# DECEMBER 2005 SAMPLING EVENT BIANNUAL LETTER REPORT ACTIVE VENTING SYSTEM OPERATION AND MAINTENANCE 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



February 22, 2006

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 North Franklin Street Site, Site No. 8-49-002

Summary of Operation and Maintenance Activities: December 2005 Sampling Event

**Biannual Letter Report** 

Dear Mr. Chiusano:

URS Corporation (URS) has completed the first of four scheduled visits to the above-referenced system to conduct biannual operation and maintenance (O&M). This work was performed in accordance with the New York State Department of Environmental Conservation (NYSDEC) Project Management Work Plan (PMWP)/Budget estimate (NYSDEC, May 2005).

The O&M consisted of performing system checks to ensure that the system is operating properly and to collect representative samples of the indoor air and the system's soil gas exhaust. The O&M activities were conducted by URS personnel on December 15, 2005. A photo log is included in Attachment 1. Documentation of the O&M activities is provided in the Field Notes, included in Attachment 2.

The former dry cleaners building containing the active venting system is currently vacant and schedule to be demolished by the new owner (The Krog Corporation). URS has been instructed by the Department in an e-mail dated December 21, 2005, to shut down the system and dismantle the fan. The system will be shut down during an upcoming indoor sampling event at the VFW Post, which is located adjacent to the former dry cleaners building.

#### Inspection

URS' inspection of the system revealed that it was running; however, it was expulsing soil gas at a rate of 420 feet per minute (ft/min), less than half of the usual rate of 930 ft/min. The reduced expulsion rate could be attributed to the ice accumulation observed within the exhaust pipe, and within the sampling ports of the system. The field technician did not have an extendable ladder to remove the ice buildup. The velocity of the exhaust was measured by inserting the probe of an air velocity meter (TSI Velocicheck Model 8330) into a sampling port located on the side of the exhaust stack. Field notes are included in Attachment 2.



#### **Biannual Air Sampling**

As part of the O&M, URS collected two air samples from the following locations:

- One ambient air 4-hour composite sample, collected in the back room of the site building (INDOOR-1205); and,
- One soil gas grab sample, collected from the venting system's exhaust stack (SOILGAS-1205).

These samples were collected using SUMMA canisters in accordance with the protocols outlined in Section 7.1.1 of the United States Environmental Protection Agency's (USEPA's) "SUMMA Canister Sampling" procedures (SOP#: 1704, 7/27/1995). The Summa canister sampling sheet and a copy of the chin of custody (COC) are provided in Attachment 3. The Summa canisters were sent under COC control to Severn Trent Laboratories (STL) in Knoxville, Tennessee (a New York State Department of Health [NYSDOH] approved laboratory) to be analyzed for volatile organic compound (VOC) using USEPA Method TO-15. The table below summarizes the analytical data. A copy of the laboratory report is included in Attachment 4.

		Samp	le I.D.	OSHA Permissible	NYSDOH
Compound	Units	INDOOR-1205	SOILGAS-1205	Exposure Level (1)	Indoor Air Criteria
Acetone	μg/m³	6.2 (estimated, method blank contamination)	21 (estimated, method blank contamination)	2,400,000	None Available
Benzene	μg/m <sup>3</sup>	1.5	2.9 (Estimated)	31,947	None Available
Carbon Tetrachloride	μg/m³	0.58 (Estimated)	Not Detected	62,920	None Available
Chloromethane	μg/m³	1.1 (Estimated)	3.2 (Estimated)	206,503	None Available
1,1- Dichloroethene	μg/m³	0.34 (Estimated)	Not Detected	None Available	None Available
cis-1,2- Dichloroethene	μg/m³	0.33 (Estimated)	Not Detected	None Available	None Available
Ethylbenzene	μg/m³	0.43 (Estimated)	Not Detected	435,000	None Available
Tetrachloroethene	$\mu g/m^3$	3.0	Not Detected	678,323.11	100 <sup>(2)</sup>
Toluene	μg/m <sup>3</sup>	2.8	Not Detected	753,620	None Available
Trichloroethene	μg/m³	0.38 (Estimated)	Not Detected	None Available	5 <sup>(2)</sup>
1,1,1- Trichloroethane	μg/m³	2.5	Not Detected	1,900,000	100(2)
o-Xylene	μg/m³	0.42 (Estimated)	Not Detected	435,000	None Available



		Samp	le I.D.	OSHA Permissible	NYSDOH
Compound	Units	INDOOR-1205	SOILGAS-1205	Exposure Level <sup>(1)</sup>	Indoor Air Criteria
m&p-Xylene	μg/m³	1.1	Not Detected	435,000	None Available
2-Butanone (MEK)	μg/m³	0.95 (Estimated)	Not Detected	590,000	None Available

<sup>1 -</sup> Sources: 29 CFR 1910.1000 and 29 CFR 1910.1052

As shown in the table above, the concentration of VOCs detected in the indoor air sample are below the applicable OSHA criteria. The concentration of tetrachloroethene [3.0 micro grams per cubic meter  $(\mu g/m^3)$ ] and 1,1,1-trichloroethane (2.5  $\mu g/m^3$ ) were detected below the NYSDOH indoor air criteria of  $100 \,\mu g/m^3$ . The concentration of trichloroethene (0.38  $\mu g/m^3$ ) was detected below the NYSDOH indoor air criteria of  $5.0 \,\mu g/m^3$ .

As previously stated, the former dry cleaners building containing the active venting system is currently vacant and schedule to be demolished by the new owner. The Department has instructed URS to shut down the system and dismantle the fan. Therefore, the December 2005 Sampling Event will the last biannual O&M sampling of the system.

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

Sincerely,

URS CORPORATION

Charles E. Dusel, Vr. Sr. Project Manager

Attachments

cc: File: 11174211 (C-1)

<sup>2 -</sup> Source: Guidance for Evaluating Soil Vapor Intrusion in the state of New York, NYSDOH (February 2005)

## ATTACHMENT 1 PHOTO LOG



#### **PHOTOGRAPHIC LOG**

#### **Client Name:**

New York State Department of Environmental Conservation

#### **Site Location:**

20 N. Franklin St., Watkins Glen, New York

Project No.

11174211.84000

Photo No.

**Date:** 12-15-05

Direction Photo Taken:

Southeast



West face (front) of site building (unoccupied).



Photo No.

Date:

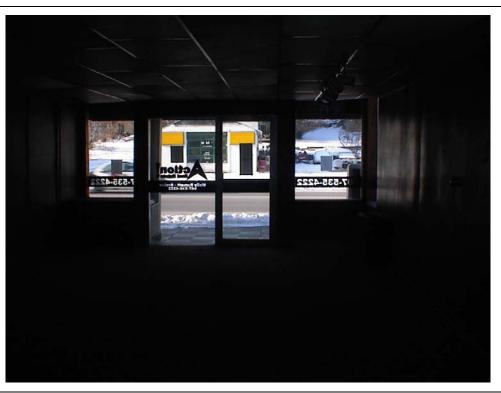
2 12-15-05

Direction Photo Taken:

West

#### Description:

Interior of site building (unoccupied).





#### PHOTOGRAPHIC LOG

New York State Department of Environmental Conservation

Site Location:

20 N. Franklin St., Watkins Glen, New York

Project No.

11174211.84000

Photo No. 3

Date: 12-15-05

**Direction Photo** Taken:

Southeast

#### Description:

Six (6) liter SUMMA canister in rear of site building, collecting indoor air sample "INDOOR-1205".



Photo No.

Date: 12-15-05 4

**Direction Photo** Taken:

West

#### Description:

Exhaust stack of SVE system, along north face of site building. Note ice build-up along west face of exhaust motor.





#### PHOTOGRAPHIC LOG

**Client Name:** 

New York State Department of Environmental Conservation

**Photo No.** 5 Date: 12-15-05

Direction Photo Taken:

North

#### Description:

Exhaust tip of SVE system. Note ice accumulation in opening.

#### Site Location:

20 N. Franklin St., Watkins Glen, New York

Project No.

11174211.84000



### ATTACHMENT 2 FIELD NOTES

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# ATTACHMENT 3 CHAIN OF CUSTODY/ SAMPLING DATA SHEET

#### **Summa Canister Sampling Field Data Sheet**

Site: NYSDEC - 20 N. Franklin Site, Watkins Glen, NY

Samplers: Kevin J. McGovern

Date: 12/15/05

Sample #	INDOOR-1205	SOILGAS-1205			
Location	Indoors	Gas Exhaust			
Summa Canister ID (Lab ID, if provided)	2 <i>989</i>	0156			
Additional Tubing Added	NO/ YES - How much	NO/ YES- How much	NO/ YES - How much	NO/ YES - How much	NO/ YES - How much
Purge Time (Start)	M	09:05			
Purge Time (Stop)	+	0 9:40			
Total Purge Time (min) [recommended time is 20 min for 1L canister]	ps	35			
Pressure Gauge - before sampling	-29" Hg	-29" Hg			
Sample Time (Start)	09:zo	09:41			
Sample Time (Stop)	13:20	09:44			
Total Sample Time (min)	240	3.0			
Pressure Gauge - after sampling	-2" //g	-1" Hg			
Canister Pressure Went To Ambient Pressure?	YES /NO	YES /	YES / NO	YES / NO	YES / NO
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## ATTACHMENT 4 LABORATORY REPORT



**STL Knoxville** 5815 Middlebrook Pike Knoxville, TN 37921

Tel: 865 291 3000 Fax: 865 584 4315 www.stl-inc.com

#### ANALYTICAL REPORT

PROJECT NO. 11174211.99998

North Franklin St.

Lot #: H5L160134

Ann Marie Kropovitch

URS Corp/ NYSDEC 640 Ellicott St. Buffalo, NY 14203-

SEVERN TRENT LABORATORIES, INC.

Jamie A. McKinney
Project Manager

December 27, 2005

#### **ANALYTICAL METHODS SUMMARY**

#### H5L160134

	ANALYTICAL
PARAMETER	METHOD
Volatile Organics by TO15	EPA-2 TO-15

#### References:

"Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", EPA-625/R-96/010b, January 1999.

#### **SAMPLE SUMMARY**

#### H5L160134

<u>WO #</u> §	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
HR81H	001	INDOOR-1205	12/15/05	
HR81J	002	SOIL GAS-1205	12/15/05	

#### NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

#### PROJECT NARRATIVE H5L160134

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.

STL Knoxville maintains the following certifications, approvals and accreditations: Arkansas DEQ Cert. #05-043-0, California DHS ELAP Cert. #2423, Colorado DPHE, Connecticut DPH Cert. #PH-0223, Florida DOH Cert. #E87177, Georgia DNR Cert. #906 (SDWA, expires 6/24/05), Hawaii DOH, Illinois EPA Cert. #000687, Indiana DOH Cert. #C-TN-02, Iowa DNR Cert. #375, 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, Ohio EPA VAP Cert. #CL0059, Oklahoma DEQ ID #9415, Pennsylvania DEP Cert. #68-00576, South Carolina DHEC Lab ID #84001001, Tennessee DOH Lab ID #02014, Utah DOH Cert. # QUAN3, Virginia DGS Lab ID #00165, Washington DOE Lab #C120, West Virginia DEP Cert. #345, Wisconsin DNR Lab ID #998044300, US Army Corps of Engineers, Naval Facilities Engineering Service Center 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.

### Sample Data Summary

#### Client Sample ID: INDOOR-1205

#### **GC/MS Volatiles**

Lot-Sample # H5L160134 - 001 Work Order # HR81H1AC Matrix....... AIR

 Date Sampled...:
 12/15/05

 Prep Date......:
 12/19/05

 Prep Batch #....:
 5354412

**Date Received..:** 12/16/05 **Analysis Date...** 12/20/05

Dilution Factor.: 1.12 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	0.22	ND		1.0
Acetone	2.6	5.6	6.2	JВ	13
Ethylbenzene	0.098	0.22	0.43	J	0.97
2-Hexanone	ND	0.56	ND		2.3
Methylene chloride	ND	0.56	ND		1.9
Benzene	0.46	0.22	1.5		0.72
Styrene	ND	0.22	ND		0.95
1,1,2,2-Tetrachloroethane	ND	0.22	ND		1.5
Tetrachloroethene	0.44	0.22	3.0		1.5
Toluene	0.74	0.22	2.8		0.84
1,1,1-Trichloroethane	0.46	0.22	2.5		1.2
1,1,2-Trichloroethane	ND	0.22	ND		1.2
Trichloroethene	0.071	0.22	0.38	J	1.2
Vinyl chloride	ND	0.22	ND		0.57
o-Xylene	0.096	0.22	0.42	J	0.97
m-Xylene & p-Xylene	0.25	0.22	1.1		0.97
Bromodichloromethane	ND	0.22	ND		1.5
2-Butanone (MEK)	0.32	0.56	0.95	J	1.7
4-Methyl-2-pentanone (MIBK)	ND	0.56	ND		2.3
Bromoform	ND	0.22	ND		2.3
Bromomethane	ND	0.22	ND		0.87
Carbon disulfide	ND	0.22	ND		0.70
Carbon tetrachloride	0.092	0.22	0.58	J	1.4
Chlorobenzene	ND	0.22	ND		1.0
Dibromochloromethane	ND	0.22	ND		1.9
Chloroethane	ND	0.22	ND		0.59
Chloroform	ND	0.22	ND		1.1
Chloromethane	0.53	0.56	1.1	J	1.2
1,1-Dichloroethane	ND	0.22	ND		0.91
1,2-Dichloroethane	ND	0.22	ND		0.91
1,1-Dichloroethene	0.086	0.22	0.34	J	0.89
cis-1,2-Dichloroethene	0.084	0.22	0.33	J	0.89
trans-1,2-Dichloroethene	ND	0.22	ND		0.89
1,2-Dichloropropane	ND	0.22	ND		1.0
cis-1,3-Dichloropropene	ND	0.22	ND		1.0

#### Client Sample ID: INDOOR-1205

#### GC/MS Volatiles

Lot-Sample #	H5L160134 - 001	Work Order #	HR81H1AC	Matrix:	AIR
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)	•
1,2-Dichloroeth Toluene-d8 4-Bromofluorol		100 102 97		70 - 130 70 - 130 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)

#### Client Sample ID: SOIL GAS-1205

#### **GC/MS Volatiles**

Lot-Sample # H5L160134 - 002 Work Order # HR81J1AD Matrix....... AIR

 Date Sampled...:
 12/15/05

 Prep Date......:
 12/19/05

 Prep Batch #.....:
 5354412

**Date Received..:** 12/16/05 **Analysis Date...** 12/20/05

Dilution Factor.: 10 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	2.0	ND		9.1
Acetone	9.0	50	21	JВ	120
Ethylbenzene	ND	2.0	ND	0.2	8.7
2-Hexanone	ND	5.0	ND		20
Methylene chloride	ND	5.0	ND		17
Benzene	0.92	2.0	2.9	J	6.4
Styrene	ND	2.0	ND		8.5
1,1,2,2-Tetrachloroethane	ND	2.0	ND		14
Tetrachloroethene	ND	2.0	ND		14
Toluene	ND	2.0	ND		7.5
1,1,1-Trichloroethane	ND	2.0	ND		11
1,1,2-Trichloroethane	ND	2.0	ND		11
Trichloroethene	ND	2.0	ND		11
Vinyl chloride	ND	2.0	ND		5.1
o-Xylene	ND	2.0	ND		8.7
m-Xylene & p-Xylene	ND	2.0	ND		8.7
Bromodichloromethane	ND	2.0	ND		13
2-Butanone (MEK)	ND	5.0	ND		15
4-Methyl-2-pentanone (MIBK)	ND	5.0	ND		20
Bromoform	ND	2.0	ND		21
Bromomethane	ND	2.0	ND		7.8
Carbon disulfide	ND	2.0	ND		6.2
Carbon tetrachloride	ND	2.0	ND		13
Chlorobenzene	ND	2.0	ND		9.2
Dibromochloromethane	ND	2.0	ND		17
Chloroethane	ND	2.0	ND		5.3
Chloroform	ND	2.0	ND		9.8
Chloromethane	1.5	5.0	3.2	J	10
1,1-Dichloroethane	ND	2.0	ND		8.1
1,2-Dichloroethane	ND	2.0	ND		8.1
1,1-Dichloroethene	ND	2.0	ND		7.9
cis-1,2-Dichloroethene	ND	2.0	ND		7.9
trans-1,2-Dichloroethene	ND	2.0	ND		7.9
1,2-Dichloropropane	ND	2.0	ND		9.2
cis-1,3-Dichloropropene	ND	2.0	ND		9.1

#### Client Sample ID: SOIL GAS-1205

#### **GC/MS Volatiles**

Lot-Sample #	H5L160134 - 002	Work Order #	HR81J1AD	Matrix:	AIR
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)	
1,2-Dichloroetha Toluene-d8 4-Bromofluorob		98 98 96		70 - 130 70 - 130 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)

#### Client Sample ID: INTRA-LAB BLANK

#### GC/MS Volatiles

**Lot-Sample** # H5L200000 - 412B

Work Order # HTGRH1AA

Matrix....:

AIR

Prep Date....:

12/19/05

**Date Received..:** 12/16/05

Prep Batch #....:

5354412

**Analysis Date...** 12/19/05

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	0.24	5.0	0.57 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

#### Client Sample ID: INTRA-LAB BLANK

#### **GC/MS Volatiles**

<b>Lot-Sample</b> # H5L200000 - 412B	Work Order #	HTGRH1AA	Matrix AIR		
SURROGATE	PERCENT RECOVERY	•	LABORATORY CONTROL LIMITS (%)		
1,2-Dichloroethane-d4 Toluene-d8 4-Bromofluorobenzene	101 101 99		70 - 130 70 - 130 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)

#### Client Sample ID: CHECK SAMPLE

#### GC/MS Volatiles

Lot-Sample # H5L200000 - 412C

Work Order # HTGRH1AC Matrix....:

70 - 130

AIR

Prep Date....:

12/19/05

**Date Received..:** 12/16/05

Prep Batch #....:

5354412

**Analysis Date...** 12/19/05

**Dilution Factor.:** 

4-Bromofluorobenzene

**Method....:** TO-15

PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS	
Benzene	10.0	7.65	32	24	76	70 - 130	
Toluene	10.0	8.02	38	30	80	70 - 130	
Trichloroethene	10.0	7.86	54	42	79	70 - 130	
Chlorobenzene	10.0	8.04	46	37	80	70 - 130	
1,1-Dichloroethene	10.0	8.86	40	35	89	70 - 130	
SURROGATE		PERCENT RECOVERY			LABORATORY CONTROL LIMITS (%)		
1,2-Dichloroethane-d4 Toluene-d8		101 101			70 - 130 70 - 130		

99

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