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### **TECHNICAL MEMORANDUM**

TO: Gayle M. Taylor, Arch Chemicals, Inc.

FROM: Jeffrey Brandow, Project Manager, MACTEC Engineering & Consulting, Inc.  
Nelson Breton, Principal Scientist, MACTEC Engineering & Consulting, Inc.

DATE: October 26, 2009

SUBJECT: Soil Vapor Sampling at Arch Chemicals, Rochester NY, Site No. 828018a

On August 5, 2009, MACTEC Engineering and Consulting, Inc. (MACTEC) completed a soil vapor sampling event at the Arch Chemicals facility at 100 McKee Road in Rochester, New York. This Technical Memorandum presents the results of the sampling.

### **PURPOSE OF THE SAMPLING**

This soil vapor sampling event was conducted in response to a request from the New York State Department of Environmental Conservation (NYSDEC), to further evaluate the potential for volatile organic compounds (VOCs) and chloropyridine compounds to be migrating beyond the Arch Chemicals property boundary via soil vapor at concentrations that could be a concern for occupants of adjacent properties. An evaluation of previous soil vapor sampling results collected at the facility in November 2007, as well as analytical results from the 2006 sub-slab and indoor air sampling conducted at the neighboring Firth Rixson and American Manufacturing & Recycling (ARM) facilities, had concluded that soil vapor intrusion was not a significant off-site exposure pathway for site-related contaminants of concern. After reviewing the results and conclusions of the previous sampling, the NYSDEC has requested that Arch collect a second round of soil vapor samples along its property line, with the addition of soil vapor samples in both the southeast and southwest corners of the Arch property, to verify those prior conclusions.

### **SAMPLE COLLECTION**

On August 4, 2009, MACTEC installed the two new soil vapor probes requested by the NYSDEC: SV-7 located in the southeast portion of the site near monitoring well E-1; and SV-8 located in the southwest corner of the site near pumping well BR-7A. The locations of the six existing and two new probes are shown on Figure 1. For the new probes, six-inch long stainless steel implants were installed as shown in Figure 2, using hand-driven Geoprobe® rods with an expendable drive point. The target sampling depth for SV-8 was 4 to 5 feet below ground surface, which is the same as the existing probes. For SV-7, the implant was set horizontally at a

depth of approximately 13 inches below ground surface, due to the presence of high groundwater elevations in that portion of the property.

Sample collection was completed on August 5, 2009. Weather conditions, as documented in Appendix A, were sunny, breezy, and mild with temperatures in the 60s and low 70s. Samples were collected into certified-clean, 6-liter SUMMA canisters, connected to the sampling implants using teflon tubing. Canisters were filled at a nominal rate of 0.2 liters per minute as recommended in New York State guidance (NYSDOH, 2006), using pre-set flow controllers provided by the laboratory. Prior to collecting samples from the existing vapor points, each installation was leak tested to ensure that samples are representative of sub-surface conditions and not outdoor ambient air. A helium leak test was performed by encapsulating the sample point with an inverted bucket and filling the bucket with helium. A helium detector (Model MGD-2002 Multi-gas Detector by Radiodetection/Dielectric Technologies) was connected to the sample port to test for helium breakthrough before the collection of the soil gas sample. At all sampling locations, readings of less than one percent were recorded. In accordance with NYSDOH guidance, readings of less than 10 percent helium are assumed to indicate a satisfactory surface seal.

Three of the eight soil vapor implants could not be successfully sampled during this sampling event. As was the case during the 2007 sampling event, high groundwater levels at locations SV-05 and SV-06 had saturated the sampling implants, as evidenced by water being drawn up into the sample tube when vacuum was applied. In addition, no air flow was obtained from sample point SV-03, so no sample was able to be collected. The remaining three original locations and the two new locations were sampled without difficulty.

The filled SUMMA canisters were packaged and shipped under chain of custody to Con-Test Analytical Laboratory in East Longmeadow, Massachusetts. While in transit, the canister containing the sample from location SV-01 lost its vacuum, rendering it invalid. The remaining four samples were analyzed by EPA Method TO-15 for the laboratory's standard list of VOCs, plus pyridine, 2-chloropyridine, 3-chloropyridine, and 2,6-dichloropyridine. The laboratory's analytical report is provided in Appendix B.

## **DATA QUALITY**

Laboratory TO-15 analytical results were reviewed for the following parameters:

- Holding Times
- Quality Control Blanks
- Surrogate Recovery
- Laboratory Control Samples
- Laboratory Duplicate Precision
- Reporting

All criteria were met with the following exceptions.

The case narrative states: “4-Fluoriline was in the calibration curve however it appears that this compound is not suitable for summa canister analysis. The calibration curve was very poor and did not meet method requirements. The samples were analyzed qualitatively for this compound and all samples were not detected.”

Acetone, 2-butanone, chloromethane, and isopropanol are reported in the method blank associated with all samples. Action limits were established at ten times the reported blank concentration for acetone and 2-butanone, and five times the reported blank concentration for chloromethane and isopropanol. The result for chloromethane in sample SV-09-08 is less than the action limit and was qualified non-detect (U). All other reported results are greater than the action limits.

With these qualifications, the data is judged to be usable for its intended purpose.

## **EVALUATION OF RESULTS**

Table 1 provides a summary of all analytical results for soil vapor samples collected in August 2009. In addition, the table includes results from the November 2007 sampling for comparison purposes.

New York State currently does not have any standards, criteria or guidance values for concentrations of compounds in soil vapor. Additionally, there are currently no databases available for background levels of volatile chemicals in soil vapor. In the absence of this information, soil vapor sampling results were reviewed in conjunction with the results of previous environmental sampling and our understanding of the site setting to assess the potential for adverse exposures due to soil vapor intrusion into buildings on adjacent properties.

Chloropyridines were detected in two of the four samples analyzed. The highest measured concentrations were observed to be less than four times the indoor air screening values derived by Arch Chemicals as part of its evaluation of previous on-site vapor intrusion sampling events. The screening values for indoor air represent concentration levels that are protective for site workers. Considering that attenuation factors for migration of soil vapor into indoor air are typically in the range of 50 to 100 (or more), the observed concentrations of chloropyridines in soil gas can be considered minimal and inconsequential.

VOC detections were observed in all four samples. Concentrations were similar to the observed levels in the November 2007 soil vapor sampling event. Direct comparisons between the two sampling events are available at locations SV-2 and SV-4. At both of these locations, VOC concentrations are generally slightly lower in 2009 compared to 2007. These observations, combined with previous sub-slab and indoor air samples from the adjacent Firth Rixson and American Recycling & Manufacturing buildings, indicate that soil vapor is not likely to have the potential to adversely affect indoor air at properties adjacent to the Arch facility.

## **SUMMARY AND CONCLUSIONS**

Analytical results from soil vapor sampling conducted in August 2009 are generally consistent with the results obtained from the November 2007 sampling event, and confirm the conclusions from that previous study that VOCs and chloropyridines related to past releases at the Arch facility do not pose a significant exposure risk to neighboring properties via the vapor intrusion pathway.

## **REFERENCES**

MACTEC, 2008. "Soil Vapor Sampling at Arch Chemicals, Rochester NY, Site No. 828018a", Technical Memorandum MACTEC Engineering & Consulting, Inc., Portland, Maine, January 2008.

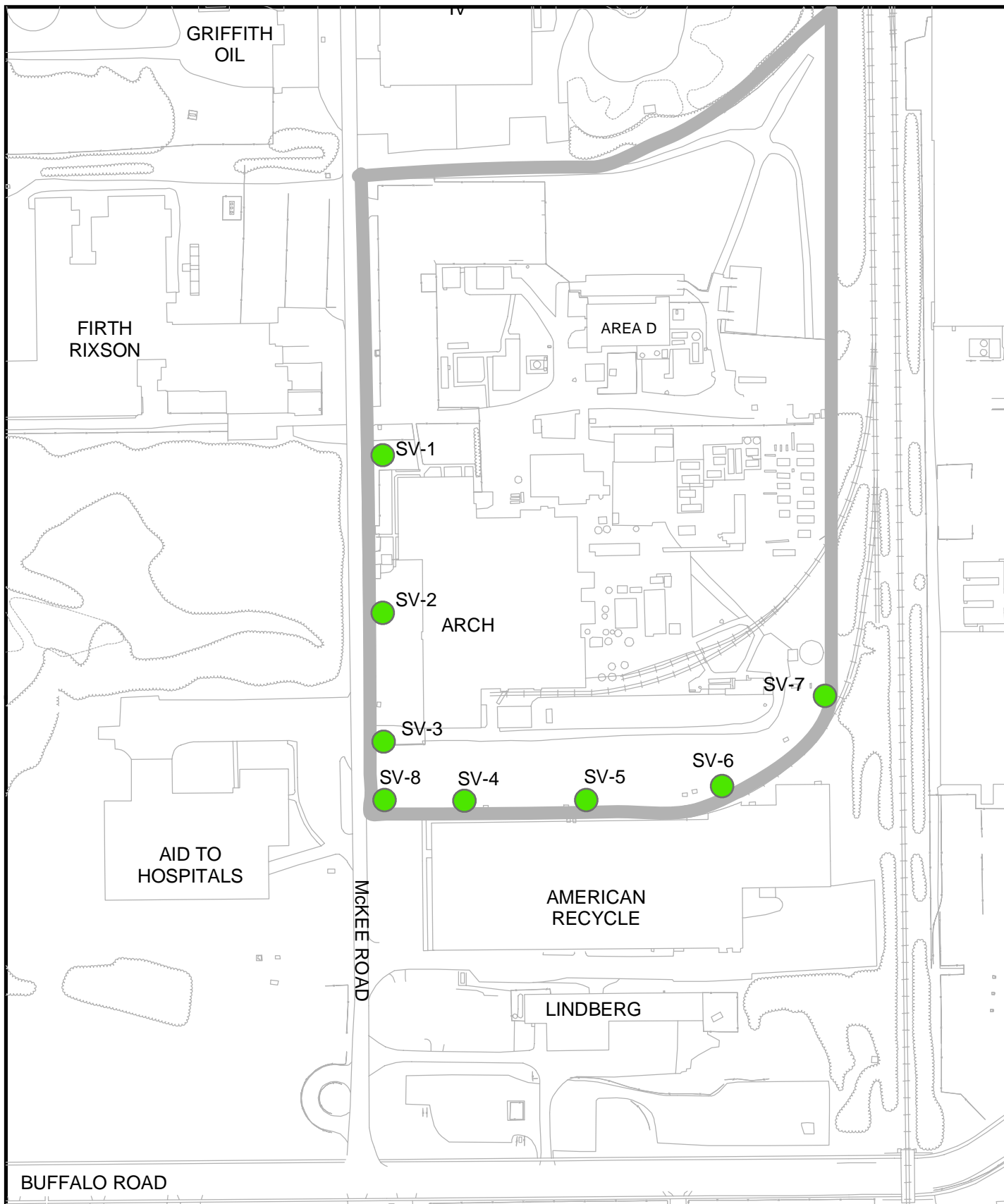
MACTEC, 2006. "Vapor Intrusion Sampling At Firth Rixson And ARM", MACTEC Engineering & Consulting, Inc., Portland, Maine, June 2006.

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



### Attachments:

Figure 1	Soil Vapor Sampling Locations
Figure 2	Soil Vapor Implants
Table 1	Soil Vapor Sampling Results
Appendix A	Meteorological Data
Appendix B	Con-Test Analytical Report

## **FIGURES**



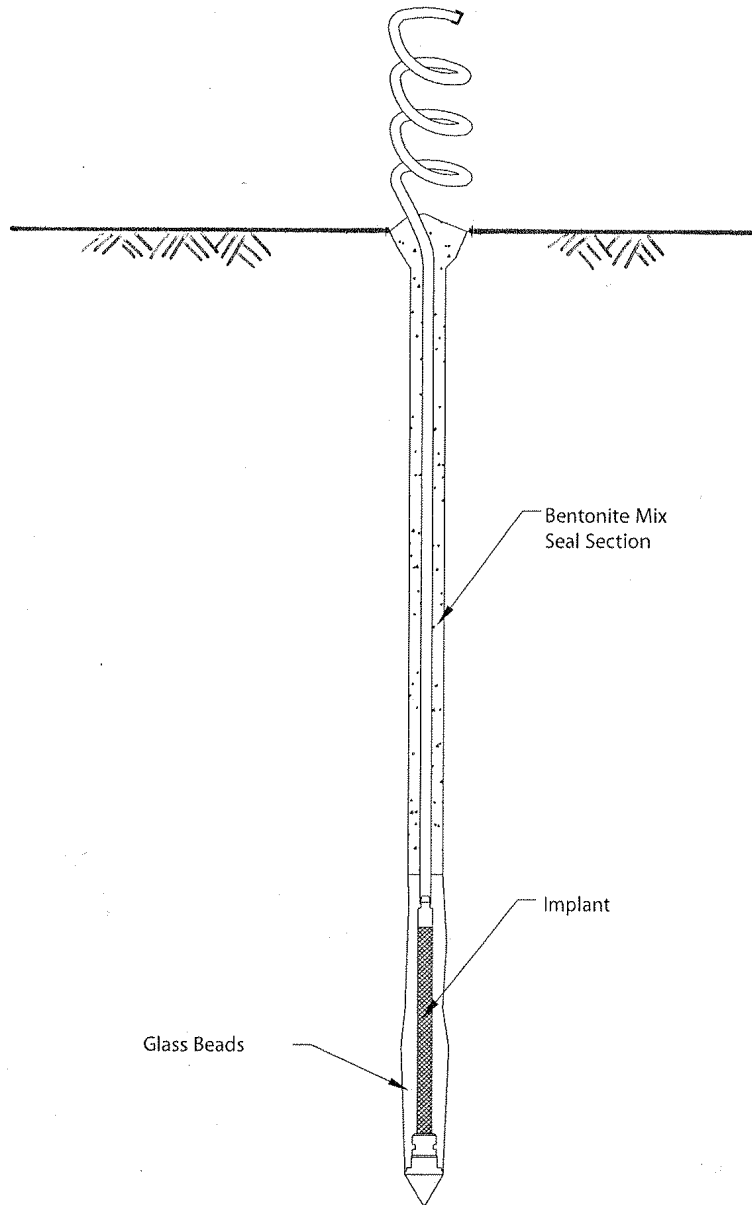
**Legend**

-  Outline of Arch Property Boundary
-  Soil Vapor Probe Installed

**FIGURE 1**  
**SOIL VAPOR SAMPLE LOCATIONS**  
**ARCH CHEMICALS**  
**ROCHESTER, NEW YORK**

MACTEC

Prepared by JEB | Checked by NMB



Example of completed soil gas monitoring point.

FIGURE 2  
SOIL VAPOR IMPLANTS  
ARCH CHEMICALS  
ROCHESTER, NEW YORK

## **TABLES**



Table 1

**Soil Vapor Sampling - 2007 and 2009 Results**  
**Arch Chemicals, Inc., Rochester, NY**

Class	Parameter Name	Loc Name Field Sample Id Field Sample Date	SV-01 SV-07-01 11/7/2007		SV-02 SV-07-02 11/7/2007		SV-02 SV-09-02 8/5/2009		SV-03 SV-07-03 11/7/2007		SV-08 SV-09-08 8/5/2009					
			Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier			
SVOC	2-Chloropyridine		ug/m3	0.36	U			0.68			2	U	0.36	U	6.3	
SVOC	3-Chloropyridine		ug/m3	NA				NA			2	U	NA		2	U
SVOC	2,6-Dichloropyridine		ug/m3	0.48	U			0.7			2	U	0.48	U	2.2	
SVOC	Pyridine		ug/m3	NA				NA			6.2	U	NA		6.2	U
VOC	1,1,1-Trichloroethane		ug/m3	17				0.13			0.55	U	0.83		4.2	
VOC	1,1,2,2-Tetrachloroethane		ug/m3	0.44				0.14	U		0.69	U	0.14	U	0.69	U
VOC	1,1,2-Trichloro-1,2,2-Trifluoroethane		ug/m3	2,300				1			1		1		440	
VOC	1,1,2-Trichloroethane		ug/m3	0.39				0.11	U		0.55	U	0.11	U	0.55	U
VOC	1,1-Dichloroethane		ug/m3	16				0.08	U		0.4	U	0.08	U	14	
VOC	1,1-Dichloroethene		ug/m3	8				0.19			0.4	U	0.08	U	0.44	
VOC	1,2,4-Trichlorobenzene		ug/m3	0.6	UJ			0.6	UJ		0.74	U	0.6	UJ	0.74	U
VOC	1,2,4-Trimethylbenzene		ug/m3	25	J			130	J		0.72		110	J	10	
VOC	1,2-Dibromoethane		ug/m3	0.43				0.16	U		0.77	U	0.16	U	0.77	U
VOC	1,2-Dichloro-1,1,2,2-tetrafluoroethane		ug/m3	0.14	U			0.14	U		0.7	U	0.14	U	0.7	U
VOC	1,2-Dichlorobenzene		ug/m3	0.41	J			0.38	J		0.6	U	0.12	UJ	0.6	U
VOC	1,2-Dichloroethane		ug/m3	0.08	U			2.5			0.4	U	5		0.4	U
VOC	1,2-Dichloropropane		ug/m3	0.22				0.1	U		0.46	U	0.1	U	0.46	U
VOC	1,3,5-Trimethylbenzene		ug/m3	5				21			0.49	U	24		4.2	
VOC	1,3-Dichlorobenzene		ug/m3	0.12	UJ			0.12	UJ		0.6	U	0.12	UJ	1.4	
VOC	1,4-Dichlorobenzene		ug/m3	0.43				0.12	U		0.6	U	0.12	U	2.8	
VOC	2-Butanone		ug/m3	41				44			3.3		89		8.4	
VOC	2-Hexanone		ug/m3	2.2				0.08	U		0.69		5.9		1.6	
VOC	2-Propanol		ug/m3	1.3				8.7			2.2		2.8		9.7	
VOC	4-Ethyltoluene		ug/m3	6.7				29			0.49	U	32		3.8	
VOC	4-Methyl-2-pentanone		ug/m3	1.3				2.8			0.41	U	3.7		2.7	
VOC	Acetone		ug/m3	350	J			300	J		32		390	J	39	
VOC	Benzene		ug/m3	2.7				19			1.1		16		3.2	
VOC	Benzyl chloride		ug/m3	0.29	J			0.11	UJ		0.52	U	0.11	UJ	0.52	U
VOC	Bromodichloromethane		ug/m3	0.48				0.14	U		0.67	U	0.14	U	0.67	U
VOC	Bromoform		ug/m3	0.62	J			0.21	UJ		1	U	0.21	UJ	1	U
VOC	Bromomethane		ug/m3	0.2				0.08	U		0.39	U	0.08	U	0.39	U
VOC	Butadiene, 1,3-		ug/m3	0.05	UJ			0.05	UJ		0.22	U	0.05	UJ	0.22	U
VOC	Carbon disulfide		ug/m3	0.07	U			21			0.31	U	16		6.4	
VOC	Carbon tetrachloride		ug/m3	0.48				0.5			0.63	U	5.9		23	
VOC	Chlorobenzene		ug/m3	0.35				0.1	U		0.46	U	0.1	U	1.7	
VOC	Chlorodibromomethane		ug/m3	0.48				0.18	U		0.85	U	0.18	U	0.85	U
VOC	Chloroethane		ug/m3	0.63				0.06	U		0.26	U	0.15		0.26	U
VOC	Chloroform		ug/m3	3.6				3.2			0.55		110		320	
VOC	Chloromethane		ug/m3	0.22	J			0.04	UJ		1.3		0.04	UJ	0.4	U
VOC	Cis-1,2-Dichloroethene		ug/m3	32				0.08	U		0.4	U	0.08	U	290	
VOC	cis-1,3-Dichloropropene		ug/m3	0.22				0.09	U		0.45	U	0.09	U	0.45	U
VOC	Cyclohexane		ug/m3	110				24			0.63		9.4		3.2	
VOC	Dichlorodifluoromethane		ug/m3	2.7				2.2			1.9		2.9		1.7	
VOC	Ethanol		ug/m3	3.3	J			3.8	J		10		5	J	36	
VOC	Ethyl acetate		ug/m3	0.82				0.08	U		14		1.5		3.2	
VOC	Ethyl benzene		ug/m3	6.1				31			0.61		39		6.7	
VOC	Heptane		ug/m3	1.6				30			0.7		15		1.5	
VOC	Hexachlorobutadiene		ug/m3	0.22	UJ			0.22	UJ		1.1	U	0.22	UJ	1.1	U
VOC	Hexane		ug/m3	1.9				39			5.3		17		3	
VOC	Methyl Tertbutyl Ether		ug/m3	0.08	U			0.08	U		0.36	U	0.08	U	0.36	U
VOC	Methylene chloride		ug/m3	0.88	U			1.6			8.8		1.9		3.7	
VOC	o-Xylene		ug/m3	11				54			0.6		63		6.4	
VOC	Propylene		ug/m3	0.35	UJ			0.35	UJ		1.5		0.35	UJ	0.34	U
VOC	Styrene		ug/m3	0.54				0.61			0.43	U	0.97		2	
VOC	Tetrachloroethene		ug/m3	1.7				1.2			0.68	U	18		25	
VOC	Tetrahydrofuran		ug/m3	13				8.3			0.29	U	23		1.2	
VOC	Toluene		ug/m3	9.9				58			4.2		95		21	
VOC	trans-1,2-Dichloroethene		ug/m3	1.3				0.08	U		0.4	U	0.16		8.5	
VOC	trans-1,3-Dichloropropene		ug/m3	0.22				0.09	U		0.45	U	0.09	U	0.45	U
VOC	Trichloroethene		ug/m3	2.1				0.88			1		4.3		13	
VOC	Trichlorofluoromethane		ug/m3	5.4				1.1			1.9		6.1		2.4	
VOC	Vinyl acetate		ug/m3	0.08	U			8.8			0.35	U	22		0.35	U
VOC	Vinyl chloride		ug/m3	390	J			0.06	UJ		0.26	U	0.06	UJ	3.5	
VOC	Xylene, m/p		ug/m3	25				120			1.7		160		21	

notes:

NA = not analyzed

U = not detected at the detection limit shown

J = reported result is estimated

Prep by: JEB Rvw by: NMB

Table 1

Soil Vapor Sampling - 2007 and 2009 Results  
Arch Chemicals, Inc., Rochester, NY

Class	Parameter Name	Loc Name Field Sample Id Field Sample Date	SV-04 SV-07-04 11/7/2007		SV-04 SV-09-04 8/5/2009		SV-07 SV-09-07 8/5/2009	
			Result	Qualifier	Result	Qualifier	Result	Qualifier
SVOC	2-Chloropyridine	ug/m3	0.36	U	2.7		2	U
SVOC	3-Chloropyridine	ug/m3	NA		2	U	2	U
SVOC	2,6-Dichloropyridine	ug/m3	0.63		2	U	2	U
SVOC	Pyridine	ug/m3	NA		6.2	U	6.2	U
VOC	1,1,1-Trichloroethane	ug/m3	6.8		1.6		1.2	
VOC	1,1,2,2-Tetrachloroethane	ug/m3	0.14	U	0.69	U	0.69	U
VOC	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/m3	120		35		6	
VOC	1,1,2-Trichloroethane	ug/m3	0.11	U	0.55	U	0.55	U
VOC	1,1-Dichloroethane	ug/m3	14		2.3		1.6	
VOC	1,1-Dichloroethene	ug/m3	0.08	U	0.4	U	0.4	U
VOC	1,2,4-Trichlorobenzene	ug/m3	0.6	UJ	0.74	U	0.74	U
VOC	1,2,4-Trimethylbenzene	ug/m3	56	J	16		13	
VOC	1,2-Dibromoethane	ug/m3	0.16	U	0.77	U	0.77	U
VOC	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ug/m3	0.25		0.7	U	0.7	U
VOC	1,2-Dichlorobenzene	ug/m3	0.17	J	0.6	U	0.6	U
VOC	1,2-Dichloroethane	ug/m3	0.19		0.48		3.5	
VOC	1,2-Dichloropropane	ug/m3	0.2		0.46	U	0.63	
VOC	1,3,5-Trimethylbenzene	ug/m3	11		6.2		5.1	
VOC	1,3-Dichlorobenzene	ug/m3	0.67	J	0.97		0.6	U
VOC	1,4-Dichlorobenzene	ug/m3	0.36		3.8		2.8	
VOC	2-Butanone	ug/m3	27		13		19	
VOC	2-Hexanone	ug/m3	2.2		2.1		2.4	
VOC	2-Propanol	ug/m3	0.96		13		11	
VOC	4-Ethyltoluene	ug/m3	15		6.3		5.7	
VOC	4-Methyl-2-pentanone	ug/m3	1		3.7		3	
VOC	Acetone	ug/m3	210	J	47		67	
VOC	Benzene	ug/m3	5		1.7		8.3	
VOC	Benzyl chloride	ug/m3	0.11	UJ	0.52	U	0.52	U
VOC	Bromodichloromethane	ug/m3	0.14	U	0.67	U	0.67	U
VOC	Bromoform	ug/m3	0.21	UJ	1	U	1	U
VOC	Bromomethane	ug/m3	0.08	U	0.39	U	0.39	U
VOC	Butadiene, 1,3-	ug/m3	0.05	UJ	0.22	U	0.22	U
VOC	Carbon disulfide	ug/m3	0.07	U	0.31	U	7.7	
VOC	Carbon tetrachloride	ug/m3	0.63		0.88		5.3	
VOC	Chlorobenzene	ug/m3	0.61		1.3		1.2	
VOC	Chlorodibromomethane	ug/m3	0.18	U	0.85	U	0.85	U
VOC	Chloroethane	ug/m3	0.06	U	0.26	U	1.7	
VOC	Chloroform	ug/m3	86		54		130	
VOC	Chloromethane	ug/m3	0.08	J	0.21	U	1.7	
VOC	Cis-1,2-Dichloroethene	ug/m3	81		6.2		15	
VOC	cis-1,3-Dichloropropene	ug/m3	0.09	U	0.45	U	0.45	U
VOC	Cyclohexane	ug/m3	3.1		1		4.2	
VOC	Dichlorodifluoromethane	ug/m3	2.2		2.2		1.7	
VOC	Ethanol	ug/m3	3.3	J	53		37	
VOC	Ethyl acetate	ug/m3	0.08	U	6.5		7.2	
VOC	Ethyl benzene	ug/m3	20		12		11	
VOC	Heptane	ug/m3	5.1		1.3		5.7	
VOC	Hexachlorobutadiene	ug/m3	0.22	UJ	1.1	U	1.1	U
VOC	Hexane	ug/m3	3.2		0.69		6.4	
VOC	Methyl Tertbutyl Ether	ug/m3	0.79		0.36	U	1.3	
VOC	Methylene chloride	ug/m3	1.6		1.4	U	6.6	
VOC	o-Xylene	ug/m3	35		9.6		7.2	
VOC	Propylene	ug/m3	0.35	UJ	1.3		6.8	
VOC	Styrene	ug/m3	0.39		3.7		3.5	
VOC	Tetrachloroethene	ug/m3	16		7.2		7.4	
VOC	Tetrahydrofuran	ug/m3	9		1.6		2	
VOC	Toluene	ug/m3	35		58		130	
VOC	trans-1,2-Dichloroethene	ug/m3	3.7		0.71		0.53	
VOC	trans-1,3-Dichloropropene	ug/m3	0.09	U	0.45	U	0.45	U
VOC	Trichloroethene	ug/m3	10		2.6		2.6	
VOC	Trichlorofluoromethane	ug/m3	2.4		8.6		250	
VOC	Vinyl acetate	ug/m3	9.4		0.35	U	0.35	U
VOC	Vinyl chloride	ug/m3	0.06	UJ	0.26	U	1	
VOC	Xylene, m/p	ug/m3	82		36		28	

notes:

NA = not analyzed

U = not detected at the detection limit shown

J = reported result is estimated

Prep by: JEB

Rvw by: NMB

**APPENDIX A**  
**METEOROLOGICAL DATA**



Weather observations for the past three days

Greater Rochester International Airport



Enter Your "City, ST" or zip code

Go

en español

Date	Time (edt)	Wind (mph)	Vis. (mi.)	Weather	Sky Cond.	Temperature (°F)				Relative Humidity	Pressure		Precipitation (in.)		
						Air	Dwpt	6 hour Max. Min.			altimeter (in.)	sea level (mb)	1 hr	3 hr	6 hr
05	17:54	NW 9	10.00	Mostly Cloudy	BKN050 BKN200	72	51			48%	29.99	1015.6			
05	16:54	NW 10 G 16	10.00	Mostly Cloudy	BKN045 BKN200	72	51			48%	30.00	1015.7			
05	15:54	NW 7	10.00	Partly Cloudy	FEW045 SCT250	72	51			48%	30.00	1015.7			
05	14:54	W 12	10.00	Partly Cloudy	FEW045 SCT250	72	51			48%	30.00	1015.8			
05	13:54	W 10 G 17	10.00	Partly Cloudy	FEW040 SCT250	71	51	72	61	49%	30.00	1015.6			
05	12:54	W 9	10.00	Partly Cloudy	FEW040 SCT250	70	52			53%	30.00	1015.8			
05	11:54	W 10	10.00	Mostly Cloudy	FEW033 BKN250	68	54			61%	30.01	1016.0			
05	10:54	NW 10	10.00	Mostly Cloudy	SCT029 BKN250	66	53			63%	30.00	1015.7			
05	09:54	W 9	10.00	Mostly Cloudy	BKN025 BKN250	63	54			73%	29.99	1015.2			
05	08:54	W 8 G 17	10.00	Mostly Cloudy	FEW030 BKN250	63	54			73%	29.98	1015.1			
05	07:54	W 8	10.00	Mostly Cloudy	FEW030 SCT080 BKN250	61	54	68	59	78%	29.97	1014.7			
05	06:54	W 6	10.00	Mostly Cloudy	FEW026 SCT070 BKN250	60	53			78%	29.96	1014.2			
05	05:54	W 6	10.00	Mostly Cloudy	FEW025 SCT075 BKN250	61	53			75%	29.94	1013.5			
05	04:54	NW 8	10.00	Mostly Cloudy	BKN070 BKN120	62	54			75%	29.91	1012.6			
05	03:54	NW 8	10.00	Mostly Cloudy	FEW080 SCT100 BKN250	64	56			75%	29.89	1011.7			
05	02:54	NW 12	10.00	Mostly Cloudy	FEW014 BKN040 BKN070	67	62			84%	29.87	1011.2			
05	01:54	NW 8	10.00	Overcast	FEW040 BKN090 OVC110	68	63	74	68	84%	29.86	1010.8			
05	00:54	NW 13 G 21	10.00	Overcast	SCT018 BKN026 OVC038	70	66			87%	29.84	1010.1			
04	23:54	SW 8	7.00	Thunderstorm	SCT030CB BKN095 OVC150	70	67			90%	29.80	1008.6			
04	22:54	SW 7	8.00	Partly Cloudy	FEW090 SCT150	71	66			84%	29.80	1008.8			

04	21:54	SW 6	9.00	Mostly Cloudy	FEW050 BKN120 BKN150	72	67			84%	29.81	1009.0
04	20:54	SW 7	9.00	Mostly Cloudy	FEW050 SCT090 BKN150	72	66			82%	29.80	1008.7
04	19:54	SW 9	9.00	Mostly Cloudy	FEW050 SCT090 SCT150 BKN180	74	66	84	74	76%	29.80	1008.7
04	18:54	SW 8	10.00	Mostly Cloudy	FEW050 SCT120 BKN180	76	65			69%	29.78	1008.2
04	17:54	SW 13	10.00	Overcast	SCT060 BKN090 BKN120 OVC180	79	66			65%	29.80	1008.7
04	16:54	SW 12	10.00	Mostly Cloudy	SCT050 BKN075 BKN120 BKN180	82	65			56%	29.80	1008.8
04	15:54	SW 16 G 26	10.00	Mostly Cloudy	FEW050 SCT090 BKN250	83	62			49%	29.80	1008.7
04	14:54	SW 12 G 21	10.00	Partly Cloudy	FEW045 SCT120 SCT250	83	66			57%	29.81	1009.0
04	13:54	S 13 G 23	10.00	Partly Cloudy	FEW045 SCT120 SCT250	81	65	81	68	58%	29.84	1010.0
04	12:54	S 13 G 22	10.00	Partly Cloudy	FEW045 SCT120 SCT150	80	65			60%	29.84	1010.2
04	11:54	SW 15	10.00	Partly Cloudy	FEW045 SCT140	79	65			62%	29.86	1010.7
04	09:54	SW 9 G 20	10.00	Partly Cloudy	FEW080 SCT140	74	63			69%	29.89	1011.9
04	08:54	SW 12	10.00	Partly Cloudy	FEW075 SCT150	71	62			73%	29.91	1012.5
04	07:54	SW 10	10.00	Mostly Cloudy	SCT070 BKN120 BKN150	68	60	68	64	76%	29.92	1012.9
04	06:54	SW 10	10.00	Mostly Cloudy	BKN075 BKN100	68	59			73%	29.92	1012.8
04	05:54	SW 9	10.00	Partly Cloudy	FEW080 SCT120 SCT250	65	59			81%	29.91	1012.7
04	04:54	SW 7	10.00	Partly Cloudy	SCT080 SCT250	66	59			78%	29.91	1012.6
04	03:54	SW 8	10.00	Overcast	BKN100 OVC150	68	59			73%	29.93	1013.1
04	02:54	SW 9	10.00	Overcast	FEW100 OVC140	68	59			73%	29.93	1013.3
04	01:54	SW 8	10.00	Overcast	SCT090 BKN120 OVC200	68	59	74	66	73%	29.94	1013.6

04	00:54	SW 9	10.00	Mostly Cloudy	SCT120 BKN180 BKN250	68	59			73%	29.94	1013.8
03	23:54	SW 6	10.00	Mostly Cloudy	FEW100 SCT150 BKN180	67	59			76%	29.94	1013.7
03	22:54	S 5	10.00	Mostly Cloudy	FEW150 BKN180	67	59			76%	29.94	1013.8
03	21:54	S 5	10.00	Mostly Cloudy	FEW100 BKN200	69	60			73%	29.94	1013.6
03	20:54	Calm	10.00	Mostly Cloudy	FEW100 SCT150 BKN200	72	59			64%	29.94	1013.5
03	19:54	S 6	10.00	Overcast	BKN100 OVC200	74	59	78	74	60%	29.93	1013.4
03	18:54	SW 9	10.00	Mostly Cloudy	FEW100 BKN200	76	58			54%	29.93	1013.3
03	17:54	SW 10	10.00	Mostly Cloudy	BKN200	77	58			52%	29.93	1013.4
03	16:54	SW 12	10.00	Mostly Cloudy	FEW050 BKN200	78	57			48%	29.94	1013.6
03	15:54	SW 9	10.00	Partly Cloudy	FEW055 SCT180	78	56			47%	29.96	1014.3
03	14:54	SW 13	10.00	Partly Cloudy	FEW055 SCT250	77	56			48%	29.98	1015.1
03	13:54	S 8	10.00	Mostly Cloudy	SCT055 BKN250	75	55	76	61	50%	29.99	1015.4
03	12:54	SW 9	10.00	Partly Cloudy	SCT049 SCT250	75	55			50%	29.99	1015.6
03	11:54	SW 8	10.00	Partly Cloudy	SCT042	73	59			62%	30.02	1016.3
03	10:54	SW 5	10.00	A Few Clouds	FEW025	71	60			68%	30.02	1016.3
03	09:54	SW 8	10.00	A Few Clouds	FEW250	68	60			76%	30.01	1015.9
03	08:54	S 7	10.00	A Few Clouds	FEW250	64	58			81%	30.02	1016.4
03	07:54	S 7	10.00	Partly Cloudy	FEW070 SCT200	61	58	61	56	90%	30.00	1015.9
03	06:54	SW 6	10.00	Partly Cloudy	FEW150 SCT250	58	57			97%	29.98	1015.2
03	05:54	SW 6	10.00	Partly Cloudy	FEW180 SCT250	57	56			96%	29.98	1015.1
03	04:54	SW 5	10.00	Fair	CLR	56	55			97%	29.97	1014.8
03	03:54	SW 5	10.00	A Few Clouds	FEW250	56	54			93%	29.97	1014.7
03	02:54	SW 3	10.00	A Few Clouds	FEW250	57	54			90%	29.96	1014.5
03	01:54	SW 3	10.00	Partly Cloudy	FEW065 SCT250	57	55	70	57	93%	29.97	1014.6
03	00:54	SW 3	10.00	A Few Clouds	FEW070	59	55			87%	29.96	1014.5
02	23:54	W 3	10.00	A Few Clouds	FEW065	62	54			75%	29.95	1014.0
02	22:54	W 7	10.00	A Few Clouds	FEW065	64	54			70%	29.93	1013.4
02	21:54	W 7	10.00	Partly Cloudy	FEW030 SCT055	67	55			66%	29.91	1012.7
02	20:54	W 7	10.00	Partly Cloudy	FEW025 SCT035TCU SCT055	68	56			65%	29.88	1011.5
02	19:54	W 6	10.00	Partly Cloudy	FEW025	70	58	76	70	66%	29.85	1010.5



**APPENDIX B**

**CON-TEST ANALYTICAL REPORT**



August 31, 2009

Jeff Brandow  
Mactec, Inc. - ME  
511 Congress Street  
Portland, ME 04101

Project Location: Rochester-NY  
Client Job Number:  
Project Number: 3616086023/02  
Laboratory Work Order Number: 09H0185

Enclosed are results of analyses for samples received by the laboratory on August 7, 2009. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

T. Timothy Kelley  
Project Manager



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Mactec, Inc. - ME  
511 Congress Street  
Portland, ME 04101  
ATTN: Jeff Brandow

REPORT DATE: 8/31/2009

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 3616086023/02

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 09H0185

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Rochester-NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SV-09-07	09H0185-01	Soil Gas		EPA TO-15	
SV-09-04	09H0185-02	Soil Gas		EPA TO-15	
SV-09-08	09H0185-03	Soil Gas		EPA TO-15	
SV-09-02	09H0185-04	Soil Gas		EPA TO-15	

**CASE NARRATIVE SUMMARY**

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

4-Fluoroaniline was in the calibration curve however it appears that this compound is not suitable for summa canister analysis. The calibration curve was very poor and did not meet method requirements. The samples were analyzed qualitatively for this compound and all samples were not detected.

**EPA TO-15**

**Qualifications:**

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Analyte is found in the associated blank as well as in the sample.

**Analyte & Samples(s) Qualified:**

**2-Butanone (MEK), Acetone, Chloromethane, Ethanol, Isopropanol, Propene**

09H0185-01[SV-09-07], 09H0185-02[SV-09-04], 09H0185-03[SV-09-08], 09H0185-04[SV-09-02], B003977-BLK1, B003977-BS1, B003977-DUP1, B003980-BS1

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Laboratory fortified blank /laboratory control sample recovery outside of control limits. Data validation is not affected since all results are "not detected" for all samples in this batch for this compound and bias is on the high side.

**Analyte & Samples(s) Qualified:**

**1,2,4-Trichlorobenzene, Bromoform, Hexachlorobutadiene**

B003977-BS1

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The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Tod E. Kopyscinski  
Air Lab Director

**ANALYTICAL RESULTS**

Project Location: Rochester-NY  
 Date Received: 8/7/2009  
 Field Sample #: SV-09-07  
 Sample ID: 09H0185-01  
 Sample Matrix: Soil Gas  
 Sampled: 8/5/2009 10:11

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1100  
 Canister Size:  
 Flow Controller ID: 4071  
 Sample Type:

**Work Order: 09H0185**  
 Initial Vacuum(in Hg): -29.5  
 Final Vacuum(in Hg): -5.4  
 Receipt Vacuum(in Hg): -5  
 Flow Controller Type:  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling:

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag	Results	RL		Analized		
Acetone	28	0.40	B	67	0.95	2	8/21/09 19:07	XC	
Benzene	2.6	0.10		8.3	0.32	2	8/21/09 19:07	XC	
Benzyl chloride	ND	0.10		ND	0.52	2	8/21/09 19:07	XC	
Bromodichloromethane	ND	0.10		ND	0.67	2	8/21/09 19:07	XC	
Bromoform	ND	0.10		ND	1.0	2	8/21/09 19:07	XC	
Bromomethane	ND	0.10		ND	0.39	2	8/21/09 19:07	XC	
1,3-Butadiene	ND	0.10		ND	0.22	2	8/21/09 19:07	XC	
2-Butanone (MEK)	6.3	0.10	B	19	0.29	2	8/21/09 19:07	XC	
Carbon Disulfide	2.5	0.10		7.7	0.31	2	8/21/09 19:07	XC	
Carbon Tetrachloride	0.85	0.10		5.3	0.63	2	8/21/09 19:07	XC	
Chlorobenzene	0.26	0.10		1.2	0.46	2	8/21/09 19:07	XC	
Chloroethane	0.63	0.10		1.7	0.26	2	8/21/09 19:07	XC	
Chloroform	28	0.10		130	0.49	2	8/21/09 19:07	XC	
Chloromethane	0.81	0.10	B	1.7	0.21	2	8/21/09 19:07	XC	
Pyridine	ND	6.2		ND	20	2	8/21/09 19:07	XC	
2-Chloropyridine	ND	0.43		ND	2.0	2	8/21/09 19:07	XC	
3-Chloropyridine	ND	0.43		ND	2.0	2	8/21/09 19:07	XC	
Cyclohexane	1.2	0.10		4.2	0.34	2	8/21/09 19:07	XC	
Dibromochloromethane	ND	0.10		ND	0.85	2	8/21/09 19:07	XC	
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	8/21/09 19:07	XC	
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	8/21/09 19:07	XC	
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	8/21/09 19:07	XC	
1,4-Dichlorobenzene	0.47	0.10		2.8	0.60	2	8/21/09 19:07	XC	
Dichlorodifluoromethane (Freon 12)	0.35	0.10		1.7	0.49	2	8/21/09 19:07	XC	
1,1-Dichloroethane	0.40	0.10		1.6	0.40	2	8/21/09 19:07	XC	
1,2-Dichloroethane	0.88	0.10		3.5	0.40	2	8/21/09 19:07	XC	
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	8/21/09 19:07	XC	
cis-1,2-Dichloroethylene	3.7	0.10		15	0.40	2	8/21/09 19:07	XC	
trans-1,2-Dichloroethylene	0.13	0.10		0.53	0.40	2	8/21/09 19:07	XC	
1,2-Dichloropropane	0.14	0.10		0.63	0.46	2	8/21/09 19:07	XC	
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	8/21/09 19:07	XC	
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	8/21/09 19:07	XC	
2,6-Dichloropyridine	ND	0.33		ND	2.0	2	8/21/09 19:07	XC	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	8/21/09 19:07	XC	
Ethanol	20	0.40		37	0.75	2	8/21/09 19:07	XC	
Ethyl Acetate	2.0	0.10		7.2	0.36	2	8/21/09 19:07	XC	
Ethylbenzene	2.5	0.10		11	0.43	2	8/21/09 19:07	XC	
4-Ethyltoluene	1.2	0.10		5.7	0.49	2	8/21/09 19:07	XC	
Heptane	1.4	0.10		5.7	0.41	2	8/21/09 19:07	XC	

**ANALYTICAL RESULTS**

Project Location: Rochester-NY  
 Date Received: 8/7/2009  
 Field Sample #: SV-09-07  
 Sample ID: 09H0185-01  
 Sample Matrix: Soil Gas  
 Sampled: 8/5/2009 10:11

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1100  
 Canister Size:  
 Flow Controller ID: 4071  
 Sample Type:

**Work Order: 09H0185**  
 Initial Vacuum(in Hg): -29.5  
 Final Vacuum(in Hg): -5.4  
 Receipt Vacuum(in Hg): -5  
 Flow Controller Type:  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling:

**EPA TO-15**

Analyte	ppbv		Flag	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexachlorobutadiene	ND	0.10		ND	1.1	2	8/21/09 19:07	XC	
Hexane	1.8	0.10		6.4	0.35	2	8/21/09 19:07	XC	
2-Hexanone (MBK)	0.59	0.10		2.4	0.41	2	8/21/09 19:07	XC	
Isopropanol	4.4	0.10	B	11	0.25	2	8/21/09 19:07	XC	
Methyl tert-Butyl Ether (MTBE)	0.35	0.10		1.3	0.36	2	8/21/09 19:07	XC	
Methylene Chloride	1.9	0.40		6.6	1.4	2	8/21/09 19:07	XC	
4-Methyl-2-pentanone (MIBK)	0.74	0.10		3.0	0.41	2	8/21/09 19:07	XC	
Propene	4.0	0.10		6.8	0.17	2	8/21/09 19:07	XC	
Styrene	0.82	0.10		3.5	0.43	2	8/21/09 19:07	XC	
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	8/21/09 19:07	XC	
Tetrachloroethylene	1.1	0.10		7.4	0.68	2	8/21/09 19:07	XC	
Tetrahydrofuran	0.67	0.10		2.0	0.29	2	8/21/09 19:07	XC	
Toluene	34	0.10		130	0.38	2	8/21/09 19:07	XC	
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74	2	8/21/09 19:07	XC	
1,1,1-Trichloroethane	0.21	0.10		1.2	0.55	2	8/21/09 19:07	XC	
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	8/21/09 19:07	XC	
Trichloroethylene	0.48	0.10		2.6	0.54	2	8/21/09 19:07	XC	
Trichlorofluoromethane (Freon 11)	44	0.10		250	0.56	2	8/21/09 19:07	XC	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.79	0.10		6.0	0.77	2	8/21/09 19:07	XC	
1,2,4-Trimethylbenzene	2.6	0.10		13	0.49	2	8/21/09 19:07	XC	
1,3,5-Trimethylbenzene	1.0	0.10		5.1	0.49	2	8/21/09 19:07	XC	
Vinyl Acetate	ND	0.10		ND	0.35	2	8/21/09 19:07	XC	
Vinyl Chloride	0.41	0.10		1.0	0.26	2	8/21/09 19:07	XC	
m&p-Xylene	6.5	0.20		28	0.87	2	8/21/09 19:07	XC	
o-Xylene	1.7	0.10		7.2	0.43	2	8/21/09 19:07	XC	
<b>Surrogates</b>	<b>% Recovery</b>			<b>% REC Limits</b>					
4-Bromofluorobenzene (1)		103			70-130		8/21/09 19:07		
4-Bromofluorobenzene (3)		101			70-130		8/21/09 19:07		

**ANALYTICAL RESULTS**

Project Location: Rochester-NY  
 Date Received: 8/7/2009  
**Field Sample #: SV-09-04**  
**Sample ID: 09H0185-02**  
 Sample Matrix: Soil Gas  
 Sampled: 8/5/2009 11:50

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1865  
 Canister Size:  
 Flow Controller ID: 4077  
 Sample Type:

**Work Order: 09H0185**  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -5.4  
 Receipt Vacuum(in Hg): -6  
 Flow Controller Type:  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling:

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag	Results	RL		Analized		
Acetone	20	0.40	B	47	0.95	2	8/21/09 20:26		XC
Benzene	0.53	0.10		1.7	0.32	2	8/21/09 20:26		XC
Benzyl chloride	ND	0.10		ND	0.52	2	8/21/09 20:26		XC
Bromodichloromethane	ND	0.10		ND	0.67	2	8/21/09 20:26		XC
Bromoform	ND	0.10		ND	1.0	2	8/21/09 20:26		XC
Bromomethane	ND	0.10		ND	0.39	2	8/21/09 20:26		XC
1,3-Butadiene	ND	0.10		ND	0.22	2	8/21/09 20:26		XC
2-Butanone (MEK)	4.4	0.10	B	13	0.29	2	8/21/09 20:26		XC
Carbon Disulfide	ND	0.10		ND	0.31	2	8/21/09 20:26		XC
Carbon Tetrachloride	0.14	0.10		0.88	0.63	2	8/21/09 20:26		XC
Chlorobenzene	0.29	0.10		1.3	0.46	2	8/21/09 20:26		XC
Chloroethane	ND	0.10		ND	0.26	2	8/21/09 20:26		XC
Chloroform	11	0.10		54	0.49	2	8/21/09 20:26		XC
Chloromethane	ND	0.10		ND	0.21	2	8/21/09 20:26		XC
Pyridine	ND	6.2		ND	20	2	8/21/09 20:26		XC
2-Chloropyridine	0.57	0.43		2.7	2.0	2	8/21/09 20:26		XC
3-Chloropyridine	ND	0.43		ND	2.0	2	8/21/09 20:26		XC
Cyclohexane	0.29	0.10		1.0	0.34	2	8/21/09 20:26		XC
Dibromochloromethane	ND	0.10		ND	0.85	2	8/21/09 20:26		XC
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	8/21/09 20:26		XC
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	8/21/09 20:26		XC
1,3-Dichlorobenzene	0.16	0.10		0.97	0.60	2	8/21/09 20:26		XC
1,4-Dichlorobenzene	0.63	0.10		3.8	0.60	2	8/21/09 20:26		XC
Dichlorodifluoromethane (Freon 12)	0.44	0.10		2.2	0.49	2	8/21/09 20:26		XC
1,1-Dichloroethane	0.58	0.10		2.3	0.40	2	8/21/09 20:26		XC
1,2-Dichloroethane	0.12	0.10		0.48	0.40	2	8/21/09 20:26		XC
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	8/21/09 20:26		XC
cis-1,2-Dichloroethylene	1.6	0.10		6.2	0.40	2	8/21/09 20:26		XC
trans-1,2-Dichloroethylene	0.18	0.10		0.71	0.40	2	8/21/09 20:26		XC
1,2-Dichloropropane	ND	0.10		ND	0.46	2	8/21/09 20:26		XC
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	8/21/09 20:26		XC
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	8/21/09 20:26		XC
2,6-Dichloropyridine	ND	0.33		ND	2.0	2	8/21/09 20:26		XC
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	8/21/09 20:26		XC
Ethanol	28	0.40		53	0.75	2	8/21/09 20:26		XC
Ethyl Acetate	1.8	0.10		6.5	0.36	2	8/21/09 20:26		XC
Ethylbenzene	2.8	0.10		12	0.43	2	8/21/09 20:26		XC
4-Ethyltoluene	1.3	0.10		6.3	0.49	2	8/21/09 20:26		XC
Heptane	0.31	0.10		1.3	0.41	2	8/21/09 20:26		XC

**ANALYTICAL RESULTS**

Project Location: Rochester-NY  
 Date Received: 8/7/2009  
**Field Sample #: SV-09-04**  
**Sample ID: 09H0185-02**  
 Sample Matrix: Soil Gas  
 Sampled: 8/5/2009 11:50

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1865  
 Canister Size:  
 Flow Controller ID: 4077  
 Sample Type:

**Work Order: 09H0185**  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -5.4  
 Receipt Vacuum(in Hg): -6  
 Flow Controller Type:  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling:

**EPA TO-15**

Analyte	ppbv		Flag	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexachlorobutadiene	ND	0.10		ND	1.1	2	8/21/09 20:26	XC	
Hexane	0.20	0.10		0.69	0.35	2	8/21/09 20:26	XC	
2-Hexanone (MBK)	0.52	0.10		2.1	0.41	2	8/21/09 20:26	XC	
Isopropanol	5.4	0.10	B	13	0.25	2	8/21/09 20:26	XC	
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	8/21/09 20:26	XC	
Methylene Chloride	ND	0.40		ND	1.4	2	8/21/09 20:26	XC	
4-Methyl-2-pentanone (MIBK)	0.90	0.10		3.7	0.41	2	8/21/09 20:26	XC	
Propene	0.74	0.20		1.3	0.34	2	8/21/09 20:26	XC	
Styrene	0.87	0.10		3.7	0.43	2	8/21/09 20:26	XC	
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	8/21/09 20:26	XC	
Tetrachloroethylene	1.1	0.10		7.2	0.68	2	8/21/09 20:26	XC	
Tetrahydrofuran	0.55	0.10		1.6	0.29	2	8/21/09 20:26	XC	
Toluene	15	0.10		58	0.38	2	8/21/09 20:26	XC	
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74	2	8/21/09 20:26	XC	
1,1,1-Trichloroethane	0.29	0.10		1.6	0.55	2	8/21/09 20:26	XC	
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	8/21/09 20:26	XC	
Trichloroethylene	0.48	0.10		2.6	0.54	2	8/21/09 20:26	XC	
Trichlorofluoromethane (Freon 11)	1.5	0.10		8.6	0.56	2	8/21/09 20:26	XC	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	4.6	0.10		35	0.77	2	8/21/09 20:26	XC	
1,2,4-Trimethylbenzene	3.3	0.10		16	0.49	2	8/21/09 20:26	XC	
1,3,5-Trimethylbenzene	1.3	0.10		6.2	0.49	2	8/21/09 20:26	XC	
Vinyl Acetate	ND	0.10		ND	0.35	2	8/21/09 20:26	XC	
Vinyl Chloride	ND	0.10		ND	0.26	2	8/21/09 20:26	XC	
m&p-Xylene	8.2	0.20		36	0.87	2	8/21/09 20:26	XC	
o-Xylene	2.2	0.10		9.6	0.43	2	8/21/09 20:26	XC	
Surrogates	% Recovery			% REC Limits					
4-Bromofluorobenzene (1)		98.7			70-130		8/21/09 20:26		
4-Bromofluorobenzene (3)		102			70-130		8/21/09 20:26		

**ANALYTICAL RESULTS**

Project Location: Rochester-NY  
 Date Received: 8/7/2009  
**Field Sample #: SV-09-08**  
**Sample ID: 09H0185-03**  
 Sample Matrix: Soil Gas  
 Sampled: 8/5/2009 13:25

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1150  
 Canister Size:  
 Flow Controller ID: 4070  
 Sample Type:

**Work Order: 09H0185**  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -4.8  
 Receipt Vacuum(in Hg): -6  
 Flow Controller Type:  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling:

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time		Analyst
	Results	RL	Flag	Results	RL		Analyzed		
Acetone	16	0.40	B	39	0.95	2	8/21/09 21:06		XC
Benzene	0.99	0.10		3.2	0.32	2	8/21/09 21:06		XC
Benzyl chloride	ND	0.10		ND	0.52	2	8/21/09 21:06		XC
Bromodichloromethane	ND	0.10		ND	0.67	2	8/21/09 21:06		XC
Bromoform	ND	0.10		ND	1.0	2	8/21/09 21:06		XC
Bromomethane	ND	0.10		ND	0.39	2	8/21/09 21:06		XC
1,3-Butadiene	ND	0.10		ND	0.22	2	8/21/09 21:06		XC
2-Butanone (MEK)	2.9	0.10	B	8.4	0.29	2	8/21/09 21:06		XC
Carbon Disulfide	2.0	0.10		6.4	0.31	2	8/21/09 21:06		XC
Carbon Tetrachloride	3.7	0.10		23	0.63	2	8/21/09 21:06		XC
Chlorobenzene	0.37	0.10		1.7	0.46	2	8/21/09 21:06		XC
Chloroethane	ND	0.10		ND	0.26	2	8/21/09 21:06		XC
Chloroform	65	1.0		320	4.9	20	8/11/09 18:50		WSD
Chloromethane	0.19	0.10	B	0.40	0.21	2	8/21/09 21:06		XC
Pyridine	ND	6.2		ND	20	2	8/21/09 21:06		XC
2-Chloropyridine	1.4	0.43		6.3	2.0	2	8/21/09 21:06		XC
3-Chloropyridine	ND	0.43		ND	2.0	2	8/21/09 21:06		XC
Cyclohexane	0.93	0.10		3.2	0.34	2	8/21/09 21:06		XC
Dibromochloromethane	ND	0.10		ND	0.85	2	8/21/09 21:06		XC
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	8/21/09 21:06		XC
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	8/21/09 21:06		XC
1,3-Dichlorobenzene	0.23	0.10		1.4	0.60	2	8/21/09 21:06		XC
1,4-Dichlorobenzene	0.47	0.10		2.8	0.60	2	8/21/09 21:06		XC
Dichlorodifluoromethane (Freon 12)	0.35	0.10		1.7	0.49	2	8/21/09 21:06		XC
1,1-Dichloroethane	3.4	0.10		14	0.40	2	8/21/09 21:06		XC
1,2-Dichloroethane	ND	0.10		ND	0.40	2	8/21/09 21:06		XC
1,1-Dichloroethylene	0.11	0.10		0.44	0.40	2	8/21/09 21:06		XC
cis-1,2-Dichloroethylene	74	1.0		290	4.0	20	8/11/09 18:50		WSD
trans-1,2-Dichloroethylene	2.2	0.10		8.5	0.40	2	8/21/09 21:06		XC
1,2-Dichloropropane	ND	0.10		ND	0.46	2	8/21/09 21:06		XC
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	8/21/09 21:06		XC
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	8/21/09 21:06		XC
2,6-Dichloropyridine	0.36	0.33		2.2	2.0	2	8/21/09 21:06		XC
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	8/21/09 21:06		XC
Ethanol	19	0.40		36	0.75	2	8/21/09 21:06		XC
Ethyl Acetate	0.88	0.10		3.2	0.36	2	8/21/09 21:06		XC
Ethylbenzene	1.5	0.10		6.7	0.43	2	8/21/09 21:06		XC
4-Ethyltoluene	0.78	0.10		3.8	0.49	2	8/21/09 21:06		XC
Heptane	0.36	0.10		1.5	0.41	2	8/21/09 21:06		XC



**ANALYTICAL RESULTS**

Project Location: Rochester-NY  
 Date Received: 8/7/2009  
**Field Sample #: SV-09-08**  
**Sample ID: 09H0185-03**  
 Sample Matrix: Soil Gas  
 Sampled: 8/5/2009 13:25

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1150  
 Canister Size:  
 Flow Controller ID: 4070  
 Sample Type:

**Work Order: 09H0185**  
 Initial Vacuum(in Hg): -29  
 Final Vacuum(in Hg): -4.8  
 Receipt Vacuum(in Hg): -6  
 Flow Controller Type:  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling:

**EPA TO-15**

Analyte	ppbv		Flag	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexachlorobutadiene	ND	0.10		ND	1.1	2	8/21/09 21:06		XC
Hexane	0.84	0.10		3.0	0.35	2	8/21/09 21:06		XC
2-Hexanone (MBK)	0.38	0.10		1.6	0.41	2	8/21/09 21:06		XC
Isopropanol	4.0	0.10	B	9.7	0.25	2	8/21/09 21:06		XC
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	8/21/09 21:06		XC
Methylene Chloride	1.1	0.40		3.7	1.4	2	8/21/09 21:06		XC
4-Methyl-2-pentanone (MIBK)	0.67	0.10		2.7	0.41	2	8/21/09 21:06		XC
Propene	ND	0.20		ND	0.34	2	8/21/09 21:06		XC
Styrene	0.46	0.10		2.0	0.43	2	8/21/09 21:06		XC
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	8/21/09 21:06		XC
Tetrachloroethylene	3.7	0.10		25	0.68	2	8/21/09 21:06		XC
Tetrahydrofuran	0.41	0.10		1.2	0.29	2	8/21/09 21:06		XC
Toluene	5.6	0.10		21	0.38	2	8/21/09 21:06		XC
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74	2	8/21/09 21:06		XC
1,1,1-Trichloroethane	0.77	0.10		4.2	0.55	2	8/21/09 21:06		XC
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	8/21/09 21:06		XC
Trichloroethylene	2.5	0.10		13	0.54	2	8/21/09 21:06		XC
Trichlorofluoromethane (Freon 11)	0.44	0.10		2.4	0.56	2	8/21/09 21:06		XC
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	58	0.10		440	0.77	2	8/21/09 21:06		XC
1,2,4-Trimethylbenzene	2.1	0.10		10	0.49	2	8/21/09 21:06		XC
1,3,5-Trimethylbenzene	0.85	0.10		4.2	0.49	2	8/21/09 21:06		XC
Vinyl Acetate	ND	0.10		ND	0.35	2	8/21/09 21:06		XC
Vinyl Chloride	1.4	0.10		3.5	0.26	2	8/21/09 21:06		XC
m&p-Xylene	4.9	0.20		21	0.87	2	8/21/09 21:06		XC
o-Xylene	1.5	0.10		6.4	0.43	2	8/21/09 21:06		XC
<b>Surrogates</b>	<b>% Recovery</b>			<b>% REC Limits</b>					
4-Bromofluorobenzene (1)	98.8			70-130			8/11/09 18:50		
4-Bromofluorobenzene (1)	98.4			70-130			8/21/09 21:06		
4-Bromofluorobenzene (3)	103			70-130			8/21/09 21:06		

**ANALYTICAL RESULTS**

Project Location: Rochester-NY  
 Date Received: 8/7/2009  
**Field Sample #: SV-09-02**  
**Sample ID: 09H0185-04**  
 Sample Matrix: Soil Gas  
 Sampled: 8/5/2009 15:30

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1011  
 Canister Size:  
 Flow Controller ID: 4080  
 Sample Type:

**Work Order: 09H0185**  
 Initial Vacuum(in Hg): -27.8  
 Final Vacuum(in Hg): -5.8  
 Receipt Vacuum(in Hg): -7  
 Flow Controller Type:  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling:

**EPA TO-15**

Analyte	ppbv			ug/m3		Dilution	Date/Time Analyzed	Analyst
	Results	RL	Flag	Results	RL			
Acetone	13	0.40	B	32	0.95	2	8/21/09 21:45	XC
Benzene	0.34	0.10		1.1	0.32	2	8/21/09 21:45	XC
Benzyl chloride	ND	0.10		ND	0.52	2	8/21/09 21:45	XC
Bromodichloromethane	ND	0.10		ND	0.67	2	8/21/09 21:45	XC
Bromoform	ND	0.10		ND	1.0	2	8/21/09 21:45	XC
Bromomethane	ND	0.10		ND	0.39	2	8/21/09 21:45	XC
1,3-Butadiene	ND	0.10		ND	0.22	2	8/21/09 21:45	XC
2-Butanone (MEK)	1.1	0.10	B	3.3	0.29	2	8/21/09 21:45	XC
Carbon Disulfide	ND	0.10		ND	0.31	2	8/21/09 21:45	XC
Carbon Tetrachloride	ND	0.10		ND	0.63	2	8/21/09 21:45	XC
Chlorobenzene	ND	0.10		ND	0.46	2	8/21/09 21:45	XC
Chloroethane	ND	0.10		ND	0.26	2	8/21/09 21:45	XC
Chloroform	0.11	0.10		0.55	0.49	2	8/21/09 21:45	XC
Chloromethane	0.61	0.10	B	1.3	0.21	2	8/21/09 21:45	XC
Pyridine	ND	6.2		ND	20	2	8/21/09 21:45	XC
2-Chloropyridine	ND	0.43		ND	2.0	2	8/21/09 21:45	XC
3-Chloropyridine	ND	0.43		ND	2.0	2	8/21/09 21:45	XC
Cyclohexane	0.18	0.10		0.63	0.34	2	8/21/09 21:45	XC
Dibromochloromethane	ND	0.10		ND	0.85	2	8/21/09 21:45	XC
1,2-Dibromoethane (EDB)	ND	0.10		ND	0.77	2	8/21/09 21:45	XC
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	8/21/09 21:45	XC
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	8/21/09 21:45	XC
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	8/21/09 21:45	XC
Dichlorodifluoromethane (Freon 12)	0.39	0.10		1.9	0.49	2	8/21/09 21:45	XC
1,1-Dichloroethane	ND	0.10		ND	0.40	2	8/21/09 21:45	XC
1,2-Dichloroethane	ND	0.10		ND	0.40	2	8/21/09 21:45	XC
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	8/21/09 21:45	XC
cis-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	8/21/09 21:45	XC
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	8/21/09 21:45	XC
1,2-Dichloropropane	ND	0.10		ND	0.46	2	8/21/09 21:45	XC
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	8/21/09 21:45	XC
trans-1,3-Dichloropropene	ND	0.10		ND	0.45	2	8/21/09 21:45	XC
2,6-Dichloropyridine	ND	0.33		ND	2.0	2	8/21/09 21:45	XC
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	8/21/09 21:45	XC
Ethanol	5.5	0.40		10	0.75	2	8/21/09 21:45	XC
Ethyl Acetate	4.0	0.10		14	0.36	2	8/21/09 21:45	XC
Ethylbenzene	0.14	0.10		0.61	0.43	2	8/21/09 21:45	XC
4-Ethyltoluene	ND	0.10		ND	0.49	2	8/21/09 21:45	XC
Heptane	0.17	0.10		0.70	0.41	2	8/21/09 21:45	XC

**ANALYTICAL RESULTS**

Project Location: Rochester-NY  
 Date Received: 8/7/2009  
**Field Sample #: SV-09-02**  
**Sample ID: 09H0185-04**  
 Sample Matrix: Soil Gas  
 Sampled: 8/5/2009 15:30

Sample Description/Location:  
 Sub Description/Location:  
 Canister ID: 1011  
 Canister Size:  
 Flow Controller ID: 4080  
 Sample Type:

**Work Order: 09H0185**  
 Initial Vacuum(in Hg): -27.8  
 Final Vacuum(in Hg): -5.8  
 Receipt Vacuum(in Hg): -7  
 Flow Controller Type:  
 Flow Controller Calibration  
 RPD Pre and Post-Sampling:

**EPA TO-15**

Analyte	ppbv		Flag	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Hexachlorobutadiene	ND	0.10		ND	1.1	2	8/21/09 21:45		XC
Hexane	1.5	0.10		5.3	0.35	2	8/21/09 21:45		XC
2-Hexanone (MBK)	0.17	0.10		0.69	0.41	2	8/21/09 21:45		XC
Isopropanol	0.91	0.10	B	2.2	0.25	2	8/21/09 21:45		XC
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	8/21/09 21:45		XC
Methylene Chloride	2.5	0.40		8.8	1.4	2	8/21/09 21:45		XC
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	8/21/09 21:45		XC
Propene	0.85	0.20		1.5	0.34	2	8/21/09 21:45		XC
Styrene	ND	0.10		ND	0.43	2	8/21/09 21:45		XC
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	8/21/09 21:45		XC
Tetrachloroethylene	ND	0.10		ND	0.68	2	8/21/09 21:45		XC
Tetrahydrofuran	ND	0.10		ND	0.29	2	8/21/09 21:45		XC
Toluene	1.1	0.10		4.2	0.38	2	8/21/09 21:45		XC
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74	2	8/21/09 21:45		XC
1,1,1-Trichloroethane	ND	0.10		ND	0.55	2	8/21/09 21:45		XC
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	8/21/09 21:45		XC
Trichloroethylene	0.19	0.10		1.0	0.54	2	8/21/09 21:45		XC
Trichlorofluoromethane (Freon 11)	0.34	0.10		1.9	0.56	2	8/21/09 21:45		XC
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.13	0.10		1.0	0.77	2	8/21/09 21:45		XC
1,2,4-Trimethylbenzene	0.15	0.10		0.72	0.49	2	8/21/09 21:45		XC
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	8/21/09 21:45		XC
Vinyl Acetate	ND	0.10		ND	0.35	2	8/21/09 21:45		XC
Vinyl Chloride	ND	0.10		ND	0.26	2	8/21/09 21:45		XC
m&p-Xylene	0.40	0.20		1.7	0.87	2	8/21/09 21:45		XC
o-Xylene	0.14	0.10		0.60	0.43	2	8/21/09 21:45		XC
<b>Surrogates</b>	<b>% Recovery</b>			<b>% REC Limits</b>					
4-Bromofluorobenzene (1)		95.3			70-130		8/21/09 21:45		
4-Bromofluorobenzene (3)		102			70-130		8/21/09 21:45		

**Sample Extraction Data**

**Prep Method: TO-15 Prep-EPA TO-15**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
09H0185-01 [SV-09-07]	B003977	1	1	N/A	1000	400	200	08/21/09
09H0185-02 [SV-09-04]	B003977	1	1	N/A	1000	400	200	08/21/09
09H0185-03 [SV-09-08]	B003977	1	1	N/A	1000	400	200	08/21/09
09H0185-04 [SV-09-02]	B003977	1	1	N/A	1000	400	200	08/21/09

**Prep Method: TO-15 Prep-EPA TO-15**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
09H0185-03RE1 [SV-09-08]	B003980	1	1	N/A	1000	400	20	08/11/09

**QUALITY CONTROL**

**Air Toxics by EPA Compendium Methods - Quality Control**

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	RPD	RPD Limit	Flag
	Results	RL	Results	RL	ppbv	Result	%REC Limits	RPD		

**Batch B003977 - TO-15 Prep**

**Blank (B003977-BLK1)**

Prepared & Analyzed: 08/21/09

Acetone	0.12	0.020								B
Benzene	ND	0.020								
Benzyl chloride	ND	0.020								
Bromodichloromethane	ND	0.020								
Bromoform	ND	0.020								
Bromomethane	ND	0.020								
1,3-Butadiene	ND	0.020								
2-Butanone (MEK)	0.035	0.020								B
Carbon Disulfide	ND	0.020								
Carbon Tetrachloride	ND	0.020								
Chlorobenzene	ND	0.020								
Chloroethane	ND	0.020								
Chloroform	ND	0.020								
Chloromethane	0.023	0.020								B
Pyridine	ND	1.2								
2-Chloropyridine	ND	0.086								
3-Chloropyridine	ND	0.086								
Cyclohexane	ND	0.020								
Dibromochloromethane	ND	0.020								
1,2-Dibromoethane (EDB)	ND	0.020								
1,2-Dichlorobenzene	ND	0.020								
1,3-Dichlorobenzene	ND	0.020								
1,4-Dichlorobenzene	ND	0.020								
Dichlorodifluoromethane (Freon 12)	ND	0.020								
1,1-Dichloroethane	ND	0.020								
1,2-Dichloroethane	ND	0.020								
1,1-Dichloroethylene	ND	0.020								
cis-1,2-Dichloroethylene	ND	0.020								
trans-1,2-Dichloroethylene	ND	0.020								
1,2-Dichloropropane	ND	0.020								
cis-1,3-Dichloropropene	ND	0.020								
trans-1,3-Dichloropropene	ND	0.020								
2,6-Dichloropyridine	ND	0.066								
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.020								
Ethanol	ND	0.020								
Ethyl Acetate	ND	0.020								
Ethylbenzene	ND	0.020								
4-Ethyltoluene	ND	0.020								
Heptane	ND	0.020								
Hexachlorobutadiene	ND	0.020								
Hexane	ND	0.020								
2-Hexanone (MBK)	ND	0.020								
Isopropanol	0.021	0.020								B
Methyl tert-Butyl Ether (MTBE)	ND	0.020								
Methylene Chloride	ND	0.020								
4-Methyl-2-pentanone (MIBK)	ND	0.020								

**QUALITY CONTROL**

**Air Toxics by EPA Compendium Methods - Quality Control**

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag
	Results	RL	Results	RL	ppbv	Result	Limits	RPD	Limit		

**Batch B003977 - TO-15 Prep**

**Blank (B003977-BLK1)**

Prepared & Analyzed: 08/21/09

Propene	ND	0.020									
Styrene	ND	0.020									
1,1,2,2-Tetrachloroethane	ND	0.020									
Tetrachloroethylene	ND	0.020									
Tetrahydrofuran	ND	0.020									
Toluene	ND	0.020									
1,2,4-Trichlorobenzene	ND	0.020									
1,1,1-Trichloroethane	ND	0.020									
1,1,2-Trichloroethane	ND	0.020									
Trichloroethylene	ND	0.020									
Trichlorofluoromethane (Freon 11)	ND	0.020									
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.020									
1,2,4-Trimethylbenzene	ND	0.020									
1,3,5-Trimethylbenzene	ND	0.020									
Vinyl Acetate	ND	0.020									
Vinyl Chloride	ND	0.020									
m&p-Xylene	ND	0.040									
o-Xylene	ND	0.020									
<hr/>											
Surrogate: 4-Bromofluorobenzene (1)	7.95				8.00		99.3	70-130			
Surrogate: 4-Bromofluorobenzene (3)	7.92				8.00		99.0	70-130			

**LCS (B003977-BS1)**

Prepared & Analyzed: 08/21/09

Acetone	6.10				5.00		122	50-150			B
Benzene	4.22				5.00		84.3	70-130			
Benzyl chloride	6.28				5.00		126	70-130			
Bromodichloromethane	5.00				5.00		100	70-130			
Bromoform	6.66				5.00		133 *	70-130			L-01
Bromomethane	5.30				5.00		106	70-130			
1,3-Butadiene	5.84				5.00		117	70-130			
2-Butanone (MEK)	4.46				5.00		89.2	70-130			B
Carbon Disulfide	4.78				5.00		95.5	70-130			
Carbon Tetrachloride	4.80				5.00		96.0	70-130			
Chlorobenzene	4.93				5.00		98.7	70-130			
Chloroethane	5.44				5.00		109	70-130			
Chloroform	5.24				5.00		105	70-130			
Chloromethane	5.04				5.00		101	70-130			B
Pyridine	3.38	3.1		10.0				50-150			
2-Chloropyridine	ND	0.22		1.00				50-150			
3-Chloropyridine	ND	0.22		1.00				50-150			
Cyclohexane	4.40				5.00		88.1	70-130			
Dibromochloromethane	5.74				5.00		115	70-130			
1,2-Dibromoethane (EDB)	5.01				5.00		100	70-130			
1,2-Dichlorobenzene	5.95				5.00		119	70-130			
1,3-Dichlorobenzene	5.97				5.00		119	70-130			
1,4-Dichlorobenzene	5.94				5.00		119	70-130			
Dichlorodifluoromethane (Freon 12)	6.02				5.00		120	70-130			

**QUALITY CONTROL**

**Air Toxics by EPA Compendium Methods - Quality Control**

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag
	Results	RL	Results	RL	ppbv	Result	Limits	RPD	Limit		
<b>Batch B003977 - TO-15 Prep</b>											
<b>LCS (B003977-BS1)</b>											
						Prepared & Analyzed: 08/21/09					
1,1-Dichloroethane	4.82				5.00		96.3	70-130			
1,2-Dichloroethane	5.20				5.00		104	70-130			
1,1-Dichloroethylene	4.87				5.00		97.4	70-130			
cis-1,2-Dichloroethylene	5.05				5.00		101	70-130			
trans-1,2-Dichloroethylene	4.84				5.00		96.9	70-130			
1,2-Dichloropropane	3.88				5.00		77.6	70-130			
cis-1,3-Dichloropropene	4.81				5.00		96.3	70-130			
trans-1,3-Dichloropropene	5.03				5.00		101	70-130			
2,6-Dichloropyridine	ND	0.16		1.00				50-150			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	6.04				5.00		121	70-130			
Ethanol	5.63				5.00		113	50-150			
Ethyl Acetate	4.94				5.00		98.9	50-150			
Ethylbenzene	5.12				5.00		102	70-130			
4-Ethyltoluene	6.04				5.00		121	50-150			
Heptane	4.49				5.00		89.8	50-150			
Hexachlorobutadiene	6.62				5.00		<b>132</b> *	70-130			L-01
Hexane	4.69				5.00		93.9	70-130			
2-Hexanone (MBK)	4.83				5.00		96.6	50-150			
Isopropanol	5.09				5.00		102	50-150			B
Methyl tert-Butyl Ether (MTBE)	5.53				5.00		111	70-130			
Methylene Chloride	5.45				5.00		109	70-130			
4-Methyl-2-pentanone (MIBK)	4.80				5.00		95.9	70-130			
Propene	4.27				5.00		85.4	50-150			
Styrene	5.48				5.00		110	70-130			
1,1,2,2-Tetrachloroethane	5.24				5.00		105	70-130			
Tetrachloroethylene	5.25				5.00		105	70-130			
Tetrahydrofuran	6.70				5.00		134	50-150			
Toluene	4.32				5.00		86.4	70-130			
1,2,4-Trichlorobenzene	6.59				5.00		<b>132</b> *	70-130			L-01
1,1,1-Trichloroethane	4.72				5.00		94.4	70-130			
1,1,2-Trichloroethane	4.89				5.00		97.7	70-130			
Trichloroethylene	4.66				5.00		93.2	70-130			
Trichlorofluoromethane (Freon 11)	6.03				5.00		121	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	5.19				5.00		104	70-130			
1,2,4-Trimethylbenzene	5.85				5.00		117	70-130			
1,3,5-Trimethylbenzene	5.78				5.00		116	70-130			
Vinyl Acetate	4.96				5.00		99.3	70-130			
Vinyl Chloride	5.40				5.00		108	70-130			
m&p-Xylene	10.5				10.0		105	70-130			
o-Xylene	5.30				5.00		106	70-130			
Surrogate: 4-Bromofluorobenzene (1)	8.47				8.00		106	70-130			
Surrogate: 4-Bromofluorobenzene (3)	8.50				8.00		106	70-130			

**QUALITY CONTROL**

**Air Toxics by EPA Compendium Methods - Quality Control**

Analyte	ppbv		ug/m3		Spike Level ppbv	Source Result	%REC Limits	RPD	RPD Limit	Flag
	Results	RL	Results	RL						
<b>Batch B003977 - TO-15 Prep</b>										
<b>Duplicate (B003977-DUP1)</b>		<b>Source: 09H0185-01</b>				<b>Prepared &amp; Analyzed: 08/21/09</b>				
Acetone	26	0.10	61	0.24		28		9.06	25	B
Benzene	2.6	0.10	8.5	0.32		2.6		1.83	25	
Benzyl chloride	ND	0.10	ND	0.52		ND			25	
Bromodichloromethane	ND	0.10	ND	0.67		ND			25	
Bromoform	ND	0.10	ND	1.0		ND			25	
Bromomethane	ND	0.10	ND	0.39		ND			25	
1,3-Butadiene	ND	0.10	ND	0.22		ND			25	
2-Butanone (MEK)	6.1	0.10	18	0.29		6.3		3.35	25	B
Carbon Disulfide	2.4	0.10	7.4	0.31		2.5		3.56	25	
Carbon Tetrachloride	0.82	0.10	5.2	0.63		0.85		3.11	25	
Chlorobenzene	0.26	0.10	1.2	0.46		0.26		0.00	25	
Chloroethane	0.59	0.10	1.6	0.26		0.63		6.22	25	
Chloroform	26	0.10	130	0.49		28		6.99	25	
Chloromethane	0.85	0.10	1.8	0.21		0.81		5.30	25	B
Pyridine	ND	6.2	ND	20		0.0			25	
2-Chloropyridine	ND	0.43	ND	2.0		0.0			25	
3-Chloropyridine	ND	0.43	ND	2.0		0.0			25	
Cyclohexane	1.2	0.10	4.2	0.34		1.2		0.496	25	
Dibromochloromethane	ND	0.10	ND	0.85		ND			25	
1,2-Dibromoethane (EDB)	ND	0.10	ND	0.77		ND			25	
1,2-Dichlorobenzene	ND	0.10	ND	0.60		ND			25	
1,3-Dichlorobenzene	ND	0.10	ND	0.60		ND			25	
1,4-Dichlorobenzene	0.47	0.10	2.8	0.60		0.47		1.70	25	
Dichlorodifluoromethane (Freon 12)	0.30	0.10	1.5	0.49		0.35		13.6	25	
1,1-Dichloroethane	0.39	0.10	1.6	0.40		0.40		2.02	25	
1,2-Dichloroethane	0.82	0.10	3.3	0.40		0.88		6.36	25	
1,1-Dichloroethylene	ND	0.10	ND	0.40		ND			25	
cis-1,2-Dichloroethylene	3.6	0.10	14	0.40		3.7		2.85	25	
trans-1,2-Dichloroethylene	0.13	0.10	0.52	0.40		0.13		1.50	25	
1,2-Dichloropropane	0.13	0.10	0.61	0.46		0.14		2.99	25	
cis-1,3-Dichloropropene	ND	0.10	ND	0.45		ND			25	
trans-1,3-Dichloropropene	ND	0.10	ND	0.45		ND			25	
2,6-Dichloropyridine	ND	0.33	ND	2.0		0.0			25	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10	ND	0.70		ND			25	
Ethanol	20	0.10	37	0.19		20		0.561	25	
Ethyl Acetate	2.1	0.10	7.6	0.36		2.0		6.42	25	
Ethylbenzene	2.4	0.10	11	0.43		2.5		0.733	25	
4-Ethyltoluene	1.2	0.10	5.7	0.49		1.2		0.690	25	
Heptane	1.4	0.10	5.6	0.41		1.4		1.75	25	
Hexachlorobutadiene	ND	0.10	ND	1.1		ND			25	
Hexane	1.7	0.10	6.1	0.35		1.8		4.51	25	
2-Hexanone (MBK)	0.58	0.10	2.4	0.41		0.59		1.37	25	
Isopropanol	4.2	0.10	10	0.25		4.4		5.10	25	B
Methyl tert-Butyl Ether (MTBE)	0.35	0.10	1.3	0.36		0.35		0.570	25	
Methylene Chloride	1.8	0.10	6.3	0.35		1.9		4.67	25	
4-Methyl-2-pentanone (MIBK)	0.77	0.10	3.2	0.41		0.74		3.96	25	



**QUALITY CONTROL**

**Air Toxics by EPA Compendium Methods - Quality Control**

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag
	Results	RL	Results	RL	ppbv	Result	Limits	RPD	Limit		
<b>Batch B003977 - TO-15 Prep</b>											
<b>Duplicate (B003977-DUP1)</b>		<b>Source: 09H0185-01</b>				<b>Prepared &amp; Analyzed: 08/21/09</b>					
Propene	4.1	0.10	7.0	0.17		4.0			2.39	25	
Styrene	0.83	0.10	3.5	0.43		0.82			1.21	25	
1,1,2,2-Tetrachloroethane	ND	0.10	ND	0.69		ND				25	
Tetrachloroethylene	1.1	0.10	7.4	0.68		1.1			0.917	25	
Tetrahydrofuran	0.70	0.10	2.1	0.29		0.67			4.37	25	
Toluene	35	0.10	130	0.38		34			0.366	25	
1,2,4-Trichlorobenzene	ND	0.10	ND	0.74		ND				25	
1,1,1-Trichloroethane	0.20	0.10	1.1	0.55		0.21			6.83	25	
1,1,2-Trichloroethane	ND	0.10	ND	0.55		ND				25	
Trichloroethylene	0.47	0.10	2.5	0.54		0.48			1.67	25	
Trichlorofluoromethane (Freon 11)	37	0.10	210	0.56		44			16.2	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.74	0.10	5.7	0.77		0.79			6.55	25	
1,2,4-Trimethylbenzene	2.4	0.10	12	0.49		2.6			6.67	25	
1,3,5-Trimethylbenzene	1.0	0.10	4.9	0.49		1.0			3.34	25	
Vinyl Acetate	ND	0.10	ND	0.35		ND				25	
Vinyl Chloride	0.40	0.10	1.0	0.26		0.41			2.48	25	
m&p-Xylene	6.5	0.20	28	0.87		6.5			0.649	25	
o-Xylene	1.6	0.10	7.1	0.43		1.7			2.55	25	
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>8.00</i>					<i>8.00</i>		<i>99.9</i>	<i>70-130</i>		
<i>Surrogate: 4-Bromofluorobenzene (3)</i>	<i>8.07</i>					<i>8.00</i>		<i>101</i>	<i>70-130</i>		

**Batch B003980 - TO-15 Prep**

<b>Blank (B003980-BLK1)</b>		<b>Prepared &amp; Analyzed: 08/11/09</b>									
Acetone	ND	0.050									
Benzene	ND	0.050									
Benzyl chloride	ND	0.050									
Bromodichloromethane	ND	0.050									
Bromoform	ND	0.050									
Bromomethane	ND	0.050									
1,3-Butadiene	ND	0.050									
2-Butanone (MEK)	0.066	0.050									
Carbon Disulfide	ND	0.050									
Carbon Tetrachloride	ND	0.050									
Chlorobenzene	ND	0.050									
Chloroethane	ND	0.050									
Chloroform	ND	0.050									
Chloromethane	ND	0.050									
Pyridine	ND	3.1									
2-Chloropyridine	ND	0.22									
3-Chloropyridine	ND	0.22									
Cyclohexane	ND	0.050									
Dibromochloromethane	ND	0.050									
1,2-Dibromoethane (EDB)	ND	0.050									
1,2-Dichlorobenzene	ND	0.050									
1,3-Dichlorobenzene	ND	0.050									

**QUALITY CONTROL**

**Air Toxics by EPA Compendium Methods - Quality Control**

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	RPD	RPD	Flag
	Results	RL	Results	RL	ppbv	Result	%REC	Limits		

**Batch B003980 - TO-15 Prep**

**Blank (B003980-BLK1)**

Prepared & Analyzed: 08/11/09

1,4-Dichlorobenzene	ND	0.050
Dichlorodifluoromethane (Freon 12)	ND	0.050
1,1-Dichloroethane	ND	0.050
1,2-Dichloroethane	ND	0.050
1,1-Dichloroethylene	ND	0.050
cis-1,2-Dichloroethylene	ND	0.050
trans-1,2-Dichloroethylene	ND	0.050
1,2-Dichloropropane	ND	0.050
cis-1,3-Dichloropropene	ND	0.050
trans-1,3-Dichloropropene	ND	0.050
2,6-Dichloropyridine	ND	0.16
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.050
Ethanol	0.15	0.050
Ethyl Acetate	ND	0.050
Ethylbenzene	ND	0.050
4-Ethyltoluene	ND	0.050
Heptane	ND	0.050
Hexachlorobutadiene	ND	0.050
Hexane	ND	0.050
2-Hexanone (MBK)	ND	0.050
Isopropanol	ND	0.050
Methyl tert-Butyl Ether (MTBE)	ND	0.050
Methylene Chloride	ND	0.050
4-Methyl-2-pentanone (MIBK)	ND	0.050
Propene	0.11	0.050
Styrene	ND	0.050
1,1,2,2-Tetrachloroethane	ND	0.050
Tetrachloroethylene	ND	0.050
Tetrahydrofuran	ND	0.050
Toluene	ND	0.050
1,2,4-Trichlorobenzene	ND	0.050
1,1,1-Trichloroethane	ND	0.050
1,1,2-Trichloroethane	ND	0.050
Trichloroethylene	ND	0.050
Trichlorofluoromethane (Freon 11)	ND	0.050
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.050
1,2,4-Trimethylbenzene	ND	0.050
1,3,5-Trimethylbenzene	ND	0.050
Vinyl Acetate	ND	0.050
Vinyl Chloride	ND	0.050
m&p-Xylene	ND	0.10
o-Xylene	ND	0.050

Surrogate: 4-Bromofluorobenzene (1)	7.89	8.00	98.6	70-130
Surrogate: 4-Bromofluorobenzene (3)	0.00	8.00	*	70-130

**QUALITY CONTROL**

**Air Toxics by EPA Compendium Methods - Quality Control**

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag
	Results	RL	Results	RL	ppbv	Result	Limits	RPD	Limit		
<b>Batch B003980 - TO-15 Prep</b>											
<b>LCS (B003980-BS1)</b>											
						Prepared & Analyzed: 08/11/09					
Acetone	4.28				5.00		85.6	50-150			
Benzene	4.51				5.00		90.1	70-130			
Benzyl chloride	5.31				5.00		106	70-130			
Bromodichloromethane	4.72				5.00		94.4	70-130			
Bromoform	4.98				5.00		99.6	70-130			
Bromomethane	4.16				5.00		83.2	70-130			
1,3-Butadiene	4.62				5.00		92.5	70-130			
2-Butanone (MEK)	4.06				5.00		81.3	70-130			B
Carbon Disulfide	3.63				5.00		72.5	70-130			
Carbon Tetrachloride	4.15				5.00		82.9	70-130			
Chlorobenzene	4.68				5.00		93.7	70-130			
Chloroethane	4.50				5.00		90.1	70-130			
Chloroform	3.74				5.00		74.9	70-130			
Chloromethane	4.61				5.00		92.3	70-130			
Pyridine	ND	3.1		10.0				50-150			
2-Chloropyridine	ND	0.22		1.00				50-150			
3-Chloropyridine	ND	0.22		1.00				50-150			
Cyclohexane	5.22				5.00		104	70-130			
Dibromochloromethane	4.82				5.00		96.5	70-130			
1,2-Dibromoethane (EDB)	4.58				5.00		91.7	70-130			
1,2-Dichlorobenzene	4.78				5.00		95.6	70-130			
1,3-Dichlorobenzene	4.79				5.00		95.8	70-130			
1,4-Dichlorobenzene	4.81				5.00		96.2	70-130			
Dichlorodifluoromethane (Freon 12)	3.92				5.00		78.4	70-130			
1,1-Dichloroethane	3.87				5.00		77.5	70-130			
1,2-Dichloroethane	3.74				5.00		74.7	70-130			
1,1-Dichloroethylene	4.04				5.00		80.8	70-130			
cis-1,2-Dichloroethylene	4.04				5.00		80.9	70-130			
trans-1,2-Dichloroethylene	3.90				5.00		78.1	70-130			
1,2-Dichloropropane	4.77				5.00		95.3	70-130			
cis-1,3-Dichloropropene	4.64				5.00		92.8	70-130			
trans-1,3-Dichloropropene	4.69				5.00		93.8	70-130			
2,6-Dichloropyridine	ND	0.16		1.00				50-150			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	4.16				5.00		83.2	70-130			
Ethanol	4.43				5.00		88.6	50-150			B
Ethyl Acetate	4.82				5.00		96.4	50-150			
Ethylbenzene	4.85				5.00		97.1	70-130			
4-Ethyltoluene	5.25				5.00		105	50-150			
Heptane	5.31				5.00		106	50-150			
Hexachlorobutadiene	4.66				5.00		93.1	70-130			
Hexane	4.44				5.00		88.9	70-130			
2-Hexanone (MBK)	5.60				5.00		112	50-150			
Isopropanol	4.96				5.00		99.3	50-150			
Methyl tert-Butyl Ether (MTBE)	3.77				5.00		75.3	70-130			
Methylene Chloride	4.78				5.00		95.5	70-130			
4-Methyl-2-pentanone (MIBK)	5.80				5.00		116	70-130			

**QUALITY CONTROL**

**Air Toxics by EPA Compendium Methods - Quality Control**

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag
	Results	RL	Results	RL	ppbv	Result	Limits	RPD	Limit		
<b>Batch B003980 - TO-15 Prep</b>											
<b>LCS (B003980-BS1)</b>											
						Prepared & Analyzed: 08/11/09					
Propene	4.65				5.00		92.9	50-150			B
Styrene	5.17				5.00		103	70-130			
1,1,2,2-Tetrachloroethane	5.17				5.00		103	70-130			
Tetrachloroethylene	4.37				5.00		87.3	70-130			
Tetrahydrofuran	4.80				5.00		95.9	50-150			
Toluene	4.72				5.00		94.5	70-130			
1,2,4-Trichlorobenzene	4.82				5.00		96.4	70-130			
1,1,1-Trichloroethane	4.12				5.00		82.3	70-130			
1,1,2-Trichloroethane	4.57				5.00		91.4	70-130			
Trichloroethylene	4.64				5.00		92.7	70-130			
Trichlorofluoromethane (Freon 11)	3.91				5.00		78.2	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	3.74				5.00		74.8	70-130			
1,2,4-Trimethylbenzene	5.04				5.00		101	70-130			
1,3,5-Trimethylbenzene	5.07				5.00		101	70-130			
Vinyl Acetate	4.05				5.00		81.0	70-130			
Vinyl Chloride	4.37				5.00		87.4	70-130			
m&p-Xylene	10.1				10.0		101	70-130			
o-Xylene	4.97				5.00		99.3	70-130			
<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>8.20</i>				<i>8.00</i>		<i>102</i>	<i>70-130</i>			
<i>Surrogate: 4-Bromofluorobenzene (3)</i>	<i>0.00</i>				<i>8.00</i>		<i>*</i>	<i>70-130</i>			

**FLAG/QUALIFIER SUMMARY**

- \* QC result is outside of established limits.
  - † Wide recovery limits established for difficult compound.
  - ‡ Wide RPD limits established for difficult compound.
  - # Data exceeded client recommended or regulatory level
- Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
- B Analyte is found in the associated blank as well as in the sample.
  - L-01 Laboratory fortified blank /laboratory control sample recovery outside of control limits. Data validation is not affected since all results are "not detected" for all samples in this batch for this compound and bias is on the high side.

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Benzene	AIHA,FL,NJ,NY
Benzyl chloride	AIHA,FL,NJ,NY
Bromodichloromethane	AIHA,NJ
Bromoform	AIHA,NJ
Bromomethane	AIHA,FL,NJ,NY
1,3-Butadiene	AIHA,NJ
2-Butanone (MEK)	AIHA,FL,NJ,NY
Carbon Disulfide	AIHA,NJ
Carbon Tetrachloride	AIHA,FL,NJ,NY
Chlorobenzene	AIHA,FL,NJ,NY
Chloroethane	AIHA,FL,NJ,NY
Chloroform	AIHA,FL,NJ,NY
Chloromethane	AIHA,FL,NJ,NY
Cyclohexane	AIHA,NJ
1,2-Dibromoethane (EDB)	AIHA,NJ
1,2-Dichlorobenzene	AIHA,FL,NJ,NY
1,3-Dichlorobenzene	AIHA,NJ
1,4-Dichlorobenzene	AIHA,FL,NJ,NY
1,1-Dichloroethane	AIHA,FL,NJ,NY
1,2-Dichloroethane	AIHA,FL,NJ,NY
1,1-Dichloroethylene	AIHA,FL,NJ,NY
cis-1,2-Dichloroethylene	AIHA,FL,NY
trans-1,2-Dichloroethylene	AIHA,NJ,NY
1,2-Dichloropropane	AIHA,FL,NJ,NY
cis-1,3-Dichloropropene	AIHA,FL,NJ,NY
Ethylbenzene	AIHA,FL,NJ,NY
4-Ethyltoluene	AIHA,NJ
Heptane	AIHA,NJ
Hexachlorobutadiene	AIHA,NJ
Hexane	AIHA,FL,NJ,NY
Methyl tert-Butyl Ether (MTBE)	AIHA,FL,NJ,NY
Methylene Chloride	AIHA,FL,NJ,NY
4-Methyl-2-pentanone (MIBK)	AIHA,FL,NJ,NY
Styrene	AIHA,FL,NJ,NY
1,1,2,2-Tetrachloroethane	AIHA,FL,NJ,NY
Tetrachloroethylene	AIHA,FL,NJ,NY
Toluene	AIHA,FL,NJ,NY
1,2,4-Trichlorobenzene	AIHA,NJ
1,1,1-Trichloroethane	AIHA,FL,NJ,NY
1,1,2-Trichloroethane	AIHA,FL,NJ,NY
Trichloroethylene	AIHA,FL,NJ,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	AIHA,NJ,NY
1,2,4-Trimethylbenzene	AIHA,NJ
1,3,5-Trimethylbenzene	AIHA,NJ
Vinyl Acetate	AIHA,FL,NJ,NY
Vinyl Chloride	AIHA,FL,NJ,NY
m&p-Xylene	AIHA,FL,NJ,NY

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
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*EPA TO-15 in Air*

o-Xylene AIHA,FL,NJ,NY

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	American Industrial Hygiene Association	100033	01/1/2010
MA	Massachusetts DEP	M-MA100	06/30/2010
CT	Connecticut Department of Public Health	PH-0567	09/30/2009
NY	New York State Department of Health	10899 NELAP	04/1/2010
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2010
RI	Rhode Island Department of Health	LAO00112	12/30/2009
NC	North Carolina Div. of Water Quality	652	12/31/2009
NJ	New Jersey DEP	MA007 NELAP	06/30/2010
FL	Florida Department of Health	E871027 NELAP	06/30/2010
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2010
WA	State of Washington Department of Ecology	C2065	03/23/2010



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 Email: info@contestlabs.com  
 www.contestlabs.com

**AIR SAMPLE CHAIN OF CUSTODY RECORD**

39 SPRUCE ST  
 EAST LONGMEADOW, MA 01028

Company Name: MACTEC

Address: 511 Congress St

Portland ME 04101

Attention: Jeff Brando

Project Location: Rochester NY

Sampled By: Mike Daskburn

Proposal Provided? (For Billing purposes)  Yes  No

Telephone: 207 225-5401

Project # 306086023/02

Client PO # 09140185

DATA DELIVERY (check one):  
 FAX  EMAIL  WEBSITE CLIENT

Fax #: \_\_\_\_\_  
 Email: \_\_\_\_\_

Format:  EXCEL  PDF  GIS KEY  OTHER \_\_\_\_\_

Field ID	Sample Description	Media	Lab #	Date	Start Time	Stop Time	Total	Flow Rate	Volume	Matrix
					Time	Time	Minutes Sampled	M <sup>3</sup> /Min. or L/Min.	Liters or M <sup>3</sup>	Code*
SV-09-07		S	DA140185-01	0925	1011	445				X
SV-09-04		S		1115	1150					X
SV-09-08		S		03109	03105					X
SV-09-03		S		1300	1325					X
SV-09-02		S		15109	15109					X
SV-09-01		S	DN HOLD	15109	15109					X

CLIENT COMMENTS:

Relinquished by: (signature) \_\_\_\_\_  
 Date/Time: 8/17/09 1345

Received by: (signature) \_\_\_\_\_  
 Date/Time: \_\_\_\_\_

Turnaround \*\*  
 7-Day  
 10-Day  
 Other BUSH \*

\*Approval Required  
 24-Hr  48-Hr  
 72-Hr  14-Day

Special Requirements  
 Regulations: \_\_\_\_\_  
 Data Enhancement/RCP?  Y  N  
 Enhanced Data Package  Y  N  
 (Surcharge Applies)  
 Required Detection Limits \_\_\_\_\_  
 Other: \_\_\_\_\_

\*Matrix Code:  
 SG= SOIL GAS  
 IA= INDOOR AIR  
 AMB=AMBIENT  
 SS= SUB SLAB  
 D= DUP  
 BL= BLANK  
 O= other

\*\*Media Codes:  
 S=summa can  
 TB=teflon bag  
 P=PUF  
 T=tube  
 F= filter  
 C=cassette  
 O= Other

ANALYSIS REQUESTED  
 Hg  
 Please fill out completely, sign, date and retain the yellow copy for your record.  
 Summa canisters and flow controllers must be returned within 14 days of receipt or rental fees will apply.  
 Summa canisters will be retained for a minimum of 14 days after sampling date prior to cleaning.

Summa Canister ID	Flow Controller ID
225524	4041
22059	4024
22049	4070
22023	4086
22059	4080
22057	4066

TURNAROUND TIME STARTS AT 9:00 AM. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS





www.contestlabs.com

39 Spruce Street  
East Longmeadow, MA  
Phone: 1-413-525-2332  
Fax: 1-413-525-6405

### AIR ONLY RECEIPT CHECKLIST

CLIENT NAME: \_\_\_\_\_  
RECEIVED BY: Km DATE: 08/07/09

- 1. Was chain of custody relinquished and signed? YES NO
- 2. Does Chain agree with samples? YES NO

If not, explain: \_\_\_\_\_

- 3. All Samples in good condition? YES NO

If not, explain: \_\_\_\_\_

- 4. Are there any on hold samples? YES NO STORED WHERE:

- 5. ARE THERE ANY RUSH OR SHORT HOLDING TIME SAMPLES? WHO WAS NOTIFIED? \_\_\_\_\_ DATE \_\_\_\_\_ TIME \_\_\_\_\_

Location where samples are stored: AIR

Permission to sub-contract samples? Yes No (circle)  
(Walk in clients only) if not already approved.  
Client Signature \_\_\_\_\_

CONTAINERS SENT TO CON-TEST	# of containers
Summa cans	9
Tedlar Bags	
Regulators	
Restrictors	9
Tubes	
Other	

- 1. Was all media (used & unused) checked into the WASP asset management program?
- 2. Were all returned summa cans, restrictors, & regulators documented as returned in the AIR Lab Outbound excel sheet?
- 3. Were the Lab ID's documented in the Air Lab Outbound excel sheet?
- 4. Was the job documented in the Air Lab Log-In Access Database?

Laboratory comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_