

**FIELD INVESTIGATION LETTER REPORT  
SOIL-GAS CONDUIT INSTALLATION AND SAMPLING AT  
THE NORTH FRANKLIN STREET SITE**

**NORTH FRANKLIN STREET SITE  
SITE #8-49-002  
VILLAGE OF WATKINS GLEN, NEW YORK**

**Prepared For:**

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF ENVIRONMENTAL REMEDIATION  
WORK ASSIGNMENT D003825-09.5**

**FINAL**

**Prepared By:**

**URS CORPORATION  
77 GOODELL STREET  
BUFFALO, NEW YORK 14203**

October 20, 2005

Mr. David J. Chiusano, Project Manager  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
625 Broadway  
12th Floor  
Albany, New York 12233-7013

**RE: NYSDEC Standby Contract  
Active Venting System Operation and Maintenance # D003825-09.5  
Soil-Gas Conduit Installation and Sampling  
North Franklin Street Site, Site No. 8-49-002  
Summary of Soil-Gas Conduit Installation and Sampling at the North Franklin Street Site:  
Letter Report**

Dear Mr. Chiusano:

URS Corporation (URS) has completed a soil-gas investigation in the vicinity of the North Franklin Street Site (Figure 1). This work was performed in accordance with the Field Sampling Plan (URS, July 2005).

The fieldwork associated with this investigation consisted of the installation and sampling of thirteen new soil-gas conduits. URS personnel supervised the installation of the soil-gas conduits between July 12, 2005 and July 13, 2005, and conducted the soil-gas conduit sampling on July 18, 2005.

#### Soil-Gas Conduit Installation and Construction

A total of thirteen soil-gas conduits (SG-01 through SG-13) were installed at the locations shown on Figure 2. The soil-gas conduit locations were approved in the field by a representative of the New York State Department of Environmental Conservation (NYSDEC). The soil-gas conduits were installed by GeoLogic NY, Inc., using a truck-mounted Geoprobe® unit. URS personnel supervised the installation of the soil-gas conduits, which were constructed in accordance with the procedures outlined in the Field Sampling Plan (URS, July 2005). The soil gas conduit construction details are included in Attachment 1. A photographic log of the installation activities and the completed soil-gas conduit locations is included in Attachment 2.

#### Soil-Gas Sampling, Analysis and Data Usability

All samples were collected using six-liter SUMMA canisters, in accordance with the procedures outlined in the Field Sampling Plan (URS, July 2005). URS collected thirteen one-hour soil gas samples plus two field duplicate samples. A helium tracer gas was used during the collection of the soil-gas samples and no elevated concentrations of helium (>20%) were detected prior to or following the sample collection at any soil-gas conduit location. One outdoor air was collected from an upwind location, located near the SG-1 location. The outdoor air sample was collected from approximately 4 feet above the ground surface

by placing the Summa canister on an elevated platform. Completed sampling logs are provided in Attachment 3. A photographic log of the sampling activities is included in Attachment 2.

After the sampling was completed, the samples were shipped under chain-of-custody (COC) control for VOC analysis via EPA Method TO-15 to Severn Trent Laboratories (STL) located in Knoxville, Tennessee. STL is a New York State Department of Health (NYSDOH) approved laboratory. A copy of the COCs is included in Attachment 3.

The data packages were prepared by the laboratory in accordance with the NYSDEC's Category B Deliverables requirements. These deliverables were reviewed by a URS chemist for compliance with the referenced method, following the guidelines in United States Environmental Protection Agency (USEPA) Region II's *Validating Canisters of Volatile Organics in Ambient Air, Rev. 0*, April 1994. A Data Usability Summary Report (DUSR) was prepared by a URS chemist following the guidelines provided in NYSDEC Division of Environmental Remediation Guidance for the Development of Data Usability Summary Reports, dated June 1999. The DUSR may be found in Attachment 4.

#### Analytical Summary

The validated analytical results from the soil-gas samples are summarized in Table 1. Concentrations of detected compounds at each sample location are shown on Figure 3. The following is a summary of the analytical results from the soil-gas conduit sampling.

- Volatile organic compounds (VOCs) were detected at every soil-gas conduit location, with the highest concentration detected in the sample collected from SG-03 (benzene at 22,700 ug/m<sup>3</sup> and m,p-xylene at 6,430ug/m<sup>3</sup>). However, chlorinated VOCs were only detected in the samples collected from soil-gas conduits SG-01, SG-02, SG-04, SG-06, SG-07 and SG09 through SG-12, with the highest concentration detected in the sample collected from SG-02 (chloroform at 214.83 ug/m<sup>3</sup>).
- Tetrachloroethene was detected in samples collected from conduits SG-06, SG-07, SG-09, SG-10 and SG-12, at concentrations ranging from 3.26 ug/m<sup>3</sup> to 35.3 ug/m<sup>3</sup>.
- Trichloroethene was detected in the sample collected from conduit SG-09, at a concentration of 12.4 ug/m<sup>3</sup>.

A copy of the laboratory report is included in Attachment 4.

It should also be noted that the concentrations listed in Table 1 and Figure 3 were obtained by converting parts per billion, by volume (ppbv) to ug/m<sup>3</sup>. The ug/m<sup>3</sup> results are slightly different from the ppbv values listed on the laboratory forms in Attachment 4.

The following tables, figures and attachments are included as part of this field investigation letter report:

Tables

Table 1	Soil-Gas Conduit Analytical Results
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Figures

Figure 1	Project Site
Figure 2	Soil-Gas Conduit Locations
Figure 3	Soil-Gas Conduit Sampling Results

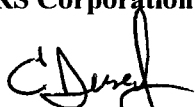
Attachments

Attachment 1	Soil-Gas Conduit Construction Details
Attachment 2	Photographic Log
Attachment 3	Sampling Logs and Chain-of-Custody
Attachment 4	Data Usability Summary Report

Should you have any questions or comments, please do not hesitate to contact me at 716-856-5636.

Sincerely,

**URS Corporation**



Charles E. Dusek, Jr.  
Sr. Project Manager

cc: File: 05.35388 (C-1) (11173258)

## **TABLES**

**TABLE 1**  
**SOIL GAS-CONDUIT ANALYTICAL RESULTS**  
**NORTH FRANKLIN ST. SITE**

Location ID		SG-01	SG-02	SG-03	SG-04	SG-05
Sample ID		SG-1	SG-2	SG-3	SG-4	SG-5
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		07/18/05	07/18/05	07/18/05	07/18/05	07/18/05
Parameter	Units					
<b>Volatile Organic Compounds</b>						
Chloromethane	UG/M3	0.74 J	16.1 UJ	9,090 U	19.0 U	16.5 U
Bromomethane	UG/M3	1.28 U	12.0 U	6,600 U	14.4 U	12.4 U
Vinyl Chloride	UG/M3	0.84 U	7.92 UJ	4,350 U	9.46 U	8.18 U
Chloroethane	UG/M3	0.87 U	8.18 U	4,490 U	9.76 U	8.44 U
Methylene Chloride	UG/M3	1.81 J	27.1 UJ	15,300 U	32.0 U	27.8 U
Acetone	UG/M3	19.5 UJ	185 UJ	105,000 U	85.5 J	190 U
Carbon Disulfide	UG/M3	1.03 U	9.97 J	5,300 U	8.41 J	15.3
1,1-Dichloroethene	UG/M3	1.31 U	12.3 UJ	6,740 U	14.7 U	12.7 U
1,1-Dichloroethane	UG/M3	1.34 U	12.6 U	6,880 U	15.0 U	13.0 U
2-Butanone	UG/M3	3.54	12.0 U	12,300 U	27.1 U	23.6 U
Chloroform	UG/M3	1.61 U	215	8,300 U	68.4	15.6 U
1,2-Dichloroethane	UG/M3	1.34 U	12.6 U	6,890 U	15.0 U	13.0 U
1,1,1-Trichloroethane	UG/M3	1.80 U	16.9 U	9,280 U	20.2 U	17.5 U
Carbon Tetrachloride	UG/M3	2.08 U	19.5 U	10,700 U	23.3 U	20.1 U
Bromodichloromethane	UG/M3	2.21 U	20.8 U	11,400 U	24.8 U	21.4 U
1,2-Dichloropropane	UG/M3	1.53 U	14.3 U	7,860 U	17.1 U	14.8 U
cis-1,3-Dichloropropene	UG/M3	1.50 U	14.1 U	7,720 U	16.8 U	14.5 U
Trichloroethene	UG/M3	1.77 U	16.7 U	9,140 U	19.9 U	17.2 U
Benzene	UG/M3	0.51 J	9.90 U	22,700	11.8 U	5.11 J
Dibromochloromethane	UG/M3	2.81 U	26.4 U	14,500 U	31.5 U	27.3 U
trans-1,3-Dichloropropene	UG/M3	1.50 UJ	14.1 U	7,720 UJ	16.8 U	14.5 U
1,1,2-Trichloroethane	UG/M3	1.80 U	16.9 U	9,280 U	20.2 U	17.5 U
Bromoform	UG/M3	3.41 UJ	32.0 U	17,600 UJ	38.3 U	33.1 U

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J - Estimated value

Detection Limits shown are PQL

**TABLE 1**  
**SOIL GAS-CONDUIT ANALYTICAL RESULTS**  
**NORTH FRANKLIN ST. SITE**

Location ID		SG-01	SG-02	SG-03	SG-04	SG-05
Sample ID		SG-1	SG-2	SG-3	SG-4	SG-5
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		07/18/05	07/18/05	07/18/05	07/18/05	07/18/05
Parameter	Units					
Volatile Organic Compounds						
4-Methyl-2-Pentanone	UG/M3	3.36 U	32.0 U	18,000 U	37.7 U	32.8 U
2-Hexanone	UG/M3	3.36 U	32.0 U	18,000 U	37.7 U	32.8 U
Tetrachloroethene	UG/M3	2.24 U	21.0 U	11,600 U	25.1 U	21.7 U
1,1,2,2-Tetrachloroethane	UG/M3	2.27 U	21.3 U	11,700 U	25.4 U	22.0 U
Toluene	UG/M3	3.54	23.4	6,410 U	20.7	21.1
Chlorobenzene	UG/M3	1.52 U	14.3 U	7,830 U	17.0 U	14.7 U
Ethylbenzene	UG/M3	1.43 U	6.51 J	7,380 U	7.82 J	5.64 J
Styrene	UG/M3	1.41 UJ	13.2 U	7,240 UJ	8.52 J	13.6 U
m,p-Xylene	UG/M3	1.39 J	40.0	6,430 J	67.7	40.0
o-Xylene	UG/M3	1.43 U	6.51 J	7,380 U	13.5 J	6.95 J
cis-1,2-Dichloroethene	UG/M3	1.31 U	12.3 U	6,740 U	14.7 U	12.7 U
trans-1,2-Dichloroethene	UG/M3	1.31 U	12.3 U	6,740 U	14.7 U	12.7 U

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**TABLE 1**  
**SOIL GAS-CONDUIT ANALYTICAL RESULTS**  
**NORTH FRANKLIN ST. SITE**

Location ID		SG-06	SG-06	SG-07	SG-08	SG-09
Sample ID		FD-2	SG-6	SG-7	SG-8	SG-9
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		07/18/05	07/18/05	07/18/05	07/18/05	07/18/05
Parameter	Units	Field Duplicate (1-1)				
Volatile Organic Compounds						
Chloromethane	UG/M3	18.8 U	1.84 U	1.98 U	18.6 U	17.6 U
Bromomethane	UG/M3	14.0 U	1.40 U	1.51 U	14.0 U	13.2 U
Vinyl Chloride	UG/M3	9.20 U	0.92 U	1.00 U	9.20 U	8.69 U
Chloroethane	UG/M3	9.50 U	0.95 U	1.03 U	9.50 U	8.97 U
Methylene Chloride	UG/M3	31.6 U	3.09	3.33 U	31.3 U	29.5 U
Acetone	UG/M3	216 U	20.2 J	22.8 U	214 U	202 U
Carbon Disulfide	UG/M3	11.2 U	1.34	1.21 U	68.5	4.67 J
1,1-Dichloroethene	UG/M3	14.3 U	1.43 U	1.55 U	14.3 U	13.5 U
1,1-Dichloroethane	UG/M3	14.6 U	1.46 U	1.58 U	14.6 U	13.8 U
2-Butanone	UG/M3	26.8 U	2.57 J	2.83 U	26.5 U	25.1 U
Chloroform	UG/M3	17.6 U	1.76 U	1.90 U	17.6 U	39.1
1,2-Dichloroethane	UG/M3	14.6 U	1.46 U	1.58 U	14.6 U	13.8 U
1,1,1-Trichloroethane	UG/M3	19.6 U	1.96 U	2.13 U	19.6 U	18.6 U
Carbon Tetrachloride	UG/M3	22.7 U	2.27 U	2.45 U	22.7 U	21.4 U
Bromodichloromethane	UG/M3	24.1 U	2.41 U	2.61 U	24.1 U	22.8 U
1,2-Dichloropropane	UG/M3	16.6 U	1.66 U	1.80 U	16.6 U	15.7 U
cis-1,3-Dichloropropene	UG/M3	16.3 U	1.63 U	1.77 U	16.3 U	15.4 U
Trichloroethene	UG/M3	19.4 U	1.93 U	2.10 U	19.3 U	12.4 J
Benzene	UG/M3	11.5 U	0.89 J	1.25 U	24.0	10.9 U
Dibromochloromethane	UG/M3	30.7 U	3.07 U	3.32 U	30.7 U	29.0 U
trans-1,3-Dichloropropene	UG/M3	16.3 U	1.63 U	1.77 U	16.3 U	15.4 U
1,1,2-Trichloroethane	UG/M3	19.6 U	1.96 U	2.13 U	19.6 U	18.6 U
Bromoform	UG/M3	37.2 U	3.72 U	4.03 U	37.2 U	35.1 U

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**TABLE 1**  
**SOIL GAS-CONDUIT ANALYTICAL RESULTS**  
**NORTH FRANKLIN ST. SITE**

Location ID		SG-06	SG-06	SG-07	SG-08	SG-09
Sample ID		FD-2	SG-6	SG-7	SG-8	SG-9
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		07/18/05	07/18/05	07/18/05	07/18/05	07/18/05
Parameter	Units	Field Duplicate (1-1)				
Volatile Organic Compounds						
4-Methyl-2-Pentanone	UG/M3	37.3 U	2.29 J	3.93 U	36.9 U	34.8 U
2-Hexanone	UG/M3	37.3 U	3.65 U	3.93 U	36.9 U	34.8 U
Tetrachloroethene	UG/M3	24.4 U	3.26	3.80 J	24.4 U	35.3
1,1,2,2-Tetrachloroethane	UG/M3	24.7 U	2.47 U	2.68 U	24.7 U	23.3 U
Toluene	UG/M3	6.41 J	6.03	6.03 J	136	12.8
Chlorobenzene	UG/M3	16.6 U	1.66 U	1.80 U	16.6 U	15.7 U
Ethylbenzene	UG/M3	15.6 U	2.00	1.65 J	14.3 J	14.8 U
Styrene	UG/M3	15.3 U	1.15 J	1.66 U	15.3 U	14.5 U
m,p-Xylene	UG/M3	31.3 U	13.0	10.4 J	80.8	15.6 J
o-Xylene	UG/M3	15.6 U	2.78	1.95 J	13.9 J	14.8 U
cis-1,2-Dichloroethene	UG/M3	14.3 U	1.43 U	1.55 U	14.3 U	13.5 U
trans-1,2-Dichloroethene	UG/M3	14.3 U	1.43 U	1.55 U	14.3 U	13.5 U

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**TABLE 1**  
**SOIL GAS-CONDUIT ANALYTICAL RESULTS**  
**NORTH FRANKLIN ST. SITE**

Location ID		SG-10	SG-10	SG-11	SG-12	SG-13
Sample ID		FD-1	SG-10	SG-11	SG-12	SG-13
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		07/18/05	07/18/05	07/18/05	07/18/05	07/18/05
Parameter	Units	Field Duplicate (1-1)				
Volatile Organic Compounds						
Chloromethane	UG/M3	18.6 U	19.8 U	18.2 U	0.58 J	18.2 UJ
Bromomethane	UG/M3	14.0 U	14.8 U	13.6 U	1.40 U	13.6 U
Vinyl Chloride	UG/M3	9.20 U	9.71 U	8.95 U	0.92 U	8.95 UJ
Chloroethane	UG/M3	9.50 U	10.0 U	9.24 U	0.95 U	9.24 U
Methylene Chloride	UG/M3	31.3 U	17.0 J	25.4 J	3.13 U	30.6 UJ
Acetone	UG/M3	214 U	228 U	209 U	28.5 U	209 UJ
Carbon Disulfide	UG/M3	15.6	11.2 J	9.65 J	15.0	7.47 J
1,1-Dichloroethene	UG/M3	14.3 U	15.1 U	13.9 U	1.43 U	13.9 UJ
1,1-Dichloroethane	UG/M3	14.6 U	15.4 U	14.2 U	1.46 U	14.2 U
2-Butanone	UG/M3	26.5 U	28.3 U	26.0 U	2.86	26.0 U
Chloroform	UG/M3	14.2 J	8.79 J	17.1 U	7.81	17.1 U
1,2-Dichloroethane	UG/M3	14.6 U	15.4 U	14.2 U	1.46 U	14.2 U
1,1,1-Trichloroethane	UG/M3	19.6 U	20.7 U	19.1 U	0.60 J	19.1 U
Carbon Tetrachloride	UG/M3	22.7 U	23.9 U	22.0 U	2.27 U	22.0 U
Bromodichloromethane	UG/M3	24.1 U	25.5 U	23.4 U	2.41 U	23.5 U
1,2-Dichloropropane	UG/M3	16.7 U	17.6 U	16.2 U	1.66 U	16.2 U
cis-1,3-Dichloropropene	UG/M3	16.3 U	17.2 U	15.9 U	1.63 U	15.9 U
Trichloroethene	UG/M3	19.4 U	20.4 U	18.8 U	1.93 U	18.8 U
Benzene	UG/M3	11.5 U	12.1 U	4.79 J	1.89	11.2 U
Dibromochloromethane	UG/M3	30.7 U	32.4 U	29.8 U	3.07 U	29.8 U
trans-1,3-Dichloropropene	UG/M3	16.3 U	17.3 U	15.9 U	1.63 UJ	15.9 U
1,1,2-Trichloroethane	UG/M3	19.6 U	20.7 U	19.1 U	1.96 U	19.1 U
Bromoform	UG/M3	37.2 U	39.3 U	36.2 U	3.72 UJ	36.2 U

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J - Estimated value

Detection Limits shown are PQL

**TABLE 1**  
**SOIL GAS-CONDUIT ANALYTICAL RESULTS**  
**NORTH FRANKLIN ST. SITE**

Location ID		SG-10	SG-10	SG-11	SG-12	SG-13
Sample ID		FD-1	SG-10	SG-11	SG-12	SG-13
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		07/18/05	07/18/05	07/18/05	07/18/05	07/18/05
Parameter	Units	Field Duplicate (1-1)				
Volatile Organic Compounds						
4-Methyl-2-Pentanone	UG/M3	36.9 U	39.3 U	36.1 U	1.97 J	36.1 U
2-Hexanone	UG/M3	36.9 U	39.3 U	36.1 U	3.69 U	36.1 U
Tetrachloroethene	UG/M3	27.8	25.8 U	23.7 U	8.14	23.7 U
1,1,2,2-Tetrachloroethane	UG/M3	24.7 U	26.1 U	24.0 U	2.47 U	24.0 U
Toluene	UG/M3	10.9 J	7.54 J	18.5	15.8	15.1
Chlorobenzene	UG/M3	16.6 U	17.5 U	16.1 U	1.66 U	16.1 U
Ethylbenzene	UG/M3	15.6 U	16.5 U	7.38 J	1.74	15.2 U
Styrene	UG/M3	15.3 U	16.2 U	14.9 U	1.53 UJ	14.9 U
m,p-Xylene	UG/M3	37.3	18.2 J	51.2	6.77	15.6 J
o-Xylene	UG/M3	6.95 J	16.5 U	8.25 J	1.26 J	15.2 U
cis-1,2-Dichloroethene	UG/M3	14.3 U	15.1 U	13.9 U	1.43 U	13.9 U
trans-1,2-Dichloroethene	UG/M3	14.3 U	15.1 U	13.9 U	1.43 U	13.9 U

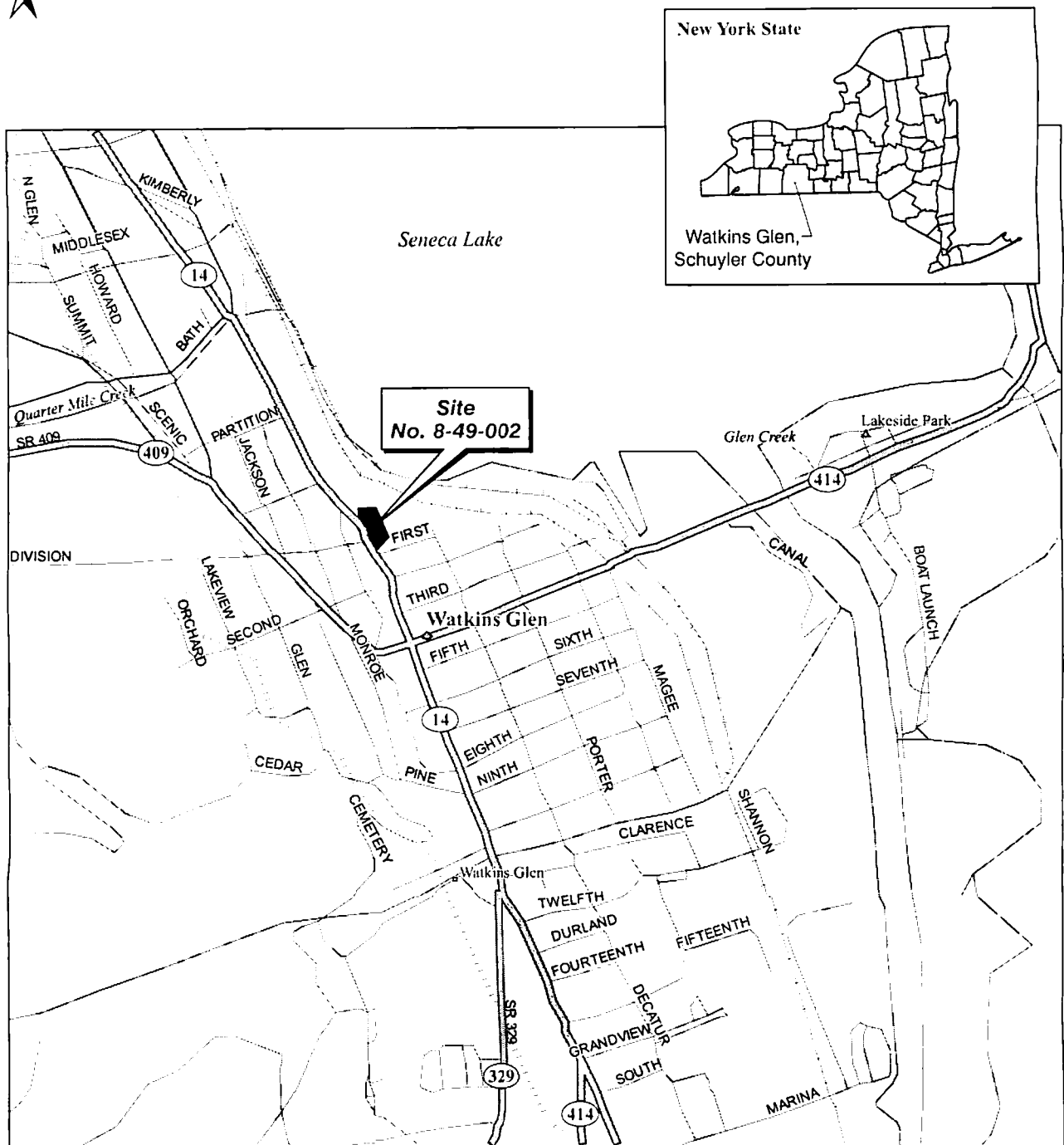
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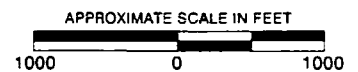
J - Estimated value

Detection Limits shown are PQL

## FIGURES



© 1993 DeLorme Mapping



**URS**

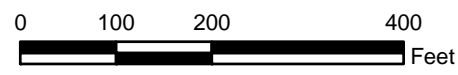
NORTH FRANKLIN STREET  
SITE LOCATION MAP

FIGURE 1

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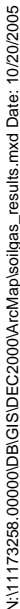


Legend	
H	Soil-Gas Conduit Location



NORTH FRANKLIN STREET  
SOIL-GAS CONDUIT LOCATIONS

FIGURE 2



## **ATTACHMENT 1**

### **SOIL-GAS CONDUIT CONSTRUCTION DETAILS**

<b>DRILLING SUMMARY</b> Geologist: Scott McCabe Drilling Company: Geologic Driller: Joe Mensel Rig Make/Model: Geoprobe 5400 Date: July 13, 2005		<p>             Flush Mount              Protective Casing              Ground Level              Top of Seal              D 0.5 (ft bgs)              E              P              T              H              Top of Sand              1 (ft. bgs)              Top of Implant Screen              1.5 (ft bgs)              2 (ft bgs)              Total Depth              DIRECT PUSH BOREHOLE              1.75 inch diameter              2 feet length              IMPLANT -              0.25 inch internal diameter              6 inches length              NOT TO SCALE           </p>							
<b>GEOLOGIC LOG</b> <table border="1"> <thead> <tr> <th>Depth(ft.)</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0-0.2</td> <td>Asphalt</td> </tr> <tr> <td>0.2-2.0</td> <td>Fill: Fine to coarse Sand, some cinder and slag, trace gravel and brick</td> </tr> </tbody> </table>				Depth(ft.)	Description	0-0.2	Asphalt	0.2-2.0	Fill: Fine to coarse Sand, some cinder and slag, trace gravel and brick
Depth(ft.)	Description								
0-0.2	Asphalt								
0.2-2.0	Fill: Fine to coarse Sand, some cinder and slag, trace gravel and brick								
<b>WELL DESIGN</b>									
<b>CASING MATERIAL</b> Surface: Steel flush-mount Well: 3/8 inch OD polyethylene tubing		<b>SCREEN MATERIAL</b> Type: 6 inch stainless steel implant Pore Diameter: 0.007 inch		<b>FILTER MATERIAL</b> Type: #1 Sand      Setting: 1.0-2.0'					
				<b>SEAL MATERIAL</b> Type: Bentonite      Setting: 0.5-1.0' Granuals					
<b>COMMENTS:</b> Implant conncted to anchor point at bottom of boring. 3/8 inch outside diameter (OD) poly tubing connected from implant to surface for soil gas sampling.			<b>LEGEND</b> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div>         Cement/Bentonite Grout       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: black; border: 1px solid black; margin-right: 5px;"></div>         Bentonite Seal       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div>         Silica Sandpack       </div>						
Client: NYSDEC		Location: North Franklin Street		Project No.: 11174211					
<b>U R S Corporation</b>		SOIL GAS CONDUIT CONSTRUCTION DETAILS		Well Number: SG-1					

<b>DRILLING SUMMARY</b> Geologist: Scott McCabe Drilling Company: Geologic Driller: Joe Mensel Rig Make/Model: Geoprobe 5400 Date: July 13, 2005		<p>             Flush Mount              Protective Casing              Ground Level              Top of Seal              D 0.5 (ft bgs)              E              P              T              H              Top of Sand              2 (ft. bgs)              Top of Implant Screen              2.5 (ft bgs)              3 (ft bgs)              Total Depth              DIRECT PUSH BOREHOLE              1.75 inch diameter              3 feet length              IMPLANT -              0.25 inch internal diameter              6 inches length              NOT TO SCALE           </p>							
<b>GEOLOGIC LOG</b> <table border="1"> <thead> <tr> <th>Depth(ft.)</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0-1.0</td> <td>Fill: Silty sand, trace gravel</td> </tr> <tr> <td>1.0-3.0</td> <td>Fill: Clayey silt , some sand gravel, ash and cinder</td> </tr> </tbody> </table>				Depth(ft.)	Description	0-1.0	Fill: Silty sand, trace gravel	1.0-3.0	Fill: Clayey silt , some sand gravel, ash and cinder
Depth(ft.)	Description								
0-1.0	Fill: Silty sand, trace gravel								
1.0-3.0	Fill: Clayey silt , some sand gravel, ash and cinder								
<b>WELL DESIGN</b>									
<b>CASING MATERIAL</b> Surface: Steel flush-mount Well: 3/8 inch OD polyethylene tubing		<b>SCREEN MATERIAL</b> Type: 6 inch stainless steel implant Pore Diameter: 0.007 inch		<b>FILTER MATERIAL</b> Type: #1 Sand      Setting: 2.0-3.0'					
				<b>SEAL MATERIAL</b> Type: Bentonite      Setting: 0.5-2.0' Granuals					
<b>COMMENTS:</b> Implant conncted to anchor point at bottom of boring. 3/8 inch outside diameter (OD) poly tubing connected from implant to surface for soil gas sampling.			<b>LEGEND</b> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div>         Cement/Bentonite Grout       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: black; border: 1px solid black; margin-right: 5px;"></div>         Bentonite Seal       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div>         Silica Sandpack       </div>						
Client: NYSDEC		Location: North Franklin Street		Project No.: 11174211					
<b>U R S Corporation</b>		SOIL GAS CONDUIT CONSTRUCTION DETAILS		Well Number: SG-2					

<b>DRILLING SUMMARY</b> Geologist: Scott McCabe Drilling Company: Geologic Driller: Joe Mensel Rig Make/Model: Geoprobe 5400 Date: July 13, 2005		<p>             Flush Mount              Protective Casing              Ground Level              Top of Seal              D 0.5 (ft bgs)              E              P              T              H              Top of Sand              2.5 (ft. bgs)              Top of Implant Screen              3.0 (ft bgs)              3.5 (ft bgs)              Total Depth              DIRECT PUSH BOREHOLE              1.75 inch diameter              3.5 feet length              IMPLANT -              0.25 inch internal diameter              6 inches length              NOT TO SCALE           </p>									
<b>GEOLOGIC LOG</b> <table border="1"> <thead> <tr> <th>Depth(ft.)</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0-0.2</td> <td>Asphalt</td> </tr> <tr> <td>0.2-1.0</td> <td>Fill: Silty sand, trace gravel</td> </tr> <tr> <td>1.0-3.5</td> <td>Fill: Clayey silt, trace gravel and brick, sight petroleum odor</td> </tr> </tbody> </table>				Depth(ft.)	Description	0-0.2	Asphalt	0.2-1.0	Fill: Silty sand, trace gravel	1.0-3.5	Fill: Clayey silt, trace gravel and brick, sight petroleum odor
Depth(ft.)	Description										
0-0.2	Asphalt										
0.2-1.0	Fill: Silty sand, trace gravel										
1.0-3.5	Fill: Clayey silt, trace gravel and brick, sight petroleum odor										
<b>WELL DESIGN</b>											
<b>CASING MATERIAL</b> Surface: Steel flush-mount Well: 3/8 inch OD polyethylene tubing		<b>SCREEN MATERIAL</b> Type: 6 inch stainless steel implant Pore Diameter: 0.007 inch		<b>FILTER MATERIAL</b> Type: #1 Sand      Setting: 2.5-3.5' <b>SEAL MATERIAL</b> Type: Bentonite      Setting: 0.5-2.5' Granuals							
<b>COMMENTS:</b> Implant conncted to anchor point at bottom of boring. 3/8 inch outside diameter (OD) poly tubing connected from implant to surface for soil gas sampling.		<b>LEGEND</b> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div>         Cement/Bentonite Grout       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: black; border: 1px solid black; margin-right: 5px;"></div>         Bentonite Seal       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div>         Silica Sandpack       </div>									
Client: NYSDEC		Location: North Franklin Street		Project No.: 11174211							
<b>U R S Corporation</b>		<b>SOIL GAS CONDUIT CONSTRUCTION DETAILS</b>		Well Number: SG-3							

<b>DRILLING SUMMARY</b> Geologist: Scott McCabe Drilling Company: Geologic Driller: Joe Mensel Rig Make/Model: Geoprobe 5400 Date: July 13, 2005		<p>             Flush Mount              Protective Casing              Ground Level              Top of Seal              D 0.5 (ft bgs)              E              P              T              H              Top of Sand              3 (ft. bgs)              Top of Implant Screen              3.5 (ft bgs)              4 (ft bgs)              Total Depth              DIRECT PUSH BOREHOLE              1.75 inch diameter              4 feet length              IMPLANT -              0.25 inch internal diameter              6 inches length              NOT TO SCALE           </p>									
<b>GEOLOGIC LOG</b> <table border="1"> <thead> <tr> <th>Depth(ft.)</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0-0.2</td> <td>Asphalt</td> </tr> <tr> <td>0.2-3.5</td> <td>Fill: Silty sand, trace gravel</td> </tr> <tr> <td>3.5-4.0</td> <td>Fill: Cinder and slag and brick, slight petroleum odor</td> </tr> </tbody> </table>				Depth(ft.)	Description	0-0.2	Asphalt	0.2-3.5	Fill: Silty sand, trace gravel	3.5-4.0	Fill: Cinder and slag and brick, slight petroleum odor
Depth(ft.)	Description										
0-0.2	Asphalt										
0.2-3.5	Fill: Silty sand, trace gravel										
3.5-4.0	Fill: Cinder and slag and brick, slight petroleum odor										
<b>WELL DESIGN</b>											
<b>CASING MATERIAL</b> Surface: Steel flush-mount Well: 3/8 inch OD polyethylene tubing		<b>SCREEN MATERIAL</b> Type: 6 inch stainless steel implant Pore Diameter: 0.007 inch		<b>FILTER MATERIAL</b> Type: #1 Sand      Setting: 3.0-4.0'							
				<b>SEAL MATERIAL</b> Type: Bentonite      Setting: 0.5-3.0' Granuals							
<b>COMMENTS:</b> Implant conncted to anchor point at bottom of boring. 3/8 inch outside diameter (OD) poly tubing connected from implant to surface for soil gas sampling.			<b>LEGEND</b> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div>         Cement/Bentonite Grout       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: black; border: 1px solid black; margin-right: 5px;"></div>         Bentonite Seal       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div>         Silica Sandpack       </div>								
Client: NYSDEC		Location: North Franklin Street		Project No.: 11174211							
<b>U R S Corporation</b>		<b>SOIL GAS CONDUIT CONSTRUCTION DETAILS</b>		Well Number: SG-4							

<b>DRILLING SUMMARY</b> Geologist: Scott McCabe Drilling Company: Geologic Driller: Joe Mensel Rig Make/Model: Geoprobe 5400 Date: July 12, 2005		<p>             Flush Mount              Protective Casing              Ground Level  <b>Top of Seal</b>              D 0.5 (ft bgs)              E              P              T              H  <b>Top of Implant Screen</b>              2.5 (ft bgs)              3 (ft bgs)  <b>Total Depth</b> </p> <p> <b>DIRECT PUSH BOREHOLE</b>              1.75 inch diameter              3 feet length  <b>Top of Sand</b>              2 (ft. bgs)  <b>IMPLANT -</b>              0.25 inch internal diameter              6 inches length           </p> <p><b>NOT TO SCALE</b></p>					
<b>GEOLOGIC LOG</b> <table border="1"> <thead> <tr> <th>Depth(ft.)</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0-3.0</td> <td>Fill: Silty fine sand trace gravel and brick</td> </tr> </tbody> </table>				Depth(ft.)	Description	0-3.0	Fill: Silty fine sand trace gravel and brick
Depth(ft.)	Description						
0-3.0	Fill: Silty fine sand trace gravel and brick						
<b>WELL DESIGN</b>							
<b>CASING MATERIAL</b> Surface: Steel flush-mount Well: 3/8 inch OD polyethylene tubing		<b>SCREEN MATERIAL</b> Type: 6 inch stainless steel implant Pore Diameter: 0.007 inch		<b>FILTER MATERIAL</b> Type: #1 Sand      Setting: 2.0-3.0'			
				<b>SEAL MATERIAL</b> Type: Bentonite Granuals      Setting: 0.5-2.0'			
<b>COMMENTS:</b> Implant conncted to anchor point at bottom of boring. 3/8 inch outside diameter (OD) poly tubing connected from implant to surface for soil gas sampling.			<b>LEGEND</b> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div>         Cement/Bentonite Grout       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: black; border: 1px solid black; margin-right: 5px;"></div>         Bentonite Seal       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div>         Silica Sandpack       </div>				
Client: NYSDEC		Location: North Franklin Street		Project No.: 11174211			
<b>U R S Corporation</b>		<b>SOIL GAS CONDUIT CONSTRUCTION DETAILS</b>		Well Number: SG-5			

<b>DRILLING SUMMARY</b> Geologist: Scott McCabe Drilling Company: Geologic Driller: Joe Mensel Rig Make/Model: Geoprobe 5400 Date: July 12, 2005		<p>             Flush Mount              Protective Casing              Ground Level              Top of Seal              D 0.5 (ft bgs)              E              P              T              H              Top of Sand              2 (ft. bgs)              Top of Implant Screen              2.5 (ft bgs)              3 (ft bgs)              Total Depth              DIRECT PUSH BOREHOLE              1.75 inch diameter              3 feet length              IMPLANT -              0.25 inch internal diameter              6 inches length              NOT TO SCALE           </p>					
<b>GEOLOGIC LOG</b> <table border="1"> <thead> <tr> <th>Depth(ft.)</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0-3.0</td> <td>Fill: Silty fine sand trace gravel, slight petroleum odor</td> </tr> </tbody> </table>				Depth(ft.)	Description	0-3.0	Fill: Silty fine sand trace gravel, slight petroleum odor
Depth(ft.)	Description						
0-3.0	Fill: Silty fine sand trace gravel, slight petroleum odor						
<b>WELL DESIGN</b>							
<b>CASING MATERIAL</b> Surface: Steel flush-mount Well: 3/8 inch OD polyethylene tubing		<b>SCREEN MATERIAL</b> Type: 6 inch stainless steel implant Pore Diameter: 0.007 inch		<b>FILTER MATERIAL</b> Type: #1 Sand      Setting: 2.0-3.0' <b>SEAL MATERIAL</b> Type: Bentonite      Setting: 0.5-2.0' Granuals			
<b>COMMENTS:</b> Implant conncted to anchor point at bottom of boring. 3/8 inch outside diameter (OD) poly tubing connected from implant to surface for soil gas sampling.		<b>LEGEND</b> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div>         Cement/Bentonite Grout       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: black; border: 1px solid black; margin-right: 5px;"></div>         Bentonite Seal       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div>         Silica Sandpack       </div>					
Client: NYSDEC		Location: North Franklin Street		Project No.: 11174211			
<b>U R S Corporation</b>		<b>SOIL GAS CONDUIT CONSTRUCTION DETAILS</b>		Well Number: SG-6			

<b>DRILLING SUMMARY</b> Geologist: Scott McCabe Drilling Company: Geologic Driller: Joe Mensel Rig Make/Model: Geoprobe 5400 Date: July 12, 2005		<p>             Flush Mount              Protective Casing              Ground Level              Top of Seal              D 0.5 (ft bgs)              E              P              T              H              Top of Sand              2 (ft. bgs)              Top of Implant Screen              2.5 (ft bgs)              3 (ft bgs)              Total Depth              DIRECT PUSH BOREHOLE              1.75 inch diameter              3 feet length              IMPLANT -              0.25 inch internal diameter              6 inches length              NOT TO SCALE           </p>							
<b>GEOLOGIC LOG</b> <table border="1"> <thead> <tr> <th>Depth(ft.)</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0-0.2</td> <td>Asphalt</td> </tr> <tr> <td>0.2-3.0</td> <td>Fill: Clayey silt trace gravel sand and brick</td> </tr> </tbody> </table>				Depth(ft.)	Description	0-0.2	Asphalt	0.2-3.0	Fill: Clayey silt trace gravel sand and brick
Depth(ft.)	Description								
0-0.2	Asphalt								
0.2-3.0	Fill: Clayey silt trace gravel sand and brick								
<b>WELL DESIGN</b>									
<b>CASING MATERIAL</b> Surface: Steel flush-mount Well: 3/8 inch OD polyethylene tubing		<b>SCREEN MATERIAL</b> Type: 6 inch stainless steel implant Pore Diameter: 0.007 inch		<b>FILTER MATERIAL</b> Type: #1 Sand      Setting: 2.0-3.0'					
				<b>SEAL MATERIAL</b> Type: Bentonite      Setting: 0.5-2.0' Granuals					
<b>COMMENTS:</b> Implant conncted to anchor point at bottom of boring. 3/8 inch outside diameter (OD) poly tubing connected from implant to surface for soil gas sampling.		<b>LEGEND</b> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div>         Cement/Bentonite Grout       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: black; border: 1px solid black; margin-right: 5px;"></div>         Bentonite Seal       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div>         Silica Sandpack       </div>							
Client: NYSDEC		Location: North Franklin Street		Project No.: 11174211					
<b>U R S Corporation</b>		<b>SOIL GAS CONDUIT CONSTRUCTION DETAILS</b>		Well Number: SG-7					

<b>DRILLING SUMMARY</b> Geologist: Scott McCabe Drilling Company: Geologic Driller: Joe Mensel Rig Make/Model: Geoprobe 5400 Date: July 12, 2005		<p>             Flush Mount              Protective Casing              Ground Level  <b>Top of Seal</b>              D 0.5 (ft bgs)              E              P              T              H  <b>Top of Sand</b>              4.5 (ft. bgs)  <b>Top of Implant Screen</b>              5.0 (ft bgs)              5.5 (ft bgs)  <b>Total Depth</b> </p> <p> <b>DIRECT PUSH BOREHOLE</b>              1.75 inch diameter              5.5 feet length  <b>IMPLANT -</b>              0.25 inch internal diameter              6 inches length           </p> <p><b>NOT TO SCALE</b></p>									
<b>GEOLOGIC LOG</b> <table border="1"> <thead> <tr> <th>Depth(ft.)</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0-0.2</td> <td>Asphalt</td> </tr> <tr> <td>0.2-1.5</td> <td>Fill: Clayey silt some gravel and cinder</td> </tr> <tr> <td>1.5-5.5</td> <td>Clayey silt</td> </tr> </tbody> </table>				Depth(ft.)	Description	0-0.2	Asphalt	0.2-1.5	Fill: Clayey silt some gravel and cinder	1.5-5.5	Clayey silt
Depth(ft.)	Description										
0-0.2	Asphalt										
0.2-1.5	Fill: Clayey silt some gravel and cinder										
1.5-5.5	Clayey silt										
<b>WELL DESIGN</b>											
<b>CASING MATERIAL</b> Surface: Steel flush-mount Well: 3/8 inch OD polyethylene tubing		<b>SCREEN MATERIAL</b> Type: 6 inch stainless steel implant Pore Diameter: 0.007 inch		<b>FILTER MATERIAL</b> Type: #1 Sand      Setting: 4.5-5.5' <b>SEAL MATERIAL</b> Type: Bentonite      Setting: 0.5-4.5' Granuals							
<b>COMMENTS:</b> Implant conncted to anchor point at bottom of boring. 3/8 inch outside diameter (OD) poly tubing connected from implant to surface for soil gas sampling.		<b>LEGEND</b> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div>         Cement/Bentonite Grout       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: black; border: 1px solid black; margin-right: 5px;"></div>         Bentonite Seal       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div>         Silica Sandpack       </div>									
Client: NYSDEC		Location: North Franklin Street		Project No.: 11174211							
<b>U R S Corporation</b>		<b>SOIL GAS CONDUIT CONSTRUCTION DETAILS</b>		Well Number: SG-8							

<b>DRILLING SUMMARY</b> Geologist: Scott McCabe Drilling Company: Geologic Driller: Joe Mensel Rig Make/Model: Geoprobe 5400 Date: July 12, 2005		<p>             Flush Mount              Protective Casing              Ground Level              Top of Seal              D 0.5 (ft bgs)              E              P              T              H              Top of Sand              3 (ft. bgs)              Top of Implant Screen              3.5 (ft bgs)              4 (ft bgs)              Total Depth              DIRECT PUSH BOREHOLE              1.75 inch diameter              4 feet length              IMPLANT -              0.25 inch internal diameter              6 inches length              NOT TO SCALE           </p>							
<b>GEOLOGIC LOG</b> <table border="1"> <thead> <tr> <th>Depth(ft.)</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0-0.33</td> <td>Concrete</td> </tr> <tr> <td>0.33-4.0</td> <td>Fill: Clayey silt trace brick, ash, gravel and cinder</td> </tr> </tbody> </table>				Depth(ft.)	Description	0-0.33	Concrete	0.33-4.0	Fill: Clayey silt trace brick, ash, gravel and cinder
Depth(ft.)	Description								
0-0.33	Concrete								
0.33-4.0	Fill: Clayey silt trace brick, ash, gravel and cinder								
<b>WELL DESIGN</b>									
<b>CASING MATERIAL</b> Surface: Steel flush-mount Well: 3/8 inch OD polyethylene tubing		<b>SCREEN MATERIAL</b> Type: 6 inch stainless steel implant Pore Diameter: 0.007 inch		<b>FILTER MATERIAL</b> Type: #1 Sand      Setting: 3.0-4.0'					
				<b>SEAL MATERIAL</b> Type: Bentonite      Setting: 0.5-3.0' Granuals					
<b>COMMENTS:</b> Implant conncted to anchor point at bottom of boring. 3/8 inch outside diameter (OD) poly tubing connected from implant to surface for soil gas sampling.		<b>LEGEND</b> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div>         Cement/Bentonite Grout       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: black; border: 1px solid black; margin-right: 5px;"></div>         Bentonite Seal       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div>         Silica Sandpack       </div>							
Client: NYSDEC		Location: North Franklin Street		Project No.: 11174211					
<b>U R S Corporation</b>		<b>SOIL GAS CONDUIT CONSTRUCTION DETAILS</b>		Well Number: SG-9					

<b>DRILLING SUMMARY</b> Geologist: Scott McCabe Drilling Company: Geologic Driller: Joe Mensel Rig Make/Model: Geoprobe 5400 Date: July 12, 2005		<p>             Flush Mount              Protective Casing              Ground Level  <b>Top of Seal</b>              D 0.5 (ft bgs)              E              P              T              H  <b>Top of Sand</b>              3.8 (ft. bgs)  <b>Top of Implant Screen</b>              4.3 (ft bgs)              4.8 (ft bgs)  <b>Total Depth</b>  <b>DIRECT PUSH BOREHOLE</b>              1.75 inch diameter              4.8 feet length  <b>IMPLANT -</b>              0.25 inch internal diameter              6 inches length  <b>NOT TO SCALE</b> </p>											
<b>GEOLOGIC LOG</b> <table border="1"> <thead> <tr> <th>Depth(ft.)</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0-0.2</td> <td>Asphalt</td> </tr> <tr> <td>0.2-1.0</td> <td>Fill: Fine sand and gravel</td> </tr> <tr> <td>1.0-3.0</td> <td>Fill: Clayey silt, trace gravel wood, cinder and slag</td> </tr> <tr> <td>3.0-4.8</td> <td>Clayey silt, trace fine sand</td> </tr> </tbody> </table>				Depth(ft.)	Description	0-0.2	Asphalt	0.2-1.0	Fill: Fine sand and gravel	1.0-3.0	Fill: Clayey silt, trace gravel wood, cinder and slag	3.0-4.8	Clayey silt, trace fine sand
Depth(ft.)	Description												
0-0.2	Asphalt												
0.2-1.0	Fill: Fine sand and gravel												
1.0-3.0	Fill: Clayey silt, trace gravel wood, cinder and slag												
3.0-4.8	Clayey silt, trace fine sand												
<b>WELL DESIGN</b>													
<b>CASING MATERIAL</b> Surface: Steel flush-mount Well: 3/8 inch OD polyethylene tubing		<b>SCREEN MATERIAL</b> Type: 6 inch stainless steel implant Pore Diameter: 0.007 inch		<b>FILTER MATERIAL</b> Type: #1 Sand Setting: 3.8-4.8' <b>SEAL MATERIAL</b> Type: Bentonite Granuals Setting: 0.5-3.8'									
<b>COMMENTS:</b> Implant conncted to anchor point at bottom of boring. 3/8 inch outside diameter (OD) poly tubing connected from implant to surface for soil gas sampling.		<b>LEGEND</b> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div>         Cement/Bentonite Grout       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: black; border: 1px solid black; margin-right: 5px;"></div>         Bentonite Seal       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div>         Silica Sandpack       </div>											
Client: NYSDEC		Location: North Franklin Street		Project No.: 11174211									
<b>U R S Corporation</b>		<b>SOIL GAS CONDUIT CONSTRUCTION DETAILS</b>		Well Number: SG-10									

<b>DRILLING SUMMARY</b> Geologist: Scott McCabe Drilling Company: Geologic Driller: Joe Mensel Rig Make/Model: Geoprobe 5400 Date: July 12, 2005		<p>             Flush Mount              Protective Casing              Ground Level  <b>Top of Seal</b>              D 0.5 (ft bgs)              E              P              T              H  <b>Top of Implant Screen</b>              4.4 (ft bgs)              4.9 (ft bgs)  <b>Total Depth</b> </p> <p> <b>DIRECT PUSH BOREHOLE</b>              1.75 inch diameter              4.9 feet length  <b>Top of Sand</b>              3.9 (ft. bgs)  <b>IMPLANT -</b>              0.25 inch internal diameter              6 inches length           </p> <p><b>NOT TO SCALE</b></p>											
<b>GEOLOGIC LOG</b> <table border="1"> <thead> <tr> <th>Depth(ft.)</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0-1.5</td> <td>Fill: Fine Sand some gravel</td> </tr> <tr> <td>1.5-3.8</td> <td>Fill: Clayey silt trace slag, cinder and glass</td> </tr> <tr> <td>3.8-4.0</td> <td>Fine Sandy silt trace clay and gravel</td> </tr> <tr> <td>4.0-4.9</td> <td>Clayey silt trace fine sand</td> </tr> </tbody> </table>				Depth(ft.)	Description	0-1.5	Fill: Fine Sand some gravel	1.5-3.8	Fill: Clayey silt trace slag, cinder and glass	3.8-4.0	Fine Sandy silt trace clay and gravel	4.0-4.9	Clayey silt trace fine sand
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4.0-4.9	Clayey silt trace fine sand												
<b>WELL DESIGN</b>													
<b>CASING MATERIAL</b> Surface: Steel flush-mount Well: 3/8 inch OD polyethylene tubing		<b>SCREEN MATERIAL</b> Type: 6 inch stainless steel implant Pore Diameter: 0.007 inch		<b>FILTER MATERIAL</b> Type: #1 Sand Setting: 3.9-4.9' <b>SEAL MATERIAL</b> Type: Bentonite Granuals Setting: 0.5-3.9'									
<b>COMMENTS:</b> Implant conncted to anchor point at bottom of boring. 3/8 inch outside diameter (OD) poly tubing connected from implant to surface for soil gas sampling.		<b>LEGEND</b> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div>         Cement/Bentonite Grout       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: black; border: 1px solid black; margin-right: 5px;"></div>         Bentonite Seal       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div>         Silica Sandpack       </div>											
Client: NYSDEC		Location: North Franklin Street		Project No.: 11174211									
<b>U R S Corporation</b>		<b>SOIL GAS CONDUIT CONSTRUCTION DETAILS</b>		Well Number: SG-11									

<b>DRILLING SUMMARY</b> Geologist: Scott McCabe Drilling Company: Geologic Driller: Joe Mensel Rig Make/Model: Geoprobe 5400 Date: July 12, 2005		<p>             Flush Mount              Protective Casing              Ground Level              Top of Seal              D 0.5 (ft bgs)              E              P              T              H              Top of Sand              3 (ft. bgs)              Top of Implant Screen              3.5 (ft bgs)              4 (ft bgs)              Total Depth              DIRECT PUSH BOREHOLE              1.75 inch diameter              4 feet length              IMPLANT -              0.25 inch internal diameter              6 inches length              NOT TO SCALE           </p>							
<b>GEOLOGIC LOG</b> <table border="1"> <thead> <tr> <th>Depth(ft.)</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0-1.5</td> <td>Fill: Sandy silt trace gravel cinder</td> </tr> <tr> <td>1.5-4.0</td> <td>Clayey silt trace sand and organics</td> </tr> </tbody> </table>				Depth(ft.)	Description	0-1.5	Fill: Sandy silt trace gravel cinder	1.5-4.0	Clayey silt trace sand and organics
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<b>WELL DESIGN</b>									
<b>CASING MATERIAL</b> Surface: Steel flush-mount Well: 3/8 inch OD polyethylene tubing		<b>SCREEN MATERIAL</b> Type: 6 inch stainless steel implant Pore Diameter: 0.007 inch		<b>FILTER MATERIAL</b> Type: #1 Sand      Setting: 3.0-4.0'					
				<b>SEAL MATERIAL</b> Type: Bentonite Granuals      Setting: 0.5-3.0'					
<b>COMMENTS:</b> Implant conncted to anchor point at bottom of boring. 3/8 inch outside diameter (OD) poly tubing connected from implant to surface for soil gas sampling.			<b>LEGEND</b> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div>         Cement/Bentonite Grout       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: black; border: 1px solid black; margin-right: 5px;"></div>         Bentonite Seal       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div>         Silica Sandpack       </div>						
Client: NYSDEC		Location: North Franklin Street		Project No.: 11174211					
<b>U R S Corporation</b>		<b>SOIL GAS CONDUIT CONSTRUCTION DETAILS</b>		Well Number: SG-12					

<b>DRILLING SUMMARY</b> Geologist: Scott McCabe Drilling Company: Geologic Driller: Joe Mensel Rig Make/Model: Geoprobe 5400 Date: July 12, 2005		<p>             Flush Mount              Protective Casing              Ground Level              Top of Seal              D 0.5 (ft bgs)              E              P              T              H              Top of Sand              4.5 (ft. bgs)              Top of Implant Screen              5.0 (ft bgs)              5.5 (ft bgs)              Total Depth              DIRECT PUSH BOREHOLE              1.75 inch diameter              5.5 feet length              IMPLANT -              0.25 inch internal diameter              6 inches length              NOT TO SCALE           </p>											
<b>GEOLOGIC LOG</b> <table border="1"> <thead> <tr> <th>Depth(ft.)</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0-1.5</td> <td>Fill: Clayey silt trace gravel slag, brick and sand</td> </tr> <tr> <td>1.5-3.8</td> <td>Fill: Silty clay, trace cinder, slag, brick and gravel</td> </tr> <tr> <td>3.8-5.0</td> <td>Clayey silt, trace gravel and sand</td> </tr> <tr> <td>5.0-5.5</td> <td>Fine to coarse sand trace fine gravel</td> </tr> </tbody> </table>				Depth(ft.)	Description	0-1.5	Fill: Clayey silt trace gravel slag, brick and sand	1.5-3.8	Fill: Silty clay, trace cinder, slag, brick and gravel	3.8-5.0	Clayey silt, trace gravel and sand	5.0-5.5	Fine to coarse sand trace fine gravel
Depth(ft.)	Description												
0-1.5	Fill: Clayey silt trace gravel slag, brick and sand												
1.5-3.8	Fill: Silty clay, trace cinder, slag, brick and gravel												
3.8-5.0	Clayey silt, trace gravel and sand												
5.0-5.5	Fine to coarse sand trace fine gravel												
<b>WELL DESIGN</b>													
<b>CASING MATERIAL</b> Surface: Steel flush-mount Well: 3/8 inch OD polyethylene tubing		<b>SCREEN MATERIAL</b> Type: 6 inch stainless steel implant Pore Diameter: 0.007 inch		<b>FILTER MATERIAL</b> Type: #1 Sand Setting: 4.5-5.5' <b>SEAL MATERIAL</b> Type: Bentonite Granuals Setting: 0.5-4.5'									
<b>COMMENTS:</b> Implant conncted to anchor point at bottom of boring. 3/8 inch outside diameter (OD) poly tubing connected from implant to surface for soil gas sampling.		<b>LEGEND</b> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div>         Cement/Bentonite Grout       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: black; border: 1px solid black; margin-right: 5px;"></div>         Bentonite Seal       </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: radial-gradient(circle, black 1px, transparent 1px); background-size: 4px 4px; border: 1px solid black; margin-right: 5px;"></div>         Silica Sandpack       </div>											
Client: NYSDEC		Location: North Franklin Street		Project No.: 11174211									
<b>U R S Corporation</b>		SOIL GAS CONDUIT CONSTRUCTION DETAILS		Well Number: SG-13									

**ATTACHMENT 2**  
**PHOTOGRAPHIC LOG**

## NORTH FRANKLIN STREET Soil Gas Conduit Installation/Sampling



Photo 1: Photograph of a soil gas implant.



Photo 2: Geoprobe operators attaching polyethylene tubing to the soil gas implant.

## NORTH FRANKLIN STREET Soil Gas Conduit Installation/Sampling



Photo 3: Photograph of installed soil gas implant prior to installation of bentonite seal and protective casing.



Photo 4: Photograph looking north at SG-1.

# **NORTH FRANKLIN STREET**

## **Soil Gas Conduit Installation/Sampling**



Photo 5: Photograph looking north at SG-2.

# NORTH FRANKLIN STREET Soil Gas Conduit Installation/Sampling



Photo 6: Photograph looking north at SG-3.



Photo 7: Photograph looking north at SG-4.

# **NORTH FRANKLIN STREET**

## **Soil Gas Conduit Installation/Sampling**



Photo 8: Photograph looking west at SG-4.

# NORTH FRANKLIN STREET Soil Gas Conduit Installation/Sampling



Photo 9: Photograph looking north at SG-6 to SG-5.

# **NORTH FRANKLIN STREET Soil Gas Conduit Installation/Sampling**



Photo 10: Photograph looking west at SG-6.

# NORTH FRANKLIN STREET

## Soil Gas Conduit Installation/Sampling



Photo 11: Photograph looking west at SG-7.

## NORTH FRANKLIN STREET Soil Gas Conduit Installation/Sampling



Photo 12: Photograph looking south at SG-8.



Photo 13: Photograph looking north at SG-9.

# **NORTH FRANKLIN STREET Soil Gas Conduit Installation/Sampling**



Photo 14: Photograph looking south at SG-10.

# **NORTH FRANKLIN STREET Soil Gas Conduit Installation/Sampling**



Photo 15: Photograph looking north at SG-11.

# **NORTH FRANKLIN STREET Soil Gas Conduit Installation/Sampling**



Photo 16: Photograph looking south at SG-12.

# **NORTH FRANKLIN STREET Soil Gas Conduit Installation/Sampling**



Photo 17: Photograph looking south at SG-17.

## NORTH FRANKLIN STREET Soil Gas Conduit Installation/Sampling

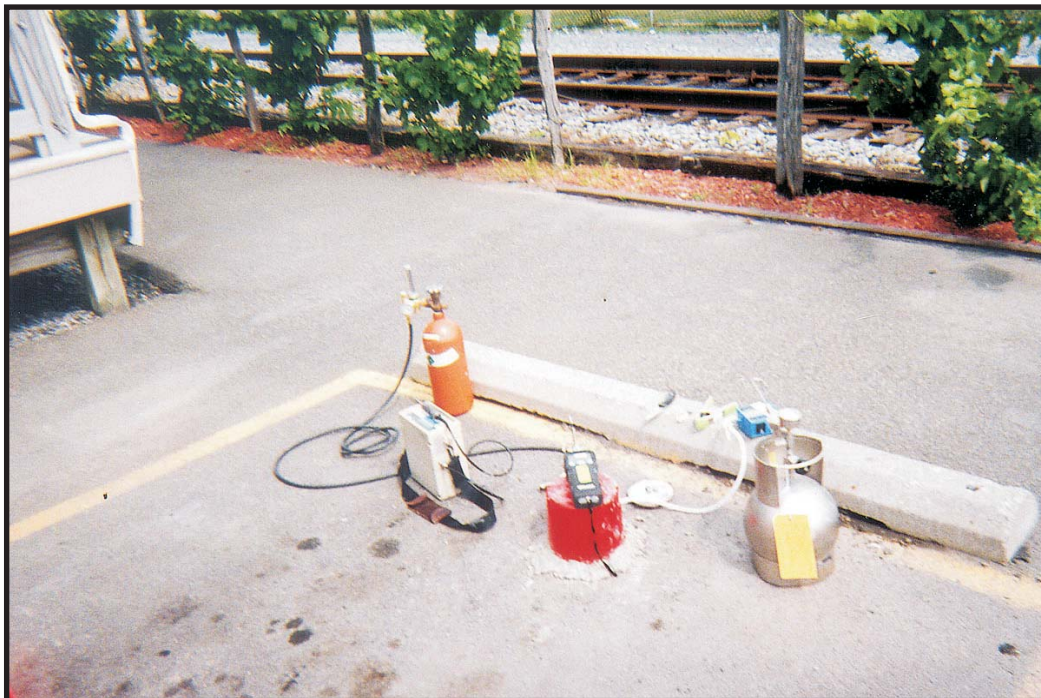


Photo 18: Photograph looking northwest at tracer gas and summa canister set-up at SG-1 location.



Photo 19: Photograph looking northwest at tracer gas and summa canister set-up at SG-2 location.

## NORTH FRANKLIN STREET Soil Gas Conduit Installation/Sampling



Photo 20: Photograph looking west at tracer gas and summa canister set-up at SG-3 location.



Photo 21: Photograph looking west at tracer gas and summa canister set-up at SG-4 location.

## NORTH FRANKLIN STREET Soil Gas Conduit Installation/Sampling



Photo 22: Photograph looking west at tracer gas and summa canister set-up at SG-5 location.



Photo 23: Photograph looking south at tracer gas and summa canister set-up at SG-6 location.

## NORTH FRANKLIN STREET Soil Gas Conduit Installation/Sampling



Photo 24: Photograph looking southwest at tracer gas and summa canister set-up at SG-7 location.



Photo 25: Photograph looking northwest at tracer gas and summa canister set-up at SG-8 location.

## NORTH FRANKLIN STREET Soil Gas Conduit Installation/Sampling



Photo 26: Photograph looking north at tracer gas and summa canister set-up at SG-9 location.



Photo 27: Photograph looking south at tracer gas and summa canister set-up at SG-10 location.

## NORTH FRANKLIN STREET Soil Gas Conduit Installation/Sampling



Photo 28: Photograph looking north at tracer gas and summa canister set-up at SG-11 location.

## NORTH FRANKLIN STREET Soil Gas Conduit Installation/Sampling



Photo 29: Photograph looking north at tracer gas and summa canister set-up at SG-12 location.



Photo 30: Photograph looking south at tracer gas and summa canister set-up at SG-13 location.

**ATTACHMENT 3**

**SAMPLING LOGS AND  
CHAIN-OF-CUSTODY**

# Summa Canister Sampling Field Data Sheet

Site: NORTH FRANKLIN STREET

Samplers: 3-MUABIZ

Date: 7/18/05

Sample #	SG-3 3.0-3.5	SG-2 2.5-3.0	SG-1 1.5-2.0	20050718-AB-1	
Location	SG-3	SG-2	SG-1	AB-1	
Summa Canister ID (Lab ID, if provided)	1495	04311	12738	93083	
Additional Tubing Added	NO/ <input checked="" type="checkbox"/> YES - How much 2'	NO/ <input checked="" type="checkbox"/> YES - How much 2'	NO/ <input checked="" type="checkbox"/> YES - How much 2'	<input checked="" type="checkbox"/> NO/ YES - How much —	NO/ YES - How much
Purge Time (Start)	1018	1638	1658	—	
Purge Time (Stop)	1023	1643	1103	—	
Total Purge Time (min)	5 min	5 min	5 min	—	
Pressure Gauge - before sampling	-29	-30	-29	-29.5	
Sample Time (Start)	1623	1643	1103	1109	
Sample Time (Stop)	1120	1138	1158	1204	
Total Sample Time (min)	57	55	55	55	
Pressure Gauge - after sampling	-10.0	-8.0	-8.0	-8.0	
Canister Pressure Went To Ambient Pressure?	YES / <input checked="" type="checkbox"/> NO	YES / <input checked="" type="checkbox"/> NO	YES / <input checked="" type="checkbox"/> NO	YES / <input checked="" type="checkbox"/> NO	YES / NO

General Comments:

SG-3 3.0-3.5	0% HE detected	157 ppm in purge	0% HE AFTER sample
SG-2 2.5-3.0	0% HE detected	7325 ppb in purge	0% HE AFTER sample
SG-1 1.5-2.0	0.6% HE detected	7866 ppb in purge	0.6% HE AFTER sample

## Summa Canister Sampling Field Data Sheet

Site: NORTH Franklin STREET

Samplers: S. MCCABE

Date: 7/18/05

Sample #	SG-12 3.5-4.0	SG-13 5.0-5.5	SG-11 4.4-4.9	SG-10 4.3-4.8	20050718-FD-1
Location	SG-12	SG-13	SG-11	SG-10	FD-1 (SG-10)
Summa Canister ID (Lab ID, if provided)	04396	3402	93074	51501	1787
Additional Tubing Added	NO/ <input checked="" type="checkbox"/> YES - How much 2'	NO/ <input checked="" type="checkbox"/> YES - How much 2'	NO/ <input checked="" type="checkbox"/> YES - How much 2'	NO/ <input checked="" type="checkbox"/> YES - How much 2'	NO/ <input checked="" type="checkbox"/> YES - How much 2'
Purge Time (Start)	1222	1239	1254	1309	1309
Purge Time (Stop)	1227	1244	1259	1314	1314
Total Purge Time (min)	5 min	5 min	5 min	5 min	5 min
Pressure Gauge - before sampling	-30	-30	-30	-30	-30
Sample Time (Start)	1227	1244	1259	1314	1314
Sample Time (Stop)	1322	1339	1354	1409	1409
Total Sample Time (min)	55	55	55	55	55
Pressure Gauge - after sampling	-9	-12	-10	-10	-10
Canister Pressure Went To Ambient Pressure?	YES <input checked="" type="checkbox"/> NO	YES <input checked="" type="checkbox"/> NO	YES <input checked="" type="checkbox"/> NO	YES <input checked="" type="checkbox"/> NO	YES <input checked="" type="checkbox"/> NO
General Comments:					
SG-12	0% H <sub>2</sub> Detected	1742 ppb	0% H <sub>2</sub>	AFTER Sample	
SG-13	0% H <sub>2</sub> Detected	1622 ppb	0% H <sub>2</sub>	AFTER Sample	
SG-11	0% H <sub>2</sub> Detected	1048 ppb	0% H <sub>2</sub>	AFTER Sample	
SG-10	0% H <sub>2</sub> Detected	1321 ppb	0% H <sub>2</sub>	AFTER Sample	
FD-1	0% H <sub>2</sub> Detected	1321 ppb	0% H <sub>2</sub>	AFTER Sample	

# Summa Canister Sampling Field Data Sheet

Site: North Franklin Street

Samplers: S. MCCABE

Date: 7/18/05

Sample #	S6-4 3.5-4.0	S6-5 2.5-3.0	S6-6 2.5-3.0	20050718-FD-2	
Location	S6-4	S6-5	S6-6	FD-2 (S6-6)	
Summa Canister ID (Lab ID, if provided)	1127	1530	93265	51529	
Additional Tubing Added	<input checked="" type="radio"/> YES NO/ How much 2'	<input checked="" type="radio"/> YES NO/ How much 2'	<input checked="" type="radio"/> YES NO/ How much 2'	<input checked="" type="radio"/> YES NO/ How much 2'	<input type="radio"/> YES NO/ How much
Purge Time (Start)	1555	1540	1455	1455	
Purge Time (Stop)	1600	1545	1500	1500	
Total Purge Time (min)	5 min	5 min	5 min	5 min	
Pressure Gauge - before sampling	-29	-30	-22	-28.5	
Sample Time (Start)	1600	1545	1500	1500	
Sample Time (Stop)	1655	1640	1555	1555	
Total Sample Time (min)	55	55	55	55	
Pressure Gauge - after sampling	-9	-6	-9	-11	
Canister Pressure Went To Ambient Pressure?	YES / <input checked="" type="radio"/> NO	YES / <input checked="" type="radio"/> NO	YES / <input checked="" type="radio"/> NO	YES / <input checked="" type="radio"/> NO	YES / NO

## General Comments:

S6-4	0% H <sub>2</sub> Detected	361 ppb	0% H <sub>2</sub> AFTER SAMPLE
S6-5	0% H <sub>2</sub> Detected	563 ppb	0% H <sub>2</sub> AFTER SAMPLE
S6-6	0% H <sub>2</sub> Detected	591 ppb	0% H <sub>2</sub> AFTER SAMPLE
FD-2	0% H <sub>2</sub> Detected	791 ppb	0% H <sub>2</sub> AFTER SAMPLE

# Summa Canister Sampling Field Data Sheet

Site: North Franklin Street

Samplers: SIMULCABE

Date: 7/18/05

Sample #	SG-8 5.0-5.5	SG-9 3.5-4.0	SG-7 2.5-3.0		
Location	SG-8	SG-9	SG-7		
Summa Canister ID (Lab ID, if provided)	2995	51488	51494		
Additional Tubing Added	NO/ <input checked="" type="checkbox"/> YES How much 2'	NO/ <input checked="" type="checkbox"/> YES How much 2'	NO/ <input checked="" type="checkbox"/> YES How much 2'	NO/ YES - How much	NO/ YES - How much
Purge Time (Start)	1415	1425	1435		
Purge Time (Stop)	1420	1430	1440		
Total Purge Time (min)	5 min	5 min	5 min		
Pressure Gauge - before sampling	-30	-29.5	-29		
Sample Time (Start)	1420	1430	1440		
Sample Time (Stop)	1515	1525	1535		
Total Sample Time (min)	55	55	55		
Pressure Gauge - after sampling	-11	-12	-9		
Canister Pressure Went To Ambient Pressure?	YES/ <input checked="" type="checkbox"/> NO	YES/ <input checked="" type="checkbox"/> NO	YES/ <input checked="" type="checkbox"/> NO	YES / NO	YES / NO

## General Comments:

SG-8 0% H<sub>2</sub> Detected 1422 ppb 0% H<sub>2</sub> After Sample  
 SG-9 0% H<sub>2</sub> Detected 1638 ppb 0% H<sub>2</sub> After Sample  
 SG-7 0% H<sub>2</sub> Detected 695 ppb 0% H<sub>2</sub> After Sample

# CHAIN OF CUSTODY RECORD

PROJECT NO.

11174211.87000

SITE NAME

North Franklin Street.

SAMPLERS (PRINT/SIGNATURE)

S. KACHUB

SUN

DELIVERY SERVICE: Fed Ex.

AIRBILL NO.:

TESTS

# URS

LAB STC - KnoxvilleCOOLER 1 of 3PAGE 1 of 2

BOTTLE TYPE AND PRESERVATIVE

LOCATION IDENTIFIER	DATE	STOP TIME	COMP/ GRAB	SAMPLE ID	MATRIX	TOTAL NO. # OF CONTAINERS
SG-3	7/18/05	1120	1hr	SG-3-3.0-3.5	GS	1
SG-2		1138	1hr	SG-2 2.5-3.0	GS	1
SG-1		1158	1hr	SG-1 1.5-2.0	GS	1
AB-1		1204	1hr	70050718-AB-1	AA	1
SG-12		1322	1hr	SG-12 3.5-4.0	GS	1
SG-13		1339	1hr	SG-13 5.0-5.5	GS	1
SG-11		1354	1hr	SG-11 4.4-4.9	GS	1
SG-10		1409	1hr	SG-10 4.3-4.8	GS	1
SG-8		1515	1hr	SG-8 5.0-5.5	GS	1
SG-9		1525	1hr	SG-9 3.5-4.0	GS	1
SG-7		1535	1hr	SG-7 2.5-3.0	GS	1
SG-4		1655	1hr	SG-4 3.5-4.0	GS	1
SG-5	✓	1640	1hr	SG-5 2.5-3.0	GS	1

TOTAL NO. # OF CONTAINERS

62 SUMMA.

REMARKS

SUMMA #

1495

SAMPLE TYPE

N1

BEGINNING DEPTH (IN FEET)

ENDING DEPTH (IN FEET)

FIELD LOT NO. # (ERPMIS)

N1

04311

12738

N1

93083

N1

04396

N1

3402

N1

93074

N1

51501

N1

2995

N1

51488

N1

51474

N1

1127

N1

1530

N1

MATRIX CODES

AA - AMBIENT AIR  
SE - SEDIMENT  
SH - HAZARDOUS SOLID WASTE

SL - SLUDGE  
WP - DRINKING WATER  
WW - WASTE WATER

WG - GROUND WATER  
SO - SOIL  
DC - DRILL CUTTINGS

WL - LEACHATE  
GS - SOIL GAS  
WC - DRILLING WATER

WO - OCEAN WATER  
WS - SURFACE WATER  
WQ - WATER FIELD QC

LH - HAZARDOUS LIQUID WASTE  
LF - FLOATING/FREE PRODUCT ON GW TABLE

SAMPLE TYPE CODES

TB# - TRIP BLANK  
SD# - MATRIX SPIKE DUPLICATE

RB# - RINSE BLANK  
FR# - FIELD REPLICATE

N# - NORMAL ENVIRONMENTAL SAMPLE  
MS# - MATRIX SPIKE

(# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

RELINQUISHED BY (SIGNATURE)

DATE

TIME

RECEIVED BY (SIGNATURE)

DATE

TIME

SPECIAL INSTRUCTIONS

RELINQUISHED BY (SIGNATURE)

DATE

TIME

RECEIVED FOR LAB BY (SIGNATURE)

DATE

TIME

Distribution: Original accompanies shipment, copy to coordinator field files



**ATTACHMENT 4**

**DATA USABILITY SUMMARY REPORT**

**DATA USABILITY SUMMARY REPORT**

**NORTH FRANKLIN STREET SITE**

**SITE NO. 84-90-002**

**WORK ASSIGNMENT D003825-09.3**

**Analyses Performed by:**

**SEVERN-TRENT LABORATORIES (STL) – KNOXVILLE, TN**

**Prepared by:**

**URS CORPORATION**

**77 GOODELL STREET**

**BUFFALO, NY 14203**

**SEPTEMBER 2005**

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## **I. INTRODUCTION**

This Data Usability Summary Report (DUSR) has been prepared following the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *Guidance for the Development of Data Usability Summary Reports (DUSR)*, dated June 1999. This DUSR discusses the soil gas and ambient air samples collected on July 18, 2005.

## **II. ANALYTICAL METHODOLOGIES**

The data being evaluated is from the July 18, 2005 sampling of 13 soil gas samples, 1 ambient air sample, and 2 field duplicate samples. The analytical laboratory that performed the analyses is Severn-Trent Laboratories, Inc. (STL) located in Knoxville, TN (STL-Knoxville). The samples were analyzed for volatile organic compounds (VOCs) following USEPA Compendium Method TO-15, *Determination of VOCs in Air Collected in Specially Prepared Canisters and Analyzed By Gas Chromatography/Mass Spectrometry (GC/MS)*.

Table 1 summarizes the data qualifications applied to the sample results. The validated analytical results are presented on Table 2.

A limited data validation was performed following the guidelines in USEPA Region II *Validating Canisters of Volatile Organics in Ambient Air, Rev. 0*, April 1994. Qualifications applied to the data include 'J/UJ' (estimated concentration/estimated quantitation limit) and 'U' (not detected). Documentation supporting the qualification of data is presented in Appendix A. Copies of the validated laboratory results (i.e., Form I's) are presented in Appendix B. Only problems affecting data usability are discussed in this report.

## **III. DATA DELIVERABLE COMPLETENESS**

The laboratory deliverable data package was equivalent to NYSDEC Analytical Services Protocol (ASP) Category B requirements.

## **IV. HOLDING TIMES/SAMPLE RECEIPT**

All samples were received by the laboratory intact and analyzed within the required holding time.

## V. NON CONFORMANCES

- Quality Control (QC) Blanks

The ambient air sample is considered to be representative of ambient air conditions. Since the soil gas samples are collected approximately 8 feet below ground surface through soil gas conduits, and the ambient air sample represents the air in the breathing zone, the results of the ambient air sample have not been used to qualify the soil gas sample results.

The laboratory method blanks associated with the soil gas samples had detections for acetone. In accordance with the USEPA Region II validation guidelines, those soil gas samples exhibiting detected results for acetone less than five times the concentration detected in the associated laboratory method blank have been qualified as follows: If the value detected in the sample was below the reporting limit (RL) then the compound was raised to the reporting limit and qualified as 'U' (undetected). If the value detected in the sample was greater than the RL, but less than five times the blank value, the compound was qualified 'U' at the value detected. The affected samples have been listed on Table 1.

Documentation supporting the qualification of data (e.g. method blank Form Is) is presented in Appendix A.

- Initial and Continuing Calibrations

The percent difference (%D) between the initial calibration (ICAL) average relative response factor (RRF) and the RRF in one of the continuing calibration (CCAL) standards exceeded the QC limit (i.e., >25%D) for bromoform, trans-1,3-dichloropropene, and styrene. The results for these compounds in the associated samples listed on Table 1 have been qualified 'J' or 'UJ.'

The %D between the ICAL average RRF and the RRF in one of the CCAL standards exceeded the QC limit (i.e., >25%D) for acetone, carbon disulfide, chloromethane, 1,1-dichloroethene, methylene chloride, and/or vinyl chloride. The results for these compounds in the associated samples listed on Table 1 have been qualified 'J' or 'UJ.'

Documentation supporting the qualification of data (e.g., Autosampler Run log, Continuing Calibration Form) is presented in Appendix A.

- Surrogates/Internal Standards

The recovery of surrogate 1,2-dichloroethane-d4 in the initial analysis of sample SG-7 was greater than the upper QC limit. The sample was re-analyzed at a dilution and exhibited acceptable recoveries for all compounds. However because the re-analysis was performed at a dilution the RLs were elevated for all compounds. Using professional judgment the results of the initial analysis have been reported on Table 2. The detected results for ethylbenzene, tetrachloroethene, toluene, o-xylene, and m/p-xylene in this sample have been qualified 'J' due to the surrogate outlier.

- Target Compounds/Instrument Performance

The following samples were analyzed utilizing a dilution due to elevated concentrations of target compounds and/or matrix interference: SG-2, SG-3, SG-4, SG-5, FD-2 (SG-6), SG-8, SG-9, SG-10, FD-1 (SG-10), SG-11, SG-13, and AB-1. The reporting limits for the non-detect compounds represent the lowest achievable at the diluted level. Samples AB-1, SG-13, and FD-1 (SG-10) were initially analyzed undiluted. These samples exhibited no recovery of the surrogates and internal standards and very poor chromatography. Since two different instruments were used for the analysis of these samples and the chromatography problems were observed on both instruments, the laboratory believes that sample matrix negatively affected instrument performance. The laboratory indicated in the report narrative that the chromatography problems were caused by the freezing of the instrument concentrator traps which restricted the flow of sample to the GC/MS. This could have resulted from water and/or carbon dioxide in the samples causing the trap to freeze-up. The samples were re-analyzed at dilutions and all surrogate and internal standard recoveries were acceptable. The laboratory determined that due to the potential for column and instrument damage by analyzing the remainder of the samples listed above un-diluted, these remaining samples were also analyzed at diluted levels.

## VII. SUMMARY

All sample analyses were found to be compliant with the method criteria, except where previously noted. Those results qualified 'J/UJ' (estimated/estimated reporting limit) are considered conditionally usable. Those results qualified 'U' are considered non-detect. All other sample results are usable as reported. URS does not recommend the re-collection of any samples at this time.

**Prepared By:** Ann Marie Kropovitch, Chemist



**Date:** 9/13/05

**Reviewed By:** James J. Lehn, Senior Chemist



**Date:** 9/13/05

## **DEFINITIONS OF USEPA REGION II DATA QUALIFIERS**

- U – The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J – The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ – The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R – The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- D – The sample results are reported from a separate secondary dilution analysis.
- NJ – Presumptive evidence of a compound at an estimated value.

**TABLE 1**  
**SUMMARY OF DATA QUALIFICATIONS**

SAMPLE ID	FRACTION	ANALYTICAL DEVIATION	QUALIFICATION
AB-1, FD-1, FD-2, SG-2, SG-5, SG-7, SG-9, SG-10, SG-11, SG-13	VOCs	Results for acetone < 5X value detected in laboratory method blanks.	Qualify as non-detect (‘U’) at the detected value or RL, whichever is higher.
SG-1, SG-3, SG-12	VOCs	CCAL %D > 25% for bromoform, styrene, and trans- 1,3-dichloropropene.	Qualify non-detect results ‘UJ.’
AB-1, SG-2, SG-13	VOCs	CCAL %D > 25% for chloromethane, vinyl chloride, 1,1-dichloroethene, acetone, carbon disulfide, and methylene chloride.	Qualify detects ‘J’ and non-detect results ‘UJ.’
SG-7	VOCs	The %R of surrogate 1,2- dichloroethane-d4 > QC limit.	Qualify detected results ‘J.’

**TABLE 2**  
**VALIDATED SOIL GAS AND AMBIENT AIR ANALYTICAL RESULTS**  
**NORTH FRANKLIN ST. SITE**

Location ID		AB-01	SG-01	SG-02	SG-03	SG-04
Sample ID		AB-1	SG-1	SG-2	SG-3	SG-4
Matrix		Ambient Air	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		07/18/05	07/18/05	07/18/05	07/18/05	07/18/05
Parameter	Units					
Volatile Organic Compounds						
Chloromethane	PPBV	7.8 UJ	0.36 J	7.8 UJ	4,400 U	9.2 U
Bromomethane	PPBV	3.1 U	0.33 U	3.1 U	1,700 U	3.7 U
Vinyl Chloride	PPBV	3.1 UJ	0.33 U	3.1 UJ	1,700 U	3.7 U
Chloroethane	PPBV	3.1 U	0.33 U	3.1 U	1,700 U	3.7 U
Methylene Chloride	PPBV	7.8 UJ	0.52 J	7.8 UJ	4,400 U	9.2 U
Acetone	PPBV	78 UJ	8.2 UJ	78 UJ	44,000 U	36 J
Carbon Disulfide	PPBV	3.1 UJ	0.33 U	3.2 J	1,700 U	2.7 J
1,1-Dichloroethene	PPBV	3.1 UJ	0.33 U	3.1 UJ	1,700 U	3.7 U
1,1-Dichloroethane	PPBV	3.1 U	0.33 U	3.1 U	1,700 U	3.7 U
2-Butanone	PPBV	7.8 U	1.2	7.8 U	4,400 U	9.2 U
Chloroform	PPBV	3.1 U	0.33 U	44	1,700 U	14
1,2-Dichloroethane	PPBV	3.1 U	0.33 U	3.1 U	1,700 U	3.7 U
1,1,1-Trichloroethane	PPBV	3.1 U	0.33 U	3.1 U	1,700 U	3.7 U
Carbon Tetrachloride	PPBV	3.1 U	0.33 U	3.1 U	1,700 U	3.7 U
Bromodichloromethane	PPBV	3.1 U	0.33 U	3.1 U	1,700 U	3.7 U
1,2-Dichloropropane	PPBV	3.1 U	0.33 U	3.1 U	1,700 U	3.7 U
cis-1,3-Dichloropropene	PPBV	3.1 U	0.33 U	3.1 U	1,700 U	3.7 U
Trichloroethene	PPBV	3.1 U	0.33 U	3.1 U	1,700 U	3.7 U
Benzene	PPBV	3.1 U	0.16 J	3.1 U	7,100	3.7 U
Dibromochloromethane	PPBV	3.1 U	0.33 U	3.1 U	1,700 U	3.7 U
trans-1,3-Dichloropropene	PPBV	3.1 U	0.33 UJ	3.1 U	1,700 UJ	3.7 U
1,1,2-Trichloroethane	PPBV	3.1 U	0.33 U	3.1 U	1,700 U	3.7 U
Bromoform	PPBV	3.1 U	0.33 UJ	3.1 U	1,700 UJ	3.7 U

Flags assigned during chemistry validation are shown.

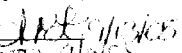
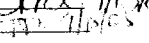
Made by CHP/9/15/05  
 Check by 9/15/05

Detection Limits shown are PQL

**TABLE 2**  
**VALIDATED SOIL GAS AND AMBIENT AIR ANALYTICAL RESULTS**  
**NORTH FRANKLIN ST. SITE**

Location ID		AB-01	SG-01	SG-02	SG-03	SG-04
Sample ID		AB-1	SG-1	SG-2	SG-3	SG-4
Matrix		Ambient Air	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		07/18/05	07/18/05	07/18/05	07/18/05	07/18/05
Parameter	Units					
Volatile Organic Compounds						
4-Methyl-2-Pentanone	PPBV	7.8 U	0.82 U	7.8 U	4,400 U	9.2 U
2-Hexanone	PPBV	7.8 U	0.82 U	7.8 U	4,400 U	9.2 U
Tetrachloroethene	PPBV	3.1 U	0.33 U	3.1 U	1,700 U	3.7 U
1,1,2,2-Tetrachloroethane	PPBV	3.1 U	0.33 U	3.1 U	1,700 U	3.7 U
Toluene	PPBV	3.1 U	0.94	6.2	1,700 U	5.5
Chlorobenzene	PPBV	3.1 U	0.33 U	3.1 U	1,700 U	3.7 U
Ethylbenzene	PPBV	3.1 U	0.33 U	1.5 J	1,700 U	1.8 J
Styrene	PPBV	3.1 U	0.33 UJ	3.1 U	1,700 UJ	2.0 J
m,p-Xylene	PPBV	3.1 U	0.16 J	4.6	740 J	7.8
o-Xylene	PPBV	3.1 U	0.33 U	1.5 J	1,700 U	3.1 J
cis-1,2-Dichloroethene	PPBV	3.1 U	0.33 U	3.1 U	1,700 U	3.7 U
trans-1,2-Dichloroethene	PPBV	3.1 U	0.33 U	3.1 U	1,700 U	3.7 U

Flags assigned during chemistry validation are shown.

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Detection Limits shown are PQL

**TABLE 2**  
**VALIDATED SOIL GAS AND AMBIENT AIR ANALYTICAL RESULTS**  
**NORTH FRANKLIN ST. SITE**

Location ID		SG-05	SG-06	SG-06	SG-07	SG-08
Sample ID		SG-5	FD-2	SG-6	SG-7	SG-8
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		07/18/05	07/18/05	07/18/05	07/18/05	07/18/05
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
Chloromethane	PPBV	8.0 U	9.1 U	0.89 U	0.96 U	9.0 U
Bromomethane	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U
Vinyl Chloride	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U
Chloroethane	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U
Methylene Chloride	PPBV	8.0 U	9.1 U	0.89	0.96 U	9.0 U
Acetone	PPBV	80 U	91 U	8.5 J	9.6 U	90 U
Carbon Disulfide	PPBV	4.9	3.6 U	0.43	0.39 U	22
1,1-Dichloroethene	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U
1,1-Dichloroethane	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U
2-Butanone	PPBV	8.0 U	9.1 U	0.87 J	0.96 U	9.0 U
Chloroform	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U
1,2-Dichloroethane	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U
1,1,1-Trichloroethane	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U
Carbon Tetrachloride	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U
Bromodichloromethane	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U
1,2-Dichloropropane	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U
cis-1,3-Dichloropropene	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U
Trichloroethene	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U
Benzene	PPBV	1.6 J	3.6 U	0.28 J	0.39 U	7.5
Dibromochloromethane	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U
trans-1,3-Dichloropropene	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U
1,1,2-Trichloroethane	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U
Bromoform	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U

Flags assigned during chemistry validation are shown.

Made by CHL/9/18/05  
 Check by CHL/9/18/05

Detection Limits shown are PQL

**TABLE 2**  
**VALIDATED SOIL GAS AND AMBIENT AIR ANALYTICAL RESULTS**  
**NORTH FRANKLIN ST. SITE**

Location ID		SG-05	SG-06	SG-06	SG-07	SG-08
Sample ID		SG-5	FD-2	SG-6	SG-7	SG-8
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		07/18/05	07/18/05	07/18/05	07/18/05	07/18/05
Parameter	Units	Field Duplicate (1-1)				
Volatile Organic Compounds						
4-Methyl-2-Pentanone	PPBV	8.0 U	9.1 U	0.56 J	0.96 U	9.0 U
2-Hexanone	PPBV	8.0 U	9.1 U	0.89 U	0.96 U	9.0 U
Tetrachloroethene	PPBV	3.2 U	3.6 U	0.48	0.56 J	3.6 U
1,1,2,2-Tetrachloroethane	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U
Toluene	PPBV	5.6	1.7 J	1.6	1.6 J	36
Chlorobenzene	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U
Ethylbenzene	PPBV	1.3 J	3.6 U	0.46	0.38 J	3.3 J
Styrene	PPBV	3.2 U	3.6 U	0.27 J	0.39 U	3.6 U
m,p-Xylene	PPBV	4.6	3.6 U	1.5	1.2 J	9.3
o-Xylene	PPBV	1.6 J	3.6 U	0.64	0.45 J	3.2 J
cis-1,2-Dichloroethene	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U
trans-1,2-Dichloroethene	PPBV	3.2 U	3.6 U	0.36 U	0.39 U	3.6 U

Flags assigned during chemistry validation are shown.

Made by WAF 9/18/05  
 Check by WAF 9/18/05

Detection Limits shown are PQL

**TABLE 2**  
**VALIDATED SOIL GAS AND AMBIENT AIR ANALYTICAL RESULTS**  
**NORTH FRANKLIN ST. SITE**

Location ID		SG-09	SG-10	SG-10	SG-11	SG-12
Sample ID		SG-9	FD-1	SG-10	SG-11	SG-12
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		07/18/05	07/18/05	07/18/05	07/18/05	07/18/05
Parameter	Units	Field Duplicate (1-1)				
<b>Volatile Organic Compounds</b>						
Chloromethane	PPBV	8.5 U	9.0 U	9.6 U	8.8 U	0.28 J
Bromomethane	PPBV	3.4 U	3.6 U	3.8 U	3.5 U	0.36 U
Vinyl Chloride	PPBV	3.4 U	3.6 U	3.8 U	3.5 U	0.36 U
Chloroethane	PPBV	3.4 U	3.6 U	3.8 U	3.5 U	0.36 U
Methylene Chloride	PPBV	8.5 U	9.0 U	4.9 J	7.3 J	0.90 U
Acetone	PPBV	85 U	90 U	96 U	88 U	12 U
Carbon Disulfide	PPBV	1.5 J	5.0	3.6 J	3.1 J	4.8
1,1-Dichloroethene	PPBV	3.4 U	3.6 U	3.8 U	3.5 U	0.36 U
1,1-Dichloroethane	PPBV	3.4 U	3.6 U	3.8 U	3.5 U	0.36 U
2-Butanone	PPBV	8.5 U	9.0 U	9.6 U	8.8 U	0.97
Chloroform	PPBV	8.0	2.9 J	1.8 J	3.5 U	1.6
1,2-Dichloroethane	PPBV	3.4 U	3.6 U	3.8 U	3.5 U	0.36 U
1,1,1-Trichloroethane	PPBV	3.4 U	3.6 U	3.8 U	3.5 U	0.11 J
Carbon Tetrachloride	PPBV	3.4 U	3.6 U	3.8 U	3.5 U	0.36 U
Bromodichloromethane	PPBV	3.4 U	3.6 U	3.8 U	3.5 U	0.36 U
1,2-Dichloropropane	PPBV	3.4 U	3.6 U	3.8 U	3.5 U	0.36 U
cis-1,3-Dichloropropene	PPBV	3.4 U	3.6 U	3.8 U	3.5 U	0.36 U
Trichloroethene	PPBV	2.3 J	3.6 U	3.8 U	3.5 U	0.36 U
Benzene	PPBV	3.4 U	3.6 U	3.8 U	1.5 J	0.59
Dibromochloromethane	PPBV	3.4 U	3.6 U	3.8 U	3.5 U	0.36 U
trans-1,3-Dichloropropene	PPBV	3.4 U	3.6 U	3.8 U	3.5 U	0.36 UJ
1,1,2-Trichloroethane	PPBV	3.4 U	3.6 U	3.8 U	3.5 U	0.36 U
Bromoform	PPBV	3.4 U	3.6 U	3.8 U	3.5 U	0.36 UJ

Flags assigned during chemistry validation are shown.

Made by CHN 9/13/05  
 Check by THL 9/13/05

Detection Limits shown are PQL

**TABLE 2**  
**VALIDATED SOIL GAS AND AMBIENT AIR ANALYTICAL RESULTS**  
**NORTH FRANKLIN ST. SITE**

Location ID		SG-09	SG-10	SG-10	SG-11	SG-12
Sample ID		SG-9	FD-1	SG-10	SG-11	SG-12
Matrix		Soil Gas	Soil Gas	Soil Gas	Soil Gas	Soil Gas
Depth Interval (ft)		-	-	-	-	-
Date Sampled		07/18/05	07/18/05	07/18/05	07/18/05	07/18/05
Parameter	Units	Field Duplicate (1-1)				
Volatile Organic Compounds						
4-Methyl-2-Pentanone	PPBV	8.5 U	9.0 U	9.6 U	8.8 U	0.48 J
2-Hexanone	PPBV	8.5 U	9.0 U	9.6 U	8.8 U	0.90 U
Tetrachloroethene	PPBV	5.2	4.1	3.8 U	3.5 U	1.2
1,1,2,2-Tetrachloroethane	PPBV	3.4 U	3.6 U	3.8 U	3.5 U	0.36 U
Toluene	PPBV	3.4	2.9 J	2.0 J	4.9	4.2
Chlorobenzene	PPBV	3.4 U	3.6 U	3.8 U	3.5 U	0.36 U
Ethylbenzene	PPBV	3.4 U	3.6 U	3.8 U	1.7 J	0.40
Styrene	PPBV	3.4 U	3.6 U	3.8 U	3.5 U	0.36 UJ
m,p-Xylene	PPBV	1.8 J	4.3	2.1 J	5.9	0.78
o-Xylene	PPBV	3.4 U	1.6 J	3.8 U	1.9 J	0.29 J
cis-1,2-Dichloroethene	PPBV	3.4 U	3.6 U	3.8 U	3.5 U	0.36 U
trans-1,2-Dichloroethene	PPBV	3.4 U	3.6 U	3.8 U	3.5 U	0.36 U

Flags assigned during chemistry validation are shown.

Made by CHAS 9/13/05  
 Check by 7/18/05

Detection Limits shown are PQL

**TABLE 2**  
**VALIDATED SOIL GAS AND AMBIENT AIR ANALYTICAL RESULTS**  
**NORTH FRANKLIN ST. SITE**

Location ID		SG-13
Sample ID		SG-13
Matrix		Soil Gas
Depth Interval (ft)		-
Date Sampled		07/18/05
Parameter	Units	
<b>Volatile Organic Compounds</b>		
Chloromethane	PPBV	8.8 UJ
Bromomethane	PPBV	3.5 U
Vinyl Chloride	PPBV	3.5 UJ
Chloroethane	PPBV	3.5 U
Methylene Chloride	PPBV	8.8 UJ
Acetone	PPBV	88 UJ
Carbon Disulfide	PPBV	2.4 J
1,1-Dichloroethene	PPBV	3.5 UJ
1,1-Dichloroethane	PPBV	3.5 U
2-Butanone	PPBV	8.8 U
Chloroform	PPBV	3.5 U
1,2-Dichloroethane	PPBV	3.5 U
1,1,1-Trichloroethane	PPBV	3.5 U
Carbon Tetrachloride	PPBV	3.5 U
Bromodichloromethane	PPBV	3.5 U
1,2-Dichloropropane	PPBV	3.5 U
cis-1,3-Dichloropropene	PPBV	3.5 U
Trichloroethene	PPBV	3.5 U
Benzene	PPBV	3.5 U
Dibromochloromethane	PPBV	3.5 U
trans-1,3-Dichloropropene	PPBV	3.5 U
1,1,2-Trichloroethane	PPBV	3.5 U
Bromoform	PPBV	3.5 U

Flags assigned during chemistry validation are shown.

Made by CHP/9/18/05  
 Check by CHP/9/18/05

Detection Limits shown are PQL

**TABLE 2**  
**VALIDATED SOIL GAS AND AMBIENT AIR ANALYTICAL RESULTS**  
**NORTH FRANKLIN ST. SITE**

<b>Location ID</b>		<b>SG-13</b>
<b>Sample ID</b>		<b>SG-13</b>
<b>Matrix</b>		<b>Soil Gas</b>
<b>Depth Interval (ft)</b>		<b>-</b>
<b>Date Sampled</b>		<b>07/18/05</b>
<b>Parameter</b>	<b>Units</b>	
<b>Volatile Organic Compounds</b>		
4-Methyl-2-Pentanone	PPBV	8.8 U
2-Hexanone	PPBV	8.8 U
Tetrachloroethene	PPBV	3.5 U
1,1,2,2-Tetrachloroethane	PPBV	3.5 U
Toluene	PPBV	4.0
Chlorobenzene	PPBV	3.5 U
Ethylbenzene	PPBV	3.5 U
Styrene	PPBV	3.5 U
m,p-Xylene	PPBV	1.8 J
o-Xylene	PPBV	3.5 U
cis-1,2-Dichloroethene	PPBV	3.5 U
trans-1,2-Dichloroethene	PPBV	3.5 U

Flags assigned during chemistry validation are shown.

Made by CLP 9/18/05  
 Check by JG 9/18/05

Detection Limits shown are PQL

## **APPENDIX A**

### **SUPPORT DOCUMENTATION**

HSG 200167

## CHAIN OF CUSTODY RECORD

PROJECT NO.

11174211.84000

SITE NAME

North Franklin Street.

SAMPLERS (PRINT/SIGNATURE)

S. MCCABE

TESTS

URS

LAB STL - KnoxvilleCOOLER 1 of 3PAGE 1 of 2

BOTTLE TYPE AND PRESERVATIVE

DELIVERY SERVICE: Fed Ex AIRBILL NO.: \_\_\_\_\_TOTAL NO. OF  
CONTAINERS

62 SUMMA #

LOCATION IDENTIFIER	DATE	STOP TIME	COMP/ GRAB	SAMPLE ID	MATRIX	TOTAL NO. OF CONTAINERS	62 SUMMA #	REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO. # (LRPIMS)
SG-3	7/18/05	1120	1hr	SG-3-3.0-3.5	GS	1	1	1495	NI			
SG-2		1138	1hr	SG-2 2.5-3.0	GS	1	1	04311	NI			
SG-1		1158	1hr	SG-1 1.5-2.0	GS	1	1	12738	NI			
AB-1		1204	1hr	20050718-AB-1	AA	1	1	93083	NI			
SG-12		1322	1hr	SG-12 3.5-4.0	GS	1	1	04396	NI			
SG-13		1339	1hr	SG-13 5.0-5.5	GS	1	1	3402	NI			
SG-11		1354	1hr	SG-11 4.4-4.9	GS	1	1	93074	NI			
SG-10		1409	1hr	SG-10 4.3-4.8	GS	1	1	51501	NI			
SG-8		1515	1hr	SG-8 5.0-5.5	GS	1	1	2995	NI			
SG-9		1525	1hr	SG-9 3.5-4.0	GS	1	1	51488	NI			
SG-7		1535	1hr	SG-7 2.5-3.0	GS	1	1	51494	NI			
SG-4		1655	1hr	SG-4 3.5-4.0	GS	1	1	1127	NI			
SG-5		1640	1hr	SG-5 2.5-3.0	GS	1	1	1530	NI			

## MATRIX CODES

AA - AMBIENT AIR

SE - SEDIMENT

SH - HAZARDOUS SOLID WASTE

SL - SLUDGE

WP - DRINKING WATER

WW - WASTE WATER

WG - GROUND WATER

SO - SOIL

DC - DRILL CUTTINGS

WL - LEACHATE

GS - SOIL GAS

WC - DRILLING WATER

WO - OCEAN WATER

WS - SURFACE WATER

WQ - WATER FIELD QC

LH - HAZARDOUS LIQUID WASTE

LF - FLOATING/FREE PRODUCT ON GW TABLE

## SAMPLE TYPE CODES

TB# - TRIP BLANK

SD# - MATRIX SPIKE DUPLICATE

RB# - RINSE BLANK

FR# - FIELD REPLICATE

N# - NORMAL ENVIRONMENTAL SAMPLE

MS# - MATRIX SPIKE

(# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

RELINQUISHED BY (SIGNATURE)

DATE

TIME

RECEIVED BY (SIGNATURE)

DATE

TIME

RELINQUISHED BY (SIGNATURE)

DATE

TIME

RECEIVED FOR LAB BY (SIGNATURE)

DATE

TIME

## SPECIAL INSTRUCTIONS

Custody Seals Intact  
Rec'd Temp. Ambient  
3 Boxes / FEDEX  
T# 7115 0798 1855  
↓ ↓ ↓  
1833  
1844

Distribution: Original accompanies shipment, copy to coordinator field files

ADF 072005



**PROJECT NARRATIVE**  
**H5G200167**  
**REVISED**

This report has been revised. The narrative has been updated and expanded chromatograms have been included.

The results reported herein are applicable to the samples submitted for analysis only.

This report shall not be reproduced except in full, without the written approval of the laboratory.

**The original chain of custody documentation is included with this report.**

**Sample Receipt**

There were no problems with the condition of the samples received.

**Quality Control**

Unless otherwise noted, all holding times and QC criteria were met and the test results shown in this report meet all applicable NELAC requirements.

Samples AB-1, and SG-13 analyzed on instrument MG and samples SG-7, and FD-1 analyzed on instrument MT, were originally analyzed at 500 mL and exhibited poor chromatography and poor or no internal standard and/or surrogate recoveries. The chromatography observed on these two separate instruments is consistent with matrix freezing of the instrument concentrator traps, restricting the flow of sample to the GCMS. This could have resulted from water and/or carbon dioxide in the sample causing the trap freeze-up. These samples impacted the recoveries of internal standards in subsequent samples run on the instrument. The samples were re-analyzed at 50 mL. Both sets of data for these four samples are reported. Due to the detrimental effects of the sample matrix on the instrument, the remaining samples (SG-2, SG-11, SG-10, SG-8, SG-9, SG-4, SG-5, and FD-2) were analyzed at 50 mL.

STL Knoxville maintains the following certifications, approvals and accreditations: Arkansas DEQ Cert. # 03-049-0, California DHS ELAP Cert. #2423, Colorado DPHE, Connecticut DPH Cert. #PH-0223, Florida DOH Cert. #E87177, Georgia DNR Cert. #906, Hawaii DOH, Illinois EPA Cert. # 000687, Indiana DOH Cert. #C-TN-02, Kansas DHE Cert. # E-10349, Kentucky DEP Lab ID #90101, Louisiana DEQ Cert. #03079, Louisiana DOHH Cert. #LA030024, Maryland DHMH Cert. #277, Massachusetts DEP Cert. #M-TN009, Michigan DEQ Lab ID #9933, New Jersey DEP Cert. #TN001, New York DOH Lab #10781, North Carolina DPH Lab ID #21705, North Carolina DEHNR Cert. #64, Oklahoma DEQ ID #9415, Pennsylvania DEP Cert. # 68-576, South Carolina DHEC Lab ID #84001001, Tennessee DOH Lab ID #02014, Utah DOH Cert. #QUAN3, Virginia DGS Lab ID #00165, Washington DOE Lab #C120, Wisconsin DNR Lab ID #998044300, US Army Corps of Engineers, Naval Facilities Engineering Service Center, US EPA Perchlorate Approval and USDA Soil Permit #S-46424. This list of approvals is subject to change and does not imply that laboratory certification is available for all parameters reported in this environmental sample data report.

## **PROJECT NARRATIVE**

**H5G200167**

**REVISED**

Sample SG-3 was reported with elevated reporting limits for all analytes due to the presence of non-target compounds. A dilution was necessary prior to analysis, and the reporting limits were adjusted accordingly.

STL Knoxville maintains the following certifications, approvals and accreditations: Arkansas DEQ Cert. # 03-049-0, California DHS ELAP Cert. #2423, Colorado DPHE, Connecticut DPH Cert. #PH-0223, Florida DOH Cert. #E87177, Georgia DNR Cert. #906, Hawaii DOH, Illinois EPA Cert. # 000687, Indiana DOH Cert. #C-TN-02, Kansas DHE Cert. # E-10349, Kentucky DEP Lab ID #90101, Louisiana DEQ Cert. #03079, Louisiana DOHH Cert. #LA030024, Maryland DHMH Cert. #277, Massachusetts DEP Cert. #M-TN009, Michigan DEQ Lab ID #9933, New Jersey DEP Cert. #TN001, New York DOH Lab #10781, North Carolina DPH Lab ID #21705, North Carolina DEHNR Cert. #64, Oklahoma DEQ ID #9415, Pennsylvania DEP Cert. # 68-576, South Carolina DHEC Lab ID #84001001, Tennessee DOH Lab ID #02014, Utah DOH Cert. #QUAN3, Virginia DGS Lab ID #00165, Washington DOE Lab #C120, Wisconsin DNR Lab ID #998044300, US Army Corps of Engineers, Naval Facilities Engineering Service Center, US EPA Perchlorate Approval and USDA Soil Permit #S-46424. This list of approvals is subject to change and does not imply that laboratory certification is available for all parameters reported in this environmental sample data report.

URS Corp/ NYSDEC  
Client Sample ID: INTRA-LAB BLANK  
GC/MS Volatiles

Lot-Sample # H5G220000 - 061B

Work Order # HF2WT1AA

Matrix.....: AIR

Prep Date.....: 7/21/05

Date Received...: 7/21/05

Prep Batch #.....: 5203061

Analysis Date...: 7/21/05

Dilution Factor.: 1

Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	0.20	ND	0.91
Acetone	0.47	5.0	1.1 J	12
Ethylbenzene	ND	0.20	ND	0.87
2-Hexanone	ND	0.50	ND	2.0
Methylene chloride	ND	0.50	ND	1.7
Benzene	ND	0.20	ND	0.64
Styrene	ND	0.20	ND	0.85
1,1,2,2-Tetrachloroethane	ND	0.20	ND	1.4
Tetrachloroethene	ND	0.20	ND	1.4
Toluene	ND	0.20	ND	0.75
1,1,1-Trichloroethane	ND	0.20	ND	1.1
1,1,2-Trichloroethane	ND	0.20	ND	1.1
Trichloroethene	ND	0.20	ND	1.1
Vinyl chloride	ND	0.20	ND	0.51
o-Xylene	ND	0.20	ND	0.87
m-Xylene & p-Xylene	ND	0.20	ND	0.87
Bromodichloromethane	ND	0.20	ND	1.3
2-Butanone (MEK)	ND	0.50	ND	1.5
4-Methyl-2-pentanone (MIBK)	ND	0.50	ND	2.0
Bromoform	ND	0.20	ND	2.1
Bromomethane	ND	0.20	ND	0.78
Carbon disulfide	ND	0.20	ND	0.62
Carbon tetrachloride	ND	0.20	ND	1.3
Chlorobenzene	ND	0.20	ND	0.92
Dibromochloromethane	ND	0.20	ND	1.7
Chloroethane	ND	0.20	ND	0.53
Chloroform	ND	0.20	ND	0.98
Chloromethane	ND	0.50	ND	1.0
1,1-Dichloroethane	ND	0.20	ND	0.81
1,2-Dichloroethane	ND	0.20	ND	0.81
1,1-Dichloroethene	ND	0.20	ND	0.79
cis-1,2-Dichloroethene	ND	0.20	ND	0.79
trans-1,2-Dichloroethene	ND	0.20	ND	0.79
1,2-Dichloropropane	ND	0.20	ND	0.92
cis-1,3-Dichloropropene	ND	0.20	ND	0.91

**URS Corp/ NYSDEC**  
**Client Sample ID: INTRA-LAB BLANK**  
**GC/MS Volatiles**

**Lot-Sample #** H5G250000 - 288B

**Work Order #** HF7E71AA

**Matrix.....:** AIR

**Prep Date.....:** 7/25/05  
**Prep Batch #.....:** 5206288  
**Dilution Factor.:** 1

**Date Received..:** 7/20/05  
**Analysis Date...** 7/25/05  
**Method.....:** TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	0.20	ND	0.91
Acetone	0.32	5.0	0.75 J	12
Ethylbenzene	ND	0.20	ND	0.87
2-Hexanone	ND	0.50	ND	2.0
Methylene chloride	ND	0.50	ND	1.7
Benzene	ND	0.20	ND	0.64
Styrene	ND	0.20	ND	0.85
1,1,2,2-Tetrachloroethane	ND	0.20	ND	1.4
Tetrachloroethene	ND	0.20	ND	1.4
Toluene	ND	0.20	ND	0.75
1,1,1-Trichloroethane	ND	0.20	ND	1.1
1,1,2-Trichloroethane	ND	0.20	ND	1.1
Trichloroethene	ND	0.20	ND	1.1
Vinyl chloride	ND	0.20	ND	0.51
o-Xylene	ND	0.20	ND	0.87
m-Xylene & p-Xylene	ND	0.20	ND	0.87
Bromodichloromethane	ND	0.20	ND	1.3
2-Butanone (MEK)	ND	0.50	ND	1.5
4-Methyl-2-pentanone (MIBK)	ND	0.50	ND	2.0
Bromoform	ND	0.20	ND	2.1
Bromomethane	ND	0.20	ND	0.78
Carbon disulfide	ND	0.20	ND	0.62
Carbon tetrachloride	ND	0.20	ND	1.3
Chlorobenzene	ND	0.20	ND	0.92
Dibromochloromethane	ND	0.20	ND	1.7
Chloroethane	ND	0.20	ND	0.53
Chloroform	ND	0.20	ND	0.98
Chloromethane	ND	0.50	ND	1.0
1,1-Dichloroethane	ND	0.20	ND	0.81
1,2-Dichloroethane	ND	0.20	ND	0.81
1,1-Dichloroethene	ND	0.20	ND	0.79
cis-1,2-Dichloroethene	ND	0.20	ND	0.79
trans-1,2-Dichloroethene	ND	0.20	ND	0.79
1,2-Dichloropropane	ND	0.20	ND	0.92
cis-1,3-Dichloropropene	ND	0.20	ND	0.91

**URS Corp/ NYSDEC**  
**Client Sample ID: INTRA-LAB BLANK**  
**GC/MS Volatiles**

**Lot-Sample #** H5G250000 - 164B

**Work Order #** HF6381AA

**Matrix.....:** AIR

**Prep Date.....:** 7/22/05  
**Prep Batch #.....:** 5206164  
**Dilution Factor..:** 1

**Date Received...:** 7/20/05  
**Analysis Date...:** 7/22/05  
**Method.....:** TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	0.20	ND	0.91
<b>Acetone</b>	<b>0.26</b>	<b>5.0</b>	<b>0.61 J</b>	<b>12</b>
Ethylbenzene	ND	0.20	ND	0.87
2-Hexanone	ND	0.50	ND	2.0
Methylene chloride	ND	0.50	ND	1.7
Benzene	ND	0.20	ND	0.64
Styrene	ND	0.20	ND	0.85
1,1,2,2-Tetrachloroethane	ND	0.20	ND	1.4
Tetrachloroethene	ND	0.20	ND	1.4
Toluene	ND	0.20	ND	0.75
1,1,1-Trichloroethane	ND	0.20	ND	1.1
1,1,2-Trichloroethane	ND	0.20	ND	1.1
Trichloroethene	ND	0.20	ND	1.1
Vinyl chloride	ND	0.20	ND	0.51
o-Xylene	ND	0.20	ND	0.87
m-Xylene & p-Xylene	ND	0.20	ND	0.87
Bromodichloromethane	ND	0.20	ND	1.3
2-Butanone (MEK)	ND	0.50	ND	1.5
4-Methyl-2-pentanone (MIBK)	ND	0.50	ND	2.0
Bromoform	ND	0.20	ND	2.1
Bromomethane	ND	0.20	ND	0.78
Carbon disulfide	ND	0.20	ND	0.62
Carbon tetrachloride	ND	0.20	ND	1.3
Chlorobenzene	ND	0.20	ND	0.92
Dibromochloromethane	ND	0.20	ND	1.7
Chloroethane	ND	0.20	ND	0.53
Chloroform	ND	0.20	ND	0.98
Chloromethane	ND	0.50	ND	1.0
1,1-Dichloroethane	ND	0.20	ND	0.81
1,2-Dichloroethane	ND	0.20	ND	0.81
1,1-Dichloroethene	ND	0.20	ND	0.79
cis-1,2-Dichloroethene	ND	0.20	ND	0.79
trans-1,2-Dichloroethene	ND	0.20	ND	0.79
1,2-Dichloropropane	ND	0.20	ND	0.92
cis-1,3-Dichloropropene	ND	0.20	ND	0.91

**URS Corp/ NYSDEC**  
**Client Sample ID: INTRA-LAB BLANK**  
**GC/MS Volatiles**

Lot-Sample # H5G220000 - 121B

Work Order # HF2141AA

Matrix.....: AIR

Prep Date.....: 7/21/05  
 Prep Batch #.....: 5203121  
 Dilution Factor.: 1

Date Received..: 7/20/05  
 Analysis Date... 7/21/05  
 Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	0.20	ND	0.91
Acetone	0.27	5.0	0.63 J	12
Ethylbenzene	ND	0.20	ND	0.87
2-Hexanone	ND	0.50	ND	2.0
Methylene chloride	ND	0.50	ND	1.7
Benzene	ND	0.20	ND	0.64
Styrene	ND	0.20	ND	0.85
1,1,2,2-Tetrachloroethane	ND	0.20	ND	1.4
Tetrachloroethene	ND	0.20	ND	1.4
Toluene	ND	0.20	ND	0.75
1,1,1-Trichloroethane	ND	0.20	ND	1.1
1,1,2-Trichloroethane	ND	0.20	ND	1.1
Trichloroethene	ND	0.20	ND	1.1
Vinyl chloride	ND	0.20	ND	0.51
o-Xylene	ND	0.20	ND	0.87
m-Xylene & p-Xylene	ND	0.20	ND	0.87
Bromodichloromethane	ND	0.20	ND	1.3
2-Butanone (MEK)	ND	0.50	ND	1.5
4-Methyl-2-pentanone (MIBK)	ND	0.50	ND	2.0
Bromoform	ND	0.20	ND	2.1
Bromomethane	ND	0.20	ND	0.78
Carbon disulfide	ND	0.20	ND	0.62
Carbon tetrachloride	ND	0.20	ND	1.3
Chlorobenzene	ND	0.20	ND	0.92
Dibromochloromethane	ND	0.20	ND	1.7
Chloroethane	ND	0.20	ND	0.53
Chloroform	ND	0.20	ND	0.98
Chloromethane	ND	0.50	ND	1.0
1,1-Dichloroethane	ND	0.20	ND	0.81
1,2-Dichloroethane	ND	0.20	ND	0.81
1,1-Dichloroethene	ND	0.20	ND	0.79
cis-1,2-Dichloroethene	ND	0.20	ND	0.79
trans-1,2-Dichloroethene	ND	0.20	ND	0.79
1,2-Dichloropropane	ND	0.20	ND	0.92
cis-1,3-Dichloropropene	ND	0.20	ND	0.91

050721  
STL-Knoxville  
TO-14 Autosampler Log  
'ME'

Sample	Volume	Position	Date	Time
CCV	103ml	15	7/21/200	12:26:48 PM
LCSA	101ml	15	7/21/200	2:04:26 PM
BLK	501ml	16	7/21/200	4:29:13 PM
BLKA	501ml	16	7/21/200	5:07:24 PM
HFVXP	253ml	1	7/21/200	5:44:23 PM
HFVX4	501ml	2	7/21/200	6:22:55 PM
HFV05D	253ml	3	7/21/200	6:59:39 PM
HFVXW	502ml	5	7/21/200	7:37:45 PM
HFVX1	502ml	6	7/21/200	8:15:58 PM
HFVX6	493ml	7	7/21/200	9:38:51 PM
HFVX1R	27ml	6	7/21/200	10:35:41 PM
HFVX1RR	28ml	6	7/22/200	7:10:08 AM
HFVX7	51ml	8	7/22/200	8:22:12 AM

Data File: /chem/gcms/mg.i/G072105.b/gccvg21.d  
 Report Date: 21-Jul-2005 12:51

## STL Knoxville

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mg.i Injection Date: 21-JUL-2005 12:26  
 Lab File ID: gccvg21.d Init. Cal. Date(s): 01-JUL-2005 01-JUL-2005  
 Analysis Type: AIR Init. Cal. Times: 12:54 16:32  
 Lab Sample ID: GCCV Quant Type: ISTD  
 Method: /chem/gcms/mg.i/G072105.b/TO14.m

COMPOUND	RRF / AMOUNT	RF10	MIN	RRF	%D / %DRIFT	MAX	%D / %DRIFT	CURVE TYPE
39 Chloroform	2.78591	2.82953	0.000	-1.56594	30.00000	Averaged		
40 1,1,1-Trichloroethane	2.48983	2.66647	0.000	-7.09432	30.00000	Averaged		
41 Cyclohexane	0.76498	0.74971	0.000	1.99725	30.00000	Averaged		
42 Carbon Tetrachloride	2.76630	2.82042	0.000	-1.95627	30.00000	Averaged		
43 Benzene	0.99049	1.05171	0.000	-6.18072	30.00000	Averaged		
44 1,2-Dichloroethane	0.43213	0.46033	0.000	-6.52560	30.00000	Averaged		
45 2,2,4-trimethylpentane	2.31797	2.30177	0.000	0.69923	30.00000	Averaged		
46 Heptane	0.90299	0.90509	0.000	-0.23187	30.00000	Averaged		
47 Trichloroethene	0.46535	0.47624	0.000	-2.34172	30.00000	Averaged		
48 1-Butanol	0.16823	0.18182	0.000	-8.08177	30.00000	Averaged		
49 1,2-Dichloropropane	0.38015	0.40081	0.000	-5.43556	30.00000	Averaged		
50 Dibromomethane	0.32811	0.35420	0.000	-7.94990	30.00000	Averaged		
51 Bromodichloromethane	0.58594	0.65085	0.000	-11.07928	30.00000	Averaged		
52 cis-1,3-Dichloropropene	0.51706	0.60850	0.000	-17.68446	30.00000	Averaged		
53 4-Methyl-2-pentanone	0.84075	0.85653	0.000	-1.87764	30.00000	Averaged		
54 Toluene	1.22579	1.34887	0.000	-10.04040	30.00000	Averaged		
55 Octane	0.41504	0.49125	0.000	-18.36203	30.00000	Averaged		
56 trans-1,3-Dichloropropene	0.33654	0.42595	0.000	-26.56678	30.00000	Averaged		
57 1,1,2-Trichloroethane	0.38698	0.45390	0.000	-17.29098	30.00000	Averaged		
58 Tetrachloroethene	0.45442	0.48300	0.000	-6.28867	30.00000	Averaged		
59 2-Hexanone	0.44979	0.47025	0.000	-4.55029	30.00000	Averaged		
60 Dibromochloromethane	0.59087	0.72657	0.000	-22.96639	30.00000	Averaged		
61 1,2-Dibromoethane	0.55724	0.68204	0.000	-22.39676	30.00000	Averaged		
62 Chlorobenzene	0.96948	1.11978	0.000	-15.50355	30.00000	Averaged		
63 Ethylbenzene	1.36560	1.58786	0.000	-16.27587	30.00000	Averaged		
64 m-Xylene (For p-)	1.00863	1.22401	0.000	-21.35362	30.00000	Averaged		
65 Nonane	0.92481	1.12019	0.000	-21.12715	30.00000	Averaged		
66 o-Xylene	1.02336	1.23146	0.000	-20.33496	30.00000	Averaged		
67 Styrene	0.70461	0.94221	0.000	-33.72101	30.00000	Averaged	<-	✓
68 Bromoform	0.53403	0.70226	0.000	-31.50076	30.00000	Averaged	<-	✓
69 a-Pinene	0.85180	1.07424	0.000	-26.11514	30.00000	Averaged		
70 Cumene	1.65923	2.10595	0.000	-26.92338	30.00000	Averaged		
71 Camphene	0.59358	0.73144	0.000	-23.22575	30.00000	Averaged		
72 1,1,2,2-Tetrachloroethane	0.84859	0.92208	0.000	-8.66038	30.00000	Averaged		
73 1,2,3-Trichloropropane	0.25820	0.27961	0.000	-8.29151	30.00000	Averaged		

050722  
STL-Knoxville  
TO-14 Autosampler Log  
'ME'

Sample	Volume	Position	Date	Time
CCV	101ml	15	7/22/200	9:33:23 AM
LCS	101ml	15	7/22/200	10:09:24 AM
BLK	503ml	16	7/22/200	10:51:53 AM
BLKA	503ml	16	7/22/200	11:30:19 AM
HFV05	251ml	3	7/22/200	12:07:29 PM
HFVXV	51ml	4	7/22/200	12:43:22 PM
HFVX1	51ml	6	7/22/200	1:19:20 PM
HFVX6	51ml	7	7/22/200	1:55:11 PM
HFVX7	51ml	8	7/22/200	2:31:10 PM
HFVX8	51ml	9	7/22/200	5:02:58 PM
HFV0A	51ml	10	7/22/200	5:39:23 PM
HFV0D	51ml	11	7/22/200	6:15:59 PM
HFV0DD	51ml	11	7/22/200	6:52:27 PM

ata File: /chem/gcms/mg.i/G072205.b/gccvg22.d  
 eport Date: 22-Jul-2005 09:57

STL Knoxville

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mg.i Injection Date: 22-JUL-2005 09:33  
 Lab File ID: gccvg22.d Init. Cal. Date(s): 01-JUL-2005 01-JUL-2005  
 Analysis Type: AIR Init. Cal. Times: 12:54 16:32  
 Lab Sample ID: GCCV Quant Type: ISTD  
 Method: /chem/gcms/mg.i/G072205.b/TO14.m

COMPOUND	RRF / AMOUNT	RF10	MIN	MAX	CURVE TYPE	
			RRF	%D / %DRIFT	%D / %DRIFT	
\$ 4 1,2-Dichloroethane-d4	0.16189	0.15951	0.000	1.46963	30.00000	Averaged
\$ 5 Toluene-d8	0.96626	0.98255	0.000	-1.68589	30.00000	Averaged
\$ 6 4-Bromofluorobenzene	0.64632	0.55755	0.000	13.73420	30.00000	Averaged
7 Chlorodifluoromethane	3.47060	2.47879	0.000	28.57746	30.00000	Averaged
8 Dichlorodifluoromethane	3.73704	2.74008	0.000	26.67783	30.00000	Averaged
9 1,2-Dichlorotetrafluoroetha	2.86670	2.17921	0.000	23.98184	30.00000	Averaged
10 Chloromethane	0.59116	0.43548	0.000	26.33379	30.00000	Averaged
11 Vinyl Chloride	1.87479	1.33903	0.000	28.57686	30.00000	Averaged
12 n-Butane	4.16059	2.87217	0.000	30.96722	30.00000	Averaged
13 1,3-Butadiene	1.56206	1.21784	0.000	22.03669	30.00000	Averaged
14 Methanol	0.84045	0.65022	0.000	22.63398	30.00000	Averaged
15 Bromomethane	1.54138	1.18145	0.000	23.35152	30.00000	Averaged
16 Chloroethane	0.96859	0.75423	0.000	22.13069	30.00000	Averaged
17 Vinyl Bromide	3.31117	2.51923	0.000	23.91706	30.00000	Averaged
18 Trichlorofluoromethane	3.84505	2.94536	0.000	23.39873	30.00000	Averaged
19 Pentane	0.66348	0.45393	0.000	31.58394	30.00000	Averaged
20 Ethyl Ether	1.64256	1.42715	0.000	13.11410	30.00000	Averaged
21 Acrolein	0.59698	0.48102	0.000	19.42476	30.00000	Averaged
22 1,1-Dichloroethene	1.76544	1.27211	0.000	27.94386	30.00000	Averaged
23 1,1,2-Trichlorotrifluoroeth	3.48059	2.70066	0.000	22.40778	30.00000	Averaged
24 Acetone	0.89685	0.65260	0.000	27.23440	30.00000	Averaged
25 Carbon Disulfide	5.14606	3.63433	0.000	29.37649	30.00000	Averaged
26 Acetonitrile	1.27860	1.07193	0.000	16.16396	30.00000	Averaged
27 3-Chloropropene	1.98672	1.60275	0.000	19.32661	30.00000	Averaged
28 Methylene Chloride	1.57247	1.14947	0.000	26.90017	30.00000	Averaged
29 2,3-Dimethyl butane	5.73089	4.30141	0.000	24.94349	30.00000	Averaged
30 tert-butanol	2.99272	2.55369	0.000	14.66989	30.00000	Averaged
31 Acrylonitrile	1.22058	1.09346	0.000	10.41448	30.00000	Averaged
32 trans-1,2-Dichloroethene	1.69810	1.30671	0.000	23.04866	30.00000	Averaged
33 Methyl-t-Butyl Ether	2.65088	2.32151	0.000	12.42478	30.00000	Averaged
34 Hexane	1.87298	1.38347	0.000	26.13543	30.00000	Averaged
35 1,1-Dichloroethane	3.02922	2.45282	0.000	19.02808	30.00000	Averaged
36 Vinyl Acetate	3.40733	3.17406	0.000	6.84620	30.00000	Averaged
37 cis 1,2-Dichloroethene	1.65646	1.30043	0.000	21.49341	30.00000	Averaged
38 2-Butanone	0.60471	0.54424	0.000	9.99997	30.00000	Averaged

## **APPENDIX B**

### **VALIDATED FORM I's**

**URS Corp/ NYSDEC**  
**Client Sample ID: SG-1**  
**GC/MS Volatiles**

Lot-Sample # H5G200167 - 003

Work Order # HFVXW1AD

Matrix.....: AIR

Date Sampled...: 7/18/05  
 Prep Date.....: 7/21/05  
 Prep Batch #....: 5203121  
 Dilution Factor.: 1.64

Date Received...: 7/20/05  
 Analysis Date...: 7/21/05  
 Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	0.33	ND	1.5
Acetone	5.0	8.2	ND-12 JB	19
Ethylbenzene	ND	0.33	ND	1.4
2-Hexanone	ND	0.82	ND	3.4
Methylene chloride	0.52	0.82	1.8 J	2.8
Benzene	0.16	0.33	0.52 J	1.0
Styrene	ND	0.33	ND	1.4
1,1,2,2-Tetrachloroethane	ND	0.33	ND	2.3
Tetrachloroethene	ND	0.33	ND	2.2
Toluene	0.94	0.33	3.5	1.2
1,1,1-Trichloroethane	ND	0.33	ND	1.8
1,1,2-Trichloroethane	ND	0.33	ND	1.8
Trichloroethene	ND	0.33	ND	1.8
Vinyl chloride	ND	0.33	ND	0.84
o-Xylene	ND	0.33	ND	1.4
m-Xylene & p-Xylene	0.16	0.33	0.70 J	1.4
Bromodichloromethane	ND	0.33	ND	2.2
2-Butanone (MEK)	1.2	0.82	3.4	2.4
4-Methyl-2-pentanone (MIBK)	ND	0.82	ND	3.4
Bromoform	ND	0.33	ND	3.4
Bromomethane	ND	0.33	ND	1.3
Carbon disulfide	ND	0.33	ND	1.0
Carbon tetrachloride	ND	0.33	ND	2.1
Chlorobenzene	ND	0.33	ND	1.5
Dibromochloromethane	ND	0.33	ND	2.8
Chloroethane	ND	0.33	ND	0.87
Chloroform	ND	0.33	ND	1.6
Chloromethane	0.36	0.82	0.75 J	1.7
1,1-Dichloroethane	ND	0.33	ND	1.3
1,2-Dichloroethane	ND	0.33	ND	1.3
1,1-Dichloroethene	ND	0.33	ND	1.3
cis-1,2-Dichloroethene	ND	0.33	ND	1.3
trans-1,2-Dichloroethene	ND	0.33	ND	1.3
1,2-Dichloropropane	ND	0.33	ND	1.5
cis-1,3-Dichloropropene	ND	0.33	ND	1.5

URS Corp/ NYSDEC  
 Client Sample ID: SG-1  
 GC/MS Volatiles

Lot-Sample # H5G200167 - 003

Work Order # HFVXW1AD

Matrix.....: AIR

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
1,2-Dichloroethane-d4	109	70 - 130
Toluene-d8	101	70 - 130
4-Bromofluorobenzene	85	70 - 130

**Qualifiers**

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.  
 J Estimated result. Result is less than RL.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

URS Corp/ NYSDEC  
Client Sample ID: SG-2  
GC/MS Volatiles

Lot-Sample # H5G200167 - 002

Work Order # HFVXV1AD

Matrix.....: AIR

Date Sampled...: 7/18/05  
Prep Date.....: 7/22/05  
Prep Batch #....: 5206164  
Dilution Factor.: 15.5

Date Received...: 7/20/05  
Analysis Date...: 7/22/05  
Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	3.1	ND	14
Acetone	11	78	26	180
Ethylbenzene	1.5	3.1	6.6	13
2-Hexanone	ND	7.8	ND	32
Methylene chloride	ND	7.8	ND	27
Benzene	ND	3.1	ND	9.9
Styrene	ND	3.1	ND	13
1,1,2,2-Tetrachloroethane	ND	3.1	ND	21
Tetrachloroethene	ND	3.1	ND	21
Toluene	6.2	3.1	23	12
1,1,1-Trichloroethane	ND	3.1	ND	17
1,1,2-Trichloroethane	ND	3.1	ND	17
Trichloroethene	ND	3.1	ND	17
Vinyl chloride	ND	3.1	ND	7.9
o-Xylene	1.5	3.1	6.5	13
m-Xylene & p-Xylene	4.6	3.1	20	13
Bromodichloromethane	ND	3.1	ND	21
2-Butanone (MEK)	ND	7.8	ND	23
4-Methyl-2-pentanone (MIBK)	ND	7.8	ND	32
Bromoform	ND	3.1	ND	32
Bromomethane	ND	3.1	ND	12
Carbon disulfide	3.2	3.1	10	9.7
Carbon tetrachloride	ND	3.1	ND	20
Chlorobenzene	ND	3.1	ND	14
Dibromochloromethane	ND	3.1	ND	26
Chloroethane	ND	3.1	ND	8.2
Chloroform	44	3.1	220	15
Chloromethane	ND	7.8	ND	16
1,1-Dichloroethane	ND	3.1	ND	13
1,2-Dichloroethane	ND	3.1	ND	13
1,1-Dichloroethene	ND	3.1	ND	12
cis-1,2-Dichloroethene	ND	3.1	ND	12
trans-1,2-Dichloroethene	ND	3.1	ND	12
1,2-Dichloropropane	ND	3.1	ND	14
cis-1,3-Dichloropropene	ND	3.1	ND	14

URS Corp/ NYSDEC  
 Client Sample ID: SG-2  
 GC/MS Volatiles

Lot-Sample # H5G200167 - 002

Work Order # HFVXV1AD

Matrix.....: AIR

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
1,2-Dichloroethane-d4	120	70 - 130
Toluene-d8	92	70 - 130
4-Bromofluorobenzene	83	70 - 130

**Qualifiers**

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.  
 J Estimated result. Result is less than RL.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

**URS Corp/ NYSDEC**  
**Client Sample ID: SG-3**  
**GC/MS Volatiles**

Lot-Sample # H5G200167 - 001

Work Order # HFVXP1AD

Matrix.....: AIR

Date Sampled...: 7/18/05  
 Prep Date.....: 7/21/05  
 Prep Batch #.....: 5203121  
 Dilution Factor.: 8739.4

Date Received...: 7/20/05  
 Analysis Date...: 7/21/05  
 Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	1700	ND <i>JS</i>	7900
Acetone	ND	44000	ND	100000
Ethylbenzene	ND	1700	ND	7600
2-Hexanone	ND	4400	ND	18000
Methylene chloride	ND	4400	ND	15000
<b>Benzene</b>	<b>7100</b>	<b>1700</b>	<b>23000</b>	<b>5600</b>
Styrene	ND	1700	ND <i>JS</i>	7400
1,1,2,2-Tetrachloroethane	ND	1700	ND	12000
Tetrachloroethene	ND	1700	ND	12000
Toluene	ND	1700	ND	6600
1,1,1-Trichloroethane	ND	1700	ND	9500
1,1,2-Trichloroethane	ND	1700	ND	9500
Trichloroethene	ND	1700	ND	9400
Vinyl chloride	ND	1700	ND	4500
o-Xylene	ND	1700	ND	7600
<b>m-Xylene &amp; p-Xylene</b>	<b>740</b>	<b>1700</b>	<b>3200 J</b>	<b>7600</b>
Bromodichloromethane	ND	1700	ND	12000
2-Butanone (MEK)	ND	4400	ND	13000
4-Methyl-2-pentanone (MIBK)	ND	4400	ND	18000
Bromoform	ND	1700	ND <i>JS</i>	18000
Bromomethane	ND	1700	ND	6800
Carbon disulfide	ND	1700	ND	5400
Carbon tetrachloride	ND	1700	ND	11000
Chlorobenzene	ND	1700	ND	8000
Dibromochloromethane	ND	1700	ND	15000
Chloroethane	ND	1700	ND	4600
Chloroform	ND	1700	ND	8500
Chloromethane	ND	4400	ND	9000
1,1-Dichloroethane	ND	1700	ND	7100
1,2-Dichloroethane	ND	1700	ND	7100
1,1-Dichloroethene	ND	1700	ND	6900
cis-1,2-Dichloroethene	ND	1700	ND	6900
trans-1,2-Dichloroethene	ND	1700	ND	6900
1,2-Dichloropropane	ND	1700	ND	8100
cis-1,3-Dichloropropene	ND	1700	ND	7900

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 6/18/05  
 5/10/05

**URS Corp/ NYSDEC**  
**Client Sample ID: SG-3**  
**GC/MS Volatiles**

**Lot-Sample #** H5G200167 - 001

**Work Order #** HFVXP1AD

**Matrix.....:** AIR

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>LABORATORY CONTROL LIMITS (%)</u>
1,2-Dichloroethane-d4	98	70 - 130
Toluene-d8	103	70 - 130
4-Bromofluorobenzene	80	70 - 130

**Qualifiers**

J Estimated result. Result is less than RL.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

URS Corp/ NYSDEC  
Client Sample ID: SG-4  
GC/MS Volatiles

Lot-Sample # H5G200167 - 012

Work Order # HFV0F1AD

Matrix.....: AIR

Date Sampled...: 7/18/05  
Prep Date.....: 7/21/05  
Prep Batch #.....: 5203061  
Dilution Factor.: 18.4

Date Received...: 7/20/05  
Analysis Date...: 7/22/05  
Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	3.7	ND	17
Acetone	36	92	85 JB	220
Ethylbenzene	1.8	3.7	8.0 J	16
2-Hexanone	ND	9.2	ND	38
Methylene chloride	ND	9.2	ND	32
Benzene	ND	3.7	ND	12
Styrene	2.0	3.7	8.3 J	16
1,1,2,2-Tetrachloroethane	ND	3.7	ND	25
Tetrachloroethene	ND	3.7	ND	25
Toluene	5.5	3.7	21	14
1,1,1-Trichloroethane	ND	3.7	ND	20
1,1,2-Trichloroethane	ND	3.7	ND	20
Trichloroethene	ND	3.7	ND	20
Vinyl chloride	ND	3.7	ND	9.4
o-Xylene	3.1	3.7	13 J	16
m-Xylene & p-Xylene	7.8	3.7	34	16
Bromodichloromethane	ND	3.7	ND	25
2-Butanone (MEK)	ND	9.2	ND	27
4-Methyl-2-pentanone (MIBK)	ND	9.2	ND	38
Bromoform	ND	3.7	ND	38
Bromomethane	ND	3.7	ND	14
Carbon disulfide	2.7	3.7	8.4 J	11
Carbon tetrachloride	ND	3.7	ND	23
Chlorobenzene	ND	3.7	ND	17
Dibromochloromethane	ND	3.7	ND	31
Chloroethane	ND	3.7	ND	9.7
Chloroform	14	3.7	71	18
Chloromethane	ND	9.2	ND	19
1,1-Dichloroethane	ND	3.7	ND	15
1,2-Dichloroethane	ND	3.7	ND	15
1,1-Dichloroethene	ND	3.7	ND	15
cis-1,2-Dichloroethene	ND	3.7	ND	15
trans-1,2-Dichloroethene	ND	3.7	ND	15
1,2-Dichloropropane	ND	3.7	ND	17
cis-1,3-Dichloropropene	ND	3.7	ND	17

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JUL 21/05

**URS Corp/ NYSDEC**  
**Client Sample ID: SG-4**  
**GC/MS Volatiles**

**Lot-Sample #** H5G200167 - 012

**Work Order #** HFV0F1AD

**Matrix.....:** AIR

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>LABORATORY CONTROL LIMITS (%)</u>
1,2-Dichloroethane-d4	125	70 - 130
Toluene-d8	104	70 - 130
4-Bromofluorobenzene	116	70 - 130

**Qualifiers**

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.  
 J Estimated result. Result is less than RL.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

**URS Corp/ NYSDEC**  
**Client Sample ID: SG-5**  
**GC/MS Volatiles**

Lot-Sample # H5G200167 - 013

Work Order # HFV0H1AD

Matrix.....: AIR

Date Sampled...: 7/18/05  
 Prep Date.....: 7/21/05  
 Prep Batch #....: 5203061  
 Dilution Factor.: 15.9

Date Received...: 7/20/05  
 Analysis Date...: 7/22/05  
 Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	3.2	ND	14
Acetone	23	80	54	190
Ethylbenzene	1.3	3.2	5.6	14
2-Hexanone	ND	8.0	ND	33
Methylene chloride	ND	8.0	ND	28
Benzene	1.6	3.2	5.1	10
Styrene	ND	3.2	ND	14
1,1,2,2-Tetrachloroethane	ND	3.2	ND	22
Tetrachloroethene	ND	3.2	ND	22
Toluene	5.6	3.2	21	12
1,1,1-Trichloroethane	ND	3.2	ND	17
1,1,2-Trichloroethane	ND	3.2	ND	17
Trichloroethene	ND	3.2	ND	17
Vinyl chloride	ND	3.2	ND	8.1
o-Xylene	1.6	3.2	6.9	14
m-Xylene & p-Xylene	4.6	3.2	20	14
Bromodichloromethane	ND	3.2	ND	21
2-Butanone (MEK)	ND	8.0	ND	23
4-Methyl-2-pentanone (MIBK)	ND	8.0	ND	33
Bromoform	ND	3.2	ND	33
Bromomethane	ND	3.2	ND	12
Carbon disulfide	4.9	3.2	15	9.9
Carbon tetrachloride	ND	3.2	ND	20
Chlorobenzene	ND	3.2	ND	15
Dibromochloromethane	ND	3.2	ND	27
Chloroethane	ND	3.2	ND	8.4
Chloroform	ND	3.2	ND	16
Chloromethane	ND	8.0	ND	16
1,1-Dichloroethane	ND	3.2	ND	13
1,2-Dichloroethane	ND	3.2	ND	13
1,1-Dichloroethene	ND	3.2	ND	13
cis-1,2-Dichloroethene	ND	3.2	ND	13
trans-1,2-Dichloroethene	ND	3.2	ND	13
1,2-Dichloropropane	ND	3.2	ND	15
cis-1,3-Dichloropropene	ND	3.2	ND	14

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 OK  
 8/15/05

**URS Corp/ NYSDEC**  
**Client Sample ID: SG-5**  
**GC/MS Volatiles**

**Lot-Sample #** H5G200167 - 013      **Work Order #** HFV0H1AD      **Matrix.....:** AIR

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>LABORATORY CONTROL LIMITS (%)</u>
1,2-Dichloroethane-d4	124	70 - 130
Toluene-d8	105	70 - 130
4-Bromofluorobenzene	112	70 - 130

**Qualifiers**

- B                      Method blank contamination. The associated method blank contains the target analyte at a reportable level.  
J                      Estimated result. Result is less than RL.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

URS Corp/ NYSDEC  
Client Sample ID: SG-6  
GC/MS Volatiles

Lot-Sample # H5G200167 - 014

Work Order # HFV001AD

Matrix.....: AIR

Date Sampled...: 7/18/05  
Prep Date.....: 7/21/05  
Prep Batch #.....: 5203061  
Dilution Factor.: 1.78

Date Received...: 7/20/05  
Analysis Date...: 7/21/05  
Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	0.36	ND	1.6
Acetone	8.5	8.9	20 J	21
Ethylbenzene	0.46	0.36	2.0	1.5
2-Hexanone	ND	0.89	ND	3.6
Methylene chloride	0.89	0.89	3.1	3.1
Benzene	0.28	0.36	0.91 J	1.1
Styrene	0.27	0.36	1.1 J	1.5
1,1,2,2-Tetrachloroethane	ND	0.36	ND	2.4
Tetrachloroethene	0.48	0.36	3.2	2.4
Toluene	1.6	0.36	6.2	1.3
1,1,1-Trichloroethane	ND	0.36	ND	1.9
1,1,2-Trichloroethane	ND	0.36	ND	1.9
Trichloroethene	ND	0.36	ND	1.9
Vinyl chloride	ND	0.36	ND	0.91
o-Xylene	0.64	0.36	2.8	1.5
m-Xylene & p-Xylene	1.5	0.36	6.4	1.5
Bromodichloromethane	ND	0.36	ND	2.4
2-Butanone (MEK)	0.87	0.89	2.6 J	2.6
4-Methyl-2-pentanone (MIBK)	0.56	0.89	2.3 J	3.6
Bromoform	ND	0.36	ND	3.7
Bromomethane	ND	0.36	ND	1.4
Carbon disulfide	0.43	0.36	1.3	1.1
Carbon tetrachloride	ND	0.36	ND	2.2
Chlorobenzene	ND	0.36	ND	1.6
Dibromochloromethane	ND	0.36	ND	3.0
Chloroethane	ND	0.36	ND	0.94
Chloroform	ND	0.36	ND	1.7
Chloromethane	ND	0.89	ND	1.8
1,1-Dichloroethane	ND	0.36	ND	1.4
1,2-Dichloroethane	ND	0.36	ND	1.4
1,1-Dichloroethene	ND	0.36	ND	1.4
cis-1,2-Dichloroethene	ND	0.36	ND	1.4
trans-1,2-Dichloroethene	ND	0.36	ND	1.4
1,2-Dichloropropane	ND	0.36	ND	1.6
cis-1,3-Dichloropropene	ND	0.36	ND	1.6

*Handwritten signature/initials*  
9/14/05

**URS Corp/ NYSDEC**  
**Client Sample ID: SG-6**  
**GC/MS Volatiles**

**Lot-Sample #** H5G200167 - 014

**Work Order #** HFV0Q1AD

**Matrix.....:** AIR

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>LABORATORY CONTROL LIMITS (%)</u>
1,2-Dichloroethane-d4	123	70 - 130
Toluene-d8	104	70 - 130
4-Bromofluorobenzene	117	70 - 130

**Qualifiers**

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.  
 J Estimated result. Result is less than RL.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

URS Corp/ NYSDEC  
Client Sample ID: FD-2  
GC/MS Volatiles

(SG-6)

Lot-Sample # H5G200167 - 016

Work Order # HFV051AD

Matrix.....: AIR

Date Sampled...: 7/18/05  
Prep Date.....: 7/25/05  
Prep Batch #.....: 5206288  
Dilution Factor.: 18.2

Date Received...: 7/20/05  
Analysis Date...: 7/25/05  
Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	3.6	ND	17
Acetone	6.3 ND	91	15 JB	220
Ethylbenzene	ND	3.6	ND	16
2-Hexanone	ND	9.1	ND	37
Methylene chloride	ND	9.1	ND	32
Benzene	ND	3.6	ND	12
Styrene	ND	3.6	ND	16
1,1,2,2-Tetrachloroethane	ND	3.6	ND	25
Tetrachloroethene	ND	3.6	ND	25
Toluene	1.7	3.6	6.2 J	14
1,1,1-Trichloroethane	ND	3.6	ND	20
1,1,2-Trichloroethane	ND	3.6	ND	20
Trichloroethene	ND	3.6	ND	20
Vinyl chloride	ND	3.6	ND	9.3
o-Xylene	ND	3.6	ND	16
m-Xylene & p-Xylene	ND	3.6	ND	16
Bromodichloromethane	ND	3.6	ND	24
2-Butanone (MEK)	ND	9.1	ND	27
4-Methyl-2-pentanone (MIBK)	ND	9.1	ND	37
Bromoform	ND	3.6	ND	38
Bromomethane	ND	3.6	ND	14
Carbon disulfide	ND	3.6	ND	11
Carbon tetrachloride	ND	3.6	ND	23
Chlorobenzene	ND	3.6	ND	17
Dibromochloromethane	ND	3.6	ND	31
Chloroethane	ND	3.6	ND	9.6
Chloroform	ND	3.6	ND	18
Chloromethane	ND	9.1	ND	19
1,1-Dichloroethane	ND	3.6	ND	15
1,2-Dichloroethane	ND	3.6	ND	15
1,1-Dichloroethene	ND	3.6	ND	14
cis-1,2-Dichloroethene	ND	3.6	ND	14
trans-1,2-Dichloroethene	ND	3.6	ND	14
1,2-Dichloropropane	ND	3.6	ND	17
cis-1,3-Dichloropropene	ND	3.6	ND	17

9/14/05  
9/15/05

**URS Corp/ NYSDEC**  
**Client Sample ID: FD-2**  
**GC/MS Volatiles**

**Lot-Sample #** H5G200167 - 016

**Work Order #** HFV051AD

**Matrix.....:** AIR

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>LABORATORY CONTROL LIMITS (%)</u>
1,2-Dichloroethane-d4	113	70 - 130
Toluene-d8	94	70 - 130
4-Bromofluorobenzene	81	70 - 130

**Qualifiers**

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.  
J Estimated result. Result is less than RL.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

URS Corp/ NYSDEC  
Client Sample ID: SG-7  
GC/MS Volatiles

Lot-Sample # H5G200167 - 011

Work Order # HFV0E1AD

Matrix.....: AIR

Date Sampled...: 7/18/05  
Prep Date.....: 7/21/05  
Prep Batch #.....: 5203061  
Dilution Factor.: 1.93

Date Received...: 7/20/05  
Analysis Date...: 7/22/05  
Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	0.39	ND	1.8
Acetone	ND	9.6	ND	23
Ethylbenzene	0.38	0.39	1.6	1.7
2-Hexanone	ND	0.96	ND	4.0
Methylene chloride	ND	0.96	ND	3.4
Benzene	ND	0.39	ND	1.2
Styrene	ND	0.39	ND	1.6
1,1,2,2-Tetrachloroethane	ND	0.39	ND	2.6
Tetrachloroethene	0.56	0.39	3.8	2.6
Toluene	1.6	0.39	5.9	1.5
1,1,1-Trichloroethane	ND	0.39	ND	2.1
1,1,2-Trichloroethane	ND	0.39	ND	2.1
Trichloroethene	ND	0.39	ND	2.1
Vinyl chloride	ND	0.39	ND	0.99
o-Xylene	0.45	0.39	2.0	1.7
m-Xylene & p-Xylene	1.2	0.39	5.2	1.7
Bromodichloromethane	ND	0.39	ND	2.6
2-Butanone (MEK)	ND	0.96	ND	2.8
4-Methyl-2-pentanone (MIBK)	ND	0.96	ND	4.0
Bromoform	ND	0.39	ND	4.0
Bromomethane	ND	0.39	ND	1.5
Carbon disulfide	ND	0.39	ND	1.2
Carbon tetrachloride	ND	0.39	ND	2.4
Chlorobenzene	ND	0.39	ND	1.8
Dibromochloromethane	ND	0.39	ND	3.3
Chloroethane	ND	0.39	ND	1.0
Chloroform	ND	0.39	ND	1.9
Chloromethane	ND	0.96	ND	2.0
1,1-Dichloroethane	ND	0.39	ND	1.6
1,2-Dichloroethane	ND	0.39	ND	1.6
1,1-Dichloroethene	ND	0.39	ND	1.5
cis-1,2-Dichloroethene	ND	0.39	ND	1.5
trans-1,2-Dichloroethene	ND	0.39	ND	1.5
1,2-Dichloropropane	ND	0.39	ND	1.8
cis-1,3-Dichloropropene	ND	0.39	ND	1.8

URS Corp/ NYSDEC  
Client Sample ID: SG-7  
GC/MS Volatiles

Lot-Sample # H5G200167 - 011

Work Order # HFV0E1AD

Matrix.....: AIR

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
1,2-Dichloroethane-d4	148 *	70 - 130
Toluene-d8	113	70 - 130
4-Bromofluorobenzene	108	70 - 130

Qualifiers

\* Surrogate recovery is outside stated control limits.  
J Estimated result. Result is less than RL.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

URS Corp/ NYSDEC  
Client Sample ID: SG-7  
GC/MS Volatiles

Lot-Sample # H5G200167 - 011

Work Order # HFV0E2AD

Matrix.....: AIR

Date Sampled...: 7/18/05  
Prep Date.....: 7/21/05  
Prep Batch #....: 5203061  
Dilution Factor.: 19.3

Date Received...: 7/20/05  
Analysis Date...: 7/22/05  
Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	3.9	ND	18
Acetone	13	96	31	230
Ethylbenzene	ND	3.9	ND	17
2-Hexanone	ND	9.6	ND	40
Methylene chloride	ND	9.6	ND	34
Benzene	ND	3.9	ND	12
Styrene	ND	3.9	ND	16
1,1,2,2-Tetrachloroethane	ND	3.9	ND	26
Tetrachloroethene	ND	3.9	ND	26
Toluene	2.3	3.9	8.6	15
1,1,1-Trichloroethane	ND	3.9	ND	21
1,1,2-Trichloroethane	ND	3.9	ND	21
Trichloroethene	ND	3.9	ND	21
Vinyl chloride	ND	3.9	ND	9.9
o-Xylene	ND	3.9	ND	17
m-Xylene & p-Xylene	1.5	3.9	6.7	17
Bromodichloromethane	ND	3.9	ND	26
2-Butanone (MEK)	ND	9.6	ND	28
4-Methyl-2-pentanone (MIBK)	ND	9.6	ND	40
Bromoform	ND	3.9	ND	40
Bromomethane	ND	3.9	ND	15
Carbon disulfide	2.6	3.9	8.1	12
Carbon tetrachloride	ND	3.9	ND	24
Chlorobenzene	ND	3.9	ND	18
Dibromochloromethane	ND	3.9	ND	33
Chloroethane	ND	3.9	ND	10
Chloroform	ND	3.9	ND	19
Chloromethane	ND	9.6	ND	20
1,1-Dichloroethane	ND	3.9	ND	16
1,2-Dichloroethane	ND	3.9	ND	16
1,1-Dichloroethene	ND	3.9	ND	15
cis-1,2-Dichloroethene	ND	3.9	ND	15
trans-1,2-Dichloroethene	ND	3.9	ND	15
1,2-Dichloropropane	ND	3.9	ND	18
cis-1,3-Dichloropropene	ND	3.9	ND	18

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URS Corp/ NYSDEC  
 Client Sample ID: SG-7  
 GC/MS Volatiles

Lot-Sample # H5G200167 - 011

Work Order # HFV0E2AD

Matrix.....: AIR

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
1,2-Dichloroethane-d4	125	70 - 130
Toluene-d8	102	70 - 130
4-Bromofluorobenzene	116	70 - 130

Qualifiers

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.  
 J Estimated result. Result is less than RL.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

URS Corp/ NYSDEC  
Client Sample ID: SG-8  
GC/MS Volatiles

Lot-Sample # H5G200167 - 009

Work Order # HFV0A1AD

Matrix.....: AIR

Date Sampled...: 7/18/05  
Prep Date.....: 7/25/05  
Prep Batch #.....: 5206288  
Dilution Factor.: 18

Date Received...: 7/20/05  
Analysis Date...: 7/25/05  
Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	3.6	ND	16
Acetone	31	90	73	210
Ethylbenzene	3.3	3.6	14	16
2-Hexanone	ND	9.0	ND	37
Methylene chloride	ND	9.0	ND	31
Benzene	7.5	3.6	24	12
Styrene	ND	3.6	ND	15
1,1,2,2-Tetrachloroethane	ND	3.6	ND	25
Tetrachloroethene	ND	3.6	ND	24
Toluene	36	3.6	140	14
1,1,1-Trichloroethane	ND	3.6	ND	20
1,1,2-Trichloroethane	ND	3.6	ND	20
Trichloroethene	ND	3.6	ND	19
Vinyl chloride	ND	3.6	ND	9.2
o-Xylene	3.2	3.6	14	16
m-Xylene & p-Xylene	9.3	3.6	41	16
Bromodichloromethane	ND	3.6	ND	24
2-Butanone (MEK)	ND	9.0	ND	27
4-Methyl-2-pentanone (MIBK)	ND	9.0	ND	37
Bromoform	ND	3.6	ND	37
Bromomethane	ND	3.6	ND	14
Carbon disulfide	22	3.6	68	11
Carbon tetrachloride	ND	3.6	ND	23
Chlorobenzene	ND	3.6	ND	17
Dibromochloromethane	ND	3.6	ND	31
Chloroethane	ND	3.6	ND	9.5
Chloroform	ND	3.6	ND	18
Chloromethane	ND	9.0	ND	19
1,1-Dichloroethane	ND	3.6	ND	15
1,2-Dichloroethane	ND	3.6	ND	15
1,1-Dichloroethene	ND	3.6	ND	14
cis-1,2-Dichloroethene	ND	3.6	ND	14
trans-1,2-Dichloroethene	ND	3.6	ND	14
1,2-Dichloropropane	ND	3.6	ND	17
cis-1,3-Dichloropropene	ND	3.6	ND	16

*Handwritten:*  
OK  
7/25/05

**URS Corp/ NYSDEC**  
**Client Sample ID: SG-8**  
**GC/MS Volatiles**

**Lot-Sample #** H5G200167 - 009

**Work Order #** HFV0A1AD

**Matrix.....:** AIR

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>LABORATORY CONTROL LIMITS (%)</u>
1,2-Dichloroethane-d4	115	70 - 130
Toluene-d8	93	70 - 130
4-Bromofluorobenzene	80	70 - 130

**Qualifiers**

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.  
 J Estimated result. Result is less than RL.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

**URS Corp/ NYSDEC**  
**Client Sample ID: SG-9**  
**GC/MS Volatiles**

Lot-Sample # H5G200167 - 010

Work Order # HFV0D1AD

Matrix.....: AIR

Date Sampled...: 7/18/05  
 Prep Date.....: 7/25/05  
 Prep Batch #.....: 5206288  
 Dilution Factor.: 17

Date Received...: 7/20/05  
 Analysis Date...: 7/25/05  
 Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	3.4	ND	15
Acetone	6.1	85	14	200
Ethylbenzene	ND	3.4	ND	15
2-Hexanone	ND	8.5	ND	35
Methylene chloride	ND	8.5	ND	30
Benzene	ND	3.4	ND	11
Styrene	ND	3.4	ND	14
1,1,2,2-Tetrachloroethane	ND	3.4	ND	23
Tetrachloroethene	5.2	3.4	35	23
Toluene	3.4	3.4	13	13
1,1,1-Trichloroethane	ND	3.4	ND	19
1,1,2-Trichloroethane	ND	3.4	ND	19
Trichloroethene	2.3	3.4	13	18
Vinyl chloride	ND	3.4	ND	8.7
o-Xylene	ND	3.4	ND	15
m-Xylene & p-Xylene	1.8	3.4	8.0	15
Bromodichloromethane	ND	3.4	ND	23
2-Butanone (MEK)	ND	8.5	ND	25
4-Methyl-2-pentanone (MIBK)	ND	8.5	ND	35
Bromoform	ND	3.4	ND	35
Bromomethane	ND	3.4	ND	13
Carbon disulfide	1.5	3.4	4.6	11
Carbon tetrachloride	ND	3.4	ND	21
Chlorobenzene	ND	3.4	ND	16
Dibromochloromethane	ND	3.4	ND	29
Chloroethane	ND	3.4	ND	9.0
Chloroform	8.0	3.4	39	17
Chloromethane	ND	8.5	ND	18
1,1-Dichloroethane	ND	3.4	ND	14
1,2-Dichloroethane	ND	3.4	ND	14
1,1-Dichloroethene	ND	3.4	ND	13
cis-1,2-Dichloroethene	ND	3.4	ND	13
trans-1,2-Dichloroethene	ND	3.4	ND	13
1,2-Dichloropropane	ND	3.4	ND	16
cis-1,3-Dichloropropene	ND	3.4	ND	15

*Handwritten:*  
 OK  
 8/18/05

**URS Corp/ NYSDEC**  
**Client Sample ID: SG-9**  
**GC/MS Volatiles**

**Lot-Sample #** H5G200167 - 010

**Work Order #** HFV0D1AD

**Matrix.....:** AIR

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>LABORATORY CONTROL LIMITS (%)</u>
1,2-Dichloroethane-d4	116	70 - 130
Toluene-d8	95	70 - 130
4-Bromofluorobenzene	82	70 - 130

**Qualifiers**

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.  
 J Estimated result. Result is less than RL.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

URS Corp/ NYSDEC  
Client Sample ID: SG-10  
GC/MS Volatiles

Lot-Sample # H5G200167 - 008

Work Order # HFVX81AD

Matrix.....: AIR

Date Sampled...: 7/18/05  
Prep Date.....: 7/25/05  
Prep Batch #....: 5206288  
Dilution Factor.: 19.1

Date Received...: 7/20/05  
Analysis Date...: 7/25/05  
Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	3.8	ND	17
Acetone	7.5 (X)	96	18 (X)	230
Ethylbenzene	ND	3.8	ND	17
2-Hexanone	ND	9.6	ND	39
Methylene chloride	4.9	9.6	17 J	33
Benzene	ND	3.8	ND	12
Styrene	ND	3.8	ND	16
1,1,2,2-Tetrachloroethane	ND	3.8	ND	26
Tetrachloroethene	ND	3.8	ND	26
Toluene	2.0	3.8	7.4 J	14
1,1,1-Trichloroethane	ND	3.8	ND	21
1,1,2-Trichloroethane	ND	3.8	ND	21
Trichloroethene	ND	3.8	ND	21
Vinyl chloride	ND	3.8	ND	9.8
o-Xylene	ND	3.8	ND	17
m-Xylene & p-Xylene	2.1	3.8	9.3 J	17
Bromodichloromethane	ND	3.8	ND	26
2-Butanone (MEK)	ND	9.6	ND	28
4-Methyl-2-pentanone (MIBK)	ND	9.6	ND	39
Bromoform	ND	3.8	ND	39
Bromomethane	ND	3.8	ND	15
Carbon disulfide	3.6	3.8	11 J	12
Carbon tetrachloride	ND	3.8	ND	24
Chlorobenzene	ND	3.8	ND	18
Dibromochloromethane	ND	3.8	ND	33
Chloroethane	ND	3.8	ND	10
Chloroform	1.8	3.8	9.0 J	19
Chloromethane	ND	9.6	ND	20
1,1-Dichloroethane	ND	3.8	ND	15
1,2-Dichloroethane	ND	3.8	ND	15
1,1-Dichloroethene	ND	3.8	ND	15
cis-1,2-Dichloroethene	ND	3.8	ND	15
trans-1,2-Dichloroethene	ND	3.8	ND	15
1,2-Dichloropropane	ND	3.8	ND	18
cis-1,3-Dichloropropene	ND	3.8	ND	17

URS Corp/ NYSDEC  
Client Sample ID: SG-10  
GC/MS Volatiles

Lot-Sample # H5G200167 - 008

Work Order # HFVX81AD

Matrix.....: AIR

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>LABORATORY CONTROL LIMITS (%)</u>
1,2-Dichloroethane-d4	111	70 - 130
Toluene-d8	94	70 - 130
4-Bromofluorobenzene	82	70 - 130

Qualifiers

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.  
J Estimated result. Result is less than RL.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

URS Corp/ NYSDEC  
 Client Sample ID: FD-1 (SG-10)  
 GC/MS Volatiles

Lot-Sample # H5G200167 - 015

Work Order # HFV001AD

Matrix.....: AIR

Date Sampled...: 7/18/05  
 Prep Date.....: 7/21/05  
 Prep Batch #....: 5203061  
 Dilution Factor.: 1.81

Date Received...: 7/20/05  
 Analysis Date...: 7/21/05  
 Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	NR		NR	
Acetone	NR		NR	
Ethylbenzene	NR		NR	
2-Hexanone	NR		NR	
Methylene chloride	NR		NR	
Benzene	NR		NR	
Styrene	NR		NR	
1,1,2,2-Tetrachloroethane	NR		NR	
Tetrachloroethene	NR		NR	
Toluene	NR		NR	
1,1,1-Trichloroethane	NR		NR	
1,1,2-Trichloroethane	NR		NR	
Trichloroethene	NR		NR	
Vinyl chloride	NR		NR	
o-Xylene	NR		NR	
m-Xylene & p-Xylene	NR		NR	
Bromodichloromethane	NR		NR	
2-Butanone (MEK)	NR		NR	
4-Methyl-2-pentanone (MIBK)	NR		NR	
Bromoform	NR		NR	
Bromomethane	NR		NR	
Carbon disulfide	NR		NR	
Carbon tetrachloride	NR		NR	
Chlorobenzene	NR		NR	
Dibromochloromethane	NR		NR	
Chloroethane	NR		NR	
Chloroform	NR		NR	
Chloromethane	NR		NR	
1,1-Dichloroethane	NR		NR	
1,2-Dichloroethane	NR		NR	
1,1-Dichloroethene	NR		NR	
cis-1,2-Dichloroethene	NR		NR	
trans-1,2-Dichloroethene	NR		NR	
1,2-Dichloropropane	NR		NR	
cis-1,3-Dichloropropene	NR		NR	

URS Corp/ NYSDEC  
 Client Sample ID: FD-1  
 GC/MS Volatiles

Lot-Sample # H5G200167 - 015

Work Order # HFV001AD

Matrix.....: AIR

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
1,2-Dichloroethane-d4	0.0 *	70 - 130
Toluene-d8	58 *	70 - 130
4-Bromofluorobenzene	102	70 - 130

**Qualifiers**

\* Surrogate recovery is outside stated control limits.

NR Not reportable.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

URS Corp/ NYSDEC  
 Client Sample ID: FD-1 (SG-10)  
 GC/MS Volatiles

Lot-Sample # H5G200167 - 015

Work Order # HFV002AD

Matrix.....: AIR

Date Sampled...: 7/18/05  
 Prep Date.....: 7/21/05  
 Prep Batch #.....: 5203061  
 Dilution Factor.: 18.1

Date Received...: 7/20/05  
 Analysis Date...: 7/22/05  
 Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	3.6	ND	16
Acetone	31	90	74	210
Ethylbenzene	ND	3.6	ND	16
2-Hexanone	ND	9.0	ND	37
Methylene chloride	ND	9.0	ND	31
Benzene	ND	3.6	ND	12
Styrene	ND	3.6	ND	15
1,1,2,2-Tetrachloroethane	ND	3.6	ND	25
Tetrachloroethene	4.1	3.6	28	25
Toluene	2.9	3.6	11	14
1,1,1-Trichloroethane	ND	3.6	ND	20
1,1,2-Trichloroethane	ND	3.6	ND	20
Trichloroethene	ND	3.6	ND	19
Vinyl chloride	ND	3.6	ND	9.3
o-Xylene	1.6	3.6	6.8	16
m-Xylene & p-Xylene	4.3	3.6	19	16
Bromodichloromethane	ND	3.6	ND	24
2-Butanone (MEK)	ND	9.0	ND	27
4-Methyl-2-pentanone (MIBK)	ND	9.0	ND	37
Bromoform	ND	3.6	ND	37
Bromomethane	ND	3.6	ND	14
Carbon disulfide	5.0	3.6	16	11
Carbon tetrachloride	ND	3.6	ND	23
Chlorobenzene	ND	3.6	ND	17
Dibromochloromethane	ND	3.6	ND	31
Chloroethane	ND	3.6	ND	9.6
Chloroform	2.9	3.6	14	18
Chloromethane	ND	9.0	ND	19
1,1-Dichloroethane	ND	3.6	ND	15
1,2-Dichloroethane	ND	3.6	ND	15
1,1-Dichloroethene	ND	3.6	ND	14
cis-1,2-Dichloroethene	ND	3.6	ND	14
trans-1,2-Dichloroethene	ND	3.6	ND	14
1,2-Dichloropropane	ND	3.6	ND	17
cis-1,3-Dichloropropene	ND	3.6	ND	16

URS Corp/ NYSDEC  
Client Sample ID: FD-1  
GC/MS Volatiles

Lot-Sample # H5G200167 - 015

Work Order # HFV002AD

Matrix.....: AIR

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
1,2-Dichloroethane-d4	122	70 - 130
Toluene-d8	105	70 - 130
4-Bromofluorobenzene	116	70 - 130

**Qualifiers**

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.  
J Estimated result. Result is less than RL.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

**URS Corp/ NYSDEC**  
**Client Sample ID: SG-11**  
**GC/MS Volatiles**

**Lot-Sample #** H5G200167 - 007

**Work Order #** HFVX71AD

**Matrix.....:** AIR

**Date Sampled...:** 7/18/05  
**Prep Date.....:** 7/25/05  
**Prep Batch #.....:** 5206288  
**Dilution Factor..:** 17.7

**Date Received...:** 7/20/05  
**Analysis Date...:** 7/25/05  
**Method.....:** TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	3.5	ND	16
Acetone	<del>13</del> ND	88	<del>32</del> ND	210
Ethylbenzene	1.7	3.5	7.6 J	15
2-Hexanone	ND	8.8	ND	36
Methylene chloride	7.3	8.8	25 J	31
Benzene	1.5	3.5	4.9 J	11
Styrene	ND	3.5	ND	15
1,1,2,2-Tetrachloroethane	ND	3.5	ND	24
Tetrachloroethene	ND	3.5	ND	24
Toluene	4.9	3.5	19	13
1,1,1-Trichloroethane	ND	3.5	ND	19
1,1,2-Trichloroethane	ND	3.5	ND	19
Trichloroethene	ND	3.5	ND	19
Vinyl chloride	ND	3.5	ND	9.0
o-Xylene	1.9	3.5	8.2 J	15
m-Xylene & p-Xylene	5.9	3.5	26	15
Bromodichloromethane	ND	3.5	ND	24
2-Butanone (MEK)	ND	8.8	ND	26
4-Methyl-2-pentanone (MIBK)	ND	8.8	ND	36
Bromoform	ND	3.5	ND	37
Bromomethane	ND	3.5	ND	14
Carbon disulfide	3.1	3.5	9.5 J	11
Carbon tetrachloride	ND	3.5	ND	22
Chlorobenzene	ND	3.5	ND	16
Dibromochloromethane	ND	3.5	ND	30
Chloroethane	ND	3.5	ND	9.3
Chloroform	ND	3.5	ND	17
Chloromethane	ND	8.8	ND	18
1,1-Dichloroethane	ND	3.5	ND	14
1,2-Dichloroethane	ND	3.5	ND	14
1,1-Dichloroethene	ND	3.5	ND	14
cis-1,2-Dichloroethene	ND	3.5	ND	14
trans-1,2-Dichloroethene	ND	3.5	ND	14
1,2-Dichloropropane	ND	3.5	ND	16
cis-1,3-Dichloropropene	ND	3.5	ND	16

*Handwritten:* 9/15/05

**URS Corp/ NYSDEC**  
**Client Sample ID: SG-11**  
**GC/MS Volatiles**

**Lot-Sample #** H5G200167 - 007

**Work Order #** HFVX71AD

**Matrix.....:** AIR

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>LABORATORY CONTROL LIMITS (%)</u>
1,2-Dichloroethane-d4	112	70 - 130
Toluene-d8	96	70 - 130
4-Bromofluorobenzene	83	70 - 130

**Qualifiers**

**B** Method blank contamination. The associated method blank contains the target analyte at a reportable level.  
**J** Estimated result. Result is less than RL.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

URS Corp/ NYSDEC  
Client Sample ID: SG-12  
GC/MS Volatiles

Lot-Sample # H5G200167 - 005

Work Order # HFVX41AD

Matrix.....: AIR

Date Sampled...: 7/18/05  
Prep Date.....: 7/21/05  
Prep Batch #.....: 5203121  
Dilution Factor.: 1.8

Date Received...: 7/20/05  
Analysis Date...: 7/21/05  
Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	0.36	ND <i>0.5</i>	1.6
Acetone	12	9.0	28 <i>B</i>	21
Ethylbenzene	0.40	0.36	1.8	1.6
2-Hexanone	ND	0.90	ND	3.7
Methylene chloride	ND	0.90	ND	3.1
Benzene	0.59	0.36	1.9	1.2
Styrene	ND	0.36	ND <i>0.5</i>	1.5
1,1,2,2-Tetrachloroethane	ND	0.36	ND	2.5
Tetrachloroethene	1.2	0.36	8.0	2.4
Toluene	4.2	0.36	16	1.4
1,1,1-Trichloroethane	0.11	0.36	0.60 J	2.0
1,1,2-Trichloroethane	ND	0.36	ND	2.0
Trichloroethene	ND	0.36	ND	1.9
Vinyl chloride	ND	0.36	ND	0.92
o-Xylene	0.29	0.36	1.3 J	1.6
m-Xylene & p-Xylene	0.78	0.36	3.4	1.6
Bromodichloromethane	ND	0.36	ND	2.4
2-Butanone (MEK)	0.97	0.90	2.9	2.7
4-Methyl-2-pentanone (MIBK)	0.48	0.90	2.0 J	3.7
Bromoform	ND	0.36	ND <i>0.5</i>	3.7
Bromomethane	ND	0.36	ND	1.4
Carbon disulfide	4.8	0.36	15	1.1
Carbon tetrachloride	ND	0.36	ND	2.3
Chlorobenzene	ND	0.36	ND	1.7
Dibromochloromethane	ND	0.36	ND	3.1
Chloroethane	ND	0.36	ND	0.95
Chloroform	1.6	0.36	7.9	1.8
Chloromethane	0.28	0.90	0.57 J	1.9
1,1-Dichloroethane	ND	0.36	ND	1.5
1,2-Dichloroethane	ND	0.36	ND	1.5
1,1-Dichloroethene	ND	0.36	ND	1.4
cis-1,2-Dichloroethene	ND	0.36	ND	1.4
trans-1,2-Dichloroethene	ND	0.36	ND	1.4
1,2-Dichloropropane	ND	0.36	ND	1.7
cis-1,3-Dichloropropene	ND	0.36	ND	1.6

*Handwritten:*  
OK  
7/21/05

URS Corp/ NYSDEC  
Client Sample ID: SG-12  
GC/MS Volatiles

Lot-Sample # H5G200167 - 005

Work Order # HFVX41AD

Matrix.....: AIR

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>LABORATORY CONTROL LIMITS (%)</u>
1,2-Dichloroethane-d4	112	70 - 130
Toluene-d8	89	70 - 130
4-Bromofluorobenzene	86	70 - 130

**Qualifiers**

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.  
J Estimated result. Result is less than RL.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

URS Corp/ NYSDEC  
Client Sample ID: SG-13  
GC/MS Volatiles

Lot-Sample # H5G200167 - 006

Work Order # HFVX62AD

Matrix.....: AIR

Date Sampled...: 7/18/05  
Prep Date.....: 7/22/05  
Prep Batch #....: 5206164  
Dilution Factor.: 17.5

Date Received...: 7/20/05  
Analysis Date...: 7/22/05  
Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	3.5	ND	16
Acetone	12	88	29	210
Ethylbenzene	ND	3.5	ND	15
2-Hexanone	ND	8.8	ND	36
Methylene chloride	ND	8.8	ND	30
Benzene	ND	3.5	ND	11
Styrene	ND	3.5	ND	15
1,1,2,2-Tetrachloroethane	ND	3.5	ND	24
Tetrachloroethene	ND	3.5	ND	24
Toluene	4.0	3.5	15	13
1,1,1-Trichloroethane	ND	3.5	ND	19
1,1,2-Trichloroethane	ND	3.5	ND	19
Trichloroethene	ND	3.5	ND	19
Vinyl chloride	ND	3.5	ND	8.9
o-Xylene	ND	3.5	ND	15
m-Xylene & p-Xylene	1.8	3.5	7.8	15
Bromodichloromethane	ND	3.5	ND	23
2-Butanone (MEK)	ND	8.8	ND	26
4-Methyl-2-pentanone (MIBK)	ND	8.8	ND	36
Bromoform	ND	3.5	ND	36
Bromomethane	ND	3.5	ND	14
Carbon disulfide	2.4	3.5	7.6	11
Carbon tetrachloride	ND	3.5	ND	22
Chlorobenzene	ND	3.5	ND	16
Dibromochloromethane	ND	3.5	ND	30
Chloroethane	ND	3.5	ND	9.2
Chloroform	ND	3.5	ND	17
Chloromethane	ND	8.8	ND	18
1,1-Dichloroethane	ND	3.5	ND	14
1,2-Dichloroethane	ND	3.5	ND	14
1,1-Dichloroethene	ND	3.5	ND	14
cis-1,2-Dichloroethene	ND	3.5	ND	14
trans-1,2-Dichloroethene	ND	3.5	ND	14
1,2-Dichloropropane	ND	3.5	ND	16
cis-1,3-Dichloropropene	ND	3.5	ND	16

URS Corp/ NYSDEC  
Client Sample ID: SG-13  
GC/MS Volatiles

Lot-Sample # H5G200167 - 006

Work Order # HFVX62AD

Matrix.....: AIR

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>LABORATORY CONTROL LIMITS (%)</u>
1,2-Dichloroethane-d4	123	70 - 130
Toluene-d8	94	70 - 130
4-Bromofluorobenzene	78	70 - 130

**Qualifiers**

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.  
J Estimated result. Result is less than RL.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

URS Corp/ NYSDEC  
Client Sample ID: SG-13  
GC/MS Volatiles

Lot-Sample # H5G200167 - 006

Work Order # HFVX61AD

Matrix.....: AIR

Date Sampled...: 7/18/05  
Prep Date.....: 7/21/05  
Prep Batch #.....: 5203121  
Dilution Factor.: 1.75

Date Received...: 7/20/05  
Analysis Date... 7/21/05  
Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	NR		NR	
Acetone	NR		NR	
Ethylbenzene	NR		NR	
2-Hexanone	NR		NR	
Methylene chloride	NR		NR	
Benzene	NR		NR	
Styrene	NR		NR	
1,1,2,2-Tetrachloroethane	NR		NR	
Tetrachloroethene	NR		NR	
Toluene	NR		NR	
1,1,1-Trichloroethane	NR		NR	
1,1,2-Trichloroethane	NR		NR	
Trichloroethene	NR		NR	
Vinyl chloride	NR		NR	
o-Xylene	NR		NR	
m-Xylene & p-Xylene	NR		NR	
Bromodichloromethane	NR		NR	
2-Butanone (MEK)	NR		NR	
4-Methyl-2-pentanone (MIBK)	NR		NR	
Bromoform	NR		NR	
Bromomethane	NR		NR	
Carbon disulfide	NR		NR	
Carbon tetrachloride	NR		NR	
Chlorobenzene	NR		NR	
Dibromochloromethane	NR		NR	
Chloroethane	NR		NR	
Chloroform	NR		NR	
Chloromethane	NR		NR	
1,1-Dichloroethane	NR		NR	
1,2-Dichloroethane	NR		NR	
1,1-Dichloroethene	NR		NR	
cis-1,2-Dichloroethene	NR		NR	
trans-1,2-Dichloroethene	NR		NR	
1,2-Dichloropropane	NR		NR	
cis-1,3-Dichloropropene	NR		NR	

URS Corp/ NYSDEC  
 Client Sample ID: SG-13  
 GC/MS Volatiles

Lot-Sample # H5G200167 - 006

Work Order # HFVX61AD

Matrix.....: AIR

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
1,2-Dichloroethane-d4	0.0 *	70 - 130
Toluene-d8	0.0 *	70 - 130
4-Bromofluorobenzene	0.0 *	70 - 130

Qualifiers

\* Surrogate recovery is outside stated control limits.  
 NR Not reportable.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

URS Corp/ NYSDEC  
Client Sample ID: AB-1  
GC/MS Volatiles

Lot-Sample # H5G200167 - 004

Work Order # HFVX12AD

Matrix.....: AIR

Date Sampled...: 7/18/05  
Prep Date.....: 7/22/05  
Prep Batch #.....: 5206164  
Dilution Factor.: 15.5

Date Received...: 7/20/05  
Analysis Date...: 7/22/05  
Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	ND	3.1	ND	14
Acetone	7.6	78	ND 18	180
Ethylbenzene	ND	3.1	ND	13
2-Hexanone	ND	7.8	ND	32
Methylene chloride	ND	7.8	ND	27
Benzene	ND	3.1	ND	9.9
Styrene	ND	3.1	ND	13
1,1,2,2-Tetrachloroethane	ND	3.1	ND	21
Tetrachloroethene	ND	3.1	ND	21
Toluene	ND	3.1	ND	12
1,1,1-Trichloroethane	ND	3.1	ND	17
1,1,2-Trichloroethane	ND	3.1	ND	17
Trichloroethene	ND	3.1	ND	17
Vinyl chloride	ND	3.1	ND	7.9
o-Xylene	ND	3.1	ND	13
m-Xylene & p-Xylene	ND	3.1	ND	13
Bromodichloromethane	ND	3.1	ND	21
2-Butanone (MEK)	ND	7.8	ND	23
4-Methyl-2-pentanone (MIBK)	ND	7.8	ND	32
Bromoform	ND	3.1	ND	32
Bromomethane	ND	3.1	ND	12
Carbon disulfide	ND	3.1	ND	9.7
Carbon tetrachloride	ND	3.1	ND	20
Chlorobenzene	ND	3.1	ND	14
Dibromochloromethane	ND	3.1	ND	26
Chloroethane	ND	3.1	ND	8.2
Chloroform	ND	3.1	ND	15
Chloromethane	ND	7.8	ND	16
1,1-Dichloroethane	ND	3.1	ND	13
1,2-Dichloroethane	ND	3.1	ND	13
1,1-Dichloroethene	ND	3.1	ND	12
cis-1,2-Dichloroethene	ND	3.1	ND	12
trans-1,2-Dichloroethene	ND	3.1	ND	12
1,2-Dichloropropane	ND	3.1	ND	14
cis-1,3-Dichloropropene	ND	3.1	ND	14

URS Corp/ NYSDEC  
Client Sample ID: AB-1  
GC/MS Volatiles

Lot-Sample # H5G200167 - 004

Work Order # HFVX12AD

Matrix.....: AIR

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>LABORATORY CONTROL LIMITS (%)</u>
1,2-Dichloroethane-d4	115	70 - 130
Toluene-d8	94	70 - 130
4-Bromofluorobenzene	77	70 - 130

Qualifiers

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.  
J Estimated result. Result is less than RL.

The 'Result' in ug/m3 is calculated using the following equation:  $\text{Amount Found}(\text{before rounding}) \times (\text{Molecular Weight}/24.45)$

The 'Reporting Limit' in ug/m3 is calculated using the following equation:  $(\text{Reporting Limit}(\text{before rounding}) \times \text{Dilution Factor}) \times (\text{Molecular Weight}/24.45)$

URS Corp/ NYSDEC  
 Client Sample ID: AB-1  
 GC/MS Volatiles

Lot-Sample # H5G200167 - 004

Work Order # HFVX11AD

Matrix.....: AIR

Date Sampled...: 7/18/05  
 Prep Date.....: 7/21/05  
 Prep Batch #....: 5203121  
 Dilution Factor.: 1.55

Date Received...: 7/20/05  
 Analysis Date...: 7/21/05  
 Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
trans-1,3-Dichloropropene	NR		NR	
Acetone	NR		NR	
Ethylbenzene	NR		NR	
2-Hexanone	NR		NR	
Methylene chloride	NR		NR	
Benzene	NR		NR	
Styrene	NR		NR	
1,1,2,2-Tetrachloroethane	NR		NR	
Tetrachloroethene	NR		NR	
Toluene	NR		NR	
1,1,1-Trichloroethane	NR		NR	
1,1,2-Trichloroethane	NR		NR	
Trichloroethene	NR		NR	
Vinyl chloride	NR		NR	
o-Xylene	NR		NR	
m-Xylene & p-Xylene	NR		NR	
Bromodichloromethane	NR		NR	
2-Butanone (MEK)	NR		NR	
4-Methyl-2-pentanone (MIBK)	NR		NR	
Bromoform	NR		NR	
Bromomethane	NR		NR	
Carbon disulfide	NR		NR	
Carbon tetrachloride	NR		NR	
Chlorobenzene	NR		NR	
Dibromochloromethane	NR		NR	
Chloroethane	NR		NR	
Chloroform	NR		NR	
Chloromethane	NR		NR	
1,1-Dichloroethane	NR		NR	
1,2-Dichloroethane	NR		NR	
1,1-Dichloroethene	NR		NR	
cis-1,2-Dichloroethene	NR		NR	
trans-1,2-Dichloroethene	NR		NR	
1,2-Dichloropropane	NR		NR	
cis-1,3-Dichloropropene	NR		NR	

URS Corp/ NYSDEC  
 Client Sample ID: AB-1  
 GC/MS Volatiles

Lot-Sample # H5G200167 - 004

Work Order # HFVX11AD

Matrix.....: AIR

SURROGATE

1,2-Dichloroethane-d4  
 Toluene-d8  
 4-Bromofluorobenzene

PERCENT  
RECOVERY

0.0 \*  
 0.0 \*  
 0.0 \*

LABORATORY  
CONTROL  
LIMITS (%)

70 - 130  
 70 - 130  
 70 - 130

Qualifiers

\* Surrogate recovery is outside stated control limits.  
 NR Not reportable.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)