



**Summary Report for Erdle Perforating Site
Immediate Soil Vapor Intrusion Investigation (8-28-072)
Gates, New York**

Prepared for

New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233



Prepared by

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September 2007
Revision: FINAL
EA Project No. 14368.05

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17 September 2007

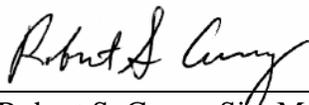
Date



David W. Eck, P.E., Project Manager
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17 September 2007

Date



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17 September 2007

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CONTENTS

	<u>Page</u>
LIST OF FIGURES	
LIST OF TABLES	
1. INTRODUCTION	1
1.1 Project Background	1
1.2 Objective.....	1
1.3 Report Organization	1
2. FIELD ACTIVITIES	2
2.1 Structure Inspection/Inventory and Owner Questionnaire	2
2.1.1 Structure Inspection/Inventory and Questionnaire	2
2.2 Sub-Slab Vapor Sampling	3
2.2.1 Sub-Slab Vapor Point Installation	3
2.2.2 Sub-Slab Vapor Sampling	4
2.3 Indoor Air and Outdoor Ambient Air Sampling	4
2.3.1 Indoor Air Sampling	4
2.3.2 Outdoor Ambient Air Sampling	5
2.4 Sump Water Sampling.....	6
2.5 Field Duplicate Sampling	6
2.5.1 Air/Vapor Field Duplicate Sampling.....	6
2.5.2 Sump Water Field Duplicate Sampling	6
2.6 Laboratory Analysis	6
2.6.1 Air/Vapor Laboratory Analysis	6
2.6.2 Sump Water Laboratory Analysis	7

	<u>Page</u>
3. FIELD SAMPLING RESULTS	8
3.1 Sub-Slab Vapor, Indoor Air, and Outdoor Ambient Air Sampling Results	8
3.1.1 Sub-Slab Vapor Results	8
3.1.2 Basement Indoor Air Results.....	9
3.1.3 First-Floor Indoor Air Results	9
3.1.4 Outdoor Ambient Air Results.....	9
3.2 Sump Water Sampling Results	9
3.3 Proposed Further Actions	10
APPENDIX A: DATA USABILITY SUMMARY REPORT (CD ATTACHMENT)	

LIST OF FIGURES

<u>Number</u>	<u>Title</u>
1	Study Area Location Map
2	Sub-Slab Vapor Trichloroethene (TCE) Data Results
3	Sub-Slab Vapor cis-1,2-dichloroethene (cis-1,2-DCE) Data Results
4	Sump Water Data Results
5	NYSDEC and NYSDOH Proposed Further Actions

LIST OF TABLES

<u>Number</u>	<u>Title</u>
1	Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
2	Summary of Detected Volatile Organic Compounds (VOCs) in Sump Water

1. INTRODUCTION

1.1 PROJECT BACKGROUND

The New York State Department of Environmental Conservation (NYSDEC) tasked EA Engineering, P.C., and its affiliate EA Science and Technology, Inc. (EA) to perform an Immediate Soil Vapor Intrusion (ISVI) investigation at the Erdle Perforating site (NYSDEC Site No. 8-28-072). The Erdle Perforating site is located within an industrial area and north of the Conrail railroad tracks; to the south of the railroad tracks is an undeveloped marsh/wetland and a developed residential area in the Town of Gates, Monroe County, New York (Figure 1). The ISVI investigation study area was targeted for the residential homes located south of the Erdle Perforating site.

This work assignment is being conducted under the NYSDEC State Superfund Standby Contract (Work Assignment No. D004438). The work was completed as an ISVI Work Assignment. The field activities for the ISVI investigation were performed from 7 March through 6 April 2007.

1.2 OBJECTIVE

The objective of the ISVI investigation at the Erdle Perforating site was to determine the nature and extent of potential volatile organic compound (VOC) contamination in the soil vapor and indoor air in the residential structures located south of the site. A sampling program, consisting of sub-slab soil vapor sampling, indoor and outdoor ambient air sampling, and sump water sampling, was performed at 38 residential structures located within the targeted study area (Figure 2).

This ISVI Investigation Summary Report was prepared to discuss the field activities and summarize the soil vapor, indoor air, and sump water sample results.

1.3 REPORT ORGANIZATION

A summary of field activities completed in March and April 2007 is provided in Section 2. Data associated with the performance of field activities are presented in Section 3.

The following is provided as an appendix:

- Appendix A: Data Usability Summary Reports.

2. FIELD ACTIVITIES

This section presents the overall approach of the field investigation activities that were performed to meet the stated objectives of the ISVI investigation. The field sampling activities were designed to evaluate the presence or absence of contaminants of concern in the study area. Environmental matrices sampled and analyzed were sub-slab soil vapor, indoor and outdoor ambient air, and sump water.

The field investigation program was performed during March and April 2007 and included the following activities:

- **Structure Inspection/Inventory and Owner Questionnaire**—An inspection/inventory of general site conditions and completion of the New York State Department of Health (NYSDOH) Indoor Air Quality Questionnaire and Building Inventory were completed for each structure.
- **Sub-Slab Vapor Sampling**—Temporary sub-slab soil vapor points were installed at each structure sampled within the study area.
- **Indoor and Outdoor Ambient Air Sampling**—Basement indoor air and first-floor indoor air samples were collected at each structure sampled within the study area. Outdoor air samples were collected at locations representative of outdoor air ambient conditions for each day indoor air samples were collected.
- **Sump Water Sampling**—A grab sump water sample was collected from each property observed to contain standing groundwater within the sump(s) on the date of air sample collection.

2.1 STRUCTURE INSPECTION/INVENTORY AND OWNER QUESTIONNAIRE

2.1.1 Structure Inspection/Inventory and Questionnaire

Guidance for Evaluating Soil Vapor Intrusion in the State of New York (Final, October 2006) (Soil Vapor Intrusion [SVI] Guidance) and NYSDEC Department of Remediation *Draft DER-10 Technical Guidance for Site Investigation and Remediation* (December 2002) protocol were followed during the planning and implementation of this investigation.

EA inspected the general site conditions at each property location. The pre-sampling inspection included completion of the NYSDOH Indoor Air Quality Questionnaire and Building Inventory, documentation of weather conditions outside and temperatures inside, ambient indoor air screening using field equipment (i.e., ppbRAE Model PGM-7240 ppb VOC Monitor [ppbRAE]), and selection of air sampling locations. Product inventories were completed in the vicinity of the basement and first floor indoor air sample locations.

Ambient indoor air ppbRAE readings ranged from 0 to 2,300 ppb within the structures sampled. Sub-slab purge vapor ppbRAE readings ranged from 0 to 5,452 ppb within the structures sampled.

2.2 SUB-SLAB VAPOR SAMPLING

2.2.1 Sub-Slab Vapor Point Installation

The following procedures were followed for the selection and installation of all sub-slab vapor points within the structures sampled during the field investigation.

- A visual assessment of the condition of the basement floor was completed. The locations of the sub-slab vapor point were selected to be out of the line of traffic, away from major cracks and other floor penetrations (sumps, pipes, etc.), and a minimum of at least 5 ft from an exterior wall.
- Once the location was determined, a 0.25-in. diameter hole was drilled approximately 2 in. below the concrete floor slab using an electric hammer drill. A 3/8-in. diameter drill bit was then used to over drill the top 0.5 in. of the borehole to create an annular space for the surface seal.
- Concrete dust and flooring material was swept away from the drill hole and wiped with a dampened towel.
- Teflon-lined polyethylene tubing (3/16-in. inside diameter × 0.25-in. outside diameter) was then inserted into the borehole drilled in the floor, extending no further than 2 in. below the bottom of the floor slab.
- Melted beeswax was then poured around the tubing at the floor penetration, and allowed to set tightly around the tubing prior to the sample canister connection.
- A dedicated 60-cubic centimeter syringe was then used to purge approximately 100 ml of air/vapor from the sampling point. The syringe was capped and the purge air released outside the building into a ppbRAE as to not interfere with the indoor air sample collection. The purge air ppbRAE reading was recorded on the field sampling form.
- 6-L Summa[®] canisters equipped with flow regulators and vacuum gauges were used to collect the sub-slab vapor samples. The canisters and flow regulators were batch certified clean by the laboratory prior to use. The flow controllers were regulated by the laboratory to collect at 0.2 L/minute over a 24-hour collection period.
- The sample canisters were connected to the sample tubing using a compression fitting and placed on the floor adjacent to the sampling point.
- A digital photograph was taken of the canister setup and the surrounding area.

2.2.2 Sub-Slab Vapor Sampling

A total of 38 sub-slab vapor samples were collected from the temporary sub-slab vapor points installed at the structures located within the study area. Prior to initiating the sampling, the serial number of the canister and associated regulator were recorded on the field sampling form. Sample information including sample identification, sample start date/time, initial vacuum gauge pressure, and required analysis (EPA Method TO-15) were recorded on the canister identification tag and the field sampling form.

Following the 24-hour collection period, the canister valves were closed to terminate sample collection. The flow controller ending gauge pressure and sample end time were recorded on the canister identification tag and the field sampling forms. Once sample collection was terminated, the canister and flow controller were disconnected from the sample tubing and placed into a shipping box. All pertinent sample information was recorded on the associated chain-of-custody and repackaged in the original box.

If the vacuum gauge reading was at 0 in Hg at the termination of the sample collection period, it was noted on the field sampling form and communicated to the NYSDEC representative. Three structures were resampled (Structure-05, Structure-09, and Structure-22) at the request of the NYSDEC due to vacuum gauge readings that terminated at 0 in Hg.

Sub-slab vapor samples were sent to Air Toxics Ltd., Folsom, California for VOC analysis by EPA Method TO-15. Sub-slab vapor sampling results are summarized in Table 1.

Upon completion of the sampling, the temporary sub-slab sampling points were removed and sealed to floor grade with hydraulic cement.

2.3 INDOOR AIR AND OUTDOOR AMBIENT AIR SAMPLING

2.3.1 Indoor Air Sampling

A total of 37 basement indoor air samples and 37 first-floor indoor air samples were collected from structures located within the study area. In accordance with the NYSDOH SVI Guidance, indoor air samples were set up to collect a representative air sample from within the breathing zone (i.e., 3-5 ft above the floor). 6-L Summa[®] canisters equipped with flow regulators and vacuum gauges were used to collect the indoor air samples. The canisters and flow regulators were batch certified clean by the laboratory prior to use. The flow controllers were regulated by the laboratory to collect at 0.2 L/minute over a 24-hour collection period.

Prior to initiating the sampling, the serial number of the canister and associated regulator were recorded on the field sampling form. Sample identification including sample identification, sample start date/time, initial vacuum gauge pressure, and required analysis (EPA Method TO-15) were recorded on the canister identification tag and the field sampling form.

Following the 24-hour collection period, the canister valves were closed to terminate the sample collection period. The flow controller ending gauge pressure and sample end time were recorded on the canister identification tag and the field sampling forms. Once sample collection was terminated, the canister and flow controller were removed from the sample tubing and placed into a shipping box. All pertinent sample information was recorded on the associated chain-of-custody and repackaged in the original box.

If the vacuum gauge reading was at 0 in Hg at the termination of the sample collection period, it was noted on the field sampling form and communicated to the NYSDEC representative. Three structures were resampled (Structure-05, Structure-09, and Structure-22) at the request of the NYSDEC due to vacuum gauge readings that terminated at 0 in Hg.

All indoor air samples were sent to Air Toxics Ltd., Folsom, California for VOC analysis by EPA Method TO-15. Indoor air sampling results are summarized in Table 1.

2.3.2 Outdoor Ambient Air Sampling

A total of 31 outdoor ambient air samples were collected concurrent with sub-slab vapor and indoor air sampling to represent outdoor ambient air quality. In accordance with the NYSDOH SVI Guidance, outdoor ambient air samples were set up to collect a representative air sample from within the breathing zone (i.e., 3-5 ft above the floor). If sample locations were unable to achieve the elevated sampling zone, dedicated Teflon-lined polyethylene tubing was used to reach the breathing zone. 6-L Summa[®] canisters equipped with flow regulators and vacuum gauges were used to collect the outdoor ambient air samples. The canisters and flow regulators were batch certified clean by the laboratory prior to use. The flow controllers were regulated by the laboratory to collect at 0.2 L/minute over a 24-hour collection period

Prior to initiating the sampling, the serial number of the canister and associated regulator were recorded on the field sampling form. Sample identification including sample identification, sample start date/time, initial vacuum gauge pressure, and required analysis (EPA Method TO-15) were recorded on the canister identification tag and the field sampling form.

Following the 24-hour collection period, the canister valves were closed to terminate the sample collection period. Flow controller ending gauge pressure and sample end time were recorded on the canister identification tag and the field sampling forms. Once sample collection was terminated, the canister and flow controller were removed from the sample tubing and placed into a shipping box. Pertinent sample information was recorded on the associated chain-of-custody and repackaged into the originating box.

Outdoor ambient air samples were sent to Air Toxics Ltd., Folsom, California for VOC analysis by EPA Method TO-15. Outdoor ambient air sampling results are summarized in Table 1.

2.4 SUMP WATER SAMPLING

A total of 35 sump water samples were collected in conjunction with sub-slab vapor and indoor air. Grab sump water samples were collected from the standing water present within the basement sump. If the basement sump was not accessible, no sump water sample was collected. Sump water samples were not collected from Structure-23, Structure-26, and Structure-33 due to intricate sump pump installations and locked sump covers.

Prior to sampling the sump water, appropriate sample identification including sample identification, sample date/time, structure identification, and required analysis (EPA Method 8260) were recorded on the sample labels and the field sampling form.

All sump water samples were sent to Mitkem Corporation, Warwick, Rhode Island for VOC analysis by EPA Method 8260. Sump water sampling results are summarized in Table 2.

2.5 FIELD DUPLICATE SAMPLING

2.5.1 Air/Vapor Field Duplicate Sampling

Field quality control samples included duplicate sample collection. Field duplicates were collected at the rate of 1 duplicate per 20 original samples per sample type (i.e., sub-slab vapor, basement indoor air, first-floor indoor air, and outdoor ambient air). For field duplicates collected at sub-slab vapor points, an in-line “tee” was used, which essentially split the sub-slab vapor sample into two canisters. At indoor and outdoor ambient air duplicate sampling locations, two canisters were set up adjacent to each other for sample collection.

A total of eight duplicate air/vapor samples were collected during the field investigation. Two sub-slab vapor duplicates, two basement indoor air duplicates, two first-floor indoor air duplicates, and two outdoor ambient air duplicates were collected for quality control purposes.

2.5.2 Sump Water Field Duplicate Sampling

Field quality control samples included duplicate sample collection. Field duplicates were collected at the rate of 1 duplicate per 20 original samples.

A total of two duplicate sump water samples were collected during the field investigation for quality control purposes.

2.6 LABORATORY ANALYSIS

2.6.1 Air/Vapor Laboratory Analysis

All air samples were analyzed by Air Toxics Ltd., Folsom, California, an Environmental Laboratory Approval Program (ELAP) certified laboratory for VOCs using EPA Method TO-15. In accordance with the NYSDOH SVI Guidance and the NYSDEC work assignment, the analysis

for indoor air samples achieved detection limits of $1 \mu\text{g}/\text{m}^3$ for each compound, except for trichloroethene (TCE), tetrachloroethene, 1,1,2,2-tetrachloroethane, 1,1,1-trichloroethane, and 1,1,2-trichloroethane which had a detection limit of $0.25 \mu\text{g}/\text{m}^3$.

All analytical results are contained within the data usability summary report (DUSR) attached as Appendix A.

2.6.2 Sump Water Laboratory Analysis

All sump water samples were analyzed by Mitkem Corporation, Warwick, Rhode Island, an Environmental Laboratory Analytical Program-certified laboratory for VOCs using EPA Method 8260B. The analysis for sump water samples achieved a detection limit of 1 ppb for each compound.

All analytical results are contained within the DUSR attached as Appendix A.

3. FIELD SAMPLING RESULTS

The following section presents the analytical results of the sub-slab vapor, indoor air and outdoor ambient air samples, and sump water samples collected during the field investigation. The NYSDEC and NYSDOH have evaluated the data generated during the SVI investigation and have made recommendations based on the results. A summary table for the sub-slab vapor and indoor air and outdoor ambient air analytical data is provided as Table 1. A summary table for sump water analytical data is provided as Table 2.

Figure 2 depicts TCE sample results for sub-slab vapor samples. Figure 3 depicts cis-1,2-dichloroethene (DCE) sample results for sub-slab vapor samples. Figure 4 depicts the sump water results for total VOCs. Figure 5 illustrates the further actions proposed by the NYSDEC and NYSDOH.

Copies of the DUSR for the sub-slab vapor, indoor air and outdoor ambient air, and sump water analytical data are provided in Appendix A.

3.1 SUB-SLAB VAPOR, INDOOR AIR, AND OUTDOOR AMBIENT AIR SAMPLING RESULTS

A total of 143 air/vapor samples were collected from within study area, as identified below:

- 38 sub-slab vapor samples (Structure-01 through Structure-38)
- 37 basement indoor air samples (Structure-01 through Structure-37)
- 37 first-floor indoor air samples (Structure-01 through Structure-37)
- 31 outdoor ambient air samples (various locations throughout the study area).

3.1.1 Sub-Slab Vapor Results

Sub-slab vapor samples were collected at each of the 38 structures within the study area and analyzed for VOCs by EPA Method TO-15.

TCE was detected in 14 sub-slab vapor samples at concentrations ranging from 1.6 $\mu\text{g}/\text{m}^3$ (Structure 14) to 980 $\mu\text{g}/\text{m}^3$ (Structure-20).

Cis-1,2-DCE was detected in 16 sub-slab vapor samples at concentrations ranging from 1.8 $\mu\text{g}/\text{m}^3$ (Structure-34) to 10,000 $\mu\text{g}/\text{m}^3$ (Structure-05).

Vinyl chloride (VC) was detected in 6 sub-slab vapor samples at concentrations ranging from 7.6 $\mu\text{g}/\text{m}^3$ (Structure-35) to 390 $\mu\text{g}/\text{m}^3$ (Structure-15).

3.1.2 Basement Indoor Air Results

Basement indoor air samples were collected at 37 of 38 structures within the study area and analyzed for VOCs by EPA Method TO-15.

TCE was detected in 17 basement indoor air samples at concentrations ranging from 0.16 $\mu\text{g}/\text{m}^3$ (Structure-34) to 120 $\mu\text{g}/\text{m}^3$ (Structure-37).

Cis-1,2-DCE was detected in 16 basement indoor air samples at concentrations ranging from 0.61 $\mu\text{g}/\text{m}^3$ (Structure-22) to 96 $\mu\text{g}/\text{m}^3$ (Structure-05)

VC was detected in 6 basement indoor air samples at concentrations ranging from 0.71 $\mu\text{g}/\text{m}^3$ (Structure-14) to 18 $\mu\text{g}/\text{m}^3$ (Structure-05).

3.1.3 First-Floor Indoor Air Results

First-floor indoor air samples were collected at 37 of 38 structures within the study area and analyzed for VOCs by EPA Method TO-15.

TCE was detected in 14 first floor indoor air samples at concentrations ranging from 0.18 $\mu\text{g}/\text{m}^3$ (Structure-30) to 9.0 $\mu\text{g}/\text{m}^3$ (Structure-04).

Cis-1,2-DCE was detected in 15 first floor indoor air samples at concentrations ranging from 0.70 $\mu\text{g}/\text{m}^3$ (Structure-22) to 90 $\mu\text{g}/\text{m}^3$ (Structure-05)

VC was detected in 5 first floor indoor air samples at concentrations ranging from 0.83 $\mu\text{g}/\text{m}^3$ (Structure-31) to 18 $\mu\text{g}/\text{m}^3$ (Structure-05).

3.1.4 Outdoor Ambient Air Results

Outdoor ambient air samples were collected at 31 locations throughout the study area. None of the outdoor ambient air samples showed elevated levels of VOCs.

3.2 SUMP WATER SAMPLING RESULTS

A total of 35 sump water samples were collected from structures located within the study area and analyzed for VOCs by EPA Method 8260.

TCE was detected in 7 sump water samples at concentrations ranging from 1.4 $\mu\text{g}/\text{L}$ (Structure-37) to 18 $\mu\text{g}/\text{L}$ (Structure-20).

Cis-1,2-DCE was detected in 16 sump water samples at concentrations ranging from 1.1 $\mu\text{g}/\text{L}$ (Structure-24) to 190 $\mu\text{g}/\text{L}$ (Structure-27).

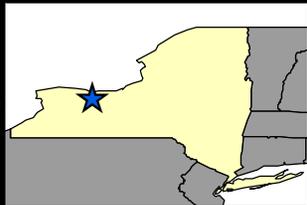
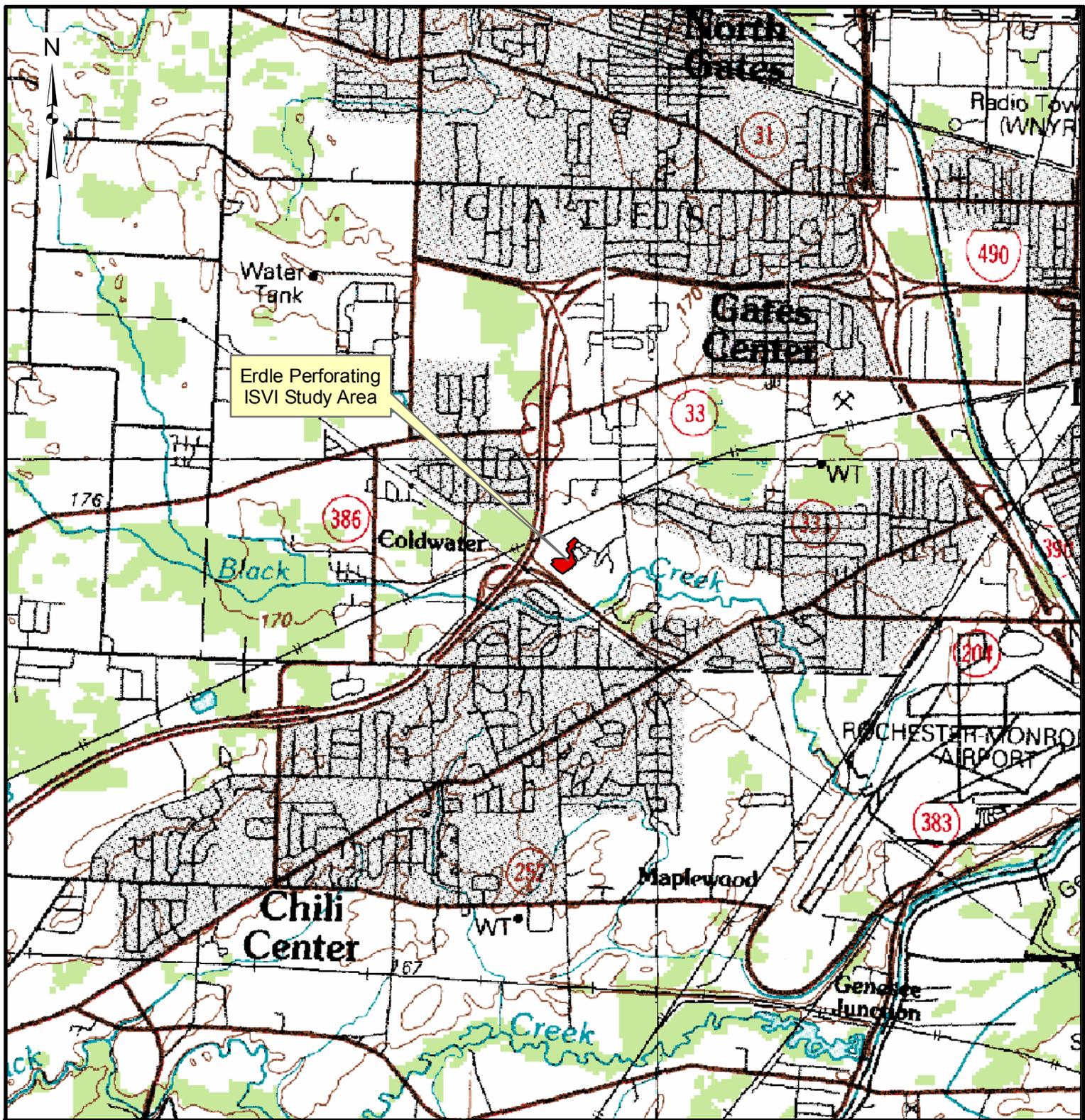
VC was detected in 8 sump water samples at concentrations ranging from 1.1 µg/L (Structure-11) to 37 µg/L (Structure-05).

3.3 PROPOSED FURTHER ACTIONS

The NYSDOH approach for addressing exposures related to SVI (based on sub-slab vapor and indoor air concentrations) is described within Section 3.0 of the NYSDOH SVI Guidance.

The NYSDEC and NYSDOH have evaluated the data generated during the field sampling and have made recommendations for proposed further actions based on the results. The proposed further actions, as depicted on Figure 5, include:

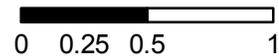
- Six structures within two areas of the Study Area were offered sub-slab depressurization (mitigation) systems.
- Structures within three areas of the Study Area were offered monitoring in order to further delineate the soil vapor plume.



Legend

 Study Area

Miles



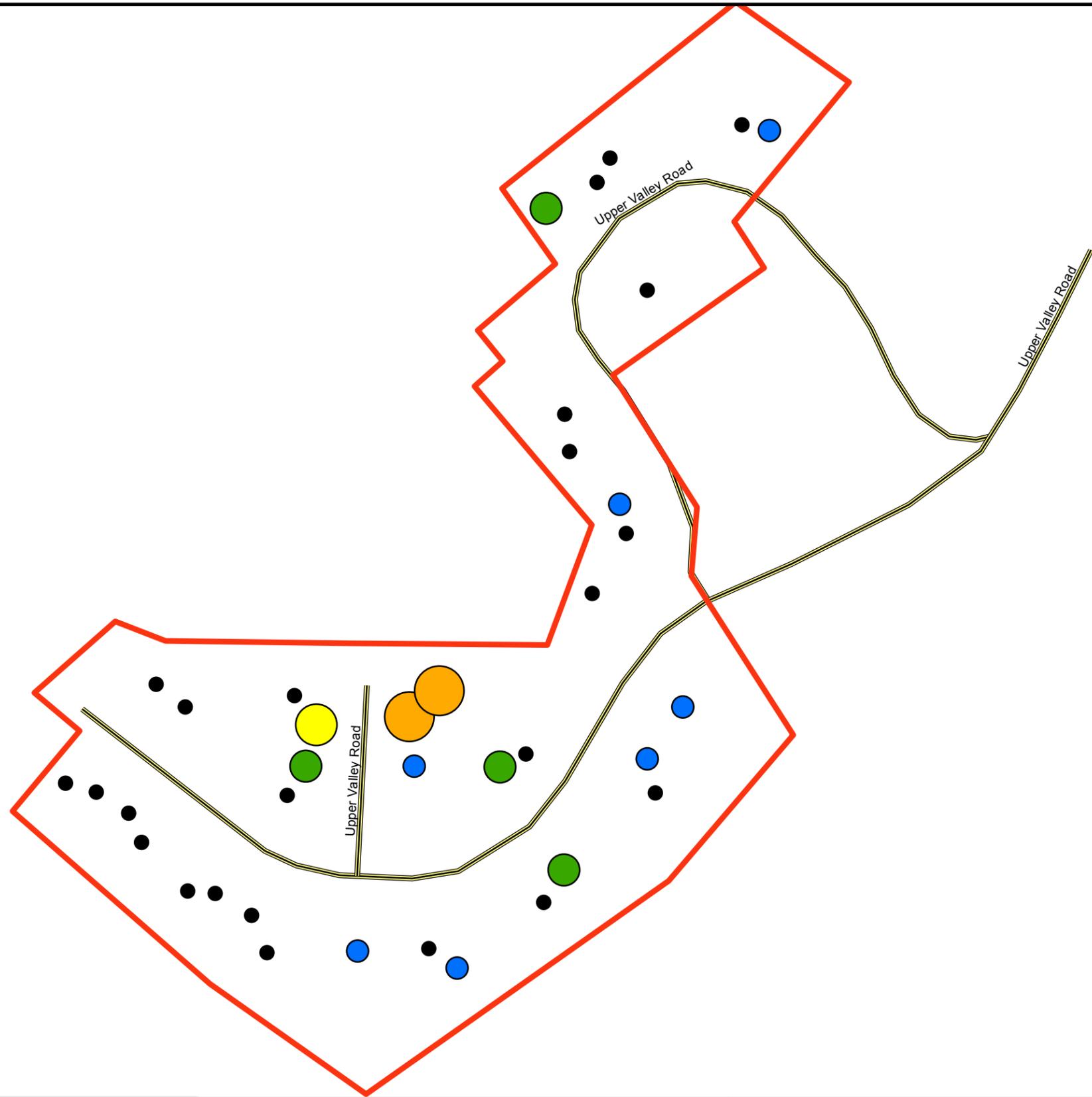
Source: USGS 1:100,000 DRG, Monroe County Division of GIS Services



ERDLE PERFORATING (8-28-072)
ISVI INVESTIGATION SUMMARY REPORT
GATES, NEW YORK

FIGURE 1
Study Area Location

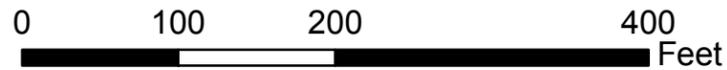
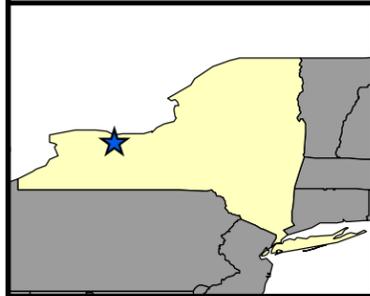
PROJECT MGR: CJC	DESIGNED BY: CJS	CREATED BY: CJS	CHECKED BY: RSC	SCALE: AS SHOWN	DATE: SEPTEMBER 2007	PROJECT NO: 14368.05	FILE NO: GIS/PROJECTS/ FIGURE1.MXD
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Legend

Trichloroethene (TCE) Sub-Slab Vapor Sampling Point Concentration (ug/m³)

- Not Detected
- < 5
- 5 - 50
- 50 - 250
- > 250
- Study Area
- Upper Valley Road



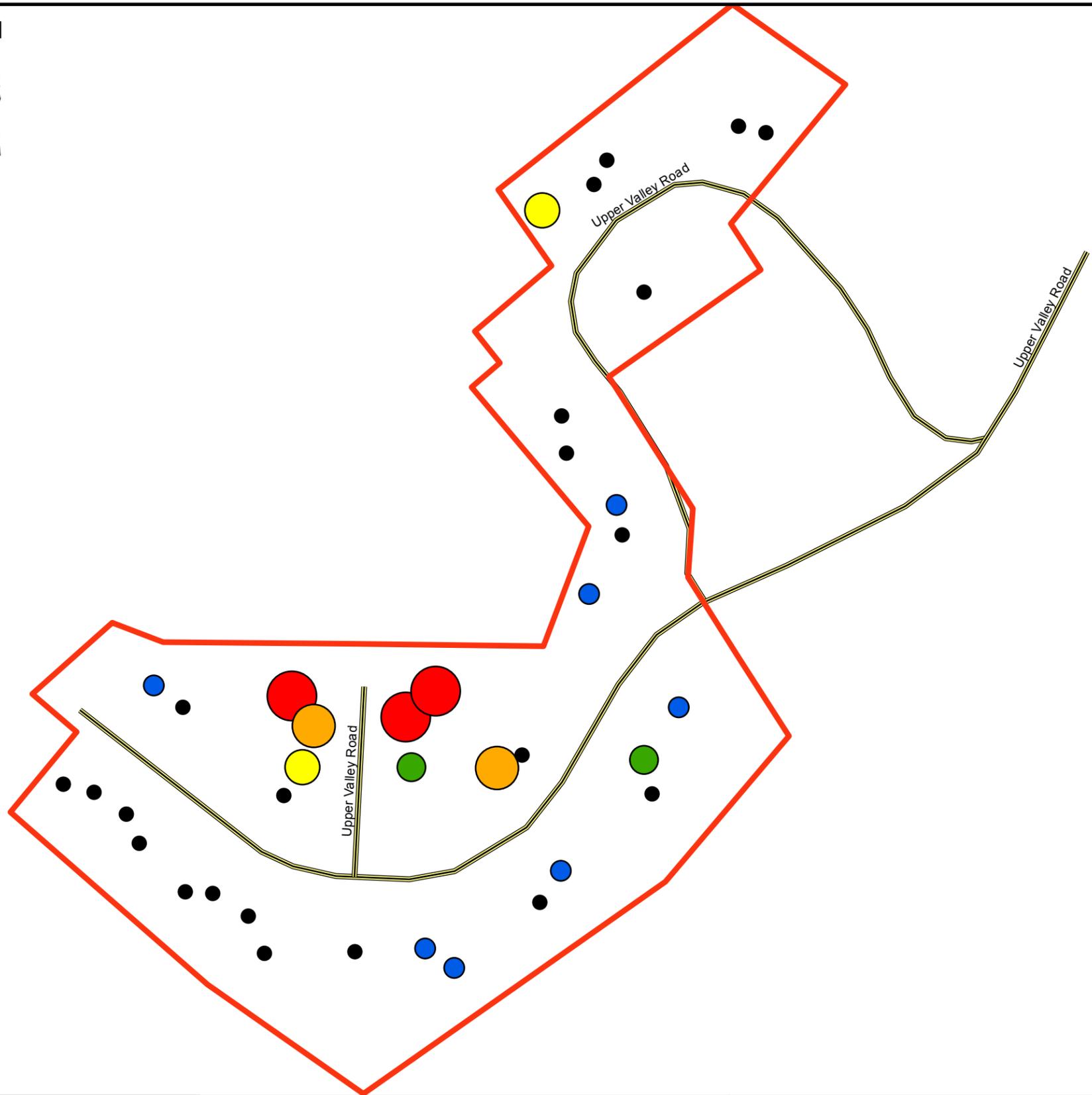
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ISVI INVESTIGATION SUMMARY REPORT
GATES, NEW YORK

Source: USGS 1:100,000 DRG, Monroe
County Division of GIS Services

FIGURE 2
Sub-Slab Vapor Trichloroethene (TCE) Data Results

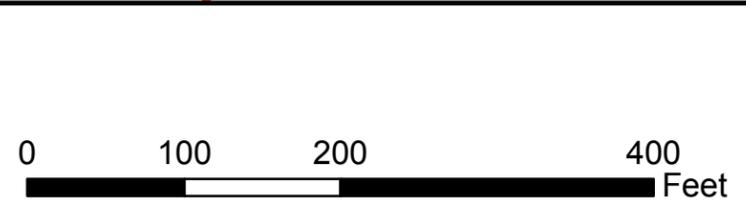
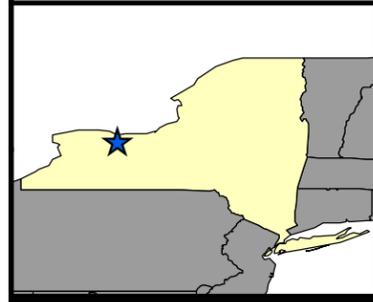


PROJECT MGR: CJC	DESIGNED BY: CJS	CREATED BY: CJS	CHECKED BY: RSC	SCALE: AS SHOWN	DATE: SEPTEMBER 2007	PROJECT NO: 14368.05	FILE NO: GIS/PROJECTS/ FIGURE2.MXD
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- Cis-1,2-Dichloroethene (cis-1,2-DCE) Sub-Slab Vapor Sampling Point Concentration (ug/m³)
- Not Detected
 - < 10
 - 10 - 250
 - 250 - 1,000
 - 1,000 - 5,000
 - > 5,000
 - Upper Valley Road
 - Study Area



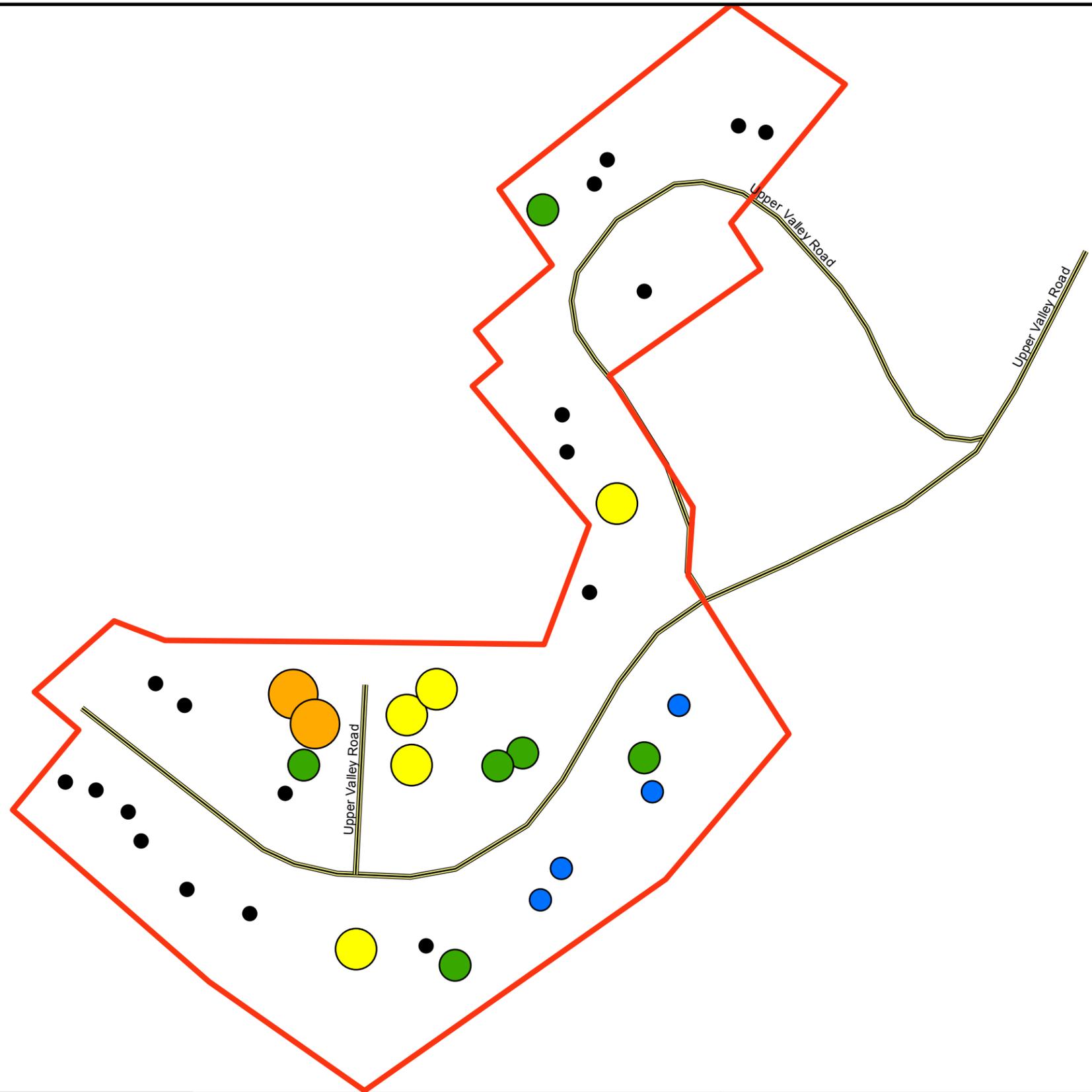
ERDLE PERFORATING (8-28-072)
ISVI INVESTIGATION SUMMARY REPORT
GATES, NEW YORK

Source: USGS 1:100,000 DRG, Monroe
County Division of GIS Services

FIGURE 3
Sub-Slab Vapor Cis-1,2-Dichloroethene (cis-1,2-DCE)
Data Results



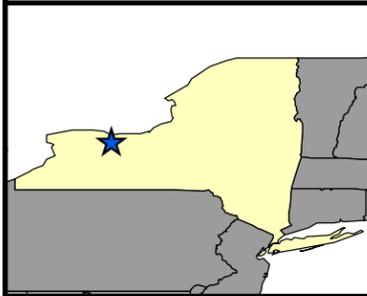
PROJECT MGR: CJC	DESIGNED BY: CJS	CREATED BY: CJS	CHECKED BY: RSC	SCALE: AS SHOWN	DATE: SEPTEMBER 2007	PROJECT NO: 14368.05	FILE NO: GIS/PROJECTS/ FIGURE2.MXD
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Legend

Sump Water Sampling Point Total Volatile Organic Compound (VOC) Concentration (ug/L)

- Non-Detect
- < 5
- 5 - 50
- 50 - 200
- > 200
- Study Area
- Upper Valley Road



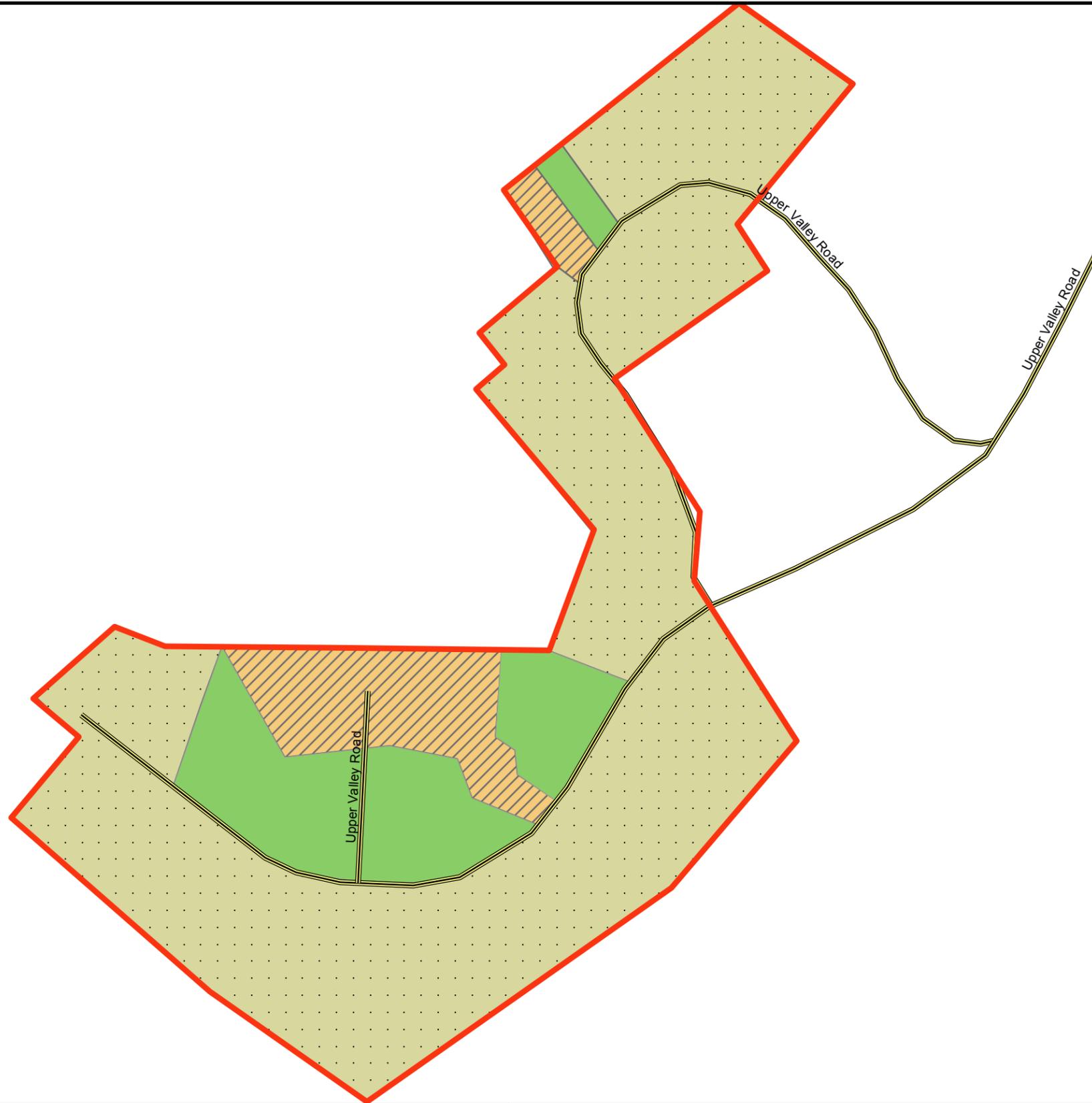
ERDLE PERFORATING (8-28-072)
ISVI INVESTIGATION SUMMARY REPORT
GATES, NEW YORK

Source: USGS 1:100,000 DRG, Monroe
County Division of GIS Services

FIGURE 4
Sump Water Data Results



PROJECT MGR: CJC	DESIGNED BY: CJS	CREATED BY: CJS	CHECKED BY: RSC	SCALE: AS SHOWN	DATE: SEPTEMBER 2007	PROJECT NO: 14368.05	FILE NO: GIS/PROJECTS/ FIGURE4.MXD
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Legend

- Proposed Further Actions**
-  Proposed Mitigate
 -  Proposed Monitor
 -  Proposed No Further Action
 -  Study Area
 -  Upper Valley Road

**ERDLE PERFORATING (8-28-072)
ISVI INVESTIGATION SUMMARY REPORT
GATES, NEW YORK**

Source: USGS 1:100,000 DRG, Monroe
County Division of GIS Services

FIGURE 5
NYSDEC & NYSDOH Proposed
Further Actions

PROJECT MGR: CJC	DESIGNED BY: CJS	CREATED BY: CJS	CHECKED BY: RSC	SCALE: AS SHOWN	DATE: SEPTEMBER 2007	PROJECT NO: 14368.05	FILE NO: GIS/PROJECTS/ FIGURE5.MXD
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Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Property ID	Structure 01			Structure 02		
	Sample ID	8-28-072 SS-01-B	8-28-072 IA-01-B	8-28-072 IA-01-1	8-28-072 SS-02-B	8-28-072 IA-02-B	8-28-072 IA-02-1
	Lab ID	0703324C-03A/03B	0703324A-01A/01B	0703324A-02A/02B	0703324C-07A/07B	0703324A-06A/06B	0703324A-05A/05B
	Sample Type	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air
	Sample Date	3/8/2007	3/8/2007	3/8/2007	3/8/2007	3/8/2007	3/8/2007
Trichloroethene	(ug/m3)			0.25			
Benzene	(ug/m3)	1.6	1	2	9.9	4	4.2
Bromomethane	(ug/m3)						
1,3- Butadiene	(ug/m3)				1.4	1.4	1.4
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	21	2.3	10	20	1	4.2
Chloroethane	(ug/m3)						
Chloroform	(ug/m3)	3.7		0.77			
Chloromethane	(ug/m3)	0.8	0.83	1.4	1.2	1.1	2
Cumene	(ug/m3)						
Cyclohexane	(ug/m3)	1.4		1	9.9	0.66	0.77
1,1- Dichloroethane	(ug/m3)						
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)						
trans-1,2- Dichloroethene	(ug/m3)						
cis-1,2- Dichloroethene	(ug/m3)						
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)	0.58	J	1.4			
Ethyl Benzene	(ug/m3)	1.4		2	1.5	1.8	2.3
4- Ethyltoluene	(ug/m3)	2.8		2.8	1.8	2	2.3
Heptane	(ug/m3)	2.7	1.1	1.3	14	1	1.2
Hexane	(ug/m3)	3.2	0.62	1	22	1.8	3.6
Methyl tert-butyl ether	(ug/m3)						
4- Methyl-2-pentanone	(ug/m3)	0.98			0.84		
Propylbenzene	(ug/m3)			0.88			
Styrene	(ug/m3)			0.84			0.76
Tetrachloroethene	(ug/m3)	0.88			0.63		
Toluene	(ug/m3)	12	4.3	14	27	10	15
1,1,1- Trichloroethane	(ug/m3)		0.45				
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)	1.3		0.91	0.79		0.78
1,2,4- Trimethylbenzene	(ug/m3)	4		3	2.2	2.2	2.6
Vinyl Chloride	(ug/m3)						
m,p- Xylene	(ug/m3)	5.3	1.2	6	6.2	5.8	6.4
o- Xylene	(ug/m3)	2.2		3	2	2	2.4

Note:

EPA = Environmental Protection Agency
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Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Property ID	Structure 03			Structure 04		
	Sample ID	8-28-072 SS-03-B	8-28-072 IA-03-B	8-28-072 IA-03-1	8-28-072 SS-04-B	8-28-072 IA-04-B	8-28-072 IA-04-1
	Lab ID	0703324C-10A/10B	0703324A-09A/09B	0703324A-08A/08B	0703324A-14A/14B	0703324A-13A/13B	0703324A-12A/12B
	Sample Type	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air
	Sample Date	3/8/2007	3/8/2007	3/8/2007	3/9/2007	3/9/2007	3/9/2007
Trichloroethene	(ug/m3)				4	3.7	9
Benzene	(ug/m3)	3.1	2.5	4.1	1.5	1.4	1.4
Bromomethane	(ug/m3)						
1,3- Butadiene	(ug/m3)		0.33	0.51			0.35
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	74	4.7	4.5	54	8.7	5.1
Chloroethane	(ug/m3)						
Chloroform	(ug/m3)		0.92	0.82			0.85
Chloromethane	(ug/m3)	1.4	1.6	1.6	0.6	0.99	
Cumene	(ug/m3)						
Cyclohexane	(ug/m3)	2.7	0.77	1			0.58
1,1- Dichloroethane	(ug/m3)						
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)						
trans-1,2- Dichloroethene	(ug/m3)						
cis-1,2- Dichloroethene	(ug/m3)				3.9	1.4	1.5
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)						
Ethyl Benzene	(ug/m3)	1.5	1.4	2.5	2	1.6	2.8
4- Ethyltoluene	(ug/m3)	1.7	1.4	2	2.2	1.6	2.8
Heptane	(ug/m3)	3.3	1.9	1.9	1.7	1.5	1.5
Hexane	(ug/m3)	6.2	1.8	2.9	1.2	1.1	1.2
Methyl tert-butyl ether	(ug/m3)						
4- Methyl-2-pentanone	(ug/m3)	2.4			1.8		
Propylbenzene	(ug/m3)						0.64
Styrene	(ug/m3)		0.72	1.5			
Tetrachloroethene	(ug/m3)				1.6	1.4	2.2
Toluene	(ug/m3)	10	12	18	9.9	9.3	12
1,1,1- Trichloroethane	(ug/m3)				5.5	6.2	5.3
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)	0.83		0.84	0.97		1
1,2,4- Trimethylbenzene	(ug/m3)	2.2	1.8	2.2	2.6	1.8	3.4
Vinyl Chloride	(ug/m3)						
m,p- Xylene	(ug/m3)	4.7	5.6	8.9	7.5	5.7	10
o- Xylene	(ug/m3)	1.8	1.8	3.1	2.6	1.9	3.9

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Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Property ID	Structure 05			Structure 06		
	Sample ID	8-28-072 SS-05-B	8-28-072 IA-05-B	8-28-072 IA-05-1	8-28-072 SS-06-B	8-28-072 IA-06-B	8-28-072 IA-06-1
	Lab ID	0704203A-12A/12B	0704203B-11A/11B	0704203B-10A/10B	0703324B-22A/22B	0703324B-21A/21B	0703324B-20A/20B
	Sample Type	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air
	Sample Date	4/6/2007	4/6/2007	4/6/2007	3/9/2007	3/9/2007	3/9/2007
Trichloroethene	(ug/m3)		0.21	0.22		2.5	3
Benzene	(ug/m3)				1.8	3.1	2.6
Bromomethane	(ug/m3)			0.76			
1,3- Butadiene	(ug/m3)				0.31	0.57	0.41
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)				5.1	1.4	1.8
Chloroethane	(ug/m3)						
Chloroform	(ug/m3)			0.85	0.78	0.86	1
Chloromethane	(ug/m3)		0.85	0.99	1.2	1.1	1.3
Cumene	(ug/m3)						
Cyclohexane	(ug/m3)						
1,1- Dichloroethane	(ug/m3)	150	1	1			
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)						
trans-1,2- Dichloroethene	(ug/m3)						
cis-1,2- Dichloroethene	(ug/m3)	10,000	96	90	1.3	0.91	0.8
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)						
Ethyl Benzene	(ug/m3)				1.5	1.6	1.4
4- Ethyltoluene	(ug/m3)				0.96	1	1
Heptane	(ug/m3)				0.87	0.82	0.94
Hexane	(ug/m3)				1.2	1.5	1.3
Methyl tert-butyl ether	(ug/m3)						
4- Methyl-2-pentanone	(ug/m3)						
Propylbenzene	(ug/m3)						
Styrene	(ug/m3)						
Tetrachloroethene	(ug/m3)						
Toluene	(ug/m3)		1.8	2.4	9.1	11	13
1,1,1- Trichloroethane	(ug/m3)				0.46		
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)						
1,2,4- Trimethylbenzene	(ug/m3)				1.1	1	0.92
Vinyl Chloride	(ug/m3)		18	18			
m,p- Xylene	(ug/m3)				5.2	5	4.9
o- Xylene	(ug/m3)				1.9	1.7	1.8

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Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Property ID	Structure 07			Structure 08		
	Sample ID	8-28-072 SS-07-B	8-28-072 IA-07-B	8-28-072 IA-07-1	8-28-072 SS-08-B	8-28-072 IA-08-B	8-28-072 IA-08-1
	Lab ID	0703324C-25A/25B	0703324B-24A/24B	0703324B-23A/23B	0703463G-03A/03B	0703463A-02A/01B	0703463A-01A/01B
	Sample Type	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air
	Sample Date	3/9/2007	3/9/2007	3/9/2007	3/14/2007	3/14/2007	3/14/2007
Trichloroethene	(ug/m3)		0.39	0.37		6.3	2.7
Benzene	(ug/m3)		3.8	5.1	12	3	2.4
Bromomethane	(ug/m3)						
1,3- Butadiene	(ug/m3)				15	0.64	0.72
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)		1.2	1.7	2.5	6.3	5.9
Chloroethane	(ug/m3)						
Chloroform	(ug/m3)			1.2			0.72
Chloromethane	(ug/m3)		0.83	0.9		2	2.5
Cumene	(ug/m3)						
Cyclohexane	(ug/m3)		0.6	0.92	3.2	1.8	1.4
1,1- Dichloroethane	(ug/m3)						
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)						
trans-1,2- Dichloroethene	(ug/m3)						
cis-1,2- Dichloroethene	(ug/m3)		1.7	1.7			
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)						
Ethyl Benzene	(ug/m3)		1	1.4	2.4	3.7	11
4- Ethyltoluene	(ug/m3)				3.5	1	1.1
Heptane	(ug/m3)		0.98	1.5	9.5	4.7	3.7
Hexane	(ug/m3)		1.8	2.5	8.7	9.5	4.7
Methyl tert-butyl ether	(ug/m3)						
4- Methyl-2-pentanone	(ug/m3)				0.99	0.83	1.1
Propylbenzene	(ug/m3)				0.66		
Styrene	(ug/m3)					0.81	0.77
Tetrachloroethene	(ug/m3)				4.3		1
Toluene	(ug/m3)		11	17	18	9.6	13
1,1,1- Trichloroethane	(ug/m3)				1.4	5.1	6.8
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)				3.6		
1,2,4- Trimethylbenzene	(ug/m3)				8.5	1.2	1.4
Vinyl Chloride	(ug/m3)						
m,p- Xylene	(ug/m3)		2.7	3.7	15	12	38
o- Xylene	(ug/m3)		1.1	1.2	4.8	3	7.8

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Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Property ID	Structure 09			Structure 10		
	Sample ID	8-28-072 SS-09-B	8-28-072IA-09-B	8-28-072 IA-09-1	8-28-072 SS-10-B	8-28-072 IA-10-B	8-28-072 IA-10-1
	Lab ID	0704203A-08A/08B	0704203B-07A/07b	0704203B-06A/06b	0703463G-10A/10B	0703463A-09A/09B	0703463A-08A/08B
	Sample Type	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air
	Sample Date	4/6/2007	4/6/2007	4/6/2007	3/14/2007	3/14/2007	3/14/2007
Trichloroethene	(ug/m3)	1.6	0.41				
Benzene	(ug/m3)	1.3		0.59	1.7	2.4	6.6
Bromomethane	(ug/m3)						
1,3- Butadiene	(ug/m3)					1.1	6
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	1.3	5.3	3.7	1.2	2.5	8
Chloroethane	(ug/m3)		0.75	0.9			
Chloroform	(ug/m3)				0.72	1.5	7.5
Chloromethane	(ug/m3)		1	1	0.62	2.4	10
Cumene	(ug/m3)						
Cyclohexane	(ug/m3)	1.3			1.8	0.64	0.57 J
1,1- Dichloroethane	(ug/m3)	1.3					
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)						
trans-1,2- Dichloroethene	(ug/m3)						
cis-1,2- Dichloroethene	(ug/m3)						
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)					1.3	3.5
Ethyl Benzene	(ug/m3)	0.83			1.2	1	1.8
4- Ethyltoluene	(ug/m3)	1.6			2.8	2.3	2.5
Heptane	(ug/m3)	2.5			4.9	1.2	1.7
Hexane	(ug/m3)	2.2			4.6	2.4	2.7
Methyl tert-butyl ether	(ug/m3)						
4- Methyl-2-pentanone	(ug/m3)				0.63		
Propylbenzene	(ug/m3)						
Styrene	(ug/m3)						2.8
Tetrachloroethene	(ug/m3)	6.3	7.7		1.1		
Toluene	(ug/m3)	5.3	6.4	11	8.8	7.1	19
1,1,1- Trichloroethane	(ug/m3)	7.2	13	11	0.53	1.2	0.72
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)	1.7			2.5	1.4	1.2
1,2,4- Trimethylbenzene	(ug/m3)	3.5			6.1	3.8	3.3
Vinyl Chloride	(ug/m3)						
m,p- Xylene	(ug/m3)	5.5	0.9	1.2	8.7	3.3	6.6
o- Xylene	(ug/m3)	1.9			2.6	1.2	1.9

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Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Property ID	Structure 11			Structure 12		
	Sample ID	8-28-072 SS-11-B	8-28-072 A-11-B	8-28-072 IA-11-1	8-28-072 SS-12-B	8-28-072 IA-12-B	8-28-072 IA-12-1
	Lab ID	0703463G-14A/14B	0703463A-13A/13B	0703463A-12A/12B	0703463G-18A/18B	0703463B-17A/17B	0703463B-16A/16B
	Sample Type	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air
	Sample Date	3/14/2007	3/14/2007	3/14/2007	3/14/2007	3/14/2007	3/14/2007
Trichloroethene	(ug/m3)	21	0.21				
Benzene	(ug/m3)		0.7	1.5	4.8	0.83	1
Bromomethane	(ug/m3)						
1,3- Butadiene	(ug/m3)						
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	10	1.7	3.4	2.3	2.8	2.6
Chloroethane	(ug/m3)						
Chloroform	(ug/m3)				1.4		1
Chloromethane	(ug/m3)		0.9	1.2		1	1.4
Cumene	(ug/m3)						
Cyclohexane	(ug/m3)				4.7		
1,1- Dichloroethane	(ug/m3)	27					
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)						
trans-1,2- Dichloroethene	(ug/m3)						
cis-1,2- Dichloroethene	(ug/m3)	1,200	4.5	1.8			
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)						
Ethyl Benzene	(ug/m3)				2.4		
4- Ethyltoluene	(ug/m3)				4.2		
Heptane	(ug/m3)		0.7	1.7	8.7	0.94	0.86
Hexane	(ug/m3)		0.92	1.2	9.4		0.75
Methyl tert-butyl ether	(ug/m3)						
4- Methyl-2-pentanone	(ug/m3)				1.1		
Propylbenzene	(ug/m3)				0.83		
Styrene	(ug/m3)						
Tetrachloroethene	(ug/m3)				1.3		
Toluene	(ug/m3)		2.2	7.3	23	6.6	5.4
1,1,1- Trichloroethane	(ug/m3)		0.32	J	0.61		
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)				5.6		
1,2,4- Trimethylbenzene	(ug/m3)			1.1	12		
Vinyl Chloride	(ug/m3)	10					
m,p- Xylene	(ug/m3)		0.98	2.3	22	1.1	1.4
o- Xylene	(ug/m3)				6.3		

Note:

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Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Property ID	Structure 13			Structure 14		
	Sample ID	8-28-072 SS-13-B	8-28-072 IA-13-B	8-28-072 IA-13-1	8-28-072 SS-14-B	8-28-072 IA-14-B	8-28-072 IA-14-1
	Lab ID	0703463G-22A/22B	0703463B-21A/21B	0703463B-20A/20B	0703463G-25A/25B	0703463B-24A/24B	0703463B-23A/23B
	Sample Type	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air
	Sample Date	3/14/2007	3/14/2007	3/14/2007	3/14/2007	3/14/2007	3/14/2007
Trichloroethene	(ug/m3)				1.6	0.26	0.95
Benzene	(ug/m3)	0.72	0.85	0.7	1.1	2.6	3.3
Bromomethane	(ug/m3)	0.58					
1,3- Butadiene	(ug/m3)						
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	1.9	1.7	1.1	1.2	3.2	11
Chloroethane	(ug/m3)						
Chloroform	(ug/m3)	1.4					1.6
Chloromethane	(ug/m3)	1.3	0.72	1	0.44		1
Cumene	(ug/m3)						
Cyclohexane	(ug/m3)				1.2	1.2	
1,1- Dichloroethane	(ug/m3)				1		
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)						
trans-1,2- Dichloroethene	(ug/m3)	0.58					
cis-1,2- Dichloroethene	(ug/m3)				2.6	2.1	1.3
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)						3.2
Ethyl Benzene	(ug/m3)	0.84			0.98	2.8	4.3
4- Ethyltoluene	(ug/m3)	0.76			1.8	4.9	J 5.2 J
Heptane	(ug/m3)	0.57	J		3.2	1.7	1.8
Hexane	(ug/m3)	5		0.61	6.3	4.9	3.2
Methyl tert-butyl ether	(ug/m3)						
4- Methyl-2-pentanone	(ug/m3)				0.62		11
Propylbenzene	(ug/m3)					0.9	
Styrene	(ug/m3)					0.81	
Tetrachloroethene	(ug/m3)	1.8			1.4	1.2	3.1
Toluene	(ug/m3)	6.2	0.77	1.3	7.1	14	22
1,1,1- Trichloroethane	(ug/m3)						
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)				1.4	3	2.9
1,2,4- Trimethylbenzene	(ug/m3)	1.2			3.6	4.7	7.2
Vinyl Chloride	(ug/m3)					0.71	
m,p- Xylene	(ug/m3)	3.1			6.2	7.7	15
o- Xylene	(ug/m3)	0.89			1.8	5.1	7.4

Note:

EPA = Environmental Protection Agency
J = Reported value is an estimate
ug/m3 = micrograms per cubic meter
Bold values indicate that the analyte was detected.

Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Property ID	Structure 15			Structure 16		
	Sample ID	8-28-072 SS-15-B	8-28-072 IA-15-B	8-28-072 IA-15-1	8-28-072 SS-16-B	8-28-072 IA-16-B	8-28-072 IA-16-1
	Lab ID	0703463G-29A/29B	0703463C-28A/28B	0703463B-27A/27B	0703463G-33A/33B	0703463C-32A/32B	0703463C-31A/31B
	Sample Type	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air
	Sample Date	3/15/2007	3/15/2007	3/15/2007	3/15/2007	3/15/2007	3/15/2007
Trichloroethene	(ug/m3)	35			690	1.2	1.1
Benzene	(ug/m3)		2.4	2.9		1.3	1.5
Bromomethane	(ug/m3)						
1,3- Butadiene	(ug/m3)						
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	8.7	5.1	8.3	39	4.8	4.8
Chloroethane	(ug/m3)						
Chloroform	(ug/m3)	10		1.2			
Chloromethane	(ug/m3)		1.4			1.2	1.2
Cumene	(ug/m3)						
Cyclohexane	(ug/m3)		0.69	2.2			
1,1- Dichloroethane	(ug/m3)	41			77		
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)				25		
trans-1,2- Dichloroethene	(ug/m3)	4.4			27		
cis-1,2- Dichloroethene	(ug/m3)	760	7.5	6.5	5,100	12	10
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)						
Ethyl Benzene	(ug/m3)		1.1	0.96		1.1	1.2
4- Ethyltoluene	(ug/m3)		1.1	0.77	J	1	1
Heptane	(ug/m3)		6.5	16		1.1	1.7
Hexane	(ug/m3)		2.6	1.6		0.95	1.6
Methyl tert-butyl ether	(ug/m3)						
4- Methyl-2-pentanone	(ug/m3)		0.92			2.7	0.75
Propylbenzene	(ug/m3)						
Styrene	(ug/m3)						
Tetrachloroethene	(ug/m3)	2.4	0.87	2.1		0.6	
Toluene	(ug/m3)	4.3	11	13		7.6	9.1
1,1,1- Trichloroethane	(ug/m3)	5.4	2.1	2.2		4.9	6.3
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)						
1,2,4- Trimethylbenzene	(ug/m3)		1.5	0.82		1.6	1.2
Vinyl Chloride	(ug/m3)	390	10	7.9	13		
m,p- Xylene	(ug/m3)		3	2.6		4.4	3.7
o- Xylene	(ug/m3)		1.3	0.97		1.7	1.4

Note:

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ug/m3 = micrograms per cubic meter
Bold values indicate that the analyte was detected.

Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Property ID	Structure 17			Structure 18		
	Sample ID	8-28-072 SS-17-B	8-28-072 IA-17-B	8-28-072 IA-17-1	8-28-072 SS-18-B	8-28-072 IA-18-B	8-28-072 IA-18-1
	Lab ID	0703463G-37A/37B	0703463C-36A/36B	0703463C-35A/35B	0703463H-41A/42B	0703463C-40A/40B	0703463C-39A/39B
	Sample Type	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air
	Sample Date	3/15/2007	3/15/2007	3/15/2007	3/15/2007	3/15/2007	3/15/2007
Trichloroethene	(ug/m3)	2.3	0.62	0.48			
Benzene	(ug/m3)	0.78	1.4	0.96	1.3	0.71	0.77
Bromomethane	(ug/m3)						
1,3- Butadiene	(ug/m3)				0.51		
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	1.5	6.3	1.4	2.7	1.4	5.5
Chloroethane	(ug/m3)						
Chloroform	(ug/m3)			2.9	0.86	2.4	6.9
Chloromethane	(ug/m3)	0.28	0.9	1	0.33	0.83	1.3
Cumene	(ug/m3)						
Cyclohexane	(ug/m3)	0.56	1.1		0.91		
1,1- Dichloroethane	(ug/m3)						
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)						
trans-1,2- Dichloroethene	(ug/m3)						
cis-1,2- Dichloroethene	(ug/m3)		1.4	1.9			
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)						
Ethyl Benzene	(ug/m3)		1.6	0.73	J		
4- Ethyltoluene	(ug/m3)	0.71	1.4	1.1	0.85		
Heptane	(ug/m3)	2.2	0.88	0.7	J	2.2	
Hexane	(ug/m3)	2.1	1.3		2.2		0.6
Methyl tert-butyl ether	(ug/m3)						J
4- Methyl-2-pentanone	(ug/m3)		0.62				
Propylbenzene	(ug/m3)						
Styrene	(ug/m3)		0.66				
Tetrachloroethene	(ug/m3)	0.84	0.77		0.74		
Toluene	(ug/m3)	2.9	14	7.5	8.3	6.7	13
1,1,1- Trichloroethane	(ug/m3)					0.68	0.5
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)	0.79			0.8		
1,2,4- Trimethylbenzene	(ug/m3)	1.5	1.7	1.6	2		
Vinyl Chloride	(ug/m3)						
m,p- Xylene	(ug/m3)	2.8	4.9	2.5	3.9	1.3	1.5
o- Xylene	(ug/m3)	0.83	1.7	0.95	0.84		

Note:

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Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Property ID	Structure 19			Structure 20		
	Sample ID	8-28-072 SS-19-B	8-28-072 IA-19-B	8-28-072 IA-19-1	8-28-072 SS-20-B	8-28-072 IA-20-B	8-28-072 IA-20-1
	Lab ID	0703463H-45A/45B	0703463D-44A/44B	0703463D-43A/43B	0703463H-49A/49B	0703463D-48A/48B	0703463D-47A/47B
	Sample Type	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air
	Sample Date	3/15/2007	3/15/2007	3/15/2007	3/16/2007	3/16/2007	3/16/2007
Trichloroethene	(ug/m3)				980		
Benzene	(ug/m3)	0.54	J	0.73		0.92	1.6
Bromomethane	(ug/m3)						2.8
1,3- Butadiene	(ug/m3)						0.51
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	0.98		6.8		1.6	7.2
Chloroethane	(ug/m3)						5.6
Chloroform	(ug/m3)						
Chloromethane	(ug/m3)			1		1.3	0.84
Cumene	(ug/m3)						0.97
Cyclohexane	(ug/m3)						
1,1- Dichloroethane	(ug/m3)				76		
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)						
trans-1,2- Dichloroethene	(ug/m3)						
cis-1,2- Dichloroethene	(ug/m3)				8,200	3.9	3.8
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)					2.8	
Ethyl Benzene	(ug/m3)			1.4		2.5	0.93
4- Ethyltoluene	(ug/m3)						
Heptane	(ug/m3)				0.75		0.71
Hexane	(ug/m3)				0.98		1.1
Methyl tert-butyl ether	(ug/m3)						
4- Methyl-2-pentanone	(ug/m3)						
Propylbenzene	(ug/m3)						
Styrene	(ug/m3)						
Tetrachloroethene	(ug/m3)	1.3					
Toluene	(ug/m3)	2.7		2.7		4.8	3.7
1,1,1- Trichloroethane	(ug/m3)						7.4
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)						
1,2,4- Trimethylbenzene	(ug/m3)					0.93	
Vinyl Chloride	(ug/m3)				190		
m,p- Xylene	(ug/m3)	1.6		3.2		6.1	2.1
o- Xylene	(ug/m3)			0.69		1.1	0.85

Note:

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Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Property ID	Structure 21			Structure 22		
	Sample ID	8-28-072 SS-21-B	8-28-072 IA-21-B	8-28-072 IA-21-1	8-28-072 SS-22-B	8-28-072 IA-22-B	8-28-072 IA-22-1
	Lab ID	0703463H-53A/53B	0703463D-52A/52B	0703463D-51A/51B	0704203A-04A/04B	0704203B-03A/03B	0704203B-02A/02B
	Sample Type	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air	Sub Slab	Basement Indoor Air	First Floor Indoor Air
	Sample Date	3/16/2007	3/16/2007	3/16/2007	4/6/2007	4/6/2007	4/6/2007
Trichloroethene	(ug/m3)				3.8	0.17	0.22
Benzene	(ug/m3)		0.79	0.84	0.58	0.8	0.62
Bromomethane	(ug/m3)					0.6	J
1,3- Butadiene	(ug/m3)						
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	9.9	2	1.1	1.2	0.54	0.99
Chloroethane	(ug/m3)						0.41
Chloroform	(ug/m3)						J
Chloromethane	(ug/m3)		0.87	0.97		1.1	1.1
Cumene	(ug/m3)						
Cyclohexane	(ug/m3)				0.78		
1,1- Dichloroethane	(ug/m3)				1.4		
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)						
trans-1,2- Dichloroethene	(ug/m3)				0.7		
cis-1,2- Dichloroethene	(ug/m3)				44	0.61	J
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)	4.6					
Ethyl Benzene	(ug/m3)						
4- Ethyltoluene	(ug/m3)						
Heptane	(ug/m3)				2.3		
Hexane	(ug/m3)				2.3		
Methyl tert-butyl ether	(ug/m3)						
4- Methyl-2-pentanone	(ug/m3)						
Propylbenzene	(ug/m3)						
Styrene	(ug/m3)						
Tetrachloroethene	(ug/m3)						
Toluene	(ug/m3)		2.4	3.8	2.8	1.9	2.3
1,1,1- Trichloroethane	(ug/m3)		2.3	5.4			
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)						
1,2,4- Trimethylbenzene	(ug/m3)						0.9
Vinyl Chloride	(ug/m3)						
m,p- Xylene	(ug/m3)		0.7	0.86	1.5	1.4	1.5
o- Xylene	(ug/m3)						

Note:

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ug/m3 = micrograms per cubic meter
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Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Property ID	Structure 23			Structure 24		
	Sample ID	8-28-072 SS-23-B	8-28-072 IA-23-B	8-28-072 IA-23-1	8-28-072 SS-24-B	8-28-072 IA-24-B	8-28-072 IA-24-1
	Lab ID	0703463H-61A/61B	0703463E-60A/60B	0703463E-59A/59B	0703463H-65A65B	0703463E-64A/64B	0703463E-63A/63B
	Sample Type	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air
	Sample Date	3/16/2007	3/16/2007	3/16/2007	3/16/2007	3/16/2007	3/16/2007
Trichloroethene	(ug/m3)				2.3	1.1	
Benzene	(ug/m3)	5.6	0.73	1.5	7.6	0.95	1.3
Bromomethane	(ug/m3)						
1,3- Butadiene	(ug/m3)						
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)		1.3	2.6	3.1	7.5	1.7
Chloroethane	(ug/m3)						
Chloroform	(ug/m3)		0.76	4.2			
Chloromethane	(ug/m3)		1.7	2.1		0.92	0.92
Cumene	(ug/m3)						
Cyclohexane	(ug/m3)						
1,1- Dichloroethane	(ug/m3)						
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)						
trans-1,2- Dichloroethene	(ug/m3)						
cis-1,2- Dichloroethene	(ug/m3)		0.68		5.2		
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)				0.55		
Ethyl Benzene	(ug/m3)			0.77		0.81	J 1.1
4- Ethyltoluene	(ug/m3)				0.73	J 1.7	2.3
Heptane	(ug/m3)		4.2	0.67	1.2		0.62
Hexane	(ug/m3)			0.57	0.62		
Methyl tert-butyl ether	(ug/m3)						
4- Methyl-2-pentanone	(ug/m3)						
Propylbenzene	(ug/m3)						0.74
Styrene	(ug/m3)						
Tetrachloroethene	(ug/m3)				1		
Toluene	(ug/m3)		3.3	14	5.4	2.8	5.6
1,1,1- Trichloroethane	(ug/m3)					0.53	
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)						0.81
1,2,4- Trimethylbenzene	(ug/m3)				1.6	1.6	2
Vinyl Chloride	(ug/m3)						
m,p- Xylene	(ug/m3)		0.7	1.6	2.7	3.3	3.9
o- Xylene	(ug/m3)			0.66	0.89	0.99	1.4

Note:

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Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Property ID	Structure 25			Structure 26		
	Sample ID	8-28-072 SS-25-B	8-28-072 IA-25-B	8-28-072 IA-25-1	8-28-072-SS-26-B ⁽¹⁾	8-28-072-IA-26-B ⁽¹⁾	8-28-072-IA-26-1 ⁽¹⁾
	Lab ID	0703463H-69A/69B	0703463F-68A/68B	0703463E-67A/67B	0704056E-36A/36B	0704056C-35A/35B	0704056C-37A/37B
	Sample Type	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air
	Sample Date	3/16/2007	3/16/2007	3/16/2007	3/22/2007	3/22/2007	3/22/2007
Trichloroethene	(ug/m3)						
Benzene	(ug/m3)	1.1	0.89	0.99	0.46	J	1
Bromomethane	(ug/m3)					0.62	J
1,3- Butadiene	(ug/m3)	0.38					
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	2.3	1.4	3.7	2.4	2.1	0.99
Chloroethane	(ug/m3)						0.49
Chloroform	(ug/m3)	1.1	1.1	1.7	1.4	0.78	J
Chloromethane	(ug/m3)	0.35	0.81	0.82		0.9	1
Cumene	(ug/m3)						
Cyclohexane	(ug/m3)	0.63			0.52		
1,1- Dichloroethane	(ug/m3)						
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)	0.7					
trans-1,2- Dichloroethene	(ug/m3)						
cis-1,2- Dichloroethene	(ug/m3)	5.6					
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)						
Ethyl Benzene	(ug/m3)		0.62	0.68		1.4	1.4
4- Ethyltoluene	(ug/m3)	0.96	2.7	2.5			
Heptane	(ug/m3)	1.5	0.84	0.88	0.84	1.3	1.1
Hexane	(ug/m3)	1.6		0.5	J	0.96	
Methyl tert-butyl ether	(ug/m3)						
4- Methyl-2-pentanone	(ug/m3)						
Propylbenzene	(ug/m3)						
Styrene	(ug/m3)						
Tetrachloroethene	(ug/m3)	0.89			0.54		
Toluene	(ug/m3)	4	7.1	9.3	1.7	4.2	4.5
1,1,1- Trichloroethane	(ug/m3)				0.59	1.4	1
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)	0.73	1.6	1.3			
1,2,4- Trimethylbenzene	(ug/m3)	1.7	3.4	2.9	1.2		
Vinyl Chloride	(ug/m3)						
m,p- Xylene	(ug/m3)	2.7	1.6	1.9	1.6	4.7	5.3
o- Xylene	(ug/m3)	0.81		0.7		1.2	1.4

Note: ⁽¹⁾ Sample identification numbers were changed to show the correct NYSDEC site number. (i.e., 8-27-072-SS-26-B was changed to 8-28-072-SS-26-B)

EPA = Environmental Protection Agency

J = Reported value is an estimate

ug/m3 = micrograms per cubic meter

Bold values indicate that the analyte was detected.

Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Property ID	Structure 27			Structure 28		
	Sample ID	8-28-072-SS-27B ⁽¹⁾	8-28-072-IA-27-B ⁽¹⁾	8-28-072-IA-27-1 ⁽¹⁾	8-28-072-SS-28-B ⁽¹⁾	8-28-072-IA-28-B ⁽¹⁾	8-28-072-IA-28-1 ⁽¹⁾
	Lab ID	0704056E-41A/41B	0704056D-40A/40B	0704056C-39A/39B	0704056E-32A/32B	0704056C-31A/31B	0704056C-30A/30B
	Sample Type	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air
	Sample Date	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007	3/22/2007
Trichloroethene	(ug/m3)	140	0.88	0.89			
Benzene	(ug/m3)		1.3	1.3	0.6	1.1	1.2
Bromomethane	(ug/m3)						
1,3- Butadiene	(ug/m3)						
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)		5.9	1.7	5.5	5	5.7
Chloroethane	(ug/m3)						
Chloroform	(ug/m3)			1			
Chloromethane	(ug/m3)		1	1.4		0.82	1.2
Cumene	(ug/m3)						
Cyclohexane	(ug/m3)						
1,1- Dichloroethane	(ug/m3)	61					
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)						
trans-1,2- Dichloroethene	(ug/m3)	22					
cis-1,2- Dichloroethene	(ug/m3)	3,900	28	24			
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)						
Ethyl Benzene	(ug/m3)			0.67	J	0.93	0.81
4- Ethyltoluene	(ug/m3)		0.78	0.77	J	0.75	
Heptane	(ug/m3)		0.86			0.86	
Hexane	(ug/m3)		0.82	0.81	0.77	0.96	1.6
Methyl tert-butyl ether	(ug/m3)					0.6	
4- Methyl-2-pentanone	(ug/m3)						
Propylbenzene	(ug/m3)						
Styrene	(ug/m3)						
Tetrachloroethene	(ug/m3)				0.83		
Toluene	(ug/m3)	15	3.9	7.7	2.3	3.3	6.3
1,1,1- Trichloroethane	(ug/m3)						
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)						
1,2,4- Trimethylbenzene	(ug/m3)		0.86	0.82	1.6	0.81	
Vinyl Chloride	(ug/m3)	9.9	4	5.4			
m,p- Xylene	(ug/m3)		2	2.4	2.6	1.2	1.8
o- Xylene	(ug/m3)		0.84	0.66	J	0.96	

Note: ⁽¹⁾ Sample identification numbers were changed to show the correct NYSDEC site number. (i.e., 8-27-072-SS-27-B was changed to 8-28-072-SS-27-B)

EPA = Environmental Protection Agency

J = Reported value is an estimate

ug/m3 = micrograms per cubic meter

Bold values indicate that the analyte was detected.

Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Property ID	Structure 29			Structure 30		
	Sample ID	8-28-072 SS-29-B ⁽¹⁾	8-28-072 IA-29-B ⁽¹⁾	8-28-072 IA-29-1 ⁽¹⁾	8-28-072-SS-30-B ⁽¹⁾	8-28-072-IA-30-B ⁽¹⁾	8-28-072-IA-30-1 ⁽¹⁾
	Lab ID	0704056E-04A/04B	0704056A-03A/03B	0704056A-02A/02B	0704056F-45A/45B	0704056D-44A/44B	0704056D-43A/43B
	Sample Type	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air
	Sample Date	3/29/2007	3/29/2007	3/29/2007	3/23/2007	3/22/2007	3/23/2007
Trichloroethene	(ug/m3)						0.18
Benzene	(ug/m3)	0.58	1.4	1.3	8.8	1.8	2
Bromomethane	(ug/m3)				0.69		
1,3- Butadiene	(ug/m3)						
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	2.8	1.3	3.6	3.7	4	2.3
Chloroethane	(ug/m3)				0.42		
Chloroform	(ug/m3)					1.5	2.8
Chloromethane	(ug/m3)	0.3	1.2	1.1	1.6	1.2	1.4
Cumene	(ug/m3)						
Cyclohexane	(ug/m3)		0.89	0.78	11		0.57
1,1- Dichloroethane	(ug/m3)						
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)						
trans-1,2- Dichloroethene	(ug/m3)						
cis-1,2- Dichloroethene	(ug/m3)						
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)						
Ethyl Benzene	(ug/m3)		1.2	1.2	3.9	0.69	0.92
4- Ethyltoluene	(ug/m3)				5.8	0.76	0.91
Heptane	(ug/m3)	0.9	7.2		29	0.71	1.2
Hexane	(ug/m3)	0.72	0.57		29	1.3	1.9
Methyl tert-butyl ether	(ug/m3)						
4- Methyl-2-pentanone	(ug/m3)						
Propylbenzene	(ug/m3)				1.1		
Styrene	(ug/m3)						
Tetrachloroethene	(ug/m3)	0.97			0.78		0.62
Toluene	(ug/m3)	5	4.4	4.8	29	5.6	11
1,1,1- Trichloroethane	(ug/m3)	1.2	1.8	1.8	0.6	0.66	
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)				5.7		
1,2,4- Trimethylbenzene	(ug/m3)	0.91	1.1	0.89	15	0.99	1.1
Vinyl Chloride	(ug/m3)						
m,p- Xylene	(ug/m3)	1.6	3.6	4.2	30	2.1	2.7
o- Xylene	(ug/m3)		1.1	1.3	9.4	0.87	1

Note: ⁽¹⁾ Sample identification numbers were changed to show the correct NYSDEC site number. (i.e., 8-27-072-SS-29-B was changed to 8-28-072-SS-29-B)

EPA = Environmental Protection Agency

J = Reported value is an estimate

ug/m3 = micrograms per cubic meter

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Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Property ID	Structure 31			Structure 32				
	Sample ID	8-28-072-SS-31-B ⁽¹⁾	8-28-072-IA-31-B ⁽¹⁾	8-27-072-IA-31-1 ⁽¹⁾	8-28-072-SS-32-B ⁽¹⁾	8-28-072-IA-32-B ⁽¹⁾	8-28-072-IA-32-1 ⁽¹⁾		
	Lab ID	0704056F-50A/50b	0704056D-49A/49B	0704056D-48A/48B	0704056E-13A/13B	0704056A-12A/12B	0704056A-11A/11B		
	Sample Type	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air		
	Sample Date	3/22/2007	3/22/2007	3/22/2007	3/28/2007	3/28/2007	3/28/2007		
Trichloroethene	(ug/m3)			0.9					
Benzene	(ug/m3)	1.6	J	1.6	1.1	0.73	2.9	5.2	
Bromomethane	(ug/m3)					0.63	0.51	J	
1,3- Butadiene	(ug/m3)								
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	4.3		9.5	1.6	0.55	4.6	7.8	J
Chloroethane	(ug/m3)								
Chloroform	(ug/m3)			0.73	J	1.8		0.95	
Chloromethane	(ug/m3)	1.3		0.88	1.1		1.2	1.6	
Cumene	(ug/m3)								
Cyclohexane	(ug/m3)				0.57	2.4	2.8	J	
1,1- Dichloroethane	(ug/m3)								
1,2- Dichloroethane	(ug/m3)							0.54	
1,1- Dichloroethene	(ug/m3)								
trans-1,2- Dichloroethene	(ug/m3)								
cis-1,2- Dichloroethene	(ug/m3)	8.6		34	20				
1,2- Dichloropropane	(ug/m3)								
1,4- Dioxane	(ug/m3)					1.1	J		
Ethyl Benzene	(ug/m3)				0.72	3.6	4.6	J	
4- Ethyltoluene	(ug/m3)					2.6	3.4		
Heptane	(ug/m3)			0.84	2	1.2	2.1	5.3	
Hexane	(ug/m3)			4.1		0.99	3.2	6.4	J
Methyl tert-butyl ether	(ug/m3)					3.5	J	5.5	J
4- Methyl-2-pentanone	(ug/m3)							0.79	
Propylbenzene	(ug/m3)							0.89	
Styrene	(ug/m3)							0.72	
Tetrachloroethene	(ug/m3)	2.2						5.3	J
Toluene	(ug/m3)	9.3		55	140	2.7	28	44	
1,1,1- Trichloroethane	(ug/m3)					0.81	22	3	
1,1,2- Trichloroethane	(ug/m3)							4.1	J
1,3,5- Trimethylbenzene	(ug/m3)						0.84	1.2	
1,2,4- Trimethylbenzene	(ug/m3)					1.6	3.2	3.8	
Vinyl Chloride	(ug/m3)			1.3	0.83				
m,p- Xylene	(ug/m3)	2.7		1.6	1.9	2.3	12	17	
o- Xylene	(ug/m3)					0.74	3.8	4.9	

Note: ⁽¹⁾ Sample identification numbers were changed to show the correct NYSDEC site number. (i.e., 8-27-072-SS-31-B was changed to 8-28-072-SS-31-B)

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ug/m3 = micrograms per cubic meter

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Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Property ID	Structure 33			Structure 34		
	Sample ID	8-28-072-SS-33-B ⁽¹⁾	8-28-072-IA-33-B ⁽¹⁾	8-28-072-IA-33-1 ⁽¹⁾	8-28-072-SS-34-B ⁽¹⁾	8-28-072-IA-34-B ⁽¹⁾	8-28-072-IA-34-1 ⁽¹⁾
	Lab ID	0704056E-28A/28B	0704056C-29A/29B	0704056A-10A/10B	0704056E-18A/18B	0704056BR1-17A/17B	0704056BR1-16A/16B
	Sample Type	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air
	Sample Date	3/28/2007	3/28/2007	3/28/2007	3/28/2007	3/28/2007	3/28/2007
Trichloroethene	(ug/m3)		3.7		5	0.16	
Benzene	(ug/m3)		2.1	1.7	0.58	1.4	1.4
Bromomethane	(ug/m3)			0.64			
1,3- Butadiene	(ug/m3)		0.66	0.47			
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	0.64	2.8	1.5	1.9	5.8	3
Chloroethane	(ug/m3)						
Chloroform	(ug/m3)	0.75	0.86	1.3			
Chloromethane	(ug/m3)		0.92	1.3		0.86	0.9
Cumene	(ug/m3)						
Cyclohexane	(ug/m3)		0.56				
1,1- Dichloroethane	(ug/m3)				0.71		
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)		0.64				
trans-1,2- Dichloroethene	(ug/m3)						
cis-1,2- Dichloroethene	(ug/m3)				1.8		
1,2- Dichloropropane	(ug/m3)		1.7				
1,4- Dioxane	(ug/m3)						
Ethyl Benzene	(ug/m3)		2.1	2		1.1	
4- Ethyltoluene	(ug/m3)		3.4	3		0.9	
Heptane	(ug/m3)		1	0.88		0.59	0.81
Hexane	(ug/m3)		1.8	1.4		1.2	0.71
Methyl tert-butyl ether	(ug/m3)						
4- Methyl-2-pentanone	(ug/m3)					0.55	
Propylbenzene	(ug/m3)		0.66	J			
Styrene	(ug/m3)						
Tetrachloroethene	(ug/m3)	0.76	0.52	0.7	0.73		
Toluene	(ug/m3)	1.8	10	13	2.6	7.1	7.5
1,1,1- Trichloroethane	(ug/m3)	0.44	0.8		0.5		0.86
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)		1.2	1.1			
1,2,4- Trimethylbenzene	(ug/m3)		4.2	3.9	0.94	1.2	
Vinyl Chloride	(ug/m3)						
m,p- Xylene	(ug/m3)	1.3	7.2	6.5	1.6	3.1	1.6
o- Xylene	(ug/m3)		3.1	2.8		1.2	

Note: ⁽¹⁾ Sample identification numbers were changed to show the correct NYSDEC site number. (i.e., 8-27-072-SS-33-B was changed to 8-28-072-SS-33-B)

EPA = Environmental Protection Agency

J = Reported value is an estimate

ug/m3 = micrograms per cubic meter

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Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Property ID	Structure 35			Structure 36		
	Sample ID	8-28-072-SS-35-B ⁽¹⁾	8-28-072-IA-35-B ⁽¹⁾	8-28-072-IA-35-1 ⁽¹⁾	8-28-072-SS-36-B ⁽¹⁾	8-28-072-IA-36-B ⁽¹⁾	8-28-072-IA-36-1 ⁽¹⁾
	Lab ID	0704056E-26A/26B	0704056BR1-25A/25B	0704056BR1-24A/24B	0704056E-08A/08B	0704056A-07A/07B	0704056A-06A/06B
	Sample Type	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air
	Sample Date	3/29/2007	3/29/2007	3/29/2007	3/29/2007	3/29/2007	3/29/2007
Trichloroethene	(ug/m3)	23	1.2				
Benzene	(ug/m3)		2.7	6.7	4	0.6	0.64
Bromomethane	(ug/m3)						
1,3- Butadiene	(ug/m3)		1.6	5			
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	6.4	9.7	12	3.8	1.5	0.85
Chloroethane	(ug/m3)						
Chloroform	(ug/m3)			0.78			0.82
Chloromethane	(ug/m3)					1.1	1.3
Cumene	(ug/m3)				0.87		
Cyclohexane	(ug/m3)				4.3		
1,1- Dichloroethane	(ug/m3)	11					
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)						
trans-1,2- Dichloroethene	(ug/m3)	1.2					
cis-1,2- Dichloroethene	(ug/m3)	290	2.8	2.9			
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)						
Ethyl Benzene	(ug/m3)		0.76	1.4	2.1	0.92	1.3
4- Ethyltoluene	(ug/m3)			0.93	4.3		
Heptane	(ug/m3)		0.74	0.89	8.7		
Hexane	(ug/m3)		0.76	1.1	11		0.66
Methyl tert-butyl ether	(ug/m3)						
4- Methyl-2-pentanone	(ug/m3)	1.1	J				
Propylbenzene	(ug/m3)				0.77		
Styrene	(ug/m3)			1.1			
Tetrachloroethene	(ug/m3)						
Toluene	(ug/m3)	2.3	6.3	14	31	2	4
1,1,1- Trichloroethane	(ug/m3)						
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)				5.1		
1,2,4- Trimethylbenzene	(ug/m3)	1.4			12		
Vinyl Chloride	(ug/m3)	7.6	1.2	1.4			
m,p- Xylene	(ug/m3)	2	1.9	4.4	19	3	4.4
o- Xylene	(ug/m3)		0.61	1	5.4	0.76	0.78

Note: ⁽¹⁾ Sample identification numbers were changed to show the correct NYSDEC site number. (i.e., 8-27-072-SS-35-B was changed to 8-28-072-SS-35-B)

EPA = Environmental Protection Agency

J = Reported value is an estimate

ug/m3 = micrograms per cubic meter

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Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Property ID	Structure 37			Structure 38		
	Sample ID	8-28-072-SS-37-B ⁽¹⁾	8-28-072-IA-37-B ⁽¹⁾	8-28-072-IA-37-1 ⁽¹⁾	8-28-072-SS-38-B ⁽¹⁾	N/A	N/A
	Lab ID	0704056E-22A/22B	0704056BR1-21A/22B	0704056BR1-20A/20B	0704203A-01A/01B	N/A	N/A
	Sample Type	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air	Subslab Soil Vapor	Basement Indoor Air	First Floor Indoor Air
	Sample Date	3/30/2007	3/30/2007	3/30/2007	4/6/2007	N/A	N/A
Trichloroethene	(ug/m3)	3.6	120	0.34			
Benzene	(ug/m3)		1.1	1.3	0.99		
Bromomethane	(ug/m3)						
1,3- Butadiene	(ug/m3)						
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	7.3	6.6	2.4	0.81		
Chloroethane	(ug/m3)						
Chloroform	(ug/m3)				26		
Chloromethane	(ug/m3)		0.75	0.6			
Cumene	(ug/m3)						
Cyclohexane	(ug/m3)			0.55	J	1.2	
1,1- Dichloroethane	(ug/m3)	1.6					
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)						
trans-1,2- Dichloroethene	(ug/m3)						
cis-1,2- Dichloroethene	(ug/m3)	120	7.6	4			
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)						
Ethyl Benzene	(ug/m3)			1.1			
4- Ethyltoluene	(ug/m3)				1.2		
Heptane	(ug/m3)		0.86	0.72	2.4		
Hexane	(ug/m3)			0.61	2.3		
Methyl tert-butyl ether	(ug/m3)						
4- Methyl-2-pentanone	(ug/m3)						
Propylbenzene	(ug/m3)						
Styrene	(ug/m3)			0.73			
Tetrachloroethene	(ug/m3)	0.84	0.78	1.4	5.1		
Toluene	(ug/m3)	1.3	3.8	6	5.2		
1,1,1- Trichloroethane	(ug/m3)		0.78	2.2			
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)				1.1		
1,2,4- Trimethylbenzene	(ug/m3)				2.9		
Vinyl Chloride	(ug/m3)						
m,p- Xylene	(ug/m3)	0.8	1.4	3	4.5		
o- Xylene	(ug/m3)				1.1		

Note: ⁽¹⁾ Sample identification numbers were changed to show the correct NYSDEC site number. (i.e., 8-27-072-SS-37-B was changed to 8-28-072-SS-37-B)

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J = Reported value is an estimate

ug/m3 = micrograms per cubic meter

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Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Associated Property	Structures 01 & 02	Structure 03	Structures 04 & 06	Structure 05	Structure 07	Structures 08 & 09
	Sample ID	828072-OA-030707-01	828072-OA-030707-02	828072-OA-030807-03	828072-OA-040507-04 ⁽¹⁾	828072-OA-030807-05	828072-OA-040507-06 ⁽¹⁾
	Lab ID	0703324A-04A/04B	0703324A-11A/11B	0703324B-15A/15B	0704203B-13A/13B	0703324B-26A/26B	0704203B-09A/09B
	Sample Type	Outdoor Air	Outdoor Air	Outdoor Air	Outdoor Air	Outdoor Air	Outdoor Air
	Sample Date	3/8/2007	3/8/3007	3/9/3007	4/6/2007	3/9/3007	4/6/2007
Trichloroethene	(ug/m3)						
Benzene	(ug/m3)	0.82	0.83	0.98	0.57	1.5	0.54
Bromomethane	(ug/m3)						0.55
1,3- Butadiene	(ug/m3)						
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	0.4	1.4	1.4	0.6	2.3	0.52
Chloroethane	(ug/m3)						
Chloroform	(ug/m3)						
Chloromethane	(ug/m3)	0.92	0.96	2.3	1.2	0.85	1
Cumene	(ug/m3)						
Cyclohexane	(ug/m3)						
1,1- Dichloroethane	(ug/m3)						
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)						
trans-1,2- Dichloroethene	(ug/m3)						
cis-1,2- Dichloroethene	(ug/m3)						
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)						
Ethyl Benzene	(ug/m3)						
4- Ethyltoluene	(ug/m3)						
Heptane	(ug/m3)						
Hexane	(ug/m3)					0.69	
Methyl tert-butyl ether	(ug/m3)						
4- Methyl-2-pentanone	(ug/m3)						
Propylbenzene	(ug/m3)						
Styrene	(ug/m3)						
Tetrachloroethene	(ug/m3)						
Toluene	(ug/m3)	0.84	0.63	1.6	0.57	2.3	
1,1,1- Trichloroethane	(ug/m3)						
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)						
1,2,4- Trimethylbenzene	(ug/m3)						
Vinyl Chloride	(ug/m3)						
m,p- Xylene	(ug/m3)					1	
o- Xylene	(ug/m3)						

Note: ⁽¹⁾ Sample identification numbers were changed to show the correct NYSDEC site number. (i.e., 827072-OA-040507-04 was changed to 828072-OA-040507-04)
EPA = Environmental Protection Agency
J = Reported value is an estimate
ug/m3 = micrograms per cubic meter
Bold values indicate that the analyte was detected.

Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Associated Property	Structure 10	Structure 11	Structures 12 & 13	Structure 14	Structure 15	Structure 16
	Sample ID	828072-OA-031307-07 ⁽¹⁾	828072-OA-031307-08 ⁽¹⁾	828072-OA-031307-10 ⁽¹⁾	828072-OA-031307-12 ⁽¹⁾	828072-OA-031307-13 ⁽¹⁾	828072-OA-031307-14 ⁽¹⁾
	Lab ID	0703463A-11A/11B	0703463B-15A/15B	0703463B-19A/19B	0703463B-26A/26B	0703463C-30A/30B	0703463C-34A/34B
	Sample Type	Outdoor Air					
	Sample Date	3/14/2007	3/14/2007	3/14/2007	3/14/2007	3/14/2007	3/14/2007
Trichloroethene	(ug/m3)						0.2
Benzene	(ug/m3)	0.74	0.73		0.77		0.71
Bromomethane	(ug/m3)						
1,3- Butadiene	(ug/m3)						
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	1.1	0.95	3.6	J	2.9	3
Chloroethane	(ug/m3)						
Chloroform	(ug/m3)						
Chloromethane	(ug/m3)	1.6	1.1		1.1	1	1
Cumene	(ug/m3)						
Cyclohexane	(ug/m3)						
1,1- Dichloroethane	(ug/m3)						
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)						
trans-1,2- Dichloroethene	(ug/m3)						
cis-1,2- Dichloroethene	(ug/m3)						
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)						
Ethyl Benzene	(ug/m3)						
4- Ethyltoluene	(ug/m3)						
Heptane	(ug/m3)						
Hexane	(ug/m3)			4	J	0.66	2.7
Methyl tert-butyl ether	(ug/m3)						
4- Methyl-2-pentanone	(ug/m3)						
Propylbenzene	(ug/m3)						
Styrene	(ug/m3)						
Tetrachloroethene	(ug/m3)						
Toluene	(ug/m3)	0.81	0.88	10	J	1.3	3.6
1,1,1- Trichloroethane	(ug/m3)						
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)						
1,2,4- Trimethylbenzene	(ug/m3)						
Vinyl Chloride	(ug/m3)						
m,p- Xylene	(ug/m3)						1.4
o- Xylene	(ug/m3)						

Note: ⁽¹⁾ Sample identification numbers were changed to show the correct NYSDEC site number. (i.e., 827072-OA-031307-07 was changed to 828072-OA-031307-07)
EPA = Environmental Protection Agency
J = Reported value is an estimate
ug/m3 = micrograms per cubic meter
Bold values indicate that the analyte was detected.

Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Associated Property	Structure 17	Structure 18	Structure 19	Structure 20	Structure 21	Structure 22
	Sample ID	828072-OA-031307-15 ⁽¹⁾	828072-OA-031407-16 ⁽¹⁾	828072-OA-031407-17 ⁽¹⁾	828072-OA-031507-18 ⁽¹⁾	828072-OA-031507-19 ⁽¹⁾	828072-OA-040507-20 ⁽¹⁾
	Lab ID	0703463C-38A/38B	0703463D-42A/42B	0703463D-46A/46B	0703463D-50A/50B	0703463D-54A/54B	0704203B-05A/05B
	Sample Type	Outdoor Air					
	Sample Date	3/14/2007	3/15/2007	3/15/2007	3/16/2007	3/16/2007	4/6/2007
Trichloroethene	(ug/m3)						
Benzene	(ug/m3)	0.72	0.9		0.78	0.81	0.49
Bromomethane	(ug/m3)						
1,3- Butadiene	(ug/m3)						
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	9.8	0.69	2.6	2	0.48	1
Chloroethane	(ug/m3)		0.6				
Chloroform	(ug/m3)	3.5					
Chloromethane	(ug/m3)	1.2	0.94	1.2	1	1	0.99
Cumene	(ug/m3)						
Cyclohexane	(ug/m3)						
1,1- Dichloroethane	(ug/m3)						
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)						
trans-1,2- Dichloroethene	(ug/m3)						
cis-1,2- Dichloroethene	(ug/m3)						
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)						
Ethyl Benzene	(ug/m3)		1.1				
4- Ethyltoluene	(ug/m3)		1.5				
Heptane	(ug/m3)						
Hexane	(ug/m3)			3.6			
Methyl tert-butyl ether	(ug/m3)						
4- Methyl-2-pentanone	(ug/m3)						
Propylbenzene	(ug/m3)						
Styrene	(ug/m3)						
Tetrachloroethene	(ug/m3)		0.94		4.4		
Toluene	(ug/m3)	1.1	3.7	3	1.8	0.81	0.72
1,1,1- Trichloroethane	(ug/m3)						
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)						
1,2,4- Trimethylbenzene	(ug/m3)		2.1				
Vinyl Chloride	(ug/m3)						
m,p- Xylene	(ug/m3)		3.9		0.54		
o- Xylene	(ug/m3)		1.5				

Note: ⁽¹⁾ Sample identification numbers were changed to show the correct NYSDEC site number. (i.e., 827072-OA-031307-15 was changed to 828072-OA-031307-15)
EPA = Environmental Protection Agency
J = Reported value is an estimate
ug/m3 = micrograms per cubic meter
Bold values indicate that the analyte was detected.

Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Associated Property	Structure 23	Structure 24	Structure 25	Structures 26 & 28	Structure 27	Structure 29
	Sample ID	828072-OA-031507-21 ⁽¹⁾	828072-OA-031507-22 ⁽¹⁾	828072-OA-031507-23 ⁽¹⁾	828072-OA-032107-24 ⁽¹⁾	828072-OA-032107-25 ⁽¹⁾	828072-OA-032807-27 ⁽¹⁾
	Lab ID	0703463E-62A/62B	0703463E-66A/66B	0703463F-70A/70B	0704056C-38A/38B	0704056D-42A/42B	0704056A-05A/05B
	Sample Type	Outdoor Air					
	Sample Date	3/16/2007	3/16/2007	3/16/2007	3/22/2007	3/22/2007	3/29/2007
Trichloroethene	(ug/m3)						
Benzene	(ug/m3)	0.75	0.99	0.61	0.7	0.63	0.72
Bromomethane	(ug/m3)						0.61
1,3- Butadiene	(ug/m3)						
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	0.46	0.47	0.54	1.3	1.5	1.6
Chloroethane	(ug/m3)						
Chloroform	(ug/m3)						
Chloromethane	(ug/m3)	0.94	1	0.91	1.3	1	1.3
Cumene	(ug/m3)						
Cyclohexane	(ug/m3)						
1,1- Dichloroethane	(ug/m3)						
1,2- Dichloroethane	(ug/m3)						
1,1- Dichloroethene	(ug/m3)						
trans-1,2- Dichloroethene	(ug/m3)						
cis-1,2- Dichloroethene	(ug/m3)						
1,2- Dichloropropane	(ug/m3)						
1,4- Dioxane	(ug/m3)			0.94	0.79	J	
Ethyl Benzene	(ug/m3)						0.84
4- Ethyltoluene	(ug/m3)						
Heptane	(ug/m3)						
Hexane	(ug/m3)						
Methyl tert-butyl ether	(ug/m3)						
4- Methyl-2-pentanone	(ug/m3)						
Propylbenzene	(ug/m3)						
Styrene	(ug/m3)						
Tetrachloroethene	(ug/m3)						
Toluene	(ug/m3)	0.94	0.6	0.8	1	0.84	1.6
1,1,1- Trichloroethane	(ug/m3)						
1,1,2- Trichloroethane	(ug/m3)						
1,3,5- Trimethylbenzene	(ug/m3)						
1,2,4- Trimethylbenzene	(ug/m3)						
Vinyl Chloride	(ug/m3)						
m,p- Xylene	(ug/m3)						0.67
o- Xylene	(ug/m3)						

Note: ⁽¹⁾ Sample identification numbers were changed to show the correct NYSDEC site number. (i.e., 827072-OA-031507-21 was changed to 828072-OA-031507-21)
EPA = Environmental Protection Agency
J = Reported value is an estimate
ug/m3 = micrograms per cubic meter
Bold values indicate that the analyte was detected.

Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Associated Property	Structure 30	Structure 31	Structure 32	Structure 33	Structures 34 & 35	Structure 36	Structure 37
	Sample ID	828072-OA-032207-28 ⁽¹⁾	828072-OA-032207-29 ⁽¹⁾	828072-OA-032707-30 ⁽¹⁾	828072-OA-032707-31 ⁽¹⁾	828072-OA-032707-32 ⁽¹⁾	828072-OA-03-2807-34 ⁽¹⁾	828072-OA-032907-35 ⁽¹⁾
	Lab ID	0704056D-46A/46B	0704056D-51A/51B	0704056BR1-14A/14B	0704056C-27A/27B	0704056BR1-19A/19B	0704056A-09A/09B	0704056BR1-23A/23B
	Sample Type	Outdoor Air	Outdoor Air					
	Sample Date	3/23/2007	3/22/2007	3/28/2007	3/28/2007	3/28/2007	3/29/2007	3/30/2007
Trichloroethene	(ug/m3)							
Benzene	(ug/m3)	0.49	0.6	0.78	0.46	1.7	1.1	1
Bromomethane	(ug/m3)				0.52	J		
1,3- Butadiene	(ug/m3)							
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	0.95	1.8	1.7	0.72	4.1	J	3.4
Chloroethane	(ug/m3)							
Chloroform	(ug/m3)							
Chloromethane	(ug/m3)	1	1.1	1.1	1.2	0.74	J	1.2
Cumene	(ug/m3)							
Cyclohexane	(ug/m3)							
1,1- Dichloroethane	(ug/m3)							
1,2- Dichloroethane	(ug/m3)							
1,1- Dichloroethene	(ug/m3)							
trans-1,2- Dichloroethene	(ug/m3)							
cis-1,2- Dichloroethene	(ug/m3)							
1,2- Dichloropropane	(ug/m3)							
1,4- Dioxane	(ug/m3)							
Ethyl Benzene	(ug/m3)					1.2		
4- Ethyltoluene	(ug/m3)					1.3		
Heptane	(ug/m3)					0.88	0.74	
Hexane	(ug/m3)					1.7		
Methyl tert-butyl ether	(ug/m3)							
4- Methyl-2-pentanone	(ug/m3)							
Propylbenzene	(ug/m3)							
Styrene	(ug/m3)							
Tetrachloroethene	(ug/m3)					0.98		
Toluene	(ug/m3)	0.7	1.4	1.4	1	5.7	2.3	2.6
1,1,1- Trichloroethane	(ug/m3)							
1,1,2- Trichloroethane	(ug/m3)							
1,3,5- Trimethylbenzene	(ug/m3)							
1,2,4- Trimethylbenzene	(ug/m3)					1.3		
Vinyl Chloride	(ug/m3)							
m,p- Xylene	(ug/m3)			0.53	J		4.1	1.1
o- Xylene	(ug/m3)					1		

Note: ⁽¹⁾ Sample identification numbers were changed to show the correct NYSDEC site number. (i.e., 827072-OA-032207-28 was changed to 828072-OA-032207-28)

EPA = Environmental Protection Agency

J = Reported value is an estimate

ug/m3 = micrograms per cubic meter

Bold values indicate that the analyte was detected.

Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Associated Sample	8-28-072 IA-13-B	8-28-072 IA-14-1	827072-OA-031507-22	8-28-072 SS-19-B
	Sample ID	828072-IA-DUP01-B ⁽¹⁾	828072-IA-DUP01-1 ⁽¹⁾	828072-OA-DUP01 ⁽¹⁾	828072-SS-DUP01-B ⁽¹⁾
	Lab ID	0703463F-71A71B	0703463F-72A/72B	0703463F-74A/75B	0703463H-73A/73B
	Sample Type	Basement Air	First Floor	Outdoor Air	Subslab
	Sample Date	3/14/2007	3/14/2007	3/16/2007	3/15/2007
Trichloroethene	(ug/m3)		0.19		
Benzene	(ug/m3)	0.5	2.8	0.57	
Bromomethane	(ug/m3)				
1,3- Butadiene	(ug/m3)				
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	1.4	2.3	0.85	
Chloroethane	(ug/m3)				
Chloroform	(ug/m3)		1.2		
Chloromethane	(ug/m3)	0.86	1.1	0.99	
Cumene	(ug/m3)				
Cyclohexane	(ug/m3)		0.81		
1,1- Dichloroethane	(ug/m3)				
1,2- Dichloroethane	(ug/m3)				
1,1- Dichloroethene	(ug/m3)				
trans-1,2- Dichloroethene	(ug/m3)				
cis-1,2- Dichloroethene	(ug/m3)		1.4		
trans-1,3- Dichloropropene	(ug/m3)				
1,4- Dioxane	(ug/m3)				
Ethyl Benzene	(ug/m3)		2.2		
4- Ethyltoluene	(ug/m3)		3.7		
Heptane	(ug/m3)		1.3		
Hexane	(ug/m3)		3.5		
Methyl tert-butyl ether	(ug/m3)				
4- Methyl-2-pentanone	(ug/m3)				
Propylbenzene	(ug/m3)				
Styrene	(ug/m3)				
Tetrachloroethene	(ug/m3)		1.1		0.95
Toluene	(ug/m3)	0.93	15	0.88	1.9
1,1,1- Trichloroethane	(ug/m3)				
1,1,2- Trichloroethane	(ug/m3)				
1,3,5- Trimethylbenzene	(ug/m3)		2		
1,2,4- Trimethylbenzene	(ug/m3)		3.8		
Vinyl Chloride	(ug/m3)				
m,p- Xylene	(ug/m3)		5.7		1.1
o- Xylene	(ug/m3)		3.3		

Note: ⁽¹⁾ Sample identification numbers were changed to show the correct NYSDEC site number. (i.e., 827072-IA-DUP01-B was changed to 828072-IA-DUP01-B)

EPA = Environmental Protection Agency

J = Reported value is an estimate

ug/m3 = micrograms per cubic meter

Bold values indicate that the analyte was detected.

Table 1
Summary of Detected Volatile Organic Compounds (VOCs) in Air Samples
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method TO-15	Associated Sample	827072-OA-032707-32	827072-SS-30-B	827072-IA-32-1	827072-IA-05-B
	Sample ID	828072-OA-DUP02 ⁽¹⁾	828072-SS-DUP02-B ⁽¹⁾	828072-IA-DUP02-1 ⁽¹⁾	828072-IA-DUP02-B ⁽¹⁾
	Lab ID	0704056A-01A/01B	0704056F-47A/47B	0704056BR1-15A/15B	0704203B-14A/14B
	Sample Type	Outdoor Air	Sub Slab	First Floor	Basement Air
	Sample Date	3/27/2007	3/23/2007	3/28/2007	4/6/2007
Trichloroethene	(ug/m3)				0.23
Benzene	(ug/m3)	1.8	8.8	4.6	
Bromomethane	(ug/m3)	0.7			
1,3- Butadiene	(ug/m3)				
2- Butanone (Methyl Ethyl Ketone)	(ug/m3)	1.1 J	7.6	1.9 J	
Chloroethane	(ug/m3)				
Chloroform	(ug/m3)			0.87	
Chloromethane	(ug/m3)	1.3 J		1.3	0.82
Cumene	(ug/m3)				
Cyclohexane	(ug/m3)	0.49	11	1.2 J	
1,1- Dichloroethane	(ug/m3)				1.1
1,2- Dichloroethane	(ug/m3)				
1,1- Dichloroethene	(ug/m3)				
trans-1,2- Dichloroethene	(ug/m3)				
cis-1,2- Dichloroethene	(ug/m3)				94
1,2- Dichloropropane	(ug/m3)				
1,4- Dioxane	(ug/m3)				
Ethyl Benzene	(ug/m3)	0.78	3.5	2.7 J	
4- Ethyltoluene	(ug/m3)	0.74	5.6	2.6	
Heptane	(ug/m3)	0.54	30	2.3 J	
Hexane	(ug/m3)	2	29	2.4 J	
Methyl tert-butyl ether	(ug/m3)			2.9 J	
4- Methyl-2-pentanone	(ug/m3)				
Propylbenzene	(ug/m3)		0.96	0.74	
Styrene	(ug/m3)		0.66	0.58 J	
Tetrachloroethene	(ug/m3)	0.61	0.72	0.81 J	
Toluene	(ug/m3)	5.8	30	28	1.9
1,1,1- Trichloroethane	(ug/m3)		0.64	3.6	
1,1,2- Trichloroethane	(ug/m3)				
1,3,5- Trimethylbenzene	(ug/m3)		5.4	0.98	
1,2,4- Trimethylbenzene	(ug/m3)	0.74	14	3	
Vinyl Chloride	(ug/m3)				18
m,p- Xylene	(ug/m3)	2.6	28	13	
o- Xylene	(ug/m3)	0.9	9	3.3	

Note: ⁽¹⁾ Sample identification numbers were changed to show the correct NYSDEC site number. (i.e., 827072-OA-DUP02 was changed to 828072-OA-DUP02)

EPA = Environmental Protection Agency

J = Reported value is an estimate

ug/m3 = micrograms per cubic meter

Bold values indicate that the analyte was detected.

Table 2
Summary of Detected Volatile Organic Compounds (VOCs) in Sump Water
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method 8260	Property ID	Structure 01	Structure 02	Structure 03	Structure 04	Structure 05	Structure 06
	Sample ID	8-28-072 SW-01	8-28-072 SW-02	8-28-072 SW-03	8-28-072 SW-04	8-28-072 SW-05	8-28-072 SW-06
	Lab ID	F0308-01A	F0308-02A	F0308-03A	F0308-04A	F0308-05A	F0308-06A
	Sample Type	Sump Water					
	Sample Date	3/7/2007	3/7/3007	3/7/3007	3/8/3007	3/8/3007	3/8/3007
1,1- Dichloroethane	(ug/L)					1.9	J
cis-1,2- Dichloroethene	(ug/L)				24	J	190
trans-1,2- Dichloroethene	(ug/L)						
Methylene chloride	(ug/L)						
Naphthalene	(ug/L)						
1,2,3- Trichlorobenzene	(ug/L)						
Trichloroethene	(ug/L)						
Vinyl chloride	(ug/L)					37	J

Parameter List EPA Method 8260	Property ID	Structure 07	Structure 08	Structure 09	Structure 10	Structure 11	Structure 12
	Sample ID	8-28-072 SW-07	8-28-072 SW-08	8-28-072 SW-09	8-28-072 SW-10	8-28-072 SW-11	8-28-072 SW-12
	Lab ID	F0308-07A	F0346-01A	F0346-02A	F0346-03A	F0346-04A	F0346-05A
	Sample Type	Sump Water					
	Sample Date	3/8/3007	3/14/2007	3/14/2007	3/14/2007	3/14/2007	3/14/2007
1,1- Dichloroethane	(ug/L)						
cis-1,2- Dichloroethene	(ug/L)	19				11	
trans-1,2- Dichloroethene	(ug/L)						
Methylene chloride	(ug/L)						
Naphthalene	(ug/L)						
1,2,3- Trichlorobenzene	(ug/L)						
Trichloroethene	(ug/L)	2.1					
Vinyl chloride	(ug/L)					1.1	

Parameter List EPA Method 8260	Property ID	Structure 13	Structure 14	Structure 15	Structure 16	Structure 17	Structure 18
	Sample ID	8-28-072 SW-13	8-28-072 SW-14	8-28-072 SW-15	8-28-072 SW-16	8-28-072 SW-17	8-28-072 SW-18
	Lab ID	F0346-06A	F0346-07A	F0346-08A	F0346-09A	F0346-10A	F0346-11A
	Sample Type	Sump Water					
	Sample Date	3/14/2007	3/14/2007	3/14/2007	3/15/2007	3/14/2007	3/14/2007
1,1- Dichloroethane	(ug/L)						
cis-1,2- Dichloroethene	(ug/L)		53	15	52	71	
trans-1,2- Dichloroethene	(ug/L)						
Methylene chloride	(ug/L)						
Naphthalene	(ug/L)						
1,2,3- Trichlorobenzene	(ug/L)						
Trichloroethene	(ug/L)		2.8		4.2	9.2	
Vinyl chloride	(ug/L)		15	9		5.7	

Parameter List EPA Method 8260	Property ID	Structure 19	Structure 20	Structure 21	Structure 22	Structure 24	Structure 25
	Sample ID	8-28-072 SW-19	8-28-072 SW-20	8-28-072 SW-21	8-28-072 SW-22	8-28-072 SW-24	8-28-072 SW-25
	Lab ID	F0346-12A	F0346-13A	F0346-14A	F0346-15A	F0346-16A	F0346-17A
	Sample Type	Sump Water					
	Sample Date	3/14/2007	3/15/2007	3/15/2007	3/15/2007	3/15/2007	3/16/2007
1,1- Dichloroethane	(ug/L)						
cis-1,2- Dichloroethene	(ug/L)		150	1.2	5.9	1.1	
trans-1,2- Dichloroethene	(ug/L)		1.4				
Methylene chloride	(ug/L)						
Naphthalene	(ug/L)	1.1	J				
1,2,3- Trichlorobenzene	(ug/L)	1	J				
Trichloroethene	(ug/L)		18				
Vinyl chloride	(ug/L)		8.9				

Note:
EPA = Environmental Protection Agency
J = Reported value is an estimate
ug/L = micrograms per liter

Table 2
Summary of Detected Volatile Organic Compounds (VOCs) in Sump Water
Immediate Soil Vapor Intrusion Investigation
Erdle Perforating Site (NYSDEC Site No. 8-28-072)
Gates, New York

Parameter List EPA Method 8260	Property ID	Structure 27	Structure 28	Structure 29	Structure 30	Structure 31	Structure 32
	Sample ID	8-28-072 SW-27	8-28-072 SW-28	8-28-072 SW-29	8-28-072 SW-30	8-28-072 SW-31	8-28-072 SW-32
	Lab ID	F0387-01A	F0387-02A	F0412-03A	F0387-03A	F0387-04A	F0412-05A
	Sample Type	Sump Water					
	Sample Date	3/21/2007	3/22/2007	3/27/2007	3/22/2007	3/22/2007	3/27/2007
1,1- Dichloroethane	(ug/L)						
cis-1,2- Dichloroethene	(ug/L)	190					
trans-1,2- Dichloroethene	(ug/L)						
Methylene chloride	(ug/L)						
Naphthalene	(ug/L)						
1,2,3- Trichlorobenzene	(ug/L)						
Trichloroethene	(ug/L)	3.8					
Vinyl chloride	(ug/L)	9.7					

Parameter List EPA Method 8260	Property ID	Structure 34	Structure 35	Structure 36	Structure 37	Structure 38
	Sample ID	8-28-072 SW-34	8-28-072 SW-35	8-28-072 SW-36	8-28-072 SW-37	8-28-072 SW-38
	Lab ID	F0412-02A	F0412-04A	F0412-01A	F0412-06A	F0445-01A
	Sample Type	Sump Water				
	Sample Date	3/27/2007	3/28/2007	3/28/2008	3/29/2007	4/5/2007
1,1- Dichloroethane	(ug/L)					
cis-1,2- Dichloroethene	(ug/L)	2.6	21		69	
trans-1,2- Dichloroethene	(ug/L)					
Methylene chloride	(ug/L)					
Naphthalene	(ug/L)					
1,2,3- Trichlorobenzene	(ug/L)					
Trichloroethene	(ug/L)				1.4	
Vinyl chloride	(ug/L)		2.4			

Parameter List EPA Method 8260	Property ID	Structure 02	Structure 25			
	Sample ID	8-28-072 SW-DUP01	8-28-072 SW-DUP02	Trip Blank	Trip Blank	Trip Blank
	Lab ID	F0308-08A	F0346-19A	F0308-09A	F0346-18A	F0387-05A
	Sample Type	Sump Water	Sump Water	QA/QC	QA/QC	QA/QC
	Sample Date	3/7/2007	3/16/2007			
1,1- Dichloroethane	(ug/L)					
cis-1,2- Dichloroethene	(ug/L)					
trans-1,2- Dichloroethene	(ug/L)					
Methylene chloride	(ug/L)				43	
Naphthalene	(ug/L)					
1,2,3- Trichlorobenzene	(ug/L)					
Trichloroethene	(ug/L)					
Vinyl chloride	(ug/L)					

Note:

EPA = Environmental Protection Agency
J = Reported value is an estimate
ug/L = micrograms per liter

Appendix A

Data Usability Summary Report (CD Attachment)