PUBLIC SOIL VAPOR INTRUSION REPORT
ERDLE PERFORATING COMPANY
SITE # 828072

WORK ASSIGNMENT NOs. D004434-15 and D004434-20

Prepared for:

New York State Department of Environmental Conservation
Albany, New York

Prepared by:

MACTEC Engineering and Consulting, P.C.
Portland, Maine

MACTEC: 3612072096

AUGUST 2010

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Submitted by:

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Charles R. Staples
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GLOSSARY OF ACRONYMS AND ABBREVIATIONS

cis-1,2-DCE	cis-1,2-dichloroethene
COCs	contaminants of concern
DUSR	Data Usability Summary Report
MACTEC	MACTEC Engineering and Consulting, P.C.
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOH Guidance	Guidance for Evaluating Soil Vapor Intrusion in the State of New York, 2006
Report	Soil Vapor Intrusion Investigation Report
Site	Erdle Perforating site
SSD	sub-slab depressurization
SVI	Soil Vapor Intrusion
TCE	trichloroethylene
µg/l	microgram(s) per liter
$\mu g/m^3$	microgram(s) per cubic meter
USEPA	United States Department of Health
VC	vinyl chloride
VOC	volatile organic compound
WA	work assignment

1.0 INTRODUCTION

1.1 PROJECT BACKGROUND

This Confidential Soil Vapor Intrusion (SVI) Investigation Report (Report) for the Erdle Perforating site (Site) located in the Town of Gates, Monroe County, New York has been prepared by MACTEC Engineering and Consulting, P.C. (MACTEC) in response to Work Assignment (WA) No. D004434-15 and WA No. D004434-20 from the New York State Department of Environmental Conservation (NYSDEC). The Site is listed as a Class 2 Inactive hazardous waste site, Site No. 828072, in the Registry of Hazardous Waste Sites in New York State. This Report has been prepared in accordance with the NYSDEC requirements in WA No. D004434-15 dated September 26, 2007 and WA No. D004434-20, dated August 24, 2007, and with the July 2005 Superfund Standby Contract between MACTEC and the NYSDEC.

The Site is located at 100 Pixley Industrial Parkway in the Town of Gates, Monroe County (Figure 1.1). It is approximately 9.2 acres and consists of a large industrial building, paved parking areas, and wooded wetland. The Site is currently zoned for industrial purposes including manufacturing and processing. The Site is bounded on the south by Conrail railroad tracks, on the north and east by light industry, and on the west by open land and Interstate 490. South of the Conrail railroad tracks is undeveloped wooded area, and a townhouse development (Hidden Valley Development) is located further south. The Site and surrounding developed areas are serviced by public water.

SVI investigations have been conducted in a phased approach within the Hidden Valley Development, located approximately 800 feet south of the site. Collectively, a total of 55 residential structures have been sampled for SVI over four consecutive heating seasons (2006/2007 through 2009/2010). SVI investigations performed during the 2006/2007 heating season, which consisted of the sampling of 38 residences, were previously summarized within the October 2007 *Immediate Soil Vapor Intrusion Investigation,* prepared by EA Engineering.

1.2 PURPOSE OF INVESTIGATION AND REPORT

The purpose of the SVI investigations is to evaluate the potential of soil vapor intrusion resulting from the presence of site related Volatile Organic Compound (VOC) groundwater contamination migrating from the Erdle site to the downgradient Hidden Valley Development. The SVI evaluation included the collection of sub-slab soil vapor, indoor air, and outdoor air samples from residential properties located above or in the vicinity of the impacted groundwater plume. Sample results for each residential property structures were individually evaluated in accordance with the New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH Guidance) (NYSDOH, 2006) in order to determine the necessity of further action.

This Report was prepared to: summarize the SVI investigation field activities (including sub-slab soil vapor, indoor air, ambient outdoor air and sump water sampling) conducted between December 2007 and March 2010, present the corresponding analytical results, and evaluate proposed further action recommendations.

1.3 REPORT ORGANIZATION

A summary of field sampling activities completed between December 2007 and April 2010 is provided in Section 2. A summary of mitigation system installations completed between November 2007 and October 2009 are also provided in Section 2. Results from field sampling activities are presented in Section 3 The Data Usability Summary Reports and Analytical Data is presented in Appendix A.

2.0 FIELD ACTIVITIES

Field activities summarized in this report include SVI sampling conducted by MACTEC over three consecutive heating seasons (2007/2008 through 2009/2010); specifically, a round of SVI sampling during the 2007/2008 heating season, a second round of SVI sampling in 2009, and a third round of SVI sampling in 2010. The report also summarizes the implementation of further actions recommended by the NYSDEC, including mitigation system installations.

SVI investigation activities were performed to better characterize the potential presence of contaminants of concern (COCs) in the Hidden Valley Development residential property structures. For each residential property sampled, sub-slab soil vapor and indoor air samples were collected in order to assess the potential for exposure via soil vapor intrusion. Outdoor air samples were collected concurrently with the sub-slab soil vapor and indoor air samples in order to evaluate outdoor air (background) quality in the vicinity of the study area. Limited sump water samples were also collected from the residential properties during the first round of SVI sampling to evaluate the potential presence of VOCs in sump water. Samples were submitted for laboratory analysis of VOCs. Based on the evaluation of the SVI investigation results, mitigation systems were recommended for installation within specific residential property structures. The SVI investigations and mitigation system installations were conducted following NYSDOH Guidance (NYSDOH, 2006).

2.1 SVI SAMPLING FIELD ACTIVITIES

The area of SVI sampling is presented on Figure 2.1. The investigation included the field activities described in the following subsections.

2.1.1 Structure Inspection/Inventory and Questionnaire

Prior to collecting samples, MACTEC completed the NYSDOH "Indoor Air Quality Questionnaire and Building Inventory" form for each structure, screened ambient indoor air using a parts per billion RAE photoionization detector, and selected the sample locations.

2.1.2 Sub-Slab Vapor Sampling

Sub-slab vapor samples were collected from below the building's basement foundation slab in 1-liter SUMMA®-type canisters. The following procedure was followed for all sub-slab vapor point installations:

- A one-inch diameter hole was drilled with a hammer drill two inches into the building slab, near the center of the basement and away from cracks or floor penetrations.
- The hole was continued with a 3/8-inch drill bit, until the building slab was penetrated. The hole was continued approximately 3-inches below the slab.
- The hole was swept to remove drill cuttings/dust from the area.
- A ¼-inch piece of laboratory/food grade tubing was inserted through a 1" diameter rubber stopper and placed into the hole, so that the bottom of the tubing was below the slab floor and the stopper rested inside the one-inch hole, forming a seal.
- The stopper was then covered with bees wax to provide a seal to prevent the migration of indoor air into the sub-slab.
- One 60 cubic centimeter volume of air was purged from the tubing with a polyethylene syringe.
- The syringe was capped and the air released outside the building as to not interfere with the indoor air sample collection.
- A 1-liter SUMMA®-type canister with a 24-hour flow valve was connected using Swagelok fittings.
- A digital photograph was taken of the set-up and surrounding area.

Approximately 24 hours after sample collection, the flow valves were shut off. Upon completion of the sampling, the tubing and stopper were removed from the building floor and the sample points were sealed to grade with fast drying hydraulic concrete.

For field duplicates collected at sub-slab vapor points, an in-line stainless steel tee fitting was used to split the sub-slab vapor sample between two canisters.

Samples were shipped to Centek Laboratories for analysis of VOCs via United Stated Environmental Protection Agency (USEPA) Method TO-15 with a detection limit of 1 microgram per cubic meter ($\mu g/m^3$) for most compounds. The laboratory provided class B deliverables for all samples.

2.1.3 Indoor Air Sampling

Basement indoor air samples were collected in 1-liter SUMMA®-type canisters from the vicinity of the sub-slab vapor sample collection points. In addition, one first floor sample was collected from each residence during the 2007 and 2008 sampling (first floor sampling was no longer required by the NYSDOH late in 2008.) Indoor air samples were collected from approximately four to six feet above the floor level and were set up with 24-hour flow valves. At indoor air duplicate sampling locations, two canisters were set up adjacent to each other for sample collection. MACTEC collected the basement air samples away from sumps. Approximately 24 hours after sample collection, the flow valves were shut off.

Samples were shipped to Centek Laboratories for analysis of VOCs via USEPA Method TO-15 with a detection limit of 1 µg/m^3 for most compounds, and a detection limit of 0.25 µg/m^3 for trichloroethylene (TCE), vinyl chloride (VC) , and carbon tetrachloride. The laboratory provided class B deliverables for all samples.

2.1.4 Outdoor Ambient Air Sampling

Outdoor ambient air samples were collected in 1-liter SUMMA®-type canisters from the vicinity of the homes being sampled for indoor air and sub-slab vapor VOC contamination. Samples were collected from approximately four to six feet above ground surface and were set up with 24-hour flow valves. At outdoor ambient air duplicate sampling locations, two canisters were set up adjacent to each other for sample collection. Approximately 24 hours after sample collection, the flow valves were shut off.

Samples were shipped to Centek Laboratories for analysis of VOCs via USEPA Method TO-15 with a detection limit of 1 µg/m^3 for most compounds, and a detection limit of 0.25 µg/m^3 for TCE, VC, and carbon tetrachloride. The laboratory provided class B deliverables for all samples.

2.1.5 Sump Water Sampling

As part of the SVI sampling conducted during the 2007/2008 heating season, sump water samples were collected from residential sumps. Samples were collected after removing the sump cover, if present, and noting the condition of the sump and observations of the water (i.e., turbid, odor). Where possible, the sump pumps were run and then shut off prior to sampling to allow fresh groundwater/sub-slab water into the sumps. Sump samples were collected by lowering the sample containers into the sumps and allowing the vials to slowly fill, avoiding extra aeration of the sample.

The sampler returned the sump pump to the "on" position and replaced the sump cover, ensuring that the system and area around the sump were returned to their original condition.

Sump water samples were shipped to Centek Laboratories for analysis of VOCs via USEPA Method 8260. The laboratory provided class B deliverables for all samples.

2.2 SVI SAMPLING ROUND 1 (DECEMBER 2007-JANUARY 2008)

SVI sampling was conducted during the 2007/2008 heating season at nine residences on Upper Valley Road (two of the nine residences were sampled twice). The SVI sampling included the collection of 11 sub-slab vapor samples and 22 indoor air samples, as well as seven exterior ambient air samples and three duplicate samples. Sampling at each residence included the collection of one sub-slab vapor sample, one basement air sample, and one first floor air sample. Outdoor ambient air samples were collected in the general vicinity of the residences sampled. The investigation included the field activities described within subsections 2.1.1 through 2.1.5.

2.3 SVI SAMPLING ROUND 2 (FEBRUARY/MARCH 2009)

Based on the results of the 2007/2008 heating season sampling, as well as results of the groundwater sampling conducted in the vicinity of the residential properties, twelve additional residences were sampled in March 2009. One residence sampled during the 2007/2008 heating season was also resampled/monitored in February 2009. The February/March 2009 SVI sampling

included the collection of thirteen sub-slab vapor samples and thirteen indoor air samples, as well as four exterior ambient samples and two duplicate samples. Samples collected from each residence included one sub-slab soil vapor sample and one basement indoor air sample (the additional first floor air sample was not requested by the NYSDOH or NYSDEC after 2008). Based on the February/March 2009 SVI results, sub-slab vapor sampling was repeated within two residences in May 2009.

Sub-slab vapor sampling, indoor air sampling, and outdoor ambient air sampling procedures were the same for 2009 as for December 2007 and January 2008. See subsections 2.1.1 – 2.1.4 for sampling procedure details

2.4 SVI SAMPLING ROUND 3 (MARCH 2010)

Based on the results of the 2009 heating season sampling, five residences were resampled in March 2010. The March 2010 SVI sampling included the collection of five sub-slab vapor samples and five indoor air samples, as well as three exterior ambient samples and one duplicate sample. Samples collected from each residence included one sub-slab soil vapor sample and one basement indoor air sample (the additional first floor air sample was not requested by the NYSDOH or NYSDEC after 2008).

Sub-slab vapor sampling, indoor air sampling, and outdoor ambient air sampling procedures were the same for March 2010 as for previous sampling activities. See subsections 2.1.1 – 2.1.4 for sampling procedure details.

2.5 MITIGATION SYSTEM INSTALLATION (NOVEMBER/DECEMBER 2007)

Based on the SVI sampling that was conducted by EA Engineering in March and April 2007, the NYSDEC contracted GeoLogic NY, Inc. to install sub-slab depressurization (SSD) mitigation systems for the following residential property structuresin the Hidden Valley Development. MACTEC reviewed SSD system documentation and performed construction oversight.

- Structure 11 (November 2007)
- Structure 20 (November/December 2007)
- Structure 15 (November 2007)

- Structure 27 (October/November 2007)

After the installation of the SSD mitigation systems within these four property structures, post-mitigation confirmation indoor air samples were collected in January 2008 (discussed in Section 3.4).

2.6 MITIGATION SYSTEM INSTALLATION (JULY 2008 – OCTOBER 2009)

Based on the results of the December 2007-January 2008 SVI investigation and the subsequent SVI investigation in March 2009 and March 2010, MACTEC contracted Mitigation Tech of Brockport, NY to install SSD mitigation systems at the following residential structures in the Hidden Valley Development:

- Structure 42 (installed February 2009)
- Structure 07 (installed July 2008)
- Structure 35 (installed August 2010)
- Structure 41 (installed July/August 2008 and updated July 2009)

In addition, Mitigation Tech installed SSD mitigation systems in two residential structures that had previously been recommended for SSD mitigation systems based on the 2007 sampling conducted by EA Engineering:

- Structure 16 (installed August 2010)
- Structure 05 (installed October 2009)

The basement drainage system was previously improved at Structure 05 in December 2007, but, at the request of the resident, the SSD system was not installed until October 2009.

MACTEC reviewed SSD system documentation and performed construction oversight. After the installation of the SSD mitigation systems, post-mitigation confirmation indoor air samples were collected between 2009 and 2010 for properties containing elevated indoor air concentrations prior to the installation of the systems (discussed in Section 3.4). Because the confirmation sample for Structure 42 was collected outside the heating season in July 2009, a second confirmation sample was collected in 2010 during the heating season.

Based on confirmation sampling and an additional evaluation of the SSD system installed at Structure 41 in July/August 2008, a second SSD system was installed at Structure 41 in July 2009.

3.0 FIELD SAMPLING RESULTS

The nature and extent of the soil vapor contamination has been delineated based on the findings of the phased SVI investigations as well as the evaluation of the groundwater plume delineation. The general area of residential SVI sampling (sub-slab soil vapor and air samples) is presented on Figure 2.1. The primary COCs from the Erdle facility are TCE and its breakdown products, cis-1,2-dichloroethene (cis-1,2-DCE) and VC.

3.1 ROUND 1 SUB-SLAB VAPOR, INDOOR AIR, OUTDOOR AMBIENT AIR AND SUMP WATER SAMPLING RESULTS

VOCs detected in sub-slab vapor and indoor/ambient air samples are presented by structure ID in Table 3.1. Analytical soil vapor results for TCE are shown graphically on Figure 3.1 and analytical soil vapor results for cis-1,2-DCE are shown graphically on Figure 3.2. Complete analytical data and the analytical Data Usability Summary Reports (DUSRs) are included in Appendix A. The range of results for COCs is provided by location (i.e. sub-slab vapor, indoor air, and outdoor air) in the following subsections:

3.1.1 Sub-Slab Vapor Results

TCE concentrations ranged from 0.55 µg/m^3 to 420 µg/m^3, cis-1,2-DCE concentrations ranged from 0.4 µg/m^3 to 9,100 µg/m^3 and VC concentrations ranged from non-detect to 2,200 µg/m^3.

3.1.2 Indoor Air Results

TCE concentrations ranged from non-detect to 19.7 µg/m^3, cis-1,2-DCE concentrations ranged from non-detect to 174 µg/m^3, and VC concentrations ranged from non-detect to 31.2 µg/m^3.

3.1.3 Outdoor Ambient Air Results

TCE concentrations ranged from non-detect to 7.05 µg/m^3. Cis-1,2-DCE and VC were not detect.

3.1.4 Sump Water Sampling Results

Sump water samples were collected from 11 residential properties concurrently with the 2007/2008 SVI sampling. Sump water sample results are presented by structure ID in Table 3.2. Sump water samples were collected to evaluate water below the residential buildings for the purpose of comparing to soil vapor and indoor air results. Sump water samples were not compared to any standards, criteria, or guidance values.

The primary groundwater contaminants were also detected in several of the sump water samples, including TCE (max concentration of 3.3 micrograms per liter [µg/l]), cis-1,2-DCE (max concentration of 92 µg/l), and VC (max concentration of 53 µg/l). In addition, 1,1-DCE, trans-1,2-DCE, and acetone were detected at several locations.

3.2 ROUND 2 SUB-SLAB VAPOR, INDOOR AIR, AND OUTDOOR AMBIENT AIR SAMPLING RESULTS

Based on the sample results for the 2007/2008 heating season, additional SVI sampling was conducted at 12 new residences in 2009, as well as at one previously sampled resident. VOCs detected in sub-slab vapor and indoor/ambient air samples are presented by structure ID in Table 3.3 (2009 heating season).Soil Vapor analytical results for TCE and cis-1,2-DCE are shown graphically on Figures 3.1 and 3.2, respectively. Complete analytical data and the analytical DUSRs are included in Appendix A.

3.2.1 Sub-Slab Vapor Results

TCE concentrations in the sub-slab vapor ranged from 0.55 µg/m^3 to 17 µg/m^3. Cis-1,2-DCE concentrations in the sub-slab vapor ranged from non-detect to 990 µg/m^3. VC concentrations in the sub-slab vapor ranged from non-detect to 850 µg/m^3.

3.2.2 Indoor Air Results

TCE concentrations in indoor air ranged from non-detect to 3.2 µg/m^3. Cis-1,2-DCE concentrations in indoor air ranged from non-detect to 3.9 µg/m^3. VC concentrations in indoor air ranged from non-detect to 1.6 µg/m^3.

3.2.3 Outdoor Ambient Air Results

TCE concentrations in the outdoor ambient air ranged from 0.44 µg/m^{3}to 2.4 µg/m^3. Cis-1,2-DCE concentrations ranged from non-detect to 0.52 µg/m^3. VC concentrations ranged from non-detect to 0.81 µg/m^3.

3.3 ROUND 3 SUB-SLAB VAPOR, INDOOR AIR, AND OUTDOOR AMBIENT AIR SAMPLING RESULTS

Based on the SVI sample results from 2009, five residences were resampled in 2010. VOCs detected in sub-slab vapor and indoor/ambient air samples are presented by structure ID in Table 3.4 (2010 heating season). Soil vapor analytical results for TCE and cis-1,2-DCE are shown graphically on Figures 3.1 and 3.2. Complete analytical data and the analytical DUSRs are included in Appendix A.

3.3.1 Sub-Slab Vapor Results

TCE concentrations in the sub-slab vapor ranged from 0.3.4 µg/m^3 to 260 µg/m^3. Cis-1,2-DCE concentrations in the sub-slab vapor ranged from non-detect to 1800 µg/m^3. VC concentrations in the sub-slab vapor ranged from non-detect to 37 µg/m^3.

3.3.2 Indoor Air Results

TCE concentrations in indoor air ranged from 0.27 µg/m^3 to 3.2 µg/m^3. Cis-1,2-DCE concentrations in indoor air ranged from non-detect to 17 µg/m^3. VC concentrations in indoor air ranged from non-detect to 9.9 µg/m^3.

3.3.3 Outdoor Ambient Air Results

TCE concentrations in the outdoor ambient air ranged from 0.27 µg/$m^3$to 3.3 µg/m^3. Cis-1,2-DCE and VC were not detected.

3.4 POST-MITIGATION CONFIRMATION SAMPLING

In addition to recording sub-slab vacuums upon completion and start up of the SSD mitigation systems, confirmation samples were collected from several of the residences to verify the effectiveness of the SSD mitigation system design and installation. Confirmation samples were not requested for residences that did not have an exceedance of indoor air guidance values prior to the installation of the SSD system. With the exception of the result from Structure 41, confirmation air sample results did not exceed guidance values. Based on the confirmation air result from Structure 41, as well as further review of the structure, the SSD system was modified to include an additional blower. Post-mitigation confirmation sample analytical results are presented in Table 3.5.

3.5 PROPOSED FURTHER ACTIONS

A total of 55 residential property structures have been sampled to date (2007 to 2010) for SVI within the Hidden Valley Development. Sample results for each property were individually evaluated in accordance with the NYSDOH Guidance to determine the necessity of further action. Based on the sampling conducted to date, ten SSD mitigation systems have been installed, two residential structures require further monitoring, and no further action is required for the remaining 43 residences.

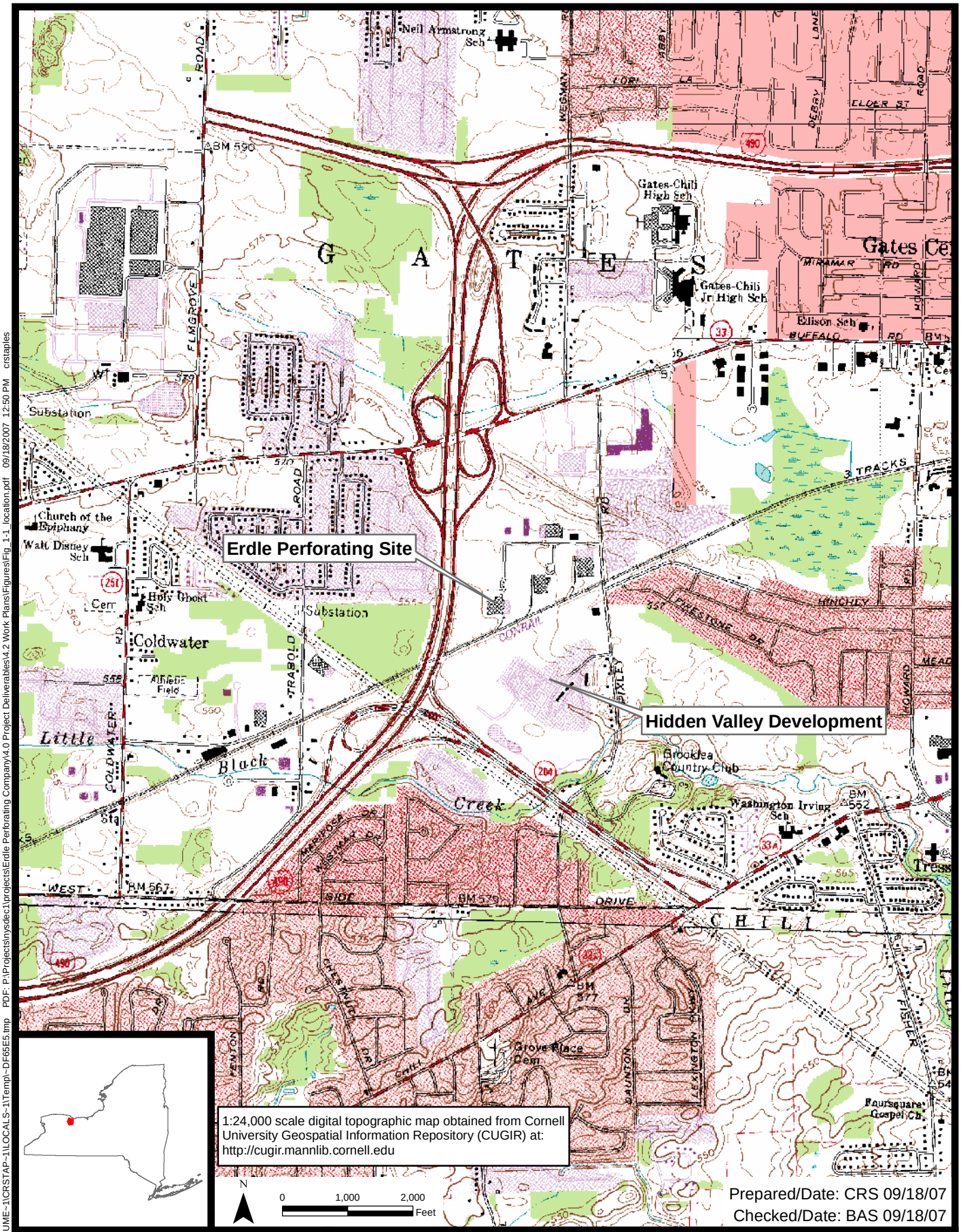
Thirty eight of the residential structures sampled, were sampled by EA Engineering in 2007. Based on the results of the EA Engineering sampling, the NYSDOH and NYSDEC recommended the installation of SSD mitigation systems in six residential structures and the continued monitoring of four residential structures. MACTEC coordinated the installation of the six SSD mitigation systems. In addition, MACTEC re-sampled the four residential structures recommended for monitoring and sampled an additional 17 residential structures.

Based on the findings of the SVI sampling conducted by MACTEC at 21 residential structures, the NYSDEC and the NYSDOH recommended further action for six of the structures. The further action includes the recommendation of the installation of SSD mitigation systems within four of the structures and continued SVI monitoring within two of the structures. MACTEC has coordinated the installation of the four SSD mitigation systems. The two residential structures to be monitored for SVI are Structure 52 and Structure 50. The remainder of the 15 residential structures sampled by MACTEC required no further action. Proposed further actions by structure based on sampling conducted by MACTEC are presented in Table 3.6 and shown graphically on Figure 3.3. Figure 3.3 also includes proposed actions from the 2007 sampling conducted by EA Engineering.

4.0 REFERENCES

New York State Department of Health (NYSDOH), 2006. Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October, 2006.

FIGURES



NYSDEC
Erdle Perforating Company
Gates, New York

MACTEC

Site Location
Project 3612-07-2096
Figure 1.1

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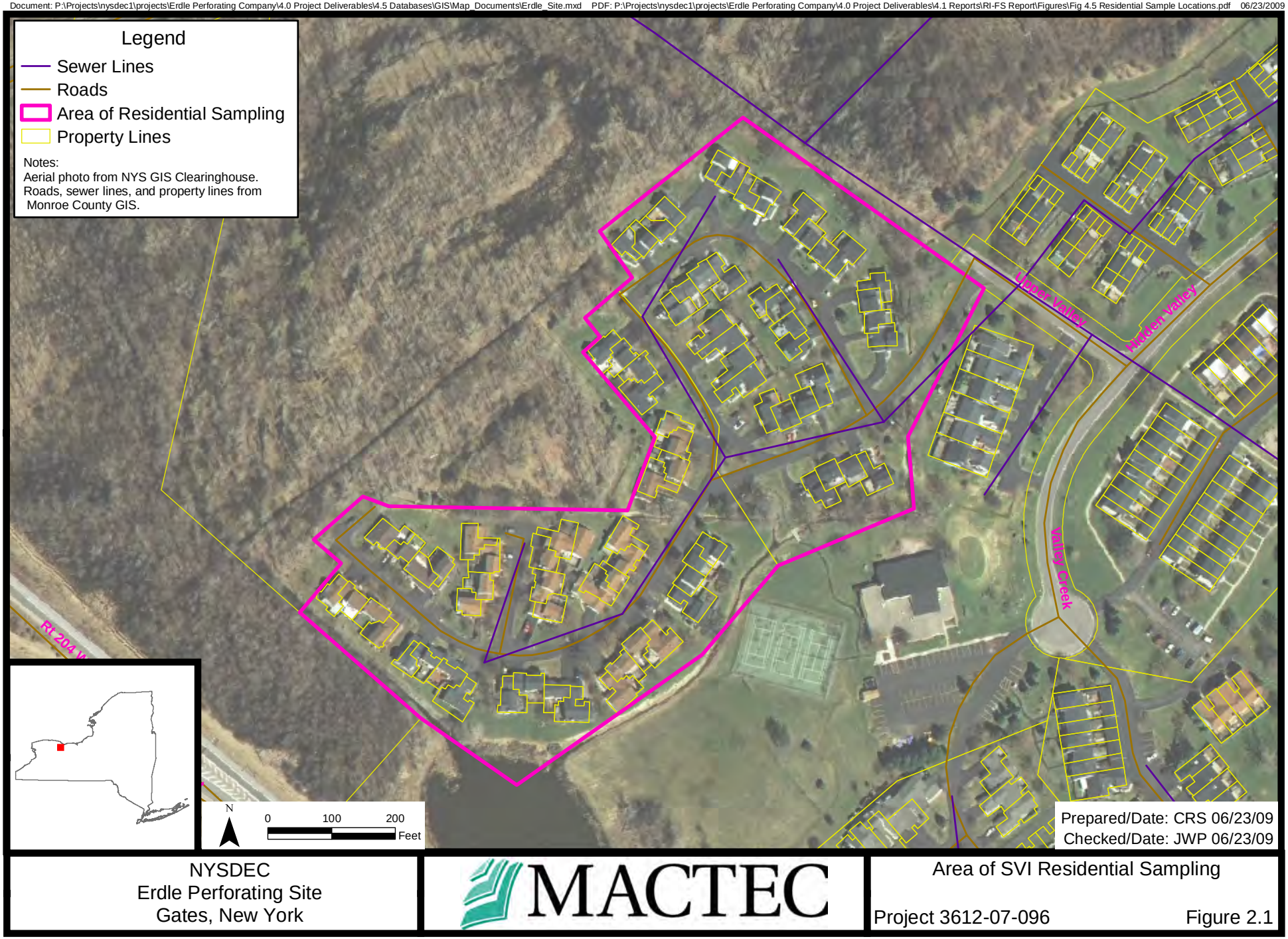

NYSDEC
Erdle Perforating Site
Gates, New York

MACTEC

Area of SVI Residential Sampling

Project 3612-07-096

Figure 2.1

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Legend

Trichloroethene (TCE) Concentration (µg/m^3)

- < 5
- 5 - 50
- 50 - 250
- > 250
- SVI Investigation Area
- Roads

TCE soil vapor results from samples collected by MACTEC from December 2007 to April 2010.

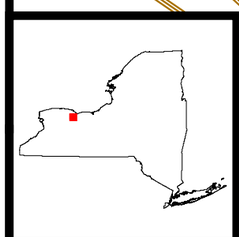
Upper Valley

Hidden Valley

Valley Creek

Rt 204 West to I-490 East

Rt 204 West



N

0 65 130 Feet

Prepared/Date: BRP 08/25/10
Checked/Date: CRS 08/25/10

NYSDEC
Erdle Perforating Site
Gates, NY

MACTEC

TCE
Residential Soil Vapor Sample Results
Project 3612-07-2096 Figure 3.1

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Legend

Cis-1,2-Dichloroethene (cis-1,2-DCE) Concentration (µg/m^3)

- Not detected
- < 10
- 10 - 250
- 250 - 1000
- 1000 - 5000
- > 5000
- SVI Investigation Area
- Roads

Cis-1,2-DCE results for soil vapor samples collected by MACTEC

Upper Valley

Hidden Valley

Valley Creek

Rt 204 West to I-490 East

Rt 204 West

N

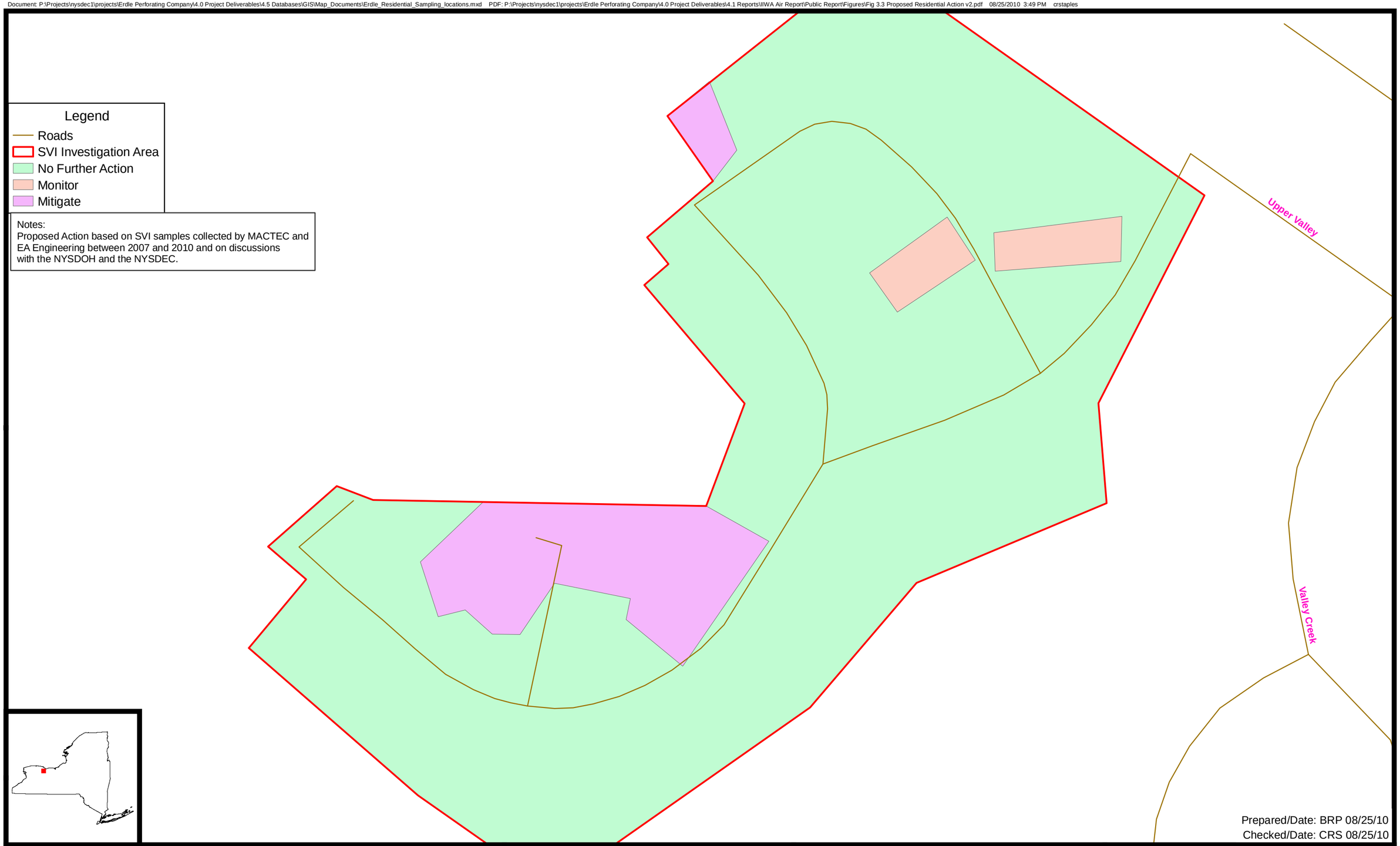
0 65 130 Feet

Prepared/Date: BRP 08/25/10
Checked/Date: CRS 08/25/10

NYSDEC
Erdle Perforating Site
Gates, NY

MACTEC

cis-1,2-DCE
Residential Soil Vapor Sample Results
Project 3612-07-2096 Figure 3.2



NYSDEC
Erdle Perforating Site
Gates, NY

MACTEC

Proposed Further Actions

Project 3612-07-2096

Figure 3.3

TABLES

Table 3.1: Sub-Slab Soil Vapor and Air Results-2007/2008

	Structure	Structure 7, 39 & 40		Structure 37, 41 & 42		Structure 43		Structure 15	
	Type	Outdoor Air		Outdoor Air		Outdoor Air		Outdoor Air	
	Sample ID	828072 OA-07-1		828072-OA-12-5-07-1		828072 OA-43-1		828072-OA-011508-01	
	Sample Date	12/4/2007		12/5/2007		12/6/2007		1/15/2008	
	QC Code	FS		FS		FS		FS	
Parameter		Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane		0.832	U	**2.77**		0.832	U	0.832	U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.17	U	**0.779**	J	1.17	U	1.17	U
1,1-Dichloroethane		0.617	U	0.617	U	0.617	U	0.617	U
1,1-Dichloroethene		0.605	U	0.605	U	0.605	U	0.605	U
1,2,4-Trimethylbenzene		**0.799**		**7.05**		**10.2**		**0.5**	J
1,2-Dichloro-1,1,2,2-tetrafluoroethane		1.07	U	1.07	U	1.07	U	1.07	U
1,2-Dichloroethane		0.617	U	0.617	U	0.617	U	0.617	U
1,3,5-Trimethylbenzene		0.75	U	**2.1**		**3**		0.75	U
1,3-Dichlorobenzene		0.917	U	0.917	U	0.917	U	0.917	U
1,4-Dichlorobenzene		0.917	U	0.917	U	0.917	U	0.917	U
2-Butanone		0.899	U	0.899	U	**0.959**		0.899	U
2-Hexanone		1.25	U	1.25	U	1.25	U	1.25	U
2-Propanol		0.375	U	0.375	U	0.375	U	0.375	U
4-Ethyltoluene		0.75	U	**1.9**		**4.25**		0.75	U
4-Methyl-2-pentanone		1.25	U	1.25	U	1.25	U	1.25	U
Acetone		**15.9**		**31.9**		**168**		**5.46**	
Benzene		**0.455**	J	**0.455**	J	**2.47**		**0.455**	J
Carbon disulfide		0.475	U	0.475	U	0.475	U	0.475	U
Carbon tetrachloride		0.256	U	**0.448**		**0.448**		**0.448**	
Chlorobenzene		0.702	U	0.702	U	0.702	U	0.702	U
Chloroform		0.744	U	0.744	U	0.744	U	0.744	U
Chloromethane		0.315	U	0.315	U	**0.693**		**0.63**	
Cis-1,2-Dichloroethene		0.604	U	**0.443**	J	0.604	U	0.604	U
Cyclohexene		0.525	U	0.525	U	**0.735**		0.525	U
Dichlorodifluoromethane		**2.61**		**3.07**		**2.31**		**1.91**	
Ethyl acetate		0.916	U	0.916	U	0.916	U	0.916	U
Ethyl benzene		0.662	U	**1.77**		**2.25**		0.662	U
Heptane		0.625	U	**0.417**	J	**0.791**		0.625	U
Hexane		**0.43**	J	**0.824**		**0.788**		0.537	U
Isooctane		0.712	U	0.712	U	**0.475**	J	0.712	U
Methyl Tertbutyl Ether		0.55	U	0.55	U	0.55	U	0.55	U
Methylene chloride		0.53	U	**5.9**		0.53	U	0.53	U
o-Xylene		0.662	U	**2.38**		**4.06**		0.662	U
Styrene		0.649	U	0.649	U	**0.779**		0.649	U
Tetrachloroethene		1.03	U	**0.758**	J	**0.758**	J	1.03	U
Tetrahydrofuran		0.45	U	0.45	U	0.45	U	0.45	U
Toluene		**1.11**		**2.72**		**7.12**		**0.613**	
trans-1,2-Dichloroethene		0.604	U	0.604	U	0.604	U	0.604	U
Trichloroethene		0.218	U	**7.05**		**0.218**		**0.328**	
Trichlorofluoromethane		**1.54**		**1.88**		**1.14**		**0.742**	J
Vinyl chloride		0.39	U	0.39	U	0.39	U	0.104	U
Xylene, m/p		**0.794**	J	**5.74**		**7.81**		**0.441**	J

Notes:

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method TO-15.

Results in microgram per cubic meter (µg/m3)

Detections are indicated in **BOLD**

QC Code: FS = Field Sample

FD = Field Duplicate

Qualifiers: J = Estimated Value

U = Not detected at a concentration greater than the RL

Table 3.1: Sub-Slab Soil Vapor and Air Results-2007/2008

Structure	Structure 11,27 & 35		Structure 18, 29 & 41		Structure 40	
Type	Outdoor Air		Outdoor Air		Outdoor Air	
Sample ID	828072 OA-011508-02		828072OA-011608-01		828072OA-011608-02	
Sample Date	1/15/2008		1/16/2008		1/16/2008	
QC Code	FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.832	U	0.832	U	0.832	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.17	U	1.17	U	1.17	U
1,1-Dichloroethane	0.617	U	0.617	U	0.617	U
1,1-Dichloroethene	0.605	U	0.605	U	0.605	U
1,2,4-Trimethylbenzene	0.749	U	**0.55**	J	**0.6**	J
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.07	U	1.07	U	1.07	U
1,2-Dichloroethane	0.617	U	0.617	U	0.617	U
1,3,5-Trimethylbenzene	0.75	U	0.75	U	0.75	U
1,3-Dichlorobenzene	0.917	U	0.917	U	0.917	U
1,4-Dichlorobenzene	0.917	U	0.917	U	0.917	U
2-Butanone	0.899	U	0.899	U	0.899	U
2-Hexanone	1.25	U	1.25	U	1.25	U
2-Propanol	0.375	U	0.375	U	0.375	U
4-Ethyltoluene	0.75	U	0.75	U	0.75	U
4-Methyl-2-pentanone	1.25	U	1.25	U	1.25	U
Acetone	**7.12**		**4.54**		**12.2**	
Benzene	**0.422**	J	**0.617**		**0.52**	
Carbon disulfide	0.475	U	0.475	U	0.475	U
Carbon tetrachloride	**0.512**		**0.384**		**0.384**	
Chlorobenzene	0.702	U	0.702	U	0.702	U
Chloroform	0.744	U	0.744	U	0.744	U
Chloromethane	**0.693**		**0.588**		**0.777**	
Cis-1,2-Dichloroethene	0.604	U	0.604	U	0.604	U
Cyclohexene	0.525	U	0.525	U	0.525	U
Dichlorodifluoromethane	**2.21**		**1.91**		**2.06**	
Ethyl acetate	0.916	U	0.916	U	0.916	U
Ethyl benzene	0.662	U	0.662	U	0.662	U
Heptane	0.625	U	0.625	U	0.625	U
Hexane	0.537	U	0.537	U	0.537	U
Isooctane	0.712	U	0.712	U	0.712	U
Methyl Tertbutyl Ether	0.55	U	0.55	U	0.55	U
Methylene chloride	**0.388**	J	0.53	U	**0.459**	J
o-Xylene	0.662	U	0.662	U	0.662	U
Styrene	0.649	U	0.649	U	0.649	U
Tetrachloroethene	1.03	U	1.03	U	1.03	U
Tetrahydrofuran	0.45	U	0.45	U	0.45	U
Toluene	**0.613**		**0.958**		**0.881**	
trans-1,2-Dichloroethene	0.604	U	0.604	U	0.604	U
Trichloroethene	**0.765**		0.218	U	**0.328**	
Trichlorofluoromethane	**0.8**	J	**0.628**	J	**0.742**	J
Vinyl chloride	0.104	U	0.104	U	0.104	U
Xylene, m/p	**0.53**	J	**0.75**	J	**0.927**	J

Notes:

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method TO-15.

Results in microgram per cubic meter (µg/m3)

Detections are indicated in **BOLD**

QC Code: FS = Field Sample

FD = Field Duplicate

Qualifiers: J = Estimated Value

U = Not detected at a concentration greater than the RL

Table 3.1: Sub-Slab Soil Vapor and Air Results-2007/2008

	Structure	Structure 7		Structure 7		Structure 7		Structure 18	
	Type	Sub-Slab Vapor		Basement Air		First Floor Air		Sub-Slab Vapor	
	Sample ID	828072 SS-07-B		828072 IA-07-B		828072 IA-07-1		828072SS-18B-02	
	Sample Date	12/4/2007		12/4/2007		12/4/2007		1/16/2008	
	QC Code	FS		FS		FS		FS	
Parameter		Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane		**2.9**		0.832	U	0.832	U	0.83	U
1,1,2-Trichloro-1,2,2-Trifluoroethane		**0.86**	J	1.17	U	1.17	U	1.2	U
1,1-Dichloroethane		**58**		0.617	U	0.617	U	0.62	U
1,1-Dichloroethene		**23**		0.605	U	0.605	U	0.6	U
1,2,4-Trimethylbenzene		**81**		**3.5**		**8.29**		**20**	
1,2-Dichloro-1,1,2,2-tetrafluoroethane		1.1	U	1.07	U	1.07	U	1.1	U
1,2-Dichloroethane		0.62	U	0.617	U	0.617	U	0.62	U
1,3,5-Trimethylbenzene		**23**		**1.15**		**3.8**		**8**	
1,3-Dichlorobenzene		0.92	U	0.917	U	0.917	U	0.92	U
1,4-Dichlorobenzene		0.92	U	0.917	U	0.917	U	0.92	U
2-Butanone		0.9	U	0.899	U	0.899	U	0.9	U
2-Hexanone		1.2	U	1.25	U	1.25	U	1.2	U
2-Propanol		0.37	U	0.375	U	**62.5**		0.37	U
4-Ethyltoluene		**14**		0.75	U	**0.899**		**8.2**	J
4-Methyl-2-pentanone		1.2	U	1.25	U	1.25	U	**0.71**	J
Acetone		**310**		**108**		**103**		0.72	U
Benzene		**3.7**		**1.27**		**2.18**		**2.3**	J
Carbon disulfide		**1.7**		0.475	U	0.475	U	**16**	J
Carbon tetrachloride		0.96	U	0.256	U	0.256	U	0.96	U
Chlorobenzene		0.7	U	0.702	U	0.702	U	**0.75**	J
Chloroform		**1.7**		0.744	U	**0.546**	J	**1.4**	J
Chloromethane		0.31	U	0.315	U	0.315	U	0.31	U
Cis-1,2-Dichloroethene		**3300**		**1.49**		**1.21**		**0.4**	J
Cyclohexene		**17**		0.525	U	**1.92**		**8**	J
Dichlorodifluoromethane		**4.4**		**2.36**		**2.31**		**1.8**	J
Ethyl acetate		0.92	U	0.916	U	0.916	U	**2.5**	J
Ethyl benzene		**13**		**0.883**		**1.85**		**34**	
Heptane		**18**		**1.04**		**2.79**		**12**	J
Hexane		**28**		0.537	U	**2.54**		**8.2**	J
Isooctane		**4.2**		0.712	U	**0.617**	J	**1.2**	J
Methyl Tertbutyl Ether		0.55	U	0.55	U	0.55	U	0.55	U
Methylene chloride		**1.2**		**1.77**		**0.742**		**0.78**	J
o-Xylene		**19**		**0.971**		**2.47**		**18**	
Styrene		0.65	U	**0.563**	J	**1.13**		**3.2**	J
Tetrachloroethene		**2.7**		1.03	U	1.03	U	**2.3**	J
Tetrahydrofuran		0.45	U	0.45	U	0.45	U	0.45	U
Toluene		**22**		**5.17**		**17.6**		**230**	J
trans-1,2-Dichloroethene		**21**		0.604	U	0.604	U	0.6	U
Trichloroethene		**400**		**0.765**		**0.601**		**0.82**	J
Trichlorofluoromethane		**3.2**		**3.26**		**2.86**		**0.63**	J
Vinyl chloride		**2200**		0.39	U	0.39	U	0.39	U
Xylene, m/p		**41**		**2.56**		**6.05**		**150**	J

Notes:

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method TO-15.

Results in microgram per cubic meter (µg/m3)

Detections are indicated in **BOLD**

QC Code: FS = Field Sample

FD = Field Duplicate

Qualifiers: J = Estimated Value

U = Not detected at a concentration greater than the RL

Table 3.1: Sub-Slab Soil Vapor and Air Results-2007/2008

Structure	Structure 18		Structure 18		Structure 35		Structure 35	
Type	Basement Air		First Floor Air		Sub-Slab Vapor		Basement Air	
Sample ID	828072IA-18-B-02		828072IA-18-1-02		828072SS-35-B-02		828072IA-35-B-02	
Sample Date	1/16/2008		1/16/2008		1/15/2008		1/15/2008	
QC Code	FS		FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.832	U	0.832	U	0.83	U	0.832	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.17	U	1.17	U	1.2	U	1.17	U
1,1-Dichloroethane	0.617	U	0.617	U	0.62	U	0.617	U
1,1-Dichloroethene	0.605	U	0.605	U	0.6	U	0.605	U
1,2,4-Trimethylbenzene	**2.2**		**5.05**		**10**		**0.899**	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.07	U	1.07	U	1.1	U	1.07	U
1,2-Dichloroethane	0.617	U	0.617	U	0.62	U	0.617	U
1,3,5-Trimethylbenzene	**1.65**		**1.7**		**8.2**	J	**0.6**	J
1,3-Dichlorobenzene	0.917	U	0.917	U	0.92	U	0.917	U
1,4-Dichlorobenzene	0.917	U	0.917	U	0.92	U	0.917	U
2-Butanone	**1.2**		**1.47**		0.9	U	**3.51**	
2-Hexanone	1.25	U	1.25	U	1.2	U	1.25	U
2-Propanol	0.375	U	0.375	U	0.37	U	**2.45**	
4-Ethyltoluene	**0.5**	J	**0.999**		**6.9**	J	0.75	U
4-Methyl-2-pentanone	1.25	U	1.25	U	1.2	U	1.25	U
Acetone	**12.3**	J	**11.8**	J	0.72	U	**6.76**	J
Benzene	**0.779**		**0.844**		**240**		**0.422**	J
Carbon disulfide	**0.728**		**0.57**		**120**	J	0.475	U
Carbon tetrachloride	**0.767**		**0.831**		0.96	U	**0.448**	
Chlorobenzene	0.702	U	0.702	U	0.7	U	0.702	U
Chloroform	**3.13**		**3.87**		0.74	U	0.744	U
Chloromethane	**0.924**		**0.861**		0.31	U	**0.567**	
Cis-1,2-Dichloroethene	**0.846**		**0.846**		**29**		**2.26**	
Cyclohexene	0.525	U	0.525	U	**280**		0.525	U
Dichlorodifluoromethane	**2.51**		**2.26**		**2.5**	J	**1.81**	
Ethyl acetate	**2.53**		**2.53**		0.92	U	0.916	U
Ethyl benzene	**0.618**	J	**0.839**		**33**		0.662	U
Heptane	**0.708**		**0.708**		**300**		0.625	U
Hexane	0.537	U	0.537	U	**520**		0.537	U
Isooctane	0.712	U	0.712	U	0.71	U	0.712	U
Methyl Tertbutyl Ether	0.55	U	0.55	U	0.55	U	0.55	U
Methylene chloride	**0.706**		**0.777**		**2.8**	J	**0.424**	J
o-Xylene	**0.485**	J	**1.06**		**14**		0.662	U
Styrene	0.649	U	0.649	U	0.65	U	0.649	U
Tetrachloroethene	**0.896**	J	1.03	U	**1.8**	J	1.03	U
Tetrahydrofuran	0.45	U	0.45	U	0.45	U	**6.47**	
Toluene	**3.64**		**4.1**		**270**		**0.881**	
trans-1,2-Dichloroethene	0.604	U	0.604	U	0.6	U	0.604	U
Trichloroethene	**0.819**		**0.765**		**10**	J	**0.382**	
Trichlorofluoromethane	**0.8**	J	**1.54**		**0.74**	J	**0.742**	J
Vinyl chloride	**0.416**		**0.468**		**12**		**2.36**	
Xylene, m/p	**1.37**		**2.87**		**80**		**0.839**	J

Notes:

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method TO-15.

Results in microgram per cubic meter (µg/m3)

Detections are indicated in **BOLD**

QC Code: FS = Field Sample

FD = Field Duplicate

Qualifiers: J = Estimated Value

U = Not detected at a concentration greater than the RL

Table 3.1: Sub-Slab Soil Vapor and Air Results-2007/2008

Structure	Structure 35		Structure 37		Structure 37		Structure 37	
Type	First Floor Air		Sub-Slab Vapor		Basement Air		First Floor Air	
Sample ID	828072IA-35-1-02		828072 SS-37-B		828072 IA-37-B		828072 IA-37-1	
Sample Date	1/15/2008		12/5/2007		12/5/2007		12/5/2007	
QC Code	FS		FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.832	U	0.83	U	**1.55**		**1.89**	
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.17	U	1.2	U	1.17	U	1.17	U
1,1-Dichloroethane	0.617	U	0.62	U	0.617	U	0.617	U
1,1-Dichloroethene	0.605	U	0.6	U	0.605	U	0.605	U
1,2,4-Trimethylbenzene	**0.849**		**160**		**2.1**		**2.05**	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.07	U	1.1	U	1.07	U	1.07	U
1,2-Dichloroethane	0.617	U	0.62	U	0.617	U	0.617	U
1,3,5-Trimethylbenzene	**0.8**		**40**		0.75	U	0.75	U
1,3-Dichlorobenzene	0.917	U	0.92	U	0.917	U	**0.734**	J
1,4-Dichlorobenzene	0.917	U	0.92	U	0.917	U	**0.795**	J
2-Butanone	**2.64**		0.9	U	0.899	U	**14**	
2-Hexanone	1.25	U	1.2	U	1.25	U	1.25	U
2-Propanol	0.375	U	0.37	U	**56.5**		**58.5**	
4-Ethyltoluene	0.75	U	**24**		0.75	U	0.75	U
4-Methyl-2-pentanone	1.25	U	1.2	U	1.25	U	1.25	U
Acetone	**23.9**	J	**20**		**41.5**		**61.3**	
Benzene	**0.584**		**2.7**		**0.584**		**0.649**	
Carbon disulfide	0.475	U	**1.1**		0.475	U	0.475	U
Carbon tetrachloride	**0.448**		0.96	U	0.256	U	**0.576**	
Chlorobenzene	0.702	U	0.7	U	0.702	U	0.702	U
Chloroform	0.744	U	0.74	U	**0.844**		**1.09**	
Chloromethane	**0.672**		0.31	U	0.315	U	0.315	U
Cis-1,2-Dichloroethene	**1.61**		**81**		**2.06**		**2.01**	
Cyclohexene	0.525	U	**7.6**		0.525	U	**0.805**	
Dichlorodifluoromethane	**1.81**		**2.8**		**2.06**		**3.67**	
Ethyl acetate	**5.79**		0.92	U	0.916	U	0.916	U
Ethyl benzene	**0.574**	J	**13**		**1.59**		**10.6**	J
Heptane	0.625	U	**8**		0.625	U	0.625	U
Hexane	0.537	U	**9.7**		0.537	U	0.537	U
Isooctane	0.712	U	**1**		0.712	U	0.712	U
Methyl Tertbutyl Ether	0.55	U	0.55	U	0.55	U	0.55	U
Methylene chloride	**1.17**		**18**		**2.15**		**2.08**	
o-Xylene	**0.706**		**24**		**0.971**		**1.02**	
Styrene	0.649	U	0.65	U	**2.38**		**3.07**	
Tetrachloroethene	1.03	U	**2.1**		**1.38**		**0.689**	J
Tetrahydrofuran	**3.51**		0.45	U	0.45	U	0.45	U
Toluene	**2.03**		**32**		**4.56**		**6.51**	
trans-1,2-Dichloroethene	0.604	U	0.6	U	0.604	U	0.604	U
Trichloroethene	**0.983**		**2.9**		**0.546**		**0.492**	
Trichlorofluoromethane	**0.971**		**1.5**		**2.06**		**2.28**	
Vinyl chloride	**1.17**		**1.5**		0.39	U	0.39	U
Xylene, m/p	**1.72**		**50**		**4.15**		**5.52**	

Notes:

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method TO-15.

Results in microgram per cubic meter (µg/m3)

Detections are indicated in **BOLD**

QC Code: FS = Field Sample

FD = Field Duplicate

Qualifiers: J = Estimated Value

U = Not detected at a concentration greater than the RL

Table 3.1: Sub-Slab Soil Vapor and Air Results-2007/2008

	Structure	Structure 39		Structure 39		Structure 39		Structure 39	
	Type	Sub-Slab Vapor		Basement Air		Basement Air		First Floor Air	
	Sample ID	828072 SS-39-B		828072 IA-39-B		828072 IA-39-BDUP		828072 IA-39-1	
	Sample Date	12/4/2007		12/4/2007		12/4/2007		12/4/2007	
	QC Code	FS		FS		FD		FS	
Parameter		Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane		0.83	U	0.832	U	0.832	U	0.832	U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.2	U	1.17	U	1.17	U	1.17	U
1,1-Dichloroethane		**3.5**		0.617	U	0.617	U	0.617	U
1,1-Dichloroethene		0.6	U	0.605	U	0.605	U	0.605	U
1,2,4-Trimethylbenzene		**110**		**0.849**		**1.35**		**1.7**	
1,2-Dichloro-1,1,2,2-tetrafluoroethane		1.1	U	1.07	U	1.07	U	1.07	U
1,2-Dichloroethane		0.62	U	0.617	U	0.617	U	0.617	U
1,3,5-Trimethylbenzene		**29**		0.75	U	0.75	U	0.75	U
1,3-Dichlorobenzene		0.92	U	0.917	U	0.917	U	0.917	U
1,4-Dichlorobenzene		0.92	U	0.917	U	0.917	U	0.917	U
2-Butanone		**1.6**		0.899	U	0.899	U	**3.45**	
2-Hexanone		1.2	U	1.25	U	1.25	U	1.25	U
2-Propanol		0.37	U	**14.7**		**13.5**		**48.7**	
4-Ethyltoluene		**18**		0.75	U	0.75	U	0.75	U
4-Methyl-2-pentanone		1.2	U	1.25	U	1.25	U	1.25	U
Acetone		**22**		**16.2**		**24.6**		**140**	
Benzene		**1.3**		**0.584**		**0.649**		**0.714**	
Carbon disulfide		**1.6**		0.475	U	0.475	U	**0.348**	J
Carbon tetrachloride		0.96	U	0.256	U	**0.448**		**0.448**	
Chlorobenzene		0.7	U	0.702	U	0.702	U	0.702	U
Chloroform		0.74	U	0.744	U	0.744	U	0.744	U
Chloromethane		0.31	U	0.315	U	0.315	U	0.315	U
Cis-1,2-Dichloroethene		**63**		**0.443**	J	**0.443**	J	**0.725**	
Cyclohexene		**5.5**		0.525	U	**0.49**	J	0.525	U
Dichlorodifluoromethane		**2.9**		**2.71**		**2.82**		**2.82**	
Ethyl acetate		0.92	U	0.916	U	0.916	U	0.916	U
Ethyl benzene		**13**		0.662	U	**5.74**		**0.618**	J
Heptane		**5.3**		**0.625**		**0.542**	J	**0.458**	J
Hexane		**6.4**		**1.07**		**1.29**		**1.04**	
Isooctane		**4.3**		0.712	U	0.712	U	0.712	U
Methyl Tertbutyl Ether		0.55	U	0.55	U	0.55	U	0.55	U
Methylene chloride		**0.74**		**0.494**	J	**0.636**		0.53	U
o-Xylene		**20**		0.662	U	**0.53**	J	0.662	U
Styrene		0.65	U	**0.736**		**1.13**		**0.866**	
Tetrachloroethene		**3.1**		1.03	U	1.03	U	1.03	U
Tetrahydrofuran		0.45	U	0.45	U	0.45	U	0.45	U
Toluene		**22**		**5.82**		**6.59**		**8.81**	
trans-1,2-Dichloroethene		0.6	U	0.604	U	0.604	U	0.604	U
Trichloroethene		**0.6**	J	0.218	U	**0.492**		**1.15**	
Trichlorofluoromethane		**1.5**		**1.48**		**1.88**		**1.54**	
Vinyl chloride		0.39	U	0.39	U	0.39	U	0.39	U
Xylene, m/p		**41**		**1.06**	J	**1.77**		**1.37**	

Notes:

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method TO-15.

Results in microgram per cubic meter (µg/m3)

Detections are indicated in **BOLD**

QC Code: FS = Field Sample

FD = Field Duplicate

Qualifiers: J = Estimated Value

U = Not detected at a concentration greater than the RL

Table 3.1: Sub-Slab Soil Vapor and Air Results-2007/2008

	Structure	Structure 40		Structure 40		Structure 40		Structure 40	
	Type	Sub-Slab Vapor		Basement Air		First Floor Air		Sub-Slab Vapor	
	Sample ID	828072 SS-40-B		828072 IA-40-B		828072 IA-40-1		828072SS-40-B-02	
	Sample Date	12/4/2007		12/4/2007		12/4/2007		1/16/2008	
	QC Code	FS		FS		FS		FS	
Parameter		Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane		0.83	U	0.832	U	0.832	U	0.83	U
1,1,2-Trichloro-1,2,2-Trifluoroethane		**0.93**	J	1.17	U	1.17	U	1.2	U
1,1-Dichloroethane		**6**		0.617	U	0.617	U	**1**	J
1,1-Dichloroethene		0.6	U	0.605	U	0.605	U	0.6	U
1,2,4-Trimethylbenzene		**120**		**98.9**		**3.05**		**25**	J
1,2-Dichloro-1,1,2,2-tetrafluoroethane		**36**		1.07	U	1.07	U	1.1	U
1,2-Dichloroethane		0.62	U	0.617	U	0.617	U	0.62	U
1,3,5-Trimethylbenzene		**34**		**24.5**		**1.4**		**11**	J
1,3-Dichlorobenzene		0.92	U	0.917	U	0.917	U	0.92	U
1,4-Dichlorobenzene		0.92	U	0.917	U	0.917	U	0.92	U
2-Butanone		0.9	U	0.899	U	0.899	U	**1.2**	J
2-Hexanone		1.2	U	1.25	U	1.25	U	1.2	U
2-Propanol		**31**		**179**		**679**		0.37	U
4-Ethyltoluene		**21**		**16**		**0.6**	J	**9.2**	J
4-Methyl-2-pentanone		1.2	U	1.25	U	1.25	U	**0.54**	J
Acetone		**32**		**33.1**		**61.3**		**25**	J
Benzene		**2.1**		**2.4**		**2.24**		**1.8**	J
Carbon disulfide		**0.82**		**0.38**	J	0.475	U	**13**	J
Carbon tetrachloride		0.96	U	**0.384**		0.256	U	0.96	U
Chlorobenzene		0.7	U	0.702	U	0.702	U	**0.75**	J
Chloroform		0.74	U	0.744	U	0.744	U	0.74	U
Chloromethane		0.31	U	0.315	U	0.315	U	0.31	U
Cis-1,2-Dichloroethene		**5.6**		0.604	U	0.604	U	**1.1**	J
Cyclohexene		**8.4**		**8.05**		0.525	U	**15**	J
Dichlorodifluoromethane		**4.7**		**2.66**		**2.87**		**24**	J
Ethyl acetate		0.92	U	0.916	U	0.916	U	**1.1**	J
Ethyl benzene		**16**		**13.7**		**1.9**		**42**	
Heptane		**9**		**6.83**		**0.875**		**7.7**	J
Hexane		**11**		**8.24**		**3.62**		**6**	J
Isooctane		**8.1**		**8.69**		**0.665**	J	**0.95**	J
Methyl Tertbutyl Ether		0.55	U	0.55	U	0.55	U	0.55	U
Methylene chloride		**0.78**		**0.6**		0.53	U	**0.85**	J
o-Xylene		**25**		**21.2**		**1.46**		**24**	J
Styrene		0.65	U	0.649	U	0.649	U	**2.9**	J
Tetrachloroethene		**5.5**		**3.03**		1.03	U	**2**	J
Tetrahydrofuran		0.45	U	0.45	U	0.45	U	0.45	U
Toluene		**26**		**23**		**12.6**		**150**	
trans-1,2-Dichloroethene		0.6	U	0.604	U	0.604	U	0.6	U
Trichloroethene		**5.1**		**15.3**		0.218	U	**0.93**	J
Trichlorofluoromethane		**2**		**1.71**		**2.17**		**4.1**	J
Vinyl chloride		0.39	U	0.39	U	0.39	U	0.39	U
Xylene, m/p		**53**		**43.7**		**6.18**		**100**	

Notes:

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method TO-15.

Results in microgram per cubic meter (µg/m3)

Detections are indicated in **BOLD**

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FD = Field Duplicate

Qualifiers: J = Estimated Value

U = Not detected at a concentration greater than the RL

Table 3.1: Sub-Slab Soil Vapor and Air Results-2007/2008

Structure	Structure 40		Structure 40		Structure 40		Structure 40	
Type	Sub-Slab Vapor		Basement Air		Basement Air		First Floor Air	
Sample ID	828072SS-40-B-02D		828072IA-40-B-02		828072IA-40-B-02D		828072IA-40-1-02	
Sample Date	1/16/2008		1/16/2008		1/16/2008		1/16/2008	
QC Code	FD		FS		FD		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.83	U	0.832	U	0.832	U	0.832	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.2	U	1.17	U	1.17	U	1.17	U
1,1-Dichloroethane	**0.99**	J	0.617	U	0.617	U	0.617	U
1,1-Dichloroethene	0.6	U	0.605	U	0.605	U	0.605	U
1,2,4-Trimethylbenzene	**24**		**2.35**		**1.55**	J	**3.1**	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.1	U	1.07	U	1.07	U	1.07	U
1,2-Dichloroethane	0.62	U	0.617	U	0.617	U	0.617	U
1,3,5-Trimethylbenzene	**8.5**		**1.1**		**0.849**	J	**1.35**	
1,3-Dichlorobenzene	0.92	U	0.917	U	0.917	U	0.917	U
1,4-Dichlorobenzene	0.92	U	0.917	U	0.917	U	0.917	U
2-Butanone	**1.6**	J	**0.989**		0.899	U	0.899	U
2-Hexanone	1.2	U	1.25	U	1.25	U	1.25	U
2-Propanol	0.37	U	**21.2**		**17.1**		**26.2**	
4-Ethyltoluene	**8.7**	J	**1.05**		**0.7**	J	**1.15**	
4-Methyl-2-pentanone	**0.54**	J	1.25	U	1.25	U	1.25	U
Acetone	0.72	U	**9.66**		**5.67**		**18.1**	
Benzene	**1.8**	J	**5.29**		**2.79**	J	**4.03**	
Carbon disulfide	**16**	J	**0.38**	J	0.475	U	**0.411**	J
Carbon tetrachloride	0.96	U	**0.512**		**0.32**	J	**0.512**	
Chlorobenzene	**0.61**	J	0.702	U	0.702	U	0.702	U
Chloroform	0.74	U	0.744	U	0.744	U	0.744	U
Chloromethane	0.31	U	0.315	U	0.315	U	0.315	U
Cis-1,2-Dichloroethene	**0.77**	J	0.604	U	0.604	U	0.604	U
Cyclohexene	**5.6**	J	0.525	U	0.525	U	0.525	U
Dichlorodifluoromethane	**27**	J	**36.7**	J	**28.9**	J	**87.5**	
Ethyl acetate	**1.2**	J	0.916	U	**1.21**		**1.65**	
Ethyl benzene	**36**		**1.59**		**1.68**	J	**1.72**	
Heptane	**10**	J	**0.833**		**0.708**	J	**1.08**	
Hexane	**5.1**	J	**2.58**		**3.22**		**2.97**	
Isooctane	**1.2**	J	0.712	U	0.712	U	0.712	U
Methyl Tertbutyl Ether	0.55	U	0.55	U	0.55	U	0.55	U
Methylene chloride	**1.1**	J	**0.494**	J	**0.459**	J	**0.565**	
o-Xylene	**21**		**1.77**		**1.54**	J	**1.85**	
Styrene	**2.8**	J	0.649	U	0.649	U	0.649	U
Tetrachloroethene	**2.1**	J	1.03	U	**0.965**	J	1.03	U
Tetrahydrofuran	0.45	U	0.45	U	0.45	U	0.45	U
Toluene	**170**		**13**		**13.2**		**11.9**	J
trans-1,2-Dichloroethene	0.6	U	0.604	U	0.604	U	0.604	U
Trichloroethene	**0.98**	J	**0.765**	J	**0.382**	J	**0.437**	
Trichlorofluoromethane	**4**	J	**10.4**		**8.11**		**21.1**	
Vinyl chloride	0.39	U	0.104	U	0.104	U	0.104	U
Xylene, m/p	**110**		**6.31**		**6.18**	J	**6.58**	

Notes:

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method TO-15.

Results in microgram per cubic meter (µg/m3)

Detections are indicated in **BOLD**

QC Code: FS = Field Sample

FD = Field Duplicate

Qualifiers: J = Estimated Value

U = Not detected at a concentration greater than the RL

Table 3.1: Sub-Slab Soil Vapor and Air Results-2007/2008

	Structure	Structure 41		Structure 41		Structure 41		Structure 41	
	Type	Sub-Slab Vapor		Basement Air		First Floor Air		Sub-Slab Vapor	
	Sample ID	828072 SS-41-B		828072 IA-41-B		828072 IA-41-1		828072SS-41-B-02	
	Sample Date	12/5/2007		12/5/2007		12/5/2007		1/16/2008	
	QC Code	FS		FS		FS		FS	
Parameter		Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane		0.83	U	0.832	U	0.832	U	0.83	U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.2	U	1.17	U	1.17	U	1.2	U
1,1-Dichloroethane		**2.6**		**2.06**		**1.93**		**1.3**	J
1,1-Dichloroethene		0.6	U	0.605	U	0.605	U	0.6	U
1,2,4-Trimethylbenzene		**110**		**0.949**		**1.1**		**22**	J
1,2-Dichloro-1,1,2,2-tetrafluoroethane		1.1	U	1.07	U	1.07	U	1.1	U
1,2-Dichloroethane		0.62	U	0.617	U	0.617	U	0.62	U
1,3,5-Trimethylbenzene		**28**		0.75	U	0.75	U	**9.7**	J
1,3-Dichlorobenzene		0.92	U	0.917	U	0.917	U	0.92	U
1,4-Dichlorobenzene		0.92	U	0.917	U	0.917	U	0.92	U
2-Butanone		0.9	U	0.899	U	0.899	U	0.9	U
2-Hexanone		1.2	U	1.25	U	1.25	U	1.2	U
2-Propanol		0.37	U	0.375	U	0.375	U	0.37	U
4-Ethyltoluene		**19**		0.75	U	0.75	U	**9.7**	J
4-Methyl-2-pentanone		1.2	U	1.25	U	1.25	U	**0.62**	J
Acetone		**19**		**31.4**		**30.9**		**37**	J
Benzene		**1.1**		**0.487**		**0.487**		**2**	J
Carbon disulfide		**1.2**		0.475	U	0.475	U	**11**	J
Carbon tetrachloride		0.96	U	**0.512**		**0.512**		0.96	U
Chlorobenzene		0.7	U	0.702	U	0.702	U	**0.61**	J
Chloroform		0.74	U	**0.546**	J	**0.794**		0.74	U
Chloromethane		0.31	U	0.315	U	0.315	U	0.31	U
Cis-1,2-Dichloroethene		**33**		**103**		**55.6**		**27**	J
Cyclohexene		**4**		0.525	U	0.525	U	**8.2**	J
Dichlorodifluoromethane		**2.7**		**1.71**		**2.61**		**1.9**	J
Ethyl acetate		0.92	U	0.916	U	0.916	U	**1.9**	J
Ethyl benzene		**13**		**0.485**	J	**0.662**		**43**	J
Heptane		**4.2**		0.625	U	0.625	U	**13**	J
Hexane		**4.3**		0.537	U	**0.681**		**7.1**	J
Isooctane		**3.4**		**0.475**	J	**0.617**	J	**1.7**	J
Methyl Tertbutyl Ether		0.55	U	0.55	U	0.55	U	0.55	U
Methylene chloride		**0.64**		**0.6**		**0.6**		**0.88**	J
o-Xylene		**20**		0.662	U	**0.485**	J	**22**	J
Styrene		0.65	U	0.649	U	0.649	U	0.65	U
Tetrachloroethene		**3.2**		1.03	U	1.03	U	**2.2**	J
Tetrahydrofuran		0.45	U	0.45	U	0.45	U	0.45	U
Toluene		**22**		**2.37**		**2.99**		**220**	
trans-1,2-Dichloroethene		**0.81**		0.604	U	**0.725**		0.6	U
Trichloroethene		**2.6**		0.218	U	0.218	U	**3.2**	J
Trichlorofluoromethane		**1.4**		**1.31**		**1.54**		**0.57**	J
Vinyl chloride		**5.6**		**118**		**82.6**		**0.29**	J
Xylene, m/p		**45**		**1.1**	J	**1.32**		**100**	

Notes:

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method TO-15.

Results in microgram per cubic meter (µg/m3)

Detections are indicated in **BOLD**

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Qualifiers: J = Estimated Value

U = Not detected at a concentration greater than the RL

Table 3.1: Sub-Slab Soil Vapor and Air Results-2007/2008

Structure	Structure 41		Structure 41		Structure 42		Structure 42	
Type	Basement Air		First Floor Air		Sub-Slab Vapor		Basement Air	
Sample ID	828072IA-41-B-02		828072IA-41-1-02		828072 SS-42-B		828072 IA-42-B	
Sample Date	1/16/2008		1/16/2008		12/5/2007		12/5/2007	
QC Code	FS		FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.832	U	0.832	U	**1.1**		0.832	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.17	U	1.17	U	1.2	U	1.17	U
1,1-Dichloroethane	**3**	J	**2.8**		**93**		**0.453**	J
1,1-Dichloroethene	**1.21**	J	**0.524**	J	**25**		0.605	U
1,2,4-Trimethylbenzene	**2.2**	J	**1.65**		**110**		**1.35**	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.07	U	1.07	U	1.1	U	1.07	U
1,2-Dichloroethane	0.617	U	0.617	U	0.62	U	0.617	U
1,3,5-Trimethylbenzene	**1.1**	J	**1.05**		**28**		0.75	U
1,3-Dichlorobenzene	0.917	U	0.917	U	0.92	U	0.917	U
1,4-Dichlorobenzene	**1.04**	J	**0.673**	J	0.92	U	0.917	U
2-Butanone	0.899	U	0.899	U	0.9	U	0.899	U
2-Hexanone	1.25	U	1.25	U	1.2	U	1.25	U
2-Propanol	0.375	U	**3.72**		**77**	J	**223**	
4-Ethyltoluene	**0.6**	J	**0.65**	J	**19**		0.75	U
4-Methyl-2-pentanone	1.25	U	1.25	U	1.2	U	1.25	U
Acetone	**9.66**		**12.3**		**50**		**43.5**	
Benzene	**0.714**	J	**0.714**		**1.4**		**0.747**	
Carbon disulfide	**0.348**	J	0.475	U	**0.82**		0.475	U
Carbon tetrachloride	**0.512**	J	**0.512**		0.96	U	**0.448**	
Chlorobenzene	0.702	U	0.702	U	0.7	U	0.702	U
Chloroform	**0.943**	J	**1.14**		**0.55**	J	0.744	U
Chloromethane	**0.504**	J	**0.819**		0.31	U	0.315	U
Cis-1,2-Dichloroethene	**163**	J	**83.8**		**9100**		**174**	
Cyclohexene	0.525	U	0.525	U	**4**		0.525	U
Dichlorodifluoromethane	**2.01**	J	**2.11**		**42**		**71.4**	
Ethyl acetate	0.916	U	0.916	U	0.92	U	0.916	U
Ethyl benzene	**0.53**	J	**0.618**	J	**14**		0.662	U
Heptane	0.625	U	**0.458**	J	**4.6**		0.625	U
Hexane	**0.681**	J	0.537	U	**5**		0.537	U
Isooctane	**0.475**	J	**0.522**	J	**2.8**		0.712	U
Methyl Tertbutyl Ether	0.55	U	**0.806**		0.55	U	0.55	U
Methylene chloride	**0.494**	J	**5.4**		**0.67**		**53.3**	
o-Xylene	**0.618**	J	**0.794**		**21**		0.662	U
Styrene	0.649	U	0.649	U	0.65	U	0.649	U
Tetrachloroethene	1.03	U	1.03	U	**3**		1.03	U
Tetrahydrofuran	0.45	U	0.45	U	0.45	U	0.45	U
Toluene	**2.91**	J	**3.64**		**21**		**2.3**	
trans-1,2-Dichloroethene	**1.65**	J	**1.37**		**60**		0.604	U
Trichloroethene	**15.3**	J	**19.7**	J	**420**		**2.73**	
Trichlorofluoromethane	**1.37**	J	**0.742**	J	**27**		**47.4**	
Vinyl chloride	**31.2**		**19.7**		**190**		0.39	U
Xylene, m/p	**1.32**	J	**1.5**		**49**		**1.06**	J

Notes:

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method TO-15.

Results in microgram per cubic meter (µg/m3)

Detections are indicated in **BOLD**

QC Code: FS = Field Sample

FD = Field Duplicate

Qualifiers: J = Estimated Value

U = Not detected at a concentration greater than the RL

Table 3.1: Sub-Slab Soil Vapor and Air Results-2007/2008

	Structure	Structure 42		Structure 43		Structure 43		Structure 43	
	Type	First Floor Air		Sub-Slab Vapor		Basement Air		First Floor Air	
	Sample ID	828072 IA-42-1		828072 SS-43-B		828072 IA-43-B		828072 IA-43-1	
	Sample Date	12/5/2007		12/6/2007		12/6/2007		12/6/2007	
	QC Code	FS		FS		FS		FS	
Parameter		Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane		0.832	U	**2.3**		0.832	U	0.832	U
1,1,2-Trichloro-1,2,2-Trifluoroethane		1.17	U	1.2	U	1.17	U	1.17	U
1,1-Dichloroethane		0.617	U	**2.1**		0.617	U	0.617	U
1,1-Dichloroethene		0.605	U	0.6	U	0.605	U	0.605	U
1,2,4-Trimethylbenzene		**1.5**		**47**		**0.55**	J	**0.899**	
1,2-Dichloro-1,1,2,2-tetrafluoroethane		1.07	U	1.1	U	1.07	U	1.07	U
1,2-Dichloroethane		0.617	U	0.62	U	0.617	U	0.617	U
1,3,5-Trimethylbenzene		0.75	U	**15**		0.75	U	0.75	U
1,3-Dichlorobenzene		0.917	U	0.92	U	0.917	U	0.917	U
1,4-Dichlorobenzene		0.917	U	0.92	U	**0.856**	J	**1.35**	
2-Butanone		0.899	U	**6**		**0.719**	J	**0.929**	
2-Hexanone		1.25	U	**0.54**	J	1.25	U	1.25	U
2-Propanol		**214**		**9.2**		**7**		**11.4**	
4-Ethyltoluene		0.75	U	**18**		0.75	U	0.75	U
4-Methyl-2-pentanone		1.25	U	**0.67**	J	1.25	U	1.25	U
Acetone		**50.2**		**73**		**8.57**		**12.1**	
Benzene		**1.27**		**1.9**		**0.52**		**0.552**	
Carbon disulfide		0.475	U	**2.2**		0.475	U	0.475	U
Carbon tetrachloride		0.256	U	**0.38**	J	**0.448**		**0.512**	
Chlorobenzene		0.702	U	0.7	U	0.702	U	0.702	U
Chloroform		0.744	U	**0.79**		0.744	U	0.744	U
Chloromethane		0.315	U	0.31	U	**0.672**		**0.651**	
Cis-1,2-Dichloroethene		**48**		**2.3**		0.604	U	0.604	U
Cyclohexene		0.525	U	**3.8**		0.525	U	0.525	U
Dichlorodifluoromethane		**93**		**4.6**		**12.3**		**16.1**	
Ethyl acetate		0.916	U	**0.4**	J	**1.36**		**3.96**	
Ethyl benzene		**0.53**	J	**8.8**		0.662	U	**1.46**	
Heptane		0.625	U	**4.2**		0.625	U	0.625	U
Hexane		0.537	U	0.54	U	0.537	U	0.537	U
Isooctane		0.712	U	**1.5**		0.712	U	0.712	U
Methyl Tertbutyl Ether		0.55	U	0.55	U	0.55	U	0.55	U
Methylene chloride		**165**		**0.49**	J	**0.388**	J	**0.459**	J
o-Xylene		0.662	U	**15**		0.662	U	**1.41**	
Styrene		0.649	U	0.65	U	0.649	U	0.649	U
Tetrachloroethene		1.03	U	**2.3**		1.03	U	1.03	U
Tetrahydrofuran		0.45	U	**2.2**		0.45	U	0.45	U
Toluene		**3.18**		**15**		**1.3**		**1.88**	
trans-1,2-Dichloroethene		0.604	U	0.6	U	0.604	U	0.604	U
Trichloroethene		**2.73**		**0.55**	J	**0.273**		**0.382**	
Trichlorofluoromethane		**62.8**		**2.3**		**6.11**		**7.54**	
Vinyl chloride		**0.961**		0.39	U	0.39	U	0.39	U
Xylene, m/p		**1.28**	J	**25**		**0.485**	J	**4.19**	

Notes:

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method TO-15.

Results in microgram per cubic meter (µg/m3)

Detections are indicated in **BOLD**

QC Code: FS = Field Sample

FD = Field Duplicate

Qualifiers: J = Estimated Value

U = Not detected at a concentration greater than the RL

Table 3.2: Sump Water Results-2007/2008

Location ID	SW-05		SW-07		SW-18		SW-33		SW-35		SW-37	
Field Sample Date	12/4/2007		12/4/2007		1/17/2008		12/4/2007		1/15/2008		12/4/2007	
Field Sample ID	828072 SW-05		828072 SW-07		828072-SW-18		828072 SW-33		828072-SW-35		828072 SW-37	
QC Code	FS		FS		FS		FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1-Dichloroethane	**1.1**		**0.48**	J	1	U	1	U	**0.8**	J	**0.42**	J
Acetone	10	U	10	U	10	U	**1.1**	J	**1.8**	J	10	U
Cis-1,2-Dichloroethene	**40**		**36**		1	U	1	U	**19**		**37**	
trans-1,2-Dichloroethene	**0.62**	J	1	U	1	U	1	U	1	U	1	U
Trichloroethene	1	U	**2.7**		1	U	1	U	1	U	**1.1**	
Vinyl chloride	**53**		**2.1**		1	U	1	U	**5.2**		**0.6**	J

Notes:

Results in microgram per liter (µg/L)

Only detected compounds shown.

Detections are indicated in **BOLD**

Samples analyzed for VOCs by EPA Method 8260B

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration greater than the reporting limit

J = Estimated value

Table 3.2: Sump Water Results-2007/2008

Location ID	SW-39		SW-40		SW-41		SW-41		SW-42		SW-43	
Field Sample Date	12/4/2007		12/4/2007		12/5/2007		12/5/2007		12/5/2007		12/7/2007	
Field Sample ID	828072 SW-39		828072 SW-40		828072 SW-41		828072 SW-41DUP		828072 SW-42		828072 SW-43	
QC Code	FS		FS		FS		FD		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1-Dichloroethane	1	U	1	U	1	U	1	U	**0.59**	J	1	U
Acetone	10	U	**1.1**	J	10	U	10	U	10	U	10	U
Cis-1,2-Dichloroethene	**3.5**		1	U	**0.52**	J	**0.62**	J	**92**		1	U
trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U	**0.55**	J	1	U
Trichloroethene	1	U	1	U	1	U	1	U	**3.3**		1	U
Vinyl chloride	1	U	1	U	1	U	1	U	1	U	1	U

Notes:

Results in microgram per liter (µg/L)

Only detected compounds shown.

Detections are indicated in **BOLD**

Samples analyzed for VOCs by EPA Method 8260B

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration greater than the reporting limit

J = Estimated value

Table 3.3: Sub-Slab Soil Vapor and Air Results-2009

Structure	Structure 35		Structures 44 to 47		Structures 41 and 48 to 51		Structures 52 to 55	
Type	Outdoor Ambient Air		Outdoor Ambient Air		Outdoor Ambient Air		Outdoor Ambient Air	
Sample ID	828072-AA-35-B-03		828072-OA-44-1-03		828072-OA-49-1-03		828072-OA-54-1-03	
Sample Date	2/4/2009		3/9/2009		3/10/2009		3/11/2009	
QC Code	FS		FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.83	U	0.83	U	0.83	U	0.83	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	**1**	J	1.2	U	1.2	U	1.2	U
1,1-Dichloroethane	0.62	U	0.62	U	0.62	U	0.62	U
1,1-Dichloroethene	0.6	U	0.6	U	0.6	U	0.6	U
1,2,4-Trimethylbenzene	0.75	U	**0.7**	J	**4.1**		**0.9**	
1,2-Dichloroethane	0.62	U	0.62	U	0.62	U	0.62	U
1,3,5-Trimethylbenzene	0.75	U	0.75	U	**1.1**		0.75	U
1,4-Dichlorobenzene	0.92	U	0.92	U	0.92	U	0.92	U
1,4-Dioxane	1.1	U	1.1	U	1.1	U	1.1	U
2-Butanone	**0.36**	J	**0.96**		0.9	U	**1.5**	
2-Hexanone	1.2	U	1.2	U	1.2	U	1.2	U
2-Propanol	0.37	U	**1.9**		**16**		0.37	U
4-Ethyltoluene	0.75	U	0.75	U	**1.2**		0.75	U
4-Methyl-2-pentanone	1.2	U	**0.58**	J	**0.67**	J	1.2	U
Acetone	**5.6**	EJ	**29**		**350**		**17**	
Benzene	**0.91**		**0.81**		**0.71**		**0.84**	
Carbon disulfide	**0.38**	J	0.47	U	0.47	U	0.47	U
Carbon tetrachloride	**0.7**		**0.7**		**0.64**		**0.7**	
Chlorobenzene	0.7	U	0.7	U	0.7	U	0.7	U
Chlorodibromomethane	1.3	U	1.3	U	1.3	U	1.3	U
Chloroform	0.74	U	**3.8**		0.74	U	0.74	U
Chloromethane	**0.65**		**1.1**		0.31	U	**1.5**	
Cis-1,2-Dichloroethene	0.6	U	0.6	U	**0.52**	J	0.6	U
Cyclohexane	0.52	U	**1.2**		**0.56**		**2.1**	
Dichlorodifluoromethane	**2.7**		**2.7**		**2.7**		**2.9**	
Ethyl acetate	0.92	U	**0.4**	J	**19**		**33**	
Ethyl benzene	0.66	U	0.66	U	**2.8**		0.66	U
Heptane	0.62	U	**0.58**	J	**0.75**		**0.92**	
Hexane	0.54	U	**0.93**		**52**		**0.97**	
Isooctane	0.71	U	0.71	U	0.71	U	0.71	U
Methyl Tertbutyl Ether	0.55	U	0.55	U	0.55	U	0.55	U
Methylene chloride	**1.3**		**0.39**	J	0.53	U	0.53	U
Styrene	0.65	U	0.65	U	0.65	U	0.65	U
Tetrachloroethene	1	U	**0.97**	J	1	U	1	U
Tetrahydrofuran	0.45	U	0.45	U	0.45	U	0.45	U
Toluene	**1.9**		**1.8**		**1.9**		**4.6**	
trans-1,2-Dichloroethene	0.6	U	0.6	U	0.6	U	0.6	U
Trichloroethene	**0.49**		**0.93**		**2.4**		**0.44**	
Trichlorofluoromethane	**1.4**		**1.5**		**1.6**		**1.5**	
Vinyl acetate	0.54	U	0.54	U	0.54	U	0.54	U
Vinyl chloride	0.1	U	0.1	U	**0.81**		0.1	U
Xylene, m/p	1.3	U	**1.1**	J	**14**		**0.88**	J
Xylene, o	0.66	U	0.66	U	**3.4**		0.66	U

Notes:
Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter (µg/m3)
Detections are indicated in **BOLD**
QC Code: FS = Field Sample
FD = Field Duplicate
Qualifiers: J = Estimated Value
U = Not detected at a concentration greater than the RL

Table 3.3: Sub-Slab Soil Vapor and Air Results-2009

Structure	Structure 35		Structure 35		Structure 44		Structure 44	
Type	Sub-Slab Vapor		Basement Air		Sub-Slab Vapor		Basement Air	
Sample ID	828072-SV-35-B-03		828072-BA-35-B-03		828072-SS-44-B-03		828072-IA-44-B-03	
Sample Date	2/4/2009		2/4/2009		3/9/2009		3/9/2009	
QC Code	FS		FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.83	U	0.83	U	**1.6**		**2.4**	
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.2	U	**1**	J	**0.86**	J	1.2	U
1,1-Dichloroethane	0.62	U	0.62	U	0.62	U	0.62	U
1,1-Dichloroethene	**0.44**	J	0.6	U	0.6	U	0.6	U
1,2,4-Trimethylbenzene	**5.6**	J	0.75	U	**4.7**	J	**2.1**	
1,2-Dichloroethane	**0.78**		0.62	U	0.62	U	0.62	U
1,3,5-Trimethylbenzene	**2.5**	J	0.75	U	**1.6**	J	**0.85**	
1,4-Dichlorobenzene	**1.7**	J	**0.73**	J	**0.67**	J	0.92	U
1,4-Dioxane	**2.4**	J	**0.44**	J	1.1	U	1.1	U
2-Butanone	**19**		**3.6**		0.9	U	**3.4**	
2-Hexanone	1.2	U	**0.83**	J	1.2	U	1.2	U
2-Propanol	0.37	U	**33**		0.37	U	0.37	U
4-Ethyltoluene	**1.8**		0.75	U	**2**	J	**0.6**	J
4-Methyl-2-pentanone	**12**	J	1.2	U	**4.4**		1.2	U
Acetone	**910**		**12**		**2000**		**30**	
Benzene	0.49	U	**0.75**		**1.8**		**1**	
Carbon disulfide	**60**		0.47	U	**0.47**		**0.38**	J
Carbon tetrachloride	0.26	U	**0.77**		**0.7**	J	**0.7**	
Chlorobenzene	**2.3**	J	0.7	U	0.7	U	0.7	U
Chlorodibromomethane	1.3	U	1.3	U	1.3	U	1.3	U
Chloroform	**1.3**		**1.9**		**0.65**	J	0.74	U
Chloromethane	**0.57**		**0.69**		0.31	U	**1.2**	
Cis-1,2-Dichloroethene	**81**		**3.9**		0.6	U	0.6	U
Cyclohexane	0.52	U	0.52	U	**6.6**		0.52	U
Dichlorodifluoromethane	**2.5**		**2.8**		**3.2**		**3.2**	
Ethyl acetate	**42**		**1.9**		**400**		**1.6**	
Ethyl benzene	**6.2**	J	0.66	U	**52**		**0.75**	
Heptane	**12**	J	**0.5**	J	**5.2**		**1.2**	
Hexane	**37**		0.54	U	**1100**		**1.4**	
Isooctane	**0.9**		0.71	U	**1.3**		0.71	U
Methyl Tertbutyl Ether	0.55	U	0.55	U	0.55	U	0.55	U
Methylene chloride	**0.99**		**1.2**		**0.53**		**0.42**	J
Styrene	**7.9**	J	0.65	U	**4.5**	J	0.65	U
Tetrachloroethene	**1.9**	J	1	U	**1.6**	J	**0.76**	J
Tetrahydrofuran	0.45	U	**4**		0.45	U	0.45	U
Toluene	**96**	J	**2.2**		**16**		**6.9**	
trans-1,2-Dichloroethene	0.6	U	0.6	U	0.6	U	0.6	U
Trichloroethene	**7.2**	J	**1.1**		**3.8**		0.22	U
Trichlorofluoromethane	**1.3**		**1.4**		**2.1**		**2**	
Vinyl acetate	0.54	U	0.54	U	0.54	U	0.54	U
Vinyl chloride	**1.3**		**0.96**		0.39	U	0.1	U
Xylene, m/p	**18**	J	**0.53**	J	**310**		**2.3**	
Xylene, o	**5.6**	J	0.66	U	**54**		**0.75**	

Notes:
Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter (µg/m3)
Detections are indicated in **BOLD**
QC Code: FS = Field Sample
FD = Field Duplicate
Qualifiers: J = Estimated Value
U = Not detected at a concentration greater than the RL

Table 3.3: Sub-Slab Soil Vapor and Air Results-2009

Structure	Structure 45		Structure 45		Structure 46		Structure 46	
Type	Sub-Slab Vapor		Basement Air		Sub-Slab Vapor		Basement Air	
Sample ID	828072-SS-45-B-03		828072-IA-45-B-03		828072-SS-46-B-03		828072-IA-46-B-03	
Sample Date	3/9/2009		3/9/2009		3/9/2009		3/9/2009	
QC Code	FS		FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.83	U	0.83	U	0.83	U	0.83	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	**0.78**	J	1.2	U	**0.86**	J	1.2	U
1,1-Dichloroethane	0.62	U	0.62	U	0.62	U	0.62	U
1,1-Dichloroethene	0.6	U	0.6	U	0.6	U	0.6	U
1,2,4-Trimethylbenzene	**7**	J	**1.3**		**6**	J	**1.7**	
1,2-Dichloroethane	0.62	U	0.62	U	0.62	U	0.62	U
1,3,5-Trimethylbenzene	**2.8**	J	**0.65**	J	**1.9**	J	**0.75**	
1,4-Dichlorobenzene	0.92	U	0.92	U	**0.67**	J	0.92	U
1,4-Dioxane	1.1	U	1.1	U	1.1	U	1.1	U
2-Butanone	0.9	U	**2.6**		0.9	U	**1.4**	
2-Hexanone	1.2	U	1.2	U	1.2	U	1.2	U
2-Propanol	0.37	U	**9**		0.37	U	0.37	U
4-Ethyltoluene	**3**	J	**0.7**	J	**2.5**	J	**0.55**	J
4-Methyl-2-pentanone	**5.1**		1.2	U	**5.5**		1.2	U
Acetone	**2400**		**36**		**2400**		**28**	
Benzene	**3**		**2.1**		**2.4**		**1.9**	
Carbon disulfide	**2.2**		0.47	U	**0.57**		0.47	U
Carbon tetrachloride	**0.7**	J	0.26	U	**0.7**	J	**0.77**	
Chlorobenzene	0.7	U	0.7	U	0.7	U	0.7	U
Chlorodibromomethane	1.3	U	1.3	U	1.3	U	1.3	U
Chloroform	**1.2**		**0.84**		**0.65**	J	**0.6**	J
Chloromethane	**17**		**3.8**		0.31	U	**1.1**	
Cis-1,2-Dichloroethene	0.6	U	0.6	U	0.6	U	0.6	U
Cyclohexane	**14**		**0.8**		**10**		**0.66**	
Dichlorodifluoromethane	**2.7**		**2.7**		**2.9**		**3**	
Ethyl acetate	**630**		**1.5**		**580**		**1.4**	
Ethyl benzene	**150**		**0.79**		**83**		**0.97**	
Heptane	**5.9**		**1.5**		**6.3**		**2.2**	
Hexane	**1800**		**1.6**		**1500**		**1.8**	
Isooctane	**2.5**		**3.7**		**1.5**		**0.57**	J
Methyl Tertbutyl Ether	0.55	U	0.55	U	0.55	U	0.55	U
Methylene chloride	**0.74**		0.53	U	**0.56**		**0.42**	J
Styrene	0.65	U	0.65	U	0.65	U	0.65	U
Tetrachloroethene	**10**	J	**25**		**2.5**	J	1	U
Tetrahydrofuran	0.45	U	0.45	U	0.45	U	0.45	U
Toluene	**35**		**5.9**		**19**		**7.7**	J
trans-1,2-Dichloroethene	0.6	U	0.6	U	0.6	U	0.6	U
Trichloroethene	**4.2**		0.22	U	**4.3**		**0.6**	
Trichlorofluoromethane	**1.8**		**1.6**		**2.2**		**2.5**	
Vinyl acetate	0.54	U	0.54	U	0.54	U	0.54	U
Vinyl chloride	0.39	U	0.1	U	0.39	U	0.1	U
Xylene, m/p	**450**		**3.1**		**420**		**3.1**	
Xylene, o	**150**		**0.79**		**90**		**1**	

Notes:
Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter (µg/m3)
Detections are indicated in **BOLD**
QC Code: FS = Field Sample
FD = Field Duplicate
Qualifiers: J = Estimated Value
U = Not detected at a concentration greater than the RL

Table 3.3: Sub-Slab Soil Vapor and Air Results-2009

Structure	Structure 47		Structure 47		Structure 48		Structure 48	
Type	Sub-Slab Vapor		Basement Air		Sub-Slab Vapor		Basement Air	
Sample ID	828072-SS-47-B-03		828072-IA-47-B-03		828072-SS-48-B-03		828072-IA-48-B-03	
Sample Date	3/9/2009		3/9/2009		3/10/2009		3/10/2009	
QC Code	FS		FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.83	U	0.83	U	0.83	U	0.83	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	**0.78**	J	1.2	U	1.2	U	1.2	U
1,1-Dichloroethane	0.62	U	0.62	U	0.62	U	0.62	U
1,1-Dichloroethene	0.6	U	0.6	U	0.6	U	0.6	U
1,2,4-Trimethylbenzene	**3**		**1.4**		**4.3**		**3.1**	
1,2-Dichloroethane	**0.49**	J	0.62	U	0.62	U	0.62	U
1,3,5-Trimethylbenzene	**1.1**		**0.75**		**1.3**		**0.8**	
1,4-Dichlorobenzene	0.92	U	0.92	U	0.92	U	0.92	U
1,4-Dioxane	1.1	U	1.1	U	1.1	U	1.1	U
2-Butanone	0.9	U	**2.3**		0.9	U	**1.1**	
2-Hexanone	1.2	U	1.2	U	1.2	U	1.2	U
2-Propanol	0.37	U	**8.5**		0.37	U	**48**	
4-Ethyltoluene	**1.1**		**0.65**	J	**1.7**		**0.9**	
4-Methyl-2-pentanone	**1.5**		1.2	U	**5**		1.2	U
Acetone	**520**		**31**		**2300**		**26**	
Benzene	**1.4**		**3.6**		**1.7**		**0.88**	
Carbon disulfide	0.47	U	0.47	U	**3.6**		**0.35**	J
Carbon tetrachloride	**0.7**	J	**0.7**		0.96	U	**0.7**	
Chlorobenzene	0.7	U	0.7	U	0.7	U	0.7	U
Chlorodibromomethane	1.3	U	1.3	U	1.3	U	1.3	U
Chloroform	0.74	U	0.74	U	**0.5**	J	0.74	U
Chloromethane	0.31	U	**1.4**		0.31	U	**1**	
Cis-1,2-Dichloroethene	0.6	U	0.6	U	**2.1**		**0.4**	J
Cyclohexane	**2.6**		**0.77**		**12**		0.52	U
Dichlorodifluoromethane	**2.8**		**2.8**		**2.1**		**3.2**	
Ethyl acetate	**87**	EJ	**0.95**		**620**		**0.73**	J
Ethyl benzene	**12**		**1.3**		**49**		**0.53**	J
Heptane	**1.7**		**1.6**		**6.1**		**0.83**	
Hexane	**490**		**2.7**		**1500**		**1.3**	
Isooctane	0.71	U	**1.8**		**0.66**	J	0.71	U
Methyl Tertbutyl Ether	0.55	U	0.55	U	0.55	U	0.55	U
Methylene chloride	0.53	U	**0.39**	J	**0.56**		**0.39**	J
Styrene	0.65	U	0.65	U	0.65	U	0.65	U
Tetrachloroethene	1	U	1	U	**0.9**	J	1	U
Tetrahydrofuran	0.45	U	0.45	U	0.45	U	0.45	U
Toluene	**7.7**		**6.1**		**13**		**2.4**	
trans-1,2-Dichloroethene	0.6	U	0.6	U	0.6	U	0.6	U
Trichloroethene	**1.5**		**0.27**		**4.4**		**0.66**	
Trichlorofluoromethane	**1.7**		**1.6**		**1.5**		**1.9**	
Vinyl acetate	0.54	U	0.54	U	0.54	U	0.54	U
Vinyl chloride	0.39	U	0.1	U	**0.94**		0.1	U
Xylene, m/p	**61**		**3.8**		**350**		**1.8**	
Xylene, o	**11**		**1.3**		**53**		**0.84**	

Notes:
Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter (µg/m3)
Detections are indicated in **BOLD**
QC Code: FS = Field Sample
FD = Field Duplicate
Qualifiers: J = Estimated Value
U = Not detected at a concentration greater than the RL

Table 3.3: Sub-Slab Soil Vapor and Air Results-2009

Structure	Structure 49		Structure 49		Structure 50		Structure 50	
Type	Sub-Slab Vapor		Basement Air		Sub-Slab Vapor		Basement Air	
Sample ID	828072-SS-49-B-03		828072-IA-49-B-03		828072-SS-50-B-03		828072-IA-50-B-03	
Sample Date	3/10/2009		3/10/2009		3/10/2009		3/10/2009	
QC Code	FS		FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	**0.67**	J	**1.6**		**1.1**		0.83	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	**0.78**	J	1.2	U	**0.78**	J	1.2	U
1,1-Dichloroethane	0.62	U	0.62	U	**28**		0.62	U
1,1-Dichloroethene	0.6	U	0.6	U	**0.44**	J	0.6	U
1,2,4-Trimethylbenzene	**11**	EJ	**3**		**4.2**	J	**2.8**	
1,2-Dichloroethane	0.62	U	0.62	U	0.62	U	0.62	U
1,3,5-Trimethylbenzene	**2.5**		**1.2**		**1.4**	J	**0.85**	
1,4-Dichlorobenzene	0.92	U	0.92	U	0.92	U	0.92	U
1,4-Dioxane	1.1	U	1.1	U	1.1	U	1.1	U
2-Butanone	0.9	U	**1.3**		0.9	U	**2.7**	
2-Hexanone	1.2	U	1.2	U	1.2	U	1.2	U
2-Propanol	0.37	U	**6.7**		0.37	U	**18**	
4-Ethyltoluene	**2.6**		**0.85**		**1.2**	J	**0.75**	
4-Methyl-2-pentanone	**52**		**1**	J	**65**		**1.4**	
Acetone	**73**		**29**		**97**		**18**	
Benzene	**6.3**		**1.8**		**9.4**		**1.4**	
Carbon disulfide	**11**		0.47	U	**58**		0.47	U
Carbon tetrachloride	**0.7**	J	**0.7**		0.96	U	**0.83**	
Chlorobenzene	0.7	U	0.7	U	0.7	U	0.7	U
Chlorodibromomethane	1.3	U	1.3	U	1.3	U	1.3	U
Chloroform	**0.89**		0.74	U	**0.99**		**1.1**	
Chloromethane	**1.2**		**0.99**		0.31	U	**1.3**	
Cis-1,2-Dichloroethene	**4.4**		**0.44**	J	**990**		**1.3**	
Cyclohexane	**18**		**0.49**	J	**30**		**0.7**	
Dichlorodifluoromethane	**3.3**		**5.1**		**4.3**		**3**	
Ethyl acetate	**2.1**		**3.6**		0.92	U	**1.7**	
Ethyl benzene	**1.9**		**1**		**1.8**	J	**0.62**	J
Heptane	**30**		**1.1**		**67**		**1.5**	
Hexane	**47**		**1.8**		**67**		**1.6**	
Isooctane	**1.3**		**0.57**	J	**1.7**		0.71	U
Methyl Tertbutyl Ether	0.55	U	0.55	U	0.55	U	0.55	U
Methylene chloride	**0.42**	J	0.53	U	**0.46**	J	0.53	U
Styrene	0.65	U	0.65	U	0.65	U	0.65	U
Tetrachloroethene	**1.3**		1	U	1	U	1	U
Tetrahydrofuran	0.45	U	0.45	U	0.45	U	0.45	U
Toluene	**6.9**		**4.7**		**13**	J	**4.7**	
trans-1,2-Dichloroethene	0.6	U	0.6	U	**13**		0.6	U
Trichloroethene	**4.2**		**0.27**		**4.4**		0.22	U
Trichlorofluoromethane	**1.8**		**1.7**		**1.5**		**1.8**	
Vinyl acetate	0.54	U	0.54	U	**7.2**		0.54	U
Vinyl chloride	**1.1**		0.1	U	**23**		0.1	U
Xylene, m/p	**6.4**		**3.6**		**5.1**	J	**1.8**	
Xylene, o	**2.4**		**1.2**		**1.7**	J	**0.75**	

Notes:
Only Detected Compounds shown.
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Results in microgram per cubic meter (µg/m3)
Detections are indicated in **BOLD**
QC Code: FS = Field Sample
FD = Field Duplicate
Qualifiers: J = Estimated Value
U = Not detected at a concentration greater than the RL

Table 3.3: Sub-Slab Soil Vapor and Air Results-2009

Structure	Structure 50		Structure 51		Structure 51		Structure 51	
Type	Sub-Slab Vapor		Sub-Slab Vapor		Sub-Slab Vapor		Basement Air	
Sample ID	828072-SS-50-B-04		828072-SS-51-B-03		828072-SS-51-B-03D		828072-IA-51-B-03	
Sample Date	5/28/2009		3/10/2009		3/10/2009		3/10/2009	
QC Code	FS		FS		FD		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	**1**		0.83	U	0.83	U	**1.1**	
1,1,2-Trichloro-1,2,2-Trifluoroethane	**0.86**	J	1.2	U	**0.78**	J	**1.1**	J
1,1-Dichloroethane	**30**		0.62	U	0.62	U	0.62	U
1,1-Dichloroethene	0.6	U	0.6	U	0.6	U	0.6	U
1,2,4-Trimethylbenzene	**21**	J	**5.1**		**5.9**		**2.7**	
1,2-Dichloroethane	0.62	U	0.62	U	0.62	U	0.62	U
1,3,5-Trimethylbenzene	**7.5**	J	**1.4**		**1.5**		**0.85**	
1,4-Dichlorobenzene	0.92	U	0.92	U	0.92	U	0.92	U
1,4-Dioxane	1.1	U	1.1	U	1.1	U	1.1	U
2-Butanone	0.9	U	0.9	U	0.9	U	**1.7**	
2-Hexanone	1.2	U	1.2	U	1.2	U	1.2	U
2-Propanol	0.37	U	0.37	U	0.37	U	**3.7**	
4-Ethyltoluene	**5.7**		**1.3**		**1.4**		**0.8**	
4-Methyl-2-pentanone	1.2	U	**71**		1.2	U	**0.75**	J
Acetone	**34**		**73**		**30**		**18**	
Benzene	**8.8**	J	**8.1**		**6.7**		**0.78**	
Carbon disulfide	**7.6**		**22**		**15**		**0.35**	J
Carbon tetrachloride	0.96	U	0.96	U	0.96	U	**1.2**	
Chlorobenzene	0.7	U	0.7	U	0.7	U	0.7	U
Chlorodibromomethane	1.3	U	1.3	U	1.3	U	1.3	U
Chloroform	**0.65**	J	**0.69**	J	0.74	U	0.74	U
Chloromethane	**1.4**		0.31	U	0.31	U	**0.9**	
Cis-1,2-Dichloroethene	**820**		**3.4**		**2.9**		0.6	U
Cyclohexane	0.52	U	**59**		**28**		0.52	U
Dichlorodifluoromethane	**2.8**		**3**		**3.1**		**3**	
Ethyl acetate	0.92	U	0.92	U	0.92	U	**2**	
Ethyl benzene	**6.6**	J	**1.7**		**1.5**		**0.62**	J
Heptane	**62**		**75**		**43**		**0.79**	
Hexane	**52**		**130**		**52**		**1**	
Isooctane	0.71	U	**1.9**		**1.3**		0.71	U
Methyl Tertbutyl Ether	0.55	U	0.55	U	0.55	U	0.55	U
Methylene chloride	0.53	U	0.53	U	0.53	U	**0.64**	
Styrene	0.65	U	0.65	U	**0.48**	J	0.65	U
Tetrachloroethene	**1.2**	J	1	U	1	U	**12**	
Tetrahydrofuran	0.45	U	0.45	U	0.45	U	0.45	U
Toluene	**29**	J	**11**		**8.4**	J	**3.9**	
trans-1,2-Dichloroethene	**3.1**		0.6	U	0.6	U	0.6	U
Trichloroethene	**8**		**2.2**		**2.1**		**0.71**	
Trichlorofluoromethane	**2.2**		**2.3**		**2.2**		**4.5**	
Vinyl acetate	0.54	U	0.54	U	0.54	U	0.54	U
Vinyl chloride	**0.81**		0.39	U	0.39	U	0.1	U
Xylene, m/p	**27**	J	**5.2**		**4.5**		**1.9**	
Xylene, o	**9.3**	J	**1.7**		**1.6**		**0.88**	

Notes:
Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter (µg/m3)
Detections are indicated in **BOLD**
QC Code: FS = Field Sample
FD = Field Duplicate
Qualifiers: J = Estimated Value
U = Not detected at a concentration greater than the RL

Table 3.3: Sub-Slab Soil Vapor and Air Results-2009

Structure	Structure 52		Structure 52		Structure 52		Structure 53	
Type	Sub-Slab Vapor		Basement Air		Sub-Slab Vapor		Sub-Slab Vapor	
Sample ID	828072-SS-52-B-03		828072-IA-52-B-03		828072-SS-52-B-04		828072-SS-53-B-03	
Sample Date	3/11/2009		3/11/2009		5/28/2009		3/11/2009	
QC Code	FS		FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	**1**		0.83	U	0.83	U	0.83	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	**0.78**	J	1.2	U	**0.93**	J	**0.78**	J
1,1-Dichloroethane	**25**		0.62	U	0.62	U	0.62	U
1,1-Dichloroethene	**0.64**		0.6	U	0.6	U	0.6	U
1,2,4-Trimethylbenzene	**9.2**		**3.8**		**93**	J	**2.5**	
1,2-Dichloroethane	0.62	U	0.62	U	0.62	U	0.62	U
1,3,5-Trimethylbenzene	**2.9**		**1.4**		**34**	J	**1.3**	
1,4-Dichlorobenzene	**1.2**		**0.67**	J	0.92	U	0.92	U
1,4-Dioxane	1.1	U	1.1	U	1.1	U	1.1	U
2-Butanone	0.9	U	**4.5**		0.9	U	**5.7**	J
2-Hexanone	1.2	U	1.2	U	1.2	U	1.2	U
2-Propanol	0.37	U	**9.5**		0.37	U	**8.2**	
4-Ethyltoluene	**2.2**		**1.8**		**15**		**0.9**	
4-Methyl-2-pentanone	1.2	U	**2.2**		1.2	U	**4.3**	
Acetone	**31**		**32**		**37**		**100**	
Benzene	**4.4**		**6.5**		**19**		**1.5**	
Carbon disulfide	**16**		**0.51**		**25**		**24**	
Carbon tetrachloride	0.96	U	**0.77**		0.96	U	**0.77**	J
Chlorobenzene	0.7	U	0.7	U	0.7	U	0.7	U
Chlorodibromomethane	1.3	U	1.3	U	1.3	U	1.3	U
Chloroform	**1.5**		0.74	U	**0.84**		0.74	U
Chloromethane	0.31	U	**1.2**		**3.9**		0.31	U
Cis-1,2-Dichloroethene	**360**		**1.3**		**53**		**3**	
Cyclohexane	**21**		**1.7**		0.52	U	**1.6**	
Dichlorodifluoromethane	**4.2**		**2.9**		**2.4**		**3.1**	
Ethyl acetate	0.92	U	**2.6**		0.92	U	**1.6**	
Ethyl benzene	**2.6**		**3.8**		**15**	J	**1.1**	
Heptane	**23**		**2.5**		**320**		**4.7**	
Hexane	**26**		**6.3**		**170**		**7.3**	
Isooctane	**0.95**		**4.2**		0.71	U	0.71	U
Methyl Tertbutyl Ether	0.55	U	0.55	U	0.55	U	0.55	U
Methylene chloride	0.53	U	**0.46**	J	0.53	U	**0.39**	J
Styrene	0.65	U	0.65	U	0.65	U	0.65	U
Tetrachloroethene	1	U	**1.3**		**1.2**	J	**0.76**	J
Tetrahydrofuran	0.45	U	0.45	U	0.45	U	0.45	U
Toluene	**7.7**		**13**		**69**	J	**4.7**	
trans-1,2-Dichloroethene	**9.6**		0.6	U	0.6	U	0.6	U
Trichloroethene	**15**		**3.2**		**17**		**2.3**	
Trichlorofluoromethane	**1.8**		**2.2**		**1.5**		**1.8**	
Vinyl acetate	**4.5**		0.54	U	0.54	U	0.54	U
Vinyl chloride	**850**		**0.7**		0.39	U	**0.68**	
Xylene, m/p	**8.9**		**11**		**91**	J	**3.4**	
Xylene, o	**2.7**		**3.9**		**28**	J	**1.2**	

Notes:
Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter (µg/m3)
Detections are indicated in **BOLD**
QC Code: FS = Field Sample
FD = Field Duplicate
Qualifiers: J = Estimated Value
U = Not detected at a concentration greater than the RL

Table 3.3: Sub-Slab Soil Vapor and Air Results-2009

Structure	Structure 53		Structure 54		Structure 54		Structure 55	
Type	Basement Air		Sub-Slab Vapor		Basement Air		Sub-Slab Vapor	
Sample ID	828072-IA-53-B-03		828072-SS-54-B-03		828072-IA-54-B-03		828072-SS-55-B-03	
Sample Date	3/11/2009		3/11/2009		3/11/2009		3/11/2009	
QC Code	FS		FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.83	U	0.83	U	0.83	U	0.83	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.2	U	**0.78**	J	**0.93**	J	1.2	U
1,1-Dichloroethane	0.62	U	0.62	U	0.62	U	0.62	U
1,1-Dichloroethene	0.6	U	0.6	U	0.6	U	0.6	U
1,2,4-Trimethylbenzene	**2.4**		**2.2**		**1.1**		**1.1**	
1,2-Dichloroethane	0.62	U	0.62	U	0.62	U	0.62	U
1,3,5-Trimethylbenzene	**0.7**	J	**1.3**		**0.6**	J	0.75	U
1,4-Dichlorobenzene	0.92	U	0.92	U	0.92	U	0.92	U
1,4-Dioxane	1.1	U	1.1	U	1.1	U	1.1	U
2-Butanone	**1.9**		0.9	U	**2.7**		0.9	U
2-Hexanone	1.2	U	1.2	U	1.2	U	1.2	U
2-Propanol	**210**		0.37	U	**13**		0.37	U
4-Ethyltoluene	**1.7**		**0.7**	J	0.75	U	0.75	U
4-Methyl-2-pentanone	**1.4**		1.2	U	**1.2**	J	**12**	J
Acetone	**20**		**84**		**29**		**48**	
Benzene	**1**		**9.7**		**0.81**		**1.9**	
Carbon disulfide	0.47	U	**10**		**0.38**	J	**2.4**	
Carbon tetrachloride	**0.77**		0.96	U	**0.77**		0.96	U
Chlorobenzene	0.7	U	0.7	U	0.7	U	0.7	U
Chlorodibromomethane	1.3	U	1.3	U	1.3	U	1.3	U
Chloroform	0.74	U	**0.55**	J	0.74	U	0.74	U
Chloromethane	**1**		0.31	U	**1.2**		0.31	U
Cis-1,2-Dichloroethene	**0.44**	J	**3.7**		**0.81**		**0.69**	
Cyclohexane	**0.73**		**43**		**0.56**		**13**	
Dichlorodifluoromethane	0.75	U	**3**		**3.1**		**2.3**	
Ethyl acetate	**1.7**		**1.7**		**1.8**		0.92	U
Ethyl benzene	**1.4**		**1.4**		**0.57**	J	**0.49**	J
Heptane	**1.5**		**34**		**1.3**		**18**	
Hexane	**2.3**		**77**		**1.4**		**39**	
Isooctane	**0.81**		0.71	U	0.71	U	0.71	U
Methyl Tertbutyl Ether	0.55	U	0.55	U	0.55	U	0.55	U
Methylene chloride	0.53	U	0.53	U	**0.42**	J	0.53	U
Styrene	0.65	U	0.65	U	0.65	U	0.65	U
Tetrachloroethene	1	U	1	U	1	U	1	U
Tetrahydrofuran	0.45	U	0.45	U	0.45	U	0.45	U
Toluene	**5.2**		**8.8**		**2.8**		**2.3**	
trans-1,2-Dichloroethene	0.6	U	0.6	U	0.6	U	0.6	U
Trichloroethene	0.22	U	**2.2**		0.22	U	**0.55**	J
Trichlorofluoromethane	**1.6**		**2.1**		**4**		**1.3**	
Vinyl acetate	0.54	U	0.54	U	0.54	U	0.54	U
Vinyl chloride	0.1	U	0.39	U	**1.6**		0.39	U
Xylene, m/p	**3.4**		**4.8**		**1.9**		**1.4**	
Xylene, o	**1.3**		**1.4**		**0.79**		**0.53**	J

Notes:
Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter (µg/m3)
Detections are indicated in **BOLD**
QC Code: FS = Field Sample
FD = Field Duplicate
Qualifiers: J = Estimated Value
U = Not detected at a concentration greater than the RL

Table 3.3: Sub-Slab Soil Vapor and Air Results-2009

Structure	Structure 55		Structure 55	
Type	Sub-Slab Vapor		Basement Air	
Sample ID	828072-SS-55-B-03D		828072-IA-55-B-03	
Sample Date	3/11/2009		3/11/2009	
QC Code	FD		FS	
Parameter	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.83	U	0.83	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.2	U	1.2	U
1,1-Dichloroethane	0.62	U	0.62	U
1,1-Dichloroethene	0.6	U	0.6	U
1,2,4-Trimethylbenzene	**1.1**		**0.95**	
1,2-Dichloroethane	0.62	U	0.62	U
1,3,5-Trimethylbenzene	0.75	U	0.75	U
1,4-Dichlorobenzene	0.92	U	0.92	U
1,4-Dioxane	1.1	U	1.1	U
2-Butanone	0.9	U	**1.2**	
2-Hexanone	1.2	U	1.2	U
2-Propanol	0.37	U	**6.7**	
4-Ethyltoluene	0.75	U	0.75	U
4-Methyl-2-pentanone	**41**		**1.2**	J
Acetone	**99**		**21**	J
Benzene	**4.6**		**1.1**	
Carbon disulfide	**11**		0.47	U
Carbon tetrachloride	0.96	U	**0.77**	
Chlorobenzene	0.7	U	0.7	U
Chlorodibromomethane	1.3	U	1.3	U
Chloroform	0.74	U	0.74	U
Chloromethane	0.31	U	**1.1**	
Cis-1,2-Dichloroethene	**1.6**		**0.81**	
Cyclohexane	**31**		0.52	U
Dichlorodifluoromethane	**2.3**		**3.1**	
Ethyl acetate	0.92	U	**0.66**	J
Ethyl benzene	**1.1**		**0.62**	J
Heptane	**44**		**1.4**	
Hexane	**62**		**1.2**	
Isooctane	0.71	U	0.71	U
Methyl Tertbutyl Ether	0.55	U	0.55	U
Methylene chloride	0.53	U	0.53	U
Styrene	0.65	U	0.65	U
Tetrachloroethene	1	U	1	U
Tetrahydrofuran	0.45	U	0.45	U
Toluene	**9.6**		**3.6**	
trans-1,2-Dichloroethene	0.6	U	0.6	U
Trichloroethene	**1.5**		**0.44**	
Trichlorofluoromethane	**1.4**		**1.8**	
Vinyl acetate	0.54	U	0.54	U
Vinyl chloride	0.39	U	0.1	U
Xylene, m/p	**3**		**1.9**	
Xylene, o	**0.84**		**0.66**	

Notes:
Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter (µg/m3)
Detections are indicated in **BOLD**
QC Code: FS = Field Sample
FD = Field Duplicate
Qualifiers: J = Estimated Value
U = Not detected at a concentration greater than the RL

Table 3.4: Sub-Slab Soil Vapor and Air Results-2010

Structure	Structures 5, 47 & 55		Sturctures 35, 50, & 52		Structure 42		Structure-35	
Type	Outdoor Air		Outdoor Air		Outdoor Air		Sub-Slab Vapor	
Sample ID	828072OA-032210-01		828072OA-032310-01		828072OA-040810-1		828072SS-35-01-B-10	
Sample Date	3/23/2010		3/24/2010		4/8/2010		3/24/2010	
QC Code	FS		FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.83	U	0.83	U	0.83	U	**5.1**	J
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.2	U	1.2	U	1.2	U	**2.5**	
1,1-Dichloroethane	0.62	U	0.62	U	0.62	U	**200**	J
1,1-Dichloroethene	0.6	U	0.6	U	0.6	U	**23**	
1,2,4-Trichlorobenzene	1.1	U	1.1	U	1.1	UJ	**0.75**	J
1,2,4-Trimethylbenzene	0.75	U	0.75	U	**0.95**		**2.2**	
1,2-Dichloroethane	0.62	U	**0.66**		0.62	U	**1.2**	
1,3,5-Trimethylbenzene	0.75	U	0.75	U	0.75	U	**1.4**	
1,4-Dichlorobenzene	0.92	U	0.92	U	0.92	U	**0.61**	J
2-Butanone	0.9	U	**1.7**		**3**	J	**23**	
2-Hexanone	1.2	U	1.2	U	1.2	U	**1.1**	J
2-Propanol	**13**		**37**		**33**		**100**	
4-Ethyltoluene	0.75	UJ	0.75	UJ	0.75	U	**1.1**	J
4-Methyl-2-pentanone	1.2	U	1.2	U	**0.67**	J	1.2	U
Acetone	**13**		**43**		**280**		**140**	
Benzene	**0.45**	J	**0.45**	J	**0.78**		**17**	
Carbon disulfide	0.47	U	**0.57**		**0.54**		**27**	
Carbon tetrachloride	**0.7**	J	**0.45**	J	**0.51**		**0.45**	J
Chloroform	0.74	U	0.74	U	0.74	U	**1.5**	
Chloromethane	**0.73**		**0.52**		**1**		0.31	U
Cis-1,2-Dichloroethene	0.6	U	0.6	U	0.6	U	**1800**	
Cyclohexane	0.52	U	**0.42**	J	0.52	U	**39**	
Dichlorodifluoromethane	**2.5**		**1.4**		**2.4**		**18**	
Ethyl acetate	0.92	U	**1.2**		**2.5**		0.92	U
Ethyl benzene	0.66	U	0.66	U	**0.79**		**5.6**	
Heptane	0.62	U	**0.5**	J	**1.1**		**32**	
Hexane	**0.9**		**1.4**		0.54	U	**45**	
Isooctane	0.71	U	0.71	U	0.71	U	0.71	U
Methylene chloride	**0.67**		**1.2**		**0.74**		**0.99**	
Styrene	0.65	U	0.65	U	**0.56**	J	**3.2**	
Tetrachloroethene	1	U	**1.1**		1	U	**3.5**	
Tetrahydrofuran	0.45	U	0.45	U	0.45	U	0.45	U
Toluene	**1.2**		**13**		**25**		**150**	
trans-1,2-Dichloroethene	0.6	U	0.6	U	0.6	U	**29**	J
Trichloroethene	**0.27**		**3.3**		**0.82**		**260**	
Trichlorofluoromethane	**1.4**		**0.8**	J	**1.5**		**1.2**	
Vinyl chloride	0.1	U	0.1	U	0.1	U	**11**	
Xylene, m/p	1.3	U	**0.49**	J	**2**		**14**	
Xylene, o	0.66	U	0.66	U	**0.79**		**3**	

Notes:
Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter (µg/m3)
Detections are indicated in **BOLD**
QC Code: FS = Field Sample
FD = Field Duplicate
Qualifiers: J = Estimated Value
U = Not detected at a concentration greater than the RL

Table 3.4: Sub-Slab Soil Vapor and Air Results-2010

Structure	Structure-35		Structure-35		Structure-47		Structure-47	
Type	Basement Air		Basement Air		Sub-Slab Vapor		Basement Air	
Sample ID	828072IA-35-01-B-10		828072IA-35-01-B-DUP-10		828072SS-47-01-B-10		828072IA-47-01-B-10	
Sample Date	3/24/2010		3/24/2010		3/23/2010		3/23/2010	
QC Code	FS		FD		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.83	U	0.83	U	0.83	U	0.83	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.2	U	1.2	U	1.2	U	1.2	U
1,1-Dichloroethane	**0.53**	J	**0.62**		0.62	U	0.62	U
1,1-Dichloroethene	0.6	U	0.6	U	0.6	U	0.6	U
1,2,4-Trichlorobenzene	1.1	U	1.1	U	1.1	U	1.1	U
1,2,4-Trimethylbenzene	0.75	U	0.75	U	**2.2**		**1.1**	
1,2-Dichloroethane	0.62	U	**0.41**	J	**1.4**		**0.62**	
1,3,5-Trimethylbenzene	0.75	U	0.75	U	**1.2**		0.75	U
1,4-Dichlorobenzene	0.92	U	0.92	U	0.92	U	0.92	U
2-Butanone	**35**		**40**		**2.5**		**1.9**	
2-Hexanone	1.2	U	1.2	U	1.2	U	1.2	U
2-Propanol	**130**		**130**		**160**		**23**	
4-Ethyltoluene	0.75	UJ	0.75	UJ	**1.1**	J	0.75	UJ
4-Methyl-2-pentanone	1.2	U	1.2	U	1.2	U	1.2	U
Acetone	**87**		**91**		**64**		**21**	
Benzene	**0.42**	J	**0.49**		**0.84**		**2.8**	
Carbon disulfide	0.47	U	**0.35**	J	**16**		**0.35**	J
Carbon tetrachloride	**0.9**	J	**0.96**	J	**0.51**	J	**0.7**	J
Chloroform	0.74	U	0.74	U	0.74	U	0.74	U
Chloromethane	**0.44**		**0.38**		**0.21**	J	**0.94**	
Cis-1,2-Dichloroethene	**17**		**17**		0.6	U	0.6	U
Cyclohexane	0.52	U	0.52	U	**3.3**		**0.8**	
Dichlorodifluoromethane	**2.2**		**2.4**		**2.7**		**2.5**	
Ethyl acetate	**0.7**	J	**0.7**	J	**1.5**		**0.44**	J
Ethyl benzene	0.66	U	0.66	U	**7.5**		**0.97**	
Heptane	0.62	U	0.62	U	**4.7**		**0.67**	
Hexane	**1**		**1.3**		**5.4**		**1.9**	
Isooctane	0.71	U	0.71	U	0.71	U	**0.52**	J
Methylene chloride	**0.46**	J	**0.53**		**0.74**		**0.71**	
Styrene	0.65	U	0.65	U	**3.5**		0.65	U
Tetrachloroethene	1	U	1	U	**4.1**		1	U
Tetrahydrofuran	**31**		**38**		0.45	U	0.45	U
Toluene	**5.1**		**5.6**		**75**		**9.6**	
trans-1,2-Dichloroethene	0.6	U	0.6	U	0.6	U	0.6	U
Trichloroethene	**1.9**		**2.3**		**3.4**		**0.27**	
Trichlorofluoromethane	**1.3**		**1.3**		**1.5**		**1.5**	
Vinyl chloride	**9.9**		**9.9**		0.39	U	0.1	U
Xylene, m/p	1.3	U	1.3	U	**14**		**3**	
Xylene, o	0.66	U	0.66	U	**3.7**		**0.93**	

Notes:
Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter (µg/m3)
Detections are indicated in **BOLD**
QC Code: FS = Field Sample
FD = Field Duplicate
Qualifiers: J = Estimated Value
U = Not detected at a concentration greater than the RL

Table 3.4: Sub-Slab Soil Vapor and Air Results-2010

Structure	Structure-50		Structure-50		Structure-52		Structure-52	
Type	Sub-Slab Vapor		Basement Air		Sub-Slab Vapor		Basement Air	
Sample ID	828072SS-50-01-B-10		828072IA-50-01-B-10		828072SS-52-01-B-10		828072IA-52-01-B-10	
Sample Date	3/24/2010		3/24/2010		3/24/2010		3/24/2010	
QC Code	FS		FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	**1.1**	J	0.83	U	**0.61**	J	0.83	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.2	U	1.2	U	1.2	U	1.2	U
1,1-Dichloroethane	**42**	J	0.62	U	**28**		0.62	U
1,1-Dichloroethene	0.6	U	0.6	U	0.6	U	0.6	U
1,2,4-Trichlorobenzene	1.1	UJ	1.1	U	1.1	U	1.1	U
1,2,4-Trimethylbenzene	**2.4**		**0.55**	J	**1.8**		0.75	U
1,2-Dichloroethane	**1.6**		0.62	U	**1.7**		**0.66**	
1,3,5-Trimethylbenzene	**1.5**		0.75	U	**0.9**		0.75	U
1,4-Dichlorobenzene	0.92	U	0.92	U	0.92	U	0.92	U
2-Butanone	**12**		**1.6**		**2.6**		**0.93**	
2-Hexanone	1.2	U	1.2	U	1.2	U	1.2	U
2-Propanol	**59**		**6.2**		**46**		**34**	
4-Ethyltoluene	**1.4**	J	0.75	UJ	**0.95**	J	0.75	UJ
4-Methyl-2-pentanone	1.2	U	**0.54**	J	1.2	U	1.2	U
Acetone	**91**		**14**		**38**		**25**	
Benzene	**2.3**		**0.88**		**1.7**		**0.78**	
Carbon disulfide	**14**		0.47	U	**17**		0.47	U
Carbon tetrachloride	**0.32**	J	**0.83**	J	**0.38**	J	**0.7**	J
Chloroform	0.74	U	0.74	U	**0.79**		0.74	U
Chloromethane	0.31	U	**0.69**		0.31	U	**0.82**	
Cis-1,2-Dichloroethene	**570**		**0.64**		**220**		0.6	U
Cyclohexane	**5.9**		**0.35**	J	**6.9**		**0.56**	
Dichlorodifluoromethane	**3.2**		**2.5**		**2.8**		**2.3**	
Ethyl acetate	**2.6**		**0.59**	J	**1.8**		**4.2**	
Ethyl benzene	**4.3**		0.66	U	**4.4**		0.66	U
Heptane	**9.2**		**0.5**	J	**7.1**		**0.54**	J
Hexane	**9.3**		**1.5**		**9.7**		**1.8**	
Isooctane	0.71	U	0.71	U	0.71	U	0.71	U
Methylene chloride	**0.92**		**0.49**	J	**0.74**		**0.74**	
Styrene	**2.6**		0.65	U	**2.8**		0.65	U
Tetrachloroethene	**4.1**		1	U	**3.9**		1	U
Tetrahydrofuran	0.45	U	0.45	U	0.45	U	**1.4**	
Toluene	**55**		**3.9**		**74**		**2.4**	
trans-1,2-Dichloroethene	**11**	J	0.6	U	**8**		0.6	U
Trichloroethene	**7**		**0.27**		**21**		**0.27**	
Trichlorofluoromethane	**1.2**		**1.6**		**1.4**		**2.1**	
Vinyl chloride	**20**		**0.1**		**37**		**0.13**	
Xylene, m/p	**7.5**	J	**0.49**	J	**7.1**	J	**0.57**	J
Xylene, o	**1.9**		0.66	U	**1.4**		0.66	U

Notes:
Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter (µg/m3)
Detections are indicated in **BOLD**
QC Code: FS = Field Sample
FD = Field Duplicate
Qualifiers: J = Estimated Value
U = Not detected at a concentration greater than the RL

Table 3.4: Sub-Slab Soil Vapor and Air Results-2010

Structure	Structure-55		Structure-55	
Type	Sub-Slab Vapor		Basement Air	
Sample ID	828072SS-55-01-B-10		828072IA-55-01-B-10	
Sample Date	3/23/2010		3/23/2010	
QC Code	FS		FS	
Parameter	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.83	U	0.83	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.2	U	1.2	U
1,1-Dichloroethane	0.62	U	0.62	U
1,1-Dichloroethene	0.6	U	0.6	U
1,2,4-Trichlorobenzene	1.1	U	1.1	U
1,2,4-Trimethylbenzene	**1.9**		**0.7**	J
1,2-Dichloroethane	**1.7**		**2**	
1,3,5-Trimethylbenzene	**1.1**		0.75	U
1,4-Dichlorobenzene	0.92	U	0.92	U
2-Butanone	**6.2**		**1.5**	
2-Hexanone	1.2	U	1.2	U
2-Propanol	**83**		**14**	
4-Ethyltoluene	**1**	J	0.75	UJ
4-Methyl-2-pentanone	**5.2**		1.2	U
Acetone	**110**		**26**	
Benzene	**12**		**2.1**	
Carbon disulfide	**36**		0.47	U
Carbon tetrachloride	**0.58**	J	**0.7**	J
Chloroform	**0.84**		0.74	U
Chloromethane	0.31	U	**0.84**	
Cis-1,2-Dichloroethene	0.6	U	0.6	U
Cyclohexane	**52**		**1**	
Dichlorodifluoromethane	**2.3**		**2.6**	
Ethyl acetate	**1.9**		**0.59**	J
Ethyl benzene	**5.8**		**0.71**	
Heptane	**79**		**1**	
Hexane	**65**		**2.9**	
Isooctane	**1.1**		**0.71**	
Methylene chloride	**0.92**		**0.85**	
Styrene	**2.8**		0.65	U
Tetrachloroethene	**4.1**		1	U
Tetrahydrofuran	0.45	U	0.45	U
Toluene	**120**		**6.1**	
trans-1,2-Dichloroethene	0.6	U	0.6	U
Trichloroethene	**3.8**		**0.33**	
Trichlorofluoromethane	**1.5**		**1.7**	
Vinyl chloride	0.39	U	0.1	U
Xylene, m/p	**8.4**	J	**2**	
Xylene, o	**2.3**		**0.66**	

Notes:
Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter (µg/m3)
Detections are indicated in **BOLD**
QC Code: FS = Field Sample
FD = Field Duplicate
Qualifiers: J = Estimated Value
U = Not detected at a concentration greater than the RL

Table 3.5: Post-Mitigation Confirmation Indoor Air Samples

Location	Structure 05		Structure 11		Structure 11	
Type	Basement Air		First Floor Air		Basement Air	
Sample Date	3/23/2010		1/15/2008		1/15/2008	
Sample ID	828072IA-05-01-B-C		828072 IA-11-1-C		828072-IA-11-B-C	
Qc Code	FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.83	U	0.832	U	0.832	U
1,1-Dichloroethane	0.62	U	0.617	U	0.617	U
1,1-Dichloroethene	0.6	U	0.605	U	0.605	U
1,2,4-Trimethylbenzene	0.75	U	**1.45**		**2.15**	
1,2-Dichloroethane	0.62	U	**1.56**		**0.823**	
1,3,5-Trimethylbenzene	0.75	U	**0.75**		**0.999**	
1,4-Dichlorobenzene	0.92	U	0.917	U	0.917	U
2-Butanone	**1.1**		**1.02**		**1.14**	
2-Propanol	**32**		0.375	U	**5.3**	
4-Ethyltoluene	0.75	UJ	**0.65**	J	**0.8**	
4-Methyl-2-pentanone	1.2	U	1.25	U	1.25	U
Acetone	**23**		**7.36**		**5.07**	
Benzene	**0.36**	J	**1.23**		**1.23**	
Carbon disulfide	0.47	U	0.475	U	0.475	U
Carbon tetrachloride	**0.77**	J	**0.448**		**0.448**	
Chlorodibromomethane	1.3	U	1.3	U	1.3	U
Chloroform	**0.6**	J	**0.496**	J	0.744	U
Chloromethane	**0.59**		**0.756**		**0.735**	
Cis-1,2-Dichloroethene	**0.56**	J	**0.564**	J	**0.927**	
Cyclohexane	0.52	U	0.525	U	**1.36**	
Dichlorodifluoromethane	**2.6**		**2.01**		**1.76**	
Ethyl acetate	0.92	U	0.916	U	**8.61**	
Ethyl benzene	0.66	U	**0.706**		**1.1**	
Heptane	0.62	U	**0.542**	J	**0.708**	
Hexane	**0.93**		**0.752**		**1.4**	
Isooctane	0.71	U	0.712	U	0.712	U
Methyl Tertbutyl Ether	0.55	U	0.55	U	0.55	U
Methylene chloride	**0.64**		**0.706**		**2.33**	
Styrene	0.65	U	0.649	U	0.649	U
Tetrachloroethene	1	U	1.03	U	1.03	U
Tetrahydrofuran	0.45	U	0.45	U	0.45	U
Toluene	**2.9**		**3.79**		**5.17**	
trans-1,2-Dichloroethene	0.6	U	0.604	U	0.604	U
Trichloroethene	**0.38**		**0.655**		**1.8**	
Trichlorofluoromethane	**1.4**		**0.971**		**1.54**	
Vinyl chloride	0.1	U	0.104	U	0.104	U
Xylene, m/p	1.3	U	**2.25**		**4.24**	
Xylene, o	0.66	U	**0.839**		**1.59**	

Notes:
Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter (µg/m3)
Detections are indicated in **BOLD**
QC Code: FS = Field Sample
Qualifiers: J = Estimated Value
U = Not detected at a concentration greater than the RL

Table 3.5: Post-Mitigation Confirmation Indoor Air Samples

Location	Structure 15		Structure 20		Structure 27	
Type	Basement Air		Basement Air		Basement Air	
Sample Date	1/15/2008		1/16/2008		1/16/2008	
Sample ID	828072-IA-15-B-C		828072IA-20-B-C		828072IA-27-B-C	
Qc Code	FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	**0.721**	J	0.832	U	0.832	U
1,1-Dichloroethane	0.617	U	0.617	U	0.617	U
1,1-Dichloroethene	0.605	U	0.605	U	0.605	U
1,2,4-Trimethylbenzene	**12.5**		**1.85**		**0.899**	
1,2-Dichloroethane	0.617	U	0.617	U	0.617	U
1,3,5-Trimethylbenzene	**8.69**		0.75	U	0.75	U
1,4-Dichlorobenzene	0.917	U	0.917	U	0.917	U
2-Butanone	**3.78**		**3.81**		**1.53**	
2-Propanol	**5.05**		0.375	U	0.375	U
4-Ethyltoluene	**7.25**		**0.75**		0.75	U
4-Methyl-2-pentanone	1.25	U	1.25	U	1.25	U
Acetone	**19.3**		**20.8**	J	**9.78**	
Benzene	**2.34**		**1.88**		**0.779**	
Carbon disulfide	**2.03**		**0.633**		**0.728**	
Carbon tetrachloride	**0.448**		**0.448**		**0.512**	
Chlorodibromomethane	1.3	U	1.3	U	1.3	U
Chloroform	**0.645**	J	0.744	U	0.744	U
Chloromethane	**0.756**		**0.777**		**0.735**	
Cis-1,2-Dichloroethene	0.604	U	0.604	U	**0.564**	J
Cyclohexane	0.525	U	0.525	U	0.525	U
Dichlorodifluoromethane	**2.66**		**2.82**		**2.61**	
Ethyl acetate	**1.87**		**0.916**		**2.05**	
Ethyl benzene	**1.19**		**0.662**		0.662	U
Heptane	**6.66**		**0.625**		0.625	U
Hexane	0.537	U	0.537	U	0.537	U
Isooctane	0.712	U	0.712	U	0.712	U
Methyl Tertbutyl Ether	0.55	U	0.55	U	0.55	U
Methylene chloride	**0.742**		**0.883**		**0.742**	
Styrene	0.649	U	0.649	U	0.649	U
Tetrachloroethene	**0.896**	J	1.03	U	1.03	U
Tetrahydrofuran	**2.79**		**1.53**		0.45	U
Toluene	**6.17**		**3.37**		**2.37**	
trans-1,2-Dichloroethene	0.604	U	0.604	U	0.604	U
Trichloroethene	**0.546**		**0.546**		**0.655**	
Trichlorofluoromethane	**0.857**		**1.37**		**1.6**	
Vinyl chloride	0.104	U	0.104	U	**0.364**	
Xylene, m/p	**4.1**		**1.77**		**0.971**	J
Xylene, o	**1.72**		**0.662**		**0.441**	

Notes:
Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter (µg/m3)
Detections are indicated in **BOLD**
QC Code: FS = Field Sample
Qualifiers: J = Estimated Value
U = Not detected at a concentration greater than the RL

Table 3.5: Post-Mitigation Confirmation Indoor Air Samples

Location	Structure 41		Structure 42		Structure 42	
Type	Basement Air		Basement Air		Basement Air	
Sample Date	3/10/2009		7/20/2009		4/8/2010	
Sample ID	828072-IA-41-B-03-C		828072IA-42-B-C		828072IA-42-B-C	
Qc Code	FS		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.83	U	0.83	U	0.83	U
1,1-Dichloroethane	**1.1**		0.62	U	0.62	U
1,1-Dichloroethene	**0.4**	J	0.6	U	0.6	U
1,2,4-Trimethylbenzene	**0.95**		**3.6**		**1.1**	
1,2-Dichloroethane	0.62	U	0.62	U	0.62	U
1,3,5-Trimethylbenzene	0.75	U	**0.9**		0.75	U
1,4-Dichlorobenzene	0.92	U	**0.79**	J	0.92	U
2-Butanone	**1.8**		**2.3**		**16**	J
2-Propanol	**8.2**		**28**		0.37	U
4-Ethyltoluene	0.75	U	**2**		0.75	U
4-Methyl-2-pentanone	**0.75**	J	1.2	U	**1**	J
Acetone	**18**		**23**		**53**	
Benzene	**0.97**		**2.4**		**0.94**	
Carbon disulfide	0.47	U	0.47	U	**0.73**	
Carbon tetrachloride	**0.7**		**0.45**		**0.58**	
Chlorodibromomethane	**6.4**		1.3	U	1.3	U
Chloroform	0.74	U	**0.55**	J	**0.69**	J
Chloromethane	**1.1**		**0.71**		**1.1**	
Cis-1,2-Dichloroethene	**64**		**0.4**	J	**0.93**	
Cyclohexane	**7.2**		0.52	U	0.52	U
Dichlorodifluoromethane	**2.9**		**2.5**		**2.6**	
Ethyl acetate	**0.73**	J	0.92	U	**14**	
Ethyl benzene	**0.66**		**2.6**		**0.97**	
Heptane	**0.79**		**1.4**		**1.2**	
Hexane	**0.97**		**2.4**		**1.3**	
Isooctane	0.71	U	**2.5**		**0.57**	J
Methyl Tertbutyl Ether	**4.7**		0.55	U	0.55	U
Methylene chloride	**0.39**	J	**1.6**		**1.6**	
Styrene	0.65	U	**0.52**	J	**0.48**	J
Tetrachloroethene	**5.3**		**12**		**0.97**	J
Tetrahydrofuran	**0.33**	J	0.45	U	**10**	
Toluene	**2.6**		**23**		**18**	
trans-1,2-Dichloroethene	**0.77**		0.6	U	0.6	U
Trichloroethene	**11**		0.22	U	**0.71**	
Trichlorofluoromethane	**1.6**		**6.1**		**6**	
Vinyl chloride	**8.3**		0.1	U	0.1	U
Xylene, m/p	**1.4**		**11**		**3**	
Xylene, o	**0.57**	J	**3**		**1.1**	

Notes:
Only Detected Compounds shown.
Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter (µg/m3)
Detections are indicated in **BOLD**
QC Code: FS = Field Sample
Qualifiers: J = Estimated Value
U = Not detected at a concentration greater than the RL

Table 3.6: Proposed Further Actions

Structure ID Number	Proposed Action
Action Based on Sampling Conducted by EA Engineering	
Structure 05	Mitigate - Installed 10/2009
Structure 11	Mitigate - Installed 11/2007
Structure 15	Mitigate - Installed 11/2007
Structure 16	Mitigate - Installed 8/2010
Structure 20	Mitigate - Installed 12/2007
Structure 27	Mitigate - Installed 11/2007
Action Based on Sampling Conducted by MACTEC	
Structure 07	Mitigate - Installed 7/30/08
Structure 18	NFA
Structure 35	Mitigate-Installed 8/24/10
Structure 37	NFA
Structure 39	NFA
Structure 40	NFA
Structure 41	Mitigate - Installed 8/4/08
Structure 42	Mitigate - Installed 2/5/09
Structure 43	NFA
Structure 44	NFA
Structure 45	NFA
Structure 46	NFA
Structure 47	NFA
Structure 48	NFA
Structure 49	NFA
Structure 50	Monitor
Structure 51	NFA
Structure 52	Monitor
Structure 53	NFA
Structure 54	NFA
Structure 55	NFA

Notes:
Proposed Action - Based on discussions with the NYSDEC and NYSDOH.
NFA = no further action

APPENDIX A

DATA USABILITY SUMMARY REPORT AND ANALYTICAL DATA

DATA VALIDATION REPORT

Volatile Analyses

SDG No. C0712007
Sampling Date: December 4-5, 2007

Submitted to:

MACTEC, Inc.,
511 Congress Street
Portland, ME 04112
207-775-5401

Submitted by:

EDV, Inc.,
1326 Orangewood Avenue
Pittsburgh, PA 15216
412-341-5281

February 4, 2008

Site:	NYDEC Erdle
Client:	MACTEC, Inc.
Analytical Laboratory:	Centek Laboratories 284 Sheffield Street Mountainside, NJ 07092
Sample Delivery Group (SDG):	C0O712007
Sampling Date:	December 4-5, 2007
Analyses:	Volatile
Analytical Method:	USEPA TO-15

Summary of Data Validation:

The adherence of laboratory analytical performance to USEPA TO-15 Analytical Specifications was evaluated during the data validation process. The USEPA Region II's data validation SOP Checklist (SOP HW-31 Rev 4, October 2006) and the National Functional Guidelines for Organic Data Review (October 1999), were used as guidelines for data qualifications.

Volatile: Isopropyl alcohol was qualified as estimated in sample 828072 SS-42-B due to calibration exceedance.

The sample qualifiers applied by the data validator are in section 15.0 and Attachment A- Form 1s. The detailed discussions can be found in the report.

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Table of Contents (Continued)

List of Appendices

1.0 Sample Identifications

The following table summarizes sample IDENTIFICATIONS, matrix of each sample and analyses present in the data package for each sample.

Client Sample ID	**Matrix**	**TO-15**
SDG C0712007		
828072 SS-07-B	Air	X
828072 SS-37-B	Air	X
828072 SS-39-B	Air	X
828072 SS-40-B	Air	X
828072 SS-41-B	Air	X
828072 SS-42-B	Air	**X**
828072 IA-07-B	Air	X
828072 IA-37-B	Air	X
828072 IA-39-B	Air	X
828072 IA-40-B	Air	X
828072 IA-41-B	Air	X
828072 IA-42-B	Air	X
828072 IA-07-I	Air	X
828072 IA-37-I	Air	X
828072 IA-39-I	Air	X
828072 IA-40-I	Air	X
828072 IA-41-I	Air	X
828072 IA-42-I	Air	X
828072 OA-12-5-07-1	Air	X
828072 OA—07-1	Air	X
828072 IA-39-BDUP	Air	X
QC sample ID	**Matrix**	
LCS	Air	**X**
LCSD	Air	**X**

2.0 Completeness Checklist

The following table identifies the summary form information and raw data found in the data package. Form numbers shown in parentheses refer to the current U.S. EPA CLP SOW equivalent reporting of results in an alternate summary format that has been determined to be acceptable. Analyses in this data package were performed in accordance with TO-15 Method.

Completeness Checklist

X	Case Narrative
X	Chain of Custody Records/Traffic Reports/Tracking Records
X	Preservation Information
X	Sample Cross Reference with Unique Identifiers
X	Sample Results Summary Form (Form 1/Form 1-TIC)
X	CLP Flagging used on Results Summary
X	SMC/Surrogate Results Summary (Form 2)
NR	Matrix Spike/Matrix Spike Duplicate Results Summary (Form 3)
X	Laboratory Control Sample (LCS)/ Blank Spike Results Summary (Form 3)
NR	Control Charts
X	Method/Preparation Blank Results Summary (Form 4)
X	Volatile Initial Calibration Summary (Forms 6)
X	Volatile Continuing Calibration Summary (Form 7)
X	Volatile Analytical Sequence (Form 8)
X	Internal Standard Area Summary (Form X11)
X	Raw Data (incl. IS, Surr/SMC, RT, quant. Reports, etc.)
X	Samples
X	Initial Calibration
NR	Clean-ups
X	Continuing Calibration
NR	Instrument Blanks
X	Preparation Blanks/Method Blanks
O	Other Blanks
X	LCS/Blank Spike
X	Matrix Spikes/Matrix Spike Duplicates
NR	Matrix Duplicates/Replicates
O	Field Blanks – Trip Blank
X	Field Duplicates
X	Extraction Log Benchsheets
X	Instrument Run Logs
X	Sample Descriptions
X	Legible Pages
X	Pages in Package Numbered and in Sequence
X	Electronic Data Deliverable (EDD)

X: Included in original Data Package
NR: Not Required
O: Not Included and/or Not Available
RS: Provided as a Resubmission
X/RS: Incomplete in original data package, completed as a resubmission

3.0 Detection Limits

Several compounds in several samples were reported at elevation detection limits due to dilutions.

4.0 Holding Time

Holding times were acceptable.

4.1 Sample Preservation

Samples were appropriately preserved.

4.2 Percent Moisture

Percent moisture was not applicable.

4.3 Chain of Custody Record

Chain of Custody Record was present.

5.0 Calibration Quality Control

5.1 Initial Calibration (ICAL)

The ICAL was acceptable.

5.2 Continuing Calibration (CCAL)

Isopropyl alcolhol-38% recovery exceeded the 30 %D criterion. The affected associated results were qualified as estimated due to this anomaly.

6.0 Blanks Quality Control

Results were acceptable.

7.0 Surrogate Recoveries

Recoveries were acceptable.

8.0 Accuracy

8.1 Laboratory Control Samples (LCS)/Blank Spikes

LCS recoveries were acceptable.

8.2 Matrix Spike/Matrix Spike Duplicates (MS/MSD)

8.2.1 Frequency

No MS/MSDs were analyzed.

8.2.2 Recovery

Recoveries were not applicable.

9.0 Precision

9.1 Matrix Spike Duplicates

The results were acceptable.

9.2 Matrix Duplicate

RPDs were acceptable.

10.0 Field QC

10.1 Field Blanks/Rinse Blanks

There were no field blanks associated with this SDG.

10.2 Trip Blanks

There were no trip blanks associated with this SDG.

10.3 Field Duplicate

Sample 828072 IA-39BDUP was presented as a field duplicate. The original sample is identified as 828072 IA-39B. RPDs are calculated when both original and duplicate report detects. RPDs were acceptable.

11.0 Internal Standards (IS)

11.1 IS Area Counts

IS area counts were acceptable.

11.2 Retention Time (RT)

All RTs were within the method accepted criteria.

12.0 Target Compound Identification

All target compounds identification was acceptable.

12.1 Tentatively Identified Compounds (TICs)

TICs were not applicable.

13.0 Calculations and Transcription

Raw data were accurately transcribed to summary data sheets.

14.0 Additional Comments

None.

15.0 Data Qualifier Table

Volatile

Sample Identification	Compound	Qualifier	Section Reference
828072 SS-42-B	Isopropyl alcohol	J	5.2

TABLE 2
RESULTS SUMMARY - SDG C0712007
AIR SAMPLES
DATA USABILITY SUMMARY REPORT
2008 REMEDIAL INVESTIGATION
ERDLE PERFORATING
GATES, NEW YORK

		Lab Sample Id	C0712007-001A		C0712007-002A		C0712007-003A		C0712007-004A		C0712007-005A	
		Lab Sample Delivery Group	C0712007		C0712007		C0712007		C0712007		C0712007	
		Loc Name	SS-07-B		SS-37-B		SS-39-B		SS-40-B		SS-41-B	
		Field Sample Id	828072 SS-07-B		828072 SS-37-B		828072 SS-39-B		828072 SS-40-B		828072 SS-41-B	
		Field Sample Date	12/4/2007		12/5/2007		12/4/2007		12/4/2007		12/5/2007	
		Qc Code	FS		FS		FS		FS		FS	
Analysis Method	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO15	1,1,1-Trichloroethane	ug/m3	2.9		0.83	U	0.83	U	0.83	U	0.83	U
TO15	1,1,2,2-Tetrachloroethane	ug/m3	1	U	1	U	1	U	1	U	1	U
TO15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	0.86	J	1.2	U	1.2	U	0.93	J	1.2	U
TO15	1,1,2-Trichloroethane	ug/m3	0.83	U	0.83	U	0.83	U	0.83	U	0.83	U
TO15	1,1-Dichloroethane	ug/m3	58		0.62	U	3.5		6		2.6	
TO15	1,1-Dichloroethene	ug/m3	23		0.6	U	0.6	U	0.6	U	0.6	U
TO15	1,2,4-Trichlorobenzene	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
TO15	1,2,4-Trimethylbenzene	ug/m3	81		160		110		120		110	
TO15	1,2-Dibromoethane	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
TO15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U	1.1	U	1.1	U	36		1.1	U
TO15	1,2-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U	0.92	U
TO15	1,2-Dichloroethane	ug/m3	0.62	U	0.62	U	0.62	U	0.62	U	0.62	U
TO15	1,2-Dichloropropane	ug/m3	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
TO15	1,3,5-Trimethylbenzene	ug/m3	23		40		29		34		28	
TO15	1,3-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U	0.92	U
TO15	1,4-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U	0.92	U
TO15	1,4-Dioxane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
TO15	2-Butanone	ug/m3	0.9	U	0.9	U	1.6		0.9	U	0.9	U
TO15	2-Hexanone	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
TO15	2-Propanol	ug/m3	0.37	U	0.37	U	0.37	U	31		0.37	U
TO15	4-Ethyltoluene	ug/m3	14		24		18		21		19	
TO15	4-Methyl-2-pentanone	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
TO15	Acetone	ug/m3	310		20		22		32		19	
TO15	Allyl chloride	ug/m3	0.48	U	0.48	U	0.48	U	0.48	U	0.48	U
TO15	Benzene	ug/m3	3.7		2.7		1.3		2.1		1.1	
TO15	Benzyl chloride	ug/m3	0.88	U	0.88	U	0.88	U	0.88	U	0.88	U
TO15	Bromodichloromethane	ug/m3	1	U	1	U	1	U	1	U	1	U
TO15	Bromoform	ug/m3	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U
TO15	Bromomethane	ug/m3	0.59	U	0.59	U	0.59	U	0.59	U	0.59	U
TO15	Butadiene, 1,3-	ug/m3	0.34	U	0.34	U	0.34	U	0.34	U	0.34	U
TO15	Carbon disulfide	ug/m3	1.7		1.1		1.6		0.82		1.2	
TO15	Carbon tetrachloride	ug/m3	0.96	U	0.96	U	0.96	U	0.96	U	0.96	U
TO15	Chlorobenzene	ug/m3	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
TO15	Chlorodibromomethane	ug/m3	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U

TABLE 2
RESULTS SUMMARY - SDG C0712007
AIR SAMPLES
DATA USABILITY SUMMARY REPORT
2008 REMEDIAL INVESTIGATION
ERDLE PERFORATING
GATES, NEW YORK

		Lab Sample Id	C0712007-001A		C0712007-002A		C0712007-003A		C0712007-004A		C0712007-005A	
		Lab Sample Delivery Group	C0712007		C0712007		C0712007		C0712007		C0712007	
		Loc Name	SS-07-B		SS-37-B		SS-39-B		SS-40-B		SS-41-B	
		Field Sample Id	828072 SS-07-B		828072 SS-37-B		828072 SS-39-B		828072 SS-40-B		828072 SS-41-B	
		Field Sample Date	12/4/2007		12/5/2007		12/4/2007		12/4/2007		12/5/2007	
		Qc Code	FS		FS		FS		FS		FS	
Analysis Method	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO15	Chloroethane	ug/m3	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
TO15	Chloroform	ug/m3	1.7		0.74	U	0.74	U	0.74	U	0.74	U
TO15	Chloromethane	ug/m3	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U
TO15	Cis-1,2-Dichloroethene	ug/m3	3,300		81		63		6		33	
TO15	cis-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U	0.69	U	0.69	U	0.69	U
TO15	Cyclohexene	ug/m3	17		7.6		5.5		8.4		4	
TO15	Dichlorodifluoromethane	ug/m3	4.4		2.8		2.9		4.7		2.7	
TO15	Ethyl acetate	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U	0.92	U
TO15	Ethyl benzene	ug/m3	13		13		13		16		13	
TO15	Heptane	ug/m3	18		8		5.3		9		4.2	
TO15	Hexachlorobutadiene	ug/m3	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U
TO15	Hexane	ug/m3	28		9.7		6.4		11		4.3	
TO15	Isooctane	ug/m3	4.2		1		4.3		8.1		3.4	
TO15	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U	0.55	U	0.55	U	0.55	U
TO15	Methylene chloride	ug/m3	1.2		18		0.74		0.78		0.64	
TO15	o-Xylene	ug/m3	19		24		20		25		20	
TO15	Propylene	ug/m3	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U
TO15	Styrene	ug/m3	0.65	U	0.65	U	0.65	U	0.65	U	0.65	U
TO15	Tetrachloroethene	ug/m3	2.7		2.1		3.1		5.5		3.2	
TO15	Tetrahydrofuran	ug/m3	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U
TO15	Toluene	ug/m3	22		32		22		26		22	
TO15	trans-1,2-Dichloroethene	ug/m3	21		0.6	U	0.6	U	0.6	U	0.81	
TO15	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U	0.69	U	0.69	U	0.69	U
TO15	Trichloroethene	ug/m3	400		2.9		0.6	J	5.1		2.6	
TO15	Trichlorofluoromethane	ug/m3	3.2		1.5		1.5		2		1.4	
TO15	Vinyl acetate	ug/m3	0.54	U	0.54	U	0.54	U	0.54	U	0.54	U
TO15	Vinyl bromide	ug/m3	0.67	U	0.67	U	0.67	U	0.67	U	0.67	U
TO15	Vinyl chloride	ug/m3	2,200		2		0	U	0	U	6	
TO15	Xylene, m/p	ug/m3	41		50		41		53		45	

Notes: ug/m3 = microgram per cubic meter
QC code: FS = field sample, FD = field duplicate
Qualifier: U = not detected at a concentration above the reporting limit
J = estimated value

TABLE 2
RESULTS SUMMARY - SDG C0712007
AIR SAMPLES
DATA USABILITY SUMMARY REPORT
2008 REMEDIAL INVESTIGATION
ERDLE PERFORATING
GATES, NEW YORK

		Lab Sample Id	C0712007-006A		C0712007-007A		C0712007-008A		C0712007-009A		C0712007-010A	
		Lab Sample Delivery Group	C0712007		C0712007		C0712007		C0712007		C0712007	
		Loc Name	SS-42-B		IA-07-B		IA-37-B		IA-39-B		IA-40-B	
		Field Sample Id	828072 SS-42-B		828072 IA-07-B		828072 IA-37-B		828072 IA-39-B		828072 IA-40-B	
		Field Sample Date	12/5/2007		12/4/2007		12/5/2007		12/4/2007		12/4/2007	
		Qc Code	FS		FS		FS		FS		FS	
Analysis Method	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO15	1,1,1-Trichloroethane	ug/m3	1.1		0.832	U	1.55		0.832	U	0.832	U
TO15	1,1,2,2-Tetrachloroethane	ug/m3	1	U	1.05	U	1.05	U	1.05	U	1.05	U
TO15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.2	U	1.17	U	1.17	U	1.17	U	1.17	U
TO15	1,1,2-Trichloroethane	ug/m3	0.83	U	0.832	U	0.832	U	0.832	U	0.832	U
TO15	1,1-Dichloroethane	ug/m3	93		0.617	U	0.617	U	0.617	U	0.617	U
TO15	1,1-Dichloroethene	ug/m3	25		0.605	U	0.605	U	0.605	U	0.605	U
TO15	1,2,4-Trichlorobenzene	ug/m3	1.1	U	1.13	U	1.13	U	1.13	U	1.13	U
TO15	1,2,4-Trimethylbenzene	ug/m3	110		3.5		2.1		0.849		98.9	
TO15	1,2-Dibromoethane	ug/m3	1.2	U	1.17	U	1.17	U	1.17	U	1.17	U
TO15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U	1.07	U	1.07	U	1.07	U	1.07	U
TO15	1,2-Dichlorobenzene	ug/m3	0.92	U	0.917	U	0.917	U	0.917	U	0.917	U
TO15	1,2-Dichloroethane	ug/m3	0.62	U	0.617	U	0.617	U	0.617	U	0.617	U
TO15	1,2-Dichloropropane	ug/m3	0.7	U	0.705	U	0.705	U	0.705	U	0.705	U
TO15	1,3,5-Trimethylbenzene	ug/m3	28		1.15		0.75	U	0.75	U	24.5	
TO15	1,3-Dichlorobenzene	ug/m3	0.92	U	0.917	U	0.917	U	0.917	U	0.917	U
TO15	1,4-Dichlorobenzene	ug/m3	0.92	U	0.917	U	0.917	U	0.917	U	0.917	U
TO15	1,4-Dioxane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
TO15	2-Butanone	ug/m3	0.9	U	0.899	U	0.899	U	0.899	U	0.899	U
TO15	2-Hexanone	ug/m3	1.2	U	1.25	U	1.25	U	1.25	U	1.25	U
TO15	2-Propanol	ug/m3	77	J	0.375	U	56.5		14.7		179	
TO15	4-Ethyltoluene	ug/m3	19		0.75	U	0.75	U	0.75	U	16	
TO15	4-Methyl-2-pentanone	ug/m3	1.2	U	1.25	U	1.25	U	1.25	U	1.25	U
TO15	Acetone	ug/m3	50		108		41.5		16.2		33.1	
TO15	Allyl chloride	ug/m3	0.48	U	0.477	U	0.477	U	0.477	U	0.477	U
TO15	Benzene	ug/m3	1.4		1.27		0.584		0.584		2.4	
TO15	Benzyl chloride	ug/m3	0.88	U	0.877	U	0.877	U	0.877	U	0.877	U
TO15	Bromodichloromethane	ug/m3	1	U	1.02	U	1.02	U	1.02	U	1.02	U
TO15	Bromoform	ug/m3	1.6	U	1.58	U	1.58	U	1.58	U	1.58	U
TO15	Bromomethane	ug/m3	0.59	U	0.592	U	0.592	U	0.592	U	0.592	U
TO15	Butadiene, 1,3-	ug/m3	0.34	U	0.337	U	0.337	U	0.337	U	0.337	U
TO15	Carbon disulfide	ug/m3	0.82		0.475	U	0.475	U	0.475	U	0.38	J
TO15	Carbon tetrachloride	ug/m3	0.96	U	0.256	U	0.256	U	0.256	U	0.384	
TO15	Chlorobenzene	ug/m3	0.7	U	0.702	U	0.702	U	0.702	U	0.702	U
TO15	Chlorodibromomethane	ug/m3	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U

TABLE 2
RESULTS SUMMARY - SDG C0712007
AIR SAMPLES
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ERDLE PERFORATING
GATES, NEW YORK

		Lab Sample Id	C0712007-006A		C0712007-007A		C0712007-008A		C0712007-009A		C0712007-010A	
		Lab Sample Delivery Group	C0712007		C0712007		C0712007		C0712007		C0712007	
		Loc Name	SS-42-B		IA-07-B		IA-37-B		IA-39-B		IA-40-B	
		Field Sample Id	828072 SS-42-B		828072 IA-07-B		828072 IA-37-B		828072 IA-39-B		828072 IA-40-B	
		Field Sample Date	12/5/2007		12/4/2007		12/5/2007		12/4/2007		12/4/2007	
		Qc Code	FS		FS		FS		FS		FS	
Analysis Method	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO15	Chloroethane	ug/m3	0.4	U	0.402	U	0.402	U	0.402	U	0.402	U
TO15	Chloroform	ug/m3	0.55	J	0.744	U	0.844		0.744	U	0.744	U
TO15	Chloromethane	ug/m3	0.31	U	0.315	U	0.315	U	0.315	U	0.315	U
TO15	Cis-1,2-Dichloroethene	ug/m3	9,100		1		2		0	J	1	U
TO15	cis-1,3-Dichloropropene	ug/m3	0.69	U	0.692	U	0.692	U	0.692	U	0.692	U
TO15	Cyclohexene	ug/m3	4		0.525	U	0.525	U	0.525	U	8.05	
TO15	Dichlorodifluoromethane	ug/m3	42		2.36		2.06		2.71		2.66	
TO15	Ethyl acetate	ug/m3	0.92	U	0.916	U	0.916	U	0.916	U	0.916	U
TO15	Ethyl benzene	ug/m3	14		0.883		1.59		0.662	U	13.7	
TO15	Heptane	ug/m3	4.6		1.04		0.625	U	0.625		6.83	
TO15	Hexachlorobutadiene	ug/m3	1.6	U	1.63	U	1.63	U	1.63	U	1.63	U
TO15	Hexane	ug/m3	5		0.537	U	0.537	U	1.07		8.24	
TO15	Isooctane	ug/m3	2.8		0.712	U	0.712	U	0.712	U	8.69	
TO15	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U	0.55	U	0.55	U	0.55	U
TO15	Methylene chloride	ug/m3	0.67		1.77		2.15		0.494	J	0.6	
TO15	o-Xylene	ug/m3	21		0.971		0.971		0.662	U	21.2	
TO15	Propylene	ug/m3	0.26	U	0.262	U	0.262	U	0.262	U	0.262	U
TO15	Styrene	ug/m3	0.65	U	0.563	J	2.38		0.736		0.649	U
TO15	Tetrachloroethene	ug/m3	3		1.03	U	1.38		1.03	U	3.03	
TO15	Tetrahydrofuran	ug/m3	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U
TO15	Toluene	ug/m3	21		5.17		4.56		5.82		23	
TO15	trans-1,2-Dichloroethene	ug/m3	60		0.604	U	0.604	U	0.604	U	0.604	U
TO15	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.692	U	0.692	U	0.692	U	0.692	U
TO15	Trichloroethene	ug/m3	420		0.765		0.546		0.218	U	15.3	
TO15	Trichlorofluoromethane	ug/m3	27		3.26		2.06		1.48		1.71	
TO15	Vinyl acetate	ug/m3	0.54	U	0.537	U	0.537	U	0.537	U	0.537	U
TO15	Vinyl bromide	ug/m3	0.67	U	0.667	U	0.667	U	0.667	U	0.667	U
TO15	Vinyl chloride	ug/m3	190		0	U	0	U	0	U	0	U
TO15	Xylene, m/p	ug/m3	49		2.56		4.15		1.06	J	43.7	

Notes: ug/m3 = microgram per cubic meter
QC code: FS = field sample, FD = field duplicate
Qualifier: U = not detected at a concentration above the reporting limit
J = estimated value

TABLE 2
RESULTS SUMMARY - SDG C0712007
AIR SAMPLES
DATA USABILITY SUMMARY REPORT
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ERDLE PERFORATING
GATES, NEW YORK

		Lab Sample Id	C0712007-011A		C0712007-012A		C0712007-013A		C0712007-014A		C0712007-015A	
		Lab Sample Delivery Group	C0712007		C0712007		C0712007		C0712007		C0712007	
		Loc Name	IA-41-B		IA-42-B		IA-07-1		IA-37-1		IA-39-1	
		Field Sample Id	828072 IA-41-B		828072 IA-42-B		828072 IA-07-1		828072 IA-37-1		828072 IA-39-1	
		Field Sample Date	12/5/2007		12/5/2007		12/4/2007		12/5/2007		12/4/2007	
		Qc Code	FS		FS		FS		FS		FS	
Analysis Method	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO15	1,1,1-Trichloroethane	ug/m3	0.832	U	0.832	U	0.832	U	1.89		0.832	U
TO15	1,1,2,2-Tetrachloroethane	ug/m3	1.05	U	1.05	U	1.05	U	1.05	U	1.05	U
TO15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.17	U	1.17	U	1.17	U	1.17	U	1.17	U
TO15	1,1,2-Trichloroethane	ug/m3	0.832	U	0.832	U	0.832	U	0.832	U	0.832	U
TO15	1,1-Dichloroethane	ug/m3	2.06		0.453	J	0.617	U	0.617	U	0.617	U
TO15	1,1-Dichloroethene	ug/m3	0.605	U	0.605	U	0.605	U	0.605	U	0.605	U
TO15	1,2,4-Trichlorobenzene	ug/m3	1.13	U	1.13	U	1.13	U	1.13	U	1.13	U
TO15	1,2,4-Trimethylbenzene	ug/m3	0.949		1.35		8.29		2.05		1.7	
TO15	1,2-Dibromoethane	ug/m3	1.17	U	1.17	U	1.17	U	1.17	U	1.17	U
TO15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.07	U	1.07	U	1.07	U	1.07	U	1.07	U
TO15	1,2-Dichlorobenzene	ug/m3	0.917	U	0.917	U	0.917	U	0.917	U	0.917	U
TO15	1,2-Dichloroethane	ug/m3	0.617	U	0.617	U	0.617	U	0.617	U	0.617	U
TO15	1,2-Dichloropropane	ug/m3	0.705	U	0.705	U	0.705	U	0.705	U	0.705	U
TO15	1,3,5-Trimethylbenzene	ug/m3	0.75	U	0.75	U	3.8		0.75	U	0.75	U
TO15	1,3-Dichlorobenzene	ug/m3	0.917	U	0.917	U	0.917	U	0.734	J	0.917	U
TO15	1,4-Dichlorobenzene	ug/m3	0.917	U	0.917	U	0.917	U	0.795	J	0.917	U
TO15	1,4-Dioxane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
TO15	2-Butanone	ug/m3	0.899	U	0.899	U	0.899	U	14		3.45	
TO15	2-Hexanone	ug/m3	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
TO15	2-Propanol	ug/m3	0.375	U	223		62.5		58.5		48.7	
TO15	4-Ethyltoluene	ug/m3	0.75	U	0.75	U	0.899		0.75	U	0.75	U
TO15	4-Methyl-2-pentanone	ug/m3	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
TO15	Acetone	ug/m3	31.4		43.5		103		61.3		140	
TO15	Allyl chloride	ug/m3	0.477	U	0.477	U	0.477	U	0.477	U	0.477	U
TO15	Benzene	ug/m3	0.487		0.747		2.18		0.649		0.714	
TO15	Benzyl chloride	ug/m3	0.877	U	0.877	U	0.877	U	0.877	U	0.877	U
TO15	Bromodichloromethane	ug/m3	1.02	U	1.02	U	1.02	U	1.02	U	1.02	U
TO15	Bromoform	ug/m3	1.58	U	1.58	U	1.58	U	1.58	U	1.58	U
TO15	Bromomethane	ug/m3	0.592	U	0.592	U	0.592	U	0.592	U	0.592	U
TO15	Butadiene, 1,3-	ug/m3	0.337	U	0.337	U	0.337	U	0.337	U	0.337	U
TO15	Carbon disulfide	ug/m3	0.475	U	0.475	U	0.475	U	0.475	U	0.348	J
TO15	Carbon tetrachloride	ug/m3	0.512		0.448		0.256	U	0.576		0.448	
TO15	Chlorobenzene	ug/m3	0.702	U	0.702	U	0.702	U	0.702	U	0.702	U
TO15	Chlorodibromomethane	ug/m3	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U

TABLE 2
RESULTS SUMMARY - SDG C0712007
AIR SAMPLES
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ERDLE PERFORATING
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		Lab Sample Id	C0712007-011A		C0712007-012A		C0712007-013A		C0712007-014A		C0712007-015A	
		Lab Sample Delivery Group	C0712007		C0712007		C0712007		C0712007		C0712007	
		Loc Name	IA-41-B		IA-42-B		IA-07-1		IA-37-1		IA-39-1	
		Field Sample Id	828072 IA-41-B		828072 IA-42-B		828072 IA-07-1		828072 IA-37-1		828072 IA-39-1	
		Field Sample Date	12/5/2007		12/5/2007		12/4/2007		12/5/2007		12/4/2007	
		Qc Code	FS		FS		FS		FS		FS	
Analysis Method	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO15	Chloroethane	ug/m3	0.402	U	0.402	U	0.402	U	0.402	U	0.402	U
TO15	Chloroform	ug/m3	0.546	J	0.744	U	0.546	J	1.09		0.744	U
TO15	Chloromethane	ug/m3	0.315	U	0.315	U	0.315	U	0.315	U	0.315	U
TO15	Cis-1,2-Dichloroethene	ug/m3	103		174		1		2		1	
TO15	cis-1,3-Dichloropropene	ug/m3	0.692	U	0.692	U	0.692	U	0.692	U	0.692	U
TO15	Cyclohexene	ug/m3	0.525	U	0.525	U	1.92		0.805		0.525	U
TO15	Dichlorodifluoromethane	ug/m3	1.71		71.4		2.31		3.67		2.82	
TO15	Ethyl acetate	ug/m3	0.916	U	0.916	U	0.916	U	0.916	U	0.916	U
TO15	Ethyl benzene	ug/m3	0.485	J	0.662	U	1.85		10.6	J	0.618	J
TO15	Heptane	ug/m3	0.625	U	0.625	U	2.79		0.625	U	0.458	J
TO15	Hexachlorobutadiene	ug/m3	1.63	U	1.63	U	1.63	U	1.63	U	1.63	U
TO15	Hexane	ug/m3	0.537	U	0.537	U	2.54		0.537	U	1.04	
TO15	Isooctane	ug/m3	0.475	J	0.712	U	0.617	J	0.712	U	0.712	U
TO15	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U	0.55	U	0.55	U	0.55	U
TO15	Methylene chloride	ug/m3	0.6		53.3		0.742		2.08		0.53	U
TO15	o-Xylene	ug/m3	0.662	U	0.662	U	2.47		1.02		0.662	U
TO15	Propylene	ug/m3	0.262	U	0.262	U	0.262	U	0.262	U	0.262	U
TO15	Styrene	ug/m3	0.649	U	0.649	U	1.13		3.07		0.866	
TO15	Tetrachloroethene	ug/m3	1.03	U	1.03	U	1.03	U	0.689	J	1.03	U
TO15	Tetrahydrofuran	ug/m3	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U
TO15	Toluene	ug/m3	2.37		2.3		17.6		6.51		8.81	
TO15	trans-1,2-Dichloroethene	ug/m3	0.604	U	0.604	U	0.604	U	0.604	U	0.604	U
TO15	trans-1,3-Dichloropropene	ug/m3	0.692	U	0.692	U	0.692	U	0.692	U	0.692	U
TO15	Trichloroethene	ug/m3	0.218	U	2.73		0.601		0.492		1.15	
TO15	Trichlorofluoromethane	ug/m3	1.31		47.4		2.86		2.28		1.54	
TO15	Vinyl acetate	ug/m3	0.537	U	0.537	U	0.537	U	0.537	U	0.537	U
TO15	Vinyl bromide	ug/m3	0.667	U	0.667	U	0.667	U	0.667	U	0.667	U
TO15	Vinyl chloride	ug/m3	118		0	U	0	U	0	U	0	U
TO15	Xylene, m/p	ug/m3	1.1	J	1.06	J	6.05		5.52		1.37	

Notes: ug/m3 = microgram per cubic meter
QC code: FS = field sample, FD = field duplicate
Qualifier: U = not detected at a concentration above the reporting limit
J = estimated value

TABLE 2
RESULTS SUMMARY - SDG C0712007
AIR SAMPLES
DATA USABILITY SUMMARY REPORT
2008 REMEDIAL INVESTIGATION
ERDLE PERFORATING
GATES, NEW YORK

		Lab Sample Id	C0712007-016A		C0712007-017A		C0712007-018A		C0712007-019A		C0712007-020A		C0712007-021A	
		Lab Sample Delivery Group	C0712007		C0712007		C0712007		C0712007		C0712007		C0712007	
		Loc Name	IA-40-1		IA-41-1		IA-42-1		OA-42		OA-07		IA-39	
		Field Sample Id	828072 IA-40-1		828072 IA-41-1		828072 IA-42-1		828072-OA-12-5-07-1		828072 OA-07-1		828072 IA-39-BDUP	
		Field Sample Date	12/4/2007		12/5/2007		12/5/2007		12/5/2007		12/4/2007		12/4/2007	
		Qc Code	FS		FS		FS		FS		FS		FD	
Analysis Method	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO15	1,1,1-Trichloroethane	ug/m3	0.832	U	0.832	U	0.832	U	2.77		0.832	U	0.832	U
TO15	1,1,2,2-Tetrachloroethane	ug/m3	1.05	U	1.05	U	1.05	U	1.05	U	1.05	U	1.05	U
TO15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.17	U	1.17	U	1.17	U	0.779	J	1.17	U	1.17	U
TO15	1,1,2-Trichloroethane	ug/m3	0.832	U	0.832	U	0.832	U	0.832	U	0.832	U	0.832	U
TO15	1,1-Dichloroethane	ug/m3	0.617	U	1.93		0.617	U	0.617	U	0.617	U	0.617	U
TO15	1,1-Dichloroethene	ug/m3	0.605	U	0.605	U	0.605	U	0.605	U	0.605	U	0.605	U
TO15	1,2,4-Trichlorobenzene	ug/m3	1.13	U	1.13	U	1.13	U	1.13	U	1.13	U	1.13	U
TO15	1,2,4-Trimethylbenzene	ug/m3	3.05		1.1		1.5		7.05		0.799		1.35	
TO15	1,2-Dibromoethane	ug/m3	1.17	U	1.17	U	1.17	U	1.17	U	1.17	U	1.17	U
TO15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.07	U	1.07	U	1.07	U	1.07	U	1.07	U	1.07	U
TO15	1,2-Dichlorobenzene	ug/m3	0.917	U	0.917	U	0.917	U	0.917	U	0.917	U	0.917	U
TO15	1,2-Dichloroethane	ug/m3	0.617	U	0.617	U	0.617	U	0.617	U	0.617	U	0.617	U
TO15	1,2-Dichloropropane	ug/m3	0.705	U	0.705	U	0.705	U	0.705	U	0.705	U	0.705	U
TO15	1,3,5-Trimethylbenzene	ug/m3	1.4		0.75	U	0.75	U	2.1		0.75	U	0.75	U
TO15	1,3-Dichlorobenzene	ug/m3	0.917	U	0.917	U	0.917	U	0.917	U	0.917	U	0.917	U
TO15	1,4-Dichlorobenzene	ug/m3	0.917	U	0.917	U	0.917	U	0.917	U	0.917	U	0.917	U
TO15	1,4-Dioxane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
TO15	2-Butanone	ug/m3	0.899	U	0.899	U	0.899	U	0.899	U	0.899	U	0.899	U
TO15	2-Hexanone	ug/m3	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
TO15	2-Propanol	ug/m3	679		0.375	U	214		0.375	U	0.375	U	13.5	
TO15	4-Ethyltoluene	ug/m3	0.6	J	0.75	U	0.75	U	1.9		0.75	U	0.75	U
TO15	4-Methyl-2-pentanone	ug/m3	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
TO15	Acetone	ug/m3	61.3		30.9		50.2		31.9		15.9		24.6	
TO15	Allyl chloride	ug/m3	0.477	U	0.477	U	0.477	U	0.477	U	0.477	U	0.477	U
TO15	Benzene	ug/m3	2.24		0.487		1.27		0.455	J	0.455	J	0.649	
TO15	Benzyl chloride	ug/m3	0.877	U	0.877	U	0.877	U	0.877	U	0.877	U	0.877	U
TO15	Bromodichloromethane	ug/m3	1.02	U	1.02	U	1.02	U	1.02	U	1.02	U	1.02	U
TO15	Bromoform	ug/m3	1.58	U	1.58	U	1.58	U	1.58	U	1.58	U	1.58	U
TO15	Bromomethane	ug/m3	0.592	U	0.592	U	0.592	U	0.592	U	0.592	U	0.592	U
TO15	Butadiene, 1,3-	ug/m3	0.337	U	0.337	U	0.337	U	0.337	U	0.337	U	0.337	U
TO15	Carbon disulfide	ug/m3	0.475	U	0.475	U	0.475	U	0.475	U	0.475	U	0.475	U
TO15	Carbon tetrachloride	ug/m3	0.256	U	0.512		0.256	U	0.448		0.256	U	0.448	
TO15	Chlorobenzene	ug/m3	0.702	U	0.702	U	0.702	U	0.702	U	0.702	U	0.702	U
TO15	Chlorodibromomethane	ug/m3	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U

TABLE 2
RESULTS SUMMARY - SDG C0712007
AIR SAMPLES
DATA USABILITY SUMMARY REPORT
2008 REMEDIAL INVESTIGATION
ERDLE PERFORATING
GATES, NEW YORK

		Lab Sample Id	C0712007-016A		C0712007-017A		C0712007-018A		C0712007-019A		C0712007-020A		C0712007-021A	
		Lab Sample Delivery Group	C0712007		C0712007		C0712007		C0712007		C0712007		C0712007	
		Loc Name	IA-40-1		IA-41-1		IA-42-1		OA-42		OA-07		IA-39	
		Field Sample Id	828072 IA-40-1		828072 IA-41-1		828072 IA-42-1		828072-OA-12-5-07-1		828072 OA-07-1		828072 IA-39-BDUP	
		Field Sample Date	12/4/2007		12/5/2007		12/5/2007		12/5/2007		12/4/2007		12/4/2007	
		Qc Code	FS		FS		FS		FS		FS		FD	
Analysis Method	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO15	Chloroethane	ug/m3	0.402	U	0.402	U	0.402	U	0.402	U	0.402	U	0.402	U
TO15	Chloroform	ug/m3	0.744	U	0.794		0.744	U	0.744	U	0.744	U	0.744	U
TO15	Chloromethane	ug/m3	0.315	U	0.315	U	0.315	U	0.315	U	0.315	U	0.315	U
TO15	Cis-1,2-Dichloroethene	ug/m3	1	U	56		48		0	J	1	U	0	J
TO15	cis-1,3-Dichloropropene	ug/m3	0.692	U	0.692	U	0.692	U	0.692	U	0.692	U	0.692	U
TO15	Cyclohexene	ug/m3	0.525	U	0.525	U	0.525	U	0.525	U	0.525	U	0.49	J
TO15	Dichlorodifluoromethane	ug/m3	2.87		2.61		93		3.07		2.61		2.82	
TO15	Ethyl acetate	ug/m3	0.916	U	0.916	U	0.916	U	0.916	U	0.916	U	0.916	U
TO15	Ethyl benzene	ug/m3	1.9		0.662		0.53	J	1.77		0.662	U	5.74	
TO15	Heptane	ug/m3	0.875		0.625	U	0.625	U	0.417	J	0.625	U	0.542	J
TO15	Hexachlorobutadiene	ug/m3	1.63	U	1.63	U	1.63	U	1.63	U	1.63	U	1.63	U
TO15	Hexane	ug/m3	3.62		0.681		0.537	U	0.824		0.43	J	1.29	
TO15	Isooctane	ug/m3	0.665	J	0.617	J	0.712	U	0.712	U	0.712	U	0.712	U
TO15	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U	0.55	U	0.55	U	0.55	U	0.55	U
TO15	Methylene chloride	ug/m3	0.53	U	0.6		165		5.9		0.53	U	0.636	
TO15	o-Xylene	ug/m3	1.46		0.485	J	0.662	U	2.38		0.662	U	0.53	J
TO15	Propylene	ug/m3	0.262	U	0.262	U	0.262	U	0.262	U	0.262	U	0.262	U
TO15	Styrene	ug/m3	0.649	U	0.649	U	0.649	U	0.649	U	0.649	U	1.13	
TO15	Tetrachloroethene	ug/m3	1.03	U	1.03	U	1.03	U	0.758	J	1.03	U	1.03	U
TO15	Tetrahydrofuran	ug/m3	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U
TO15	Toluene	ug/m3	12.6		2.99		3.18		2.72		1.11		6.59	
TO15	trans-1,2-Dichloroethene	ug/m3	0.604	U	0.725		0.604	U	0.604	U	0.604	U	0.604	U
TO15	trans-1,3-Dichloropropene	ug/m3	0.692	U	0.692	U	0.692	U	0.692	U	0.692	U	0.692	U
TO15	Trichloroethene	ug/m3	0.218	U	0.218	U	2.73		7.05		0.218	U	0.492	
TO15	Trichlorofluoromethane	ug/m3	2.17		1.54		62.8		1.88		1.54		1.88	
TO15	Vinyl acetate	ug/m3	0.537	U	0.537	U	0.537	U	0.537	U	0.537	U	0.537	U
TO15	Vinyl bromide	ug/m3	0.667	U	0.667	U	0.667	U	0.667	U	0.667	U	0.667	U
TO15	Vinyl chloride	ug/m3	0	U	83		1		0	U	0	U	0	U
TO15	Xylene, m/p	ug/m3	6.18		1.32		1.28	J	5.74		0.794	J	1.77	

Notes: ug/m3 = microgram per cubic meter
QC code: FS = field sample, FD = field duplicate
Qualifier: U = not detected at a concentration above the reporting limit
J = estimated value

DATA VALIDATION REPORT

Volatile Analyses

SDG No. C0712015
Sampling Date: December 6, 2007

Submitted to:

MACTEC, Inc.,
511 Congress Street
Portland, ME 04112
207-775-5401

Submitted by:

EDV, Inc.,
1326 Orangewood Avenue
Pittsburgh, PA 15216
412-341-5281

February 28, 2008

Site:	NYDEC Erdle
Client:	MACTEC, Inc.
Analytical Laboratory:	Centek Laboratories 284 Sheffield Street Mountainside, NJ 07092
Sample Delivery Group (SDG):	CO712015
Sampling Date:	December 6, 2007
Analyses:	Volatile
Analytical Method:	USEPA TO-15

Summary of Data Validation:

The adherence of laboratory analytical performance to USEPA TO-15 Analytical Specifications were evaluated during the data validation process. The USEPA Region II's data validation SOP Checklists (SOP HW-31 Rev 4, October 2006**,** and the National Functional Guidelines for Organic Data Review (October 1999), were used as guidelines for data qualifications.

Volatile: The results as presented by the laboratory are acceptable.

The sample qualifiers applied by the data validator are in section 15.0 and Attachment A- Form 1s. The detailed discussions can be found in the report.

Table of Contents

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List of Appendices

1.0 Sample Identifications

The following table summarizes sample IDENTIFICATIONS, matrix of each sample and analyses present in the data package for each sample.

Client Sample ID	Matrix	TO-15
SDG C0712015		
828072 SS-43-B	Air	X
828072 IA-43-B	Air	X
828072 IA-43-I	Air	X
828072 OA43-I	Air	X
QC sample ID	**Matrix**	
LCS	Air	**X**
LCSD	Air	**X**

2.0 Completeness Checklist

The following table identifies the summary form information and raw data found in the data package. Form numbers shown in parentheses refer to the current U.S. EPA CLP SOW equivalent reporting of results in an alternate summary format that has been determined to be acceptable. Analyses in this data package were performed in accordance with TO-15 Methods.

Completeness Checklist

X	Case Narrative
X	Chain of Custody Records/Traffic Reports/Tracking Records
X	Preservation Information
X	Sample Cross Reference with Unique Identifiers
X	Sample Results Summary Form (Form 1/Form 1-TIC)
X	CLP Flagging used on Results Summary
X	SMC/Surrogate Results Summary (Form 2)
NR	Matrix Spike/Matrix Spike Duplicate Results Summary (Form 3)
X	Laboratory Control Sample (LCS)/ Blank Spike Results Summary (Form 3)
NR	Control Charts
X	Method/Preparation Blank Results Summary (Form 4)
X	Volatile Initial Calibration Summary (Forms 6)
X	Volatile Continuing Calibration Summary (Form 7)
X	Volatile Analytical Sequence (Form 8)
X	Internal Standard Area Summary (Form X11)
X	Raw Data (incl. IS, Surr/SMC, RT, quant. Reports, etc.)
X	Samples
X	Initial Calibration
NR	Clean-ups
X	Continuing Calibration
NR	Instrument Blanks
X	Preparation Blanks/Method Blanks
O	Other Blanks
X	LCS/Blank Spike
X	Matrix Spikes/Matrix Spike Duplicates
NR	Matrix Duplicates/Replicates
O	Field Blanks – Trip Blank
X	Field Duplicates
X	Extraction Log Benchsheets
X	Instrument Run Logs
X	Sample Descriptions
X	Legible Pages
X	Pages in Package Numbered and in Sequence
X	Electronic Data Deliverable (EDD)

X: Included in original Data Package
NR: Not Required
O: Not Included and/or Not Available
RS: Provided as a Resubmission
X/RS: Incomplete in original data package, completed as a resubmission

3.0 Detection Limits

Several compounds in several samples were reported at elevation detection limits due to dilutions.

4.0 Holding Time

Holding times were acceptable.

4.1 Sample Preservation

Samples were appropriately preserved.

4.2 Percent Moisture

Percent moisture was not applicable.

4.3 Chain of Custody Record

Chain of Custody Record was present.

5.0 Calibration Quality Control

5.1 Initial Calibration (ICAL)

The ICAL was acceptable.

5.2 Continuing Calibration (CCAL)

CCAL was acceptable.

6.0 Blanks Quality Control

Results were acceptable.

7.0 Surrogate Recoveries

Recoveries were acceptable.

8.0 Accuracy

8.1 Laboratory Control Samples (LCS)/Blank Spikes

LCS recoveries were acceptable.

8.2 Matrix Spike/Matrix Spike Duplicates (MS/MSD)

8.2.1 Frequency

No MS/MSDs were analyzed.

8.2.2 Recovery

Recoveries were not applicable.

9.0 Precision

9.1 Matrix Spike Duplicates

The results were acceptable.

9.2 Matrix Duplicate

RPDs were acceptable.

10.0 Field QC

10.1 Field Blanks/Rinse Blanks

There were no field blanks associated with this SDG.

10.2 Trip Blanks

There were no field blanks associated with this SDG.

10.3 Field Duplicate

There were no field duplicates included in this SDG.

11.0 Internal Standards (IS)

11.1 IS Area Counts

IS area counts were acceptable.

11.2 Retention Time (RT)

All RTs were within the method accepted criteria.

12.0 Target Compound Identification

All target compounds identification was acceptable.

12.1 Tentatively Identified Compounds (TICs)

TICs were not applicable.

13.0 Calculations and Transcription

Raw data were accurately transcribed to summary data sheets.

14.0 Additional Comments

None.

15.0 Data Qualifier Table

No data were qualified.

TABLE 2
RESULTS SUMMARY - SDG C0712015
AIR SAMPLES
DATA USABILITY SUMMARY REPORT
2008 REMEDIAL INVESTIGATION
ERDLE PERFORATING
GATES, NEW YORK

		Lab Sample Id	C0712015-001A		C0712015-002A		C0712015-003A		C0712015-004A	
		Lab Sample Delivery Group	C0712015		C0712015		C0712015		C0712015	
		Loc Name	SS-43-B		IA-43-B		IA-43-1		OA-43	
		Field Sample Id	828072 SS-43-B		828072 IA-43-B		828072 IA-43-1		828072 OA-43-1	
		Field Sample Date	12/6/2007		12/6/2007		12/6/2007		12/6/2007	
		Qc Code	FS		FS		FS		FS	
Analysis Method	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO15	1,1,1-Trichloroethane	ug/m3	2.3		0.832	U	0.832	U	0.832	U
TO15	1,1,2,2-Tetrachloroethane	ug/m3	1	U	1.05	U	1.05	U	1.05	U
TO15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.2	U	1.17	U	1.17	U	1.17	U
TO15	1,1,2-Trichloroethane	ug/m3	0.83	U	0.832	U	0.832	U	0.832	U
TO15	1,1-Dichloroethane	ug/m3	2.1		0.617	U	0.617	U	0.617	U
TO15	1,1-Dichloroethene	ug/m3	0.6	U	0.605	U	0.605	U	0.605	U
TO15	1,2,4-Trichlorobenzene	ug/m3	1.1	U	1.13	U	1.13	U	1.13	U
TO15	1,2,4-Trimethylbenzene	ug/m3	47		0.55	J	0.899		10.2	
TO15	1,2-Dibromoethane	ug/m3	1.2	U	1.17	U	1.17	U	1.17	U
TO15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U	1.07	U	1.07	U	1.07	U
TO15	1,2-Dichlorobenzene	ug/m3	0.92	U	0.917	U	0.917	U	0.917	U
TO15	1,2-Dichloroethane	ug/m3	0.62	U	0.617	U	0.617	U	0.617	U
TO15	1,2-Dichloropropane	ug/m3	0.7	U	0.705	U	0.705	U	0.705	U
TO15	1,3,5-Trimethylbenzene	ug/m3	15		0.75	U	0.75	U	3	
TO15	1,3-Dichlorobenzene	ug/m3	0.92	U	0.917	U	0.917	U	0.917	U
TO15	1,4-Dichlorobenzene	ug/m3	0.92	U	0.856	J	1.35		0.917	U
TO15	1,4-Dioxane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
TO15	2-Butanone	ug/m3	6		0.719	J	0.929		0.959	
TO15	2-Hexanone	ug/m3	0.54	J	1.25	U	1.25	U	1.25	U
TO15	2-Propanol	ug/m3	9.2		7		11.4		0.375	U
TO15	4-Ethyltoluene	ug/m3	18		0.75	U	0.75	U	4.25	
TO15	4-Methyl-2-pentanone	ug/m3	0.67	J	1.25	U	1.25	U	1.25	U
TO15	Acetone	ug/m3	73		8.57		12.1		168	
TO15	Allyl chloride	ug/m3	0.48	U	0.477	U	0.477	U	0.477	U
TO15	Benzene	ug/m3	1.9		0.52		0.552		2.47	
TO15	Benzyl chloride	ug/m3	0.88	U	0.877	U	0.877	U	0.877	U

TABLE 2
RESULTS SUMMARY - SDG C0712015
AIR SAMPLES
DATA USABILITY SUMMARY REPORT
2008 REMEDIAL INVESTIGATION
ERDLE PERFORATING
GATES, NEW YORK

		Lab Sample Id	C0712015-001A		C0712015-002A		C0712015-003A		C0712015-004A	
		Lab Sample Delivery Group	C0712015		C0712015		C0712015		C0712015	
		Loc Name	SS-43-B		IA-43-B		IA-43-1		OA-43	
		Field Sample Id	828072 SS-43-B		828072 IA-43-B		828072 IA-43-1		828072 OA-43-1	
		Field Sample Date	12/6/2007		12/6/2007		12/6/2007		12/6/2007	
		Qc Code	FS		FS		FS		FS	
Analysis Method	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO15	Bromodichloromethane	ug/m3	1	U	1.02	U	1.02	U	1.02	U
TO15	Bromoform	ug/m3	1.6	U	1.58	U	1.58	U	1.58	U
TO15	Bromomethane	ug/m3	0.59	U	0.592	U	0.592	U	0.592	U
TO15	Butadiene, 1,3-	ug/m3	0.34	U	0.337	U	0.337	U	0.337	U
TO15	Carbon disulfide	ug/m3	2.2		0.475	U	0.475	U	0.475	U
TO15	Carbon tetrachloride	ug/m3	0.38	J	0.448		0.512		0.448	
TO15	Chlorobenzene	ug/m3	0.7	U	0.702	U	0.702	U	0.702	U
TO15	Chlorodibromomethane	ug/m3	1.3	U	1.3	U	1.3	U	1.3	U
TO15	Chloroethane	ug/m3	0.4	U	0.402	U	0.402	U	0.402	U
TO15	Chloroform	ug/m3	0.79		0.744	U	0.744	U	0.744	U
TO15	Chloromethane	ug/m3	0.31	U	0.672		0.651		0.693	
TO15	Cis-1,2-Dichloroethene	ug/m3	2.3		0.604	U	0.604	U	0.604	U
TO15	cis-1,3-Dichloropropene	ug/m3	0.69	U	0.692	U	0.692	U	0.692	U
TO15	Cyclohexene	ug/m3	3.8		0.525	U	0.525	U	0.735	
TO15	Dichlorodifluoromethane	ug/m3	4.6		12.3		16.1		2.31	
TO15	Ethyl acetate	ug/m3	0.4	J	1.36		3.96		0.916	U
TO15	Ethyl benzene	ug/m3	8.8		0.662	U	1.46		2.25	
TO15	Heptane	ug/m3	4.2		0.625	U	0.625	U	0.791	
TO15	Hexachlorobutadiene	ug/m3	1.6	U	1.63	U	1.63	U	1.63	U
TO15	Hexane	ug/m3	0.54	U	0.537	U	0.537	U	0.788	
TO15	Isooctane	ug/m3	1.5		0.712	U	0.712	U	0.475	J
TO15	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U	0.55	U	0.55	U
TO15	Methylene chloride	ug/m3	0.49	J	0.388	J	0.459	J	0.53	U
TO15	o-Xylene	ug/m3	15		0.662	U	1.41		4.06	
TO15	Propylene	ug/m3	0.26	U	0.262	U	0.262	U	0.262	U
TO15	Styrene	ug/m3	0.65	U	0.649	U	0.649	U	0.779	

TABLE 2
RESULTS SUMMARY - SDG C0712015
AIR SAMPLES
DATA USABILITY SUMMARY REPORT
2008 REMEDIAL INVESTIGATION
ERDLE PERFORATING
GATES, NEW YORK

		Lab Sample Id	C0712015-001A		C0712015-002A		C0712015-003A		C0712015-004A	
		Lab Sample Delivery Group	C0712015		C0712015		C0712015		C0712015	
		Loc Name	SS-43-B		IA-43-B		IA-43-1		OA-43	
		Field Sample Id	828072 SS-43-B		828072 IA-43-B		828072 IA-43-1		828072 OA-43-1	
		Field Sample Date	12/6/2007		12/6/2007		12/6/2007		12/6/2007	
		Qc Code	FS		FS		FS		FS	
Analysis Method	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO15	Tetrachloroethene	ug/m3	2.3		1.03	U	1.03	U	0.758	J
TO15	Tetrahydrofuran	ug/m3	2.2		0.45	U	0.45	U	0.45	U
TO15	Toluene	ug/m3	15		1.3		1.88		7.12	
TO15	trans-1,2-Dichloroethene	ug/m3	0.6	U	0.604	U	0.604	U	0.604	U
TO15	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.692	U	0.692	U	0.692	U
TO15	Trichloroethene	ug/m3	0.55	J	0.273		0.382		0.218	
TO15	Trichlorofluoromethane	ug/m3	2.3		6.11		7.54		1.14	
TO15	Vinyl acetate	ug/m3	0.54	U	0.537	U	0.537	U	0.537	U
TO15	Vinyl bromide	ug/m3	0.67	U	0.667	U	0.667	U	0.667	U
TO15	Vinyl chloride	ug/m3	0.39	U	0.39	U	0.39	U	0.39	U
TO15	Xylene, m/p	ug/m3	25		0.485	J	4.19		7.81	

Notes: ug/m3 = microgram per cubic meter
QC code: FS = field sample
Qualifier: U = not detected at a concentration above the reporting limit
J = estimated value

DATA VALIDATION REPORT

Volatile Analyses

SDG No. C0801032
Sampling Date: January 15-16, 2008

Submitted to:

MACTEC, Inc.,
511 Congress Street
Portland, ME 04112
207-775-5401

Submitted by:

EDV, Inc.,
1326 Orangewood Avenue
Pittsburgh, PA 15216
412-341-5281

April 1, 2008

Site:	NYDEC Erdle
Client:	MACTEC, Inc.
Analytical Laboratory:	Centek Laboratories 284 Sheffield Street Mountainside, NJ 07092
Sample Delivery Group (SDG):	C0801032
Sampling Date:	January 15-16, 2008
Analyses:	Volatile
Analytical Method:	USEPA TO-15

Summary of Data Validation:

The adherence of laboratory analytical performance to USEPA TO-15 Analytical Specifications was evaluated during the data validation process. The USEPA Region II's data validation SOP Checklist (SOP HW-31 Rev 4, October 2006) and the National Functional Guidelines for Organic Data Review (October 1999) were used as guidelines for data qualifications.

Several sample results were qualified as estimated due to surrogate, internal standard or precision issues.

The sample qualifiers applied by the data validator are in section 15.0 and Attachment A- Form 1s. The detailed discussions can be found in the report.

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List of Appendices

1.0 Sample Identifications

The following table summarizes sample IDENTIFICATIONS, matrix of each sample and analyses present in the data package for each sample.

Client Sample ID	Matrix	TO-15
SDG C0801032		
828072 IA-15-B-C	Air	X
828072-OA-011508-01	Air	X
828072 IA-11-B-C	Air	X
828072 IA-11-1-C	Air	X
828072 OA-011508-02	Air	X
828072 SS-35-B-02	Air	**X**
828072 IA-35-B-02	Air	X
828072 IA-35-1-02	Air	X
828072 IA-20-B-C	Air	X
828072 SS-41-B-02	Air	X
828072 IA-41-B-02	Air	X
828072 IA-41-1-02	Air	X
828072 SS-40-B-02	Air	X
828072 IA-40-B-02	Air	X
828072 IA-40-1-02	Air	X
828072 OA-011608-02	Air	X
828072 SS-40-B-02D	Air	X
828072 IA-40-B-02D	Air	X
828072 IA-18-1-02	Air	X
828072 OA-011608-01	Air	X
828072 IA-18-B-02	Air	X
828072 SS-18B-02	Air	X
828072 IA-27-B-C	Air	X
QC sample ID	**Matrix**	
LCS	Air	**X**
LCSD	Air	**X**

2.0 Completeness Checklist

The following table identifies the summary form information and raw data found in the data package. Form numbers shown in parentheses refer to the current U.S. EPA CLP SOW equivalent reporting of results in an alternate summary format that has been determined to be acceptable. Analyses in this data package were performed in accordance with TO-15 Method.

Completeness Checklist

X	Case Narrative
X	Chain of Custody Records/Traffic Reports/Tracking Records
X	Preservation Information
X	Sample Cross Reference with Unique Identifiers
X	Sample Results Summary Form (Form 1/Form 1-TIC)
X	CLP Flagging used on Results Summary
X	SMC/Surrogate Results Summary (Form 2)
NR	Matrix Spike/Matrix Spike Duplicate Results Summary (Form 3)
X	Laboratory Control Sample (LCS)/ Blank Spike Results Summary (Form 3)
NR	Control Charts
X	Method/Preparation Blank Results Summary (Form 4)
X	Volatile Initial Calibration Summary (Forms 6)
X	Volatile Continuing Calibration Summary (Form 7)
X	Volatile Analytical Sequence (Form 8)
x	Internal Standard Area Summary (Form X11)
X	Raw Data (incl. IS, Surr/SMC, RT, quant. Reports, etc.)
X	Samples
X	Initial Calibration
NR	Clean-ups
X	Continuing Calibration
NR	Instrument Blanks
X	Preparation Blanks/Method Blanks
O	Other Blanks
X	LCS/Blank Spike
X	Matrix Spikes/Matrix Spike Duplicates
NR	Matrix Duplicates/Replicates
O	Field Blanks – Trip Blank
X	Field Duplicates
X	Extraction Log Benchsheets
X	Instrument Run Logs
X	Sample Descriptions
X	Legible Pages
x	Pages in Package Numbered and in Sequence
X	Electronic Data Deliverable (EDD)

X: Included in original Data Package
NR: Not Required
O: Not Included and/or Not Available
RS: Provided as a Resubmission
X/RS: Incomplete in original data package, completed as a resubmission

3.0 Detection Limits

Several compounds in several samples were reported at elevation detection limits due to dilutions.

4.0 Holding Time

Holding times were acceptable.

4.1 Sample Preservation

Samples were appropriately preserved.

4.2 Percent Moisture

Percent moisture was not applicable.

4.3 Chain of Custody Record

Chain of Custody Record was present.

5.0 Calibration Quality Control

5.1 Initial Calibration (ICAL)

The ICAL was acceptable.

5.2 Continuing Calibration (CCAL)

CCAL results were acceptable.

6.0 Blanks Quality Control

Results were acceptable.

7.0 Surrogate Recoveries

Several samples reported elevated surrogate recoveries. All detected results in the affected samples were qualified as estimated "J" to indicate a high bias.

8.0 Accuracy

8.1 Laboratory Control Samples (LCS)/Blank Spikes

LCS recoveries were acceptable.

8.2 Matrix Spike/Matrix Spike Duplicates (MS/MSD)

8.2.1 Frequency

No MS/MSDs were analyzed.

8.2.2 Recovery

Recoveries were not applicable.

9.0 Precision

9.1 Matrix Spike Duplicates

The results were not acceptable.

9.2 Matrix Duplicate

RPDs were acceptable.

10.0 Field QC

10.1 Field Blanks/Rinse Blanks

There were no field blanks associated with this SDG.

10.2 Trip Blanks

There were no trip blanks associated with this SDG.

10.3 Field Duplicate

Sample 828072SS-40-B-02D was presented as a field duplicate. The original sample is identified as 828072SS-40-B-02. Sample 828072IA-40-B-02D was presented as a field duplicate. The original sample is identified as 828072IA-40-B-02. RPDs are calculated when both original and duplicate report detects. Freon 12 in the latter duplicate pair and trichloroethene in the latter original sample were qualified as estimated due to RPDs exceedance. Trichloroethene in the latter duplicate sample was already qualified due to internal standard issues. No further qualification was necessary.

11.0 Internal Standards (IS)

11.1 IS Area Counts

Several samples reported IS area counts that were outside the required QC limits. All affected sample results were qualified as estimated "J".

11.2 Retention Time (RT)

All RTs were within the method accepted criteria.

12.0 Target Compound Identification

All target compounds identification was acceptable.

12.1 Tentatively Identified Compounds (TICs)

TICs were not applicable.

13.0 Calculations and Transcription

Raw data were accurately transcribed to summary data sheets. A calculation check revealed no errors.

14.0 Additional Comments

None.

15.0 Data Qualifier Table

Sample Identification	Compound	Qualifier	Section Reference
828072 SS-35-B-02	1,3,5-Trimethylbenzene, 4-ethyl toluene, Freon 12, methylene chloride, tetrachloroethylene, trichloroethene	J	7.0
82072 IA-35-B-02, 82072 IA-35-1-02, 82072 IA-20-B-C	Acetone	J	11.1
82072 SS-41-B-02	1,1-Dichloroethane, 1,2,4-trimethyl benzene, 1,3,5-trimethyl benzene, 2,2,4-trimethyl pentane, 4-ethyl toluene, benzene, carbon disulfide, cis-1,2-dichloroethene, cyclohexane, ethyl acetate, ethylbenzene, Freon 12, heptane, hexane, methylene chloride, o-xylene, tetrachloroethylene, trichloroethene, acetone	J	7.0/11.1
82072 IA-41-B-02	1,1-Dichloroethane, 1,1-dichloroethene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene,, 1,4-dichlorobenzene, benzene, carbon tetrachloride, chloroform, chloromethane, cis-1,2-dichloroethene, Freon 11, Freon 12, hexane, m&p-xylene, toluene, trans-1,2-dichoroethene, trichloroethene	J	7.0/11.1
82072 IA-41-1-02	Trichloroethene	J	11.1
82072 SS-40-B-02	1,1-Dichloroethane, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 2,2, 4-trimethylpentane, 4-ethyl toluene, acetone, benzene, carbon disulfide, chlorobenzene, cis-1,2-dichloroethene, cyclohexane, ethyl acetate, Freon 11, Freon 12, heptane, hexane, methyl ethyl kenone, methylene chloride, o-xylene, styrene, tetrachloroethylene, trichloroethene	J	7.0
82072 IA-40-1-02	Toluene	J	11.1
82072 SS-40-B-02D	1,1-Dichloroethane, 2,2,4-trimethyl pentane, 4-ethyl toluene, benzene, carbon disulfide, cis-1,2-dichloroethene, cyclohexane, ethyl acetate, Freon 11, Freon 12, heptane, hexane, methyl ethyl ketone, methylene chloride, styrene, tetrachloroethylene, trichloroethene	J	7.0
82072 IA-40-B-02D	1,2,4-trimethyl benzene, 1,3,5-trimethyl benzene, benzene, carbon tetrachloride, ethyl benzene, heptane, m&p-xylene, o-xylene, trichloroethene	J	11.1
82072 IA-18-1-02, 82072 IA-18-B-02	Acetone	J	11.1
82072 SS-18-B-02	2,2,4-Trimethyl pentane, 4-ethyl toluene, benzene, carbon disulfide, chlorobenzene, chloroform, cyclohexane, ethyl acetate, Freon 12, heptane, hexane, m&p-xylene, methylene chloride, styrene, tetrachloroethylene, toluene, trichloroethene	J	7.0
828072IA-40B-02D 828072IA-40B-02	Freon 12	J	10.3
828072IA-40B-02	Trichloroethene	J	10.3

TABLE 2
RESULTS SUMMARY - SDG C0801032
AIR SAMPLES
DATA USABILITY SUMMARY REPORT
2008 REMEDIAL INVESTIGATION
ERDLE PERFORATING
GATES, NEW YORK

		Lab Sample Id	C0801032-001A		C0801032-002A		C0801032-003A		C0801032-004A		C0801032-005A	
		Lab Sample Delivery Group	C0801032		C0801032		C0801032		C0801032		C0801032	
		Loc Name	IA-15-B		OA-011508-01		IA-11-B		IA-11-1		OA-011508-02	
		Field Sample Id	828072-IA-15-B-C		828072-OA-011508-01		828072-IA-11-B-C		828072 IA-11-1-C		828072 OA-011508-02	
		Field Sample Date	1/15/2008 0:00		1/15/2008 0:00		1/15/2008 0:00		1/15/2008 0:00		1/15/2008 0:00	
		Qc Code	FS		FS		FS		FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO-15	1,1,1-Trichloroethane	ug/m3	0.721	J	0.832	U	0.832	U	0.832	U	0.832	U
TO-15	1,1,2,2-Tetrachloroethane	ug/m3	1.05	U	1.05	U	1.05	U	1.05	U	1.05	U
TO-15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.17	U	1.17	U	1.17	U	1.17	U	1.17	U
TO-15	1,1,2-Trichloroethane	ug/m3	0.832	U	0.832	U	0.832	U	0.832	U	0.832	U
TO-15	1,1-Dichloroethane	ug/m3	0.617	U	0.617	U	0.617	U	0.617	U	0.617	U
TO-15	1,1-Dichloroethene	ug/m3	0.605	U	0.605	U	0.605	U	0.605	U	0.605	U
TO-15	1,2,4-Trichlorobenzene	ug/m3	1.13	U	1.13	U	1.13	U	1.13	U	1.13	U
TO-15	1,2,4-Trimethylbenzene	ug/m3	12.5		0.5	J	2.15		1.45		0.749	U
TO-15	1,2-Dibromoethane	ug/m3	1.17	U	1.17	U	1.17	U	1.17	U	1.17	U
TO-15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.07	U	1.07	U	1.07	U	1.07	U	1.07	U
TO-15	1,2-Dichlorobenzene	ug/m3	0.917	U	0.917	U	0.917	U	0.917	U	0.917	U
TO-15	1,2-Dichloroethane	ug/m3	0.617	U	0.617	U	0.823		1.56		0.617	U
TO-15	1,2-Dichloropropane	ug/m3	0.705	U	0.705	U	0.705	U	0.705	U	0.705	U
TO-15	1,3,5-Trimethylbenzene	ug/m3	8.69		0.75	U	0.999		0.75		0.75	U
TO-15	1,3-Dichlorobenzene	ug/m3	0.917	U	0.917	U	0.917	U	0.917	U	0.917	U
TO-15	1,4-Dichlorobenzene	ug/m3	0.917	U	0.917	U	0.917	U	0.917	U	0.917	U
TO-15	1,4-Dioxane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
TO-15	2-Butanone	ug/m3	3.78		0.899	U	1.14		1.02		0.899	U
TO-15	2-Hexanone	ug/m3	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
TO-15	2-Propanol	ug/m3	5.05		0.375	U	5.3		0.375	U	0.375	U
TO-15	4-Ethyltoluene	ug/m3	7.25		0.75	U	0.8		0.65	J	0.75	U
TO-15	4-Methyl-2-pentanone	ug/m3	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
TO-15	Acetone	ug/m3	19.3		5.46		5.07		7.36		7.12	
TO-15	Allyl chloride	ug/m3	0.477	U	0.477	U	0.477	U	0.477	U	0.477	U
TO-15	Benzene	ug/m3	2.34		0.455	J	1.23		1.23		0.422	J
TO-15	Benzyl chloride	ug/m3	0.877	U	0.877	U	0.877	U	0.877	U	0.877	U
TO-15	Bromodichloromethane	ug/m3	1.02	U	1.02	U	1.02	U	1.02	U	1.02	U

TABLE 2
RESULTS SUMMARY - SDG C0801032
AIR SAMPLES
DATA USABILITY SUMMARY REPORT
2008 REMEDIAL INVESTIGATION
ERDLE PERFORATING
GATES, NEW YORK

		Lab Sample Id	C0801032-001A		C0801032-002A		C0801032-003A		C0801032-004A		C0801032-005A	
		Lab Sample Delivery Group	C0801032		C0801032		C0801032		C0801032		C0801032	
		Loc Name	IA-15-B		OA-011508-01		IA-11-B		IA-11-1		OA-011508-02	
		Field Sample Id	828072-IA-15-B-C		828072-OA-011508-01		828072-IA-11-B-C		828072 IA-11-1-C		828072 OA-011508-02	
		Field Sample Date	1/15/2008 0:00		1/15/2008 0:00		1/15/2008 0:00		1/15/2008 0:00		1/15/2008 0:00	
		Qc Code	FS		FS		FS		FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO-15	Bromoform	ug/m3	1.58	U	1.58	U	1.58	U	1.58	U	1.58	U
TO-15	Bromomethane	ug/m3	0.592	U	0.592	U	0.592	U	0.592	U	0.592	U
TO-15	Butadiene, 1,3-	ug/m3	0.337	U	0.337	U	0.337	U	0.337	U	0.337	U
TO-15	Carbon disulfide	ug/m3	2.03		0.475	U	0.475	U	0.475	U	0.475	U
TO-15	Carbon tetrachloride	ug/m3	0.448		0.448		0.448		0.448		0.512	
TO-15	Chlorobenzene	ug/m3	0.702	U	0.702	U	0.702	U	0.702	U	0.702	U
TO-15	Chlorodibromomethane	ug/m3	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U
TO-15	Chloroethane	ug/m3	0.402	U	0.402	U	0.402	U	0.402	U	0.402	U
TO-15	Chloroform	ug/m3	0.645	J	0.744	U	0.744	U	0.496	J	0.744	U
TO-15	Chloromethane	ug/m3	0.756		0.63		0.735		0.756		0.693	
TO-15	Cis-1,2-Dichloroethene	ug/m3	0.604	U	0.604	U	0.927		0.564	J	0.604	U
TO-15	cis-1,3-Dichloropropene	ug/m3	0.692	U	0.692	U	0.692	U	0.692	U	0.692	U
TO-15	Cyclohexene	ug/m3	0.525	U	0.525	U	1.36		0.525	U	0.525	U
TO-15	Dichlorodifluoromethane	ug/m3	2.66		1.91		1.76		2.01		2.21	
TO-15	Ethyl acetate	ug/m3	1.87		0.916	U	8.61		0.916	U	0.916	U
TO-15	Ethyl benzene	ug/m3	1.19		0.662	U	1.1		0.706		0.662	U
TO-15	Heptane	ug/m3	6.66		0.625	U	0.708		0.542	J	0.625	U
TO-15	Hexachlorobutadiene	ug/m3	1.63	U	1.63	U	1.63	U	1.63	U	1.63	U
TO-15	Hexane	ug/m3	0.537	U	0.537	U	1.4		0.752		0.537	U
TO-15	Isooctane	ug/m3	0.712	U	0.712	U	0.712	U	0.712	U	0.712	U
TO-15	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U	0.55	U	0.55	U	0.55	U
TO-15	Methylene chloride	ug/m3	0.742		0.53	U	2.33		0.706		0.388	J
TO-15	o-Xylene	ug/m3	1.72		0.662	U	1.59		0.839		0.662	U
TO-15	Propylene	ug/m3	0.262	U	0.262	U	0.262	U	0.262	U	0.262	U
TO-15	Styrene	ug/m3	0.649	U	0.649	U	0.649	U	0.649	U	0.649	U
TO-15	Tetrachloroethene	ug/m3	0.896	J	1.03	U	1.03	U	1.03	U	1.03	U
TO-15	Tetrahydrofuran	ug/m3	2.79		0.45	U	0.45	U	0.45	U	0.45	U

TABLE 2
RESULTS SUMMARY - SDG C0801032
AIR SAMPLES
DATA USABILITY SUMMARY REPORT
2008 REMEDIAL INVESTIGATION
ERDLE PERFORATING
GATES, NEW YORK

		Lab Sample Id	C0801032-001A		C0801032-002A		C0801032-003A		C0801032-004A		C0801032-005A	
		Lab Sample Delivery Group	C0801032		C0801032		C0801032		C0801032		C0801032	
		Loc Name	IA-15-B		OA-011508-01		IA-11-B		IA-11-1		OA-011508-02	
		Field Sample Id	828072-IA-15-B-C		828072-OA-011508-01		828072-IA-11-B-C		828072 IA-11-1-C		828072 OA-011508-02	
		Field Sample Date	1/15/2008 0:00		1/15/2008 0:00		1/15/2008 0:00		1/15/2008 0:00		1/15/2008 0:00	
		Qc Code	FS		FS		FS		FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO-15	Toluene	ug/m3	6.17		0.613		5.17		3.79		0.613	
TO-15	trans-1,2-Dichloroethene	ug/m3	0.604	U	0.604	U	0.604	U	0.604	U	0.604	U
TO-15	trans-1,3-Dichloropropene	ug/m3	0.692	U	0.692	U	0.692	U	0.692	U	0.692	U
TO-15	Trichloroethene	ug/m3	0.546		0.328		1.8		0.655		0.765	
TO-15	Trichlorofluoromethane	ug/m3	0.857		0.742	J	1.54		0.971		0.8	J
TO-15	Vinyl acetate	ug/m3	0.537	U	0.537	U	0.537	U	0.537	U	0.537	U
TO-15	Vinyl bromide	ug/m3	0.667	U	0.667	U	0.667	U	0.667	U	0.667	U
TO-15	Vinyl chloride	ug/m3	0.104	U	0.104	U	0.104	U	0.104	U	0.104	U
TO-15	Xylene, m/p	ug/m3	4.1		0.441	J	4.24		2.25		0.53	J

Notes: ug/m3 = microgram per cubic meter
QC code: FS = field sample, FD = field duplicate
Qualifier: U = not detected at a concentration above the reporting limit
J = estimated value

TABLE 2
RESULTS SUMMARY - SDG C0801032
AIR SAMPLES
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2008 REMEDIAL INVESTIGATION
ERDLE PERFORATING
GATES, NEW YORK

		Lab Sample Id	C0801032-006A		C0801032-007A		C0801032-008A		C0801032-009A		C0801032-010A	
		Lab Sample Delivery Group	C0801032		C0801032		C0801032		C0801032		C0801032	
		Loc Name	SS-35-B		IA-35-B		IA-35-1		IA-20-B		SS-41-B	
		Field Sample Id	828072SS-35-B-02		828072IA-35-B-02		828072IA-35-1-02		828072IA-20-B-C		828072SS-41-B-02	
		Field Sample Date	1/15/2008 0:00		1/15/2008 0:00		1/15/2008 0:00		1/16/2008 0:00		1/16/2008 0:00	
		Qc Code	FS		FS		FS		FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO-15	1,1,1-Trichloroethane	ug/m3	0.83	U	0.832	U	0.832	U	0.832	U	0.83	U
TO-15	1,1,2,2-Tetrachloroethane	ug/m3	1	U	1.05	U	1.05	U	1.05	U	1	U
TO-15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.2	U	1.17	U	1.17	U	1.17	U	1.2	U
TO-15	1,1,2-Trichloroethane	ug/m3	0.83	U	0.832	U	0.832	U	0.832	U	0.83	U
TO-15	1,1-Dichloroethane	ug/m3	0.62	U	0.617	U	0.617	U	0.617	U	1.3	J
TO-15	1,1-Dichloroethene	ug/m3	0.6	U	0.605	U	0.605	U	0.605	U	0.6	U
TO-15	1,2,4-Trichlorobenzene	ug/m3	1.1	U	1.13	U	1.13	U	1.13	U	1.1	U
TO-15	1,2,4-Trimethylbenzene	ug/m3	10		0.899		0.849		1.85		22	J
TO-15	1,2-Dibromoethane	ug/m3	1.2	U	1.17	U	1.17	U	1.17	U	1.2	U
TO-15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U	1.07	U	1.07	U	1.07	U	1.1	U
TO-15	1,2-Dichlorobenzene	ug/m3	0.92	U	0.917	U	0.917	U	0.917	U	0.92	U
TO-15	1,2-Dichloroethane	ug/m3	0.62	U	0.617	U	0.617	U	0.617	U	0.62	U
TO-15	1,2-Dichloropropane	ug/m3	0.7	U	0.705	U	0.705	U	0.705	U	0.7	U
TO-15	1,3,5-Trimethylbenzene	ug/m3	8.2	J	0.6	J	0.8		0.75	U	9.7	J
TO-15	1,3-Dichlorobenzene	ug/m3	0.92	U	0.917	U	0.917	U	0.917	U	0.92	U
TO-15	1,4-Dichlorobenzene	ug/m3	0.92	U	0.917	U	0.917	U	0.917	U	0.92	U
TO-15	1,4-Dioxane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
TO-15	2-Butanone	ug/m3	0.9	U	3.51		2.64		3.81		0.9	U
TO-15	2-Hexanone	ug/m3	1.2	U	1.25	U	1.25	U	1.25	U	1.2	U
TO-15	2-Propanol	ug/m3	0.37	U	2.45		0.375	U	0.375	U	0.37	U
TO-15	4-Ethyltoluene	ug/m3	6.9	J	0.75	U	0.75	U	0.75		9.7	J
TO-15	4-Methyl-2-pentanone	ug/m3	1.2	U	1.25	U	1.25	U	1.25	U	0.62	J
TO-15	Acetone	ug/m3	0.72	U	6.76	J	23.9	J	20.8	J	37	J
TO-15	Allyl chloride	ug/m3	0.48	U	0.477	U	0.477	U	0.477	U	0.48	U
TO-15	Benzene	ug/m3	240		0.422	J	0.584		1.88		2	J
TO-15	Benzyl chloride	ug/m3	0.88	U	0.877	U	0.877	U	0.877	U	0.88	U
TO-15	Bromodichloromethane	ug/m3	1	U	1.02	U	1.02	U	1.02	U	1	U

TABLE 2
RESULTS SUMMARY - SDG C0801032
AIR SAMPLES
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		Lab Sample Id	C0801032-006A		C0801032-007A		C0801032-008A		C0801032-009A		C0801032-010A	
		Lab Sample Delivery Group	C0801032		C0801032		C0801032		C0801032		C0801032	
		Loc Name	SS-35-B		IA-35-B		IA-35-1		IA-20-B		SS-41-B	
		Field Sample Id	828072SS-35-B-02		828072IA-35-B-02		828072IA-35-1-02		828072IA-20-B-C		828072SS-41-B-02	
		Field Sample Date	1/15/2008 0:00		1/15/2008 0:00		1/15/2008 0:00		1/16/2008 0:00		1/16/2008 0:00	
		Qc Code	FS		FS		FS		FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO-15	Bromoform	ug/m3	1.6	U	1.58	U	1.58	U	1.58	U	1.6	U
TO-15	Bromomethane	ug/m3	0.59	U	0.592	U	0.592	U	0.592	U	0.59	U
TO-15	Butadiene, 1,3-	ug/m3	0.34	U	0.337	U	0.337	U	0.337	U	0.34	U
TO-15	Carbon disulfide	ug/m3	120	J	0.475	U	0.475	U	0.633		11	J
TO-15	Carbon tetrachloride	ug/m3	0.96	U	0.448		0.448		0.448		0.96	U
TO-15	Chlorobenzene	ug/m3	0.7	U	0.702	U	0.702	U	0.702	U	0.61	J
TO-15	Chlorodibromomethane	ug/m3	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U
TO-15	Chloroethane	ug/m3	0.4	U	0.402	U	0.402	U	0.402	U	0.4	U
TO-15	Chloroform	ug/m3	0.74	U	0.744	U	0.744	U	0.744	U	0.74	U
TO-15	Chloromethane	ug/m3	0.31	U	0.567		0.672		0.777		0.31	U
TO-15	Cis-1,2-Dichloroethene	ug/m3	29		2.26		1.61		0.604	U	27	J
TO-15	cis-1,3-Dichloropropene	ug/m3	0.69	U	0.692	U	0.692	U	0.692	U	0.69	U
TO-15	Cyclohexene	ug/m3	280		0.525	U	0.525	U	0.525	U	8.2	J
TO-15	Dichlorodifluoromethane	ug/m3	2.5	J	1.81		1.81		2.82		1.9	J
TO-15	Ethyl acetate	ug/m3	0.92	U	0.916	U	5.79		0.916		1.9	J
TO-15	Ethyl benzene	ug/m3	33		0.662	U	0.574	J	0.662		43	J
TO-15	Heptane	ug/m3	300		0.625	U	0.625	U	0.625		13	J
TO-15	Hexachlorobutadiene	ug/m3	1.6	U	1.63	U	1.63	U	1.63	U	1.6	U
TO-15	Hexane	ug/m3	520		0.537	U	0.537	U	0.537	U	7.1	J
TO-15	Isooctane	ug/m3	0.71	U	0.712	U	0.712	U	0.712	U	1.7	J
TO-15	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U	0.55	U	0.55	U	0.55	U
TO-15	Methylene chloride	ug/m3	2.8	J	0.424	J	1.17		0.883		0.88	J
TO-15	o-Xylene	ug/m3	14		0.662	U	0.706		0.662		22	J
TO-15	Propylene	ug/m3	0.26	U	0.262	U	0.262	U	0.262	U	0.26	U
TO-15	Styrene	ug/m3	0.65	U	0.649	U	0.649	U	0.649	U	0.65	U
TO-15	Tetrachloroethene	ug/m3	1.8	J	1.03	U	1.03	U	1.03	U	2.2	J
TO-15	Tetrahydrofuran	ug/m3	0.45	U	6.47		3.51		1.53		0.45	U

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		Lab Sample Id	C0801032-006A		C0801032-007A		C0801032-008A		C0801032-009A		C0801032-010A	
		Lab Sample Delivery Group	C0801032		C0801032		C0801032		C0801032		C0801032	
		Loc Name	SS-35-B		IA-35-B		IA-35-1		IA-20-B		SS-41-B	
		Field Sample Id	828072SS-35-B-02		828072IA-35-B-02		828072IA-35-1-02		828072IA-20-B-C		828072SS-41-B-02	
		Field Sample Date	1/15/2008 0:00		1/15/2008 0:00		1/15/2008 0:00		1/16/2008 0:00		1/16/2008 0:00	
		Qc Code	FS		FS		FS		FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO-15	Toluene	ug/m3	270		0.881		2.03		3.37		220	
TO-15	trans-1,2-Dichloroethene	ug/m3	0.6	U	0.604	U	0.604	U	0.604	U	0.6	U
TO-15	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.692	U	0.692	U	0.692	U	0.69	U
TO-15	Trichloroethene	ug/m3	10	J	0.382		0.983		0.546		3.2	J
TO-15	Trichlorofluoromethane	ug/m3	0.74	J	0.742	J	0.971		1.37		0.57	J
TO-15	Vinyl acetate	ug/m3	0.54	U	0.537	U	0.537	U	0.537	U	0.54	U
TO-15	Vinyl bromide	ug/m3	0.67	U	0.667	U	0.667	U	0.667	U	0.67	U
TO-15	Vinyl chloride	ug/m3	12		2.36		1.17		0.104	U	0.29	J
TO-15	Xylene, m/p	ug/m3	80		0.839	J	1.72		1.77		100	

Notes: ug/m3 = microgram per cubic meter
QC code: FS = field sample, FD = field duplicate
Qualifier: U = not detected at a concentration above the reporting li
J = estimated value

TABLE 2
RESULTS SUMMARY - SDG C0801032
AIR SAMPLES
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		Lab Sample Id	C0801032-011A		C0801032-012A		C0801032-013A		C0801032-014A		C0801032-015A	
		Lab Sample Delivery Group	C0801032		C0801032		C0801032		C0801032		C0801032	
		Loc Name	IA-41-B		IA-41-1		SS-40-B		IA-40-B		IA-40-1	
		Field Sample Id	828072IA-41-B-02		828072IA-41-1-02		828072SS-40-B-02		828072IA-40-B-02		828072IA-40-1-02	
		Field Sample Date	1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00	
		Qc Code	FS		FS		FS		FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO-15	1,1,1-Trichloroethane	ug/m3	0.832	U	0.832	U	0.83	U	0.832	U	0.832	U
TO-15	1,1,2,2-Tetrachloroethane	ug/m3	1.05	U	1.05	U	1	U	1.05	U	1.05	U
TO-15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.17	U	1.17	U	1.2	U	1.17	U	1.17	U
TO-15	1,1,2-Trichloroethane	ug/m3	0.832	U	0.832	U	0.83	U	0.832	U	0.832	U
TO-15	1,1-Dichloroethane	ug/m3	3	J	2.8		1	J	0.617	U	0.617	U
TO-15	1,1-Dichloroethene	ug/m3	1.21	J	0.524	J	0.6	U	0.605	U	0.605	U
TO-15	1,2,4-Trichlorobenzene	ug/m3	1.13	U	1.13	U	1.1	U	1.13	U	1.13	U
TO-15	1,2,4-Trimethylbenzene	ug/m3	2.2	J	1.65		25	J	2.35		3.1	
TO-15	1,2-Dibromoethane	ug/m3	1.17	U	1.17	U	1.2	U	1.17	U	1.17	U
TO-15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.07	U	1.07	U	1.1	U	1.07	U	1.07	U
TO-15	1,2-Dichlorobenzene	ug/m3	0.917	U	0.917	U	0.92	U	0.917	U	0.917	U
TO-15	1,2-Dichloroethane	ug/m3	0.617	U	0.617	U	0.62	U	0.617	U	0.617	U
TO-15	1,2-Dichloropropane	ug/m3	0.705	U	0.705	U	0.7	U	0.705	U	0.705	U
TO-15	1,3,5-Trimethylbenzene	ug/m3	1.1	J	1.05		11	J	1.1		1.35	
TO-15	1,3-Dichlorobenzene	ug/m3	0.917	U	0.917	U	0.92	U	0.917	U	0.917	U
TO-15	1,4-Dichlorobenzene	ug/m3	1.04	J	0.673	J	0.92	U	0.917	U	0.917	U
TO-15	1,4-Dioxane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
TO-15	2-Butanone	ug/m3	0.899	U	0.899	U	1.2	J	0.989		0.899	U
TO-15	2-Hexanone	ug/m3	1.25	U	1.25	U	1.2	U	1.25	U	1.25	U
TO-15	2-Propanol	ug/m3	0.375	U	3.72		0.37	U	21.2		26.2	
TO-15	4-Ethyltoluene	ug/m3	0.6	J	0.65	J	9.2	J	1.05		1.15	
TO-15	4-Methyl-2-pentanone	ug/m3	1.25	U	1.25	U	0.54	J	1.25	U	1.25	U
TO-15	Acetone	ug/m3	9.66		12.3		25	J	9.66		18.1	
TO-15	Allyl chloride	ug/m3	0.477	U	0.477	U	0.48	U	0.477	U	0.477	U
TO-15	Benzene	ug/m3	0.714	J	0.714		1.8	J	5.29		4.03	
TO-15	Benzyl chloride	ug/m3	0.877	U	0.877	U	0.88	U	0.877	U	0.877	U
TO-15	Bromodichloromethane	ug/m3	1.02	U	1.02	U	1	U	1.02	U	1.02	U

TABLE 2
RESULTS SUMMARY - SDG C0801032
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		Lab Sample Id	C0801032-011A		C0801032-012A		C0801032-013A		C0801032-014A		C0801032-015A	
		Lab Sample Delivery Group	C0801032		C0801032		C0801032		C0801032		C0801032	
		Loc Name	IA-41-B		IA-41-1		SS-40-B		IA-40-B		IA-40-1	
		Field Sample Id	828072IA-41-B-02		828072IA-41-1-02		828072SS-40-B-02		828072IA-40-B-02		828072IA-40-1-02	
		Field Sample Date	1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00	
		Qc Code	FS		FS		FS		FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO-15	Bromoform	ug/m3	1.58	U	1.58	U	1.6	U	1.58	U	1.58	U
TO-15	Bromomethane	ug/m3	0.592	U	0.592	U	0.59	U	0.592	U	0.592	U
TO-15	Butadiene, 1,3-	ug/m3	0.337	U	0.337	U	0.34	U	0.337	U	0.337	U
TO-15	Carbon disulfide	ug/m3	0.348	J	0.475	U	13	J	0.38	J	0.411	J
TO-15	Carbon tetrachloride	ug/m3	0.512	J	0.512		0.96	U	0.512		0.512	
TO-15	Chlorobenzene	ug/m3	0.702	U	0.702	U	0.75	J	0.702	U	0.702	U
TO-15	Chlorodibromomethane	ug/m3	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U
TO-15	Chloroethane	ug/m3	0.402	U	0.402	U	0.4	U	0.402	U	0.402	U
TO-15	Chloroform	ug/m3	0.943	J	1.14		0.74	U	0.744	U	0.744	U
TO-15	Chloromethane	ug/m3	0.504	J	0.819		0.31	U	0.315	U	0.315	U
TO-15	Cis-1,2-Dichloroethene	ug/m3	163	J	83.8		1.1	J	0.604	U	0.604	U
TO-15	cis-1,3-Dichloropropene	ug/m3	0.692	U	0.692	U	0.69	U	0.692	U	0.692	U
TO-15	Cyclohexene	ug/m3	0.525	U	0.525	U	15	J	0.525	U	0.525	U
TO-15	Dichlorodifluoromethane	ug/m3	2.01	J	2.11		24	J	36.7	J	87.5	
TO-15	Ethyl acetate	ug/m3	0.916	U	0.916	U	1.1	J	0.916	U	1.65	
TO-15	Ethyl benzene	ug/m3	0.53	J	0.618	J	42		1.59		1.72	
TO-15	Heptane	ug/m3	0.625	U	0.458	J	7.7	J	0.833		1.08	
TO-15	Hexachlorobutadiene	ug/m3	1.63	U	1.63	U	1.6	U	1.63	U	1.63	U
TO-15	Hexane	ug/m3	0.681	J	0.537	U	6	J	2.58		2.97	
TO-15	Isooctane	ug/m3	0.475	J	0.522	J	0.95	J	0.712	U	0.712	U
TO-15	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.806		0.55	U	0.55	U	0.55	U
TO-15	Methylene chloride	ug/m3	0.494	J	5.4		0.85	J	0.494	J	0.565	
TO-15	o-Xylene	ug/m3	0.618	J	0.794		24	J	1.77		1.85	
TO-15	Propylene	ug/m3	0.262	U	0.262	U	0.26	U	0.262	U	0.262	U
TO-15	Styrene	ug/m3	0.649	U	0.649	U	2.9	J	0.649	U	0.649	U
TO-15	Tetrachloroethene	ug/m3	1.03	U	1.03	U	2	J	1.03	U	1.03	U
TO-15	Tetrahydrofuran	ug/m3	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U

TABLE 2
RESULTS SUMMARY - SDG C0801032
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		Lab Sample Id	C0801032-011A		C0801032-012A		C0801032-013A		C0801032-014A		C0801032-015A	
		Lab Sample Delivery Group	C0801032		C0801032		C0801032		C0801032		C0801032	
		Loc Name	IA-41-B		IA-41-1		SS-40-B		IA-40-B		IA-40-1	
		Field Sample Id	828072IA-41-B-02		828072IA-41-1-02		828072SS-40-B-02		828072IA-40-B-02		828072IA-40-1-02	
		Field Sample Date	1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00	
		Qc Code	FS		FS		FS		FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO-15	Toluene	ug/m3	2.91	J	3.64		150		13		11.9	J
TO-15	trans-1,2-Dichloroethene	ug/m3	1.65	J	1.37		0.6	U	0.604	U	0.604	U
TO-15	trans-1,3-Dichloropropene	ug/m3	0.692	U	0.692	U	0.69	U	0.692	U	0.692	U
TO-15	Trichloroethene	ug/m3	15.3	J	19.7	J	0.93	J	0.765	J	0.437	
TO-15	Trichlorofluoromethane	ug/m3	1.37	J	0.742	J	4.1	J	10.4		21.1	
TO-15	Vinyl acetate	ug/m3	0.537	U	0.537	U	0.54	U	0.537	U	0.537	U
TO-15	Vinyl bromide	ug/m3	0.667	U	0.667	U	0.67	U	0.667	U	0.667	U
TO-15	Vinyl chloride	ug/m3	31.2		19.7		0.39	U	0.104	U	0.104	U
TO-15	Xylene, m/p	ug/m3	1.32	J	1.5		100		6.31		6.58	

Notes: ug/m3 = microgram per cubic meter
QC code: FS = field sample, FD = field duplicate
Qualifier: U = not detected at a concentration above the reporting li
J = estimated value

TABLE 2
RESULTS SUMMARY - SDG C0801032
AIR SAMPLES
DATA USABILITY SUMMARY REPORT
2008 REMEDIAL INVESTIGATION
ERDLE PERFORATING
GATES, NEW YORK

		Lab Sample Id	C0801032-016A		C0801032-017A		C0801032-018A		C0801032-020A		C0801032-021A	
		Lab Sample Delivery Group	C0801032		C0801032		C0801032		C0801032		C0801032	
		Loc Name	OA-011608-02		SS-40-B		IA-40-B		IA-18-1		OA-011608-01	
		Field Sample Id	828072OA-011608-02		828072SS-40-B-02D		828072IA-40-B-02D		828072IA-18-1-02		828072OA-011608-01	
		Field Sample Date	1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00	
		Qc Code	FS		FD		FD		FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO-15	1,1,1-Trichloroethane	ug/m3	0.832	U	0.83	U	0.832	U	0.832	U	0.832	U
TO-15	1,1,2,2-Tetrachloroethane	ug/m3	1.05	U	1	U	1.05	U	1.05	U	1.05	U
TO-15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.17	U	1.2	U	1.17	U	1.17	U	1.17	U
TO-15	1,1,2-Trichloroethane	ug/m3	0.832	U	0.83	U	0.832	U	0.832	U	0.832	U
TO-15	1,1-Dichloroethane	ug/m3	0.617	U	0.99	J	0.617	U	0.617	U	0.617	U
TO-15	1,1-Dichloroethene	ug/m3	0.605	U	0.6	U	0.605	U	0.605	U	0.605	U
TO-15	1,2,4-Trichlorobenzene	ug/m3	1.13	U	1.1	U	1.13	U	1.13	U	1.13	U
TO-15	1,2,4-Trimethylbenzene	ug/m3	0.6	J	24		1.55	J	5.05		0.55	J
TO-15	1,2-Dibromoethane	ug/m3	1.17	U	1.2	U	1.17	U	1.17	U	1.17	U
TO-15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.07	U	1.1	U	1.07	U	1.07	U	1.07	U
TO-15	1,2-Dichlorobenzene	ug/m3	0.917	U	0.92	U	0.917	U	0.917	U	0.917	U
TO-15	1,2-Dichloroethane	ug/m3	0.617	U	0.62	U	0.617	U	0.617	U	0.617	U
TO-15	1,2-Dichloropropane	ug/m3	0.705	U	0.7	U	0.705	U	0.705	U	0.705	U
TO-15	1,3,5-Trimethylbenzene	ug/m3	0.75	U	8.5		0.849	J	1.7		0.75	U
TO-15	1,3-Dichlorobenzene	ug/m3	0.917	U	0.92	U	0.917	U	0.917	U	0.917	U
TO-15	1,4-Dichlorobenzene	ug/m3	0.917	U	0.92	U	0.917	U	0.917	U	0.917	U
TO-15	1,4-Dioxane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
TO-15	2-Butanone	ug/m3	0.899	U	1.6	J	0.899	U	1.47		0.899	U
TO-15	2-Hexanone	ug/m3	1.25	U	1.2	U	1.25	U	1.25	U	1.25	U
TO-15	2-Propanol	ug/m3	0.375	U	0.37	U	17.1		0.375	U	0.375	U
TO-15	4-Ethyltoluene	ug/m3	0.75	U	8.7	J	0.7	J	0.999		0.75	U
TO-15	4-Methyl-2-pentanone	ug/m3	1.25	U	0.54	J	1.25	U	1.25	U	1.25	U
TO-15	Acetone	ug/m3	12.2		0.72	U	5.67		11.8	J	4.54	
TO-15	Allyl chloride	ug/m3	0.477	U	0.48	U	0.477	U	0.477	U	0.477	U
TO-15	Benzene	ug/m3	0.52		1.8	J	2.79	J	0.844		0.617	
TO-15	Benzyl chloride	ug/m3	0.877	U	0.88	U	0.877	U	0.877	U	0.877	U
TO-15	Bromodichloromethane	ug/m3	1.02	U	1	U	1.02	U	1.02	U	1.02	U

TABLE 2
RESULTS SUMMARY - SDG C0801032
AIR SAMPLES
DATA USABILITY SUMMARY REPORT
2008 REMEDIAL INVESTIGATION
ERDLE PERFORATING
GATES, NEW YORK

		Lab Sample Id	C0801032-016A		C0801032-017A		C0801032-018A		C0801032-020A		C0801032-021A	
		Lab Sample Delivery Group	C0801032		C0801032		C0801032		C0801032		C0801032	
		Loc Name	OA-011608-02		SS-40-B		IA-40-B		IA-18-1		OA-011608-01	
		Field Sample Id	828072OA-011608-02		828072SS-40-B-02D		828072IA-40-B-02D		828072IA-18-1-02		828072OA-011608-01	
		Field Sample Date	1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00	
		Qc Code	FS		FD		FD		FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO-15	Bromoform	ug/m3	1.58	U	1.6	U	1.58	U	1.58	U	1.58	U
TO-15	Bromomethane	ug/m3	0.592	U	0.59	U	0.592	U	0.592	U	0.592	U
TO-15	Butadiene, 1,3-	ug/m3	0.337	U	0.34	U	0.337	U	0.337	U	0.337	U
TO-15	Carbon disulfide	ug/m3	0.475	U	16	J	0.475	U	0.57		0.475	U
TO-15	Carbon tetrachloride	ug/m3	0.384		0.96	U	0.32	J	0.831		0.384	
TO-15	Chlorobenzene	ug/m3	0.702	U	0.61	J	0.702	U	0.702	U	0.702	U
TO-15	Chlorodibromomethane	ug/m3	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U
TO-15	Chloroethane	ug/m3	0.402	U	0.4	U	0.402	U	0.402	U	0.402	U
TO-15	Chloroform	ug/m3	0.744	U	0.74	U	0.744	U	3.87		0.744	U
TO-15	Chloromethane	ug/m3	0.777		0.31	U	0.315	U	0.861		0.588	
TO-15	Cis-1,2-Dichloroethene	ug/m3	0.604	U	0.77	J	0.604	U	0.846		0.604	U
TO-15	cis-1,3-Dichloropropene	ug/m3	0.692	U	0.69	U	0.692	U	0.692	U	0.692	U
TO-15	Cyclohexene	ug/m3	0.525	U	5.6	J	0.525	U	0.525	U	0.525	U
TO-15	Dichlorodifluoromethane	ug/m3	2.06		27	J	28.9	J	2.26		1.91	
TO-15	Ethyl acetate	ug/m3	0.916	U	1.2	J	1.21		2.53		0.916	U
TO-15	Ethyl benzene	ug/m3	0.662	U	36		1.68	J	0.839		0.662	U
TO-15	Heptane	ug/m3	0.625	U	10	J	0.708	J	0.708		0.625	U
TO-15	Hexachlorobutadiene	ug/m3	1.63	U	1.6	U	1.63	U	1.63	U	1.63	U
TO-15	Hexane	ug/m3	0.537	U	5.1	J	3.22		0.537	U	0.537	U
TO-15	Isooctane	ug/m3	0.712	U	1.2	J	0.712	U	0.712	U	0.712	U
TO-15	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U	0.55	U	0.55	U	0.55	U
TO-15	Methylene chloride	ug/m3	0.459	J	1.1	J	0.459	J	0.777		0.53	U
TO-15	o-Xylene	ug/m3	0.662	U	21		1.54	J	1.06		0.662	U
TO-15	Propylene	ug/m3	0.262	U	0.26	U	0.262	U	0.262	U	0.262	U
TO-15	Styrene	ug/m3	0.649	U	2.8	J	0.649	U	0.649	U	0.649	U
TO-15	Tetrachloroethene	ug/m3	1.03	U	2.1	J	0.965	J	1.03	U	1.03	U
TO-15	Tetrahydrofuran	ug/m3	0.45	U	0.45	U	0.45	U	0.45	U	0.45	U

TABLE 2
RESULTS SUMMARY - SDG C0801032
AIR SAMPLES
DATA USABILITY SUMMARY REPORT
2008 REMEDIAL INVESTIGATION
ERDLE PERFORATING
GATES, NEW YORK

			Lab Sample Id		C0801032-016A		C0801032-017A		C0801032-018A		C0801032-020A		C0801032-021A	
			Lab Sample Delivery Group		C0801032		C0801032		C0801032		C0801032		C0801032	
			Loc Name		OA-011608-02		SS-40-B		IA-40-B		IA-18-1		OA-011608-01	
			Field Sample Id		828072OA-011608-02		828072SS-40-B-02D		828072IA-40-B-02D		828072IA-18-1-02		828072OA-011608-01	
			Field Sample Date		1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00	
			Qc Code		FS		FD		FD		FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO-15	Toluene	ug/m3	0.881		170		13.2		4.1		0.958	
TO-15	trans-1,2-Dichloroethene	ug/m3	0.604	U	0.6	U	0.604	U	0.604	U	0.604	U
TO-15	trans-1,3-Dichloropropene	ug/m3	0.692	U	0.69	U	0.692	U	0.692	U	0.692	U
TO-15	Trichloroethene	ug/m3	0.328		0.98	J	0.382	J	0.765		0.218	U
TO-15	Trichlorofluoromethane	ug/m3	0.742	J	4	J	8.11		1.54		0.628	J
TO-15	Vinyl acetate	ug/m3	0.537	U	0.54	U	0.537	U	0.537	U	0.537	U
TO-15	Vinyl bromide	ug/m3	0.667	U	0.67	U	0.667	U	0.667	U	0.667	U
TO-15	Vinyl chloride	ug/m3	0.104	U	0.39	U	0.104	U	0.468		0.104	U
TO-15	Xylene, m/p	ug/m3	0.927	J	110		6.18	J	2.87		0.75	J

Notes: ug/m3 = microgram per cubic meter
QC code: FS = field sample, FD = field duplicate
Qualifier: U = not detected at a concentration above the reporting li
J = estimated value

TABLE 2
RESULTS SUMMARY - SDG C0801032
AIR SAMPLES
DATA USABILITY SUMMARY REPORT
2008 REMEDIAL INVESTIGATION
ERDLE PERFORATING
GATES, NEW YORK

		Lab Sample Id	C0801032-022A		C0801032-023A		C0801032-024A	
		Lab Sample Delivery Group	C0801032		C0801032		C0801032	
		Loc Name	IA-18-B		SS-18-B		IA-27-B	
		Field Sample Id	828072IA-18-B-02		828072SS-18B-02		828072IA-27-B-C	
		Field Sample Date	1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00	
		Qc Code	FS		FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO-15	1,1,1-Trichloroethane	ug/m3	0.832	U	0.83	U	0.832	U
TO-15	1,1,2,2-Tetrachloroethane	ug/m3	1.05	U	1	U	1.05	U
TO-15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.17	U	1.2	U	1.17	U
TO-15	1,1,2-Trichloroethane	ug/m3	0.832	U	0.83	U	0.832	U
TO-15	1,1-Dichloroethane	ug/m3	0.617	U	0.62	U	0.617	U
TO-15	1,1-Dichloroethene	ug/m3	0.605	U	0.6	U	0.605	U
TO-15	1,2,4-Trichlorobenzene	ug/m3	1.13	U	1.1	U	1.13	U
TO-15	1,2,4-Trimethylbenzene	ug/m3	2.2		20		0.899	
TO-15	1,2-Dibromoethane	ug/m3	1.17	U	1.2	U	1.17	U
TO-15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.07	U	1.1	U	1.07	U
TO-15	1,2-Dichlorobenzene	ug/m3	0.917	U	0.92	U	0.917	U
TO-15	1,2-Dichloroethane	ug/m3	0.617	U	0.62	U	0.617	U
TO-15	1,2-Dichloropropane	ug/m3	0.705	U	0.7	U	0.705	U
TO-15	1,3,5-Trimethylbenzene	ug/m3	1.65		8		0.75	U
TO-15	1,3-Dichlorobenzene	ug/m3	0.917	U	0.92	U	0.917	U
TO-15	1,4-Dichlorobenzene	ug/m3	0.917	U	0.92	U	0.917	U
TO-15	1,4-Dioxane	ug/m3	1.1	U	1.1	U	1.1	U
TO-15	2-Butanone	ug/m3	1.2		0.9	U	1.53	
TO-15	2-Hexanone	ug/m3	1.25	U	1.2	U	1.25	U
TO-15	2-Propanol	ug/m3	0.375	U	0.37	U	0.375	U
TO-15	4-Ethyltoluene	ug/m3	0.5	J	8.2	J	0.75	U
TO-15	4-Methyl-2-pentanone	ug/m3	1.25	U	0.71	J	1.25	U
TO-15	Acetone	ug/m3	12.3	J	0.72	U	9.78	
TO-15	Allyl chloride	ug/m3	0.477	U	0.48	U	0.477	U
TO-15	Benzene	ug/m3	0.779		2.3	J	0.779	
TO-15	Benzyl chloride	ug/m3	0.877	U	0.88	U	0.877	U
TO-15	Bromodichloromethane	ug/m3	1.02	U	1	U	1.02	U

TABLE 2
RESULTS SUMMARY - SDG C0801032
AIR SAMPLES
DATA USABILITY SUMMARY REPORT
2008 REMEDIAL INVESTIGATION
ERDLE PERFORATING
GATES, NEW YORK

		Lab Sample Id	C0801032-022A		C0801032-023A		C0801032-024A	
		Lab Sample Delivery Group	C0801032		C0801032		C0801032	
		Loc Name	IA-18-B		SS-18-B		IA-27-B	
		Field Sample Id	828072IA-18-B-02		828072SS-18B-02		828072IA-27-B-C	
		Field Sample Date	1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00	
		Qc Code	FS		FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO-15	Bromoform	ug/m3	1.58	U	1.6	U	1.58	U
TO-15	Bromomethane	ug/m3	0.592	U	0.59	U	0.592	U
TO-15	Butadiene, 1,3-	ug/m3	0.337	U	0.34	U	0.337	U
TO-15	Carbon disulfide	ug/m3	0.728		16	J	0.728	
TO-15	Carbon tetrachloride	ug/m3	0.767		0.96	U	0.512	
TO-15	Chlorobenzene	ug/m3	0.702	U	0.75	J	0.702	U
TO-15	Chlorodibromomethane	ug/m3	1.3	U	1.3	U	1.3	U
TO-15	Chloroethane	ug/m3	0.402	U	0.4	U	0.402	U
TO-15	Chloroform	ug/m3	3.13		1.4	J	0.744	U
TO-15	Chloromethane	ug/m3	0.924		0.31	U	0.735	
TO-15	Cis-1,2-Dichloroethene	ug/m3	0.846		0.4	J	0.564	J
TO-15	cis-1,3-Dichloropropene	ug/m3	0.692	U	0.69	U	0.692	U
TO-15	Cyclohexene	ug/m3	0.525	U	8	J	0.525	U
TO-15	Dichlorodifluoromethane	ug/m3	2.51		1.8	J	2.61	
TO-15	Ethyl acetate	ug/m3	2.53		2.5	J	2.05	
TO-15	Ethyl benzene	ug/m3	0.618	J	34		0.662	U
TO-15	Heptane	ug/m3	0.708		12	J	0.625	U
TO-15	Hexachlorobutadiene	ug/m3	1.63	U	1.6	U	1.63	U
TO-15	Hexane	ug/m3	0.537	U	8.2	J	0.537	U
TO-15	Isooctane	ug/m3	0.712	U	1.2	J	0.712	U
TO-15	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U	0.55	U
TO-15	Methylene chloride	ug/m3	0.706		0.78	J	0.742	
TO-15	o-Xylene	ug/m3	0.485	J	18		0.441	
TO-15	Propylene	ug/m3	0.262	U	0.26	U	0.262	U
TO-15	Styrene	ug/m3	0.649	U	3.2	J	0.649	U
TO-15	Tetrachloroethene	ug/m3	0.896	J	2.3	J	1.03	U
TO-15	Tetrahydrofuran	ug/m3	0.45	U	0.45	U	0.45	U

TABLE 2
RESULTS SUMMARY - SDG C0801032
AIR SAMPLES
DATA USABILITY SUMMARY REPORT
2008 REMEDIAL INVESTIGATION
ERDLE PERFORATING
GATES, NEW YORK

		Lab Sample Id	C0801032-022A		C0801032-023A		C0801032-024A	
		Lab Sample Delivery Group	C0801032		C0801032		C0801032	
		Loc Name	IA-18-B		SS-18-B		IA-27-B	
		Field Sample Id	828072IA-18-B-02		828072SS-18B-02		828072IA-27-B-C	
		Field Sample Date	1/16/2008 0:00		1/16/2008 0:00		1/16/2008 0:00	
		Qc Code	FS		FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO-15	Toluene	ug/m3	3.64		230	J	2.37	
TO-15	trans-1,2-Dichloroethene	ug/m3	0.604	U	0.6	U	0.604	U
TO-15	trans-1,3-Dichloropropene	ug/m3	0.692	U	0.69	U	0.692	U
TO-15	Trichloroethene	ug/m3	0.819		0.82	J	0.655	
TO-15	Trichlorofluoromethane	ug/m3	0.8	J	0.63	J	1.6	
TO-15	Vinyl acetate	ug/m3	0.537	U	0.54	U	0.537	U
TO-15	Vinyl bromide	ug/m3	0.667	U	0.67	U	0.667	U
TO-15	Vinyl chloride	ug/m3	0.416		0.39	U	0.364	
TO-15	Xylene, m/p	ug/m3	1.37		150	J	0.971	J

Notes: ug/m3 = microgram per cubic meter
QC code: FS = field sample, FD = field duplicate
Qualifier: U = not detected at a concentration above the reporting li
J = estimated value

DATA USABILITY SUMMARY REPORT
FEBRUARY 2009 AIR SAMPLING PROGRAM
ERDLE PERFORATING SITE
GATES, NEW YORK

1.0 Introduction:

Air Volatile Organic Analyses by Method TO-15
Samples Collected: February 4, 2009
Samples Received at Centek Laboratory on February 10, 2009
Sample Delivery Group: C0902013
Laboratory Reference Numbers:

Field sample ID	Laboratory Sample ID
828072-SV-35-B-03	C0902013-001
828072-SV-35-B-03 DL10X	C0902013-001 DL10X
828072-SV-35-B-03 DL270X	C0902013-001 DL270X
82072-BA-35-B-03	C0902013-002
82072-BA-35-B-03 DL10X	C0902013-002 DL10X
82072-AA-35-B-03	C0902013-003

Deliverables for the off-site laboratory analyses included a Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2005) for SDG C0902013.

A project chemist review was completed based on NYSDEC Division of Environmental Remediation guidance for Data Usability Summary Reports (NYSDEC, 2002) for SDG C0902013. Air samples were reviewed using criteria in the US EPA Region II checklist, Validating Volatile Organic Analysis of Ambient Air in canister by Method TO-15, SOP HW-31 Revision 4 (USEPA, 2006). The following parameters were reviewed.

* - Data Completeness
* - GC/MS Tuning
* - Holding Times
* - Calibrations
- Laboratory Blanks
* - Surrogate Compound Recoveries
- Internal Standard Recoveries
- Laboratory Control Sample
* - Compound Identification
- Compound Quantitation

* - Indicates that all criteria were met for this parameter.

2.0 DATA VALIDATION SUMMARY

Holding Times

All samples were analyzed within 30 days of collection.

Tunes

No problems were detected with the tunes associated with the samples of this delivery group. The NYS DEC ASP FORM V was not included in the data package.

Surrogate Compound Recoveries

All surrogate compound recoveries were within the 70% - 130% quality assurance limits.

Calibrations

All %RSDs in the initial calibration and the percent differences in the continuing calibrations were less than 30%.

All RRF's were greater than the required limits.

The data for the 2.0 ppbv, 1.50 ppbv, 1.25 ppbv, and 1.0 ppbv standards were not included in the initial calibration summary (page 110).

Laboratory Control Sample

All of the laboratory control samples were within the required 70% - 130% limits in the LCS associated with the dilutions of the samples 828072-SV-35-B-03 DL10 (C0902013-001 DL10X) and 82072-BA-35-B-03 DL10X (C0902013-002 DL10X) with the exceptions of 1,4-dioxane (135%) and bromoform (170%).

None of these compounds were detected in the sample and non detects were not qualified since high recoveries do not affect the usability of the data.

All of the recoveries were within the required limits in the LCS associated with the undiluted analyses of the samples.

Method Blanks

Methyl butyl ketone (0.13 ppbv) was detected in the method blank associated with the diluted analyses of the samples 828072-SV-35-B-03 DL10 (C0902013-001 DL10X) and 82072-BA-35-B-03 DL10X (C0902013-002 DL10X). Methyl butyl ketone was not detected in any of the diluted analyses and the blank contamination does not affect the use of the data.

No compounds were detected in the method blank associated with the undiluted analyses.

Internal Standard Areas and Retention Times

The areas and retention times of all internal standards were within the required quality control limits (+40% to 40%) with the exceptions of 1,4-difluorobenzene and chlorobenzene in the original analysis of sample 828072-SV-35-B-03 (C0902013-001).

The laboratory's case narrative states: *This is most likely due to matrix interference. Based on the chromatographic evidence, it appears that the contamination is from a fuel. The sample was reanalyzed at a further dilution with criteria being met.*

The compounds that were quantitated against these internal standards and detected in sample 828072-SV-35-B-03 (C0902013-001) were qualified estimated (J). Non-detects were not qualified based on the EPA Region II guidelines.

Sample Results

Validated results are presented in Table II.

Sample 828072-SV-35-B-03 (C0902013-001)

Ethylbenzene was detected in the initial analysis of this sample at a concentration of 2.48 ppbv which is above the linear range of 2.0 ppbv.

When the sample was reanalyzed at a 10X dilution the concentration was reported as 1.4 ppbv. This was at the lowest standard concentration of 0.15 ppbv.

Ethylbenzene was reported in the final data set from the 10X dilution.

Sample 82072-AA-35-B-03 (C0902013-003)

Acetone was detected in the sample at a concentration of 2.34 ppbv which was above the linear range of 2.0 ppbv, but the sample was not reanalyzed.

During validation, acetone was qualified 5.6 ug/m^3 EJ estimated in the final data set.

No other problems were found with the reported results of any of the samples in SDG C0902013.

References:

New York State Department of Environmental Conservation (NYSDEC), 2005. "Analytical Services Protocols"; July 2005.

New York State Department of Environmental Conservation (NYSDEC), 2002. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; Draft DER-10; Division of Environmental Remediation; December 2002.

USEP Hazardous Waste Support Branch – Validation Air Samples – Volatile Organic Analysis of Ambient Air in Canister By Method TO-15 (SOP #HW-31, Revision #4, October 2006)

Validated by Nancy Potak June, 2, 2009

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DUSR Table 2
Results Summary
SDG C0902013
Erdle Perforating

	Lab Sample Delivery Group		C0902013		C0902013		C0902013	
	Loc Name		SV-35-B		BA-35-B		AA-35-B	
	Field Sample Date		2/4/2009		2/4/2009		2/4/2009	
	Field Sample Id		828072-SV-35-B-03		828072-BA-35-B-03		828072-AA-35-B-03	
		Qc Code	FS		FS		FS	
Analysis Method	Param Name	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO-15	1,1,1-Trichloroethane	ug/m3	0.83	U	0.83	U	0.83	U
TO-15	1,1,2,2-Tetrachloroethane	ug/m3	1	U	1	U	1	U
TO-15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.2	U	1	J	1	J
TO-15	1,1,2-Trichloroethane	ug/m3	0.83	U	0.83	U	0.83	U
TO-15	1,1-Dichloroethane	ug/m3	0.62	U	0.62	U	0.62	U
TO-15	1,1-Dichloroethene	ug/m3	0.44	J	0.6	U	0.6	U
TO-15	1,2,4-Trichlorobenzene	ug/m3	1.1	U	1.1	U	1.1	U
TO-15	1,2,4-Trimethylbenzene	ug/m3	5.6	J	0.75	U	0.75	U
TO-15	1,2-Dibromoethane	ug/m3	1.2	U	1.2	U	1.2	U
TO-15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U	1.1	U	1.1	U
TO-15	1,2-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U
TO-15	1,2-Dichloroethane	ug/m3	0.78		0.62	U	0.62	U
TO-15	1,2-Dichloropropane	ug/m3	0.7	U	0.7	U	0.7	U
TO-15	1,3,5-Trimethylbenzene	ug/m3	2.5	J	0.75	U	0.75	U
TO-15	1,3-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U
TO-15	1,4-Dichlorobenzene	ug/m3	1.7	J	0.73	J	0.92	U
TO-15	1,4-Dioxane	ug/m3	2.4	J	0.44	J	1.1	U
TO-15	2-Butanone	ug/m3	19		3.6		0.36	J
TO-15	2-Hexanone	ug/m3	1.2	U	0.83	J	1.2	U
TO-15	2-Propanol	ug/m3	0.37	U	33		0.37	U
TO-15	4-Ethyltoluene	ug/m3	1.8		0.75	U	0.75	U
TO-15	4-Methyl-2-pentanone	ug/m3	12	J	1.2	U	1.2	U
TO-15	Acetone	ug/m3	910		12		5.6	EJ
TO-15	Allyl chloride	ug/m3	0.48	U	0.48	U	0.48	U
TO-15	Benzene	ug/m3	0.49	U	0.75		0.91	
TO-15	Benzyl chloride	ug/m3	0.88	U	0.88	U	0.88	U
TO-15	Bromodichloromethane	ug/m3	1	U	1	U	1	U
TO-15	Bromoform	ug/m3	1.6	U	1.6	U	1.6	U
TO-15	Bromomethane	ug/m3	0.59	U	0.59	U	0.59	U
TO-15	Butadiene, 1,3-	ug/m3	0.34	U	0.34	U	0.34	U
TO-15	Carbon disulfide	ug/m3	60		0.47	U	0.38	J
TO-15	Carbon tetrachloride	ug/m3	0.26	U	0.77		0.7	
TO-15	Chlorobenzene	ug/m3	2.3	J	0.7	U	0.7	U
TO-15	Chlorodibromomethane	ug/m3	1.3	U	1.3	U	1.3	U
TO-15	Chloroethane	ug/m3	0.4	U	0.4	U	0.4	U
TO-15	Chloroform	ug/m3	1.3		1.9		0.74	U
TO-15	Chloromethane	ug/m3	0.57		0.69		0.65	
TO-15	Cis-1,2-Dichloroethene	ug/m3	81		3.9		0.6	U
TO-15	cis-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U	0.69	U
TO-15	Cyclohexane	ug/m3	0.52	U	0.52	U	0.52	U
TO-15	Dichlorodifluoromethane	ug/m3	2.5		2.8		2.7	
TO-15	Ethyl acetate	ug/m3	42		1.9		0.92	U
TO-15	Ethyl benzene	ug/m3	6.2	J	0.66	U	0.66	U
TO-15	Heptane	ug/m3	12	J	0.5	J	0.62	U
TO-15	Hexachlorobutadiene	ug/m3	1.6	U	1.6	U	1.6	U
TO-15	Hexane	ug/m3	37		0.54	U	0.54	U
TO-15	Isooctane	ug/m3	0.9		0.71	U	0.71	U
TO-15	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U	0.55	U
TO-15	Methylene chloride	ug/m3	0.99		1.2		1.3	
TO-15	Propylene	ug/m3	0.26	U	0.26	U	0.26	U
TO-15	Styrene	ug/m3	7.9	J	0.65	U	0.65	U
TO-15	Tetrachloroethene	ug/m3	1.9	J	1	U	1	U
TO-15	Tetrahydrofuran	ug/m3	0.45	U	4		0.45	U
TO-15	Toluene	ug/m3	96	J	2.2		1.9	
TO-15	trans-1,2-Dichloroethene	ug/m3	0.6	U	0.6	U	0.6	U
TO-15	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U	0.69	U
TO-15	Trichloroethene	ug/m3	7.2	J	1.1		0.49	
TO-15	Trichlorofluoromethane	ug/m3	1.3		1.4		1.4	
TO-15	Vinyl acetate	ug/m3	0.54	U	0.54	U	0.54	U
TO-15	Vinyl bromide	ug/m3	0.67	U	0.67	U	0.67	U
TO-15	Vinyl chloride	ug/m3	1.3		0.96		0.1	U
TO-15	Xylene, m/p	ug/m3	18	J	0.53	J	1.3	U
TO-15	Xylene, o	ug/m3	5.6	J	0.66	U	0.66	U

Notes: ug/m3 = microgram per cubic meter
QC code: FS = field sample, FD = field duplicate
Qualifier: U = not detected at a concentration above the reporting limit
J = estimated value
D = result form a dilution analysis

P:\Projects\nysdec1\projects\Erdle Perforating Company\3.0 Field and Site Characterization\3.4 Test Results\Validation Files\validated\C0902013_Table_2.xls
produced by: BJS 6/1/09
checked by: TLC 6/1/09

DATA USABILITY SUMMARY REPORT
MARCH 2009 AIR SAMPLING PROGRAM
ERDLE PERFORATING SITE
GATES, NEW YORK

1.0 Introduction:

Air Volatile Organic Analyses by Method TO-15
Samples Collected: March 9th through 11th, 2009
Samples Received at Centek Laboratory on March 19, 2009
Sample Delivery Group: C0903035
Laboratory Reference Numbers:

Laboratory Sample ID	Field Sample ID
C0903035-001A	828072-SS-44-B-03
C0903035-001A 10X DL	828072-SS-44-B-03 10X DL
C0903035-001A 40X DL	828072-SS-44-B-03 40X DL
C0903035-001A 270X DL	828072-SS-44-B-03 270X DL
C0903035-001A 1620X DL	828072-SS-44-B-03 1620X DL
C0903035-002A	828072-IA-44-B-03
C0903035-002A 10X DL	828072-IA-44-B-03 10X DL
C0903035-003A	828072-0A-44-1-03
C0903035-003A 10X DL	828072-0A-44-1-03 10X DL
C0903035-004A	828072-SS-45-B-03
C0903035-004A 10X DL	828072-SS-45-B-03 10X DL
C0903035-004A 40X DL	828072-SS-45-B-03 40X DL
C0903035-004A 270X DL	828072-SS-45-B-03 270X DL
C0903035-004A 810X DL	828072-SS-45-B-03 810X DL
C0903035-005A	828072-IA-45-B-03
C0903035-005A 10X DL	828072-IA-45-B-03 10X DL
C0903035-006A	828072-SS-46-B-03
C0903035-006A 10X DL	828072-SS-46-B-03 10X DL
C0903035-006A 40X DL	828072-SS-46-B-03 40X DL
C0903035-006A 270X DL	828072-SS-46-B-03 270X DL
C0903035-006A 810 DL	828072-SS-46-B-03 810X DL
C0903035-007A	828072-IA-46-B-03
C0903035-007A 10X DL	828072-IA-46-B-03 10X DL
C0903035-008A	828072-SS-47-B-03
C0903035-008A 10X DL	828072-SS-47-B-03 10X DL
C0903035-008A 270X DL	828072-SS-47-B-03 270X DL
C0903035-009A	828072-IA-47-B-03
C0903035-009A 10X DL	828072-IA-47-B-0310X DL
C0903035-010A	828072-SS-48-B-03
C0903035-010A 10X DL	828072-SS-48-B-03 10X DL
C0903035-010A 40X DL	828072-SS-48-B-03 40X DL
C0903035-010A 270X DL	828072-SS-48-B-03270X DL
C0903035-010A 810X DL	828072-SS-48-B-03 810 X DL
C0903035-011A	828072-IA-48-B-03
C0903035-011A 10X DL	828072-IA-48-B-03 10X DL
C0903035-012A	828072-SS-49-B-03
C0903035-012A 10X DL	828072-SS-49-B-03 10X DL
C0903035-012A 40X DL	828072-SS-49-B-03 40X DL

Laboratory Sample ID	Field Sample ID
C0903035-013A	828072-IA-49-B-03
C0903035-013A 10X DL	828072-IA-49-B-03 10X DL
C0903035-0l4A	828072-0A-49-1-03
C0903035-0l4A 10X DL	828072-0A-49-1-03 10X DL
C0903035-0l4A 90X DL	828072-0A-49-1-03 90X DL
C0903035-015A	828072-SS-50-B-03
C0903035-015A 10X DL	828072-SS-50-B-03 10X DL
C0903035-015A 40X DL	828072-SS-50-B-03 40X DL
C0903035-015A 270X DL	828072-SS-50-B-03 270X DL
C0903035-016A	828072-IA-50-B-03
C0903035-016A 10X DL	828072-IA-50-B-03 10X DL
C0903035-017A	828072-SS-51-B-03
C0903035-017A 10X DL	828072-SS-51-B-03 10X DL
C0903035-017A 40X DL	828072-SS-51-B-03 40X DL
C0903035-018A	828072-IA-51-B-03
C0903035-018A 10X DL	828072-IA-51-B-03 10X DL
C0903035-019A	828072-SS-51-B-03D
C0903035-019A 20X DL	828072-SS-51-B-03D 20X DL
C0903035-020A	828072-IA-41-B-03
C0903035-020A 10X DL	828072-IA-41-B-03 10X DL
C0903035-021A	828072-SS-52-B-03
C0903035-021A 10X DL	828072-SS-52-B-03
C0903035-021A 270X DL	828072-SS-52-B-03
C0903035-022A	828072-IA-52-B-03
C0903035-022A 10X	828072-IA-52-B-03 10X
C0903035-023A	828072-SS-53-B-03
C0903035-023A 10X DL	828072-SS-53-B-03 10X DL
C0903035-023A 40X DL	828072-SS-53-B-03 40X DL
C0903035-024A	828072-IA-53-B-03
C0903035-024A 10X DL	828072-IA-53-B-03 10X DL
C0903035-025A	828072-SS-54-B-03
C0903035-025A 10X DL	828072-SS-54-B-03 10X DL
C0903035-025A 40X DL	828072-SS-54-B-03 40X DL
C0903035-026A	828072-IA-54-B-03
C0903035-026A 10X DL	828072-IA-54-B-03 10X DL
C0903035-027A	828072-0A-54-1-03
C0903035-027A 10X DL	828072-0A-54-1-03 10X DL
C0903035-028A	828072-SS-55-B-03
C0903035-028A 10X DL	828072-SS-55-B-03 10X DL
C0903035-029A	828072-SS-55-B-03D
C0903035-029A 10X DL	828072-SS-55-B-03D 10X DL
C0903035-029A 40X DL	828072-SS-55-B-03D 40X DL
C0903035-030A	828072-IA-55-B-03
C0903035-030A 10X DL	828072-IA-55-B-03 10D DL

Deliverables for the off-site laboratory analyses included a Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2005) for SDG C0903035.

A project chemist review was completed based on NYSDEC Division of Environmental Remediation guidance for Data Usability Summary Reports (NYSDEC, 2002) for SDG C0903035. Air samples were reviewed using criteria in the US EPA Region II checklist, Validating Volatile Organic Analysis of Ambient Air in canister by Method TO-15, SOP HW-31 Revision 4 (USEPA, 2006). The following parameters were reviewed.

* - Data Completeness
* - GC/MS Tuning
* - Holding Times
* - Calibrations
* - Laboratory Blanks
* - Surrogate Compound Recoveries
- Internal Standard Recoveries
- Laboratory Control Sample
* - Compound Identification
- Compound Quantitation

* - Indicates that all criteria were met for this parameter.

2.0 DATA VALIDATION SUMMARY

Holding Times

All samples were analyzed within 30 days of collection.

Tunes

No problems were detected with the tunes associated with the samples of this delivery group. The NYS DEC ASP FORM V was not included in the data package.

Surrogate Compound Recoveries

All surrogate compound recoveries were within the 70% - 130% quality assurance limits.

Calibrations

All %RSDs in the initial calibrations were less than 30%.

1,2-Dichlorobenzne and several other late eluting compounds were recorded on the 0.15 ppbv summary form (page 968) of the 2/29 initial calibration, but they were not found in the raw data for the standard (page 988).

The percent difference of acetone (32.5%), 1,4-dioxane (39%) and 1,2-4 trichlorobenzene (42%) were greater than the 30% continuing calibration quality control limit in the 3/27/09 continuing calibration associated with the 10X dilution of the following samples:

C0903035-001A 10X DL	828072-SS-44-B-03 10X DL
C0903035-003A 10X DL	828072-0A-44-1-03 10X DL
C0903035-004A 10X DL	828072-SS-45-B-03 10X DL
C0903035-006A 10X DL	828072-SS-46-B-03 10X DL
C0903035-008A 10X DL	828072-SS-47-B-03 10X DL
C0903035-012A 10X DL	828072-SS-49-B-03 10X DL
C0903035-015A 10X DL	828072-SS-50-B-03 10X DL
C0903035-017A 10X DL	828072-SS-51-B-03 10X DL

Acetone was detected in the 10X dilution of sample 828072-IA-55-B-03 at a concentration of 8.5 ppbv. This was flagged with the "J" qualifier and is an estimated value.

None of the other compounds were quantitated from the 10X dilution in these samples and no qualifiers were added to the data set.

The percent difference of 1,3-butadiene (43%), bromoform (39%) and benzyl chloride (80%) were greater than the 30% quality control limit in the 3/27/09 continuing calibration associated with the following samples:

C0903035-002A 10X DL	828072-IA-44-B-03 10X DL
C0903035-003A 10X DL	828072-0A-44-1-03 10X DL
C0903035-005A 10X DL	828072-IA-45-B-03 10X DL
C0903035-007A 10X DL	828072-IA-46-B-03 10X DL
C0903035-009A 10X DL	828072-IA-47-B-0310X DL
C0903035-010A	828072-SS-48-B-03
C0903035-011A 10X DL	828072-IA-48-B-03 10X DL
C0903035-013A 10X DL	828072-IA-49-B-03 10X DL
C0903035-020A 10X DL	828072-IA-41-B-03 10X DL
C0903035-028A	828072-SS-55-B-03
C0903035-028A 10X DL	828072-SS-55-B-03 10X DL
C0903035-029A	828072-SS-55-B-03D
C0903035-029A 10X DL	828072-SS-55-B-03D 10X DL

The data for these compounds were flagged with the "J' qualifier and are estimated values.

All RRF's were greater than the required limits.

The data for the 2.0, 1.50, 1.25, and 1.0 standards were not included in the initial calibration summary (page 110).

Laboratory Control Sample

All of the laboratory control samples were within the required 70% - 130% limits in the LCS associated with the following samples with the exception of 1,3-butadiene (135%).

C0903035-001A	828072-SS-44-B-03
C0903035-002A	828072-IA-44-B-03
C0903035-003A	828072-0A-44-1-03
C0903035-004A	828072-SS-45-B-03

C0903035-005A	828072-IA-45-B-03
C0903035-006A	828072-SS-46-B-03
C0903035-007A	828072-IA-46-B-03
C0903035-008A	828072-SS-47-B-03
C0903035-009A	828072-IA-47-B-03
C0903035-011A	828072-IA-48-B-03
C0903035-013A	828072-IA-49-B-03
C0903035-0l4A	828072-0A-49-1-03
C0903035-016A	828072-IA-50-B-03
C0903035-018A	828072-IA-51-B-03
C0903035-020A	828072-IA-41-B-03
C0903035-022A	828072-IA-52-B-03
C0903035-024A	828072-IA-53-B-03
C0903035-026A	828072-IA-54-B-03
C0903035-027A	828072-0A-54-1-03
C0903035-030A	828072-IA-55-B-03

All of the laboratory control samples were within the required 70% - 130% limits in the LCS associated with associated the following samples with the exceptions of 1,3-butadiene (138%), benzyl chloride (166%) and bromoform (139%).

C0903035-002A 10X DL	828072-IA-44-B-03 10X DL
C0903035-003A 10X DL	828072-0A-44-1-03 10X DL
C0903035-005A 10X DL	828072-IA-45-B-03 10X DL
C0903035-007A 10X DL	828072-IA-46-B-03 10X DL
C0903035-009A 10X DL	828072-IA-47-B-03 10X DL
C0903035-010A	828072-SS-48-B-03
C0903035-011A 10X DL	828072-IA-48-B-03 10X DL
C0903035-013A 10X DL	828072-IA-49-B-03 10X DL
C0903035-020A 10X DL	828072-IA-41-B-03 10X DL
C0903035-028A	828072-SS-55-B-03
C0903035-028A 10X DL	828072-SS-55-B-03 10X DL
C0903035-029A	828072-SS-55-B-03D
C0903035-029A 10X DL	828072-SS-55-B-03D 10X DL

None of these compounds were detected in the samples and non detects were not qualified.

All of the laboratory control samples were within the required 70% - 130% limits in the LCS associated with associated with the following samples:

C0903035-001A 10X DL	828072-SS-44-B-03 10X DL
C0903035-004A 10X DL	828072-SS-45-B-03 10X DL
C0903035-006A 10X DL	828072-SS-46-B-03 10X DL
C0903035-008A 10X DL	828072-SS-47-B-03 10X DL
C0903035-012A 10X DL	828072-SS-49-B-03 10X DL
C0903035-015A 10X DL	828072-SS-50-B-03 10X DL
C0903035-017A 10X DL	828072-SS-51-B-03 10X DL
C0903035-030A 10X DL	828072-IA-55-B-03 10D DL

Method Blanks

No compounds were detected in any of the method blanks.

Internal Standard Areas and Retention Times

The recoveries and retention times of all internal standards were within the required quality control limits (-40% to +40%) with the exception chlorobenzene in the undiluted analysis of the following samples:

Sample	
C0903035-001A	828072-SS-44-B-03
C0903035-004A	828072-SS-45-B-03
C0903035-006A	828072-SS-46-B-03
C0903035-015A	828072-SS-50-B-03

The laboratory's case narrative states: *This is most likely due to matrix interference. Based on the chromatographic evidence, it appears that the contamination is from a fuel. The sample was reanalyzed at a further dilution with criteria being met.*

The compounds that were quantitated against these internal standards and detected in the samples were qualified estimated (J). Non-detects were not qualified based on the EPA Region II guidelines.

Sample Results

Validated results are presented in Table 2.

Sample C0903035-001A / 828072-SS-44-B-03

Cyclohexane was detected in the initial analysis of this sample at a concentration of 2.83 ppbv which is above the linear range of 2.0 ppbv.

When the sample was reanalyzed at a 10X dilution the concentration was reported as 1.9 ppbv, or 0.19 ppbv prior to correction for the dilution. This was close to the lowest standard concentration of 0.15 ppbv. Cyclohexane was reported from the 10X dilution in the final data set.

O-Xylene was reported from the 40X dilution by the laboratory, but it was within the linear range in the 10X dilution (12 ppbv). The result for o-Xylene in the final data set was reported from the 10X dilution run.

Sample C0903035-004A (828072-SS-45-B-03)

Toluene was reported from the 40X dilution by the laboratory (9.2 ppbv), but the 10X dilution (5.9 ppbv) was the lowest analytical run to bring the concentration within the linear range. The data from the 10X dilution was used for the final reporting.

Sample C0903035-008A (828072-SS-47-B-03)

Ethyl acetate was reported from the 10X dilution, but the reported concentration in the dilution (2.37 ppbv) was above the linear range of 2.0 ppbv. The compound was not detected in the 270X dilution.

The final result for ethyl acetate was flagged with the "EJ" qualifier and is an estimated value.

Sample C0903035-012A (828072-SS-49-B-03)

1,2,4-Trimethylbenzene (2.2 ppbv) was reported from the 1X dilution, and was above the linear range of 2.0 ppbv. The compound was not detected in the 10X dilution. The final result for 1,2,4-trimethylbenzene was flagged with the "EJ" qualifier and is an estimated value.

Sample C0903035-020A (828072-IA-41-B-03)

Trichloroethene was detected in the undiluted analysis at a concentration of 2.67 ppbv which is above the linear range of 2.0 ppbv.

The sample was reanalyzed at a 10X dilution and the concentration was reported as 2.0 ppbv, or 0.2 ppbv prior to correction for the dilution. This was close to the lowest standard concentration of 0.15 ppbv. TCE was reported from the 10X dilution in the final data set.

Sample C0903035-021A / 828072-SS-52-B-03

The laboratory inadvertently reported trans-1,2-dichloroethene from the 270X dilution at a concentration of 65 ppbv (260 ug/m3). Trans-1,2-dichloroethene was not detected in the 270X dilution run. Trans-1,2-dichloroethene was detected in the 10X dilution raw data at a concentration of 2.4 ppbv (9.57 ug/m3) which was within the linear range and reported in the final data set.

Sample C0903035-022A / 828072-IA-52-B-03

Benzene was detected in the undiluted analysis at a concentration of 2.54 ppbv which is above the linear range of 2.0 ppbv.

When the sample was reanalyzed at a 10X dilution the concentration was reported as 2.0 ppbv, or 0.2 ppbv prior to correction for the dilution. This was close to the lowest standard concentration of 0.15 ppbv. Benzene was reported from the 10X dilution in the final data set.

No other problems were found with the reported results of any of the samples in SDG C0903035.

References:

New York State Department of Environmental Conservation (NYSDEC), 2005. "Analytical Services Protocols"; July 2005.

New York State Department of Environmental Conservation (NYSDEC), 2002. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; Draft DER-10; Division of Environmental Remediation; December 2002.

USEP Hazardous Waste Support Branch – Validation Air Samples – Volatile Organic Analysis of Ambient Air in Canister By Method TO-15 (SOP #HW-31, Revision #4, October 2006)

Validated by Nancy Potak June, 2, 2009

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DUSR Table 2
Results Summary
SDG C0903035
Erdle Perforating

		Lab Sample Delivery Group	C0903035		C0903035		C0903035		C0903035	
		Loc Name	SS-44-B		IA-44-B		OA-44-1		SS-45-B	
		Field Sample Date	3/9/2009		3/9/2009		3/9/2009		3/9/2009	
		Field Sample Id	828072-SS-44-B-03		828072-IA-44-B-03		828072-OA-44-1-03		828072-SS-45-B-03	
		Qc Code	FS		FS		FS		FS	
Analysis	Param Name	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	ug/m3	1.6		2.4		0.83	U	0.83	U
VOCs	1,1,2,2-Tetrachloroethane	ug/m3	1	U	1	U	1	U	1	U
VOCs	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	0.86	J	1.2	U	1.2	U	0.78	J
VOCs	1,1,2-Trichloroethane	ug/m3	0.83	U	0.83	U	0.83	U	0.83	U
VOCs	1,1-Dichloroethane	ug/m3	0.62	U	0.62	U	0.62	U	0.62	U
VOCs	1,1-Dichloroethene	ug/m3	0.6	U	0.6	U	0.6	U	0.6	U
VOCs	1,2,4-Trichlorobenzene	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	1,2,4-Trimethylbenzene	ug/m3	4.7	J	2.1		0.7	J	7	J
VOCs	1,2-Dibromoethane	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U
VOCs	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	1,2-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U
VOCs	1,2-Dichloroethane	ug/m3	0.62	U	0.62	U	0.62	U	0.62	U
VOCs	1,2-Dichloropropane	ug/m3	0.7	U	0.7	U	0.7	U	0.7	U
VOCs	1,3,5-Trimethylbenzene	ug/m3	1.6	J	0.85		0.75	U	2.8	J
VOCs	1,3-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U
VOCs	1,4-Dichlorobenzene	ug/m3	0.67	J	0.92	U	0.92	U	0.92	U
VOCs	1,4-Dioxane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	2-Butanone	ug/m3	0.9	U	3.4		0.96		0.9	U
VOCs	2-Hexanone	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U
VOCs	2-Propanol	ug/m3	0.37	U	0.37	U	1.9		0.37	U
VOCs	4-Ethyltoluene	ug/m3	2	J	0.6	J	0.75	U	3	J
VOCs	4-Methyl-2-pentanone	ug/m3	4.4		1.2	U	0.58	J	5.1	
VOCs	Acetone	ug/m3	2,000		30		29		2,400	
VOCs	Allyl chloride	ug/m3	0.48	U	0.48	U	0.48	U	0.48	U
VOCs	Benzene	ug/m3	1.8		1		0.81		3	
VOCs	Benzyl chloride	ug/m3	0.88	U	0.88	U	0.88	U	0.88	U
VOCs	Bromodichloromethane	ug/m3	1	U	1	U	1	U	1	U
VOCs	Bromoform	ug/m3	1.6	U	1.6	U	1.6	U	1.6	U
VOCs	Bromomethane	ug/m3	0.59	U	0.59	U	0.59	U	0.59	U
VOCs	Butadiene, 1,3-	ug/m3	0.34	U	0.34	U	0.34	U	0.34	U
VOCs	Carbon disulfide	ug/m3	0.47		0.38	J	0.47	U	2.2	
VOCs	Carbon tetrachloride	ug/m3	0.7	J	0.7		0.7		0.7	J
VOCs	Chlorobenzene	ug/m3	0.7	U	0.7	U	0.7	U	0.7	U
VOCs	Chlorodibromomethane	ug/m3	1.3	U	1.3	U	1.3	U	1.3	U
VOCs	Chloroethane	ug/m3	0.4	U	0.4	U	0.4	U	0.4	U
VOCs	Chloroform	ug/m3	0.65	J	0.74	U	3.8		1.2	
VOCs	Chloromethane	ug/m3	0.31	U	1.2		1.1		17	
VOCs	Cis-1,2-Dichloroethene	ug/m3	0.6	U	0.6	U	0.6	U	0.6	U
VOCs	cis-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U	0.69	U	0.69	U
VOCs	Cyclohexane	ug/m3	6.6		0.52	U	1.2		14	
VOCs	Dichlorodifluoromethane	ug/m3	3.2		3.2		2.7		2.7	
VOCs	Ethyl acetate	ug/m3	400		1.6		0.4	J	630	
VOCs	Ethyl benzene	ug/m3	52		0.75		0.66	U	150	
VOCs	Heptane	ug/m3	5.2		1.2		0.58	J	5.9	
VOCs	Hexachlorobutadiene	ug/m3	1.6	U	1.6	U	1.6	U	1.6	U
VOCs	Hexane	ug/m3	1,100		1		1		1,800	
VOCs	Isooctane	ug/m3	1.3		0.71	U	0.71	U	2.5	
VOCs	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U	0.55	U	0.55	U
VOCs	Methylene chloride	ug/m3	0.53		0.42	J	0.39	J	0.74	
VOCs	Propylene	ug/m3	0.26	U	0.26	U	0.26	U	0.26	U
VOCs	Styrene	ug/m3	4.5	J	0.65	U	0.65	U	0.65	U
VOCs	Tetrachloroethene	ug/m3	1.6	J	0.76	J	0.97	J	10	J
VOCs	Tetrahydrofuran	ug/m3	0.45	U	0.45	U	0.45	U	0.45	U
VOCs	Toluene	ug/m3	16		6.9		1.8		35	
VOCs	trans-1,2-Dichloroethene	ug/m3	0.6	U	0.6	U	0.6	U	0.6	U
VOCs	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U	0.69	U	0.69	U
VOCs	Trichloroethene	ug/m3	3.8		0.22	U	0.93		4.2	
VOCs	Trichlorofluoromethane	ug/m3	2.1		2		1.5		1.8	
VOCs	Vinyl acetate	ug/m3	0.54	U	0.54	U	0.54	U	0.54	U
VOCs	Vinyl bromide	ug/m3	0.67	U	0.67	U	0.67	U	0.67	U
VOCs	Vinyl chloride	ug/m3	0.39	U	0.1	U	0.1	U	0.39	U
VOCs	Xylene, m/p	ug/m3	310		2.3		1.1	J	450	
VOCs	Xylene, o	ug/m3	54		0.75		0.66	U	150	

Notes: ug/m3 = microgram per cubic meter
QC code: FS = field sample, FD = field duplicate
Qualifier: U = not detected at a concentration above the reporting limit
J = estimated value
D = result form a dilution analysis

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C0903035_Table_2.xls
produced by: BJS 6/1/09
checked by: TLC 6/1/09

DUSR Table 2
Results Summary
SDG C0903035
Erdle Perforating

	Lab Sample Delivery Group	C0903035		C0903035		C0903035		C0903035	
	Loc Name	IA-45-B		SS-46-B		IA-46-B		SS-47-B	
	Field Sample Date	3/9/2009		3/9/2009		3/9/2009		3/9/2009	
	Field Sample Id	828072-IA-45-B-03		828072-SS-46-B-03		828072-IA-46-B-03		828072-SS-47-B-03	
	Qc Code	FS		FS		FS		FS	
Analysis	Param Name	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	ug/m3	0.83	U	0.83	U	0.83	U	0.83	U
VOCs	1,1,2,2-Tetrachloroethane	ug/m3	1	U	1	U	1	U	1	U
VOCs	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.2	U	0.86	J	1.2	U	0.78	J
VOCs	1,1,2-Trichloroethane	ug/m3	0.83	U	0.83	U	0.83	U	0.83	U
VOCs	1,1-Dichloroethane	ug/m3	0.62	U	0.62	U	0.62	U	0.62	U
VOCs	1,1-Dichloroethene	ug/m3	0.6	U	0.6	U	0.6	U	0.6	U
VOCs	1,2,4-Trichlorobenzene	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	1,2,4-Trimethylbenzene	ug/m3	1.3		6	J	1.7		3	
VOCs	1,2-Dibromoethane	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U
VOCs	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	1,2-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U
VOCs	1,2-Dichloroethane	ug/m3	0.62	U	0.62	U	0.62	U	0.49	J
VOCs	1,2-Dichloropropane	ug/m3	0.7	U	0.7	U	0.7	U	0.7	U
VOCs	1,3,5-Trimethylbenzene	ug/m3	0.65	J	1.9	J	0.75		1.1	
VOCs	1,3-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U
VOCs	1,4-Dichlorobenzene	ug/m3	0.92	U	0.67	J	0.92	U	0.92	U
VOCs	1,4-Dioxane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	2-Butanone	ug/m3	2.6		0.9	U	1.4		0.9	U
VOCs	2-Hexanone	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U
VOCs	2-Propanol	ug/m3	9		0.37	U	0.37	U	0.37	U
VOCs	4-Ethyltoluene	ug/m3	0.7	J	2.5	J	0.55	J	1.1	
VOCs	4-Methyl-2-pentanone	ug/m3	1.2	U	5.5		1.2	U	1.5	
VOCs	Acetone	ug/m3	36		2,400		28		520	
VOCs	Allyl chloride	ug/m3	0.48	U	0.48	U	0.48	U	0.48	U
VOCs	Benzene	ug/m3	2.1		2.4		1.9		1.4	
VOCs	Benzyl chloride	ug/m3	0.88	U	0.88	U	0.88	U	0.88	U
VOCs	Bromodichloromethane	ug/m3	1	U	1	U	1	U	1	U
VOCs	Bromoform	ug/m3	1.6	U	1.6	U	1.6	U	1.6	U
VOCs	Bromomethane	ug/m3	0.59	U	0.59	U	0.59	U	0.59	U
VOCs	Butadiene, 1,3-	ug/m3	0.34	U	0.34	U	0.34	U	0.34	U
VOCs	Carbon disulfide	ug/m3	0.47	U	0.57		0.47	U	0.47	U
VOCs	Carbon tetrachloride	ug/m3	0.26	U	0.7	J	0.77		0.7	J
VOCs	Chlorobenzene	ug/m3	0.7	U	0.7	U	0.7	U	0.7	U
VOCs	Chlorodibromomethane	ug/m3	1.3	U	1.3	U	1.3	U	1.3	U
VOCs	Chloroethane	ug/m3	0.4	U	0.4	U	0.4	U	0.4	U
VOCs	Chloroform	ug/m3	0.84		0.65	J	0.6	J	0.74	U
VOCs	Chloromethane	ug/m3	3.8		0.31	U	1.1		0.31	U
VOCs	Cis-1,2-Dichloroethene	ug/m3	0.6	U	0.6	U	0.6	U	0.6	U
VOCs	cis-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U	0.69	U	0.69	U
VOCs	Cyclohexane	ug/m3	0.8		10		0.66		2.6	
VOCs	Dichlorodifluoromethane	ug/m3	2.7		2.9		3		2.8	
VOCs	Ethyl acetate	ug/m3	1.5		580		1.4		87	EJ
VOCs	Ethyl benzene	ug/m3	0.79		83		0.97		12	
VOCs	Heptane	ug/m3	1.5		6.3		2.2		1.7	
VOCs	Hexachlorobutadiene	ug/m3	1.6	U	1.6	U	1.6	U	1.6	U
VOCs	Hexane	ug/m3	2		1,500		2		490	
VOCs	Isooctane	ug/m3	3.7		1.5		0.57	J	0.71	U
VOCs	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U	0.55	U	0.55	U
VOCs	Methylene chloride	ug/m3	0.53	U	0.56		0.42	J	0.53	U
VOCs	Propylene	ug/m3	0.26	U	0.26	U	0.26	U	0.26	U
VOCs	Styrene	ug/m3	0.65	U	0.65	U	0.65	U	0.65	U
VOCs	Tetrachloroethene	ug/m3	25		2.5	J	1	U	1	U
VOCs	Tetrahydrofuran	ug/m3	0.45	U	0.45	U	0.45	U	0.45	U
VOCs	Toluene	ug/m3	5.9		19		7.7	J	7.7	
VOCs	trans-1,2-Dichloroethene	ug/m3	0.6	U	0.6	U	0.6	U	0.6	U
VOCs	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U	0.69	U	0.69	U
VOCs	Trichloroethene	ug/m3	0.22	U	4.3		0.6		1.5	
VOCs	Trichlorofluoromethane	ug/m3	1.6		2.2		2.5		1.7	
VOCs	Vinyl acetate	ug/m3	0.54	U	0.54	U	0.54	U	0.54	U
VOCs	Vinyl bromide	ug/m3	0.67	U	0.67	U	0.67	U	0.67	U
VOCs	Vinyl chloride	ug/m3	0.1	U	0.39	U	0.1	U	0.39	U
VOCs	Xylene, m/p	ug/m3	3.1		420		3.1		61	
VOCs	Xylene, o	ug/m3	0.79		90		1		11	

Notes: ug/m3 = microgram per cubic meter
QC code: FS = field sample, FD = field duplicate
Qualifier: U = not detected at a concentration above the reporting limit
J = estimated value
D = result form a dilution analysis

DUSR Table 2
Results Summary
SDG C0903035
Erdle Perforating

	Lab Sample Delivery Group	C0903035		C0903035		C0903035		C0903035	
	Loc Name	IA-47-B		SS-48-B		IA-48-B		SS-49-B	
	Field Sample Date	3/9/2009		3/10/2009		3/10/2009		3/10/2009	
	Field Sample Id	828072-IA-47-B-03		828072-SS-48-B-03		828072-IA-48-B-03		828072-SS-49-B-03	
	Qc Code	FS		FS		FS		FS	
Analysis	Param Name	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	ug/m3	0.83	U	0.83	U	0.83	U	0.67	J
VOCs	1,1,2,2-Tetrachloroethane	ug/m3	1	U	1	U	1	U	1	U
VOCs	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.2	U	1.2	U	1.2	U	0.78	J
VOCs	1,1,2-Trichloroethane	ug/m3	0.83	U	0.83	U	0.83	U	0.83	U
VOCs	1,1-Dichloroethane	ug/m3	0.62	U	0.62	U	0.62	U	0.62	U
VOCs	1,1-Dichloroethene	ug/m3	0.6	U	0.6	U	0.6	U	0.6	U
VOCs	1,2,4-Trichlorobenzene	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	1,2,4-Trimethylbenzene	ug/m3	1.4		4.3		3.1		11	EJ
VOCs	1,2-Dibromoethane	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U
VOCs	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	1,2-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U
VOCs	1,2-Dichloroethane	ug/m3	0.62	U	0.62	U	0.62	U	0.62	U
VOCs	1,2-Dichloropropane	ug/m3	0.7	U	0.7	U	0.7	U	0.7	U
VOCs	1,3,5-Trimethylbenzene	ug/m3	0.75		1.3		0.8		2.5	
VOCs	1,3-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U
VOCs	1,4-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U
VOCs	1,4-Dioxane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	2-Butanone	ug/m3	2.3		0.9	U	1.1		0.9	U
VOCs	2-Hexanone	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U
VOCs	2-Propanol	ug/m3	8.5		0.37	U	48		0.37	U
VOCs	4-Ethyltoluene	ug/m3	0.65	J	1.7		0.9		2.6	
VOCs	4-Methyl-2-pentanone	ug/m3	1.2	U	5		1.2	U	52	
VOCs	Acetone	ug/m3	31		2,300		26		73	
VOCs	Allyl chloride	ug/m3	0.48	U	0.48	U	0.48	U	0.48	U
VOCs	Benzene	ug/m3	3.6		1.7		0.88		6.3	
VOCs	Benzyl chloride	ug/m3	0.88	U	0.88	UJ	0.88	U	0.88	U
VOCs	Bromodichloromethane	ug/m3	1	U	1	U	1	U	1	U
VOCs	Bromoform	ug/m3	1.6	U	1.6	UJ	1.6	U	1.6	U
VOCs	Bromomethane	ug/m3	0.59	U	0.59	U	0.59	U	0.59	U
VOCs	Butadiene, 1,3-	ug/m3	0.34	U	0.34	UJ	0.34	U	0.34	U
VOCs	Carbon disulfide	ug/m3	0.47	U	3.6		0.35	J	11	
VOCs	Carbon tetrachloride	ug/m3	0.7		0.96	U	0.7		0.7	J
VOCs	Chlorobenzene	ug/m3	0.7	U	0.7	U	0.7	U	0.7	U
VOCs	Chlorodibromomethane	ug/m3	1.3	U	1.3	U	1.3	U	1.3	U
VOCs	Chloroethane	ug/m3	0.4	U	0.4	U	0.4	U	0.4	U
VOCs	Chloroform	ug/m3	0.74	U	0.5	J	0.74	U	0.89	
VOCs	Chloromethane	ug/m3	1.4		0.31	U	1		1.2	
VOCs	Cis-1,2-Dichloroethene	ug/m3	0.6	U	2.1		0.4	J	4.4	
VOCs	cis-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U	0.69	U	0.69	U
VOCs	Cyclohexane	ug/m3	0.77		12		0.52	U	18	
VOCs	Dichlorodifluoromethane	ug/m3	2.8		2.1		3.2		3.3	
VOCs	Ethyl acetate	ug/m3	0.95		620		0.73	J	2.1	
VOCs	Ethyl benzene	ug/m3	1.3		49		0.53	J	1.9	
VOCs	Heptane	ug/m3	1.6		6.1		0.83		30	
VOCs	Hexachlorobutadiene	ug/m3	1.6	U	1.6	U	1.6	U	1.6	U
VOCs	Hexane	ug/m3	3		1,500		1		47	
VOCs	Isooctane	ug/m3	1.8		0.66	J	0.71	U	1.3	
VOCs	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U	0.55	U	0.55	U
VOCs	Methylene chloride	ug/m3	0.39	J	0.56		0.39	J	0.42	J
VOCs	Propylene	ug/m3	0.26	U	0.26	U	0.26	U	0.26	U
VOCs	Styrene	ug/m3	0.65	U	0.65	U	0.65	U	0.65	U
VOCs	Tetrachloroethene	ug/m3	1	U	0.9	J	1	U	1.3	
VOCs	Tetrahydrofuran	ug/m3	0.45	U	0.45	U	0.45	U	0.45	U
VOCs	Toluene	ug/m3	6.1		13		2.4		6.9	
VOCs	trans-1,2-Dichloroethene	ug/m3	0.6	U	0.6	U	0.6	U	0.6	U
VOCs	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U	0.69	U	0.69	U
VOCs	Trichloroethene	ug/m3	0.27		4.4		0.66		4.2	
VOCs	Trichlorofluoromethane	ug/m3	1.6		1.5		1.9		1.8	
VOCs	Vinyl acetate	ug/m3	0.54	U	0.54	U	0.54	U	0.54	U
VOCs	Vinyl bromide	ug/m3	0.67	U	0.67	U	0.67	U	0.67	U
VOCs	Vinyl chloride	ug/m3	0.1	U	0.94		0.1	U	1.1	
VOCs	Xylene, m/p	ug/m3	3.8		350		1.8		6.4	
VOCs	Xylene, o	ug/m3	1.3		53		0.84		2.4	

Notes: ug/m3 = microgram per cubic meter
QC code: FS = field sample, FD = field duplicate
Qualifier: U = not detected at a concentration above the reporting limit
J = estimated value
D = result form a dilution analysis

DUSR Table 2
Results Summary
SDG C0903035
Erdle Perforating

	Lab Sample Delivery Group	C0903035		C0903035		C0903035		C0903035	
	Loc Name	IA-49-B		OA-49-1		SS-50-B		IA-50-B	
	Field Sample Date	3/10/2009		3/10/2009		3/10/2009		3/10/2009	
	Field Sample Id	828072-IA-49-B-03		828072-OA-49-1-03		828072-SS-50-B-03		828072-IA-50-B-03	
	Qc Code	FS		FS		FS		FS	
Analysis	Param Name	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	ug/m3	1.6		0.83	U	1.1		0.83	U
VOCs	1,1,2,2-Tetrachloroethane	ug/m3	1	U	1	U	1	U	1	U
VOCs	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.2	U	1.2	U	0.78	J	1.2	U
VOCs	1,1,2-Trichloroethane	ug/m3	0.83	U	0.83	U	0.83	U	0.83	U
VOCs	1,1-Dichloroethane	ug/m3	0.62	U	0.62	U	28		0.62	U
VOCs	1,1-Dichloroethene	ug/m3	0.6	U	0.6	U	0.44	J	0.6	U
VOCs	1,2,4-Trichlorobenzene	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	1,2,4-Trimethylbenzene	ug/m3	3		4.1		4.2	J	2.8	
VOCs	1,2-Dibromoethane	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U
VOCs	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	1,2-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U
VOCs	1,2-Dichloroethane	ug/m3	0.62	U	0.62	U	0.62	U	0.62	U
VOCs	1,2-Dichloropropane	ug/m3	0.7	U	0.7	U	0.7	U	0.7	U
VOCs	1,3,5-Trimethylbenzene	ug/m3	1.2		1.1		1.4	J	0.85	
VOCs	1,3-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U
VOCs	1,4-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U
VOCs	1,4-Dioxane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	2-Butanone	ug/m3	1.3		0.9	U	0.9	U	2.7	
VOCs	2-Hexanone	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U
VOCs	2-Propanol	ug/m3	6.7		16		0.37	U	18	
VOCs	4-Ethyltoluene	ug/m3	0.85		1.2		1.2	J	0.75	
VOCs	4-Methyl-2-pentanone	ug/m3	1	J	0.67	J	65		1.4	
VOCs	Acetone	ug/m3	29		350		97		18	
VOCs	Allyl chloride	ug/m3	0.48	U	0.48	U	0.48	U	0.48	U
VOCs	Benzene	ug/m3	1.8		0.71		9.4		1.4	
VOCs	Benzyl chloride	ug/m3	0.88	U	0.88	U	0.88	U	0.88	U
VOCs	Bromodichloromethane	ug/m3	1	U	1	U	1	U	1	U
VOCs	Bromoform	ug/m3	1.6	U	1.6	U	1.6	U	1.6	U
VOCs	Bromomethane	ug/m3	0.59	U	0.59	U	0.59	U	0.59	U
VOCs	Butadiene, 1,3-	ug/m3	0.34	U	0.34	U	0.34	U	0.34	U
VOCs	Carbon disulfide	ug/m3	0.47	U	0.47	U	58		0.47	U
VOCs	Carbon tetrachloride	ug/m3	0.7		0.64		0.96	U	0.83	
VOCs	Chlorobenzene	ug/m3	0.7	U	0.7	U	0.7	U	0.7	U
VOCs	Chlorodibromomethane	ug/m3	1.3	U	1.3	U	1.3	U	1.3	U
VOCs	Chloroethane	ug/m3	0.4	U	0.4	U	0.4	U	0.4	U
VOCs	Chloroform	ug/m3	0.74	U	0.74	U	0.99		1.1	
VOCs	Chloromethane	ug/m3	0.99		0.31	U	0.31	U	1.3	
VOCs	Cis-1,2-Dichloroethene	ug/m3	0.44	J	0.52	J	990		1.3	
VOCs	cis-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U	0.69	U	0.69	U
VOCs	Cyclohexane	ug/m3	0.49	J	0.56		30		0.7	
VOCs	Dichlorodifluoromethane	ug/m3	5.1		2.7		4.3		3	
VOCs	Ethyl acetate	ug/m3	3.6		19		0.92	U	1.7	
VOCs	Ethyl benzene	ug/m3	1		2.8		1.8	J	0.62	J
VOCs	Heptane	ug/m3	1.1		0.75		67		1.5	
VOCs	Hexachlorobutadiene	ug/m3	1.6	U	1.6	U	1.6	U	1.6	U
VOCs	Hexane	ug/m3	2		52		67		2	
VOCs	Isooctane	ug/m3	0.57	J	0.71	U	1.7		0.71	U
VOCs	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U	0.55	U	0.55	U
VOCs	Methylene chloride	ug/m3	0.53	U	0.53	U	0.46	J	0.53	U
VOCs	Propylene	ug/m3	0.26	U	0.26	U	0.26	U	0.26	U
VOCs	Styrene	ug/m3	0.65	U	0.65	U	0.65	U	0.65	U
VOCs	Tetrachloroethene	ug/m3	1	U	1	U	1	U	1	U
VOCs	Tetrahydrofuran	ug/m3	0.45	U	0.45	U	0.45	U	0.45	U
VOCs	Toluene	ug/m3	4.7		1.9		13	J	4.7	
VOCs	trans-1,2-Dichloroethene	ug/m3	0.6	U	0.6	U	13		0.6	U
VOCs	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U	0.69	U	0.69	U
VOCs	Trichloroethene	ug/m3	0.27		2.4		4.4		0.22	U
VOCs	Trichlorofluoromethane	ug/m3	1.7		1.6		1.5		1.8	
VOCs	Vinyl acetate	ug/m3	0.54	U	0.54	U	7.2		0.54	U
VOCs	Vinyl bromide	ug/m3	0.67	U	0.67	U	0.67	U	0.67	U
VOCs	Vinyl chloride	ug/m3	0.1	U	0.81		23		0.1	U
VOCs	Xylene, m/p	ug/m3	3.6		14		5.1	J	1.8	
VOCs	Xylene, o	ug/m3	1.2		3.4		1.7	J	0.75	

Notes: ug/m3 = microgram per cubic meter
QC code: FS = field sample, FD = field duplicate
Qualifier: U = not detected at a concentration above the reporting limit
J = estimated value
D = result form a dilution analysis

DUSR Table 2
Results Summary
SDG C0903035
Erdle Perforating

	Lab Sample Delivery Group	C0903035		C0903035		C0903035		C0903035	
	Loc Name	SS-51-B		IA-51-B		SS-51-B		IA-41-B	
	Field Sample Date	3/10/2009		3/10/2009		3/10/2009		3/10/2009	
	Field Sample Id	828072-SS-51-B-03		828072-IA-51-B-03		828072-SS-51-B-03D		828072-IA-41-B-03	
	Qc Code	FS		FS		FD		FS	
Analysis	Param Name	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	ug/m3	0.83	U	1.1		0.83	U	0.83	U
VOCs	1,1,2,2-Tetrachloroethane	ug/m3	1	U	1	U	1	U	1	U
VOCs	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.2	U	1.1	J	0.78	J	1.2	U
VOCs	1,1,2-Trichloroethane	ug/m3	0.83	U	0.83	U	0.83	U	0.83	U
VOCs	1,1-Dichloroethane	ug/m3	0.62	U	0.62	U	0.62	U	1.1	
VOCs	1,1-Dichloroethene	ug/m3	0.6	U	0.6	U	0.6	U	0.4	J
VOCs	1,2,4-Trichlorobenzene	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	1,2,4-Trimethylbenzene	ug/m3	5.1		2.7		5.9		0.95	
VOCs	1,2-Dibromoethane	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U
VOCs	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	1,2-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U
VOCs	1,2-Dichloroethane	ug/m3	0.62	U	0.62	U	0.62	U	0.62	U
VOCs	1,2-Dichloropropane	ug/m3	0.7	U	0.7	U	0.7	U	0.7	U
VOCs	1,3,5-Trimethylbenzene	ug/m3	1.4		0.85		1.5		0.75	U
VOCs	1,3-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U
VOCs	1,4-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U
VOCs	1,4-Dioxane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	2-Butanone	ug/m3	0.9	U	1.7		0.9	U	1.8	
VOCs	2-Hexanone	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U
VOCs	2-Propanol	ug/m3	0.37	U	3.7		0.37	U	8.2	
VOCs	4-Ethyltoluene	ug/m3	1.3		0.8		1.4		0.75	U
VOCs	4-Methyl-2-pentanone	ug/m3	71		0.75	J	1.2	U	0.75	J
VOCs	Acetone	ug/m3	73		18		30		18	
VOCs	Allyl chloride	ug/m3	0.48	U	0.48	U	0.48	U	0.48	U
VOCs	Benzene	ug/m3	8.1		0.78		6.7		0.97	
VOCs	Benzyl chloride	ug/m3	0.88	U	0.88	U	0.88	U	0.88	U
VOCs	Bromodichloromethane	ug/m3	1	U	1	U	1	U	1	U
VOCs	Bromoform	ug/m3	1.6	U	1.6	U	1.6	U	1.6	U
VOCs	Bromomethane	ug/m3	0.59	U	0.59	U	0.59	U	0.59	U
VOCs	Butadiene, 1,3-	ug/m3	0.34	U	0.34	U	0.34	U	0.34	U
VOCs	Carbon disulfide	ug/m3	22		0.35	J	15		0.47	U
VOCs	Carbon tetrachloride	ug/m3	0.96	U	1.2		0.96	U	0.7	
VOCs	Chlorobenzene	ug/m3	0.7	U	0.7	U	0.7	U	0.7	U
VOCs	Chlorodibromomethane	ug/m3	1.3	U	1.3	U	1.3	U	6.4	
VOCs	Chloroethane	ug/m3	0.4	U	0.4	U	0.4	U	0.4	U
VOCs	Chloroform	ug/m3	0.69	J	0.74	U	0.74	U	0.74	U
VOCs	Chloromethane	ug/m3	0.31	U	0.9		0.31	U	1.1	
VOCs	Cis-1,2-Dichloroethene	ug/m3	3.4		0.6	U	2.9		64	
VOCs	cis-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U	0.69	U	0.69	U
VOCs	Cyclohexane	ug/m3	59		0.52	U	28		7.2	
VOCs	Dichlorodifluoromethane	ug/m3	3		3		3.1		2.9	
VOCs	Ethyl acetate	ug/m3	0.92	U	2		0.92	U	0.73	J
VOCs	Ethyl benzene	ug/m3	1.7		0.62	J	1.5		0.66	
VOCs	Heptane	ug/m3	75		0.79		43		0.79	
VOCs	Hexachlorobutadiene	ug/m3	1.6	U	1.6	U	1.6	U	1.6	U
VOCs	Hexane	ug/m3	130		1		52		1	
VOCs	Isooctane	ug/m3	1.9		0.71	U	1.3		0.71	U
VOCs	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U	0.55	U	4.7	
VOCs	Methylene chloride	ug/m3	0.53	U	0.64		0.53	U	0.39	J
VOCs	Propylene	ug/m3	0.26	U	0.26	U	0.26	U	0.26	U
VOCs	Styrene	ug/m3	0.65	U	0.65	U	0.48	J	0.65	U
VOCs	Tetrachloroethene	ug/m3	1	U	12		1	U	5.3	
VOCs	Tetrahydrofuran	ug/m3	0.45	U	0.45	U	0.45	U	0.33	J
VOCs	Toluene	ug/m3	11		3.9		8.4	J	2.6	
VOCs	trans-1,2-Dichloroethene	ug/m3	0.6	U	0.6	U	0.6	U	0.77	
VOCs	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U	0.69	U	0.69	U
VOCs	Trichloroethene	ug/m3	2.2		0.71		2.1		11	
VOCs	Trichlorofluoromethane	ug/m3	2.3		4.5		2.2		1.6	
VOCs	Vinyl acetate	ug/m3	0.54	U	0.54	U	0.54	U	0.54	U
VOCs	Vinyl bromide	ug/m3	0.67	U	0.67	U	0.67	U	0.67	U
VOCs	Vinyl chloride	ug/m3	0.39	U	0.1	U	0.39	U	8.3	
VOCs	Xylene, m/p	ug/m3	5.2		1.9		4.5		1.4	
VOCs	Xylene, o	ug/m3	1.7		0.88		1.6		0.57	J

Notes: ug/m3 = microgram per cubic meter
QC code: FS = field sample, FD = field duplicate
Qualifier: U = not detected at a concentration above the reporting limit
J = estimated value
D = result form a dilution analysis

DUSR Table 2
Results Summary
SDG C0903035
Erdle Perforating

		Lab Sample Delivery Group	C0903035		C0903035		C0903035		C0903035	
		Loc Name	SS-52-B		IA-52-B		SS-53-B		IA-53-B	
		Field Sample Date	3/11/2009		3/11/2009		3/11/2009		3/11/2009	
		Field Sample Id	828072-SS-52-B-03		828072-IA-52-B-03		828072-SS-53-B-03		828072-IA-53-B-03	
		Qc Code	FS		FS		FS		FS	
Analysis	Param Name	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	ug/m3	1		0.83	U	0.83	U	0.83	U
VOCs	1,1,2,2-Tetrachloroethane	ug/m3	1	U	1	U	1	U	1	U
VOCs	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	0.78	J	1.2	U	0.78	J	1.2	U
VOCs	1,1,2-Trichloroethane	ug/m3	0.83	U	0.83	U	0.83	U	0.83	U
VOCs	1,1-Dichloroethane	ug/m3	25		0.62	U	0.62	U	0.62	U
VOCs	1,1-Dichloroethene	ug/m3	0.64		0.6	U	0.6	U	0.6	U
VOCs	1,2,4-Trichlorobenzene	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	1,2,4-Trimethylbenzene	ug/m3	9.2		3.8		2.5		2.4	
VOCs	1,2-Dibromoethane	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U
VOCs	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	1,2-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U
VOCs	1,2-Dichloroethane	ug/m3	0.62	U	0.62	U	0.62	U	0.62	U
VOCs	1,2-Dichloropropane	ug/m3	0.7	U	0.7	U	0.7	U	0.7	U
VOCs	1,3,5-Trimethylbenzene	ug/m3	2.9		1.4		1.3		0.7	J
VOCs	1,3-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U
VOCs	1,4-Dichlorobenzene	ug/m3	1.2		0.67	J	0.92	U	0.92	U
VOCs	1,4-Dioxane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	2-Butanone	ug/m3	0.9	U	4.5		5.7	J	1.9	
VOCs	2-Hexanone	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U
VOCs	2-Propanol	ug/m3	0.37	U	9.5		8.2		210	
VOCs	4-Ethyltoluene	ug/m3	2.2		1.8		0.9		1.7	
VOCs	4-Methyl-2-pentanone	ug/m3	1.2	U	2.2		4.3		1.4	
VOCs	Acetone	ug/m3	31		32		100		20	
VOCs	Allyl chloride	ug/m3	0.48	U	0.48	U	0.48	U	0.48	U
VOCs	Benzene	ug/m3	4.4		6.5		1.5		1	
VOCs	Benzyl chloride	ug/m3	0.88	U	0.88	U	0.88	U	0.88	U
VOCs	Bromodichloromethane	ug/m3	1	U	1	U	1	U	1	U
VOCs	Bromoform	ug/m3	1.6	U	1.6	U	1.6	U	1.6	U
VOCs	Bromomethane	ug/m3	0.59	U	0.59	U	0.59	U	0.59	U
VOCs	Butadiene, 1,3-	ug/m3	0.34	U	0.34	U	0.34	U	0.34	U
VOCs	Carbon disulfide	ug/m3	16		0.51		24		0.47	U
VOCs	Carbon tetrachloride	ug/m3	0.96	U	0.77		0.77	J	0.77	
VOCs	Chlorobenzene	ug/m3	0.7	U	0.7	U	0.7	U	0.7	U
VOCs	Chlorodibromomethane	ug/m3	1.3	U	1.3	U	1.3	U	1.3	U
VOCs	Chloroethane	ug/m3	0.4	U	0.4	U	0.4	U	0.4	U
VOCs	Chloroform	ug/m3	1.5		0.74	U	0.74	U	0.74	U
VOCs	Chloromethane	ug/m3	0.31	U	1.2		0.31	U	1	
VOCs	Cis-1,2-Dichloroethene	ug/m3	360		1.3		3		0.44	J
VOCs	cis-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U	0.69	U	0.69	U
VOCs	Cyclohexane	ug/m3	21		1.7		1.6		0.73	
VOCs	Dichlorodifluoromethane	ug/m3	4.2		2.9		3.1		0.75	U
VOCs	Ethyl acetate	ug/m3	0.92	U	2.6		1.6		1.7	
VOCs	Ethyl benzene	ug/m3	2.6		3.8		1.1		1.4	
VOCs	Heptane	ug/m3	23		2.5		4.7		1.5	
VOCs	Hexachlorobutadiene	ug/m3	1.6	U	1.6	U	1.6	U	1.6	U
VOCs	Hexane	ug/m3	26		6		7		2	
VOCs	Isooctane	ug/m3	0.95		4.2		0.71	U	0.81	
VOCs	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U	0.55	U	0.55	U
VOCs	Methylene chloride	ug/m3	0.53	U	0.46	J	0.39	J	0.53	U
VOCs	Propylene	ug/m3	0.26	U	0.26	U	0.26	U	0.26	U
VOCs	Styrene	ug/m3	0.65	U	0.65	U	0.65	U	0.65	U
VOCs	Tetrachloroethene	ug/m3	1	U	1.3		0.76	J	1	U
VOCs	Tetrahydrofuran	ug/m3	0.45	U	0.45	U	0.45	U	0.45	U
VOCs	Toluene	ug/m3	7.7		13		4.7		5.2	
VOCs	trans-1,2-Dichloroethene	ug/m3	9.6		0.6	U	0.6	U	0.6	U
VOCs	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U	0.69	U	0.69	U
VOCs	Trichloroethene	ug/m3	15		3.2		2.3		0.22	U
VOCs	Trichlorofluoromethane	ug/m3	1.8		2.2		1.8		1.6	
VOCs	Vinyl acetate	ug/m3	4.5		0.54	U	0.54	U	0.54	U
VOCs	Vinyl bromide	ug/m3	0.67	U	0.67	U	0.67	U	0.67	U
VOCs	Vinyl chloride	ug/m3	850		0.7		0.68		0.1	U
VOCs	Xylene, m/p	ug/m3	8.9		11		3.4		3.4	
VOCs	Xylene, o	ug/m3	2.7		3.9		1.2		1.3	

Notes: ug/m3 = microgram per cubic meter
QC code: FS = field sample, FD = field duplicate
Qualifier: U = not detected at a concentration above the reporting limit
J = estimated value
D = result form a dilution analysis

DUSR Table 2
Results Summary
SDG C0903035
Erdle Perforating

		Lab Sample Delivery Group	C0903035		C0903035		C0903035		C0903035	
		Loc Name	SS-54-B		IA-54-B		OA-54-1		SS-55-B	
		Field Sample Date	3/11/2009		3/11/2009		3/11/2009		3/11/2009	
		Field Sample Id	828072-SS-54-B-03		828072-IA-54-B-03		828072-OA-54-1-03		828072-SS-55-B-03	
		Qc Code	FS		FS		FS		FS	
Analysis	Param Name	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	ug/m3	0.83	U	0.83	U	0.83	U	0.83	U
VOCs	1,1,2,2-Tetrachloroethane	ug/m3	1	U	1	U	1	U	1	U
VOCs	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	0.78	J	0.93	J	1.2	U	1.2	U
VOCs	1,1,2-Trichloroethane	ug/m3	0.83	U	0.83	U	0.83	U	0.83	U
VOCs	1,1-Dichloroethane	ug/m3	0.62	U	0.62	U	0.62	U	0.62	U
VOCs	1,1-Dichloroethene	ug/m3	0.6	U	0.6	U	0.6	U	0.6	U
VOCs	1,2,4-Trichlorobenzene	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	1,2,4-Trimethylbenzene	ug/m3	2.2		1.1		0.9		1.1	
VOCs	1,2-Dibromoethane	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U
VOCs	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	1,2-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U
VOCs	1,2-Dichloroethane	ug/m3	0.62	U	0.62	U	0.62	U	0.62	U
VOCs	1,2-Dichloropropane	ug/m3	0.7	U	0.7	U	0.7	U	0.7	U
VOCs	1,3,5-Trimethylbenzene	ug/m3	1.3		0.6	J	0.75	U	0.75	U
VOCs	1,3-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U
VOCs	1,4-Dichlorobenzene	ug/m3	0.92	U	0.92	U	0.92	U	0.92	U
VOCs	1,4-Dioxane	ug/m3	1.1	U	1.1	U	1.1	U	1.1	U
VOCs	2-Butanone	ug/m3	0.9	U	2.7		1.5		0.9	U
VOCs	2-Hexanone	ug/m3	1.2	U	1.2	U	1.2	U	1.2	U
VOCs	2-Propanol	ug/m3	0.37	U	13		0.37	U	0.37	U
VOCs	4-Ethyltoluene	ug/m3	0.7	J	0.75	U	0.75	U	0.75	U
VOCs	4-Methyl-2-pentanone	ug/m3	1.2	U	1.2	J	1.2	U	12	J
VOCs	Acetone	ug/m3	84		29		17		48	
VOCs	Allyl chloride	ug/m3	0.48	U	0.48	U	0.48	U	0.48	U
VOCs	Benzene	ug/m3	9.7		0.81		0.84		1.9	
VOCs	Benzyl chloride	ug/m3	0.88	U	0.88	U	0.88	U	0.88	UJ
VOCs	Bromodichloromethane	ug/m3	1	U	1	U	1	U	1	U
VOCs	Bromoform	ug/m3	1.6	U	1.6	U	1.6	U	1.6	UJ
VOCs	Bromomethane	ug/m3	0.59	U	0.59	U	0.59	U	0.59	U
VOCs	Butadiene, 1,3-	ug/m3	0.34	U	0.34	U	0.34	U	0.34	UJ
VOCs	Carbon disulfide	ug/m3	10		0.38	J	0.47	U	2.4	
VOCs	Carbon tetrachloride	ug/m3	0.96	U	0.77		0.7		0.96	U
VOCs	Chlorobenzene	ug/m3	0.7	U	0.7	U	0.7	U	0.7	U
VOCs	Chlorodibromomethane	ug/m3	1.3	U	1.3	U	1.3	U	1.3	U
VOCs	Chloroethane	ug/m3	0.4	U	0.4	U	0.4	U	0.4	U
VOCs	Chloroform	ug/m3	0.55	J	0.74	U	0.74	U	0.74	U
VOCs	Chloromethane	ug/m3	0.31	U	1.2		1.5		0.31	U
VOCs	Cis-1,2-Dichloroethene	ug/m3	3.7		0.81		0.6	U	0.69	
VOCs	cis-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U	0.69	U	0.69	U
VOCs	Cyclohexane	ug/m3	43		0.56		2.1		13	
VOCs	Dichlorodifluoromethane	ug/m3	3		3.1		2.9		2.3	
VOCs	Ethyl acetate	ug/m3	1.7		1.8		33		0.92	U
VOCs	Ethyl benzene	ug/m3	1.4		0.57	J	0.66	U	0.49	J
VOCs	Heptane	ug/m3	34		1.3		0.92		18	
VOCs	Hexachlorobutadiene	ug/m3	1.6	U	1.6	U	1.6	U	1.6	U
VOCs	Hexane	ug/m3	77		1		1		39	
VOCs	Isooctane	ug/m3	0.71	U	0.71	U	0.71	U	0.71	U
VOCs	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U	0.55	U	0.55	U
VOCs	Methylene chloride	ug/m3	0.53	U	0.42	J	0.53	U	0.53	U
VOCs	Propylene	ug/m3	0.26	U	0.26	U	0.26	U	0.26	U
VOCs	Styrene	ug/m3	0.65	U	0.65	U	0.65	U	0.65	U
VOCs	Tetrachloroethene	ug/m3	1	U	1	U	1	U	1	U
VOCs	Tetrahydrofuran	ug/m3	0.45	U	0.45	U	0.45	U	0.45	U
VOCs	Toluene	ug/m3	8.8		2.8		4.6		2.3	
VOCs	trans-1,2-Dichloroethene	ug/m3	0.6	U	0.6	U	0.6	U	0.6	U
VOCs	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U	0.69	U	0.69	U
VOCs	Trichloroethene	ug/m3	2.2		0.22	U	0.44		0.55	J
VOCs	Trichlorofluoromethane	ug/m3	2.1		4		1.5		1.3	
VOCs	Vinyl acetate	ug/m3	0.54	U	0.54	U	0.54	U	0.54	U
VOCs	Vinyl bromide	ug/m3	0.67	U	0.67	U	0.67	U	0.67	U
VOCs	Vinyl chloride	ug/m3	0.39	U	1.6		0.1	U	0.39	U
VOCs	Xylene, m/p	ug/m3	4.8		1.9		0.88	J	1.4	
VOCs	Xylene, o	ug/m3	1.4		0.79		0.66	U	0.53	J

Notes: ug/m3 = microgram per cubic meter
QC code: FS = field sample, FD = field duplicate
Qualifier: U = not detected at a concentration above the reporting limit
J = estimated value
D = result form a dilution analysis

DUSR Table 2
Results Summary
SDG C0903035
Erdle Perforating

		Lab Sample Delivery Group	C0903035		C0903035	
		Loc Name	SS-55-B		IA-55-B	
		Field Sample Date	3/11/2009		3/11/2009	
		Field Sample Id	828072-SS-55-B-03D		828072-IA-55-B-03	
		Qc Code	FD		FS	
Analysis	Param Name	Units	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	ug/m3	0.83	U	0.83	U
VOCs	1,1,2,2-Tetrachloroethane	ug/m3	1	U	1	U
VOCs	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.2	U	1.2	U
VOCs	1,1,2-Trichloroethane	ug/m3	0.83	U	0.83	U
VOCs	1,1-Dichloroethane	ug/m3	0.62	U	0.62	U
VOCs	1,1-Dichloroethene	ug/m3	0.6	U	0.6	U
VOCs	1,2,4-Trichlorobenzene	ug/m3	1.1	U	1.1	U
VOCs	1,2,4-Trimethylbenzene	ug/m3	1.1		0.95	
VOCs	1,2-Dibromoethane	ug/m3	1.2	U	1.2	U
VOCs	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U	1.1	U
VOCs	1,2-Dichlorobenzene	ug/m3	0.92	U	0.92	U
VOCs	1,2-Dichloroethane	ug/m3	0.62	U	0.62	U
VOCs	1,2-Dichloropropane	ug/m3	0.7	U	0.7	U
VOCs	1,3,5-Trimethylbenzene	ug/m3	0.75	U	0.75	U
VOCs	1,3-Dichlorobenzene	ug/m3	0.92	U	0.92	U
VOCs	1,4-Dichlorobenzene	ug/m3	0.92	U	0.92	U
VOCs	1,4-Dioxane	ug/m3	1.1	U	1.1	U
VOCs	2-Butanone	ug/m3	0.9	U	1.2	
VOCs	2-Hexanone	ug/m3	1.2	U	1.2	U
VOCs	2-Propanol	ug/m3	0.37	U	6.7	
VOCs	4-Ethyltoluene	ug/m3	0.75	U	0.75	U
VOCs	4-Methyl-2-pentanone	ug/m3	41		1.2	J
VOCs	Acetone	ug/m3	99		21	J
VOCs	Allyl chloride	ug/m3	0.48	U	0.48	U
VOCs	Benzene	ug/m3	4.6		1.1	
VOCs	Benzyl chloride	ug/m3	0.88	UJ	0.88	U
VOCs	Bromodichloromethane	ug/m3	1	U	1	U
VOCs	Bromoform	ug/m3	1.6	UJ	1.6	U
VOCs	Bromomethane	ug/m3	0.59	U	0.59	U
VOCs	Butadiene, 1,3-	ug/m3	0.34	UJ	0.34	U
VOCs	Carbon disulfide	ug/m3	11		0.47	U
VOCs	Carbon tetrachloride	ug/m3	0.96	U	0.77	
VOCs	Chlorobenzene	ug/m3	0.7	U	0.7	U
VOCs	Chlorodibromomethane	ug/m3	1.3	U	1.3	U
VOCs	Chloroethane	ug/m3	0.4	U	0.4	U
VOCs	Chloroform	ug/m3	0.74	U	0.74	U
VOCs	Chloromethane	ug/m3	0.31	U	1.1	
VOCs	Cis-1,2-Dichloroethene	ug/m3	1.6		0.81	
VOCs	cis-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U
VOCs	Cyclohexane	ug/m3	31		0.52	U
VOCs	Dichlorodifluoromethane	ug/m3	2.3		3.1	
VOCs	Ethyl acetate	ug/m3	0.92	U	0.66	J
VOCs	Ethyl benzene	ug/m3	1.1		0.62	J
VOCs	Heptane	ug/m3	44		1.4	
VOCs	Hexachlorobutadiene	ug/m3	1.6	U	1.6	U
VOCs	Hexane	ug/m3	62		1	
VOCs	Isooctane	ug/m3	0.71	U	0.71	U
VOCs	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U
VOCs	Methylene chloride	ug/m3	0.53	U	0.53	U
VOCs	Propylene	ug/m3	0.26	U	0.26	U
VOCs	Styrene	ug/m3	0.65	U	0.65	U
VOCs	Tetrachloroethene	ug/m3	1	U	1	U
VOCs	Tetrahydrofuran	ug/m3	0.45	U	0.45	U
VOCs	Toluene	ug/m3	9.6		3.6	
VOCs	trans-1,2-Dichloroethene	ug/m3	0.6	U	0.6	U
VOCs	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U
VOCs	Trichloroethene	ug/m3	1.5		0.44	
VOCs	Trichlorofluoromethane	ug/m3	1.4		1.8	
VOCs	Vinyl acetate	ug/m3	0.54	U	0.54	U
VOCs	Vinyl bromide	ug/m3	0.67	U	0.67	U
VOCs	Vinyl chloride	ug/m3	0.39	U	0.1	U
VOCs	Xylene, m/p	ug/m3	3		1.9	
VOCs	Xylene, o	ug/m3	0.84		0.66	

Notes: ug/m3 = microgram per cubic meter
QC code: FS = field sample, FD = field duplicate
Qualifier: U = not detected at a concentration above the reporting limit
J = estimated value
D = result form a dilution analysis

DATA USABILITY SUMMARY REPORT
2009 AIR SAMPLING
ERDLE PERFORATING SITE
GATES, NEW YORK

1.0 INTRODUCTION

Two sub-slab air samples were collected on May 28, 2009 at the Erdle Perforating Site (Site) in Gates, New York and submitted to Centek Laboratories, LLC for analysis of volatile organic compounds by method TO-15. Results were reported in Sample Delivery Group (SDG): C0905031. A listing of samples included in this Data Usability Summary Report is presented in Table 1. A summary of the analytical results is presented in Table 2.

Deliverables for the off-site laboratory analyses included a Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2005) for SDG C0905031.

A project chemist review was completed based on NYSDEC Division of Environmental Remediation guidance for Data Usability Summary Reports (NYSDEC, 2002) for SDG C0905031. Laboratory QC limits were used during the data evaluation unless noted otherwise. The project chemist review included evaluations of sample collection, data package completeness, holding times, QC data (blanks, instrument calibrations, duplicates, lab control samples, and surrogate recovery), data transcription, electronic data reporting, calculations, and data qualification.

Table 1

					Class	VOCs
					Analysis Method	TO-15
SDG	**Media**	**Location**	**Sample ID**	**Sample Date**	**Qc Code**	
0905031	Air	SS-050	828072-SS-50-B-04	5/28/2009	FS	X
0905031	Air	SS-052	828072-SS-52-B-04	5/28/2009	FS	X

The following laboratory or data validation qualifiers are used in the final data presentation.

U = target analyte is not detected at the reported detection limit
J = concentration is estimated
UJ = target analyte is not detected at the reported detection limit and is estimated

Results are interpreted to be usable as reported by the laboratory unless discussed in the following sections.

2.0 VOLATILE ORGANIC COMPOUNDS (VOCS)

VOC - Initial and Continuing Calibration Standards

The continuing calibration analyzed on May 28, 2009 had a percent difference greater than the control limit of 30 for 1,2,4-trichlorobenzene (64). 1,2,4-Trichlorobenzene was qualified estimated (UJ) in samples 828072-SS-50-B-04 and 828072-SS-52-B-04.

VOC - Internal Standards

The laboratory indicated that internal standards in the undiluted (1X) and 10X dilution analysis of 828072-SS-50-B-04 and 828072-SS-52-B-04 were above the area control limits due to matrix interferences. The internal standard, chlorobenzene-d5, was above the upper control area in 828072-SS-50-B-04 (1X and 10X). 1,4-Difluorobenzene was above the upper control area in the 10X analysis of 828072-SS-50-B-04. 1,4-Difluorobenzene and chlorobenzene-d5 were above the upper control area in 828072-SS-52-B-04 (1X). Chlorobenzene-d5 was also above the control limits in the 10X analysis of 828072-SS-52-B-04. Compounds quantified using these internal standards with positive detections were qualified estimated (J).

Reference:

New York State Department of Environmental Conservation (NYSDEC), 2005. "Analytical Services Protocols"; July 2005.

New York State Department of Environmental Conservation (NYSDEC), 2002. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; Draft DER-10; Division of Environmental Remediation; December 2002.

Data Validator: Tige Cunningham

Date: 6/16/09

Reviewed by Chris Ricardi, NRCC-EAC
Quality Assurance Officer

Date: 6/18/09

DUSR Table 2
Results Summary
SDG C0905031
Erdle Perforating

		Sample Delivery Group	C0905031		C0905031	
		Location	SS-50-B		SS-52-B	
		Sample Date	5/28/2009		5/28/2009	
		Sample ID	828072-SS-50-B-04		828072-SS-52-B-04	
		Qc Code	FS		FS	
Analysis	Parameter	Units	Result	Qualifier	Result	Qualifier
TO-15	1,1,1-Trichloroethane	ug/m3	1		0.83	U
TO-15	1,1,2,2-Tetrachloroethane	ug/m3	1	U	1	U
TO-15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	0.86	J	0.93	J
TO-15	1,1,2-Trichloroethane	ug/m3	0.83	U	0.83	U
TO-15	1,1-Dichloroethane	ug/m3	30		0.62	U
TO-15	1,1-Dichloroethene	ug/m3	0.6	U	0.6	U
TO-15	1,2,4-Trichlorobenzene	ug/m3	1.1	UJ	1.1	UJ
TO-15	1,2,4-Trimethylbenzene	ug/m3	21	J	93	J
TO-15	1,2-Dibromoethane	ug/m3	1.2	U	1.2	U
TO-15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U	1.1	U
TO-15	1,2-Dichlorobenzene	ug/m3	0.92	U	0.92	U
TO-15	1,2-Dichloroethane	ug/m3	0.62	U	0.62	U
TO-15	1,2-Dichloropropane	ug/m3	0.7	U	0.7	U
TO-15	1,3,5-Trimethylbenzene	ug/m3	7.5	J	34	J
TO-15	1,3-Dichlorobenzene	ug/m3	0.92	U	0.92	U
TO-15	1,4-Dichlorobenzene	ug/m3	0.92	U	0.92	U
TO-15	1,4-Dioxane	ug/m3	1.1	U	1.1	U
TO-15	2-Butanone	ug/m3	0.9	U	0.9	U
TO-15	2-Hexanone	ug/m3	1.2	U	1.2	U
TO-15	2-Propanol	ug/m3	0.37	U	0.37	U
TO-15	4-Ethyltoluene	ug/m3	5.7		15	
TO-15	4-Methyl-2-pentanone	ug/m3	1.2	U	1.2	U
TO-15	Acetone	ug/m3	34		37	
TO-15	Allyl chloride	ug/m3	0.48	U	0.48	U
TO-15	Benzene	ug/m3	8.8	J	19	
TO-15	Benzyl chloride	ug/m3	0.88	U	0.88	U
TO-15	Bromodichloromethane	ug/m3	1	U	1	U
TO-15	Bromoform	ug/m3	1.6	U	1.6	U
TO-15	Bromomethane	ug/m3	0.59	U	0.59	U
TO-15	Butadiene, 1,3-	ug/m3	0.34	U	0.34	U
TO-15	Carbon disulfide	ug/m3	7.6		25	
TO-15	Carbon tetrachloride	ug/m3	0.96	U	0.96	U
TO-15	Chlorobenzene	ug/m3	0.7	U	0.7	U
TO-15	Chlorodibromomethane	ug/m3	1.3	U	1.3	U
TO-15	Chloroethane	ug/m3	0.4	U	0.4	U
TO-15	Chloroform	ug/m3	0.65	J	0.84	
TO-15	Chloromethane	ug/m3	1.4		3.9	
TO-15	Cis-1,2-Dichloroethene	ug/m3	820		53	
TO-15	cis-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U
TO-15	Cyclohexane	ug/m3	0.52	U	0.52	U
TO-15	Dichlorodifluoromethane	ug/m3	2.8		2.4	
TO-15	Ethyl acetate	ug/m3	0.92	U	0.92	U
TO-15	Ethyl benzene	ug/m3	6.6	J	15	J
TO-15	Heptane	ug/m3	62		320	
TO-15	Hexachlorobutadiene	ug/m3	1.6	U	1.6	U
TO-15	Hexane	ug/m3	52		170	
TO-15	Isooctane	ug/m3	0.71	U	0.71	U
TO-15	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U
TO-15	Methylene chloride	ug/m3	0.53	U	0.53	U
TO-15	Propylene	ug/m3	0.26	U	0.26	U
TO-15	Styrene	ug/m3	0.65	U	0.65	U
TO-15	Tetrachloroethene	ug/m3	1.2	J	1.2	J
TO-15	Tetrahydrofuran	ug/m3	0.45	U	0.45	U
TO-15	Toluene	ug/m3	29	J	69	J
TO-15	trans-1,2-Dichloroethene	ug/m3	3.1		0.6	U
TO-15	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U
TO-15	Trichloroethene	ug/m3	8		17	
TO-15	Trichlorofluoromethane	ug/m3	2.2		1.5	
TO-15	Vinyl acetate	ug/m3	0.54	U	0.54	U
TO-15	Vinyl bromide	ug/m3	0.67	U	0.67	U
TO-15	Vinyl chloride	ug/m3	0.81		0.39	U
TO-15	Xylene, m/p	ug/m3	27	J	91	J
TO-15	Xylene, o	ug/m3	9.3	J	28	J

Notes: ug/m3 = microgram per cubic meter
QC code: FS = field sample
Qualifier: U = not detected at a concentration above the reporting limit
J = estimated value

DATA USABILITY SUMMARY REPORT
2009 AIR SAMPLING
ERDLE PERFORATING SITE
GATES, NEW YORK

1.0 INTRODUCTION

One indoor air sample was collected on July 20, 2009 at the Erdle Perforating Site (Site) in Gates, New York and submitted to Centek Laboratories, LLC for analysis of volatile organic compounds by Method TO-15. Results were reported in Sample Delivery Group (SDG): C0907048. A listing of samples included in this Data Usability Summary Report is presented in Table 1. A summary of the analytical results is presented in Table 2.

Deliverables for the off-site laboratory analyses included a Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2005) for SDG C0907048.

A project chemist review was completed based on NYSDEC Division of Environmental Remediation guidance for Data Usability Summary Reports (NYSDEC, 2002) for SDG C0907048. Laboratory QC limits were used during the data evaluation unless noted otherwise. The project chemist review included evaluations of sample collection, data package completeness, holding times, QC data (blanks, instrument calibrations, duplicates, lab control samples, and surrogate recovery), data transcription, electronic data reporting, calculations, and data qualification.

Table 1

					Class	VOCs
					Analysis Method	TO-15
SDG	**Media**	**Location**	**Sample ID**	**Sample Date**	**QC Code**	
C0907048	Air	IA-42-B	828072IA-42-B-C	7/20/2009	FS	X

The following laboratory or data validation qualifiers are used in the final data presentation.

U = target analyte is not detected at the reported detection limit
J = concentration is estimated

2.0 Data Validation Observations and Actions

No quality control issues were identified and results are interpreted to be usable as reported by the laboratory.

Reference:

New York State Department of Environmental Conservation (NYSDEC), 2005. "Analytical Services Protocols"; July 2005.

New York State Department of Environmental Conservation (NYSDEC), 2002. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; Draft DER-10; Division of Environmental Remediation; December 2002.

Data Validator: Wolfgang Calicchio

Date: 9/8/09

Reviewed by Chris Ricardi, NRCC-EAC
Quality Assurance Officer

Date: 9/23/09

DUSR Table 2
Results Summary
SDG C0907048
Erdle Perforating

	Sample Delivery Group		C0907048	
	Location		IA-42-B	
	Sample Date		7/20/2009	
	Sample ID		828072IA-42-B-C	
	QC Code		FS	
Analysis	**Parameter**	**Units**	Result	Qualifier
Method TO15	1,1,1-Trichloroethane	ug/m3	0.83	U
Method TO15	1,1,2,2-Tetrachloroethane	ug/m3	1	U
Method TO15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.2	U
Method TO15	1,1,2-Trichloroethane	ug/m3	0.83	U
Method TO15	1,1-Dichloroethane	ug/m3	0.62	U
Method TO15	1,1-Dichloroethene	ug/m3	0.6	U
Method TO15	1,2,4-Trichlorobenzene	ug/m3	1.1	U
Method TO15	1,2,4-Trimethylbenzene	ug/m3	3.6	
Method TO15	1,2-Dibromoethane	ug/m3	1.2	U
Method TO15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U
Method TO15	1,2-Dichlorobenzene	ug/m3	0.92	U
Method TO15	1,2-Dichloroethane	ug/m3	0.62	U
Method TO15	1,2-Dichloropropane	ug/m3	0.7	U
Method TO15	1,3,5-Trimethylbenzene	ug/m3	0.9	
Method TO15	1,3-Dichlorobenzene	ug/m3	0.92	U
Method TO15	1,4-Dichlorobenzene	ug/m3	0.79	J
Method TO15	1,4-Dioxane	ug/m3	1.1	U
Method TO15	2-Butanone	ug/m3	2.3	
Method TO15	2-Hexanone	ug/m3	1.2	U
Method TO15	2-Propanol	ug/m3	28	
Method TO15	4-Ethyltoluene	ug/m3	2	
Method TO15	4-Methyl-2-pentanone	ug/m3	1.2	U
Method TO15	Acetone	ug/m3	23	
Method TO15	Allyl chloride	ug/m3	0.48	U
Method TO15	Benzene	ug/m3	2.4	
Method TO15	Benzyl chloride	ug/m3	0.88	U
Method TO15	Bromodichloromethane	ug/m3	1	U
Method TO15	Bromoform	ug/m3	1.6	U
Method TO15	Bromomethane	ug/m3	0.59	U
Method TO15	Butadiene, 1,3-	ug/m3	0.34	U
Method TO15	Carbon disulfide	ug/m3	0.47	U
Method TO15	Carbon tetrachloride	ug/m3	0.45	
Method TO15	Chlorobenzene	ug/m3	0.7	U
Method TO15	Chlorodibromomethane	ug/m3	1.3	U
Method TO15	Chloroethane	ug/m3	0.4	U
Method TO15	Chloroform	ug/m3	0.55	J
Method TO15	Chloromethane	ug/m3	0.71	
Method TO15	Cis-1,2-Dichloroethene	ug/m3	0.4	J

Produced by: BJS
Date: 09/08/09
Reveiwed by: WDC
Date: 09/08/09

DUSR Table 2
Results Summary
SDG C0907048
Erdle Perforating

	Sample Delivery Group		C0907048	
	Location		IA-42-B	
	Sample Date		7/20/2009	
	Sample ID		828072IA-42-B-C	
	QC Code		FS	
Analysis	**Parameter**	**Units**	Result	Qualifier
Method TO15	cis-1,3-Dichloropropene	ug/m3	0.69	U
Method TO15	Cyclohexane	ug/m3	0.52	U
Method TO15	Dichlorodifluoromethane	ug/m3	2.5	
Method TO15	Ethyl acetate	ug/m3	0.92	U
Method TO15	Ethyl benzene	ug/m3	2.6	
Method TO15	Heptane	ug/m3	1.4	
Method TO15	Hexachlorobutadiene	ug/m3	1.6	U
Method TO15	Hexane	ug/m3	2.4	
Method TO15	Isooctane	ug/m3	2.5	
Method TO15	Methyl Tertbutyl Ether	ug/m3	0.55	U
Method TO15	Methylene chloride	ug/m3	1.6	
Method TO15	Propylene	ug/m3	0.26	U
Method TO15	Styrene	ug/m3	0.52	J
Method TO15	Tetrachloroethene	ug/m3	12	
Method TO15	Tetrahydrofuran	ug/m3	0.45	U
Method TO15	Toluene	ug/m3	23	
Method TO15	trans-1,2-Dichloroethene	ug/m3	0.6	U
Method TO15	trans-1,3-Dichloropropene	ug/m3	0.69	U
Method TO15	Trichloroethene	ug/m3	0.22	U
Method TO15	Trichlorofluoromethane	ug/m3	6.1	
Method TO15	Vinyl acetate	ug/m3	0.54	U
Method TO15	Vinyl bromide	ug/m3	0.67	U
Method TO15	Vinyl chloride	ug/m3	0.1	U
Method TO15	Xylene, m/p	ug/m3	11	
Method TO15	Xylene, o	ug/m3	3	

Notes: ug/m3 = microgrmas per cubic meter
QC Code: FS = Field Sample
Qualifier: U = not detected above concentration listed
J = estimated value

Produced by: BJS
Date: 09/08/09
Reveiwed by: WDC
Date: 09/08/09

DATA USABILITY SUMMARY REPORT
2010 SOIL VAPOR SAMPLING
ERDLE PERFORATING
GATES, NEW YORK

1.0 Introduction

Soil vapor samples were collected at the Erdle Perforating Site (Site) in Gates, New York in March and April 2010 and submitted for off-site laboratory analysis. Samples were analyzed by Centek Laboratories located in Syracuse, NY. Results were reported in the following Sample Delivery Group (SDGs): C1003061, and C1004023.

A listing of samples included in this Data Usability Summary Report is presented in Table 1. A summary of the analytical results is presented in Table 2. Samples were analyzed by the following methods:

- Volatile organic compounds (VOCs) by USEPA Method TO-15.

Deliverables for the off-site laboratory analyses included a Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2005).

A project chemist review was completed based on NYSDEC Division of Environmental Remediation guidance for Data Usability Summary Reports (NYSDEC, 2002). Laboratory quality control (QC) limits were used during the data evaluation unless noted otherwise. The project chemist review included evaluations of sample collection, data package completeness, holding times, QC data (blanks, instrument calibrations, duplicates, surrogate recovery, and spike recovery), data transcription, electronic data reporting, calculations, and data qualification.

Table 1

SDG	Media	Location	Sample ID	Sample Date	Class / Fraction / Analysis Method / Qc Code	VOCs T Method TO15	VOCs T CT-TCE-VC
C1003061	AIR	IA-05-B	828072IA-05-01-B-C	3/23/2010	FS		X
C1003061	AIR	IA-35-B	828072IA-35-01-B-10	3/24/2010	FS		X
C1003061	AIR	IA-35-B	828072IA-35-01-B-DUP-10	3/24/2010	FD		X
C1003061	AIR	IA-47-B	828072IA-47-01-B-10	3/23/2010	FS		X
C1003061	AIR	IA-50-B	828072IA-50-01-B-10	3/24/2010	FS		X
C1003061	AIR	IA-52-B	828072IA-52-01-B-10	3/24/2010	FS		X
C1003061	AIR	IA-55-B	828072IA-55-01-B-10	3/23/2010	FS		X
C1003061	AIR	OA-032210	828072OA-032210-01	3/23/2010	FS		X
C1003061	AIR	OA-032310	828072OA-032310-01	3/24/2010	FS		X
C1003061	SV	SS-35-B	828072SS-35-01-B-10	3/24/2010	FS	X	
C1003061	SV	SS-47-B	828072SS-47-01-B-10	3/23/2010	FS	X	
C1003061	SV	SS-50-B	828072SS-50-01-B-10	3/24/2010	FS	X	
C1003061	SV	SS-52-B	828072SS-52-01-B-10	3/24/2010	FS	X	
C1003061	SV	SS-55-B	828072SS-55-01-B-10	3/23/2010	FS	X	
C1004023	AIR	IA-42-B	828072IA-42-B-C	4/8/2010	FS	X	
C1004023	AIR	OA-040810	828072OA-040810-1	4/8/2010	FS	X	

The following laboratory or data validation qualifiers are used in the final data presentation.

U = target analyte is not detected at the reported detection limit
J = concentration is estimated
UJ = target analyte is not detected at the reported detection limit and is estimated

Results are interpreted to be usable as reported by the laboratory unless discussed in the following sections.

2.0 Volatile Organic Compounds (VOCs)

Laboratory Control Sample Results

SDG C1001063

For a subset of samples, the LCS percent recovery of 4-ethyltoluene (62, 67, and 68) were less than the lower QC limit of 70. The results for 4-ethyltoluene in associated samples was qualified estimated (J/UJ).

For a subset of samples, the LCS percent recovery of carbon tetrachloride (146) and hexachloro-1,3-butadiene (173) exceed the upper QC limit of 130. Reported detections for carbon tetrachloride and hexachloro-1,3-butadiene in associated samples were qualified estimated (J).

For a subset of samples, the LCS percent recovery of 1,1,1-trichloroethane (146), 1,1-dichloroethane (142), 1,2,4-trichlorobenzene (140), 1,2-dichlorobenzene (132), 1,3 butadiene (141), bromodichloromethane (132), carbon tetrachloride (164), hexachloro-1,3-butadiene (189), and trans-1,2-dichloroethene (133) exceed the upper QC limit of 130. Reported detections of these compounds in associated samples were qualified estimated (J).

SDGC1004023

The LCS percent recovery of 1,2,4-trichlorobenzene (66), 1,4-dioxane (56), and methyl isobutyl ketone (4-methyl-2-pentanone) (30) were less than the lower QC limit of 70. The LCS percent recovery of 1,3-butadiene (133) exceed the upper QC limit of 130. Associated sample results for 1,2,4-trichloroethane, 1,4-dioxane, and methyl isobutyl ketone were qualified estimated (J/UJ). Associated sample results for 1,3-butadiene were non-detect, no further action required.

Initial and Continuing Calibration

SDG C1001063

In the continuing calibration analyzed on March 3, 2010, the percent difference for 1,2,4-trichlorobenzene (-70) and hexachloro-1,3-butadiene (-98) exceeded the QC limit of 30. Associated sample results for 1,2,4-trichorobenzene and hexachloro-1,3-butadiene were non detect and were qualified estimated (UJ).

Sample Reporting

SDG C1001063

Dilution analyses were performed on the following samples due to elevated concentrations of target compounds. Results from the original analysis and dilution analysis were combined in the final data set.

field_sample_id	qc_code	lab_sample_id	Method	Dilution Factor
828072SS-55-01-B-10	FS	C1001063-001A	TO-15	10
828072SS-55-01-B-10	FS	C1001063-001A	TO-15	40
828072IA-55-01-B-10	FS	C1001063-002A	TO-15	10
828072OA-032210-01	FS	C1001063-003A	TO-15	10
828072IA-05-01-B-C	FS	C1001063-004A	TO-15	10
828072SS-47-01-B-10	FS	C1001063-005A	TO-15	10
828072SS-47-01-B-10	FS	C1001063-005A	TO-15	40
828072IA-47-01-B-10	FS	C1001063-006A	TO-15	10
828072SS-52-01-B-10	FS	C1001063-007A	TO-15	10
828072SS-52-01-B-10	FS	C1001063-007A	TO-15	40
828072IA-52-01-B-10	FS	C1001063-008A	TO-15	10
828072OA-032310-01	FS	C1001063-009A	TO-15	10
828072OA-032310-01	FS	C1001063-009A	TO-15	40
828072SS-35-01-B-10	FS	C1001063-010A	TO-15	10
828072SS-35-01-B-10	FS	C1001063-010A	TO-15	40
828072SS-35-01-B-10	FS	C1001063-010A	TO-15	80
828072SS-35-01-B-10	FS	C1001063-010A	TO-15	640
828072IA-35-01-B-10	FS	C1001063-011A	TO-15	10
828072IA-35-01-B-10	FS	C1001063-011A	TO-15	40
828072IA-DUP-35-01-B-10	FD	C1001063-012A	TO-15	10
828072IA-DUP-35-01-B-10	FD	C1001063-012A	TO-15	40
828072SS-50-01-B-10	FS	C1001063-013A	TO-15	10
828072SS-50-01-B-10	FS	C1001063-013A	TO-15	40
828072SS-50-01-B-10	FS	C1001063-013A	TO-15	10
828072IA-50-01-B-10	FS	C1001063-014A	TO-15	10

SDG C1004023

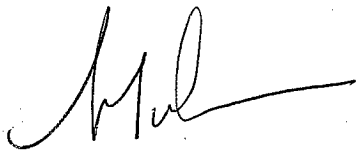
Dilution analyses were performed on the following samples due to elevated concentrations of target compounds. Results from the original analysis and dilution analysis were combined in the final data set.

field_sample_id	qc_code	lab_sample_id	Method	Dilution Factor
828072IA-42-B-C	FS	C1004023-001A	TO-15	10
828072OA-040810-1	FS	C1004023-002A	TO-15	40

Reference:

New York State Department of Environmental Conservation (NYSDEC), 2005. "Analytical Services Protocols"; July 2005.

Data Validator: Michael Washburn



Date: 5/26/2010

Reviewed by Wolfgang D. Calicchio

Date: 6/1/2010

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

		Sample Delivery Group	C1003061		C1003061	
		Location	IA-05-B		IA-35-B	
		Sample Date	3/23/2010		3/24/2010	
		Sample ID	828072IA-05-01-B-C		828072IA-35-01-B-10	
		Qc Code	FS		FS	
Analysis	Param Name	Units	Result	Qualifier	Result	Qualifier
CT-TCE-VC	1,1,1-Trichloroethane	ug/m3	0.83	U	0.83	U
CT-TCE-VC	1,1,2,2-Tetrachloroethane	ug/m3	1	U	1	U
CT-TCE-VC	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.2	U	1.2	U
CT-TCE-VC	1,1,2-Trichloroethane	ug/m3	0.83	U	0.83	U
CT-TCE-VC	1,1-Dichloroethane	ug/m3	0.62	U	0.53	J
CT-TCE-VC	1,1-Dichloroethene	ug/m3	0.6	U	0.6	U
CT-TCE-VC	1,2,4-Trichlorobenzene	ug/m3	1.1	U	1.1	U
CT-TCE-VC	1,2,4-Trimethylbenzene	ug/m3	0.75	U	0.75	U
CT-TCE-VC	1,2-Dibromoethane	ug/m3	1.2	U	1.2	U
CT-TCE-VC	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U	1.1	U
CT-TCE-VC	1,2-Dichlorobenzene	ug/m3	0.92	U	0.92	U
CT-TCE-VC	1,2-Dichloroethane	ug/m3	0.62	U	0.62	U
CT-TCE-VC	1,2-Dichloropropane	ug/m3	0.7	U	0.7	U
CT-TCE-VC	1,3,5-Trimethylbenzene	ug/m3	0.75	U	0.75	U
CT-TCE-VC	1,3-Butadiene	ug/m3	0.34	U	0.34	U
CT-TCE-VC	1,3-Dichlorobenzene	ug/m3	0.92	U	0.92	U
CT-TCE-VC	1,4-Dichlorobenzene	ug/m3	0.92	U	0.92	U
CT-TCE-VC	1,4-Dioxane	ug/m3	1.1	U	1.1	U
CT-TCE-VC	2-Butanone	ug/m3	1.1		35	
CT-TCE-VC	2-Hexanone	ug/m3	1.2	U	1.2	U
CT-TCE-VC	2-Propanol	ug/m3	32		130	
CT-TCE-VC	4-Ethyltoluene	ug/m3	0.75	UJ	0.75	UJ
CT-TCE-VC	4-Methyl-2-pentanone	ug/m3	1.2	U	1.2	U
CT-TCE-VC	Acetone	ug/m3	23		87	
CT-TCE-VC	Allyl chloride	ug/m3	0.48	U	0.48	U
CT-TCE-VC	Benzene	ug/m3	0.36	J	0.42	J
CT-TCE-VC	Benzyl chloride	ug/m3	0.88	U	0.88	U
CT-TCE-VC	Bromodichloromethane	ug/m3	1	U	1	U
CT-TCE-VC	Bromoform	ug/m3	1.6	U	1.6	U
CT-TCE-VC	Bromomethane	ug/m3	0.59	U	0.59	U
CT-TCE-VC	Carbon disulfide	ug/m3	0.47	U	0.47	U
CT-TCE-VC	Carbon tetrachloride	ug/m3	0.77	J	0.9	J
CT-TCE-VC	Chlorobenzene	ug/m3	0.7	U	0.7	U
CT-TCE-VC	Chlorodibromomethane	ug/m3	1.3	U	1.3	U
CT-TCE-VC	Chloroethane	ug/m3	0.4	U	0.4	U
CT-TCE-VC	Chloroform	ug/m3	0.6	J	0.74	U
CT-TCE-VC	Chloromethane	ug/m3	0.59		0.44	
CT-TCE-VC	Cis-1,2-Dichloroethene	ug/m3	0.56	J	17	
CT-TCE-VC	cis-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U
CT-TCE-VC	Cyclohexane	ug/m3	0.52	U	0.52	U
CT-TCE-VC	Dichlorodifluoromethane	ug/m3	2.6		2.2	
CT-TCE-VC	Ethyl acetate	ug/m3	0.92	U	0.7	J
CT-TCE-VC	Ethyl benzene	ug/m3	0.66	U	0.66	U
CT-TCE-VC	Heptane	ug/m3	0.62	U	0.62	U
CT-TCE-VC	Hexachlorobutadiene	ug/m3	1.6	U	1.6	U
CT-TCE-VC	Hexane	ug/m3	0.93		1	
CT-TCE-VC	Isooctane	ug/m3	0.71	U	0.71	U
CT-TCE-VC	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U
CT-TCE-VC	Methylene chloride	ug/m3	0.64		0.46	J
CT-TCE-VC	Propylene	ug/m3	0.26	U	0.26	U
CT-TCE-VC	Styrene	ug/m3	0.65	U	0.65	U
CT-TCE-VC	Tetrachloroethene	ug/m3	1	U	1	U

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

		Sample Delivery Group	C1003061		C1003061	
		Location	IA-05-B		IA-35-B	
		Sample Date	3/23/2010		3/24/2010	
		Sample ID	828072IA-05-01-B-C		828072IA-35-01-B-10	
		Qc Code	FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier
CT-TCE-VC	Tetrahydrofuran	ug/m3	0.45	U	31	
CT-TCE-VC	Toluene	ug/m3	2.9		5.1	
CT-TCE-VC	trans-1,2-Dichloroethene	ug/m3	0.6	U	0.6	U
CT-TCE-VC	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U
CT-TCE-VC	Trichloroethene	ug/m3	0.38		1.9	
CT-TCE-VC	Trichlorofluoromethane	ug/m3	1.4		1.3	
CT-TCE-VC	Vinyl acetate	ug/m3	0.54	U	0.54	U
CT-TCE-VC	Vinyl bromide	ug/m3	0.67	U	0.67	U
CT-TCE-VC	Vinyl chloride	ug/m3	0.1	U	9.9	
CT-TCE-VC	Xylene, m/p	ug/m3	1.3	U	1.3	U
CT-TCE-VC	Xylene, o	ug/m3	0.66	U	0.66	U
Method TO15	1,1,1-Trichloroethane	ug/m3				
Method TO15	1,1,2,2-Tetrachloroethane	ug/m3				
Method TO15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3				
Method TO15	1,1,2-Trichloroethane	ug/m3				
Method TO15	1,1-Dichloroethane	ug/m3				
Method TO15	1,1-Dichloroethene	ug/m3				
Method TO15	1,2,4-Trichlorobenzene	ug/m3				
Method TO15	1,2,4-Trimethylbenzene	ug/m3				
Method TO15	1,2-Dibromoethane	ug/m3				
Method TO15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3				
Method TO15	1,2-Dichlorobenzene	ug/m3				
Method TO15	1,2-Dichloroethane	ug/m3				
Method TO15	1,2-Dichloropropane	ug/m3				
Method TO15	1,3,5-Trimethylbenzene	ug/m3				
Method TO15	1,3-Butadiene	ug/m3				
Method TO15	1,3-Dichlorobenzene	ug/m3				
Method TO15	1,4-Dichlorobenzene	ug/m3				
Method TO15	1,4-Dioxane	ug/m3				
Method TO15	2-Butanone	ug/m3				
Method TO15	2-Hexanone	ug/m3				
Method TO15	2-Propanol	ug/m3				
Method TO15	4-Ethyltoluene	ug/m3				
Method TO15	4-Methyl-2-pentanone	ug/m3				
Method TO15	Acetone	ug/m3				
Method TO15	Allyl chloride	ug/m3				
Method TO15	Benzene	ug/m3				
Method TO15	Benzyl chloride	ug/m3				
Method TO15	Bromodichloromethane	ug/m3				
Method TO15	Bromoform	ug/m3				
Method TO15	Bromomethane	ug/m3				
Method TO15	Carbon disulfide	ug/m3				
Method TO15	Carbon tetrachloride	ug/m3				
Method TO15	Chlorobenzene	ug/m3				
Method TO15	Chlorodibromomethane	ug/m3				
Method TO15	Chloroethane	ug/m3				
Method TO15	Chloroform	ug/m3				
Method TO15	Chloromethane	ug/m3				
Method TO15	Cis-1,2-Dichloroethene	ug/m3				
Method TO15	cis-1,3-Dichloropropene	ug/m3				
Method TO15	Cyclohexane	ug/m3				
Method TO15	Dichlorodifluoromethane	ug/m3				

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

		Sample Delivery Group	C1003061		C1003061	
		Location	IA-05-B		IA-35-B	
		Sample Date	3/23/2010		3/24/2010	
		Sample ID	828072IA-05-01-B-C		828072IA-35-01-B-10	
		Qc Code	FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier
Method TO15	Ethyl acetate	ug/m3				
Method TO15	Ethyl benzene	ug/m3				
Method TO15	Heptane	ug/m3				
Method TO15	Hexachlorobutadiene	ug/m3				
Method TO15	Hexane	ug/m3				
Method TO15	Isooctane	ug/m3				
Method TO15	Methyl Tertbutyl Ether	ug/m3				
Method TO15	Methylene chloride	ug/m3				
Method TO15	Propylene	ug/m3				
Method TO15	Styrene	ug/m3				
Method TO15	Tetrachloroethene	ug/m3				
Method TO15	Tetrahydrofuran	ug/m3				
Method TO15	Toluene	ug/m3				
Method TO15	trans-1,2-Dichloroethene	ug/m3				
Method TO15	trans-1,3-Dichloropropene	ug/m3				
Method TO15	Trichloroethene	ug/m3				
Method TO15	Trichlorofluoromethane	ug/m3				
Method TO15	Vinyl acetate	ug/m3				
Method TO15	Vinyl bromide	ug/m3				
Method TO15	Vinyl chloride	ug/m3				
Method TO15	Xylene, m/p	ug/m3				
Method TO15	Xylene, o	ug/m3				

Notes:
ug/m3 = microgram per meter cubed
FS = field sample
FD = field duplicate
U = not detected
J = estimated value

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

		Sample Delivery Group	C1003061		C1003061	
		Location	IA-35-B		IA-47-B	
		Sample Date	3/24/2010		3/23/2010	
		Sample ID	8072IA-35-01-B-DUP-		828072IA-47-01-B-10	
		Qc Code	FD		FS	
Analysis	Param Name	Units	Result	Qualifier	Result	Qualifier
CT-TCE-VC	1,1,1-Trichloroethane	ug/m3	0.83	U	0.83	U
CT-TCE-VC	1,1,2,2-Tetrachloroethane	ug/m3	1	U	1	U
CT-TCE-VC	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.2	U	1.2	U
CT-TCE-VC	1,1,2-Trichloroethane	ug/m3	0.83	U	0.83	U
CT-TCE-VC	1,1-Dichloroethane	ug/m3	0.62		0.62	U
CT-TCE-VC	1,1-Dichloroethene	ug/m3	0.6	U	0.6	U
CT-TCE-VC	1,2,4-Trichlorobenzene	ug/m3	1.1	U	1.1	U
CT-TCE-VC	1,2,4-Trimethylbenzene	ug/m3	0.75	U	1.1	
CT-TCE-VC	1,2-Dibromoethane	ug/m3	1.2	U	1.2	U
CT-TCE-VC	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U	1.1	U
CT-TCE-VC	1,2-Dichlorobenzene	ug/m3	0.92	U	0.92	U
CT-TCE-VC	1,2-Dichloroethane	ug/m3	0.41	J	0.62	
CT-TCE-VC	1,2-Dichloropropane	ug/m3	0.7	U	0.7	U
CT-TCE-VC	1,3,5-Trimethylbenzene	ug/m3	0.75	U	0.75	U
CT-TCE-VC	1,3-Butadiene	ug/m3	0.34	U	0.34	U
CT-TCE-VC	1,3-Dichlorobenzene	ug/m3	0.92	U	0.92	U
CT-TCE-VC	1,4-Dichlorobenzene	ug/m3	0.92	U	0.92	U
CT-TCE-VC	1,4-Dioxane	ug/m3	1.1	U	1.1	U
CT-TCE-VC	2-Butanone	ug/m3	40		1.9	
CT-TCE-VC	2-Hexanone	ug/m3	1.2	U	1.2	U
CT-TCE-VC	2-Propanol	ug/m3	130		23	
CT-TCE-VC	4-Ethyltoluene	ug/m3	0.75	UJ	0.75	UJ
CT-TCE-VC	4-Methyl-2-pentanone	ug/m3	1.2	U	1.2	U
CT-TCE-VC	Acetone	ug/m3	91		21	
CT-TCE-VC	Allyl chloride	ug/m3	0.48	U	0.48	U
CT-TCE-VC	Benzene	ug/m3	0.49		2.8	
CT-TCE-VC	Benzyl chloride	ug/m3	0.88	U	0.88	U
CT-TCE-VC	Bromodichloromethane	ug/m3	1	U	1	U
CT-TCE-VC	Bromoform	ug/m3	1.6	U	1.6	U
CT-TCE-VC	Bromomethane	ug/m3	0.59	U	0.59	U
CT-TCE-VC	Carbon disulfide	ug/m3	0.35	J	0.35	J
CT-TCE-VC	Carbon tetrachloride	ug/m3	0.96	J	0.7	J
CT-TCE-VC	Chlorobenzene	ug/m3	0.7	U	0.7	U
CT-TCE-VC	Chlorodibromomethane	ug/m3	1.3	U	1.3	U
CT-TCE-VC	Chloroethane	ug/m3	0.4	U	0.4	U
CT-TCE-VC	Chloroform	ug/m3	0.74	U	0.74	U
CT-TCE-VC	Chloromethane	ug/m3	0.38		0.94	
CT-TCE-VC	Cis-1,2-Dichloroethene	ug/m3	17		0.6	U
CT-TCE-VC	cis-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U
CT-TCE-VC	Cyclohexane	ug/m3	0.52	U	0.8	
CT-TCE-VC	Dichlorodifluoromethane	ug/m3	2.4		2.5	
CT-TCE-VC	Ethyl acetate	ug/m3	0.7	J	0.44	J
CT-TCE-VC	Ethyl benzene	ug/m3	0.66	U	0.97	
CT-TCE-VC	Heptane	ug/m3	0.62	U	0.67	
CT-TCE-VC	Hexachlorobutadiene	ug/m3	1.6	U	1.6	U
CT-TCE-VC	Hexane	ug/m3	1.3		1.9	
CT-TCE-VC	Isooctane	ug/m3	0.71	U	0.52	J
CT-TCE-VC	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U
CT-TCE-VC	Methylene chloride	ug/m3	0.53		0.71	
CT-TCE-VC	Propylene	ug/m3	0.26	U	0.26	U
CT-TCE-VC	Styrene	ug/m3	0.65	U	0.65	U
CT-TCE-VC	Tetrachloroethene	ug/m3	1	U	1	U

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

		Sample Delivery Group	C1003061		C1003061	
		Location	IA-35-B		IA-47-B	
		Sample Date	3/24/2010		3/23/2010	
		Sample ID	8072IA-35-01-B-DUP-		828072IA-47-01-B-10	
		Qc Code	FD		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier
CT-TCE-VC	Tetrahydrofuran	ug/m3	38		0.45	U
CT-TCE-VC	Toluene	ug/m3	5.6		9.6	
CT-TCE-VC	trans-1,2-Dichloroethene	ug/m3	0.6	U	0.6	U
CT-TCE-VC	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U
CT-TCE-VC	Trichloroethene	ug/m3	2.3		0.27	
CT-TCE-VC	Trichlorofluoromethane	ug/m3	1.3		1.5	
CT-TCE-VC	Vinyl acetate	ug/m3	0.54	U	0.54	U
CT-TCE-VC	Vinyl bromide	ug/m3	0.67	U	0.67	U
CT-TCE-VC	Vinyl chloride	ug/m3	9.9		0.1	U
CT-TCE-VC	Xylene, m/p	ug/m3	1.3	U	3	
CT-TCE-VC	Xylene, o	ug/m3	0.66	U	0.93	
Method TO15	1,1,1-Trichloroethane	ug/m3				
Method TO15	1,1,2,2-Tetrachloroethane	ug/m3				
Method TO15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3				
Method TO15	1,1,2-Trichloroethane	ug/m3				
Method TO15	1,1-Dichloroethane	ug/m3				
Method TO15	1,1-Dichloroethene	ug/m3				
Method TO15	1,2,4-Trichlorobenzene	ug/m3				
Method TO15	1,2,4-Trimethylbenzene	ug/m3				
Method TO15	1,2-Dibromoethane	ug/m3				
Method TO15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3				
Method TO15	1,2-Dichlorobenzene	ug/m3				
Method TO15	1,2-Dichloroethane	ug/m3				
Method TO15	1,2-Dichloropropane	ug/m3				
Method TO15	1,3,5-Trimethylbenzene	ug/m3				
Method TO15	1,3-Butadiene	ug/m3				
Method TO15	1,3-Dichlorobenzene	ug/m3				
Method TO15	1,4-Dichlorobenzene	ug/m3				
Method TO15	1,4-Dioxane	ug/m3				
Method TO15	2-Butanone	ug/m3				
Method TO15	2-Hexanone	ug/m3				
Method TO15	2-Propanol	ug/m3				
Method TO15	4-Ethyltoluene	ug/m3				
Method TO15	4-Methyl-2-pentanone	ug/m3				
Method TO15	Acetone	ug/m3				
Method TO15	Allyl chloride	ug/m3				
Method TO15	Benzene	ug/m3				
Method TO15	Benzyl chloride	ug/m3				
Method TO15	Bromodichloromethane	ug/m3				
Method TO15	Bromoform	ug/m3				
Method TO15	Bromomethane	ug/m3				
Method TO15	Carbon disulfide	ug/m3				
Method TO15	Carbon tetrachloride	ug/m3				
Method TO15	Chlorobenzene	ug/m3				
Method TO15	Chlorodibromomethane	ug/m3				
Method TO15	Chloroethane	ug/m3				
Method TO15	Chloroform	ug/m3				
Method TO15	Chloromethane	ug/m3				
Method TO15	Cis-1,2-Dichloroethene	ug/m3				
Method TO15	cis-1,3-Dichloropropene	ug/m3				
Method TO15	Cyclohexane	ug/m3				
Method TO15	Dichlorodifluoromethane	ug/m3				

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

		Sample Delivery Group	C1003061		C1003061	
		Location	IA-35-B		IA-47-B	
		Sample Date	3/24/2010		3/23/2010	
		Sample ID	8072IA-35-01-B-DUP-		828072IA-47-01-B-10	
		Qc Code	FD		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier
Method TO15	Ethyl acetate	ug/m3				
Method TO15	Ethyl benzene	ug/m3				
Method TO15	Heptane	ug/m3				
Method TO15	Hexachlorobutadiene	ug/m3				
Method TO15	Hexane	ug/m3				
Method TO15	Isooctane	ug/m3				
Method TO15	Methyl Tertbutyl Ether	ug/m3				
Method TO15	Methylene chloride	ug/m3				
Method TO15	Propylene	ug/m3				
Method TO15	Styrene	ug/m3				
Method TO15	Tetrachloroethene	ug/m3				
Method TO15	Tetrahydrofuran	ug/m3				
Method TO15	Toluene	ug/m3				
Method TO15	trans-1,2-Dichloroethene	ug/m3				
Method TO15	trans-1,3-Dichloropropene	ug/m3				
Method TO15	Trichloroethene	ug/m3				
Method TO15	Trichlorofluoromethane	ug/m3				
Method TO15	Vinyl acetate	ug/m3				
Method TO15	Vinyl bromide	ug/m3				
Method TO15	Vinyl chloride	ug/m3				
Method TO15	Xylene, m/p	ug/m3				
Method TO15	Xylene, o	ug/m3				

Notes:
ug/m3 = microgram per meter cubed
FS = field sample
FD = field duplicate
U = not detected
J = estimated value

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

	Sample Delivery Group		C1003061		C1003061	
	Location		IA-50-B		IA-52-B	
	Sample Date		3/24/2010		3/24/2010	
	Sample ID		828072IA-50-01-B-10		828072IA-52-01-B-10	
	Qc Code		FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier
CT-TCE-VC	1,1,1-Trichloroethane	ug/m3	0.83	U	0.83	U
CT-TCE-VC	1,1,2,2-Tetrachloroethane	ug/m3	1	U	1	U
CT-TCE-VC	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.2	U	1.2	U
CT-TCE-VC	1,1,2-Trichloroethane	ug/m3	0.83	U	0.83	U
CT-TCE-VC	1,1-Dichloroethane	ug/m3	0.62	U	0.62	U
CT-TCE-VC	1,1-Dichloroethene	ug/m3	0.6	U	0.6	U
CT-TCE-VC	1,2,4-Trichlorobenzene	ug/m3	1.1	U	1.1	U
CT-TCE-VC	1,2,4-Trimethylbenzene	ug/m3	0.55	J	0.75	U
CT-TCE-VC	1,2-Dibromoethane	ug/m3	1.2	U	1.2	U
CT-TCE-VC	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U	1.1	U
CT-TCE-VC	1,2-Dichlorobenzene	ug/m3	0.92	U	0.92	U
CT-TCE-VC	1,2-Dichloroethane	ug/m3	0.62	U	0.66	
CT-TCE-VC	1,2-Dichloropropane	ug/m3	0.7	U	0.7	U
CT-TCE-VC	1,3,5-Trimethylbenzene	ug/m3	0.75	U	0.75	U
CT-TCE-VC	1,3-Butadiene	ug/m3	0.34	U	0.34	U
CT-TCE-VC	1,3-Dichlorobenzene	ug/m3	0.92	U	0.92	U
CT-TCE-VC	1,4-Dichlorobenzene	ug/m3	0.92	U	0.92	U
CT-TCE-VC	1,4-Dioxane	ug/m3	1.1	U	1.1	U
CT-TCE-VC	2-Butanone	ug/m3	1.6		0.93	
CT-TCE-VC	2-Hexanone	ug/m3	1.2	U	1.2	U
CT-TCE-VC	2-Propanol	ug/m3	6.2		34	
CT-TCE-VC	4-Ethyltoluene	ug/m3	0.75	UJ	0.75	UJ
CT-TCE-VC	4-Methyl-2-pentanone	ug/m3	0.54	J	1.2	U
CT-TCE-VC	Acetone	ug/m3	14		25	
CT-TCE-VC	Allyl chloride	ug/m3	0.48	U	0.48	U
CT-TCE-VC	Benzene	ug/m3	0.88		0.78	
CT-TCE-VC	Benzyl chloride	ug/m3	0.88	U	0.88	U
CT-TCE-VC	Bromodichloromethane	ug/m3	1	U	1	U
CT-TCE-VC	Bromoform	ug/m3	1.6	U	1.6	U
CT-TCE-VC	Bromomethane	ug/m3	0.59	U	0.59	U
CT-TCE-VC	Carbon disulfide	ug/m3	0.47	U	0.47	U
CT-TCE-VC	Carbon tetrachloride	ug/m3	0.83	J	0.7	J
CT-TCE-VC	Chlorobenzene	ug/m3	0.7	U	0.7	U
CT-TCE-VC	Chlorodibromomethane	ug/m3	1.3	U	1.3	U
CT-TCE-VC	Chloroethane	ug/m3	0.4	U	0.4	U
CT-TCE-VC	Chloroform	ug/m3	0.74	U	0.74	U
CT-TCE-VC	Chloromethane	ug/m3	0.69		0.82	
CT-TCE-VC	Cis-1,2-Dichloroethene	ug/m3	0.64		0.6	U
CT-TCE-VC	cis-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U
CT-TCE-VC	Cyclohexane	ug/m3	0.35	J	0.56	
CT-TCE-VC	Dichlorodifluoromethane	ug/m3	2.5		2.3	
CT-TCE-VC	Ethyl acetate	ug/m3	0.59	J	4.2	
CT-TCE-VC	Ethyl benzene	ug/m3	0.66	U	0.66	U
CT-TCE-VC	Heptane	ug/m3	0.5	J	0.54	J
CT-TCE-VC	Hexachlorobutadiene	ug/m3	1.6	U	1.6	U
CT-TCE-VC	Hexane	ug/m3	1.5		1.8	
CT-TCE-VC	Isooctane	ug/m3	0.71	U	0.71	U
CT-TCE-VC	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U
CT-TCE-VC	Methylene chloride	ug/m3	0.49	J	0.74	
CT-TCE-VC	Propylene	ug/m3	0.26	U	0.26	U
CT-TCE-VC	Styrene	ug/m3	0.65	U	0.65	U
CT-TCE-VC	Tetrachloroethene	ug/m3	1	U	1	U

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

		Sample Delivery Group	C1003061		C1003061	
		Location	IA-50-B		IA-52-B	
		Sample Date	3/24/2010		3/24/2010	
		Sample ID	828072IA-50-01-B-10		828072IA-52-01-B-10	
		Qc Code	FS		FS	
Analysis	Param Name	Units	Result	Qualifier	Result	Qualifier
CT-TCE-VC	Tetrahydrofuran	ug/m3	0.45	U	1.4	
CT-TCE-VC	Toluene	ug/m3	3.9		2.4	
CT-TCE-VC	trans-1,2-Dichloroethene	ug/m3	0.6	U	0.6	U
CT-TCE-VC	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U
CT-TCE-VC	Trichloroethene	ug/m3	0.27		0.27	
CT-TCE-VC	Trichlorofluoromethane	ug/m3	1.6		2.1	
CT-TCE-VC	Vinyl acetate	ug/m3	0.54	U	0.54	U
CT-TCE-VC	Vinyl bromide	ug/m3	0.67	U	0.67	U
CT-TCE-VC	Vinyl chloride	ug/m3	0.1		0.13	
CT-TCE-VC	Xylene, m/p	ug/m3	0.49	J	0.57	J
CT-TCE-VC	Xylene, o	ug/m3	0.66	U	0.66	U
Method TO15	1,1,1-Trichloroethane	ug/m3				
Method TO15	1,1,2,2-Tetrachloroethane	ug/m3				
Method TO15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3				
Method TO15	1,1,2-Trichloroethane	ug/m3				
Method TO15	1,1-Dichloroethane	ug/m3				
Method TO15	1,1-Dichloroethene	ug/m3				
Method TO15	1,2,4-Trichlorobenzene	ug/m3				
Method TO15	1,2,4-Trimethylbenzene	ug/m3				
Method TO15	1,2-Dibromoethane	ug/m3				
Method TO15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3				
Method TO15	1,2-Dichlorobenzene	ug/m3				
Method TO15	1,2-Dichloroethane	ug/m3				
Method TO15	1,2-Dichloropropane	ug/m3				
Method TO15	1,3,5-Trimethylbenzene	ug/m3				
Method TO15	1,3-Butadiene	ug/m3				
Method TO15	1,3-Dichlorobenzene	ug/m3				
Method TO15	1,4-Dichlorobenzene	ug/m3				
Method TO15	1,4-Dioxane	ug/m3				
Method TO15	2-Butanone	ug/m3				
Method TO15	2-Hexanone	ug/m3				
Method TO15	2-Propanol	ug/m3				
Method TO15	4-Ethyltoluene	ug/m3				
Method TO15	4-Methyl-2-pentanone	ug/m3				
Method TO15	Acetone	ug/m3				
Method TO15	Allyl chloride	ug/m3				
Method TO15	Benzene	ug/m3				
Method TO15	Benzyl chloride	ug/m3				
Method TO15	Bromodichloromethane	ug/m3				
Method TO15	Bromoform	ug/m3				
Method TO15	Bromomethane	ug/m3				
Method TO15	Carbon disulfide	ug/m3				
Method TO15	Carbon tetrachloride	ug/m3				
Method TO15	Chlorobenzene	ug/m3				
Method TO15	Chlorodibromomethane	ug/m3				
Method TO15	Chloroethane	ug/m3				
Method TO15	Chloroform	ug/m3				
Method TO15	Chloromethane	ug/m3				
Method TO15	Cis-1,2-Dichloroethene	ug/m3				
Method TO15	cis-1,3-Dichloropropene	ug/m3				
Method TO15	Cyclohexane	ug/m3				
Method TO15	Dichlorodifluoromethane	ug/m3				

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

		Sample Delivery Group	C1003061		C1003061	
		Location	IA-50-B		IA-52-B	
		Sample Date	3/24/2010		3/24/2010	
		Sample ID	828072IA-50-01-B-10		828072IA-52-01-B-10	
		Qc Code	FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier
Method TO15	Ethyl acetate	ug/m3				
Method TO15	Ethyl benzene	ug/m3				
Method TO15	Heptane	ug/m3				
Method TO15	Hexachlorobutadiene	ug/m3				
Method TO15	Hexane	ug/m3				
Method TO15	Isooctane	ug/m3				
Method TO15	Methyl Tertbutyl Ether	ug/m3				
Method TO15	Methylene chloride	ug/m3				
Method TO15	Propylene	ug/m3				
Method TO15	Styrene	ug/m3				
Method TO15	Tetrachloroethene	ug/m3				
Method TO15	Tetrahydrofuran	ug/m3				
Method TO15	Toluene	ug/m3				
Method TO15	trans-1,2-Dichloroethene	ug/m3				
Method TO15	trans-1,3-Dichloropropene	ug/m3				
Method TO15	Trichloroethene	ug/m3				
Method TO15	Trichlorofluoromethane	ug/m3				
Method TO15	Vinyl acetate	ug/m3				
Method TO15	Vinyl bromide	ug/m3				
Method TO15	Vinyl chloride	ug/m3				
Method TO15	Xylene, m/p	ug/m3				
Method TO15	Xylene, o	ug/m3				

Notes:
ug/m3 = microgram per meter cubed
FS = field sample
FD = field duplicate
U = not detected
J = estimated value

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

	Sample Delivery Group		C1003061		C1003061	
	Location		IA-55-B		OA-032210	
	Sample Date		3/23/2010		3/23/2010	
	Sample ID		828072IA-55-01-B-10		828072OA-032210-01	
	Qc Code		FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier
CT-TCE-VC	1,1,1-Trichloroethane	ug/m3	0.83	U	0.83	U
CT-TCE-VC	1,1,2,2-Tetrachloroethane	ug/m3	1	U	1	U
CT-TCE-VC	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.2	U	1.2	U
CT-TCE-VC	1,1,2-Trichloroethane	ug/m3	0.83	U	0.83	U
CT-TCE-VC	1,1-Dichloroethane	ug/m3	0.62	U	0.62	U
CT-TCE-VC	1,1-Dichloroethene	ug/m3	0.6	U	0.6	U
CT-TCE-VC	1,2,4-Trichlorobenzene	ug/m3	1.1	U	1.1	U
CT-TCE-VC	1,2,4-Trimethylbenzene	ug/m3	0.7	J	0.75	U
CT-TCE-VC	1,2-Dibromoethane	ug/m3	1.2	U	1.2	U
CT-TCE-VC	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U	1.1	U
CT-TCE-VC	1,2-Dichlorobenzene	ug/m3	0.92	U	0.92	U
CT-TCE-VC	1,2-Dichloroethane	ug/m3	2		0.62	U
CT-TCE-VC	1,2-Dichloropropane	ug/m3	0.7	U	0.7	U
CT-TCE-VC	1,3,5-Trimethylbenzene	ug/m3	0.75	U	0.75	U
CT-TCE-VC	1,3-Butadiene	ug/m3	0.34	U	0.34	U
CT-TCE-VC	1,3-Dichlorobenzene	ug/m3	0.92	U	0.92	U
CT-TCE-VC	1,4-Dichlorobenzene	ug/m3	0.92	U	0.92	U
CT-TCE-VC	1,4-Dioxane	ug/m3	1.1	U	1.1	U
CT-TCE-VC	2-Butanone	ug/m3	1.5		0.9	U
CT-TCE-VC	2-Hexanone	ug/m3	1.2	U	1.2	U
CT-TCE-VC	2-Propanol	ug/m3	14		13	
CT-TCE-VC	4-Ethyltoluene	ug/m3	0.75	UJ	0.75	UJ
CT-TCE-VC	4-Methyl-2-pentanone	ug/m3	1.2	U	1.2	U
CT-TCE-VC	Acetone	ug/m3	26		13	
CT-TCE-VC	Allyl chloride	ug/m3	0.48	U	0.48	U
CT-TCE-VC	Benzene	ug/m3	2.1		0.45	J
CT-TCE-VC	Benzyl chloride	ug/m3	0.88	U	0.88	U
CT-TCE-VC	Bromodichloromethane	ug/m3	1	U	1	U
CT-TCE-VC	Bromoform	ug/m3	1.6	U	1.6	U
CT-TCE-VC	Bromomethane	ug/m3	0.59	U	0.59	U
CT-TCE-VC	Carbon disulfide	ug/m3	0.47	U	0.47	U
CT-TCE-VC	Carbon tetrachloride	ug/m3	0.7	J	0.7	J
CT-TCE-VC	Chlorobenzene	ug/m3	0.7	U	0.7	U
CT-TCE-VC	Chlorodibromomethane	ug/m3	1.3	U	1.3	U
CT-TCE-VC	Chloroethane	ug/m3	0.4	U	0.4	U
CT-TCE-VC	Chloroform	ug/m3	0.74	U	0.74	U
CT-TCE-VC	Chloromethane	ug/m3	0.84		0.73	
CT-TCE-VC	Cis-1,2-Dichloroethene	ug/m3	0.6	U	0.6	U
CT-TCE-VC	cis-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U
CT-TCE-VC	Cyclohexane	ug/m3	1		0.52	U
CT-TCE-VC	Dichlorodifluoromethane	ug/m3	2.6		2.5	
CT-TCE-VC	Ethyl acetate	ug/m3	0.59	J	0.92	U
CT-TCE-VC	Ethyl benzene	ug/m3	0.71		0.66	U
CT-TCE-VC	Heptane	ug/m3	1		0.62	U
CT-TCE-VC	Hexachlorobutadiene	ug/m3	1.6	U	1.6	U
CT-TCE-VC	Hexane	ug/m3	2.9		0.9	
CT-TCE-VC	Isooctane	ug/m3	0.71		0.71	U
CT-TCE-VC	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U
CT-TCE-VC	Methylene chloride	ug/m3	0.85		0.67	
CT-TCE-VC	Propylene	ug/m3	0.26	U	0.26	U
CT-TCE-VC	Styrene	ug/m3	0.65	U	0.65	U
CT-TCE-VC	Tetrachloroethene	ug/m3	1	U	1	U

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

		Sample Delivery Group	C1003061		C1003061	
		Location	IA-55-B		OA-032210	
		Sample Date	3/23/2010		3/23/2010	
		Sample ID	828072IA-55-01-B-10		828072OA-032210-01	
		Qc Code	FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier
CT-TCE-VC	Tetrahydrofuran	ug/m3	0.45	U	0.45	U
CT-TCE-VC	Toluene	ug/m3	6.1		1.2	
CT-TCE-VC	trans-1,2-Dichloroethene	ug/m3	0.6	U	0.6	U
CT-TCE-VC	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U
CT-TCE-VC	Trichloroethene	ug/m3	0.33		0.27	
CT-TCE-VC	Trichlorofluoromethane	ug/m3	1.7		1.4	
CT-TCE-VC	Vinyl acetate	ug/m3	0.54	U	0.54	U
CT-TCE-VC	Vinyl bromide	ug/m3	0.67	U	0.67	U
CT-TCE-VC	Vinyl chloride	ug/m3	0.1	U	0.1	U
CT-TCE-VC	Xylene, m/p	ug/m3	2		1.3	U
CT-TCE-VC	Xylene, o	ug/m3	0.66		0.66	U
Method TO15	1,1,1-Trichloroethane	ug/m3				
Method TO15	1,1,2,2-Tetrachloroethane	ug/m3				
Method TO15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3				
Method TO15	1,1,2-Trichloroethane	ug/m3				
Method TO15	1,1-Dichloroethane	ug/m3				
Method TO15	1,1-Dichloroethene	ug/m3				
Method TO15	1,2,4-Trichlorobenzene	ug/m3				
Method TO15	1,2,4-Trimethylbenzene	ug/m3				
Method TO15	1,2-Dibromoethane	ug/m3				
Method TO15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3				
Method TO15	1,2-Dichlorobenzene	ug/m3				
Method TO15	1,2-Dichloroethane	ug/m3				
Method TO15	1,2-Dichloropropane	ug/m3				
Method TO15	1,3,5-Trimethylbenzene	ug/m3				
Method TO15	1,3-Butadiene	ug/m3				
Method TO15	1,3-Dichlorobenzene	ug/m3				
Method TO15	1,4-Dichlorobenzene	ug/m3				
Method TO15	1,4-Dioxane	ug/m3				
Method TO15	2-Butanone	ug/m3				
Method TO15	2-Hexanone	ug/m3				
Method TO15	2-Propanol	ug/m3				
Method TO15	4-Ethyltoluene	ug/m3				
Method TO15	4-Methyl-2-pentanone	ug/m3				
Method TO15	Acetone	ug/m3				
Method TO15	Allyl chloride	ug/m3				
Method TO15	Benzene	ug/m3				
Method TO15	Benzyl chloride	ug/m3				
Method TO15	Bromodichloromethane	ug/m3				
Method TO15	Bromoform	ug/m3				
Method TO15	Bromomethane	ug/m3				
Method TO15	Carbon disulfide	ug/m3				
Method TO15	Carbon tetrachloride	ug/m3				
Method TO15	Chlorobenzene	ug/m3				
Method TO15	Chlorodibromomethane	ug/m3				
Method TO15	Chloroethane	ug/m3				
Method TO15	Chloroform	ug/m3				
Method TO15	Chloromethane	ug/m3				
Method TO15	Cis-1,2-Dichloroethene	ug/m3				
Method TO15	cis-1,3-Dichloropropene	ug/m3				
Method TO15	Cyclohexane	ug/m3				
Method TO15	Dichlorodifluoromethane	ug/m3				

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

		Sample Delivery Group	C1003061		C1003061	
		Location	IA-55-B		OA-032210	
		Sample Date	3/23/2010		3/23/2010	
		Sample ID	828072IA-55-01-B-10		828072OA-032210-01	
		Qc Code	FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier
Method TO15	Ethyl acetate	ug/m3				
Method TO15	Ethyl benzene	ug/m3				
Method TO15	Heptane	ug/m3				
Method TO15	Hexachlorobutadiene	ug/m3				
Method TO15	Hexane	ug/m3				
Method TO15	Isooctane	ug/m3				
Method TO15	Methyl Tertbutyl Ether	ug/m3				
Method TO15	Methylene chloride	ug/m3				
Method TO15	Propylene	ug/m3				
Method TO15	Styrene	ug/m3				
Method TO15	Tetrachloroethene	ug/m3				
Method TO15	Tetrahydrofuran	ug/m3				
Method TO15	Toluene	ug/m3				
Method TO15	trans-1,2-Dichloroethene	ug/m3				
Method TO15	trans-1,3-Dichloropropene	ug/m3				
Method TO15	Trichloroethene	ug/m3				
Method TO15	Trichlorofluoromethane	ug/m3				
Method TO15	Vinyl acetate	ug/m3				
Method TO15	Vinyl bromide	ug/m3				
Method TO15	Vinyl chloride	ug/m3				
Method TO15	Xylene, m/p	ug/m3				
Method TO15	Xylene, o	ug/m3				

Notes:
ug/m3 = microgram per meter cubed
FS = field sample
FD = field duplicate
U = not detected
J = estimated value

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

		Sample Delivery Group	C1003061		C1003061	
		Location	OA-032310		SS-35-B	
		Sample Date	3/24/2010		3/24/2010	
		Sample ID	828072OA-032310-01		828072SS-35-01-B-10	
		Qc Code	FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier
CT-TCE-VC	1,1,1-Trichloroethane	ug/m3	0.83	U		
CT-TCE-VC	1,1,2,2-Tetrachloroethane	ug/m3	1	U		
CT-TCE-VC	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.2	U		
CT-TCE-VC	1,1,2-Trichloroethane	ug/m3	0.83	U		
CT-TCE-VC	1,1-Dichloroethane	ug/m3	0.62	U		
CT-TCE-VC	1,1-Dichloroethene	ug/m3	0.6	U		
CT-TCE-VC	1,2,4-Trichlorobenzene	ug/m3	1.1	U		
CT-TCE-VC	1,2,4-Trimethylbenzene	ug/m3	0.75	U		
CT-TCE-VC	1,2-Dibromoethane	ug/m3	1.2	U		
CT-TCE-VC	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U		
CT-TCE-VC	1,2-Dichlorobenzene	ug/m3	0.92	U		
CT-TCE-VC	1,2-Dichloroethane	ug/m3	0.66			
CT-TCE-VC	1,2-Dichloropropane	ug/m3	0.7	U		
CT-TCE-VC	1,3,5-Trimethylbenzene	ug/m3	0.75	U		
CT-TCE-VC	1,3-Butadiene	ug/m3	0.34	U		
CT-TCE-VC	1,3-Dichlorobenzene	ug/m3	0.92	U		
CT-TCE-VC	1,4-Dichlorobenzene	ug/m3	0.92	U		
CT-TCE-VC	1,4-Dioxane	ug/m3	1.1	U		
CT-TCE-VC	2-Butanone	ug/m3	1.7			
CT-TCE-VC	2-Hexanone	ug/m3	1.2	U		
CT-TCE-VC	2-Propanol	ug/m3	37			
CT-TCE-VC	4-Ethyltoluene	ug/m3	0.75	UJ		
CT-TCE-VC	4-Methyl-2-pentanone	ug/m3	1.2	U		
CT-TCE-VC	Acetone	ug/m3	43			
CT-TCE-VC	Allyl chloride	ug/m3	0.48	U		
CT-TCE-VC	Benzene	ug/m3	0.45	J		
CT-TCE-VC	Benzyl chloride	ug/m3	0.88	U		
CT-TCE-VC	Bromodichloromethane	ug/m3	1	U		
CT-TCE-VC	Bromoform	ug/m3	1.6	U		
CT-TCE-VC	Bromomethane	ug/m3	0.59	U		
CT-TCE-VC	Carbon disulfide	ug/m3	0.57			
CT-TCE-VC	Carbon tetrachloride	ug/m3	0.45	J		
CT-TCE-VC	Chlorobenzene	ug/m3	0.7	U		
CT-TCE-VC	Chlorodibromomethane	ug/m3	1.3	U		
CT-TCE-VC	Chloroethane	ug/m3	0.4	U		
CT-TCE-VC	Chloroform	ug/m3	0.74	U		
CT-TCE-VC	Chloromethane	ug/m3	0.52			
CT-TCE-VC	Cis-1,2-Dichloroethene	ug/m3	0.6	U		
CT-TCE-VC	cis-1,3-Dichloropropene	ug/m3	0.69	U		
CT-TCE-VC	Cyclohexane	ug/m3	0.42	J		
CT-TCE-VC	Dichlorodifluoromethane	ug/m3	1.4			
CT-TCE-VC	Ethyl acetate	ug/m3	1.2			
CT-TCE-VC	Ethyl benzene	ug/m3	0.66	U		
CT-TCE-VC	Heptane	ug/m3	0.5	J		
CT-TCE-VC	Hexachlorobutadiene	ug/m3	1.6	U		
CT-TCE-VC	Hexane	ug/m3	1.4			
CT-TCE-VC	Isooctane	ug/m3	0.71	U		
CT-TCE-VC	Methyl Tertbutyl Ether	ug/m3	0.55	U		
CT-TCE-VC	Methylene chloride	ug/m3	1.2			
CT-TCE-VC	Propylene	ug/m3	0.26	U		
CT-TCE-VC	Styrene	ug/m3	0.65	U		
CT-TCE-VC	Tetrachloroethene	ug/m3	1.1			

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

	Sample Delivery Group		C1003061		C1003061	
	Location		OA-032310		SS-35-B	
	Sample Date		3/24/2010		3/24/2010	
	Sample ID		828072OA-032310-01		828072SS-35-01-B-10	
	Qc Code		FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier
CT-TCE-VC	Tetrahydrofuran	ug/m3	0.45	U		
CT-TCE-VC	Toluene	ug/m3	13			
CT-TCE-VC	trans-1,2-Dichloroethene	ug/m3	0.6	U		
CT-TCE-VC	trans-1,3-Dichloropropene	ug/m3	0.69	U		
CT-TCE-VC	Trichloroethene	ug/m3	3.3			
CT-TCE-VC	Trichlorofluoromethane	ug/m3	0.8	J		
CT-TCE-VC	Vinyl acetate	ug/m3	0.54	U		
CT-TCE-VC	Vinyl bromide	ug/m3	0.67	U		
CT-TCE-VC	Vinyl chloride	ug/m3	0.1	U		
CT-TCE-VC	Xylene, m/p	ug/m3	0.49	J		
CT-TCE-VC	Xylene, o	ug/m3	0.66	U		
Method TO15	1,1,1-Trichloroethane	ug/m3			5.1	J
Method TO15	1,1,2,2-Tetrachloroethane	ug/m3			1	U
Method TO15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3			2.5	
Method TO15	1,1,2-Trichloroethane	ug/m3			0.83	U
Method TO15	1,1-Dichloroethane	ug/m3			200	J
Method TO15	1,1-Dichloroethene	ug/m3			23	
Method TO15	1,2,4-Trichlorobenzene	ug/m3			0.75	J
Method TO15	1,2,4-Trimethylbenzene	ug/m3			2.2	
Method TO15	1,2-Dibromoethane	ug/m3			1.2	U
Method TO15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3			1.1	U
Method TO15	1,2-Dichlorobenzene	ug/m3			0.92	U
Method TO15	1,2-Dichloroethane	ug/m3			1.2	
Method TO15	1,2-Dichloropropane	ug/m3			0.7	U
Method TO15	1,3,5-Trimethylbenzene	ug/m3			1.4	
Method TO15	1,3-Butadiene	ug/m3			0.34	U
Method TO15	1,3-Dichlorobenzene	ug/m3			0.92	U
Method TO15	1,4-Dichlorobenzene	ug/m3			0.61	J
Method TO15	1,4-Dioxane	ug/m3			1.1	U
Method TO15	2-Butanone	ug/m3			23	
Method TO15	2-Hexanone	ug/m3			1.1	J
Method TO15	2-Propanol	ug/m3			100	
Method TO15	4-Ethyltoluene	ug/m3			1.1	J
Method TO15	4-Methyl-2-pentanone	ug/m3			1.2	U
Method TO15	Acetone	ug/m3			140	
Method TO15	Allyl chloride	ug/m3			0.48	U
Method TO15	Benzene	ug/m3			17	
Method TO15	Benzyl chloride	ug/m3			0.88	U
Method TO15	Bromodichloromethane	ug/m3			1	U
Method TO15	Bromoform	ug/m3			1.6	U
Method TO15	Bromomethane	ug/m3			0.59	U
Method TO15	Carbon disulfide	ug/m3			27	
Method TO15	Carbon tetrachloride	ug/m3			0.45	J
Method TO15	Chlorobenzene	ug/m3			0.7	U
Method TO15	Chlorodibromomethane	ug/m3			1.3	U
Method TO15	Chloroethane	ug/m3			0.4	U
Method TO15	Chloroform	ug/m3			1.5	
Method TO15	Chloromethane	ug/m3			0.31	U
Method TO15	Cis-1,2-Dichloroethene	ug/m3			1800	
Method TO15	cis-1,3-Dichloropropene	ug/m3			0.69	U
Method TO15	Cyclohexane	ug/m3			39	
Method TO15	Dichlorodifluoromethane	ug/m3			18	

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

		Sample Delivery Group	C1003061		C1003061	
		Location	OA-032310		SS-35-B	
		Sample Date	3/24/2010		3/24/2010	
		Sample ID	828072OA-032310-01		828072SS-35-01-B-10	
		Qc Code	FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier
Method TO15	Ethyl acetate	ug/m3			0.92	U
Method TO15	Ethyl benzene	ug/m3			5.6	
Method TO15	Heptane	ug/m3			32	
Method TO15	Hexachlorobutadiene	ug/m3			1.6	UJ
Method TO15	Hexane	ug/m3			45	
Method TO15	Isooctane	ug/m3			0.71	U
Method TO15	Methyl Tertbutyl Ether	ug/m3			0.55	U
Method TO15	Methylene chloride	ug/m3			0.99	
Method TO15	Propylene	ug/m3			0.26	U
Method TO15	Styrene	ug/m3			3.2	
Method TO15	Tetrachloroethene	ug/m3			3.5	
Method TO15	Tetrahydrofuran	ug/m3			0.45	U
Method TO15	Toluene	ug/m3			150	
Method TO15	trans-1,2-Dichloroethene	ug/m3			29	J
Method TO15	trans-1,3-Dichloropropene	ug/m3			0.69	U
Method TO15	Trichloroethene	ug/m3			260	
Method TO15	Trichlorofluoromethane	ug/m3			1.2	
Method TO15	Vinyl acetate	ug/m3			0.54	U
Method TO15	Vinyl bromide	ug/m3			0.67	U
Method TO15	Vinyl chloride	ug/m3			11	
Method TO15	Xylene, m/p	ug/m3			14	
Method TO15	Xylene, o	ug/m3			3	

Notes:
ug/m3 = microgram per meter cubed
FS = field sample
FD = field duplicate
U = not detected
J = estimated value

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

		Sample Delivery Group	C1003061		C1003061	
		Location	SS-47-B		SS-50-B	
		Sample Date	3/23/2010		3/24/2010	
		Sample ID	828072SS-47-01-B-10		828072SS-50-01-B-10	
		Qc Code	FS		FS	
Analysis	Param Name	Units	Result	Qualifier	Result	Qualifier
CT-TCE-VC	1,1,1-Trichloroethane	ug/m3				
CT-TCE-VC	1,1,2,2-Tetrachloroethane	ug/m3				
CT-TCE-VC	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3				
CT-TCE-VC	1,1,2-Trichloroethane	ug/m3				
CT-TCE-VC	1,1-Dichloroethane	ug/m3				
CT-TCE-VC	1,1-Dichloroethene	ug/m3				
CT-TCE-VC	1,2,4-Trichlorobenzene	ug/m3				
CT-TCE-VC	1,2,4-Trimethylbenzene	ug/m3				
CT-TCE-VC	1,2-Dibromoethane	ug/m3				
CT-TCE-VC	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3				
CT-TCE-VC	1,2-Dichlorobenzene	ug/m3				
CT-TCE-VC	1,2-Dichloroethane	ug/m3				
CT-TCE-VC	1,2-Dichloropropane	ug/m3				
CT-TCE-VC	1,3,5-Trimethylbenzene	ug/m3				
CT-TCE-VC	1,3-Butadiene	ug/m3				
CT-TCE-VC	1,3-Dichlorobenzene	ug/m3				
CT-TCE-VC	1,4-Dichlorobenzene	ug/m3				
CT-TCE-VC	1,4-Dioxane	ug/m3				
CT-TCE-VC	2-Butanone	ug/m3				
CT-TCE-VC	2-Hexanone	ug/m3				
CT-TCE-VC	2-Propanol	ug/m3				
CT-TCE-VC	4-Ethyltoluene	ug/m3				
CT-TCE-VC	4-Methyl-2-pentanone	ug/m3				
CT-TCE-VC	Acetone	ug/m3				
CT-TCE-VC	Allyl chloride	ug/m3				
CT-TCE-VC	Benzene	ug/m3				
CT-TCE-VC	Benzyl chloride	ug/m3				
CT-TCE-VC	Bromodichloromethane	ug/m3				
CT-TCE-VC	Bromoform	ug/m3				
CT-TCE-VC	Bromomethane	ug/m3				
CT-TCE-VC	Carbon disulfide	ug/m3				
CT-TCE-VC	Carbon tetrachloride	ug/m3				
CT-TCE-VC	Chlorobenzene	ug/m3				
CT-TCE-VC	Chlorodibromomethane	ug/m3				
CT-TCE-VC	Chloroethane	ug/m3				
CT-TCE-VC	Chloroform	ug/m3				
CT-TCE-VC	Chloromethane	ug/m3				
CT-TCE-VC	Cis-1,2-Dichloroethene	ug/m3				
CT-TCE-VC	cis-1,3-Dichloropropene	ug/m3				
CT-TCE-VC	Cyclohexane	ug/m3				
CT-TCE-VC	Dichlorodifluoromethane	ug/m3				
CT-TCE-VC	Ethyl acetate	ug/m3				
CT-TCE-VC	Ethyl benzene	ug/m3				
CT-TCE-VC	Heptane	ug/m3				
CT-TCE-VC	Hexachlorobutadiene	ug/m3				
CT-TCE-VC	Hexane	ug/m3				
CT-TCE-VC	Isooctane	ug/m3				
CT-TCE-VC	Methyl Tertbutyl Ether	ug/m3				
CT-TCE-VC	Methylene chloride	ug/m3				
CT-TCE-VC	Propylene	ug/m3				
CT-TCE-VC	Styrene	ug/m3				
CT-TCE-VC	Tetrachloroethene	ug/m3				

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

		Sample Delivery Group	C1003061		C1003061	
		Location	SS-47-B		SS-50-B	
		Sample Date	3/23/2010		3/24/2010	
		Sample ID	828072SS-47-01-B-10		828072SS-50-01-B-10	
		Qc Code	FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier
CT-TCE-VC	Tetrahydrofuran	ug/m3				
CT-TCE-VC	Toluene	ug/m3				
CT-TCE-VC	trans-1,2-Dichloroethene	ug/m3				
CT-TCE-VC	trans-1,3-Dichloropropene	ug/m3				
CT-TCE-VC	Trichloroethene	ug/m3				
CT-TCE-VC	Trichlorofluoromethane	ug/m3				
CT-TCE-VC	Vinyl acetate	ug/m3				
CT-TCE-VC	Vinyl bromide	ug/m3				
CT-TCE-VC	Vinyl chloride	ug/m3				
CT-TCE-VC	Xylene, m/p	ug/m3				
CT-TCE-VC	Xylene, o	ug/m3				
Method TO15	1,1,1-Trichloroethane	ug/m3	0.83	U	1.1	J
Method TO15	1,1,2,2-Tetrachloroethane	ug/m3	1	U	1	U
Method TO15	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.2	U	1.2	U
Method TO15	1,1,2-Trichloroethane	ug/m3	0.83	U	0.83	U
Method TO15	1,1-Dichloroethane	ug/m3	0.62	U	42	J
Method TO15	1,1-Dichloroethene	ug/m3	0.6	U	0.6	U
Method TO15	1,2,4-Trichlorobenzene	ug/m3	1.1	U	1.1	UJ
Method TO15	1,2,4-Trimethylbenzene	ug/m3	2.2		2.4	
Method TO15	1,2-Dibromoethane	ug/m3	1.2	U	1.2	U
Method TO15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U	1.1	U
Method TO15	1,2-Dichlorobenzene	ug/m3	0.92	U	0.92	U
Method TO15	1,2-Dichloroethane	ug/m3	1.4		1.6	
Method TO15	1,2-Dichloropropane	ug/m3	0.7	U	0.7	U
Method TO15	1,3,5-Trimethylbenzene	ug/m3	1.2		1.5	
Method TO15	1,3-Butadiene	ug/m3	0.34	U	0.34	U
Method TO15	1,3-Dichlorobenzene	ug/m3	0.92	U	0.92	U
Method TO15	1,4-Dichlorobenzene	ug/m3	0.92	U	0.92	U
Method TO15	1,4-Dioxane	ug/m3	1.1	U	1.1	U
Method TO15	2-Butanone	ug/m3	2.5		12	
Method TO15	2-Hexanone	ug/m3	1.2	U	1.2	U
Method TO15	2-Propanol	ug/m3	160		59	
Method TO15	4-Ethyltoluene	ug/m3	1.1	J	1.4	J
Method TO15	4-Methyl-2-pentanone	ug/m3	1.2	U	1.2	U
Method TO15	Acetone	ug/m3	64		91	
Method TO15	Allyl chloride	ug/m3	0.48	U	0.48	U
Method TO15	Benzene	ug/m3	0.84		2.3	
Method TO15	Benzyl chloride	ug/m3	0.88	U	0.88	U
Method TO15	Bromodichloromethane	ug/m3	1	U	1	U
Method TO15	Bromoform	ug/m3	1.6	U	1.6	U
Method TO15	Bromomethane	ug/m3	0.59	U	0.59	U
Method TO15	Carbon disulfide	ug/m3	16		14	
Method TO15	Carbon tetrachloride	ug/m3	0.51	J	0.32	J
Method TO15	Chlorobenzene	ug/m3	0.7	U	0.7	U
Method TO15	Chlorodibromomethane	ug/m3	1.3	U	1.3	U
Method TO15	Chloroethane	ug/m3	0.4	U	0.4	U
Method TO15	Chloroform	ug/m3	0.74	U	0.74	U
Method TO15	Chloromethane	ug/m3	0.21	J	0.31	U
Method TO15	Cis-1,2-Dichloroethene	ug/m3	0.6	U	570	
Method TO15	cis-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U
Method TO15	Cyclohexane	ug/m3	3.3		5.9	
Method TO15	Dichlorodifluoromethane	ug/m3	2.7		3.2	

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

		Sample Delivery Group	C1003061		C1003061	
		Location	SS-47-B		SS-50-B	
		Sample Date	3/23/2010		3/24/2010	
		Sample ID	828072SS-47-01-B-10		828072SS-50-01-B-10	
		Qc Code	FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier
Method TO15	Ethyl acetate	ug/m3	1.5		2.6	
Method TO15	Ethyl benzene	ug/m3	7.5		4.3	
Method TO15	Heptane	ug/m3	4.7		9.2	
Method TO15	Hexachlorobutadiene	ug/m3	1.6	U	1.6	UJ
Method TO15	Hexane	ug/m3	5.4		9.3	
Method TO15	Isooctane	ug/m3	0.71	U	0.71	U
Method TO15	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U
Method TO15	Methylene chloride	ug/m3	0.74		0.92	
Method TO15	Propylene	ug/m3	0.26	U	0.26	U
Method TO15	Styrene	ug/m3	3.5		2.6	
Method TO15	Tetrachloroethene	ug/m3	4.1		4.1	
Method TO15	Tetrahydrofuran	ug/m3	0.45	U	0.45	U
Method TO15	Toluene	ug/m3	75		55	
Method TO15	trans-1,2-Dichloroethene	ug/m3	0.6	U	11	J
Method TO15	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U
Method TO15	Trichloroethene	ug/m3	3.4		7	
Method TO15	Trichlorofluoromethane	ug/m3	1.5		1.2	
Method TO15	Vinyl acetate	ug/m3	0.54	U	0.54	U
Method TO15	Vinyl bromide	ug/m3	0.67	U	0.67	U
Method TO15	Vinyl chloride	ug/m3	0.39	U	20	
Method TO15	Xylene, m/p	ug/m3	14		7.5	J
Method TO15	Xylene, o	ug/m3	3.7		1.9	

Notes:
ug/m3 = microgram per meter cubed
FS = field sample
FD = field duplicate
U = not detected
J = estimated value

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

		Sample Delivery Group	C1003061		C1003061	
		Location	SS-52-B		SS-55-B	
		Sample Date	3/24/2010		3/23/2010	
		Sample ID	828072SS-52-01-B-10		828072SS-55-01-B-10	
		Qc Code	FS		FS	
Analysis	Param Name	Units	Result	Qualifier	Result	Qualifier
CT-TCE-VC	1,1,1-Trichloroethane	ug/m3				
CT-TCE-VC	1,1,2,2-Tetrachloroethane	ug/m3				
CT-TCE-VC	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3				
CT-TCE-VC	1,1,2-Trichloroethane	ug/m3				
CT-TCE-VC	1,1-Dichloroethane	ug/m3				
CT-TCE-VC	1,1-Dichloroethene	ug/m3				
CT-TCE-VC	1,2,4-Trichlorobenzene	ug/m3				
CT-TCE-VC	1,2,4-Trimethylbenzene	ug/m3				
CT-TCE-VC	1,2-Dibromoethane	ug/m3				
CT-TCE-VC	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3				
CT-TCE-VC	1,2-Dichlorobenzene	ug/m3				
CT-TCE-VC	1,2-Dichloroethane	ug/m3				
CT-TCE-VC	1,2-Dichloropropane	ug/m3				
CT-TCE-VC	1,3,5-Trimethylbenzene	ug/m3				
CT-TCE-VC	1,3-Butadiene	ug/m3				
CT-TCE-VC	1,3-Dichlorobenzene	ug/m3				
CT-TCE-VC	1,4-Dichlorobenzene	ug/m3				
CT-TCE-VC	1,4-Dioxane	ug/m3				
CT-TCE-VC	2-Butanone	ug/m3				
CT-TCE-VC	2-Hexanone	ug/m3				
CT-TCE-VC	2-Propanol	ug/m3				
CT-TCE-VC	4-Ethyltoluene	ug/m3				
CT-TCE-VC	4-Methyl-2-pentanone	ug/m3				
CT-TCE-VC	Acetone	ug/m3				
CT-TCE-VC	Allyl chloride	ug/m3				
CT-TCE-VC	Benzene	ug/m3				
CT-TCE-VC	Benzyl chloride	ug/m3				
CT-TCE-VC	Bromodichloromethane	ug/m3				
CT-TCE-VC	Bromoform	ug/m3				
CT-TCE-VC	Bromomethane	ug/m3				
CT-TCE-VC	Carbon disulfide	ug/m3				
CT-TCE-VC	Carbon tetrachloride	ug/m3				
CT-TCE-VC	Chlorobenzene	ug/m3				
CT-TCE-VC	Chlorodibromomethane	ug/m3				
CT-TCE-VC	Chloroethane	ug/m3				
CT-TCE-VC	Chloroform	ug/m3				
CT-TCE-VC	Chloromethane	ug/m3				
CT-TCE-VC	Cis-1,2-Dichloroethene	ug/m3				
CT-TCE-VC	cis-1,3-Dichloropropene	ug/m3				
CT-TCE-VC	Cyclohexane	ug/m3				
CT-TCE-VC	Dichlorodifluoromethane	ug/m3				
CT-TCE-VC	Ethyl acetate	ug/m3				
CT-TCE-VC	Ethyl benzene	ug/m3				
CT-TCE-VC	Heptane	ug/m3				
CT-TCE-VC	Hexachlorobutadiene	ug/m3				
CT-TCE-VC	Hexane	ug/m3				
CT-TCE-VC	Isooctane	ug/m3				
CT-TCE-VC	Methyl Tertbutyl Ether	ug/m3				
CT-TCE-VC	Methylene chloride	ug/m3				
CT-TCE-VC	Propylene	ug/m3				
CT-TCE-VC	Styrene	ug/m3				
CT-TCE-VC	Tetrachloroethene	ug/m3				

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

	Sample Delivery Group	C1003061		C1003061	
	Location	SS-52-B		SS-55-B	
	Sample Date	3/24/2010		3/23/2010	
	Sample ID	828072SS-52-01-B-10		828072SS-55-01-B-10	
	Qc Code	FS		FS	
Analysis	**Param Name** **Units**	Result	Qualifier	Result	Qualifier
CT-TCE-VC	Tetrahydrofuran ug/m3				
CT-TCE-VC	Toluene ug/m3				
CT-TCE-VC	trans-1,2-Dichloroethene ug/m3				
CT-TCE-VC	trans-1,3-Dichloropropene ug/m3				
CT-TCE-VC	Trichloroethene ug/m3				
CT-TCE-VC	Trichlorofluoromethane ug/m3				
CT-TCE-VC	Vinyl acetate ug/m3				
CT-TCE-VC	Vinyl bromide ug/m3				
CT-TCE-VC	Vinyl chloride ug/m3				
CT-TCE-VC	Xylene, m/p ug/m3				
CT-TCE-VC	Xylene, o ug/m3				
Method TO15	1,1,1-Trichloroethane ug/m3	0.61	J	0.83	U
Method TO15	1,1,2,2-Tetrachloroethane ug/m3	1	U	1	U
Method TO15	1,1,2-Trichloro-1,2,2-Trifluoroethane ug/m3	1.2	U	1.2	U
Method TO15	1,1,2-Trichloroethane ug/m3	0.83	U	0.83	U
Method TO15	1,1-Dichloroethane ug/m3	28		0.62	U
Method TO15	1,1-Dichloroethene ug/m3	0.6	U	0.6	U
Method TO15	1,2,4-Trichlorobenzene ug/m3	1.1	U	1.1	U
Method TO15	1,2,4-Trimethylbenzene ug/m3	1.8		1.9	
Method TO15	1,2-Dibromoethane ug/m3	1.2	U	1.2	U
Method TO15	1,2-Dichloro-1,1,2,2-tetrafluoroethane ug/m3	1.1	U	1.1	U
Method TO15	1,2-Dichlorobenzene ug/m3	0.92	U	0.92	U
Method TO15	1,2-Dichloroethane ug/m3	1.7		1.7	
Method TO15	1,2-Dichloropropane ug/m3	0.7	U	0.7	U
Method TO15	1,3,5-Trimethylbenzene ug/m3	0.9		1.1	
Method TO15	1,3-Butadiene ug/m3	0.34	U	0.34	U
Method TO15	1,3-Dichlorobenzene ug/m3	0.92	U	0.92	U
Method TO15	1,4-Dichlorobenzene ug/m3	0.92	U	0.92	U
Method TO15	1,4-Dioxane ug/m3	1.1	U	1.1	U
Method TO15	2-Butanone ug/m3	2.6		6.2	
Method TO15	2-Hexanone ug/m3	1.2	U	1.2	U
Method TO15	2-Propanol ug/m3	46		83	
Method TO15	4-Ethyltoluene ug/m3	0.95	J	1	J
Method TO15	4-Methyl-2-pentanone ug/m3	1.2	U	5.2	
Method TO15	Acetone ug/m3	38		110	
Method TO15	Allyl chloride ug/m3	0.48	U	0.48	U
Method TO15	Benzene ug/m3	1.7		12	
Method TO15	Benzyl chloride ug/m3	0.88	U	0.88	U
Method TO15	Bromodichloromethane ug/m3	1	U	1	U
Method TO15	Bromoform ug/m3	1.6	U	1.6	U
Method TO15	Bromomethane ug/m3	0.59	U	0.59	U
Method TO15	Carbon disulfide ug/m3	17		36	
Method TO15	Carbon tetrachloride ug/m3	0.38	J	0.58	J
Method TO15	Chlorobenzene ug/m3	0.7	U	0.7	U
Method TO15	Chlorodibromomethane ug/m3	1.3	U	1.3	U
Method TO15	Chloroethane ug/m3	0.4	U	0.4	U
Method TO15	Chloroform ug/m3	0.79		0.84	
Method TO15	Chloromethane ug/m3	0.31	U	0.31	U
Method TO15	Cis-1,2-Dichloroethene ug/m3	220		0.6	U
Method TO15	cis-1,3-Dichloropropene ug/m3	0.69	U	0.69	U
Method TO15	Cyclohexane ug/m3	6.9		52	
Method TO15	Dichlorodifluoromethane ug/m3	2.8		2.3	

DUSR TABLE 2
SDG C1003061
Results Summary
Erdle Perforating

		Sample Delivery Group	C1003061		C1003061	
		Location	SS-52-B		SS-55-B	
		Sample Date	3/24/2010		3/23/2010	
		Sample ID	828072SS-52-01-B-10		828072SS-55-01-B-10	
		Qc Code	FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier
Method TO15	Ethyl acetate	ug/m3	1.8		1.9	
Method TO15	Ethyl benzene	ug/m3	4.4		5.8	
Method TO15	Heptane	ug/m3	7.1		79	
Method TO15	Hexachlorobutadiene	ug/m3	1.6	U	1.6	U
Method TO15	Hexane	ug/m3	9.7		65	
Method TO15	Isooctane	ug/m3	0.71	U	1.1	
Method TO15	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U
Method TO15	Methylene chloride	ug/m3	0.74		0.92	
Method TO15	Propylene	ug/m3	0.26	U	0.26	U
Method TO15	Styrene	ug/m3	2.8		2.8	
Method TO15	Tetrachloroethene	ug/m3	3.9		4.1	
Method TO15	Tetrahydrofuran	ug/m3	0.45	U	0.45	U
Method TO15	Toluene	ug/m3	74		120	
Method TO15	trans-1,2-Dichloroethene	ug/m3	8		0.6	U
Method TO15	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U
Method TO15	Trichloroethene	ug/m3	21		3.8	
Method TO15	Trichlorofluoromethane	ug/m3	1.4		1.5	
Method TO15	Vinyl acetate	ug/m3	0.54	U	0.54	U
Method TO15	Vinyl bromide	ug/m3	0.67	U	0.67	U
Method TO15	Vinyl chloride	ug/m3	37		0.39	U
Method TO15	Xylene, m/p	ug/m3	7.1	J	8.4	J
Method TO15	Xylene, o	ug/m3	1.4		2.3	

Notes:
ug/m3 = microgram per meter cubed
FS = field sample
FD = field duplicate
U = not detected
J = estimated value

DUSR TABLE 2
SDG C1004023
Results Summary
Erdle Perforating

		Sample Delivery Group	C1004023		C1004023	
		Location	IA-42-B		OA-040810	
		Sample Date	4/8/2010 0:00		4/8/2010 0:00	
		Sample ID	828072IA-42-B-C		828072OA-040810-1	
		Qc Code	FS		FS	
Analysis	Param Name	Units	Result	Qualifier	Result	Qualifier
CT-TCE-VC	1,1,1-Trichloroethane	ug/m3	0.83	U	0.83	U
CT-TCE-VC	1,1,2,2-Tetrachloroethane	ug/m3	1	U	1	U
CT-TCE-VC	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	1.2	U	1.2	U
CT-TCE-VC	1,1,2-Trichloroethane	ug/m3	0.83	U	0.83	U
CT-TCE-VC	1,1-Dichloroethane	ug/m3	0.62	U	0.62	U
CT-TCE-VC	1,1-Dichloroethene	ug/m3	0.6	U	0.6	U
CT-TCE-VC	1,2,4-Trichlorobenzene	ug/m3	1.1	UJ	1.1	UJ
CT-TCE-VC	1,2,4-Trimethylbenzene	ug/m3	1.1		0.95	
CT-TCE-VC	1,2-Dibromoethane	ug/m3	1.2	U	1.2	U
CT-TCE-VC	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	1.1	U	1.1	U
CT-TCE-VC	1,2-Dichlorobenzene	ug/m3	0.92	U	0.92	U
CT-TCE-VC	1,2-Dichloroethane	ug/m3	0.62	U	0.62	U
CT-TCE-VC	1,2-Dichloropropane	ug/m3	0.7	U	0.7	U
CT-TCE-VC	1,3,5-Trimethylbenzene	ug/m3	0.75	U	0.75	U
CT-TCE-VC	1,3-Butadiene	ug/m3	0.34	U	0.34	U
CT-TCE-VC	1,3-Dichlorobenzene	ug/m3	0.92	U	0.92	U
CT-TCE-VC	1,4-Dichlorobenzene	ug/m3	0.92	U	0.92	U
CT-TCE-VC	1,4-Dioxane	ug/m3	1.1	UJ	1.1	UJ
CT-TCE-VC	2-Butanone	ug/m3	16	J	3	J
CT-TCE-VC	2-Hexanone	ug/m3	1.2	U	1.2	U
CT-TCE-VC	2-Propanol	ug/m3	0.37	U	33	
CT-TCE-VC	4-Ethyltoluene	ug/m3	0.75	U	0.75	U
CT-TCE-VC	4-Methyl-2-pentanone	ug/m3	1	J	0.67	J
CT-TCE-VC	Acetone	ug/m3	53		280	
CT-TCE-VC	Allyl chloride	ug/m3	0.48	U	0.48	U
CT-TCE-VC	Benzene	ug/m3	0.94		0.78	
CT-TCE-VC	Benzyl chloride	ug/m3	0.88	U	0.88	U
CT-TCE-VC	Bromodichloromethane	ug/m3	1	U	1	U
CT-TCE-VC	Bromoform	ug/m3	1.6	U	1.6	U
CT-TCE-VC	Bromomethane	ug/m3	0.59	U	0.59	U
CT-TCE-VC	Carbon disulfide	ug/m3	0.73		0.54	
CT-TCE-VC	Carbon tetrachloride	ug/m3	0.58		0.51	
CT-TCE-VC	Chlorobenzene	ug/m3	0.7	U	0.7	U
CT-TCE-VC	Chlorodibromomethane	ug/m3	1.3	U	1.3	U
CT-TCE-VC	Chloroethane	ug/m3	0.4	U	0.4	U
CT-TCE-VC	Chloroform	ug/m3	0.69	J	0.74	U
CT-TCE-VC	Chloromethane	ug/m3	1.1		1	
CT-TCE-VC	Cis-1,2-Dichloroethene	ug/m3	0.93		0.6	U
CT-TCE-VC	cis-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U
CT-TCE-VC	Cyclohexane	ug/m3	0.52	U	0.52	U
CT-TCE-VC	Dichlorodifluoromethane	ug/m3	2.6		2.4	
CT-TCE-VC	Ethyl acetate	ug/m3	14		2.5	
CT-TCE-VC	Ethyl benzene	ug/m3	0.97		0.79	
CT-TCE-VC	Heptane	ug/m3	1.2		1.1	
CT-TCE-VC	Hexachlorobutadiene	ug/m3	1.6	U	1.6	U
CT-TCE-VC	Hexane	ug/m3	1.3		0.54	U
CT-TCE-VC	Isooctane	ug/m3	0.57	J	0.71	U
CT-TCE-VC	Methyl Tertbutyl Ether	ug/m3	0.55	U	0.55	U
CT-TCE-VC	Methylene chloride	ug/m3	1.6		0.74	
CT-TCE-VC	Propylene	ug/m3	0.26	U	0.26	U
CT-TCE-VC	Styrene	ug/m3	0.48	J	0.56	J
CT-TCE-VC	Tetrachloroethene	ug/m3	0.97	J	1	U

DUSR TABLE 2
SDG C1004023
Results Summary
Erdle Perforating

		Sample Delivery Group	C1004023		C1004023	
		Location	IA-42-B		OA-040810	
		Sample Date	4/8/2010 0:00		4/8/2010 0:00	
		Sample ID	828072IA-42-B-C		828072OA-040810-1	
		Qc Code	FS		FS	
Analysis	**Param Name**	**Units**	Result	Qualifier	Result	Qualifier
CT-TCE-VC	Tetrahydrofuran	ug/m3	10		0.45	U
CT-TCE-VC	Toluene	ug/m3	18		25	
CT-TCE-VC	trans-1,2-Dichloroethene	ug/m3	0.6	U	0.6	U
CT-TCE-VC	trans-1,3-Dichloropropene	ug/m3	0.69	U	0.69	U
CT-TCE-VC	Trichloroethene	ug/m3	0.71		0.82	
CT-TCE-VC	Trichlorofluoromethane	ug/m3	6		1.5	
CT-TCE-VC	Vinyl acetate	ug/m3	0.54	U	0.54	U
CT-TCE-VC	Vinyl bromide	ug/m3	0.67	U	0.67	U
CT-TCE-VC	Vinyl chloride	ug/m3	0.1	U	0.1	U
CT-TCE-VC	Xylene, m/p	ug/m3	3		2	
CT-TCE-VC	Xylene, o	ug/m3	1.1		0.79	

Notes:
ug/m3 = microgram per meter cubed
FS = field sample
U = not detected
J = estimated value