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Envirotek II/Roblin Steel Site Potentially Responsible Parties Group

Groundwater Monitoring Report Sampling Events 1 and 2

Operable Unit 3

Envirotek II Superfund Site

Tonawanda, New York

March 2007

Mark B. Hanish Project Manager Groundwater Monitoring Report Sampling Events 1 and 2 Operable Unit 3

Envirotek II Superfund Site

Prepared for.

Envirotek II/Roblin Steel Site Potentially Responsible Parties Group

Prepared by: ARCADIS U.S., Inc. 600 Waterfront Drive Pittsburgh Pennsylvania 15222 Tel 412.231.6624 Fax 412.231.6147

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Acronyms and Units of Measurement

AOC Administrative Order by Consent
ARCADIS BBL ARCADIS of New York, Inc.
BBL Blasland, Bouck & Lee, Inc.
COC constituent of concern

Colorado F&I Colorado Fuel and Iron Corporation

°C degrees Celsius
cis-1,2-DCE cis-1,2-dichloroethene
DO dissolved oxygen
1,1-DCA 1,1-dichloroethane
Envirotek Envirotek Ltd.
ft/ft foot per foot

FFS Focused Feasibility Study
IRM Interim Remedial Measures

mg/L milligrams per liter

MNA monitored natural attenuation

mV millivolts

NFA no further action

NRW Niagara River World, Inc.

NYSDEC New York State Department of Environmental Conservation

ORP oxidation-reduction potential

OU Operable Unit

PRP Potentially Responsible Parties
QA/QC quality assurance/quality control
RASP Remedial Action Sampling Plan

RCRA Resource Conservation and Recovery Act

RI remedial investigation
ROD Record of Decision
SDA Still Discharge Area

STL Severn Trent Laboratories, Inc.

TCE trichloroethene

TOGS Technical and Operational Guidance Series
USEPA United States Environmental Protection Agency

VC vinyl chloride

VOC volatile organic compound

Wickwire Spencer Steel Company

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1. Introduction

ARCADIS of New York, Inc. (ARCADIS BBL, formerly known as Blasland, Bouck and Lee, Inc. [BBL]) respectfully submits this *Groundwater Monitoring Report – Sampling Events 1 and 2* (report) on behalf of the Envirotek II/Robin Steel Site Potentially Responsible Parties (PRP) Group for the Envirotek II Superfund Site located at 4000 River Road in the town of Tonawanda, Erie County, New York (site). Groundwater Sampling Events 1 and 2 were performed and this report is being submitted in accordance with the April 17, 2006 *Groundwater Monitoring Plan – Operable Unit 3* (Monitoring Plan for OU-3) (BBL, 2006), which is pending formal approval.

The New York State Department of Environmental Conservation's (NYSDEC's) March 2005 Record of Decision (ROD) selected monitored natural attenuation (MNA) as the proposed remedy to compete the final remedial action of OU-3. The Monitoring Plan for OU-3 (BBL, 2006) was designed to evaluate water quality trends and the rate of water quality improvement to assess whether MNA continues to be an effective remedy for OU-3.

1.1 Site Location

The site consists of a 2.5-acre parcel of land located within the 50-acre Roblin Steel complex (NYSDEC Site #915056) at 4000 River Road in the Town of Tonawanda, Erie County, New York. A map identifying the approximate location of the Roblin Steel complex is presented as Figure 1. Figure 2 presents a site plan of the Roblin Steel complex that includes the Envirotek II site. The Roblin Steel complex (Figure 2), which is presently owned by Niagara River World, Inc. (NRW), is bounded on the west by the Niagara River, on the east by River Road, on the south by Marathon Oil, and on the north by a facility that was investigated and remediated by the NYSDEC (i.e., the River Road Site [NYSDEC Site #915031]).

1.2 Site History

The history of the site is interrelated with the history of the Roblin Steel complex, as the site was formerly leased by Envirotek Ltd. Company (Envirotek) from Roblin Steel for industrial use. Between August 1981 and June 1989, Envirotek operated a solvent recovery operation at the site located within the Roblin Steel property.

A review of the property history indicates that the Roblin Steel site was the location of industrial steel production operations beginning in the early 1900s. Prior to

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development of the property, a section of the Erie Canal along River Road was filled with unspecified materials. In addition, Rattlesnake Creek, which formerly ran through the Roblin Steel property, was backfilled with slag and industrial debris to bridge Rattlesnake Island with the main property and to fill in low areas that were located within the seasonal floodplains. The property was developed in the early 1900s for the production of steel by the Wickwire Spencer Steel Company (Wickwire). In 1945, the property was sold to the Colorado Fuel and Iron Corporation (Colorado F&I), which subsequently merged with Wickwire, and was operated by Colorado F&I until it went bankrupt in 1963. In the mid- to late-1960s, Roblin Steel purchased the property and used it primarily for storage. Roblin Steel also subleased portions of the property to a number of other companies, including, but not limited to, Ascension Chemical, Rupp Rental, Freightways Transportation, Envirotek, and Booth Oil.

In 1984, the NYSDEC issued a Resource Conservation and Recovery Act (RCRA) Part B Permit to Envirotek to operate the site as a hazardous waste treatment, storage, and disposal facility. After violations of this permit in 1985, including improper waste characterization, RCRA drum handling violations, and lack of insurance and financial assurance, Envirotek entered into an Administrative Order of Consent (AOC) with the NYSDEC that required a reduction of Envirotek's hazardous waste inventory.

In 1988, Envirotek submitted a *Facility Closure Plan* (Envirotek, 1988) to the NYSDEC to remove and dispose of all materials remaining onsite and to take measures to decontaminate the property. The NYSDEC denied approval of the *Facility Closure Plan* after its review determined that this plan was unacceptable because the NYSDEC believed that it contained inaccurate closure costs and proposed the use of unqualified personnel to implement the closure.

On February 2, 1989, Envirotek filed a petition under Chapter 11 of the Bankruptcy Code in the United States Bankruptcy Court of the Western District of New York. The current owner of the property, NRW, evicted Envirotek in June 1989, at which time Envirotek abandoned the facility. On November 16, 1989, the NYSDEC formally revoked Envirotek's RCRA Part B Permit to operate on the basis of Envirotek's inability to develop an acceptable Facility Closure Plan.

Following abandonment of the site, the United States Environmental Protection Agency (USEPA) inspected the site and confirmed the presence of abandoned and unsecured drums and containers, pits containing hazardous substances, and contaminated process vessels and tanks. Preliminary analysis of some of the materials suggested that corrosive, air-reactive, and metal-contaminated wastes, as well as oils and waste

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solvents, were present onsite. Many of the materials located onsite were flammable, with some known to be either acutely or chronically toxic.

As a result, the USEPA notified former Envirotek customers of their potential liability at the site and requested the performance of a removal action to control site conditions. As a result, on May 14, 1990, the USEPA entered into an AOC with site respondents to perform a removal action at the site (Removal Action AOC). The site boundaries, as defined in this Removal Action AOC, included the property once leased by Envirotek and the southeast portion of the hangar-like building that contained the aforementioned pits, which was located adjacent to the property once leased by Envirotek.

Under the Removal Action AOC, several tasks were completed by the Envirotek II/Roblin Steel Site PRP Group, including the following:

Between June 1990 and November 1990, characterization; removal; transportation; and offsite disposal of approximately 980 drums, 3,500 gallons of liquid wastes, 363 tons of solid wastes, and 146 lab pack containers, all of which had been stored in Buildings 13, 24, and 153.

Between July 1990 and October 1990, characterization, removal, transportation, and offsite disposal of waste materials that were formerly stored in Pits 1, 2, 3, 3A, 4, and 5; decontamination of the former pits; offsite transportation and disposal of decontamination water; and backfilling of the pits.

- Between June 1990 and January 1991, decontamination of a number of process vessels, tanks, buildings, and equipment.
- Between September 1990 and November 1990, implementation of a Remedial Action Sampling Plan (RASP) (BBL, 1990) at the site to identify areas onsite, other than the Still Discharge Area (SDA), at which spills or releases of chemical compounds may have occurred. The RASP also estimated the direction and rate of groundwater flow in the shallow overburden aquifer underlying the site, evaluated the nature of chemical compounds in groundwater that were associated with the former activities at the site, and provided a preliminary characterization of site conditions that would be the basis for evaluating whether further investigation and/or remediation of the site would be warranted. To accomplish these objectives, the Envirotek II/Roblin Steel Site PRP Group performed a soil gas survey, installed and sampled site

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groundwater monitoring wells, analyzed groundwater samples for volatile organic compounds (VOCs), and collected soil samples from the SDA.

The results of this investigation indicated the following:

- The soil gas survey indicated elevated levels of VOCs in the area of the SDA and in an area to the west of Building 153.
- The analytical results for the groundwater sampling indicated the presence of VOC-impacted groundwater associated with the site.
- The analytical results for the soil sampling indicated that there were elevated levels of chlorinated and aromatic VOCs and that the soils containing the highest level of VOCs were located in the vicinity of the SDA.
- Following implementation of the RASP in 1990, evaluation of potential interim remedial alternatives for the SDA by BBL in March 1991.
- In May 1993, implementation of a removal action that consisted of the removal of approximately 175 tons of impacted soil from the SDA. Soils with field headspace screening results greater than 1,000 units of total volatile organic vapors were removed from this area. A polyethylene sheet was placed over the remaining soils in the excavation, and clean fill was placed over the polyethylene sheet. A 12-inch-diameter production well located near the Power Building was also abandoned during this field activity.

The NYSDEC and the Envirotek II/Roblin Steel Site PRP Group entered into a Consent Order on September 2, 1997. This order was amended on August 20, 1998. The Consent Order, and its amendment, obligated the responsible parties to implement a remedial investigation/feasibility study (RI/FS) remedial program.

From 1999 to 2001, the Envirotek II/Roblin Steel Site PRP Group conducted an RI at the site to assess the onsite surface and subsurface soil quality, offsite subsurface soil quality, site groundwater quality, and site geologic and hydrogeologic characteristics. The results of the RI for the site are presented in the *Remedial Investigation Report* (RI Report) (BBL, 2002). Based on the results of the RI, the Envirotek II/Roblin Steel Site PRP Group submitted three recommendations to the NYSDEC, including:

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- Implementing an Interim Remedial Measure (IRM) to remove the Boiler House ink waste for offsite disposal; removing soils containing elevated levels of VOCs from Waste Pit No. 6, decontaminating the pit, and backfilling the pit with clean backfill; and disposing of all solid, liquid, and personal protection equipment generated during this IRM to an approved offsite disposal facility(ies).
- Reducing the potential for migration of VOC constituents of concern (COCs) from source-area soils to the shallow overburden groundwater.
- Reducing the concentration of VOC COCs in shallow overburden groundwater associated with elevated VOC concentrations in source-area soils.

The first recommendation, which is defined as OU-1 and is related to the removal of ink waste in the Boiler House and VOC-impacted soil in Waste Pit No. 6, was implemented in April 2003 and is summarized in the *Interim Remedial Measures Final Report for Operable Unit 1* (IRM Final Report for OU-1) (BBL, June 2003). The IRM Final Report for OU-1 was reviewed and approved by the NYSDEC in No Further Action (NFA) letters dated November 5 and 19, 2003.

The second recommendation, which is defined as OU-2 and is related to reducing the potential for migration of VOC COCs from source-area soils to the shallow overburden groundwater, was implemented in October 2003 and is summarized in the *Interim Remedial Measures Final Report for Operable Unit 2* (IRM Final Report for OU-2) (BBL, 2004a). Following review of the IRM Final Report for OU-2, the NYSDEC issued an NFA letter for OU-2 dated February 9, 2004.

The third recommendation, defined as OU-3 and is related to reducing the concentration of VOC COCs in shallow overburden groundwater associated with elevated VOC concentrations in source-area soils, was discussed in the January 31, 2005 Interim Remedial Measures Final Report for Operable Unit 3 (IRM Final Report for OU-3) (BBL, 2005a). The implementation of the OU-2 IRM had an expected significant beneficial effect on OU-3 because more than 7,100 tons of impacted soil was removed as a potential future source of VOC COCs in groundwater. The IRM Final Report for OU-3 presented an evaluation of groundwater gauging and sampling data and the historical occurrence and future viability of natural attenuation and supported the selection of an MNA remedy. The NYSDEC approved the IRM Final Report for OU-3 on March 9, 2005 (NYSDEC, 2005a). On March 11, 2005, the Envirotek Il/Roblin Steel Site PRP Group then submitted the Focused Feasibility Study

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Report (FFS) (BBL, 2005b) that identified MNA as the best remedial option for OU-3. The FFS was approved by the NYSDEC on March 24, 2005 (NYSDEC, 2005b). The NYSDEC then issued the ROD for the site on March 31, 2005 (NYSDEC, 2005c), which selects MNA as the proposed remedy to compete the final remedial action of OU-3.

The Monitoring Plan for OU-3 (BBL, 2006) proposed to implement an annual MNA groundwater sampling program utilizing the existing monitoring well network. The objective of the Monitoring Plan for OU-3 is to obtain additional groundwater monitoring data, to supplement the existing data, and to evaluate whether MNA continues to be an effective remedy for OU-3.

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2. Groundwater Monitoring Activities

The Envirotek II/Roblin Steel Site PRP Group engaged ARCADIS BBL to perform Groundwater Sampling Event No. 1 on October 17, 2005 and Groundwater Sampling Event No. 2 on October 5, 2006. Groundwater elevation data were collected from all site monitoring wells, with the exception of monitoring wells ESI-8 and NW-1, which were inaccessible during the 2005 and 2006 events. Monitoring wells GW-5 and ENV-1D and staff gauge NR-1 were also inaccessible during the 2006 gauging event. Groundwater samples were collected from the seven monitoring wells that define the OU-3 monitoring well network (ENV-1, ENV-3R, ENV-4, ENV-7, ENV-8, ENV-9, and GW-3).

Groundwater gauging and sampling was performed in accordance with procedures presented in the Monitoring Plan for OU-3 (BBL, 2006) and Sampling and Analysis Plan and Quality Assurance/Quality Control Plan contained with the March 1999 Remedial Investigation/Feasibility Study Work Plan (BBL, 1999). Groundwater samples were collected using low-flow purging and sampling techniques. Prior to sampling, each monitoring well was purged using a peristaltic pump and dedicated tubing until parameters of pH, conductance, dissolved oxygen (DO), temperature, and oxidation-reduction potential (ORP) stabilized, which provides an indication that water drawn from the well is representative of the groundwater in the surrounding formation. After the monitored parameters stabilized, samples were collected with a disposable bailer into laboratory-provided sample containers.

Several quality control samples, including a trip blank, a field blank, a matrix spike and matrix spike duplicate, and a field duplicate were collected during the sampling event.

Samples were delivered under chain of custody to Severn Trent Laboratories, Inc. (STL) in Buffalo, New York for analysis of VOCs by USEPA SW-846 Method 8260.

Purge water generated during the groundwater sampling activities was containerized in labeled 55-gallon drums and staged onsite for disposal at a licensed disposal facility.

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3. Groundwater Monitoring Results

This section presents the results of Groundwater Sampling Events 1 and 2. Included are descriptions of site-specific hydrogeology, the identification and distribution of constituents present in groundwater, and a discussion of whether MNA continues to be an effective remedy for OU-3. Constituents detected in groundwater were compared to the applicable NYSDEC Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) Groundwater Standards and Guidance Values.

3.1 Site Hydrogeology

Groundwater gauging data collected during the sampling events are presented in Table 1. Figures 3 and 4 illustrate the groundwater elevation contours within the upper fill material based on the data collected on October 17, 2005 and October 5, 2006, respectively.

The groundwater elevation contours are consistent with historical interpretations. The groundwater flow has a radial component of flow, particularly on the eastern side of the site, and a more unidirectional flow on the western side of the site, proximal to the Niagara River. The October 17, 2005 groundwater gradient calculated between monitoring wells ENV-1 and GW-5 was 0.0037 foot/foot (ft/ft) and the October 5, 2006 groundwater gradient calculated between monitoring wells ENV-1 and GW-6 was 0.0035 ft/ft, which are consistent with the gradients calculated in May and September 2004.

3.2 Groundwater Analytical Results

A summary of the constituents detected in groundwater during Groundwater Sampling Events 1 and 2 is presented in Table 2. The NYSDEC TOGS are listed, if available, for each compound in Table 2. Figures 5 and 6 illustrate the distribution of total VOC concentrations detected in each of the seven wells during the October 2005 and October 2006 groundwater sampling events, respectively. Laboratory analytical reports are provided in Appendix A.

Historical groundwater analytical data is included in Table 2. Total groundwater VOC concentration maps presented in the IRM Final Report for OU-3 (BBL, 2005a) are included as Figures 7, 8, and 9.

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As shown in Table 2, nine VOCs were detected onsite. Five VOCs were detected in five of the seven monitoring wells sampled during the October 2005 event and five VOCs were detected in four of the seven wells during the October 2006 event. As illustrated on Figures 5 and 6, there is an elevated total VOC plume in groundwater within the shallow overburden zone in the central portion of the property. This plume is centered at monitoring well ENV-7, which contained the highest total VOC concentrations (0.394 milligrams per liter [mg/L] in October 2005 and 0.243 mg/L in October 2006).

As described in the IRM Final Report for OU-3 (BBL, 2005a), the size of the total VOC plume has been shrinking over time. Figures 5 through 9 provide a visual depiction of how the areal extent of the total VOC plume has been reducing. Figure 9, depicting the VOC concentrations in groundwater from September 1999, shows a total VOC plume that covers the majority of the site, with a total VOC concentration of nearly 50 mg/L at well ENV-2. Figures 8 (May 5, 2004) and 7 (September 28, 2004) indicate significantly smaller total VOC plumes. Total VOC concentrations at all monitoring wells in May and September 2004 were all less than 1 mg/L. Figure 6, which depicts the VOC concentrations in groundwater from the October 17, 2005 sampling event, indicates a continued shrinking of the extent of the total VOC plume; there were no VOCs detected at well ENV-1 and GW-3. Figure 5 presents evidence of further shrinking of the total VOC plume in October 2006 with no VOCs detected in groundwater sampled from monitoring wells ENV-1, ENV-9, and GW-3.

The following table provides a descriptive analysis of groundwater analytical data collected from the upper overburden wells during Groundwater Sampling Events 1 and 2. Concentration trend plots for selected compounds are presented on Figures 10 through 16.

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Descriptive Analysis of Groundwater Quality Data

Monitoring Well	Long-Term Descriptive Trend Analysis	Additional Comments
	Upper Overbu	irden Monitoring Wells
ENV-1	No VOCs have been detected since 1990, with the exception of methylene chloride, which was detected at a low concentration in 2004.	No VOCs were detected during Groundwater Sampling Events 1 and 2.
ENV-3/3R	Variable, but generally low and decreasing VOC concentrations.	1,1-DCA, cis-1,2-DCE, TCE, and VC were detected at concentrations exceeding the NYSDEC TOGS during Groundwater Sampling Event 1, and 1,1-DCA, cis-1,2-DCE, and VC were detected at concentrations exceeding the NYSDEC TOGS during Sampling Event 2. Relatively significant decreases in cis-1,2-DCE and VC were noted in the October 2005 and October 2006 data compared to the September 2004 data.
ENV-4	Decreasing VOC concentrations.	Only cis-1,2-DCE was detected at a concentration exceeding its NYSDEC TOGS during Groundwater Sampling Events 1 and 2.
ENV-7	Variable, but generally decreasing VOC concentrations.	Cis-1,2-DCE and VC were detected at concentrations exceeding the NYSDEC TOGS during Groundwater Sampling Events 1 and 2. Concentrations of all VOCs decreased during Groundwater Sampling Event 2.
ENV-8	Variable, but generally low and decreasing VOC concentrations.	Cis-1,2-DCE and TCE were detected at concentrations exceeding the NYSDEC TOGS during Groundwater Sampling Events 1 and 2. VC was detected above the NYSDEC TOGS during Groundwater Sampling Event 1 but decreased to below the NYSDEC TOGS during Groundwater Sampling Event 2.
ENV-9	No VOCs detected.	No VOCs were detected above the NYSDEC TOGS during either sampling event.
GW-3	No VOCs detected.	No VOCs were detected during Groundwater Sampling Events 1 and 2.

Notes: cis-1,2-DCE – cis-1,2-dichloroethene

1,1-DCA - 1,1-dichloroethane

TCE - trichloroethene

VC - vinyl chloride

NYSDEĆ TOGS - New York State Department of Environmental Conservation Technical and Operational Guidance Series

1.1.1: Ambient Water Quality Standards and Guidance Values

3.3 Monitoring Natural Attenuation Evaluation

As discussed in the IRM Final Report for OU-3 (BBL, 2005a), benzene, toluene, ethylbenzene, and xylene compounds and chlorinated VOCs can be biodegraded insitu by naturally occurring aerobic and anaerobic microorganisms. These metabolic processes require proper microorganisms, water, circum-neutral pH conditions, adequate temperature, a supply of electron acceptors or alternate electron acceptors, and nutrients.

Field measured geochemical parameters are summarized in Table 3. These data can be used to assess the continued effectiveness of MNA in addressing the dissolved VOC groundwater plume at OU-3.

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During the October 2005 sampling event, the pH of site groundwater samples ranged from 6.32 (ENV-1) to 7.96 (ENV-4) standard units, with the exception of GW-3, which indicated an elevated pH of 10.11 standard units. During the October 2006 sampling event, the pH of site groundwater samples ranged from 6.96 (ENV-1) to 9.09 (ENV-4) standard units, with the exception of GW-3, which indicated an elevated pH of 11.71 standard units (Table 3).

Groundwater pH between 7 and 9 standard units is considered favorable for microbiologic growth. Therefore, according to the October 2005 and 2006 data, groundwater pH within the VOC groundwater plume is within acceptable limits for microbiologic activity.

Temperature

Groundwater temperatures greater than 10 degrees Celsius (°C) are considered favorable for microbiologic growth. Temperatures of groundwater samples ranged from 13.44 to 16.09°C across the site during the October 2005 sampling event and from 13.10 to 15.60°C during the October 2006 sampling event (Table 3), indicating appropriate conditions across the site for microbiologic activity.

Oxidation-Reduction Potential

ORP readings of site groundwater samples ranged from -208.1 millivolts (mV) to 233.8 mV during the October 2005 sampling event and from -330 mV to -141 mV during the October 2006 sampling event (Table 3). This suggests conditions conducive to the possible aerobic and anaerobic microbial activity (under strongly reducing geochemical conditions that are supported by anaerobic ORP reactions) in site groundwater during the October 2005 sampling event, and only anaerobic ORP reactions during the October 2006 sampling event.

The positive ORP readings at wells ENV-7 and ENV-8 (58.7 mV and 233.8 mV, respectively) during the October 2005 sampling event indicate conditions conducive to possible aerobic microbial activity, while highly negative ORP readings at other site wells (ranging from -110.7 [GW-3] to -208.1 [ENV-9] during the October 2005 sampling event and from -330 mV [ENV-4] to -141 mV [ENV-7] during the October 2006 sampling event) indicate possible anaerobic ORP reactions, such as methanogenesis.

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Methanogenesis is typically associated with ORP readings less than approximately -50 mV.

Dissolved Oxygen

Aerobic respiration is a biologically mediated ORP reaction known to destroy organic chemicals in groundwater. During aerobic respiration, aerobic microorganisms use DO as an electron acceptor and dissolved organic chemicals as a source of carbon. Aerobes reduce molecular oxygen and oxidize dissolved organic chemicals, resulting in the production of carbon dioxide and chloride ions. Rain can contain DO concentrations up to 10 mg/L and is a primary source of DO in groundwater. DO concentrations measured at groundwater monitoring wells can be used to evaluate the presence and magnitude of aerobic respiration.

DO concentrations in site groundwater samples ranged from 0 mg/L to 0.57 mg/L during the October 2005 sampling event (Table 3). Since all DO concentrations are less than 1 mg/L, it is likely that DO in site groundwater has been depleted and that anaerobic processes are occurring. This DO data is consistent with the ORP data, which also indicated anaerobic activity at site monitoring wells, with the exception of wells ENV-7 and ENV-8.

During the October 2006 sampling event, DO concentrations in site groundwater samples ranged from 0 mg/L to 9.60 mg/L, with DO concentrations less than 1 mg/L at only ENV-8 and GW-3 (Table 3). The elevated DO values measured during the October 2006 groundwater sampling event appear to be inconsistent with the highly negative ORP values measured during that event. This suggests that one of the field meters may have been malfunctioning at the time. We suspect that because the DO concentrations observed on the field meter were so close to the theoretical maximum expected in rainwater and were so different than that measured during previous groundwater sampling events the DO measurements may be inaccurate. We suspect that the groundwater conditions encountered in October 2006 continued to be such to promote anaerobic processes.

3.4 Quality Assurance/Quality Control Analytical Results

Groundwater samples were analyzed for VOCs by USEPA SW-846 Method 8260 volatiles at STL in Buffalo, New York. The laboratory data were independently reviewed by a data validator in accordance with USEPA National Functional Guidelines of October 1999.

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The results of the field duplicate, equipment blank, and other quality assurance/quality control (QA/QC) samples collected during the October 2005 and October 2006 sampling events are presented in Table 2. The associated laboratory analytical reports are presented in Appendix A.

The QA/QC measurements examined for the 2005 data were within method-specified or laboratory-derived limits. No 2005 data were rejected as a result of the data validation. Several results of the 2006 data were qualified with a J, indicating an estimated concentration and chloroethane data were rejected (R) as a result of the data validation.

3.5 Conclusions

Based on the data presented herein, groundwater quality conditions continue to improve at the Envirotek site suggesting that the MNA remedy has been successful in shrinking the size and magnitude of the VOC plume in groundwater. Therefore, continued implementation of the April 17, 2006 Monitoring Plan for OU-3 through the next groundwater sampling round, tentatively scheduled for October 2007, is recommended. If groundwater conditions continue to improve or at least remain stable, the Envirotek II/Roblin Steel Site PRP Group will consult with the NYSDEC to pursue an NFA letter for OU-3.

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Groundwater Monitoring
Report – Sampling
Events 1 and 2
Operable Unit 3
Envirotek II Superfund Site

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Tables

Table 1 Groundwater Level Measurements

Envirotek II Site - Tonawanda, New York Groundwater Monitoring Report Sampling Events 1 and 2

	Ground	Reference	5/5	/2004	9/28	3/2004	10/1	7/2005	10/5/2006		
Monitoring Point I.D.	Surface Elevation (feet)	Elevation (feet)	Point (RP) Elevation (feet)	Depth to Water from RP (feet)	Groundwater Elevation (feet)	Depth to Water from RP (fee)	Groundwater Elevation (feet)	Depth to Water from RP (feet)	Groundwater Elevation (feet)	Depth to Water from RP (feet)	Groundwater Elevation (feet)
GW-1 ²	576.50	575.77	6.15	569.62	6.37	569.4	6.20	569.57	5.78	569.99	
GW-2	579.60	582.00	12.85	569.15	13.01	568.99	13.14	568.86	12.73	569.27	
GW-3	576.60	579.00	8.62	570.38	8.79	570.21	9.62	569.38	9.56	569.44	
GW-4	573.43	575.89	9.72	566.17	9.87	566.02	9.90	565.99	9.69	566.20	
GW-5⁴	571.10	573.39	6.93	566.46	7.16	566.23	4.70	566.30	NA	-	
GW-6	571.40	574.08	6.35	567.73	6.49	567.59	7.01	567.07	6.29	567.79	
GW-7	579.26	581.96	11.78	570.18	11.93	570.03	12.19	569.77	11.9	570.06	
ENV-1	579.95	579.46	7.1	572.36	7.29	572.17	7.81	571.65	6.51	572.95	
ENV-3R	NA	580.14	8.98	571.16	9.12	571.02	9.40	570.74	9.19	570.95	
ENV-4	580.21	582.60	11.21	571.39	11.39	571.21	12.35	570.25	12.17	570.43	
ENV-5	579.20	581.48	10.05	571.43	10.31	571.17	11.21	570.27	11.02	570.46	
ENV-6	579.70	582.05	10.62	571.43	10.84	571.21	11.72	570.33	11.37	570.68	
ENV-7	580.07	582.74	12.1	570.64	12.26	570.48	12.45	570.29	12.3	570.44	
ENV-8	580.48	583.11	12.15	570.96	12.37	570.74	12.56	570.55	12.37	570.74	
ENV-9	580.77	583.65	12.7	570.95	12.93	570.72	13.08	570.57	12.87	570.78	
ESI-7	NA	NA	12.42		12.56		13.17	155	12.95		
ESI-8	577.20	580.06	8.82	571.24	8.97	571.09	NA		NA		
NW-1	579.26	578.92	Could	not locate	Could	not locate	Could	not locate	Control William Control No.	not locate	
NW-2	579.09	581.25	11.95	569.3	12.08	569.17	11.82	569.43	11.8	569.45	
NW-4	578.70	581.16	10.28	570.88	10.36	570.8	10.59	570.57	10.54	570.62	
NW-5	579.40	581.58	9.01	572.57	9.32	572.26	9.26	572.32	8.74	572.84	
ENV-1D	579.95	579.63	12.65	566.98	12.79	566.84	14.29	565.34	NA		
ENV-10D	576.53	579.20	13.08	566.12	13.29	565.91	13.14	566.06	13.21	565.99	
NR-1 ¹		571.07	5.35	565.72	5.61	565.46	4.96	566.11	NA	***	

Notes:

- 1. Staff gauge on sheet piling along Niagara River.
- 2. GW-1 was repaired and retrofitted as a flush-mount well in April 2001.
- 3. Data based upon site survey prior to October 1999.
- 4. GW-5 was damaged between September 2004 and October 2005. October 2005 Reference Point (RP) Elevation = Ground Surface Elevation = 571.00 feet.

Ground surface and reference point elevations based upon October 1999 and June 2000 site survey.

Monitoring wells GW-1 and ESI-7 were damaged and not useable during the 9/29/99 water-level measurement event.

NA - data not available

--- Groundwater elevation could not be calculated because no reference point elevation was available.

Envirotek II Site - Tonawanda, New York **Groundwater Monitoring Report** Sampling Events 1 and 2

Sample ID:	NYSDEC TOGS 1.1.1				E	NV-1		
	Water Quality		00100100	04140104	05/05/04	20100101	40/47/05	40107100
Date Collected: 1,1,1-Trichloroethane	Standards ¹	Units µg/L	09/29/99 10 U	04/18/01 10 U	05/05/04 1 U	09/28/04 5 U	10/17/05 10 U	10/05/06 1 U
	54	1		100				
1,1,2,2-Tetrachloroethane		µg/L	-	-	-	22	10 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	µg/L					10 U	1 U
1,1,2-Trichloroethane	1 1	µg/L	10 U	10 U	10	5 U	10 U	1 U
1,1-Dichloroethane	5	μg/L	10 U	10 U	1 U	5 U	10 U	1 U
1,1-Dichloroethene	5	µg/L	10 U	10 U	1 ∪	5 U	10 U	1 U
1,2,4-Trichlorobenzene	5	µg/L					10 U	1 U
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L		-			10 U	1 U
1,2-Dibromoethane (EDB)	NE	µg/L					10 U	1 U
1,2-Dichlorobenzene	3	μg/L					10 U	1 U
1,2-Dichloroethane	5 / 0.6	µg/L	10 U	10 U	1 U	5 U	10 U	1 U
1,2-Dichloropropane	5	μg/L		-	-		10 U	1 U
1,3-Dichlorobenzene	3	µg/L	-	-	-		10 U	1 U
1,4-Dichlorobenzene	3	µg/L				-	10 U	1 U
2-Hexanone	50	µg/L	10 U	10 U	5 U	25 U	10 U	5 U
Acetone	50	µg/L	10 U	10 U	5 U	25 U	10 U	5 U J
Benzene	1	µg/L	10 U	10 U	10	5 U	10 U	1 U
Bromoform	NE / 50 ²	µg/L					10 U	1 U
Bromomethane	5	µg/L		155			10 U	1 U J
Carbon Disulfide	NE / 60	µg/L	10 U	10 U	1∪	5 U	10 U	1 U
Carbon Tetrachloride	5	µg/L					10 U	1 U
Chlorobenzene	5	µg/L	10 U	10 U	1 U	5 U	10 U	1 U
Chloroethane	5	µg/L	10 U	10 U	1 U	5 U	10 U	R
Chloroform	7	µg/L	10 U	10 U	1 U	5 U	10 U	1 U
Chloromethane	NE	µg/L	-				10 U	1 U
cis-1,2-Dichloroethene	5	µg/L		10 U	1 U	5 U	10 U	1 U
cis-1,3-Dichloropropene	0.4 3	µg/L					10 U	1 0
Cyclohexane	NE	µg/L					10 U	1 0
Dibromochloromethane	NE / 50 ²	µg/L					10 U	1 0
Dichlorobromomethane	NE	µg/L					10 U	1 0
Dichlorodifluoromethane	5 4	µg/L					10 U	1 U
Ethylbenzene	5	µg/L	10 U	10 U	1 U	5 U	10 U	1 0
Isopropylbenzene	5 4	µg/L	100		'-		10 U	1 1 U
Methyl acetate	NE NE	µg/L					10 U	1 U J
, ,		1	ı		1	ı		
Methyl Ethyl Ketone	NE / 50 ²	μg/L	10 U	10 U	10	25 U	10 U	5 U
Methyl Isobutyl Ketone	NE	μg/L	10 U	10 U	5 U	25 U	10 U	5 U
Methylcyclohexane	NE	µg/L	40.11	40.11		l <u>-</u>	10 U	1 U
Methylene chloride	5	µg/L	10 U	10 U	2 U	3 J	10 U	1 U
Methyl-t-Butyl Ether (MTBE)	NE / 10	µg/L	-		-		10 U	1 U
Styrene	50	hg/r					10 U	1 U
Tetrachloroethene	5	µg/L	10 U	10 U	10	25 U	10 U	1 U
Toluene	5	µg/L	10 U	10 U	1 U	25 U	10 U	1 U
Total Xylenes	5	µg/L	10 U	10 U	3 U	15 U	10 U	3 U
trans-1,2-Dichloroethene	5	µg/L	NA	10 U	1 U	5 U	10 U	1 U
trans-1,3-Dichloropropene	0.4 3	µg/L	-	-		-	10 U	1 U
Trichloroethene	5	µg/L	10 U	10 U	1 U	5 U	10 U	1 U
Trichlorofluoromethane	5	µg/L		_		-	10 U	1 U
Vinyl chloride	2	µg/L	10 U	10 U	1 U	5 U	10 U	1 U
Total VOCs		µg/L	ND	ND	ND	3	ND	ND
Total VOCs		mg/L	ND	ND	ND	0.003	ND	ND

- Notes:

 1. New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values (µg/L).

 Where two values are provided, the first represents pre-2004 values and the second represents revised values used for the 2004 data.

- Guidance Value used where a standard has not been established.
 Applies to the sum of cis-1,3-dichloropropene and trans-1,2-dichloropropene.
 The principal organic contaminant standard for groundwater of 5 µg/L applies to this analyte.

Bolded concentrations indicate the analyte was detected.

- Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

 NE NYSDEC TOGS 1.1.1 water quality standard not established.

 U The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.
- J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
- R The sample results are rejected.
 D Compound identified in analysis at a secondary dilution factor.

Envirotek II Site - Tonawanda, New York Groundwater Monitoring Report Sampling Events 1 and 2

	NYSDEC	學療	13.1.324	g Mills of the second		de la lación
Sample ID:	TOGS 1.1.1		ENV-1D	N. 878 P. P. S. A. S. A. S. A.	ENV-2	STEEL AND ASSESSED.
Day Cally and	Water Quality Standards ¹	130	04/20/01	444000	40/04/00	0.41401/04
Date Collected: 1.1.1-Trichloroethane	5	Units µg/L	10 U	11/19/90	10/01/99 2,500 D	4.000
1.1.2.2-Tetrachloroethane	5 4	ug/L	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	21,000	2,000 0	4,000
	5		-		-	-
1,1,2-Trichloro-1,2,2-trifluoroethane	1	µg/L	40.11	<u> </u>		
1,1,2-Trichloroethane	5	µg/L	10 U		1 J	500 U
1,1-Dichloroethane 1.1-Dichloroethene	5 5	µg/L	10 U	4,800	งเติDJ	950
.,		µg/L		300	93	460 J
1,2,4-Trichlorobenzene	5	µg/L		~	-	
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L	-			
1,2-Dibromoethane (EDB)	NE	µg/L	-			
1,2-Dichlorobenzene	3 5 / 0.6	µg/L	40.11	7-6	_	500.11
1,2-Dichloroethane		µg/L	10 U	750	20	500 U
1,2-Dichloropropane	5 3	µg/L	-	_		
1,3-Dichlorobenzene	_	µg/L	-		-	~
1,4-Dichlorobenzene	3	µg/L	40.11			
2-Hexanone	50	µg/L	10 U	2 422	10 U	500 U
Acetone	50	µg/L	710 DJ	1,600	22 B3	500 U
Benzene	1	µg/L	10 U		23	500 U
Bromoform	NE / 50 ²	µg/L			-	-
Bromomethane	5	μg/L	-			-
Carbon Disulfide	NE / 60	µg/L	10 U		10 U	500 U
Carbon Tetrachloride	5	μg/L	-			-
Chlorobenzene	5	µg/L	10 U		3 J	500 U
Chloroethane	5	µg/L	10 U		10 U	500 U
Chloroform	7	µg/L	10 U		10 U	500 U
Chloromethane	NE	µg/L				
cis-1,2-Dichloroethene	5	µg/L	10 U	NA NA	NA	64,000 D
cis-1,3-Dichloropropene	0.4 ³	μg/L				
Cyclohexane	NE	μg/L				
Dibromochloromethane	NE / 50 ²	μg/L				
Dichlorobromomethane	NE	µg/L		_		
Dichlorodifluoromethane	5 ⁴	µg/L				
Ethylbenzene	5	µg/L	10 U	84C	170	280 J
Isopropylbenzene	5 4	µg/L				2000
Methyl acetate	NE NE	µg/L				
Methyl Ethyl Ketone	NE / 50 ²	ug/L	2 J	-	10 U	500 U
Methyl Isobutyl Ketone	NE / 50	1	10 U			
Methylcyclohexane	NE NE	μg/L	100		10 U	500 U
Methylene chloride	5	µg/L µg/L	10 U	€,100	180	140 J
Methyl-t-Butyl Ether (MTBE)	NE / 10		100	4, 100 	CONTRACT TARGET AND ADDRESS OF THE PARTY OF	140 J
Styrene	NE / 10	µg/L			-	
Tetrachloroethene	50	µg/L	10 U	40.000	7,700 D	13,000 D
Toluene	5	µg/L	10 U	8,600	2,700 D	
Total Xylenes	5	µg/L	10 U	5,100	9Ç0 DJ	2,300
	5	µg/L		0, IGU		1,470 J
trans-1,2-Dichloroethene	0.4 3	µg/L	10 U		NA	500 U
trans-1,3-Dichloropropene		µg/L		-		
Trichloroethene	5	µg/L	10 U	29,000	1,300 D	3,50C
Trichlorofluoromethane	5	µg/L		-	_	-
Vinyl chloride Total VOCs	2	µg/L	10 U	3,490	790 DJ	580
	The state of the s	µg/L	712	167,490	48,991	83,480

- Notes:

 1. New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values (µg/L). Where two values are provided, the first represents pre-2004 values and the second represents revised values used for the 2004 data.
- 2. Guidance Value used where a standard has not been established.
- 2. Goldance value used where a standard has not been established.

 3. Applies to the sum of cis-1,3-dichloropropene and trans-1,2-dichloropropene.

 4. The principal organic contaminant standard for groundwater of 5 µg/L applies to this analyte. Bolded concentrations indicate the analyte was detected.

 Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

- NE NYSDEC TOGS 1.1.1 water quality standard not established.
- U The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.

 J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
- R The sample results are rejected.
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Envirotek II Site - Tonawanda, New York **Groundwater Monitoring Report** Sampling Events 1 and 2

Sample ID:	NYSDEC TOGS 1.1.1			ENV-3		ENV-3R					
	Water Quality				微型	等是在发展					
Date Collected:	Standards ¹	Units	11/19/90	10/01/99	04/18/01	05/05/04	07/15/04	09/28/04	10/17/05	10/05/06	
1,1,1-Trichloroethane	5 5 4	µg/L	- 11	10 U	10 U	2	4J	10 Ü	2 J	5 U	
1,1,2,2-Tetrachloroethane		µg/L		-	-	-	-	-	10 U	5 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	5	µg/L	L		V2.10	-	-	-	10 U	5 U	
1,1,2-Trichloroethane	1 1	µg/L		10 U	10 U	10		10 U	10 U	5 U	
1,1-Dichloroethane	5	µg/L	250	71	59	20	18	49	24	17	
1,1-Dichloroethene	5	µg/L	-	10 U	10 U	1	- 139	10 U	10 U	5 U	
1,2,4-Trichlorobenzene	5	µg/L	- 0					-	10 U	5 U	
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L						-	10 U	5 U	
1,2-Dibromoethane (EDB)	NE	µg/L							10 U	5 U	
1,2-Dichlorobenzene	3	µg/L							10 U	5 U	
1,2-Dichloroethane	5 / 0.6	µg/L		10 U	10 U	1		3 J	10 U	5 U	
1,2-Dichloropropane	5	µg/L	-				-	-	10 U	5 U	
1,3-Dichlorobenzene	3	µg/L			l				10 U	5 U	
1,4-Dichlorobenzene	3	µg/L		-		-		-	10 U	5 U	
2-Hexanone	50	µg/L		10 U	10 U	5 U	-	50 U	10 U	25 U	
Acetone	50	µg/L		10 U	10 U	5 U		50 U	10 U	25 U J	
Benzene	1	µg/L	-	1 J	10 U	1	-	10 U	10 U	5 U	
Bromoform	NE / 50 ²	µg/L							10 U	5 U	
Bromomethane	5	µg/L			-				10 U	5 U J	
Carbon Disulfide	NE / 60	µg/L	-	10 U	10 U	1 υ		10 U	10 U	5 U	
Carbon Tetrachloride	5	µg/L	-					-	10 U	5 U	
Chlorobenzene	5	µg/L	-	10 U	10 U	10	-	10 U	10 U	5 U	
Chloroethane	5	µg/L	79	52	25	10		10 U	10 U	R	
Chloroform	7	µg/L		10 U	10 U	10		10 U	10 U	5 U	
Chloromethane	NE	µg/L	W	-	-	-			10 U	5 U	
cis-1,2-Dichloroethene	5	µg/L	NA	NA	2 J	120 D	32	370 D	39	22	
cis-1,3-Dichloropropene	0.4 3	µg/L	_		-			-	10 U	5 U	
Cyclohexane	NE	µg/L	-	-			1.0		10 U	5 U	
Dibromochloromethane	NE / 50 ²	µg/L	_						10 U	5 U	
Dichlorobromomethane	NE NE	µg/L							10 0	5 U	
Dichlorodifluoromethane	5 4		1		_		ı	l		5 U	
	5	µg/L		40.11	40.11		-		10 U		
Ethylbenzene		µg/L		10 U	10 U	2		10 U	1 J	5 U	
Isopropylbenzene	5 4	µg/L							10 U	5 U	
Methyl acetate	NE 2	µg/L	-						10 U	5 U J	
Methyl Ethyl Ketone	NE / 50 ²	µg/L		10 U	10 U	1 U		50 U	10 U	25 U	
Methyl Isobutyl Ketone	NE	µg/L	82	10 U	2 J	14		50 U	10 U	25 U	
Methylcyclohexane	NE	µg/L	-						10 U	5 U	
Methylene chloride	5	µg/L		2 J	10 U	0.8 J	6J	9 DJ	10 U	5 U	
Methyl-t-Butyl Ether (MTBE)	NE / 10	µg/L	-				-		10 U	5 U	
Styrene	50	µg/L	-		~	-	-		10 U	5 U	
Tetrachloroethene	5	µg/L	-	10 U	6 J	16	6	3 J	2 J	3 J	
Toluene	5	µg/L	11	10 U	10 U	3	-	10 U	10 U	5 U	
Total Xylenes	5	µg/L	14	10 U	10 U	18	3J	30 U	1 J	15 U	
trans-1,2-Dichloroethene	5	µg/L	NA	NA	10 U	0.7 J	-	10 U	10 U	5 U	
trans-1,3-Dichloropropene	0.4 3	µg/L			12		-	-	10 U	5 U	
Trichloroethene	5	µg/L		10 U	3 J	22	7	6 J	9 J	5	
Trichlorofluoromethane	5	µg/L	-			-			10 U	5 U	
Vinyl chloride	2	µg/L	-	10 U	10 U	33 D	8	220 J	73	13	
Total VOCs		µg/L	436	126	97	263.5	84	660	151	60	
Total VOCs	1	mg/L	0.436	0.126	0.097	0.2535	0.084	0.66	0.151	0.060	

- New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values (μg/L). Where two values are provided, the first represents pre-2004 values and the second represents revised values used for the 2004 data.

 2. Guidance Value - used where a standard has not been established.

 3. Applies to the sum of cis-1,3-dichloropropene and trans-1,2-dichloropropene.

 4. The principal organic contaminant standard for groundwater of 5 µg/L applies to this analyte.

Bolded concentrations indicate the analyte was detected.

Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

NE - NYSDEC TOGS 1.1.1 water quality standard not established.

- U The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.
- J The analyte was positively identified, however, the associated numerical value is an estimated concentration only.
- R The sample results are rejected.
 D Compound identified in analysis at a secondary dilution factor.

Envirotek II Site - Tonawanda, New York Groundwater Monitoring Report Sampling Events 1 and 2

Sample ID:	NYSDEC TOGS 1.1.1		The state of			ENV-4			
Date Collected:	Water Quality Standards ¹	Units	11/19/90	09/30/99	04/18/01	05/05/04	09/28/04	10/17/05	10/05/06
1,1,1-Trichloroethane	5	µg/L	11/13/30	10 U	10 U	10	10 U	10 U	5 U
1,1,2,2-Tetrachloroethane	5 4	µg/L	_	100	100			10 U	5 U
1,1,2,Trichloro-1,2,2-trifluoroethane	5	µg/L		~		-	- 1	10 U	5 U
1,1,2-Trichloroethane	1 1	1		10 U	10 U	1 U	10 U	10 U	
1,1-Dichloroethane	5	μg/L		2.1	10 U	10	10 U	10 U	5 U
1,1-Dichloroethene	5	μg/L	-	10 U	10 U	10	10 U	10 U	5 U
1,2,4-Trichlorobenzene	5	µg/L		10.0		10	100	10 U	
1,2-Dibromo-3-Chloropropane DBCP	0.04	μg/L μg/L						10 U	5 U
1,2-Dibromoethane (EDB)	NE		l	l .		-		10 U	5 U
1.2-Dichlorobenzene	3	μg/L		- 1			-	10 U	5 U
1,2-Dichloroethane	5/0.6	µg/L		40.11			40.11		
1,2-Dichloropropane	570.6	µg/L		10 U	10 U	1 U	10 U	10 U	5 U
1,3-Dichlorobenzene	3	µg/L		-		-	-	10 U	
1,4-Dichlorobenzene	3	µg/L		l .	~	-	-	10 U	5 U
2-Hexanone	50	μg/L		10 U	10 U	5 U	50 U	10 U	5 U
Acetone	50	µg/L							25 U
Benzene		µg/L		10 U	10 U	5 U	50 U	10 U	25 U J
	1	μg/L		10 U	10 U	1 U	10 U	10 U	5 U
Bromoform	NE / 50 ²	µg/L			-	-		10 U	5 U
Bromomethane	5	μg/L	-					10 U	5 U J
Carbon Disulfide	NE / 60	µg/L		10 U	10 U	1 U	10 U	10 U	5 U
Carbon Tetrachloride	5	µg/L	-					10 U	5 U
Chlorobenzene	5	µg/L	-	10 U	10 U	1 U	10 U	10 U	5 U
Chloroethane	5	μg/L		10 U	10 U	1 U	10 U	10 U	R
Chloroform	7	μg/L	-	10 U	10 U	1 U	10 U	10 U	5 U
Chloromethane	NE	μg/L					-	10 U	5 U
cis-1,2-Dichloroethene	5	μg/L	-		3 J	1 U	10 U	6.1	6
cis-1,3-Dichloropropene	0.4 3	μg/L			-			10 U	5 U
Cyclohexane	NE	µg/L				-		10 U	5 U
Dibromochloromethane	NE / 50 ²	µg/L				-		10 U	5 U
Dichlorobromomethane	NE	µg/L				-		10 U	5 U
Dichlorodifluoromethane	5 4	μg/L			-			10 U	5 U
Ethylbenzene	5	LIG/L	68	24	10 U	1 U	10 U	10 U	5 U
Isopropylbenzene	5 4	MARKE						10 U	5 U
Methyl acetate	NE	µg/L			_			10 U	5 U J
Methyl Ethyl Ketone	NE / 50 ²	µg/L	_	10 U	10 U	1 1 U	10 U	10 U	25 U
Methyl Isobutyl Ketone	NE	µg/L	110	10 U	10 U	5 U	50 U	10 U	25 U
Methylcyclohexane	NE	µg/L						10 U	5 U
Methylene chloride	5	µg/L		10 U	10 U	2 U	8.3	10 U	5 U
Methyl-t-Butyl Ether (MTBE)	NE / 10	µg/L						10 U	5 U
Styrene	50	µg/L			-			10 U	5 U
Tetrachloroethene	5	µg/L		10 U	10 U	0.3 J	10 U	10 U	5 U
Toluene	5	µg/L	760	9 J	10 U	1 U	10 U	10 U	5 U
Total Xylenes	5	µg/L	260	67	10 U	3 U	30 U	10 U	15 U
trans-1,2-Dichloroethene	5	µg/L			10 U	1 1 U	10 U	2 J	5 U
trans-1,3-Dichloropropene	0.4 3	μg/L	_				""	10 U	5 U
Trichloroethene	5	µg/L	660	45	3 J	1	10 U	10 U	5 U
Trichlorofluoromethane	5	µg/L			33		100	10 U	5 U
Vinyl chloride	2	µg/L		5.J	10 U	10	10 U	10 U	5 U
Total VOCs		µg/L	1,858	238	6	1.3	8	9	6
Total VOCs		mg/L	1.858	0.238	0.006	0.001	0.008	0.009	0.006

Notes:

1. New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values (µg/L). Where two values are provided, the first represents pre-2004 values and the second represents revised values used for the 2004 data.

- 2. Guidance Value used where a standard has not been established.
- Applies to the sum of cis-1,3-dichloropropene and trans-1,2-dichloropropene.
 The principal organic contaminant standard for groundwater of 5 µg/L applies to this analyte.
 Bolded concentrations indicate the analyte was detected.

Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

NE - NYSDEC TOGS 1.1.1 water quality standard not established.

- U The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.
 J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
- R The sample results are rejected.
- D Compound identified in analysis at a secondary dilution factor.

Envirotek II Site - Tonawanda, New York **Groundwater Monitoring Report** Sampling Events 1 and 2

Sample ID:	NYSDEC TOGS 1.1.1			ENV-6		ENV-6		
Date Collected:	Water Quality Standards ¹	Units	11/19/90	09/30/99	04/20/01	09/30/99	04/19/01	
1,1,1-Trichioroethane	5	µg/L	11/19/90	10 U	10 U	10 U	10 U	
1,1,2,2-Tetrachloroethane	5 4				100		100	
		µg/L	-					
1,1,2-Trichloro-1,2,2-trifluoroethane 1,1,2-Trichloroethane	5 1	µg/L	-				17	
	5	µg/L	-	10 U	10 U	10 U	10 U	
1,1-Dichloroethane	_	µg/L	8	2 J	10 U	10 U	10 U	
1,1-Dichloroethene	5	µg/L	-	10 U	10 U	10 U	10 U	
1,2,4-Trichlorobenzene	5	µg/L			-	'	-	
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L				-		
1,2-Dibromoethane (EDB)	NE	μg/L						
1,2-Dichlorobenzene	3	μg/L						
1,2-Dichloroethane	5 / 0.6	µg/L		10 U	10 U	10 U	10 U	
1,2-Dichloropropane	5	μg/L						
1,3-Dichlorobenzene	3	µg/L				-	-	
1,4-Dichlorobenzene	3	µg/L						
2-Hexanone	50	µg/L		10 U	10 U	10 U	10 U	
Acetone	50	µg/L		10 U	6 J	10 U	10 U	
Benzene	1	µg/L		10 U	10 U	10 U	10 U	
Bromoform	NE / 50 ²	µg/L						
Bromomethane	5	µg/L						
Carbon Disulfide	NE / 60	µg/L		10 U	10 U	10 U	10 U	
Carbon Tetrachloride	5	µg/L						
Chlorobenzene	5	µg/L		10 U	10 U	10 U	10 U	
Chloroethane	5	µg/L		10 U	10 U	10 U	10 U	
Chloroform	7	µg/L		10 U	10 U	10 U	10 U	
Chloromethane	, NE	µg/L		100		100	100	
cis-1,2-Dichloroethene	5	µg/L	l		10		10 U	
cis-1,3-Dichloropropene	0.4 ³	µg/L					""	
Cyclohexane	NE	µg/L				_	-	
Dibromochloromethane	NE / 50 ²	110000	l			_	-	
		µg/L	-		-		-	
Dichlorobromomethane	NE	µg/L			-	-		
Dichlorodifluoromethane	5 4	µg/L						
Ethylbenzene	5	µg/L		10 U	10 U	10 U	10 U	
Isopropylbenzene	5 ⁴	μg/L						
Methyl acetate	NE	µg/L						
Methyl Ethyl Ketone	NE / 50 ²	μg/L		10 U	10 U	10 U	10 U	
Methyl Isobutyl Ketone	NE	µg/L		10 U	10 U	10 U	10 U	
Methylcyclohexane	NE	µg/L			_			
Methylene chloride	5	µg/L		10 U	10 U	10 U	10 U	
Methyl-t-Butyl Ether (MTBE)	NE / 10	µg/L						
Styrene	50	µg/L				_		
Tetrachloroethene	5	µg/L		10 U	10 U	10 U	2 J	
Toluene	5	µg/L		10 U	10 U	10 U	10 U	
Total Xylenes	5	µg/L		10 U	10 U	10 U	10 U	
trans-1,2-Dichloroethene	5	µg/L		100	4 J	'-'	10 U	
trans-1,3-Dichloropropene	0.4 ³	µg/L		-				
Trichloroethene	5	μg/L μg/L		10 U	10 ⊍	10 U	10 U	
Trichlorofluoromethane	5	μg/L		100	100	100	""	
Vinyl chloride	2	µg/L µg/L		3 J*	2 J		10.11	
Total VOCs		µg/L µg/L	44	61	22	2 J 8	10 U	
Total VOCs		µg/L	0.044	0.061	0.022	0.008	0.002	

- Notes:

 1. New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1. Ambient Water Quality Standards and Guidance Values (µg/L).

 Where two values are provided, the first represents pre-2004 values and the second represents revised values used for the 2004 data.
- 2. Guidance Value used where a standard has not been established.
- Applies to the sum of cis-1,3-dichloropropene and trans-1,2-dichloropropene.
 The principal organic contaminant standard for groundwater of 5 µg/L applies to this analyte.

Bolded concentrations indicate the analyte was detected.

- Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

- NE NYSDEC TOGS 1.1.1 water quality standard not established.

 U The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.

 J The analyte was constitutely identified, however, the associated numerical value is an estimated concentration only.
- R The sample results are rejucted.
- D Compound identified in analysis at a secondary dilution fautor.

Envirotek II Site - Tonawanda, New York **Groundwater Monitoring Report** Sampling Events 1 and 2

Sample ID:	NYSDEC TOGS 1.1.1				ENV-7					ENV-8		
图象的复数形式 经营业的	Water Quality		表表表					1 3 3	国籍联系			
Date Collected: 1,1,1-Trichloroethane	Standards ¹	Units	04/19/01 25 U	05/05/04 1 U	09/28/04 5 U	10/17/05 10 U	10/05/06 5 U	04/19/01 10 U	05/05/04 5 U	09/28/04 10 U	10/17/05 10 U	10/05/06 5 U
	5 5 ⁴	µg/L	1515.55			10 U	5 U	.,	100		10 U	5 U
1,1,2,2-Tetrachloroethane		μg/L	-	-	-				701 -00	-	10 U	5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	µg/L		1 U	5 U	10 U 10 U	5 U	10 U	5 U	10 U		5 U
1,1,2-Trichloroethane	5	µg/L	25 U 3 J		5 U		3 J	The second second second second second	50		10 U	5 U
1,1-Dichloroethane 1,1-Dichloroethene	5	µg/L	25 U	2	5 U	3 J 10 U	5 U	7 J	5 U	4 J 10 U	4 J 10 U	5 U
.,.	5	μg/L		1		10 U	5 U			7.2.2	10 U	5 U
1,2,4-Trichlorobenzene 1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L				10 U	5 U			-	10 U	5 U
	NE	µg/L				10 U	5 U		l	-	10 U	5 U
1,2-Dibromoethane (EDB)		µg/L				10 U	5 U			-	10 U	5 U
1,2-Dichlorobenzene 1,2-Dichloroethane	3 5/0.6	µg/L	25 U	1 U	5 U	10 U	5 U	10 U	5 U	10 U	10 U	5 U
	570.6	µg/L	25 0		50	10 U	5 U	100	50		10 U	5 U
1,2-Dichloropropane 1,3-Dichlorobenzene	3	µg/L µg/L				10 U	5 U			-	10 U	5 U
1,4-Dichlorobenzene	3	1				10 U	5 U		I -	-	10 U	5 U
2-Hexanone	50	μg/L μg/L	25 U	5 U	25 U	10 U	25 U	10 U	25 U	50 U	10 U	25 U
Acetone	50	μg/L μg/L	16 J	5 U	25 U	10 U	25 U J	31	25 U	50 U	10 U	25 U J
Benzene	1	μg/L μg/L	25 U	1 1 U	5 U	10 U	5 U	10 U	5 U	10 U	10 U	5 U
	NE / 50 ²	1 ' "		l					1			5 U
Bromoform Bromomethane	NE / 50	µg/L				10 U 10 U	5 U 5 U J			-	10 U 10 U	5 U J
	NE / 60	μg/L			 5 U	10 U	5 U 5	4011	5 U	10 U	10 U	5 U
Carbon Disulfide		μg/L	25 U	10		10 U	5 U	10 U	50		10 U	5 U
Carbon Tetrachloride	5 5	μg/L	25 U	1 U	 5 U	10 U	5 U	10 U	5 U	10 U	10 U	5 U
Chlorobenzene Chloroethane	5	μg/L		10	5 U	10 U	R R		5 U	10 U	10 U	l R
Chloroform	7	µg/L	25 U		5 U	10 U	5 U	10 U	5 U	1	10 U	5 U
Chloromethane	NE NE	µg/L µg/L	25 U	10		10 U	5 U	10 U		10 U	10 U	5 U
cis-1,2-Dichloroethene	5	μg/L	430	280 D	170	190	140	150	140	120	78	36
	0.4 3		District of the Committee of the Committ	AND DESCRIPTION OF THE PARTY OF	SCHOOL SCHOOL SCHOOL SCHOOL	Constitution of the Consti	5 U	STATE OF THE PARTY	1	THE REAL PROPERTY.	Company of the owner of the	5 U
cis-1,3-Dichloropropene		µg/L		-		10 U	5 U	1 500	-	-	10 U	5 U
Cyclohexane	NE	µg/L		-		10 U			-	-	10 U	1
Dibromochloromethane	NE / 50 ²	µg/L	-			10 U	5 U		-	-	10 U	5 U
Dichlorobromomethane	NE	µg/L	-	-		10 U	5 U	-		-	10 U	5 U
Dichlorodifluoromethane	5 4	μg/L				10 U	5 U				10 U	5 U
Ethylbenzene	5	µg/L	25 U	10	5 U	10 U	5 U	10 U	5 U	10 U	10 U	5 U
Isopropylbenzene	5 4	µg/L				10 U	5 U				10 U	5 U
Methyl acetate	NE .	µg/L				10 U	5 U J		-		10 U	5 U J
Methyl Ethyl Ketone	NE / 50 ²	µg/L	25 U	1 U	5 ป	10 U	25 U	10 U	5 U	10 U	10 U	25 U
Methyl Isobutyl Ketone	NE	µg/L	25 U	5 U	25 U	10 U	25 U	11	25 U	50 U	10 U	25 U
Methylcyclohexane	NE	µg/L				10 U	5 U				10 U	5 U
Methylene chloride	5	µg/L	25 U	2 U	3 J	10 U	5 U	10 U	10 U	4 J	10 U	5 U
Methyl-t-Butyl Ether (MTBE)	NE / 10	µg/L				10 U	5 U			-	10 U	5 U
Styrene	50	μg/L				10 U	5 U				10 U	5 U
Tetrachloroethene	5	μg/L	3 J	4	3 J	1 J	5 U	3 J	3 J	3 J	3 J	5 U
Toluene	5	μg/L	25 U	10	5 U	10 U	5 U	10 U	5 U	10 U	10 U	5 U
Total Xylenes	5	μg/L	28 UJ	3 U	15 U	10 U	15 U	-	15 U	30 U	10 U	15 U
trans-1,2-Dichloroethene	5	µg/L	4 J	3	5 U	10 U	5 U	4 J	3 J	10 U	2 J	5 U
trans-1,3-Dichloropropene	0.4 3	μg/L	-	(a) -	-	10 U	5 U			-	10 U	5 U
Trichloroethene	5	µg/L	16 J	6	5 U	10 U	5 U	1,2	143	- 12	10	8
Trichlorofluoromethane	5	µg/L		-	-	10 U	5 U		-	-	10 U	5 U
Vinyl chloride	2	µg/L	220	50 D	88	200	100	33	5 U	10	1, 6, 1	5 U
Total VOCs		µg/L	720	346	264	394	243	221	165	153	106	44
Total VOCs		mg/L	0.72	0.346	0.264	0.394	0.243	0.221	0.165	0.153	0.106	0.044

- New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values (µg/L). Where two values are provided, the first represents pre-2004 values and the second represents revised
- values used for the 2004 data.

 2. Guidance Value used where a standard has not been established.
- 3. Applies to the sum of cis-1,3-dichloropropene and trans-1,2-dichloropropene.
- 4. The principal organic contaminant standard for groundwater of 5 µg/L applies to this analyte.

Bolded concentrations indicate the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

- NE NYSDEC TOGS 1.1.1 water quality standard not established.
- U The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.
- J The analyte was positively identified; however, the associated numerical value is an estimated concentration only. R The sample results are rejected.
- D Compound identified in analysis at a secondary dilution factor.

Envirotek II Site - Tonawanda, New York Groundwater Monitoring Report Sampling Events 1 and 2

Sample ID:	NYSDEC TOGS 1.1.1				ENV-9			ENV-9	(DUP)
Date Collected:	Water Quality Standards ¹	Units	04/19/01	06/05/04	09/28/04	10/17/05	10/05/06	10/17/05	10/05/06
1,1,1-Trichloroethane	5	µg/L	10 U	1 U	5 U	10 U	5 U	10 U	5 U
1,1,2,2-Tetrachloroethane	5 4	µg/L			_	10 U	5 U	10 U	5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	µg/L	-		_	10 U	5 U	10 U	5 U
1.1.2-Trichloroethane	1	µg/L	10 U	1 U	5 U	10 U	5 U	10 U	5 U
1.1-Dichloroethane	5	µg/L	10 U	0.5 J	5 U	10 U	5 U	10 U	5 U
1.1-Dichloroethene	5	µg/L	10 U	1 U	5 U	10 U	5 U	10 U	5 U
1.2.4-Trichlorobenzene	5	µg/L	100			10 U	5 U	10 U	5 U
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L				10 U	5 U	10 U	5 Ü
1,2-Dibromoethane (EDB)	NE NE	µg/L				10 U	5 U	10 U	5 U
1.2-Dichlorobenzene	3	µg/L				10 U	5 U	10 U	5 U
1.2-Dichloroethane	5/0.6	µg/L	10 U	1 U	5 U	10 U	5 U	10 U	5 U
1,2-Dichloropropane	5	µg/L	"-			10 U	5 U	10 U	5 U
1,3-Dichlorobenzene	3	µg/L				10 U	5 U	10 U	5 U
1.4-Dichlorobenzene	3	µg/L				10 U	5 U	10 U	5 U
2-Hexanone	50	µg/L	2 J	5 U	25 U	10 U	25 U	10 U	25 U
Acetone	50	µg/L	1,200 DJ	5 U	25 U	10 U	25 U J	10 U	25 U J
Benzene	1 1	µg/L	10 U	10	5 U	10 U	5 U	10 U	5 U
Bromoform	NE / 50 ²					10 U	5 U	10 U	100
Bromomethane	NE / 50	µg/L			_	10 U	5 U J		5 U
		µg/L	40.11					10 U	5 U J
Carbon Disulfide	NE / 60	µg/L	10 U	1 U	5 U	10 U	5 U 5 U	10 U	5 U
Carbon Tetrachloride Chlorobenzene	5	µg/L	10 U	1 U	 5 U	10 U 10 U	5 U	10 U	5 U
	5	µg/L						7.0	7.7
Chloroethane Chloroform	7	µg/L	10 U	1 U 1 U	5 U 5 U	10 U 10 U	R 5 U	10 U	8 5 U
		µg/L	3 J	10	50			10 U	
Chloromethane	NE 5	µg/L	10 U	0.6 J	5 U	10 U	5 U 5 U	10 U	5 U
cis-1,2-Dichloroethene		µg/L				1 J		1 J	5 U
cis-1,3-Dichloropropene	0.4 3	µg/L	-			10 U	5 U	10 U	5 U
Cyclohexane	NE 0	µg/L	-			10 U	5 U	10 U	5 U
Dibromochloromethane	NE / 50 ²	µg/L	-			10 U	5 U	10 U	5 U
Dichlorobromomethane	NE	µg/L		-		10 U	5 U	10 U	5 U
Dichlorodifluoromethane	5 4	µg/L				10 U	5 U	10 U	5 U
Ethylbenzene	5	µg/L	2 J	1 U	5 U	10 U	5 U	10 U	5 U
Isopropylbenzene	5 ⁴	µg/L				10 U	5 U	10 U	5 U
Methyl acetate	NE	µg/L				10 U	5 U J	10 U	5 U J
Methyl Ethyl Ketone	NE / 50 ²	µg/L	6 J	1 1 U	5 U	10 U	25 U	10 U	25 U
Methyl Isobutyl Ketone	NE	µg/L	10	5 U	25 U	10 U	25 U	10 U	25 U
Methylcyclohexane	NE NE	µg/L				10 U	5 U	10 U	5 U
Methylene chloride	5	µg/L	10 U	2 U	3 J	10 U	5 U	10 U	5 U
Methyl-t-Butyl Ether (MTBE)	NE / 10	µg/L				10 U	5 U	10 U	5 U
Styrene	50	µg/L	l			10 U	5 U	10 U	5 U
Tetrachloroethene	5	µg/L	10 U	1 U	5 U	10 U	5 U	10 U	5 U
Toluene	5	µg/L	10 U	1 U	5 U	10 U	5 U	10 U	5 U
Total Xylenes	5	µg/L	13 J	3 U	15 U	10 U	15 U	10 U	15 U
trans-1,2-Dichloroethene	5	µg/L	10 U	10	5 U	10 U	5 U	10 U	5 U
trans-1,3-Dichloropropene	0.4 3	µg/L				10 U	5 U	10 U	5 U
Trichloroethene	5	µg/L	3 J	0.8 J	5 U	10 U	5 U	10 U	5 U
Trichlorofluoromethane	5	µg/L	-	0.00		10 U	5 U	10 U	5 U
Vinyl chloride	2	µg/L	10 U	10	5 U	10 U	5 U	10 U	5 U
Total VOCs	-	µg/L	1,238	1.9	3	1	ND	1	ND
Total VOCs		mg/L	1,238	0.0019	0.003	0.001	ND	0.001	ND

- Notes:

 1. New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values (μg/L).

 Where two values are provided, the first represents pre-2004 values and the second represents revised values used for the 2004 data.

- Guidance Value used where a standard has not been established.
 Applies to the sum of cis-1,3-dichloropropene and trans-1,2-dichloropropene.
 The principal organic contaminant standard for groundwater of 5 µg/L applies to this analyte.

Bolded concentrations indicate the analyte was detected.

Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria. NE - NYSDEC TOGS 1.1.1 water quality standard not established.

- U The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.
- J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
- R The sample results are rejected.

Envirotek II Site - Tonawanda, New York Groundwater Monitoring Report Sampling Events 1 and 2

Sample ID:	NYSDEC TOGS 1.1.1		ENV-10D		GW-1			GW-2	
	Water Quality						0.0004000		
Date Collected:	Standards1	Units	04/20/01 10 U	9/28/1988	12/5/1990	4/19/2001 10 U	9/28/1988	12/05/90	9/29/1999 10 U
1,1,1-Trichloroethane	5 5 ⁴	µg/L		-	-	100.00		-	- Charles State of Con-
1,1,2,2-Tetrachloroethane		µg/L		-		-		-	-
1,1,2-Trichloro-1,2,2-trifluoroethane	5	µg/L		-			-	- 1	40.11
1,1,2-Trichloroethane	1	µg/L	10 U			10 U		- 1	10 U
1,1-Dichloroethane	5	µg/L	10 U	-	-	10 U			10 U
1,1-Dichloroethene	5	µg/L	10 U	-		10 U		- 1	10 U
1,2,4-Trichlorobenzene	5	µg/L		-				-	-
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L	-					-	-
1,2-Dibromoethane (EDB)	NE	μg/L				-			-
1,2-Dichlorobenzene	3	µg/L				·		-	
1,2-Dichloroethane	5 / 0.6	µg/L	10 U		-	10 U	-		10 U
1,2-Dichloropropane	5	µg/L							-
1,3-Dichlorobenzene	3	µg/L			_	-		_	
1,4-Dichlorobenzene	3	µg/L		-					
2-Hexanone	50	µg/L	10 U	-		10 U		-	10 U
Acetone	50	µg/L	29 J		12	10 U	-	12 J	10 U
Benzene	1 1	μg/L	10 U	34	42	4.]	-		10 U
Bromoform	NE / 50 ²	µg/L	-	28	55				-
Bromomethane	5	μg/L							-
Carbon Disulfide	NE / 60	μg/L	10 U			10 U		5 J	10 U
Carbon Tetrachloride	5	μg/L							-
Chlorobenzene	5	μg/L	10 U			10 U		-	10 U
Chloroethane	5	µg/L	10 U	-		10 U			10 U
Chloroform	7	µg/L	10 U	-		10 U			10 U
Chloromethane	NE	μg/L				-		-	
cis-1,2-Dichloroethene	5	μg/L	10 U	-		10 U			
cis-1,3-Dichloropropene	0.4 3	µg/L						-	
Cyclohexane	NE NE	µg/L						-	
Dibromochloromethane	NE / 50 ²	µg/L							
Dichlorobromomethane	NE NE	µg/L				l		l	
Dichlorodifluoromethane	5 4	µg/L					l _	l	
Ethylbenzene	5	µg/L	10 U			10 U			10 U
1 '	5 4		1						_
Isopropylbenzene	NE NE	µg/L							_
Methyl acetate		µg/L	1			1	1	1	40.11
Methyl Ethyl Ketone	NE / 50 ²	µg/L	10 U	- 1	-	10 U	-	-	10 U
Methyl Isobutyl Ketone	NE	µg/L	10 U	-	-	10 U		-	10 U
Methylcyclohexane	NE	µg/L	l				l	-	
Methylene chloride	5	µg/L	10 U	6 B	_	10 U	2 BJ	-	10 U
Methyl-t-Butyl Ether (MTBE)	NE / 10	µg/L		-	-	-	-		-
Styrene	50	µg/L			-			-	
Tetrachloroethene	5	µg/L	10 U	<u> </u>	l	10 U			10 U
Toluene	5	µg/L	10 U	0.9 J	0.8 J	10 U			10 U
Total Xylenes	5	µg/L	10 U		-	10 U			10 U
trans-1,2-Dichloroethene	5	µg/L	10 U	-		10 U			NA NA
trans-1,3-Dichloropropene	0.4 ³	µg/L							-
Trichloroethene	5	µg/L	10 U	-		10 U	-	-	10 U
Trichlorofluoromethane	5	µg/L			-		_	-	
Vinyl chloride	2	µg/L	10 U	- 1	-	10 U		-	10 U
Total VOCs		µg/L	29	40.9	54.8	4	2	17	ND
Total VOCs		mg/L	0.029	0.0409	0.0548	0.004	0.002	0.017	ND

Notes:

- New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values (µg/L). Where two values are provided, the first represents pre-2004 values and the second represents revised values used for the 2004 data.
- Guidance Value used where a standard has not been established.
 Applies to the sum of cis-1,3-dichloropropene and trans-1,2-dichloropropene.
- The principal organic contaminant standard for groundwater of 5 µg/L applies to this analyte.

Bolded concentrations indicate the analyte was detected.

Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria. NE - NYSDEC TOGS 1.1.1 water quality standard not established.

- U The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.
- J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
- R The sample results are rejected.
- D Compound identified in analysis at a secondary dilution factor.

Envirotek II Site - Tonawanda, New York **Groundwater Monitoring Report** Sampling Events 1 and 2

Sample ID;	NYSDEC TOGS 1.1.1					GW-3			4
Date Collected:	Water Quality Standards ¹	Units	9/28/1988	12/5/1990	9/29/1999	5/5/2004	9/28/2004	10/17/05	10/05/06
1,1,1-Trichloroethane	5	µg/L	3/20/1300	1230/1330	10 U	1 U	2 U	10 U	4 U
1,1,2,2-Tetrachloroethane	5 4	µg/L			100		2.0	10 U	4 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	μg/L						10 U	4 U
1,1,2-Trichloroethane	1 1	µg/L			10 U	10	2 U	10 U	4 U
1.1-Dichloroethane	5	μg/L			100	1 10	2 U	10 U	4 U
1,1-Dichloroethene	5	µg/L			10 U	10	2 U	10 U	4 U
1,2,4-Trichlorobenzene	5	μg/L				'-'		10 U	4 U
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L						10 U	4 U
1,2-Dibromoethane (EDB)	NE	µg/L		_				10 U	4 U
1.2-Dichlorobenzene	3	µg/L			_			10 U	4 U
1,2-Dichloroethane	5 / 0.6	µg/L			10 U	1 U	2 U	10 U	4 U
1,2-Dichloropropane	5	µg/L			- 10 0	'-	20	10 U	4 U
1,3-Dichlorobenzene	3	µg/L						10 U	4 U
1.4-Dichlorobenzene	3	µg/L	-					10 U	4 U
2-Hexanone	50	µg/L			10 U	5 U	10 U	10 U	20 U
Acetone	50	µg/L		20	10 U	5 U	10 U	10 U	20 U J
Benzene	1 1	µg/L	6	2 J	1 1 1	10	2 U	10 U	4 U
Bromoform	NE / 50 ²	µg/L				1		10 U	4 U
Bromomethane	5	µg/L						10 U	4 U J
Carbon Disulfide	NE / 60	µg/L			10 U	10	2 U	10 U	4 U J
Carbon Tetrachloride	5	μg/L			100	1	20	10 U	4 U
Chlorobenzene	5	µg/L			10 U	1 U	2 U	10 U	4 U
Chloroethane	5	µg/L			10 U	1 U	2 0	10 U	R R
Chloroform	7	µg/L			10 U	10	2 0	10 U	4 U
Chloromethane	NE NE	µg/L			100	'-		10 U	4 U
cis-1,2-Dichloroethene	5	µg/L			_	0.3 J	2 U	10 U	4 U
cis-1,3-Dichloropropene	0.43	µg/L	-		_	0.5 5		10 U	4 U
Cyclohexane	NE NE	µg/L						10 U	4 U
	NE / 50 ²								
Dibromochloromethane	1	µg/L		_		-	-	10 U	4 U
Dichlorobromomethane	NE	µg/L				_	-	10 U	4 U
Dichlorodifluoromethane	5 4	µg/L						10 U	4 U
Ethylbenzene	5	μg/L			10 U	1 U	2 U	10 U	4 U
Isopropylbenzene	5 4	µg/L	~4				-	10 U	4 ∪
Methyl acetate	NE	µg/L						10 U	4 U J
Methyl Ethyl Ketone	NE / 50 ²	µg/L		29	10 U	1 U	2 U	10 U	20 U
Methyl Isobutyl Ketone	NE	µg/L		-	10 U	5 U	10 U	10 U	20 U
Methylcyclohexane	NE	µg/L		-				10 U	4 U
Methylene chloride	5	µg/L	-	-	10 U	2 U	1 J	10 U	4 U
Methyl-t-Butyl Ether (MTBE)	NE / 10	µg/L						10 U	4 U
Styrene	50	µg/L		_		-		10 U	4 U
Tetrachloroethene	5	µg/L			10 U	0.5 J	2 U	10 U	4 U
Toluene	5	µg/L	1 J	0.6 J	10 U	1 U	2 U	10 U	4 U
Total Xylenes	5	µg/L	2 J	-	10 U	3 U	6 U	10 U	12 U
trans-1,2-Dichloroethene	5	µg/L	-	-	-	1 U	2 U	10 U	4 U
trans-1,3-Dichloropropene	0.4 3	µg/L	-				-	10 U	4 U
Trichloroethene	5	µg/L			10 U	1 U	2 U	10 U	4 U
Trichlorofluoromethane	5	µg/L	-		10.700			10 U	4 U
Vinyl chloride	2	µg/L	-		10 U	10	2 U	10 U	4 U
Total VOCs		µg/L	9	51.6	1	0.8	1	ND	ND
Total VOCs		mg/L	0.009	0.0516	0.001	0.0008	0.001	ND	ND

Notes:

- 1. New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values (μg/L). Where two values are provided, the first represents pre-2004 values and the second represents revised values used for the 2004 data.
- 2. Guidance Value used where a standard has not been established.
- Applies to the sum of cis-1,3-dichloropropene and trans-1,2-dichloropropene.
 The principal organic contaminant standard for groundwater of 5 µg/L applies to this analyte.
 Bolded concentrations indicate the analyte was detected.

Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

- NE NYSDEC TOGS 1.1.1 water quality standard not established.

 U The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.

 J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
- R The sample results are rejected.
- D Compound identified in analysis at a secondary dilution factor.

Envirotek II Site - Tonawanda, New York Groundwater Monitoring Report Sampling Events 1 and 2

Sample ID:	nple ID: NYSDEC TOGS 1.1.1			GW-4			GW-5		GW-6		
18年12年十七世上的美雄	Water Quality	-386		100	美久 及3	8-69-6-9		5 1 E 16 St	E 25875)	40.460	4.5 电影体
Date Collected:	Standards ¹	Units	9/28/1988	12/5/1990	9/30/1999	9/28/1988	12/5/1990	9/30/1999	9/28/1988	12/5/1990	9/30/1999
1,1,1-Trichloroethane	5	µg/L	-		10 U			10 U	-		10 U
1,1,2,2-Tetrachloroethane	5 ⁴	μg/L	_	-					-	- 4	-
1,1,2-Trichloro-1,2,2-trifluoroethane	5	µg/L	7= 1	_	2						-
1,1,2-Trichloroethane	1	μg/L			10 U	- 1		10 U	-	-	10 U
1,1-Dichloroethane	5	μg/L			10 U			10 U	-		10 U
1,1-Dichloroethene	5	μg/L			10 U			10 U		-	10 U
1,2,4-Trichlorobenzene	5	µg/L							'	-	-
1,2-Dibromo-3-Chloropropane DBCP	0.04	μg/L									
1,2-Dibromoethane (EDB)	NE NE	µg/L									
1,2-Dichlorobenzene	3	µg/L									
1,2-Dichloroethane	5 / 0.6	µg/L			10 U			10 U		_	10 U
1,2-Dichloropropane	5	µg/L							-		
1,3-Dichlorobenzene	3	µg/L									
1,4-Dichlorobenzene	3	µg/L									
2-Hexanone	50	µg/L			10 U			10 U			10 U
Acetone	50	µg/L		13	10 U		l e J	10 U	46 B	20	10 U
Benzene	1 1	µg/L	3 J	0.9 J	1 J	3 J		10 U	2 J	0.7 J	10 U
Bromoform	NE / 50 ²	µg/L							_	-	_
Bromomethane	5	µg/L							l _		
Carbon Disulfide	NE / 60	µg/L			10 U			10 U			10 U
Carbon Tetrachloride	5	µg/L						"-	l _		
Chlorobenzene	5	µg/L			10 U			10 U			10 U
Chloroethane	5	µg/L			10 U			10 U	8 J		10 U
Chloroform	7	µg/L			10 U			10 U			10 U
Chloromethane	NE NE	µg/L			"						
cis-1,2-Dichloroethene	5	µg/L							l _{NA}	NA NA	NA NA
cis-1,3-Dichloropropene	0.4 3	µg/L			_				"		""
Cyclohexane	NE NE	µg/L									-
	NE / 50 ²		1				l				
Dibromochloromethane		μg/L						-	-		
Dichlorobromomethane	NE	μg/L						-			
Dichlorodifluoromethane	5 4	μg/L	_							-	
Ethylbenzene	5	μg/L	-		10 U			10 U	-		10 U
Isopropylbenzene	5 4	μg/L									
Methyl acetate	NE	μg/L									
Methyl Ethyl Ketone	NE / 50 ²	μg/L			10 U	-		10 U	-	-	10 U
Methyl Isobutyl Ketone	NE	μg/L			10 ∪			10 ∪			10 U
Methylcyclohexane	NE	µg/L				-					
Methylene chloride	5	µg/L	18 B		10 U			10 U	31 B		10 U
Methyl-t-Butyl Ether (MTBE)	NE / 10	µg/L								i	
Styrene	50	μg/L									
Tetrachloroethene	5	μg/L			10 U			10 U	-		10 U
Toluene	5	μg/L	1 BJ		10 U			10 U	3 BJ		10 U
Total Xylenes	5	μg/L			10 U	4 J	1 J	10 U	_	-	10 U
trans-1,2-Dichloroethene	5	μg/L			-				-		-
trans-1,3-Dichloropropene	0.4 3	µg/L									
Trichloroethene	5	µg/L			10 U			10 U	_		10 U
Trichlorofluoromethane	5	µg/L				-					
Vinyl chloride	2	µg/L	-	-	10 U	1	0-1	10 U	-		10 U
Total VOCs		µg/L	22	13.9	1	7	10	-	90	20.7	_
Total VOCs		mg/L	0.022	0.0139	0.001	0.007	0.01	ND	0.09	0.0207	ND

- 1. New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values (μg/L).
- Where two values are provided, the first represents pre-2004 values and the second represents revised values used for the 2004 data.

 2. Guidance Value - used where a standard has not been established.

 3. Applies to the sum of cis-1,3-dichloropropene and trans-1,2-dichloropropene.

 4. The principal organic contaminant standard for groundwater of 5 µg/L applies to this analyte.

Bolded concentrations indicate the analyte was detected.

Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

NE - NYSDEC TOGS 1.1.1 water quality standard not established.

- U The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.
- J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
- R The sample results are rejected.

Envirotek II Site - Tonawanda, New York Groundwater Monitoring Report Sampling Events 1 and 2

Sample ID:	NYSDEC TOGS 1.1.1				GV	V-7	4.432		NW-1	NW-2
	Water Quality Standards ¹		0/00/4000	12/5/1990	9/30/1999	4/19/2001	5/5/2004	9/28/2004	9/30/1999	4/19/2001
Date Collected: 1,1,1-Trichloroethane	Standards 5	Units µg/L	9/28/1988	12/8/1990	10 U	10 U	1 U	10 U	10 U	10 U
	5 4		A		100			100		100
1,1,2,2-Tetrachloroethane		µg/L						-		
1,1,2-Trichloro-1,2,2-trifluoroethane	5	µg/L	-		10 U	10 U	1 U	10 U	10 U	10 U
1,1,2-Trichloroethane	1 5	µg/L	11		10 U	10 U	1 U	10 U	10 U	2 J
1,1-Dichloroethane		µg/L		-	1 J 10 U		1 U	10 U	10 U	10 U
1,1-Dichloroethene	5	µg/L	-	-		10 U	-			100
1,2,4-Trichlorobenzene	5	μg/L	-			-		-	-	l
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L	-			-		-		
1,2-Dibromoethane (EDB)	NE	µg/L		-		-				
1,2-Dichlorobenzene	3	µg/L		l I	40.11				40.11	l
1,2-Dichloroethane	5 / 0.6	µg/L		4 J	10 U	10 U	1 U	10 U	10 U	2 J
1,2-Dichloropropane	5	µg/L								,
1,3-Dichlorobenzene	3	µg/L				-			-	"
1,4-Dichlorobenzene	3	µg/L	-		40.11	40.11			40.11	40.11
2-Hexanone	50	µg/L			10 U	10 U	5 U	50 U	10 U	10 U
Acetone	50	μg/L	210 D	60	10 U	12	5 U	50 U	10 U	7 J
Benzene	1	μg/L	2 J	0.9 J	10 U	10 U	1 U	10 U	10 U	10 U
Bromoform	NE / 50 ²	μg/L							-	
Bromomethane	5	μg/L	-			- 1				
Carbon Disulfide	NE / 60	µg/L			10 U	10 U	1 U	10 U	10 U	10 U
Carbon Tetrachloride	5	µg/L				-				
Chlorobenzene	5	µg/L			10 U	10 U	10	10 U	10 U	10 U
Chloroethane	5	µg/L			10 U	10 U	1 U	10 U	10 U	10 U
Chloroform	7	µg/L	-		10 U	10 U	1 U	10 U	10 U	10 U
Chloromethane	NE	µg/L				-				
cis-1,2-Dichloroethene	5	µg/L				14	- 6	6 J		16
cis-1,3-Dichloropropene	0.4 3	μg/L								
Cyclohexane	NE	µg/L								
Dibromochloromethane	NE / 50 ²	µg/L			_					
Dichlorobromomethane	NE	µg/L	_	-			_			
Dichlorodifluoromethane	5 4	µg/L								
Ethylbenzene	5	µg/L	1 J	3 J	10 U	10 U	10	10 U	10 U	10 1
Isopropylbenzene	5 4	µg/L								
Methyl acetate	NE NE	µg/L								
Methyl Ethyl Ketone	NE / 50 ²	µg/L	61		10 U	10 U	1 U	10 U	10 U	10 U
Methyl Isobutyl Ketone	NE NE	µg/L	40	20	10 U	10 U	5 U	50 U	10 U	10 U
Methylcyclohexane	NE NE	µg/L	40	20				300	1	
Methylene chloride	5	µg/L	41 B		10 U	10 U	2 U	20 U	10 U	10 U
Methyl-t-Butyl Ether (MTBE)	NE / 10	µg/L	19 I D					200	100	100
Styrene	50	µg/L	-			-				
Tetrachloroethene	5	µg/L	87	9.J	3 J	6.J	2	10 U	10 U	10 U
Toluene	5	µg/L	35 B	69	10 U	1 J	1	10 U	10 U	10 U
Total Xylenes	5	µg/L	7	16	10 U	10 U	3 U	30 U	10 U	10 U
trans-1,2-Dichloroethene	5		STATE OF THE PARTY	Y	100	10 U	1 1 U	10 U	"-"	10 U
	0.4 3	µg/L	- N	-					-	
trans-1,3-Dichloropropene		µg/L	-				-	40.11	40.11	10.11
Trichloroethene	5	µg/L	32	:36	1 J	2 J	1	10 U	10 U	10 U
Trichlorofluoromethane	5	µg/L	-	1	40.11	4011		40.11	4011	40.11
Vinyl chloride	2	µg/L	8	3 J	10 U	10 U	0.4 J	10 U	10 U	10 U
Total VOCs Total VOCs		μg/L mg/L	0.82	272.9 0.2729	0.019	0.035	9.4	0,005	ND	27 0.027

- Notes:

 1. New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values (µg/L). Where two values are provided, the first represents pre-2004 values and the second represents revised values used for the 2004 data.

 2. Guidance Value - used where a standard has not been established.

- 2. Guidance value used where a standard has not been established.

 3. Applies to the sum of cis-1,3-dichloropropene and trans-1,2-dichloropropene.

 4. The principal organic contaminant standard for groundwater of 5 µg/L applies to this analyte. Bolded concentrations indicate the analyte was detected.

 Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

NE - NYSDEC TOGS 1.1.1 water quality standard not established.

- U The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.

 J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

 R The sample results are rejected.
- D Compound identified in analysis at a secondary dilution factor.

Envirotek II Site - Tonawanda, New York **Groundwater Monitoring Report** Sampling Events 1 and 2

Sample ID:	NYSDEC TOGS 1.1.1		NW-4		NW-5	ESI-8
Date Collected:	Water Quality Standards ¹	Units	9/30/1999	4/19/2001	9/3/1999	9/29/1999
1,1,1-Trichloroethane	5	µg/L	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	5 4	µg/L	-			-
1,1,2-Trichloro-1,2,2-trifluoroethane	5	µg/L				_
1,1,2-Trichloroethane	1 1	µg/L	10 U	10 U	10 U	10 U
1,1-Dichloroethane	5	µg/L	8 J	3.1	10 U	10 U
1,1-Dichloroethene	5	µg/L	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	5	µg/L	-	100		"
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L				
1,2-Dibromoethane (EDB)	NE NE	µg/L				
1.2-Dichlorobenzene	3	µg/L				
1.2-Dichloroethane	5/0.6	µg/L	10 U	10 U	10 U	10 U
1,2-Dichloropropane	5	µg/L	100	1	100	1 100
1,3-Dichlorobenzene	3	µg/L				
1.4-Dichlorobenzene	3	µg/L				
2-Hexanone	50	µg/L	10 U	10 U	10 U	10 U
Acetone	50	µg/L	10 U	10 U	10 U	10 U
Benzene	1 1	µg/L	10 U	10 U	10 U	10 U
Bromoform	NE / 50 ²	µg/L				-
Bromomethane	5	µg/L				
Carbon Disulfide	NE / 60	µg/L	10 U	10 U	10 U	10 U
Carbon Tetrachloride	5	µg/L		10.0		100
Chlorobenzene	5	µg/L	10 U	10 U	10 U	10 U
Chloroethane	5	µg/L	10 0	10 U	10 U	10 U
Chloroform	7	µg/L	10 U	10 U	10 U	10 U
Chloromethane	NE NE	µg/L	100	100	100	100
cis-1,2-Dichloroethene	5	µg/L		5 J		
cis-1,3-Dichloropropene	0.43	µg/L		"-"		
Cyclohexane	NE	µg/L				
*	NE / 50 ²				_	l
Dibromochloromethane Dichlorobromomethane	NE / 50	µg/L	-	-		-
	5 ⁴	µg/L	-	-		-
Dichlorodifluoromethane	1	μg/L				
Ethylbenzene	5	µg/L	10 U	10 U	10 U	10 U
Isopropylbenzene	5 4	µg/L				
Methyl acetate	NE a	µg/L	-			
Methyl Ethyl Ketone	NE / 50 ²	µg/L	10 U	10 U	10 U	10 U
Methyl Isobutyl Ketone	NE	µg/L	10 U	10 U	10 U	10 U
Methylcyclohexane	NE	µg/L			-	
Methylene chloride	5	µg/L	10 U	10 U	10 U	10 U
Methyl-t-Butyl Ether (MTBE)	NE / 10	µg/L	-			
Styrene	50	µg/L	-			
Tetrachloroethene	5	µg/L	2 J	4 J	10 U	10 U
Toluene	5	μg/L	10 U	10 U	10 U	1 J
Total Xylenes	5	µg/L	10 U	10 U	10 U	
trans-1,2-Dichloroethene	5	µg/L	-	10 U		-
trans-1,3-Dichloropropene	0.4 3	µg/L	-			
Trichloroethene	5	μg/L	1 J	10 U	10 U	10 U
Trichlorofluoromethane	5	µg/L	-			
Vinyl chloride	2	µg/L	9 J	10 U	10 U	10 U
Total VOCs		µg/L	28	12		3
Total VOCs		mg/L	0.028	0.012	ND	0.003

Notes:

- New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values (μg/L).
 Where two values are provided, the first represents pre-2004 values and the second represents revised values used for the 2004 data.
- Guidance Value used where a standard has not been established.
 Applies to the sum of cis-1,3-dichloropropene and trans-1,2-dichloropropene.
 The principal organic contaminant standard for groundwater of 5 µg/L applies to this analyte.

- 4. The principal organic contaminant standard for groundwater of 5 µg/L applies to this analyte. Bolded concentrations indicate the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

 NE NYSDEC TOGS 1.1.1 water quality standard not established.

 U The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.
- J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
- R The sample results are rejected.
- D Compound identified in analysis at a secondary dilution factor.

Envirotek II Site - Tonawanda, New York **Groundwater Monitoring Report** Sampling Events 1 and 2

	NYSDEC					
Sample ID:	TOGS 1.1.1 Water Quality		FB101705	FB100506	TRIP BLANK	TRIP BLANK
Date Collected:	Standards ¹	Units	10/17/05	10/05/06	10/17/05	10/05/06
1,1,1-Trichloroethane	5	µg/L	10 U	1 U	10 U	1 U
1.1.2.2-Tetrachloroethane	5 4	µg/L	10 U	1 U	10 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	µg/L	10 U	1 0	10 U	1 0
1.1.2-Trichloroethane	1	µg/L	10 U	1 0	10 U	1 0
1,1-Dichloroethane	5	µg/L	10 U	1 0	10 U	1 0
1,1-Dichloroethene	5	µg/L	10 U	1 0	10 U	1 0
1,2,4-Trichlorobenzene	5	µg/L	10 U	1 0	10 U	1 0
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L	10 U	1 Ŭ	10 U	1 Ü
1,2-Dibromoethane (EDB)	NE NE	µg/L	10 U	1 0	10 U	1 0
1.2-Dichlorobenzene	3	µg/L	10 U	1 0	10 U	1 0
1.2-Dichloroethane	5 / 0.6	µg/L	10 U	1 0	10 U	1 0
1,2-Dichloropropane	5	µg/L	10 U	1 0	10 U	1 0
1,3-Dichlorobenzene	3	µg/L	10 U	1 0	10 U	1 0
1.4-Dichlorobenzene	3	µg/L	10 U	1 0	10 U	1 0
2-Hexanone	50	µg/L	10 U	5 U	10 U	5 U
Acetone	50	µg/L	2 J	60 J	10 U	5 U J
Benzene	1	µg/L	10 U	1 U	10 U	1 0
Bromoform	NE / 50 ²	µg/L	10 U	1 0	10 U	1 0
Bromomethane	5	µg/L	10 U	101	10 U	1 0 1
Carbon Disulfide	NE / 60	µg/L	10 U	1 0 0	10 U	1 1 0
Carbon Tetrachloride	5	µg/L	10 U	1 0	10 U	1 10
Chlorobenzene	5	µg/L	10 U	1 0	10 U	1 0
Chloroethane	5	µg/L	10 U	R	10 U	R
Chloroform	7	µg/L	10 U	l 1 u	10 U	1 1 0
Chloromethane	NE NE	µg/L	10 U	Ιΰ	10 U	Ιίŭ
cis-1,2-Dichloroethene	5	µg/L	10 U	Ιΰ	10 U	1 0
cis-1,3-Dichloropropene	0.4 3	µg/L	10 U	1 1 0	10 U	1 0
Cyclohexane	NE.	µg/L	10 U	1 10	10 U	1 0
Dibromochloromethane	NE / 50 ²	1	10 U	1 0	10 U	1 1 0
Dichlorobromomethane	NE NE	µg/L	10 U	1 0	10 U	1 0
	5 ⁴	μg/L			1	
Dichlorodifluoromethane		µg/L	10 U	1 U	10 U	1 U
Ethylbenzene	5	µg/L	10 U	1 U	10 U	1 U
Isopropylbenzene	5 ⁴	µg/L	10 U	1 U	10 U	1 U
Methyl acetate	NE	µg/L	10 U	1 U J	10 U	1 U J
Methyl Ethyl Ketone	NE / 50 ²	µg/L	10 U	9	10 U	5 U
Methyl Isobutyl Ketone	NE	µg/L	10 U	5 U	10 U	5 U
Methylcyclohexane	NE	µg/L	10 U	1 U	10 U	1 U
Methylene chloride	5	µg/L	10 U	1 U	10 U	1 U
Methyl-t-Butyl Ether (MTBE)	NE / 10	µg/L	10 U	0.8 J	10 U	1 U
Styrene	50	µg/L	10 U	1 U	10 U	1 U
Tetrachloroethene	5	μg/L	10 U	1 U	10 U	1 U
Toluene	5	µg/L	10 U	1 1	10 U	1 U
Total Xylenes	5	µg/L	10 U	3 U	10 U	3 U
trans-1,2-Dichloroethene	5	µg/L	10 U	1 U	10 U	1 U
trans-1,3-Dichloropropene	0.4 3	µg/L	10 U	1 U	10 U	1 U
Trichloroethene	5	µg/L	10 U	1 U	10 U	1 U
Trichlorofluoromethane	5	µg/L	10 U	1 U	10 U	1 U
Vinyl chloride	2	µg/L	10 U	1 U	10 U	1 U
Total VOCs		µg/L	2	71	ND	ND
Total VOCs		mg/L	0.002	0.071	ND	ND

- 1. New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values (μg/L). Where two values are provided, the first represents pre-2004 values and the second represents revised values used for the 2004 data.

- 2. Guidance Value used where a standard has not been established.
 3. Applies to the sum of cis-1,3-dichloropropene and trans-1,2-dichloropropene.
 4. The principal organic contaminant standard for groundwater of 5 µg/L applies to this analyte.

Bolded concentrations indicate the analyte was detected.

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NE - NYSDEC TOGS 1.1.1 water quality standard not established.

- U The analyte was analyzed for but not detected. The associated value is the analyte quantitation limit.
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- R The sample results are rejected.
 D Compound identified in analysis at a secondary dilution factor.

Table 3 Field Measured Parameters

Envirotek II Site - Tonawanda, New York Groundwater Monitoring Report Sampling Events 1 and 2

Sample ID:	EN'	V-1	EN	/-3R	ENV-4		EN	ENV-7	
Date Collected:		10/5/2006	10/17/2005	10/5/2006	10/17/2005	10/5/2006	10/17/2005	10/5/2006	
pH (standard units)	6.32	6.96	7.95	8.39	7.96	9.09	7.74	8.50	
Temperature (°C)	14.55	14.70	16.04	15.60	14.16	13.90	13.89	13.10	
Specific Conductivity (mS/cm)	0.702	0.866	0.834	0.984	0.971	0.983	0.567	0.911	
ORP (mV)	-121.7	-169	-159.9	-248	-206.9	-330	58.7	-141	
DO (mg/L)	0.30	9.28	0.36	9.49	0	9.60	0.54	4.72	
Turbidity (NTU)	5.2	2.0	0.9	1.17	9.7	2.0	0	0	
Purge Method	GeoPump	GeoPump	GeoPump	GeoPump	GeoPump	GeoPump	GeoPump	GeoPump	

Sample ID:	EN	8-V	EN	V-9	GW-3		
Date Collected:	10/17/2005	10/5/2008	10/17/2005	19/5/2006	10/17/2005	10/5/2006	
pH (standard units)	7.49	8.27	7.30	8.17	10.11	11.71	
Temperature (°C)	16.09	15.40	14.76	13.90	13.44	13.10	
Specific Conductivity (mS/cm)	0.989	1.29	1.708	2.17	1.116	1.36	
ORP (mV)	233.8	-162	-208.1	-253	-110.7	-296	
DO (mg/L)	0.37	0.49	0.57	9.21	0.17	0.00	
Turbidity (NTV)	1.5	5.0	7.7	6.3	3.7	0.35	
Purge Method	GeoPump	GeoPump	GeoPump	GeoPump	GeoPump	GeoPump	

Notes:

°C - degrees Celsius

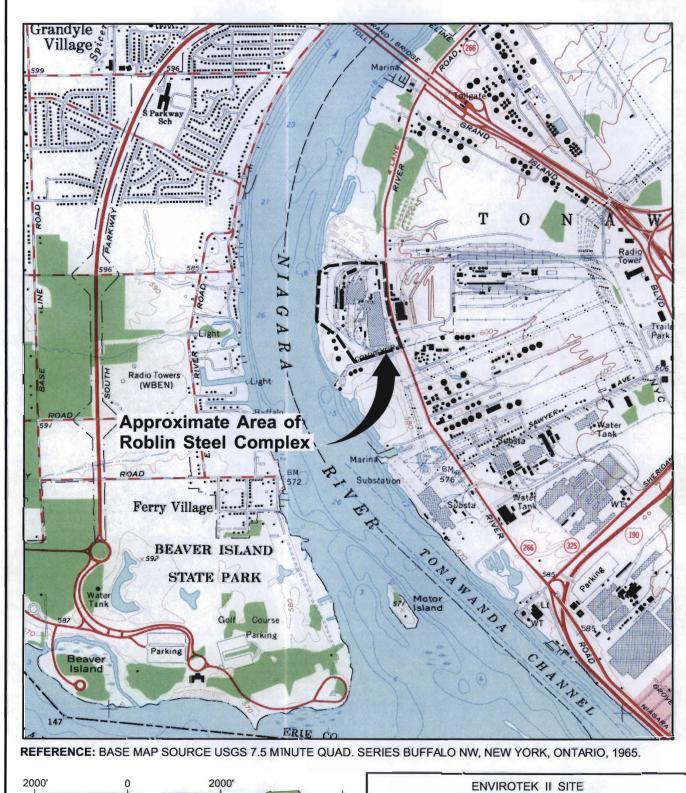
mS/cm - millisiemens/centimeter

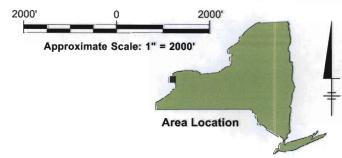
mV - millivots

mg/L - milligrams per liter

NTU - nephelometric turbidity units

Figures





TONAWANDA NEW YORK

GROUNDWATER MONITORING REPORT

SITE LOCATION MAP



FIGURE

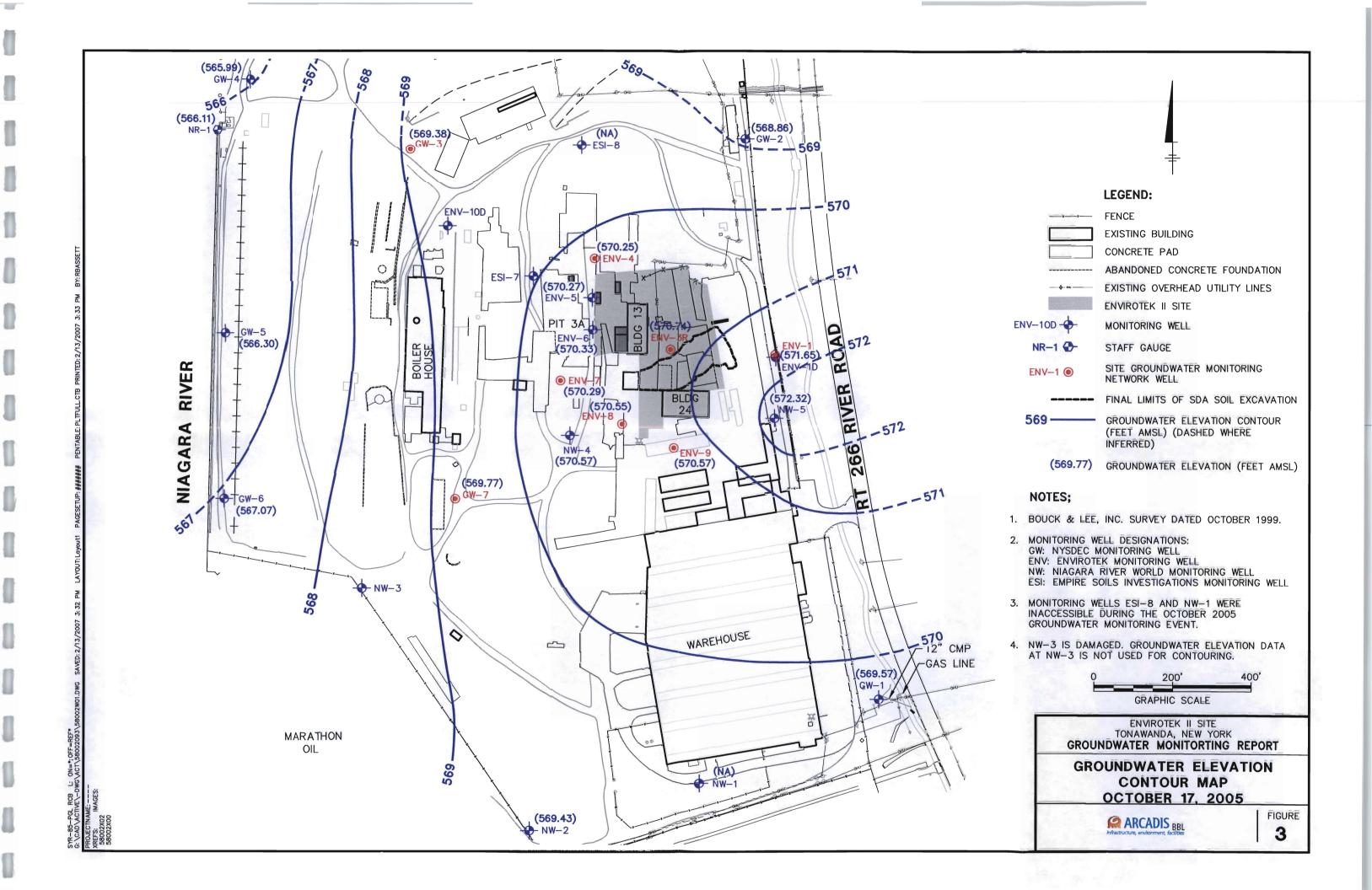
BASE MAP PREPARED FROM BLASLAND, BOUCK & LEE, INC. SURVEY DATED OCTOBER 1999.

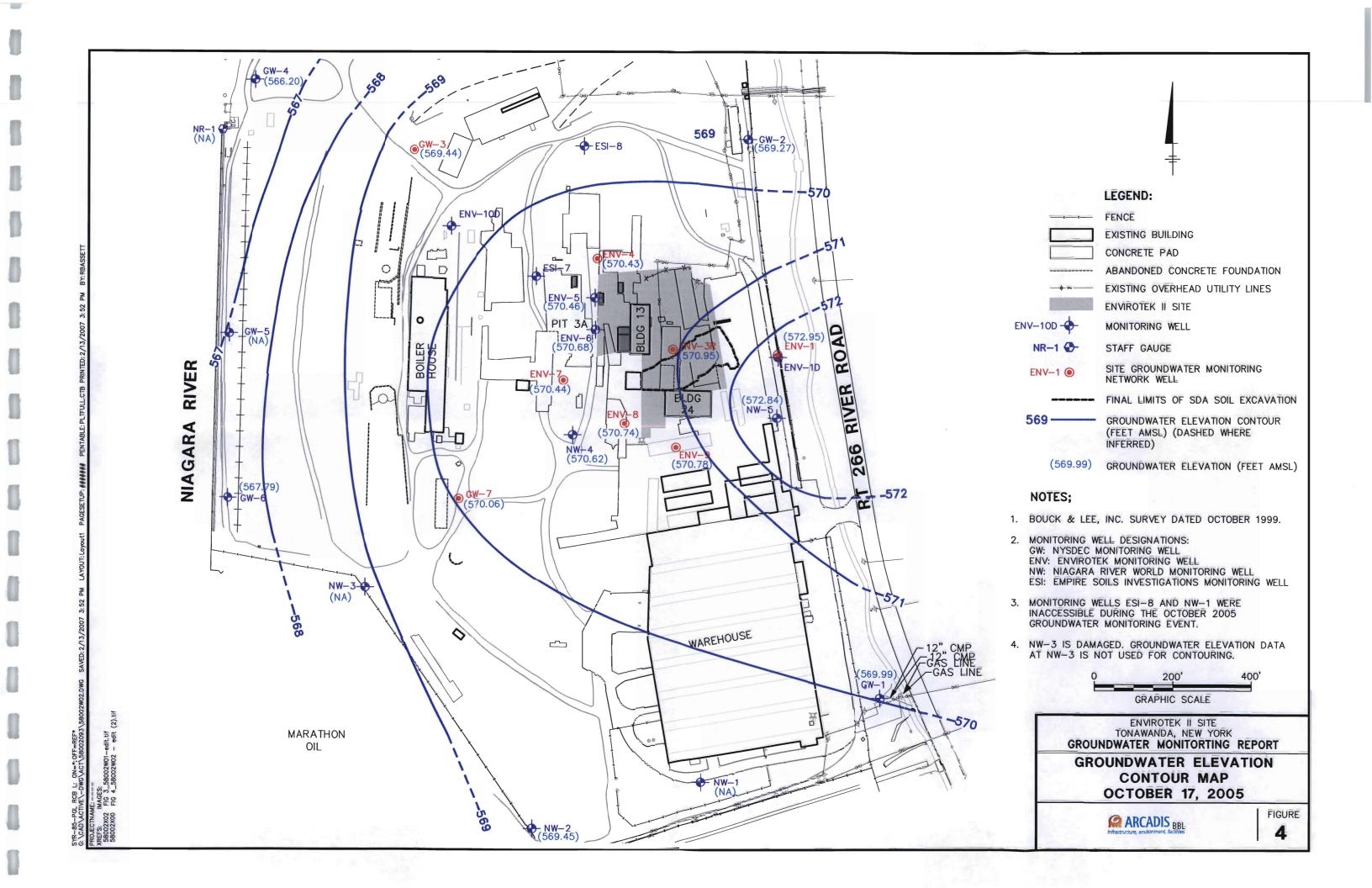


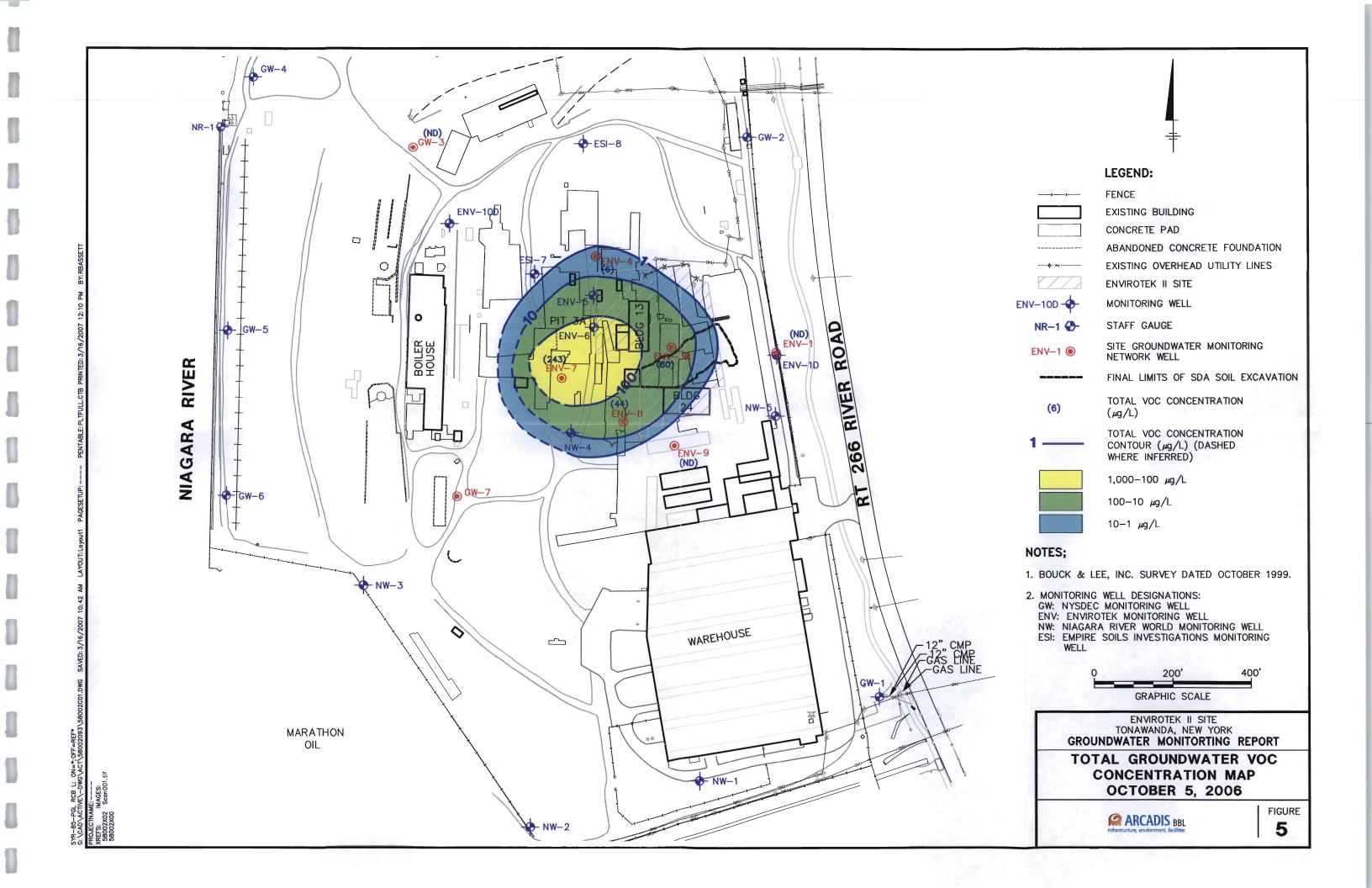
TONAWANDA, NEW YORK GROUNDWATER MONITORING REPORT

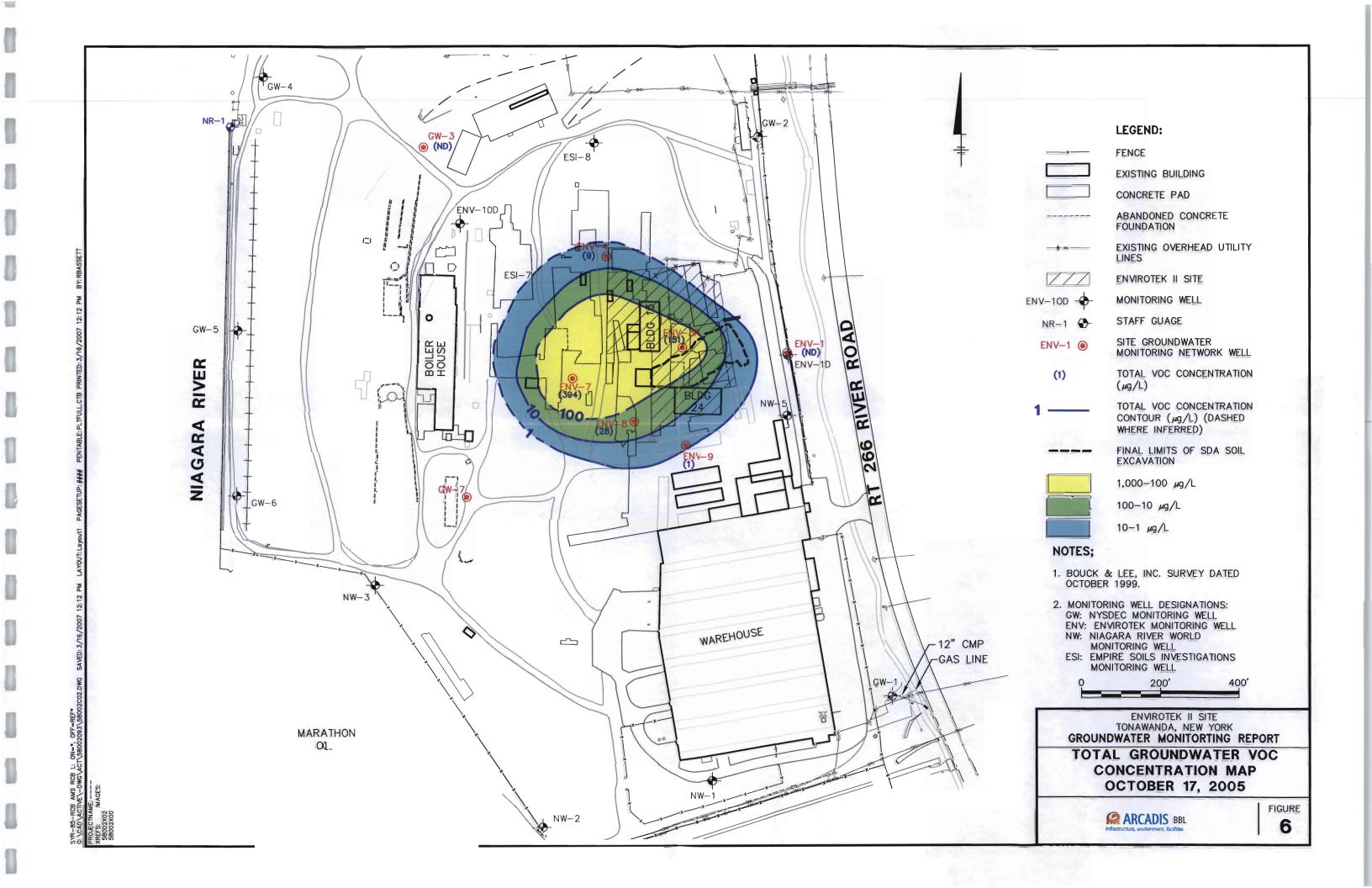
ROBLIN STEEL COMPLEX SITE PLAN

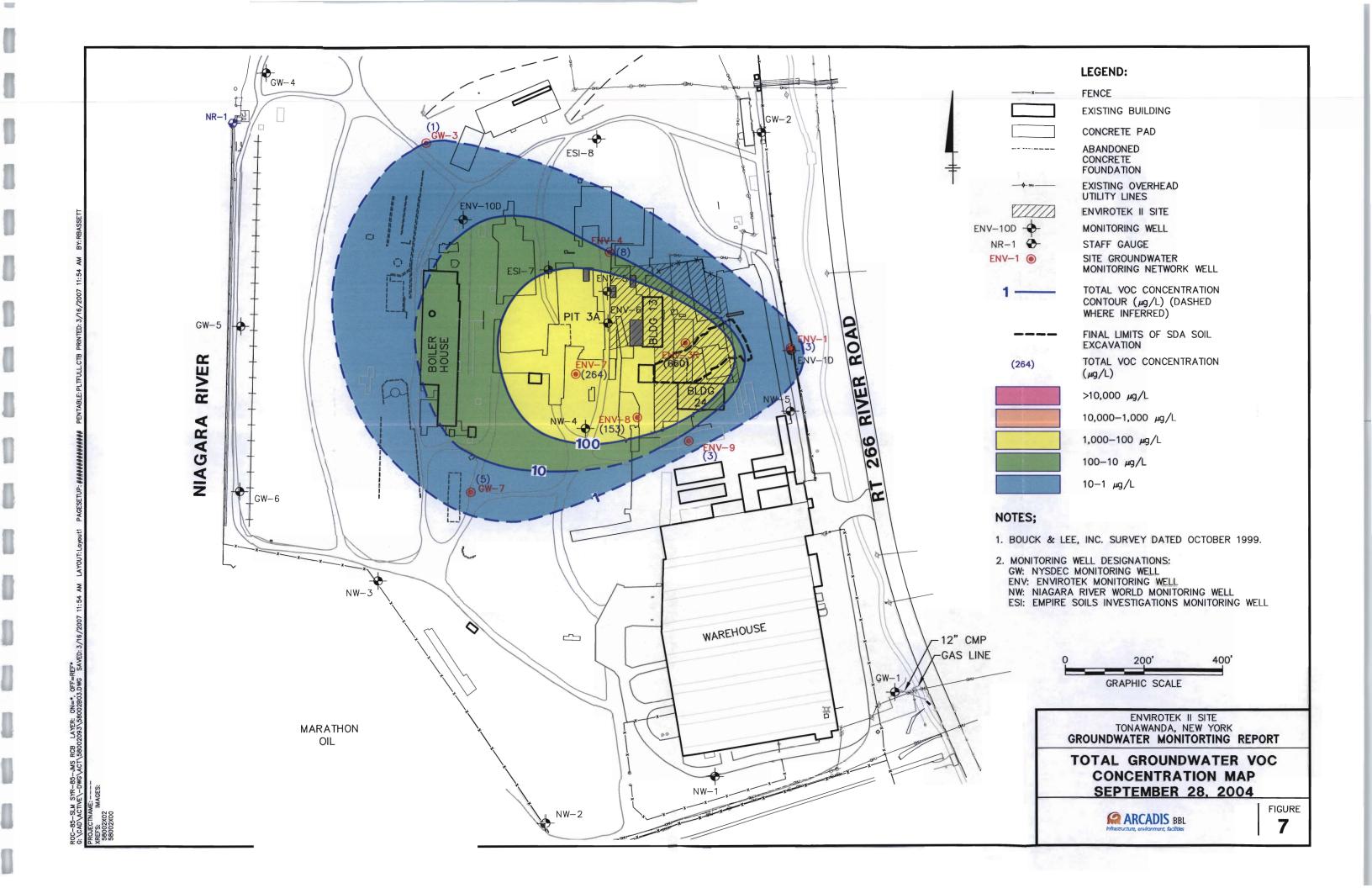
> **FIGURE** 2

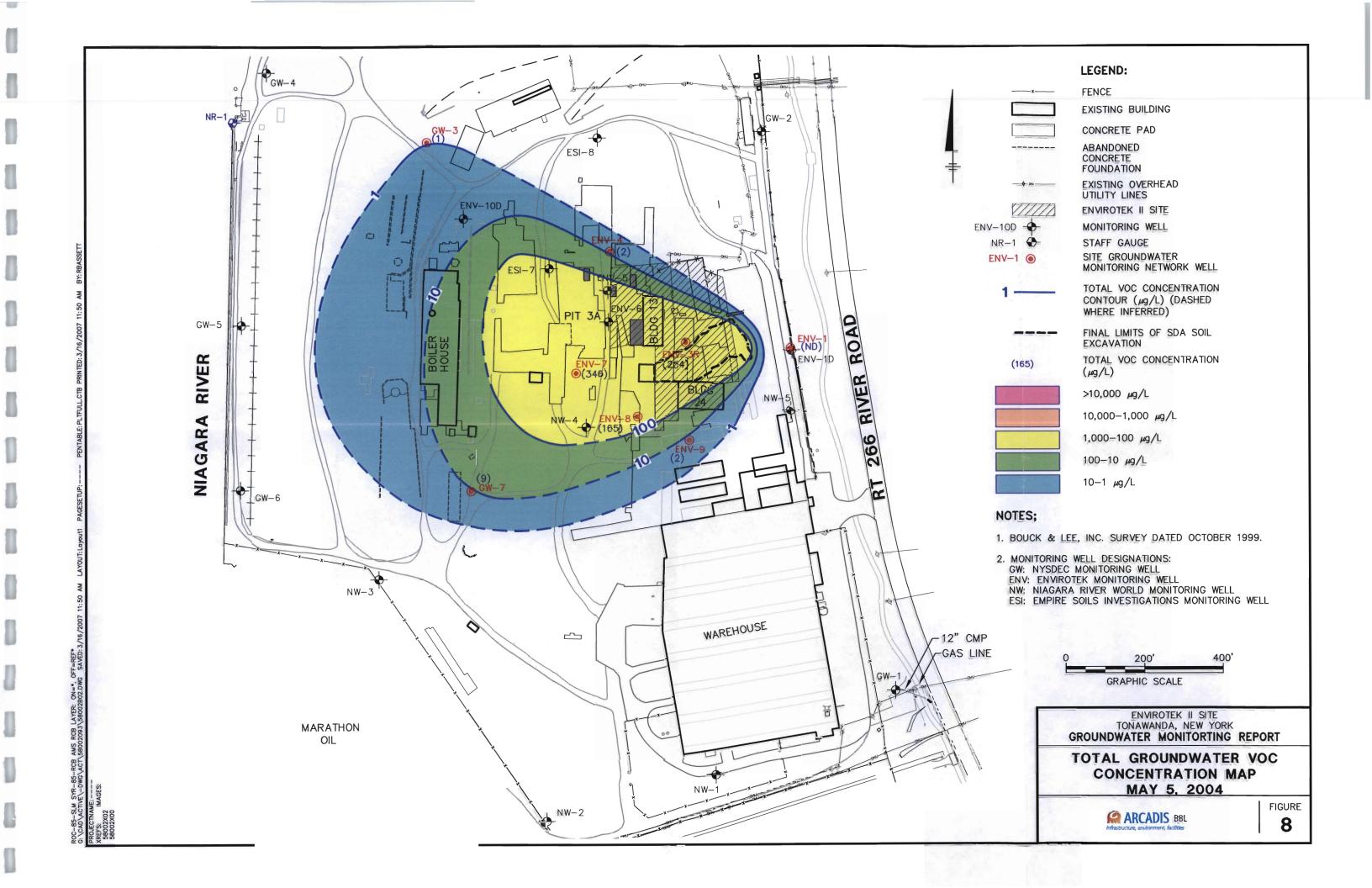












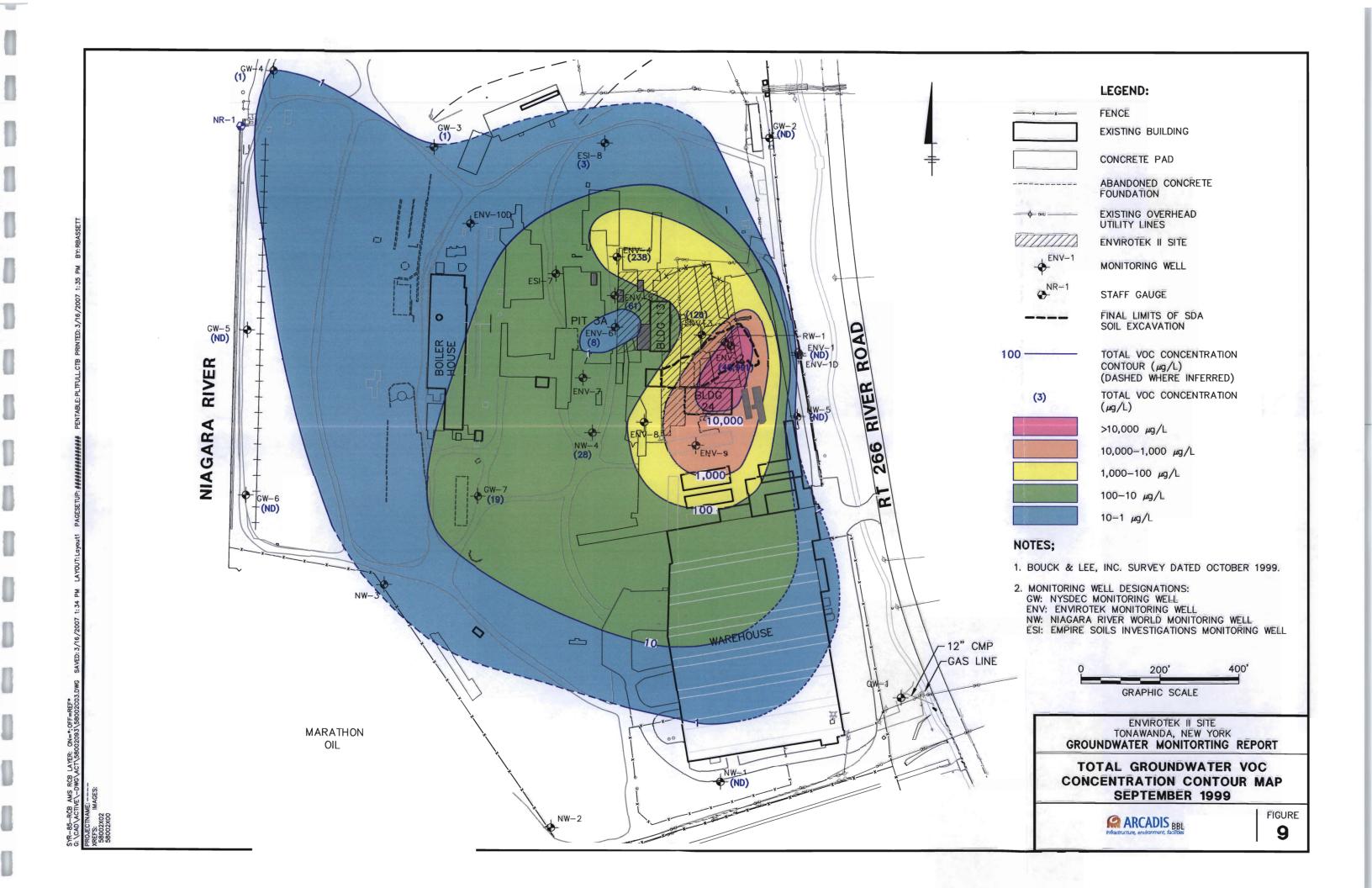


FIGURE 10
Groundwater VOC Concentrations in ENV-1 vs. Time

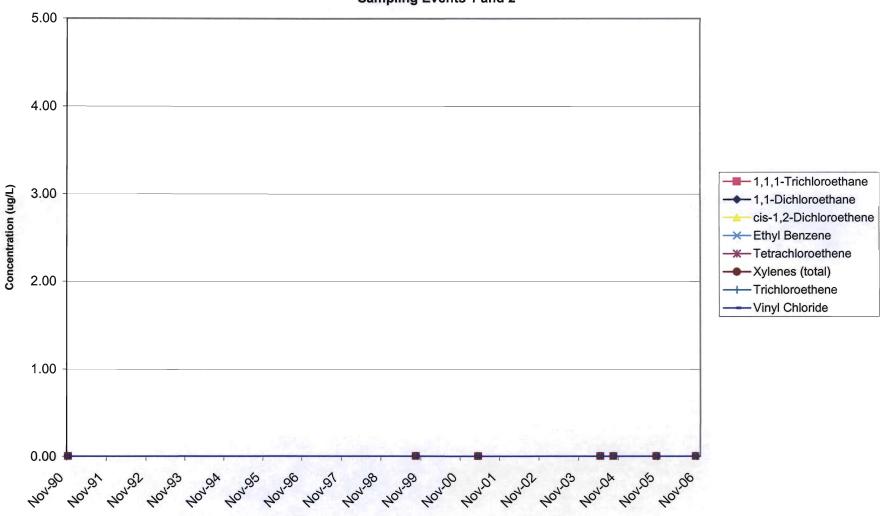
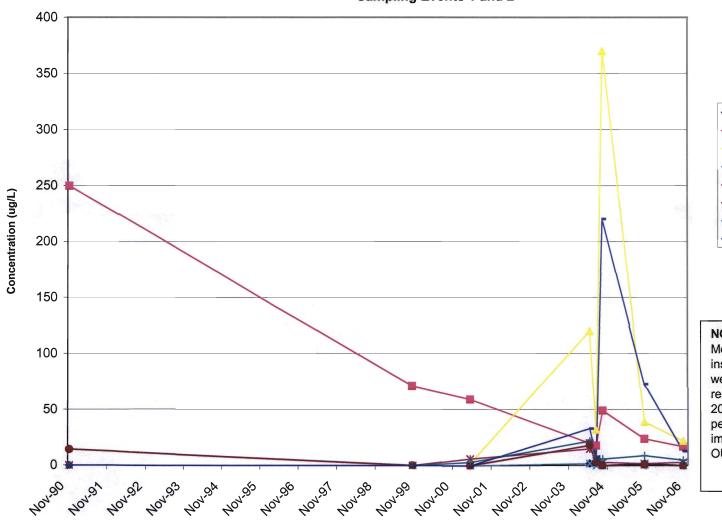


FIGURE 11
Groundwater VOC Concentrations in ENV-3/3R vs. Time



1,1,1-Trichloroethane 1,1-Dichloroethane cis-1,2-Dichloroethene Ethyl Benzene Tetrachloroethene Xylenes (total) Trichloroethene Vinyl Chloride

NOTE:

Monitoring well ENV-3R was installed to replace monitoring well ENV-3, which was removed on September 25, 2003 during the excavation performed during implementation of the IRM for OU-2.

FIGURE 12
Groundwater VOC Concentrations in ENV-4 vs. Time

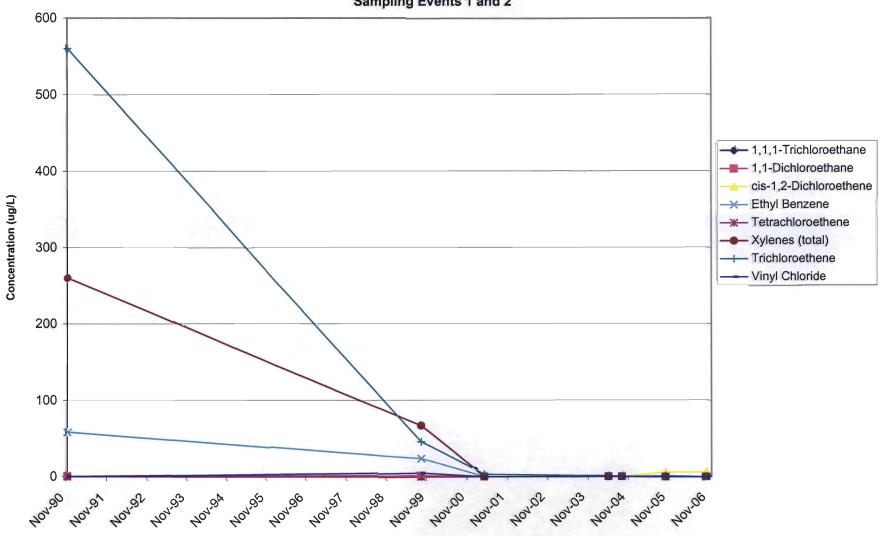


FIGURE 13
Groundwater VOC Concentrations in ENV-7 vs. Time



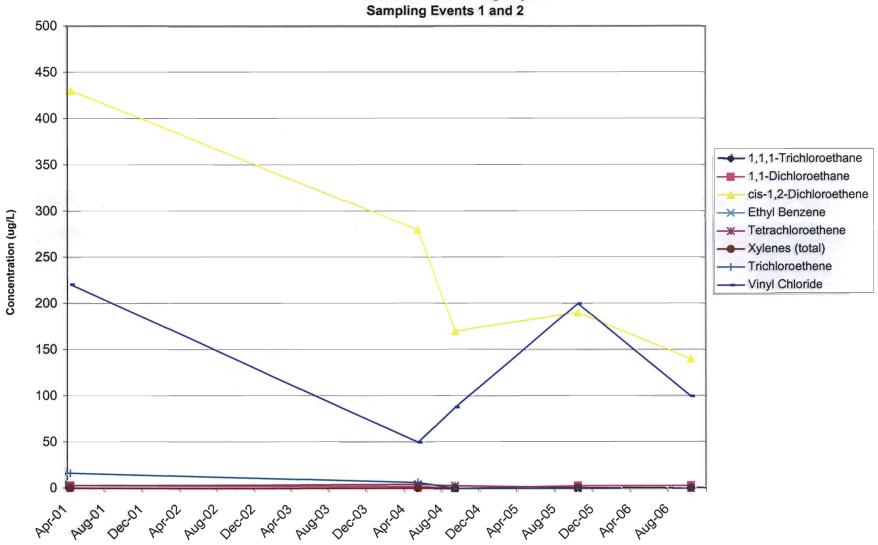


FIGURE 14
Groundwater VOC Concentrations in ENV-8 vs. Time

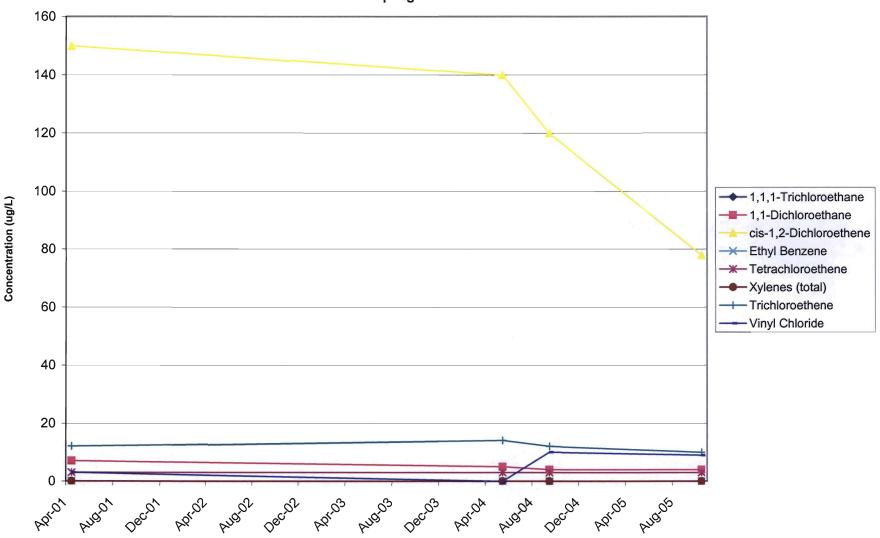


FIGURE 15
Groundwater VOC Concentrations in ENV-9 vs. Time

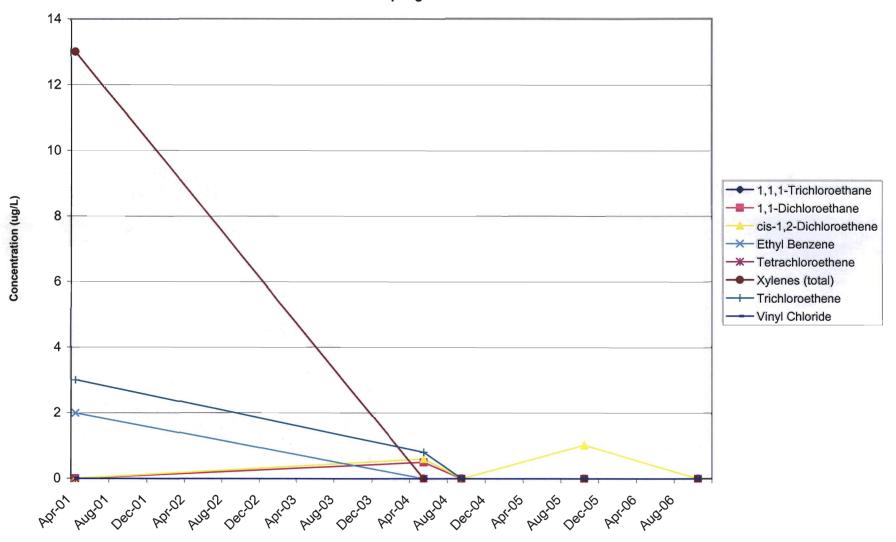
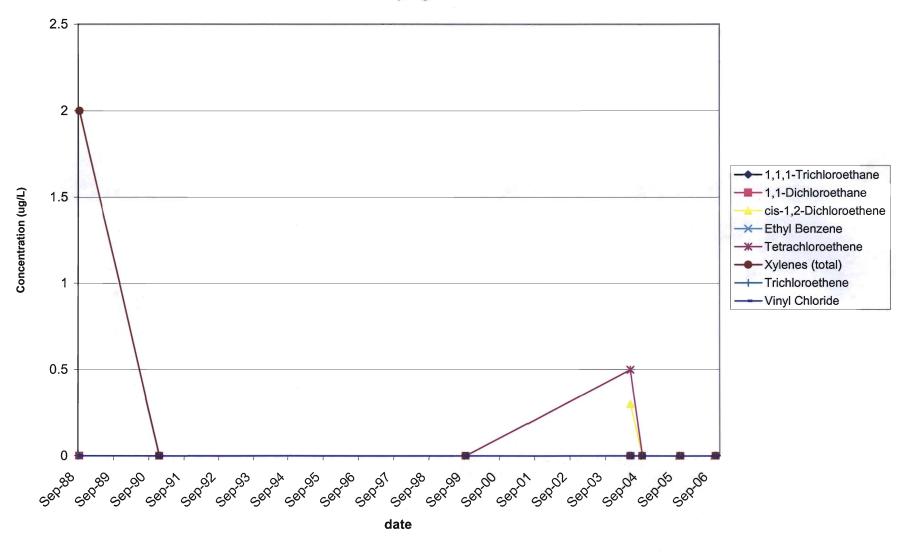


FIGURE 16
Groundwater VOC Concentrations in GW-3 vs. Time



ARCADIS BBL

Appendix A

Laboratory Analytical Reports

