:a. Number : 30395 SDG Number: E00A5
:ite Name: EVERGREEN MANOR (IL) Laboratory: COMPUCHEM

Below is a summary of the out-of-control audits and the possible effects on the data for this :ase:

Eight (8) preserved water samples, numbered *E00A5* through *E00A9*, and *E00B0* through *E00B2* were collected on *April 16, 2002*. The lab received the samples on *April 17, 2002* in good condition. All samples were analyzed for only the volatile list of organic analytes. All were analyzed according to CLP SOW *OLC03.2*.

Reviewed By: Allison Harvey/IITRI-ESAT
Date: April 25, 2002

ase Number : 30395 SDG Number: E00A5
ite Name: EVERGREEN MANOR (IL) Laboratory: COMPUCHEM

. **HOLDING TIME**

lo defects found.

. **GC/MS TUNING AND GC INSTRUMENT PERFORMANCE**

lo defects found.

. **CALIBRATION**

'he following volatile samples are associated with a continuing calibration whose corresponding initial :alibration has relative response factors (RRFs) outside primary criteria. Hits are flagged "J" and non-detect ıre qualified "R".

Methyl Acetate
VBLKQR, VHBLKMJ

The following volatile samples are associated with a continuing calibration whose corresponding initial :alibration has percent relative standard deviation (%RSD) outside primary criteria. Hits are qualified "J" : ıon-detects are flagged "UJ".

Methyl Acetate
E00A5, E00A6, E00A7, E00A8, E00A9, E00A9MS, E00A9MSD, E00B0, E00B1, E00B2, VBLKTB

The following volatile samples are associated with a continuing calibration relative response factor (RRFs) outside primary criteria. Hits are flagged "J" and non-detects are qualified "R".

Methyl Acetate
VBLKQR, VHBLKMJ

The following volatile samples are associated with a continuing calibration percent difference (%D) outside expanded criteria. Hits are flagged "J" and non-detects are flagged "UJ".

Methyl Acetate, Methyl tert-Butyl Ether
E00A5, E00A6, E00A7, E00A8, E00A9, E00A9MS, E00A9MSD, E00B0, E00B1, E00B2, VBLKTB

The following volatile samples are associated with an initial calibration in which a SMC/DMC did not meet relative response factor (RRF) criteria. Hits are considered estimated. Sample results are not affected surrogate recoveries are still within the acceptance criteria.

a Number : 30395 SDG Number: E00A5
it Name: EVERGREEN MANOR (IL) Laboratory: COMPUCHEM

VBLKQR, VHBLKMJ
Trans-1,3-Dichloropropene-d4

'he following volatile samples are associated with a continuing calibration in which a SMC/DMC exceeded ercent difference (%D) criteria. Hits are considered estimated. Sample results are not affected as all urrogate recoveries are still within the acceptance criteria.

E00A5, E00A6, E00A7, E00A8, E00A9, E00A9MS, E00A9MSD, E00B0, E00B1, E00B2, VBLKTB
Bromoform-d

ı. BLANKS

'he following volatile samples were analyzed after a highly contaminated sample and have no preceding nstrument blank.

Acetone, Toluene
E00A6

Sample E00A6 was analyzed following sample E00A5. Sample E00A5 reported Acetone at 160 µg/L and Toluene at 270 µg/L. Sample E00A6 reported Acetone at 130 µg/L and Toluene at 160 µg/L. Tl reviewer was unable to reasonably eliminate all possibilty of carryover from sample E00A5 to E00A6.

Chloroform
E00A9

Sample E00A9 was analyzed following sample E00B0. Sample E00B0 reported Chloroform at 14 µg/L. Sample E00A9 reported Chloroform at 2.1 µg/L. The reviewer was unable to reasonably eliminate all possibilty of carryover from sample E00B0 to E00A9.

The following volatile samples have analyte concentrations reported below the CRQL. The associated meth blank concentration is less than the concentration criteria. Reported sample concentrations have been elevated to the CRQL. Hits are qualified "U" and non-detects are not flagged.

Acetone
E00A7, E00A8, E00B0, E00B1

cis-1,3-Dichloropropene
E00A5, E00A6, E00A7, E00A8, E00A9, E00A9MS, E00A9MSD, E00B0, E00B1, E00B2

Th llowing volatile samples have analyte concentrations reported below the CRQL. The associated meth

ase Number : 30395 SDG Number: E00A5
ite Name: EVERGREEN MANOR (IL) Laboratory: COMPUCHEM

lank concentration is more than or equal to the concentration criteria. Reported sample concentrations hav een elevated to the CRQL. Hits are qualified "U" and non-detects are not flagged.

Bromoform
E00A9, E00A9MSD, VHBLKMJ

'he following volatile samples have analyte concentrations reported at or above the CRQL and less than the ıethod blank concentration. The associated method blank concentration is more than or equal to the oncentration criteria. Blank concentration value is reported as the sample result. Hits are qualified "U" and ıon-detects are not flagged.

Bromoform
E00A7, E00A8, E00A9MS, E00B1, E00B2

'he following volatile samples have analyte concentrations reported at or above the CRQL and more than o ;qual to the method blank concentration. The associated method blank concentration is more than or equal he concentration criteria. Hits are qualified "U" and non-detects are not flagged.

Bromoform
E00A5, E00A6, E00B0

5. SYSTEM MONITORING COMPOUND AND SURROGATE RECOVERY

No defects found.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The relative percent difference (RPD) between the following volatile matrix spike and matrix spike duplicate ecoveries is outside criteria. The presence of Trichloroethene in the unspiked sample, E00A9, is qualified " and non-detects are qualified "UJ".

E00A9MS, E00A9MSD
Trichloroethene

7. FIELD BLANK AND FIELD DUPLICATE

Sample *E00B1* is a trip blank. Sample *E00B0* is a field blank. Sample *E00A8* is a field duplicate of Sample *E00A7*. Results are summarized in the following table:

:a Number : 30395 SDG Number: E00A5
:ite Name: EVERGREEN MANOR (IL) Laboratory: COMPUCHEM

Analytes	E00A7	E00A8	E00B0	E00B1
1,1-Dichloroethene	0.19 J	0.16 J		
Methylene Chloride				0.11 J
1,1-Dichloroethane	0.34 J	0.34 J		
cis-1,2-Dichloroethene	1.5	1.4		
Chloroform			14	
1,1,1-Trichloroethane	2.4	2.0		
' .hloroethene	4.7	4.4	0.36 J	
Bromodichloromethane			0.39 J	
Toluene	0.15 J	0.15 J	0.40 J	0.50
Tetrachloroethene	1.7	1.7		
X ıe (Total)			0.17 J	

Results are not qualified based upon the results of the field blank or field duplicates.

3. INTERNAL STANDARDS

No defects found.

9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all VOA compounds were properly dentified.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The following volatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

E00A5
Tetrachloroethene

E00A6
Methylene Chloride, Benzene, Ethylbenzene

Reviewed By: Allison Harvey/IITRI-ESAT
Date: April 25, 2002

Case Number : 30395 SDG Number: E00A5
Site Name: EVERGREEN MANOR (IL) Laboratory: COMPUCHEM

E00A7, E00A8
1,1-Dichloroethene, 1,1-Dichloroethane, Toluene

E00A9
1,1-Dichloroethene, 1,1-Dichloroethane, Toluene, Tetrachloroethene

E00A9MS
Methylene Chloride, 1,1-Dichloroethane, Tetrachloroethene

E00A9MSD
Methylene Chloride, 1,1-Dichloroethane, Chloroform, Tetrachloroethene

E00B0
Trichloroethene, Bromodichloromethane, Toluene, Xylenes (total)

E00B1
Methylene Chloride

E00B2
Chloroform, Trichloroethene, Toluene

VBLKQR
Xylenes (total), Bromoform

VBLKTB
Acetone, cis-1,3-Dichloropropene

1. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance. The GC baseline for the pesticide analysis was acceptable.

2. ADDITIONAL INFORMATION

one.

Reviewed By: Allison Harvey/IITRI-ESAT
Date: April 25, 2002

Analytical Results (Qualified Data)

Case #: 30395 SDG : E00A5
Site : EVERGREEN MANOR
: LIBRTY
ewer :
Date :

Number of Soil Samples : 0
Number of Water Samples : 8

Sample Number :	E00A5		E00A6		E00A7		E00A8		E00A9	
Sampling Location :	EM2-GWIDW-01		EM2-GWIDW-02		EM2-GMW1A-01		EM2-GMW1A-01DP		EM2-GMW3-01	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	04/16/2002		04/16/2002		04/16/2002		04/16/2002		04/16/2002	
Time Sampled :	08:55		09:15		11:10		11:10		13:20	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :										
Dilution Factor :	25.0		12.5		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	13	U	[illegible]	[illegible]	0.5	U	0.5	U	0.5	U
Chloromethane	13	U	6	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	13	U	[illegible]	[illegible]	0.5	U	0.5	U	0.5	U
Bromomethane	13	U	6	U	0.5	U	0.5	U	0.5	U
Chloroethane	13	U	[illegible]	[illegible]	0.5	U	0.5	U	0.5	U
ichlorofluoromethane	13	U	6	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene	13	U	[illegible]	[illegible]	0.2	J	0.2	J	0.2	J
1,1,2-Trichloro-1,2,2-trifluoroethane	13	U	6	U	0.5	U	0.5	U	0.5	U
Acetone	160	[illegible]	[illegible]	[illegible]	5	U	5	U	5	U
Carbon Disulfide	13	U	6	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	13	UJ	[illegible]	[illegible]	0.5	UJ	0.5	UJ	0.5	UJ
Methylene Chloride	13	U	6 ~~2~~ ~~J~~ U		0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	13	U	[illegible]	[illegible]	0.5	U	0.5	U	0.5	U
-Butyl Methyl Ether	13	UJ	6	UJ	0.5	UJ	0.5	UJ	0.5	UJ
-Dichloroethane	13	U	[illegible]	[illegible]	0.3	J	0.3	J	0.3	J
cis-1,2-Dichloroethene	13	U	6	U	2		1		1	
2-Butanone	130	U	[illegible]	[illegible]	5	U	5	U	5	U
Bromochloromethane	13	U	6	U	0.5	U	0.5	U	0.5	U
Chloroform	13	U	[illegible]	[illegible]	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	13	U	6	U	2		2		2	
Cyclohexane	13	U	[illegible]	[illegible]	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	13	U	6	U	0.5	U	0.5	U	0.5	U
enzene	13	U	[illegible]	[illegible]	0.5	U	0.5	U	0.5	U
,2-Dichloroethane	13	U	6	U	0.5	U	0.5	U	0.5	U
Trichloroethene	13	U	[illegible]	[illegible]	5		[illegible]	[illegible]	7	J
Methylcyclohexane	13	U	6	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	13	U	[illegible]	[illegible]	0.5	U	0.5	U	0.5	U
Bromodichloromethane	13	U	6	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	13	U	[illegible]	[illegible]	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	130	U	63	U	5	U	5	U	5	U
Toluene	270	[illegible]	[illegible]	[illegible]	0.5 ~~0.2~~ ~~J~~ U		0.5 ~~0.2~~ ~~J~~ U		0.5 ~~0.2~~ ~~J~~ U	
trans-1,3-Dichloropropene	13	U	6	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	13	U	[illegible]	[illegible]	0.5	U	0.5	U	0.5	U

TB

Analytical Results (Qualified Data)

Case #: 30395 SDG : E00A5
Site : EVERGREEN MANOR
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	E00A5		E00A6		E00A7		E00A8		E00A9	
Sampling Location :	EM2-GWIDW-01		EM2-GWIDW-02		EM2-GMW1A-01		EM2-GMW1A-01DP		EM2-GMW3-01	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	04/16/2002		04/16/2002		04/16/2002		04/16/2002		04/16/2002	
Time Sampled :	08:55		09:15		11:10		11:10		13:20	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :										
Dilution Factor :	25.0		12.5		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	[illegible]	U	[illegible]	U	[illegible]	U	[illegible]	U	[illegible]	U
2-Hexanone	130	U	63	U	5	U	5	U	5	U
Dibromochloromethane	[illegible]	U	[illegible]	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	13	U	6	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	[illegible]	U	[illegible]	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	13	U	3	J	0.5	U	0.5	U	0.5	U
1,1,1,2-Tetrachloroethane	[illegible]	U	[illegible]	U	0.5	U	0.5	U	0.5	U
Styrene	13	U	6	U	0.5	U	0.5	U	0.5	U
Bromoform	[illegible]	U	[illegible]	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	13	U	6	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	[illegible]	U	[illegible]	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	13	U	6	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	[illegible]	U	[illegible]	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	13	U	6	U	0.5	U	0.5	U	0.5	U
1,2-Dibromo-3-chloropropane	[illegible]	U	[illegible]	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	13	U	6	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	[illegible]	U	[illegible]	U	0.5	U	0.5	U	0.5	U

Analytical Results (Qualified Data)

Case #: 30395 SDG : E00A5
Site : EVERGREEN MANOR
LIBRTY
Reviewer :
Date :

Sample Number :	E00A9MS		E00A9MSD		E00B0		E00B1		E00B2	
Sampling Location :	EM2-GMW3-01		EM2-GMW3-01		EM2-GWFB03-01		EM2-TB07-01		EM2-GMW2-01	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	04/16/2002		04/16/2002		04/16/2002		04/16/2002		04/16/2002	
Time Sampled :	13:20		13:20		13:50		13:40		16:00	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.5	U			0.5	U	0.5	U	0.5	U
Chloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl Chloride	0.5	U			0.5	U	0.5	U	0.5	U
Bromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	0.5	U			0.5	U	0.5	U	0.5	U
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene	5				0.5	U	0.5	U	0.5	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Acetone	5	U			5	U	5	U	5	U
Carbon Disulfide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methyl Acetate	0.5	UJ			0.5	UJ	0.5	UJ	0.5	U
Methylene Chloride	0.1	J	0.1	J	0.5	U	0.1	J	0.5	U
trans-1,2-Dichloroethene	0.5	U			0.5	U	0.5	U	0.5	U
tert-Butyl Methyl Ether	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
1,1-Dichloroethane	0.5	U			0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	1		1		0.5	U	0.5	U	0.5	U
2-Butanone	5	U			5	U	5	U	5	U
Bromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U			0.4	J	0.5	U	0.5	U
1,1,1-Trichloroethane	2		2		0.5	U	0.5	U	2	
Cyclohexane	0.5	U			0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	5				0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	0.2				0.4	J	0.5	U	0.5	U
Methylcyclohexane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U			0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.4	J	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U			0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	5	U	5	U	5	U	5	U	5	U
Toluene	5				0.4	J	0.5	U	5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U			0.5	U	0.5	U	0.5	U

TB

Analytical Results (Qualified Data)

Case #: 30395 SDG : E00A5
Site : EVERGREEN MANOR
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	E00A9MS		E00A9MSD		E00B0		E00B1		E00B2	
Sampling Location :	EM2-GMW3-01		EM2-GMW3-01		EM2-GWFB03-01		EM2-TB07-01		EM2-GMW2-01	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	04/16/2002		04/16/2002		04/16/2002		04/16/2002		04/16/2002	
Time Sampled :	13:20		13:20		13:50		13:40		16:00	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.2	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Hexanone	5	U	5	U	5	U	5	U	5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylenes, (total)	0.5	U	0.5	U	0.2	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Analytical Results (Qualified Data)

Case #: 30395 SDG : E00A5
Site : EVERGREEN MANOR
: LIBRTY
Reviewer :
Date :

Sample Number :	VBLKQR		VBLKTB		VHBLKMJ					
Sampling Location :										
Matrix :	Water		Water		Water					
Units :	ug/L		ug/L		ug/L					
Date Sampled :										
Time Sampled :										
%Moisture :	N/A		N/A		N/A					
pH :										
Dilution Factor :	1.0		1.0		1.0					
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.5	U			0.5	U				
Chloromethane	0.5	U	0.5	U	0.5	U				
Vinyl Chloride	0.5	U			0.5	U				
Bromomethane	0.5	U	0.5	U	0.5	U				
Chloroethane	0.5	U			0.5	U				
Trichlorofluoromethane	0.5	U	0.5	U	0.5	U				
1,1-Dichloroethene	0.5	U			0.5	U				
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	U	0.5	U	0.5	U				
Acetone	5	U			5	U				
Carbon Disulfide	0.5	U	0.5	U	0.5	U				
Methyl Acetate	0.5	U			0.5	R				
Methylene Chloride	0.5	U	0.5	U	0.5	U				
trans-1,2-Dichloroethene	0.5	U			0.5	U				
t-Butyl Methyl Ether	0.5	U	0.5	UJ	0.5	U				
1,1-Dichloroethane	0.5	U			0.5	U				
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U				
2-Butanone	5	U			5	U				
Bromochloromethane	0.5	U	0.5	U	0.5	U				
Chloroform	0.5	U			0.5	U				
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U				
Cyclohexane	0.5	U			0.5	U				
Carbon Tetrachloride	0.5	U	0.5	U	0.5	U				
Benzene	0.5	U			0.5	U				
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U				
Trichloroethene	0.5	U			0.5	U				
Methylcyclohexane	0.5	U	0.5	U	0.5	U				
1,2-Dichloropropane	0.5	U			0.5	U				
Bromodichloromethane	0.5	U	0.5	U	0.5	U				
cis-1,3-Dichloropropene	0.5	U			0.5	U				
4-Methyl-2-pentanone	5	U	5	U	5	U				
Toluene	0.5	U			0.5	U				
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U				
1,1,2-Trichloroethane	0.5	U			0.5	U				

Analytical Results (Qualified Data)

Case #: 30395 SDG : E00A5
Site : EVERGREEN MANOR
Lab. : LIBRTY
Reviewer :
Date :

Sample Number :	VBLKQR		VBLKTB		VHBLKMJ					
Sampling Location :										
Matrix :	Water		Water		Water					
Units :	ug/L		ug/L		ug/L					
Date Sampled :										
Time Sampled :										
%Moisture :	N/A		N/A		N/A					
pH :										
Dilution Factor :	1.0		1.0		1.0					
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.5	U	0.5	U	0.5	U				
2-Hexanone	5	U	5	U	5	U				
Dibromochloromethane	0.5	U	0.5	U	0.5	U				
1,2-Dibromoethane	0.5	U	0.5	U	0.5	U				
Chlorobenzene	0.5	U	0.5	U	0.5	U				
Ethylbenzene	0.5	U	0.5	U	0.5	U				
Xylenes (total)	0.5	U	0.5	U	0.5	U				
Styrene	0.5	U	0.5	U	0.5	U				
Bromoform	0.5	U	0.5	U	0.5	U				
Isopropylbenzene	0.5	U	0.5	U	0.5	U				
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U				
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U				
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U				
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U				
1,2-Dibromo-3-chloropropane	0.5	U	0.5	U	0.5	U				
1,2,4-Trichlorobenzene	0.5	U	0.5	U	0.5	U				
1,2,3-Trichlorobenzene	0.5	U	0.5	U	0.5	U				

1LCA

LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E0098

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30351 Client No.: SDG No.: E0094

Lab Sample ID: 1508.006 Date Received: 04/10/2002

Lab File ID: C4443 Date Analyzed: 04/11/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon Disulfide	0.50	U
79-20-9	Methyl Acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Well No. ~~MW~~-6
pretreatment

1LCB

LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E0098

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30351 Client No.: SDG No.: E0094

Lab Sample ID: 1508.006 Date Received: 04/10/2002

Lab File ID: C4443 Date Analyzed: 04/11/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.34	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (total)	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1LCA

LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET

EPA SAMPLE NO.

E0099

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30351 Client No.: SDG No.: E0094

Lab Sample ID: 1508.007 Date Received: 04/10/2002

Lab File ID: C4444 Date Analyzed: 04/11/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon Disulfide	0.50	U
79-20-9	Methyl Acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Well # 6
pre treatment
- duplicate sample

1LCB

LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E0099

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30351 Client No.: SDG No.: E0094

Lab Sample ID: 1508.007 Date Received: 04/10/2002

Lab File ID: C4444 Date Analyzed: 04/11/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.25	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (total)	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1LCA

LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E00A0RE

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30351 Client No.: SDG No.: E0094

Lab Sample ID: 1508.008RE Date Received: 04/10/2002

Lab File ID: C4452 Date Analyzed: 04/11/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon Disulfide	0.50	U
79-20-9	Methyl Acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Well # 6

post treatment

1LCB
LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.
E00A0RE

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30351 Client No.: SDG No.: E0094

Lab Sample ID: 1508.008RE Date Received: 04/10/2002

Lab File ID: C4452 Date Analyzed: 04/11/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.23	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (total)	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Well # 6
cont

1LCF

LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E00A0RE

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30351 Client No.: SDG No.: E0094

Lab Sample ID: 1508.008RE Date Received: 04/10/2002

Lab File ID: C4452 Date Analyzed: 04/11/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

Number TICs found: 3

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01		UNKNOWN	14.16	2.1	J
02		UNKNOWN	14.35	0.98	J
03		UNKNOWN	16.21	1.2	J
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

1LCA
LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E00A1

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30351 Client No.: SDG No.: E0094

Lab Sample ID: 1508.009 Date Received: 04/10/2002

Lab File ID: C4446 Date Analyzed: 04/11/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon Disulfide	0.50	U
79-20-9	Methyl Acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Well # 6A
pretreatment

1LCB

LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET

EPA SAMPLE NO.

E00A1

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30351 Client No.: SDG No.: E0094

Lab Sample ID: 1508.009 Date Received: 04/10/2002

Lab File ID: C4446 Date Analyzed: 04/11/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.61	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (total)	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1LCA

LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET

EPA SAMPLE NO.

E00A2RE

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30351 Client No.: SDG No.: E0094

Lab Sample ID: 1508.010RE Date Received: 04/10/2002

Lab File ID: C4453 Date Analyzed: 04/11/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-tri uoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon Disulfide	0.50	U
79-20-9	Methyl Acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Well # 6A
post treatment

1LCB

LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS

DATA SHEET

EPA SAMPLE NO.

E00A2RE

Lab Name: A4 SCIENTIFIC, INC. Contract: 68-W-01-038

Lab Code: A4 Case No.: 30351 Client No.: SDG No.: E0094

Lab Sample ID: 1508.010RE Date Received: 04/10/2002

Lab File ID: C4453 Date Analyzed: 04/11/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0.32 (MM) Length: 60 (M)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (UG/L)	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.61	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (total)	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1LCF

LOW CONCENTRATION W. R VOLATILE ORGANICS ANALYSIS
DATA SHEET TENT- ELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

E00A2RE

Lab Name: A4 SCIENTIFIC, INC. tract: 68-W-01-038

Lab Code: A4 Case No.: 3035 Client No.: SDG No.: E0094

Lab Sample ID: 1508.010RE Date Received: 04/10/2002

Lab File ID: C4453 Date Analyzed: 04/11/2002

Purge Volume: 25 (ML) Dilution Factor: 1.0

GC Column: RTX-624 ID: 0. (MM) Length: 60 (M)

Number TICs found: 1

	CAS NUMBER	COMPOUND NAME		RT	EST. CONC. (UG/L)	Q
01		UNKNOWN		16.21	2.0	J
02						
03						
04						
05						
06						
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Appendix M

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

E NUMBER : D111100
ING POINT DESC. : 0901/NORTH PARK PWD/[redacted] METRIC DR

TT G SOURCE # : 201550001 SITE # : 010926
COLLECTED : 011003 TIME COLLECTED : 0950 SAMPLING PROGRAM : TH

CTED BY : GMK DELIVERED BY : UPS
NTS : HAAS & THMS
NG CODE : PW32 AGENCY ROUTING : UNIT CODE :
YPE CODE : [redacted] SAMPLE PURPOSE CODE : 1 REPORTING INDICATOR : B
taken from distribution system
RECEIVED : 011004 TIME RECEIVED : 0900 RECEIVED BY : J M
BSERVATIONS : 3-60ML/2-40ML THM TRIP BL SAM# : D111101
VISORS INITIALS : GLG NOTE : K = LESS THAN VALUE

6 CHLOROFORM	UG/L	: 4
1 BROMODICHLOROMETHANE	UG/L	: 3
5 CHLORODIBROMOMETHANE	UG/L	: 2
4 BROMOFORM	UG/L	: 1.0K
TAL THMS	UG/L	: 9

CEPTABLE QUALITY CONTROL COULD NOT BE

HIEVED FOR METHOD 552.2 ANALYSIS. A
SAMPLE FOR THIS ANALYSIS WAS REQUESTED ON
/22/01.

cnc

THMS

Illinois Environmental Protection Agency
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

Andrea Rhodes
Environmental Protection Specialist
Bureau of Water

217 524 8113 - direct line
217/785-0561
217/557-1407 FAX
E-Mail: epa1215@epa.state.il.us

9

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

LE NUMBER : D011332
LING POINT DESC. : 0900/NORTH PARK PWD/[redacted] ELEVATOR ROAD

ITTING SOURCE # : 201550001 SITE # : 000919
COLLECTED : 000925 TIME COLLECTED : 1505 SAMPLING PROGRAM : TH

ECTED BY : GMK DELIVERED BY : UPS
ENTS : HAAS & THMS
ING CODE : PW32 AGENCY ROUTING : UNIT CODE :
TYPE CODE : DPWS SAMPLE PURPOSE CODE : 1 REPORTING INDICATOR : B

RECEIVED : 000926 TIME RECEIVED : 0900 RECEIVED BY : J M
OBSERVATIONS : 3-60ML/2-40ML THM TRIP BL SAM# : D011333
RVISORS INITIALS : GLG NOTE : K = LESS THAN VALUE

06	CHLOROFORM	UG/L	: 1
01	BROMODICHLOROMETHANE	UG/L	: 2
05	CHLORODIBROMOMETHANE	UG/L	: 2
04	BROMOFORM	UG/L	: 1.0K
	TOTAL THMS	UG/L	: 5
13	MONOCHLOROACETIC ACID (MCAA)	UG/L	: 2.0K
16	MONOBROMOACETIC ACID (MBAA)	UG/L	: 1.0K
88	DICHLOROACETIC ACID (DCAA)	UG/L	: 1.0K
23	TRICHLOROACETIC ACID (TCAA)	UG/L	: 1.0K
21	DIBROMOACETIC ACID (DBAA)	UG/L	: 1.0K

cmc

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

LE NUMBER : D011331
LING POINT DESC. : 0900/NORTH PARK PWD/WELLS 6 & 6A

IT G SOURCE # : 201550005 SITE # : 000919
COLLECTED : 000925 TIME COLLECTED : 1450 SAMPLING PROGRAM : TH

ECTED BY : GMC DELIVERED BY : UPS
ENTS : HAAS & THMS
ING CODE : PW32 AGENCY ROUTING : UNIT CODE :
TYPE CODE : DPWS SAMPLE PURPOSE CODE : 1 REPORTING INDICATOR : B

RECEIVED : 000926 TIME RECEIVED : 0900 RECEIVED BY : J M
OBSERVATIONS : 3-60ML/2-40ML THM TRIP BL SAM# : D011333
RVISORS INITIALS : GLG NOTE : K = LESS THAN VALUE

06	CHLOROFORM	UG/L	: 1
01	BROMODICHLOROMETHANE	UG/L	: 2
05	CHLORODIBROMOMETHANE	UG/L	: 3
04	BROMOFORM	UG/L	: 1
	OTAL THMS	UG/L	: 7
13	MONOCHLOROACETIC ACID (MCAA)	UG/L	: 2.0K
16	MONOBROMOACETIC ACID (MBAA)	UG/L	: 1.0K
88	DICHLOROACETIC ACID (DCAA)	UG/L	: 1.0K
23	TRICHLOROACETIC ACID (TCAA)	UG/L	: 1.0K
21	DIBROMOACETIC ACID (DBAA)	UG/L	: 1.0K

CMC

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

.E NUMBER : D006456
.ING POINT DESC. : 0600/NORTH PARK PWD/WELL 5/[redacted] METRIC

ITTING SOURCE # : 201550001 SITE # : 000601
COLLECTED : 000619 TIME COLLECTED : 1200 SAMPLING PROGRAM : TH

ECTED BY : GMK DELIVERED BY : UPS
ENTS : HAAS & THMS
ING CODE : PW32 AGENCY ROUTING : UNIT CODE :
TYPE CODE : DPWS SAMPLE PURPOSE CODE : 1 REPORTING INDICATOR : B

RECEIVED : 000620 TIME RECEIVED : 0900 RECEIVED BY : MAH
OBSERVATIONS : 3-60ML/2-40ML THM TRIP BL SAM# : D006457
RVISORS INITIALS : GLG NOTE : K = LESS THAN VALUE

06	CHLOROFORM	UG/L	: 3
01	BROMODICHLOROMETHANE	UG/L	: 3
05	CHLORODIBROMOMETHANE	UG/L	: 4
04	BROMOFORM	UG/L	: 1
	TOTAL THMS	UG/L	: 11
13	MONOCHLOROACETIC ACID (MCAA)	UG/L	: 2.0K
16	MONOBROMOACETIC ACID (MBAA)	UG/L	: 1.0K
88	DICHLOROACETIC ACID (DCAA)	UG/L	: 1.0K
23	TRICHLOROACETIC ACID (TCAA)	UG/L	: 1.0K
21	DIBROMOACETIC ACID (DBAA)	UG/L	: 1.0K

CMC

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

LE NUMBER : D003249
'LIN POINT DESC. : 0300/NORTH PARK PWD/WELL 5/ROCKTON RD

IITTING SOURCE # : 201550001 SITE # : 000308
: COLLECTED : 000327 TIME COLLECTED : 1135 SAMPLING PROGRAM : TH

.ECTED BY : GMK DELIVERED BY : UPS
IENTS : HAAS & THMS
'ING CODE : PW32 AGENCY ROUTING : UNIT CODE :
TYPE CODE : DPWS SAMPLE PURPOSE CODE : 1 REPORTING INDICATOR : B

: RECEIVED : 000329 TIME RECEIVED : 0900 RECEIVED BY : S L
OBSERVATIONS : 3-60ML/2-40ML THM TRIP BL SAM# : D003250
:RVISORS INITIALS : GLG NOTE : K = LESS THAN VALUE

·G6	CHLOROFORM	UG/L	: 1
101	BROMODICHLOROMETHANE	UG/L	: 2
105	CHLORODIBROMOMETHANE	UG/L	: 2
10	BROMOFORM	UG/L	: 1
	TOTAL THMS	UG/L	: 6
213	MONOCHLOROACETIC ACID (MCAA)	UG/L	: 2.0K
116	MONOBROMOACETIC ACID (MBAA)	UG/L	: 1.0K
288	DICHLOROACETIC ACID (DCAA)	UG/L	: 1.0K
723	TRICHLOROACETIC ACID (TCAA)	UG/L	: 1.0K
721	DIBROMOACETIC ACID (DBAA)	UG/L	: 1.0K

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

LE NUMBER : D914327
LING POINT DESC. : 1299/NORTH PARK PWD/WELL 5

ITTING SOURCE # : 201550001 SITE # : 991130
COLLECTED : 991206 TIME COLLECTED : 1015 SAMPLING PROGRAM : TH

ECTED BY : G. KIRBY DELIVERED BY : UPS
ENTS : HAAS & THMS
ING CODE : PW32 AGENCY ROUTING : UNIT CODE :
TYPE CODE : DPWS SAMPLE PURPOSE CODE : 1 REPORTING INDICATOR : B

RECEIVED : 991207 TIME RECEIVED : 0900 RECEIVED BY : S L
OBSERVATIONS : 3-60ML/2-40ML THM TRIP BL SAM# : D914328
RVISORS INITIALS : GLG NOTE : K = LESS THAN VALUE

06	CHLOROFORM	UG/L	: 2
01	BROMODICHLOROMETHANE	UG/L	: 3
05	CHLORODIBROMOMETHANE	UG/L	: 3
04	BROMOFORM	UG/L	: 1
	TOTAL THMS	UG/L	: 9
13	MONOCHLOROACETIC ACID (MCAA)	UG/L	: 2.0K
16	MONOBROMOACETIC ACID (MBAA)	UG/L	: 1.0K
88	DICHLOROACETIC ACID (DCAA)	UG/L	: 1.0K
23	TRICHLOROACETIC ACID (TCAA)	UG/L	: 1.0K
21	DIBROMOACETIC ACID (DBAA)	UG/L	: 1.0K

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

LE NUMBER : D910827
LING POINT DESC. : 0999/NORTH PARK PWD [redacted] GLEASMAN ROAD

ITTING SOURCE # : 201550001 SITE # : 990909
COLLECTED : 990920 TIME COLLECTED : 1010 SAMPLING PROGRAM : TH

ECTED BY : GMK DELIVERED BY : UPS
ENTS : HAAS & THMS
ING CODE : PW32 AGENCY ROUTING : UNIT CODE :
TYPE CODE : DPWS SAMPLE PURPOSE CODE : 1 REPORTING INDICATOR : B

RECEIVED : 990921 TIME RECEIVED : 0900 RECEIVED BY : S L
OBSERVATIONS : 3-60ML/2-40ML THM TRIP BL SAM# : D910828
RVISORS INITIALS : GLG NOTE : K = LESS THAN VALUE

06	CHLOROFORM	UG/L	: 1
01	BROMODICHLOROMETHANE	UG/L	: 1
05	CHLORODIBROMOMETHANE	UG/L	: 2
0	BROMOFORM	UG/L	: 1.0K
	TOTAL THMS	UG/L	: 4
13	MONOCHLOROACETIC ACID (MCAA)	UG/L	: 2.0K
16	MONOBROMOACETIC ACID (MBAA)	UG/L	: 1.0K
88	DICHLOROACETIC ACID (DCAA)	UG/L	: 1.0K
23	TRICHLOROACETIC ACID (TCAA)	UG/L	: 1.0K
21	DIBROMOACETIC ACID (DBAA)	UG/L	: 1.0K

GG

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

LE NUMBER : D906375
LING POINT DESC. : 0699/NORTH PARK PWD/WELL 5

ITTING SOURCE # : 201550001 SITE # : 990610
COLLECTED : 990614 TIME COLLECTED : 1045 SAMPLING PROGRAM : TH

ECTED BY : GWK DELIVERED BY : UPS
ENTS : HAAS & THMS
ING CODE : PW32 AGENCY ROUTING : UNIT CODE :
TYPE CODE : DPWS SAMPLE PURPOSE CODE : 1 REPORTING INDICATOR : B

RECEIVED : 990615 TIME RECEIVED : 0900 RECEIVED BY : MAH
OBSERVATIONS : 3-60ML/2-40ML THM TRIP BL SAM# : D906376
RVISORS INITIALS : GLG NOTE : K = LESS THAN VALUE

06	CHLOROFORM	UG/L	: 3
01	BROMODICHLOROMETHANE	UG/L	: 4
05	CHLORODIBROMOMETHANE	UG/L	: 4
04	BROMOFORM	UG/L	: 1
	TOTAL THMS	UG/L	: 12
13	MONOCHLOROACETIC ACID (MCAA)	UG/L	: 2.0K
16	MONOBROMOACETIC ACID (MBAA)	UG/L	: 1.0K
88	DICHLOROACETIC ACID (DCAA)	UG/L	: 1.0K
23	TRICHLOROACETIC ACID (TCAA)	UG/L	: 1.0K
21	DIBROMOACETIC ACID (DBAA)	UG/L	: 1.0K

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

LE NUMBER : D903178
LI POINT DESC. : 0399/NORTH PARK PWD [redacted] GLEASMAN ROAD

ITTING SOURCE # : 201550001 SITE # : 990318
COLLECTED : 990323 TIME COLLECTED : 1300 SAMPLING PROGRAM : TH

ECTED BY : GMK DELIVERED BY : UPS
ENTS : THMS/REPLACEMENT SAMPLE FOR #D902921
ING CODE : PW32 AGENCY ROUTING : UNIT CODE :
TYPE CODE : DPWS SAMPLE PURPOSE CODE : 3 REPORTING INDICATOR : B

RECEIVED : 990324 TIME RECEIVED : 0900 RECEIVED BY : MAH
OBSERVATIONS : 2-40ML THMS TRIP BL SAM# : D903180
RVISORS INITIALS : GLG NOTE : K = LESS THAN VALUE

06	CHLOROFORM	UG/L : 1.0K
01	BROMODICHLOROMETHANE	UG/L : 1
0[illegible]	HLORODIBROMOMETHANE	UG/L : 1
04	BROMOFORM	UG/L : 1.0K
	TOTAL THMS	UG/L : 2

17

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

_E NUMBER : D903179
LING POINT DESC. : 0399/NORTH PARK PWD/[redacted]ROCKTON ROAD

ITTING SOURCE # : 201550005 SITE # : 990318
COLLECTED : 990323 TIME COLLECTED : 1230 SAMPLING PROGRAM : TH

ECTED BY : GMK DELIVERED BY : UPS
ENTS : THMS/REPLACEMENT SAMPLE FOR #D902920
ING CODE : PW32 AGENCY ROUTING : UNIT CODE :
TYPE CODE : DPWS SAMPLE PURPOSE CODE : 3 REPORTING INDICATOR : B

RECEIVED : 990324 TIME RECEIVED : 0900 RECEIVED BY : MAH
OBSERVATIONS : 2-40ML THMS TRIP BL SAM# : D903180
RVISORS INITIALS : GLG NOTE : K = LESS THAN VALUE

06 CHLOROFORM	UG/L	: 1
01 BROMODICHLOROMETHANE	UG/L	: 2
05 CHLORODIBROMOMETHANE	UG/L	: 3
04 BROMOFORM	UG/L	: 1
TOTAL THMS	UG/L	: 7

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

LE NUMBER : D814874
LIN POINT DESC. : 1298/NORTH PARK PWD/[redacted] TURRET DR

ITTING SOURCE # : 201550001 SITE # : 981202
COLLECTED : 981207 TIME COLLECTED : 0900 SAMPLING PROGRAM : TH

ECTED BY : GK DELIVERED BY : UPS
ENTS : HAAS & THMS
ING CODE : PW32 AGENCY ROUTING : UNIT CODE :
TYPE CODE : DPWS SAMPLE PURPOSE CODE : 1 REPORTING INDICATOR : B

RECEIVED : 981208 TIME RECEIVED : 0900 RECEIVED BY : G S
OBSERVATIONS : 3-60ML/2-40ML THM TRIP BL SAM# : D814876
RVISORS INITIALS : GLG NOTE : K = LESS THAN VALUE

06	CHLOROFORM	UG/L	: 1.0K
01	BROMODICHLOROMETHANE	UG/L	: 1
05	CHLORODIBROMOMETHANE	UG/L	: 1
04	BROMOFORM	UG/L	: 1.0K
	TOTAL THMS	UG/L	: 2
13	MONOCHLOROACETIC ACID (MCAA)	UG/L	: 2.0K
16	MONOBROMOACETIC ACID (MBAA)	UG/L	: 1.0K
88	DICHLOROACETIC ACID (DCAA)	UG/L	: 1.0K
23	TRICHLOROACETIC ACID (TCAA)	UG/L	: 1.0K
21	DIBROMOACETIC ACID (DBAA)	UG/L	: 1.0K

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

LE NUMBER : D814875
LING POINT DESC. : 1298/NORTH PARK PWD/[redacted] N 2ND ST

ITTING SOURCE # : 201550005 SITE # : 981202
COLLECTED : 981207 TIME COLLECTED : 1030 SAMPLING PROGRAM : TH

ECTED BY : GK DELIVERED BY : UPS
ENTS : HAAS & THMS
ING CODE : PW32 AGENCY ROUTING : UNIT CODE :
TYPE CODE : DPWS SAMPLE PURPOSE CODE : 1 REPORTING INDICATOR : B

RECEIVED : 981208 TIME RECEIVED : 0900 RECEIVED BY : G S
OBSERVATIONS : 3-60ML/2-40ML THM TRIP BL SAM# : D814876
RVISORS INITIALS : GLG NOTE : K = LESS THAN VALUE

06	CHLOROFORM	UG/L	: 1
01	BROMODICHLOROMETHANE	UG/L	: 1
05	CHLORODIBROMOMETHANE	UG/L	: 1
04	BROMOFORM	UG/L	: 1.0K
	TOTAL THMS	UG/L	: 3
18	MONOCHLOROACETIC ACID (MCAA)	UG/L	: 2.0K
16	MONOBROMOACETIC ACID (MBAA)	UG/L	: 1.0K
88	DICHLOROACETIC ACID (DCAA)	UG/L	: 1.0K
23	TRICHLOROACETIC ACID (TCAA)	UG/L	: 1.0K
21	DIBROMOACETIC ACID (DBAA)	UG/L	: 1.0K

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

PLE NUMBER : D811433
PLING POINT DESC. : 0998/NORTH PARK PWD/WELL 5

MITTING SOURCE # : 201550001 SITE # : 980903
E COLLECTED : 980909 TIME COLLECTED : 1120 SAMPLING PROGRAM : TH

LECTED BY : M. KRAUSE DELIVERED BY : UPS
MENTS : HAAS & THMS
DING CODE : PW32 AGENCY ROUTING : UNIT CODE :
TYPE CODE : DPWS SAMPLE PURPOSE CODE : 1 REPORTING INDICATOR : B

E RECEIVED : 980910 TIME RECEIVED : 0900 RECEIVED BY : S L
OBSERVATIONS : 3-60ML/2-40ML THM TRIP BL SAM# : D811434
E' :SORS INITIALS : GLG NOTE : K = LESS THAN VALUE

106	CHLOROFORM	UG/L	: 1.0K
101	BROMODICHLOROMETHANE	UG/L	: 1
105	CHLORODIBROMOMETHANE	UG/L	: 1
104	BROMOFORM	UG/L	: 1.0K
	TOTAL THMS	UG/L	: 2
21	MONOCHLOROACETIC ACID (MCAA)	UG/L	: 2.0K
D16	MONOBROMOACETIC ACID (MBAA)	UG/L	: 1.0K
288	DICHLOROACETIC ACID (DCAA)	UG/L	: 1.0K
723	TRICHLOROACETIC ACID (TCAA)	UG/L	: 1.0K
721	DIBROMOACETIC ACID (DBAA)	UG/L	: 1.0

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

IPLE NUMBER : D811432
IPLING POINT DESC. : 0998/NORTH PARK PWD/WELLS 6 & 6A

IMITTING SOURCE # : 201550005 SITE # : 980903
'E COLLECTED : 980909 TIME COLLECTED : 1155 SAMPLING PROGRAM : TH

LECTED BY : M. KRAUSE DELIVERED BY : UPS
IMENTS : HAAS & THMS
IDING CODE : PW32 AGENCY ROUTING : UNIT CODE :
I TYPE CODE : DPWS SAMPLE PURPOSE CODE : 1 REPORTING INDICATOR : B

E RECEIVED : 980910 TIME RECEIVED : 0900 RECEIVED BY : S L
OBSERVATIONS : 3-60ML/2-40ML THM TRIP BL SAM# : D811434
ERVISORS INITIALS : GLG NOTE : K = LESS THAN VALUE

106	CHLOROFORM	UG/L	: 4
101	BROMODICHLOROMETHANE	UG/L	: 4
105	CHLORODIBROMOMETHANE	UG/L	: 3
104	BROMOFORM	UG/L	: 1
	TOTAL THMS	UG/L	: 12
213	MONOCHLOROACETIC ACID (MCAA)	UG/L	: 2.0K
016	MONOBROMOACETIC ACID (MBAA)	UG/L	: 1.0K
288	DICHLOROACETIC ACID (DCAA)	UG/L	: 1.2
723	TRICHLOROACETIC ACID (TCAA)	UG/L	: 1.0K
721	DIBROMOACETIC ACID (DBAA)	UG/L	: 1.0K

DKM

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

PLE NUMBER : D714505
PLING POINT DESC. : 1197/NORTH PARK PWD/DIST 05 CEDARBROOK

MI NG SOURCE # : 201550005 SITE # :
E COLLECTED : 971117 TIME COLLECTED : 1130 SAMPLING PROGRAM : MT

LECTED BY : DENNIS DELIVERED BY : UPS
MENTS : THMS/MAXIMUM TRIHALOMETHANE POTENTIAL
DING CODE : PW32 AGENCY ROUTING : -- UNIT CODE :
TYPE CODE : DPWS SAMPLE PURPOSE CODE : 1 REPORTING INDICATOR : B

E RECEIVED : 971118 TIME RECEIVED : 0910 RECEIVED BY : G S
OBSERVATIONS : 3-40ML MTP TRIP BL SAM# : D714507
ERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

106	CHLOROFORM	UG/L	: 9
101	BROMODICHLOROMETHANE	UG/L	: 2
105	CHLORODIBROMOMETHANE	UG/L	: 1
104	BROMOFORM	UG/L	: 1.0K

012

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

PLE NUMBER : 0614872
PLING POINT DESC. : 1196/NORTH PARK PWD/WELL #5 [redacted] TULLET

MITTING SOURCE # : 201550001 SITE # : 961028
E COLLECTED : 961118 TIME COLLECTED : 1330 SAMPLING PROGRAM : MT

LECTED BY : M.KRAUSE DELIVERED BY : UPS
MENTS : THMS/MAXIMUM TRIHALOMETHANE POTENTIAL
DING CODE : PW32 AGENCY ROUTING : -- UNIT CODE :
TYPE CODE : DPWS SAMPLE PURPOSE CODE : 1 REPORTING INDICATOR : B

E RECEIVED : 961119 TIME RECEIVED : 0900 RECEIVED BY : GLS
OBSERVATIONS : 3-40-ML POTENTIAL TRIP BL SAM# : 0614873
ERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

106	CHLOROFORM	UG/L	: 12
101	BROMODICHLOROMETHANE	UG/L	: 8
105	CHLORODIBROMOMETHANE	UG/L	: 6
104	BROMOFORM	UG/L	: 1

02

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

PLE NUMBER : D600914
PLING POINT DESC. : 1195/NORTH PARK PWD/WELL # 5

MITTING SOURCE # : 201550001 SITE # : 960104
E COLLECTED : 960122 TIME COLLECTED : 1040 SAMPLING PROGRAM : MT

LECTED BY : L.ELLIS DELIVERED BY : UPS
MENTS : THMS/MAXIMUM TRIHALOMETHANE POTENTIAL REPLACEMENT
DING CODE : PW32 AGENCY ROUTING : -- UNIT CODE :
TYPE CODE : DPWS SAMPLE PURPOSE CODE : 3 REPORTING INDICATOR : B

E RECEIVED : 960123 TIME RECEIVED : 0900 RECEIVED BY : GLS
OBSERVATIONS : 3-40-ML POTENTIAL TRIP BL SAM# : D600915
ERVISORS INITIALS : RTN NOTE : K = LESS THAN VALUE

106	CHLOROFORM	UG/L	: 12
101	BROMODICHLOROMETHANE	UG/L	: 11
105	CHLORODIBROMOMETHANE	UG/L	: 7
1[illegible]	BROMOFORM	UG/L	: 2

32