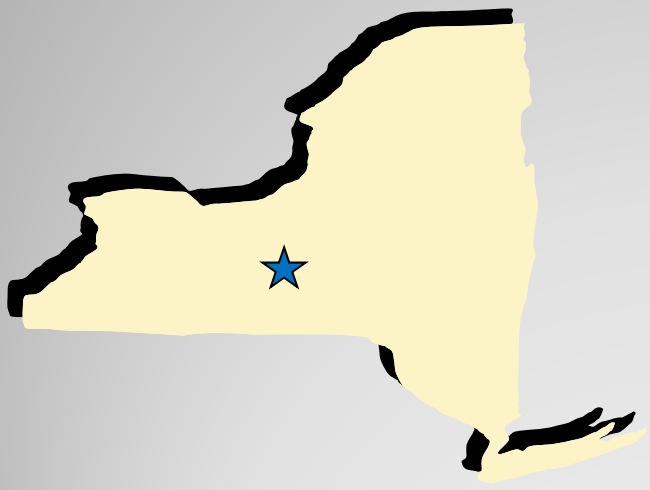
PHASE VII SOIL VAPOR INTRUSION SUMMARY REPORT ADDENDUM

Off-site Former Axiohm Facility (C755012A)
Tompkins County, Ithaca, New York



Prepared for:

New York State Department of Environmental Conservation
Division of Environmental Remediation

Prepared by:

EA ENGINEERING, P.C. and Its Affiliate
EA SCIENCE and TECHNOLOGY

JULY 2012

Phase VII Soil Vapor Intrusion
Summary Report Addendum
Off-Site Former Axiohm Facility (C755012A)
Ithaca, New York

Prepared for

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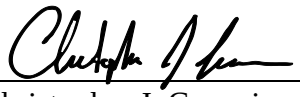
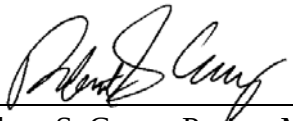


24 July 2012
Christopher J. Canonica, P.E., Program Manager — Date
EA Engineering, P.C.



24 July 2012
Robert S. Casey, Project Manager — Date
EA Science and Technology

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1. INTRODUCTION

1.1 PROJECT BACKGROUND

The New York State Department of Environmental Conservation (NYSDEC) tasked EA Engineering, P.C., and its affiliate EA Science and Technology (EA) to perform Phase VII soil vapor intrusion (SVI) evaluations at the offsite Former Axiohm Facility (NYSDEC Site No. C755012A). The site is located within the South Hill neighborhood in the city of Ithaca, Tompkins County, New York (Figure 1). EA completed activities for Phase VII SVI evaluations under the NYSDEC State Superfund Standby Contract (Work Assignment No. D004438-19).

Subsequent to the submission of the Final Phase VII SVI Summary Report (EA 2012)[1], NYSDEC requested that EA complete SVI monitoring at two residential structures located within the study area based upon historical results. In addition, EA was tasked to provide engineering oversight during sub-slab depressurization system (SSDS) enhancement operations at three residential structures and to perform post-mitigation testing. EA performed the field investigation and engineering oversight activities in February 2012. This addendum report summarizes the supplemental field work completed to date following submission of the Final Phase VII SVI Summary Report.

1.2 OBJECTIVES

The objective of the SVI monitoring was to further evaluate the potential for vapor intrusion within selected structures. The objective of the structure mitigations enhancements was to improve SSDS operation at structures with existing Radon/SSDSs and to enhance mitigation performance for potential vapor intrusion.

1.3 REPORT ORGANIZATION

A summary of field investigation activities conducted in February 2012 is included in Section 2. Section 3 summarizes analytical results of the field sampling activities. Analytical results are summarized in table format and associated figures.

The following are provided as appendixes:

- **Appendix A**—NYSDEC Daily Field Reports
- **Appendix B**—Indoor Air/Sub-Slab Vapor Sampling Forms
- **Appendix C**—Data Usability Summary Reports
- **Appendix D**—Laboratory Analytical Data, Form Is, Chain of Custody Forms.

1. EA Engineering, P.C., and its affiliate EA Science and Technology, 2012. Phase VII Soil Vapor Intrusion Summary Report, *Off-site Former Axiohm Facility (C755012), Ithaca, New York.* January

2. FIELD INVESTIGATION ACTIVITIES

Following the Phase VII SVI evaluations, two residential structures were identified by NYSDEC and New York State Department of Health (NYSDOH) for installation of SSDSs, and two residential structures were identified for further SVI evaluation. Residential structures with active radon mitigation systems were evaluated for system performance, and additional SVI sampling and/or radon sampling was conducted as deemed necessary. Based on supplemental sampling, NYSDEC and NYSDOH identified three residential structures with previously installed radon mitigation systems as requiring upgrades to enhance system performance and recommended additional sampling at the two residential structures previously identified for further SVI evaluation (Figure 2).

Copies of daily field reports are provided in Appendix A. Table 1 presents the Phase VII SVI reevaluation/post-SSDS enhancement analytical sampling program. Table 2 presents the residential structure address summary.

2.1 SSDS UPGRADES AND ENHANCEMENTS

On 6-9 February 2012, EA, NYSDEC, and Aztech Technologies, Inc (Aztech), a NYSDEC standby Remedial Contractor, completed SSDS enhancements at Structures 35, 39, and 43. All enhancements were performed by Aztech in accordance with the U.S. Environmental Protection Agency (EPA) Radon Mitigation Standard 402-R93-078 and the NYSDOH Draft Guidance, Appendix F, Standard Specifications, Active Soil Depressurizations Systems. A summary of the SSDS enhancement completed at each structure is provided in the following sections.

Structure 35

Structure 35 contains a preexisting radon mitigation system, which functions in the same manner as a SSDS. Based upon previous inspections, SVI evaluations of this structure completed in December 2010 and May 2011, and the analytical results of a sub-slab passive diffusion sampler deployed in the sub-slab environment in June 2011, an unused floor drain was observed to be a potential area for vapor intrusion and "short circuiting" of the existing system. On 6 February 2012, EA oversaw the installation of a concrete seal over the existing floor drain in an attempt to eliminate vapor intrusion through the open floor drain. A damaged clay drain tile beneath the concrete floor was repaired with Fernco® couplings and a section of polyvinyl chloride (PVC) piping. The void space beneath the concrete floor was then filled with a porous pea stone material, with new concrete installed to the floor surface to provide a seal between the sub-slab environment and the basement area. In addition, a series of small cracks observed beneath the carpeted portion of the basement were sealed to further eliminate the potential for short circuiting of the SSDS.

Structure 39

Structure 39 contains a preexisting radon mitigation system. Previous inspections of this structure identified poor communication between the system extraction point and north portions of the sub-slab environment. Based upon these results, and at the request of the NYSDEC and NYSDOH, EA oversaw the installation of a secondary extraction point. Aztech installed the secondary extraction point along the northern portion of the basement of Structure 39 in order to improve communication within the sub-slab environment. The secondary extraction point was installed to a depth of approximately 16 in. to reach the sub-slab environment beneath a partially exposed footer observed beneath the basement stairs. The secondary extraction point was then tied in with the existing radon mitigation system piping and fan.

Structure 43

Structure 43 was previously selected by NYSDEC and NYSDOH for installation of a SSDS, based upon the results of the SVI evaluation completed in December 2010. EA provided engineering oversight of Aztech during the installation of the SSDS in June 2011. Post-mitigation sampling, completed in July 2011, confirmed the presence of TCE within basement air at levels similar to pre-mitigation concentrations (i.e., 0.37–0.53 µg/m^3). Based upon these results, and at the request of the NYSDEC and NYSDOH, EA oversaw the installation of a secondary extraction point from 7 to 8 February 2012. Aztech installed the secondary extraction point in the southern portion of the basement in order to improve communication within the sub-slab environment. The secondary extraction point was installed to a depth of approximately 10 in. through a dense clay material and a section of bedrock in an attempt to improve communication within the sub-slab environment. The secondary extraction point was then tied in with the existing SSDS piping and fan.

2.1.1 SSDS Post-Mitigation Enhancement Sampling

Following improvements of existing SSDSs at Structures 39 and 43, and sealing of the exposed floor drain at Structure 35, the systems were allowed to operate for approximately 1 week prior to the collection of post-enhancement samples. Post-mitigation enhancement sampling included the collection of basement indoor air and corresponding outdoor ambient air samples at each of the structures. Basement indoor air and outdoor ambient air samples were collected on 9-10 and 16-17 February 2012 following the procedures presented in Sections 2.1.3.1 and 2.1.3.2 of the Final Phase VII SVI Summary Report (EA 2012)[1]. Basement indoor air and outdoor ambient air samples were sent to Air Toxics for volatile organic compound (VOC) analysis by EPA Method TO-15. Sampling forms and photographs are included in Appendix B.

2.2 STRUCTURE MONITORING SAMPLING

Based upon the results of Phase VII SVI evaluations completed in November/December 2010 and May 2011, Structures 37 and 38 were identified by NYSDEC and NYSDOH for SVI monitoring.

Monitoring sampling was completed in February 2012 following the identical procedures described in Section 2.1 of the Final Phase VII SVI Summary Report (EA 2012)[1]. Sub-slab vapor and basement indoor air sampling was conducted in the same locations as the November/December 2010 and May 2011 SVI evaluations. Sub-slab vapor, basement indoor air, and outdoor ambient air samples were sent to Air Toxics for VOC analysis by EPA Method TO-15. Structure monitoring/sampling forms and photographs are included in Appendix B.

2.3 FIELD DUPLICATES

Field quality control sampling included collection of duplicate samples and field blanks. Field duplicates were collected at the rate of 1 duplicate per 20 original samples per sample type (i.e., sub-slab vapor, basement indoor air, and outdoor ambient air).

One duplicate air/vapor sample was collected during the Phase VII SVI supplemental evaluations. The duplicate sample was collected at an indoor air sampling location, with two canisters set up adjacent to each other for sample collection.

3. RESULTS

This section summarizes the analytical results of the field investigation activities conducted at the site in February 2012. SVI monitoring and post-mitigation samples were analyzed by an Environmental Laboratory Approval Program-certified laboratory in accordance with the reporting requirements as defined in NYSDEC Analytical Services Protocol of June 2000. Laboratory analytical data were reported using Category B deliverables and a standard electronic data deliverable. The analytical data package or sample delivery group (SDG) was validated by Environmental Data Services, Inc. (EDS) of Williamsburg, Virginia, an independent third party of this assignment.

3.1 ANALYTICAL RESULTS

An analytical summary table for Phase VII SVI monitoring sampling data is provided in Table 3. Figure 3 depicts the analytical results of the SVI monitoring sampling, specifically those associated with a decision matrix and air guidelines presented in the NYSDOH SVI Guidance.

An analytical summary table for the post-enhancement basement indoor air and outdoor ambient air samples collected following the improvement of the SSDSs is provided in Table 4.

Copies of data usability summary reports for the sub-slab vapor, basement air, and outdoor ambient air analytical data are provided in Appendix C. Analytical Form Is are provided in Appendix D.

3.2 DATA USABILITY SUMMARY REPORTS

EDS validated the analytical data package submitted to EA by Air Toxics, Ltd. Analytical data packages are submitted as SDGs based on the number of samples within each shipment receipted at the laboratory for analysis. The SDG associated with this soil vapor sampling event was reviewed for completeness and compliance as defined by the requirements for NYSDEC Analytical Services Protocol Category B deliverables.

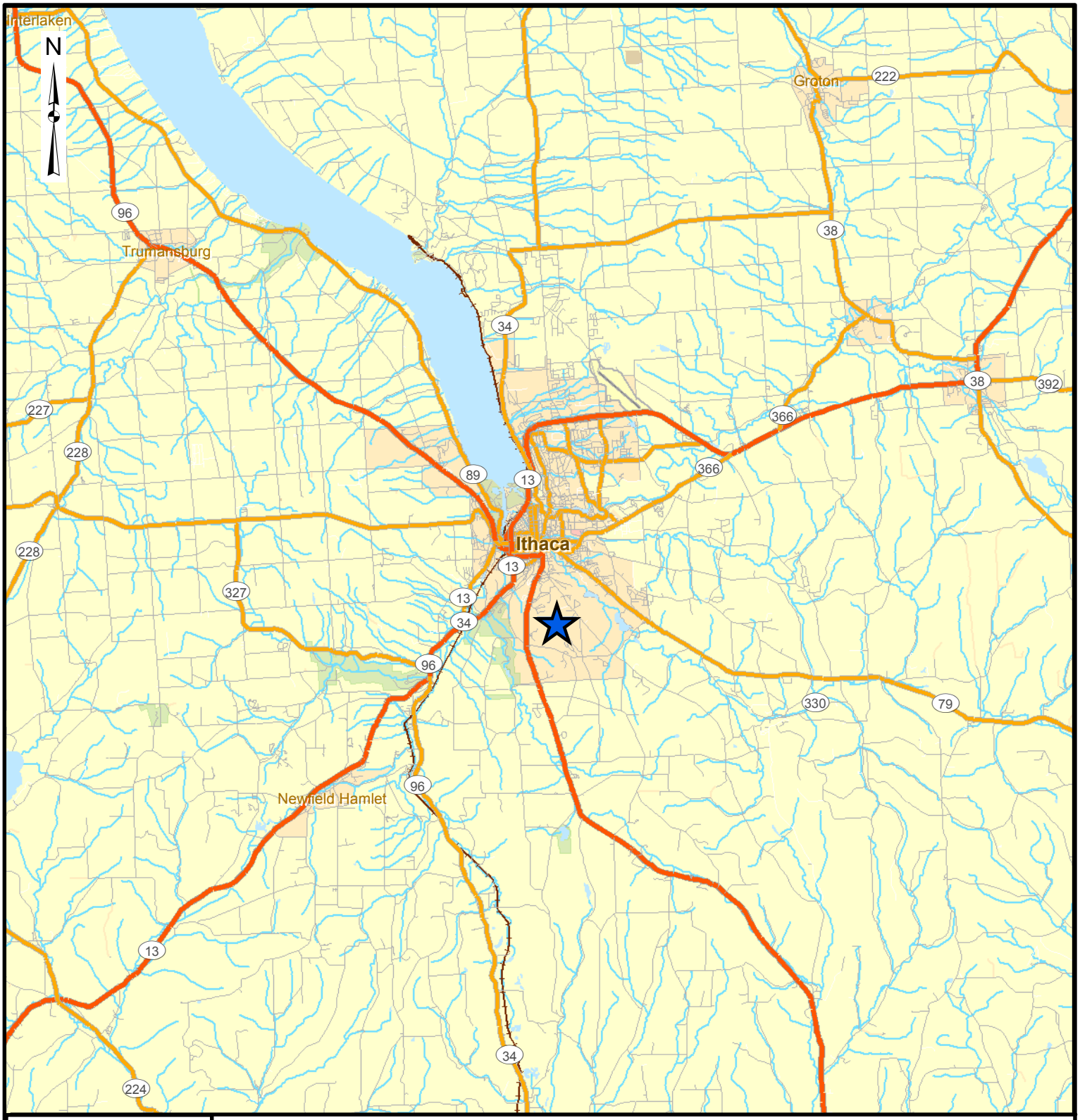
EDS completed data validation for one SDG and submitted a data usability summary report for the SDG reviewed for this soil vapor sampling event. Overall, the data were acceptable for their intended use; select samples were qualified for various reasons and are identified in the associated table.

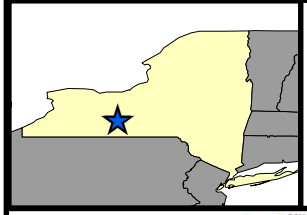
4. CONCLUSIONS AND PROPOSED FURTHER ACTIONS

The NYSDEC and NYSDOH have evaluated the data generated during the Phase VII SVI evaluations and have made the following recommendations for proposed actions based on the results of the above supplemental mitigation activities/testing and the decision matrices provided in the NYSDOH SVI Guidance:

- Additional actions are not required at this time at Structures 35, 37, 38, 39, and 43 based on the monitoring and post-mitigation testing performed.

- Additional environmental investigations are ongoing in the Phase VII neighborhood in an effort to better understand the nature and extent of contamination in the subsurface. The Department will continue to ensure that all actions taken remain effective in the future. This may include additional sampling and/or evaluation of the existing radon/SSDSs.





Legend

★ Site Location

Miles

0 1.5 3 6

1 in = 3 miles

Source: NYS GIS Clearing House

ADDEUNDUM TO PHASE VII SOIL VAPOR INTRUSION SUMMARY REPORT
OFF-SITE FORMER AXIOHM FACILITY (C755012A)
TOMPKINS COUNTY, ITHACA, NEW YORK

FIGURE 1
Site Location

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
RSC	CJS	DCC	RSC	AS SHOWN	JULY 2012	14368.19	GIS/PROJECTS/ FIGURE1.MXD

N

W CLINTON ST
E CLINTON ST
PLEASANT ST
JAMES ST
E STATE ST
BRANDON PL
VALLEY RD
VALENTINE PL
E SPENCER ST
TURNER PL
COLUMBIA ST
S AURORA ST
COTTAGE PL
CHARLES ST
Structure 37
N TITUS AVE
S TITUS AVE
SOUTH HILL TERR
HILLVIEW PL
RENZETTI PL
HUDSON ST
FOUNTAIN ST
WATER ST
GILES ST
S CAYUGA ST
HAWTHORNE CIR
CRESCENT PL
Structure 39
Structure 35
HAWTHORNE PL
Structure 38
GRANDVIEW AVE
PEARSALL PL
Structure 43
HUDSON PL

ADDEUNDUM TO PHASE VII SOIL VAPOR INTRUSION SUMMARY REPORT
OFF-SITE FORMER AXIOHM FACILITY (C755012A)
TOMPKINS COUNTY, ITHACA, NEW YORK

FIGURE 2
Post-Mitigation Enhancement and Vapor Intrusion Monitoring Structure Locations

0 137.5 275 550 Feet
1 inch = 275 feet

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	PROJECT NO:	DATE:	SCALE:	FILE NO:
RSC	CJS	JCP	RSC	14368.19	JULY 2012	AS SHOWN	GIS/PROJECTS/ FIGURE2.MXD

Legend

- Monitoring Structure
- Post-Mitigation Enhancement Structure
- Sanitary Sewer Line (Arrows Indicate Flow Direction)

Source: NYS GIS Clearing House

N

W CLINTON ST

PLEASANT ST

JAMES ST

BRANDON PL

E STATE ST

VALLEY RD

VALENTINE PL

COLUMBIA ST

N TITUS AVE

S TITUS AVE

TURNER PL

S AURORA ST

HILLVIEW PL

RENZETTI PL

COTTAGE PL

HUDSON ST

FOUNTAIN ST

WATER ST

GILES ST

S CAYUGA ST

HAWTHORNE CIR

CRESCENT PL

HAWTHORNE PL

GRANDVIEW AVE

PEARSALL PL

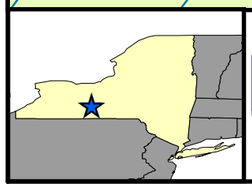
Structure 37	Dec. 2010		May 2011			Feb. 2012	
	SS-37 (µg/m³)	BA-37 (µg/m³)	SS-37 (µg/m³)	Duplicate-01 (µg/m³)	BA-37 (µg/m³)	SS-37 (µg/m³)	BA-37 (µg/m³)
Carbon tetrachloride	**0.32**	**0.43**	**0.26**	**0.27**	**0.54**	**0.43 J**	**0.52**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroehtene	ND	ND	ND	**0.72**	ND	ND	ND
Tetrachloroethene	**270**	ND	**310**	**320**	ND	**210 J**	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	**14**	ND	**16**	**17**	**0.50**	**13 J**	ND
Vinyl Chloride	**0.042**	ND	ND	ND	ND	ND	ND

Outoor Air	5-May-11	10-Feb-12
	OA-37 (µg/m³)	OA-37 (µg/m³)
Carbon tetrachloride	**0.52**	**0.53**
1,1-Dichloroethene	ND	ND
trans-1,2-Dichloroethene	ND	ND
cis-1,2-Dichloroehtene	ND	ND
Tetrachloroethene	ND	ND
1,1,1-Trichloroethane	ND	ND
Trichloroethene	ND	ND
Vinyl Chloride	ND	ND

Outoor Air (May 5, 2011)	OA-33 (µg/m³)
Carbon tetrachloride	**0.54**
1,1-Dichloroethene	ND
trans-1,2-Dichloroethene	ND
cis-1,2-Dichloroehtene	ND
Tetrachloroethene	ND
1,1,1-Trichloroethane	ND
Trichloroethene	ND
Vinyl Chloride	ND

Outoor Air	2-Dec-11	10-Feb-12
	OA-38 (µg/m³)	OA-38 (µg/m³)
Carbon tetrachloride	**0.43**	**0.54**
1,1-Dichloroethene	ND	ND
trans-1,2-Dichloroethene	ND	ND
cis-1,2-Dichloroehtene	ND	ND
Tetrachloroethene	ND	ND
1,1,1-Trichloroethane	ND	ND
Trichloroethene	ND	ND
Vinyl Chloride	ND	ND

Structure 38	Dec. 2010		May 2011		Feb. 2012	
	SS-38 (µg/m³)	BA-38 (µg/m³)	SS-38 (µg/m³)	BA-38 (µg/m³)	SS-38 (µg/m³)	BA-38 (µg/m³)
Carbon tetrachloride	**0.32**	**0.38**	**0.46**	**0.46**	**0.42**	**0.45**
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroehtene	ND	ND	ND	ND	ND	ND
Tetrachloroethene	**27**	**8.8**	**14**	**11**	**27**	**4.7**
1,1,1-Trichloroethane	ND	**0.62**	ND	ND	ND	**0.86**
Trichloroethene	**0.36**	**0.62**	**1.9**	**2.2**	**0.28**	**0.66**
Vinyl Chloride	**0.086**	ND	ND	ND	ND	ND



EA ENGINEERING, SCIENCE, AND TECHNOLOGY

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ADDEUNDUM TO PHASE VII SOIL VAPOR INTRUSION SUMMARY REPORT
OFF-SITE FORMER AXIOHM FACILITY (C755012A)
TOMPKINS COUNTY, ITHACA, NEW YORK

FIGURE 3
Vapor Intrusion
Monitoring Results

0 137.5 275 550 Feet

1 inch = 275 feet

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	PROJECT NO:	DATE:	SCALE:	FILE NO:
RSC	CJS	JCP	RSC	14368.19	JULY 2012	AS SHOWN	GIS/PROJECTS/FIGURE3.MXD

Legend

- Monitoring Structure
- Sewer Line (Arrows Indicate Flow Direction)
- Outdoor Air Sampling Location

Source: NYS GIS Clearing House

µg/m³ - Micrograms per cubic meter
ND - Non-detect
J - Concentration is an estimate

Post-Mitigation sample results for Structures 35, 39, and 43 are included in Table 3

TABLE 1 SAMPLING AND ANALYTICAL PROGRAM – FEBRUARY 2012

	Sample Matrix	VOCs - TO-15		
		Sub-slab Vapor	Indoor Air	Outdoor Air
VAPOR INTRUSION MONITORING SAMPLES				
No. of Samples	Vapor/Air	2	2	2
Field Duplicate		--	---	---
Field Blank		---	---	---
MS/MSD		---	---	---
Total No. of Analyses		**2**	**3**	**2**
POST-MITIGATION ENHANCEMENT SAMPLES				
No. of Samples	Air	**---**	**3**	**2**
Field Duplicate		**---**	**1**	**---**
Trip Blank		**---**	**---**	**---**
MS/MSD		**---**	**---**	**---**
Total No. of Analyses		**---**	**4**	**2**

NOTE: VOCs = Volatile Organic Compounds
--- = No Sample Taken
MS/MSD = Matrix Spike/Matrix Spike Duplicate
Laboratory quality control samples were collected at a rate of 1 per 20 samples, per matrix.

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TABLE 2 VAPOR INTRUSION MONITORING ANALYTICAL DATA

Parameter List EPA Method TO-15	Property ID	Structure 37											
	Sample ID	C755012A-SS-37		C755012A-BA-37		C755012A-OA-38		C755012A-SS-37-0511		C755012A-BA-37-0511		C755012A-SS-DUP-01-0511	
	Lab ID	1012126BR1-26A/26B		1012126BR1-25A/25B		1012126BR1-29A/29B		1105141A-07A/07B		1105141A-06A/06B		1105141A-10A/10B	
	Sample Type	Sub-slab Vapor		Basement Indoor Air		Outdoor Air		Sub-slab Vapor		Basement Indoor Air		Sub-slab Vapor Duplicate	
	Sample Date	12/2/2010		12/2/2010		12/2/2010		5/5/2011		5/5/2011		5/5/2011	
Carbon Tetrachloride	(µg/m3)	0.32		0.43		0.43		0.26		0.54		0.27	
1,1- Dichloroethene	(µg/m3)	(<0.64)	U	(<0.67)	U	(<0.61)	U	(<0.69)	U	(<1.3)	U	(<0.65)	U
trans-1,2- Dichloroethene	(µg/m3)	(<0.64)	U	(<0.67)	U	(<0.61)	U	(<0.69)	U	(<1.3)	U	(<0.65)	U
cis-1,2- Dichloroethene	(µg/m3)	(<0.64)	U	(<0.67)	U	(<0.61)	U	(<0.69)	U	(<1.3)	U	0.72	
Tetrachloroethene	(µg/m3)	270		(<0.57)	U	(<0.52)	U	310		(<1.1)	U	320	
1,1,1- Trichloroethane	(µg/m3)	(<0.44)	U	(<0.46)	U	(<0.42)	U	(<0.48)	U	(<0.89)	U	(<0.45)	U
Trichloroethene	(µg/m3)	14		(<0.18)	U	(<0.17)	U	16		0.50		17	
Vinyl Chloride	(µg/m3)	0.042	U	(<0.043)	U	(<0.040)	U	(<0.045)	U	(<0.084)	U	(<0.042)	U

Parameter List EPA Method TO-15	Property ID	Structure 37							
	Sample ID	C755012A-OA-37-0511		C755012A-SS-37-0212		C755012A-BA-37-0212		C755012A-OA-37	
	Lab ID	1105141A-08A/08B		1202298-02A/02B		1202298-01A/01B		1202298-03A/03B	
	Sample Type	Outdoor Air		Sub-slab Vapor		Basement Indoor Air		Outdoor Air	
	Sample Date	5/5/2011		2/10/2012		2/10/2012		2/10/2012	
Carbon Tetrachloride	(µg/m3)	0.52		0.43	J	0.52		0.53	
1,1- Dichloroethene	(µg/m3)	(<0.82)	U	(<0.64)	U	(<0.63)	U	(<0.53)	U
trans-1,2- Dichloroethene	(µg/m3)	(<0.82)	U	(<0.64)	U	(<0.63)	U	(<0.53)	U
cis-1,2- Dichloroethene	(µg/m3)	(<0.82)	U	(<0.64)	U	(<0.63)	U	(<0.53)	U
Tetrachloroethene	(µg/m3)	(<0.70)	U	210	J	(<0.54)	U	(<0.45)	U
1,1,1- Trichloroethane	(µg/m3)	(<0.56)	U	(<0.44)	U	(<0.43)	U	(<0.36)	U
Trichloroethene	(µg/m3)	(<0.22)	U	13	J	(<0.17)	U	(<0.14)	U
Vinyl Chloride	(µg/m3)	(<0.053)	U	(<0.041)	U	(<0.040)	U	(<0.034)	U

NOTE: EPA = U.S. Environmental Protection Agency
µg/m3 = micrograms per cubic meter
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
J = Reported value is an estimate.
The analytical data results provided by Air Toxics, LTD.
Data validation completed by Environmental Data Services, Inc.

TABLE 2 VAPOR INTRUSION MONITORING ANALYTICAL DATA

Parameter List EPA Method TO-15	Property ID	Structure 38									
	Sample ID	C755012A-SS-38		C755012A-BA-38		C755012A-OA-38		C755012A-SS-38-0511		C755012A-BA-38-0511	
	Lab ID	1012126BR1-28A/28B		1012126BR1-27A/27B		1012126BR1-29A/29B		1105141B-14A/14B		1105141B-14A/14B	
	Sample Type	Sub-slab Vapor		Basement Indoor Air		Outdoor Air		Sub-slab Vapor		Basement Indoor Air	
	Sample Date	12/2/2010		12/2/2010		12/2/2010		5/5/2011		5/5/2011	
Carbon Tetrachloride	(µg/m3)	0.32		0.38		0.43		0.46		0.46	
1,1- Dichloroethene	(µg/m3)	(<0.56)	U	(<0.57)	U	(<0.61)	U	(<0.52)	U	(<0.63)	U
trans-1,2- Dichloroethene	(µg/m3)	(<0.56)	U	(<0.57)	U	(<0.61)	U	(<0.52)	U	(<0.63)	U
cis-1,2- Dichloroethene	(µg/m3)	(<0.56)	U	(<0.57)	U	(<0.61)	U	(<0.52)	U	(<0.63)	U
Tetrachloroethene	(µg/m3)	27		8.8		(<0.52)	U	14		11.0	
1,1,1- Trichloroethane	(µg/m3)	(<0.38)	U	0.62		(<0.42)	U	(<0.35)	U	(<0.43)	U
Trichloroethene	(µg/m3)	0.36		0.62		(<0.17)	U	1.9		2.2	
Vinyl Chloride	(µg/m3)	0.086	U	(<0.037)	U	(<0.040)	U	(<0.033)	U	(<0.040)	U

Parameter List EPA Method TO-15	Property ID	Structure 38							
	Sample ID	C755012A-OA-33-0511		C755012A-SS-38-0212		C755012A-BA-38-0212		C755012A-OA-38	
	Lab ID	1105141A-09A/09B		1202298-05A/05B		1202298-04A/04B		1202298-06A/06B	
	Sample Type	Outdoor Air		Sub-slab Vapor		Basement Indoor Air		Outdoor Air	
	Sample Date	5/5/2011		2/10/2012		2/10/2012		2/10/2012	
Carbon Tetrachloride	(µg/m3)	0.54		0.42		0.45		0.49	
1,1- Dichloroethene	(µg/m3)	(<0.56)	U	(<0.68)	U	(<0.63)	U	(<0.58)	U
trans-1,2- Dichloroethene	(µg/m3)	(<0.56)	U	(<0.68)	U	(<0.63)	U	(<0.58)	U
cis-1,2- Dichloroethene	(µg/m3)	(<0.56)	U	(<0.68)	U	(<0.63)	U	(<0.58)	U
Tetrachloroethene	(µg/m3)	(<0.48)	U	27		4.7		(<0.50)	U
1,1,1- Trichloroethane	(µg/m3)	(<0.38)	U	(<0.47)	U	0.86		(<0.40)	U
Trichloroethene	(µg/m3)	(<0.15)	U	0.28		0.66		(<0.16)	U
Vinyl Chloride	(µg/m3)	(<0.036)	U	(<0.044)	U	(<0.040)	U	(<0.037)	U

TABLE 3 POST-MITIGATION ENHANCEMENT VAPOR INTRUSION ANALYTICAL DATA

Parameter List EPA Method TO-15	Property ID	Structure 35[a]											
	Sample ID	C755012A-BA-35		C755012A-OA-38		C755012A-BA-35-0511		C755012A-BA-35A-0511		C755012A-OA-33-0511		C755012A-VTA-35	
	Lab ID	1012126BR1-21A/21B		1012126BR1-29A/29B		1105141A-04A/04B		1105141A-05A/05B		1105141A-09A/09B		1494	
	Sample Type	Basement Indoor Air		Outdoor Air		Basement Indoor Air		Basement Indoor Air		Outdoor Air		Sub-Slab Vapor	
	Sample Date	12/1/2010		12/2/2010		5/5/2011		5/5/2011		5/5/2011		6/10/2011	
Carbon Tetrachloride	(µg/m3)	0.43		0.43		0.55		0.55		0.54		0.39	
1,1- Dichloroethene	(µg/m3)	(<0.54)	U	(<0.61)	U	(<0.67)	U	(<0.65)	U	(<0.56)	U	2.80	
trans-1,2- Dichloroethene	(µg/m3)	(<0.54)	U	(<0.61)	U	(<0.67)	U	(<0.65)	U	(<0.56)	U	(<1.1)	U
cis-1,2- Dichloroethene	(µg/m3)	(<0.54)	U	(<0.61)	U	(<0.67)	U	(<0.65)	U	(<0.56)	U	9.0	U
Tetrachloroethene	(µg/m3)	1.3		(<0.52)	U	1.1		2.6		(<0.48)	U	33.0	
1,1,1- Trichloroethane	(µg/m3)	(<0.37)	U	(<0.42)	U	(<0.46)	U	(<0.45)	U	(<0.38)	U	2.4	
Trichloroethene	(µg/m3)	0.36		(<0.17)	U	0.83		5.4		(<0.15)	U	16	
Vinyl Chloride	(µg/m3)	(<0.035)	U	(<0.040)	U	(<0.043)	U	(<0.42)	U	(<0.036)	U	(<0.45)	UJ

Parameter List EPA Method TO-15	Property ID	Structure 35[a]							
	Sample ID	C755012A-Field Blank		C755012A-BA-35-0212		C755012A-BA-DUP-0212		C755012A-OA-38	
	Lab ID	1495		1202298-07A/07B		1202298-08A/08B		1202298-06A/06B	
	Sample Type	QA/QC - Field Blank		Basement Indoor Air		Basement Indoor Air Duplicate		Outdoor Air	
	Sample Date	6/10/2011		2/10/2012		2/10/2012		2/10/2012	
Carbon Tetrachloride	(µg/m3)	(<0.1)	U	0.52		0.65	J	0.49	
1,1- Dichloroethene	(µg/m3)	(<0.2)	U	(<0.60)	U	(<0.63)	U	(<0.58)	U
trans-1,2- Dichloroethene	(µg/m3)	(<0.1)	U	(<0.60)	U	(<0.63)	U	(<0.58)	U
cis-1,2- Dichloroethene	(µg/m3)	(<0.1)	U	(<0.60)	U	(<0.63)	U	(<0.58)	U
Tetrachloroethene	(µg/m3)	(<0.1)	U	2.0		1.9		(<0.50)	U
1,1,1- Trichloroethane	(µg/m3)	(<0.1)	U	(<0.41)	U	(<0.43)	U	(<0.40)	U
Trichloroethene	(µg/m3)	(<0.2)	U	1.1		1.4	J	(<0.16)	U
Vinyl Chloride	(µg/m3)	(<0.2)	U	(<0.039)	U	(<0.040)	U	(<0.037)	U

(a) Basement Air Sample BA-35 and BA-35-0511 collected from unfinished portion of basement; basement air sample BA-35A-0511 collected from finished portion of basement. VTA Sample collected 6/10/2011 was located beneath observed floor drain within finished portion of basement. Basement indoor air sample and duplicate sample were collected two days after repairing and sealing the floor drain and cracks observed in basement concrete slab on 2/10/2012.

NOTE: EPA = U.S. Environmental Protection Agency
µg/m3 = micrograms per cubic meter
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
QA/QC = Quality Assurnace/Quality Control
J = Reported value is an estimate.
The analytical data results provided by Air Toxics, LTD.
Data validation completed by Environmental Data Services, Inc.

TABLE 3 POST-MITIGATION ENHANCEMENT VAPOR INTRUSION ANALYTICAL DATA

Parameter List EPA Method TO-15	Property ID	Structure 39											
	Sample ID	C755012A-BA-39		C755012A-OA-38		C755012A-BA-39		C755012A-OA-33-0511		C755012A-BA-39-0212		C755012A-OA-39-0212	
	Lab ID	1012126BR1-30A/30B		1012126BR1-29A/29B		1105141B-02A/02B		1105141A-09A/09B		1202465-03A/03B		1202465-04A/04B	
	Sample Type	Basement Indoor Air		Outdoor Air		Basement Indoor Air		Outdoor Air		Basement Indoor Air		Outdoor Air	
	Sample Date	12/2/2010		12/2/2010		5/5/2011		5/5/2011		2/17/2012		2/17/2012	
Carbon Tetrachloride	(µg/m3)	0.44		0.43		0.50		0.54		0.57		0.53	
1,1- Dichloroethene	(µg/m3)	(<0.64)	U	(<0.61)	U	(<0.65)	U	(<0.56)	U	(<0.58)	U	(<0.54)	U
trans-1,2- Dichloroethene	(µg/m3)	(<0.64)	U	(<0.61)	U	(<0.65)	U	(<0.56)	U	(<0.58)	U	(<0.54)	U
cis-1,2- Dichloroethene	(µg/m3)	(<0.64)	U	(<0.61)	U	(<0.65)	U	(<0.56)	U	(<0.58)	U	(<0.54)	U
Tetrachloroethene	(µg/m3)	4.1		(<0.52)	U	3.0		(<0.48)	U	8.4		(<0.46)	U
1,1,1- Trichloroethane	(µg/m3)	(<0.44)	U	(<0.42)	U	(<0.45)	U	(<0.38)	U	(<0.40)	U	(<0.37)	U
Trichloroethene	(µg/m3)	(<0.17)	U	(<0.17)	U	(<0.18)	U	(<0.15)	U	(<0.16)	U	(<0.15)	U
Vinyl Chloride	(µg/m3)	(<0.041)	U	(<0.040)	U	(<0.042)	U	(<0.036)	U	(<0.038)	U	(<0.035)	U

TABLE 3 POST-MITIGATION ENHANCEMENT VAPOR INTRUSION ANALYTICAL DATA

Parameter List EPA Method TO-15, Passive Ultra III & TO-17	Property ID	Structure 43									
	Sample ID	C755012A-SS-43		C755012A-BA-43		C755012A-ULTRA-43		C755012A-RAD-43		C755012A-OA-44	
	Lab ID	1012390AR1-06A/06B		1012390AR1-05A/05B		1012261B-04A		1012261A-03A		1012390AR1-09A/09B	
	Sample Type	Sub-slab Vapor		Basement Indoor Air		Basement Indoor Air		Basement Indoor Air		Outdoor Air	
	Sample Date	12/7/2010		12/7/2010		12/7/2010		12/7/2010		12/7/2010	
Carbon Tetrachloride	(µg/m3)	(<1.2)	U	0.41		0.28		1.4	J	0.32	
1,1- Dichloroethene	(µg/m3)	(<3.9)	U	(<0.57)	U	(<0.14)	U	(<0.044)	U	(<0.50)	U
trans-1,2- Dichloroethene	(µg/m3)	(<3.9)	U	(<0.57)	U	(<0.14)	U	(<0.044)	U	(<0.50)	U
cis-1,2- Dichloroethene	(µg/m3)	18		(<0.57)	U	(<0.12)	U	0.070	J	(<0.50)	U
Tetrachloroethene	(µg/m3)	93		(<0.49)	U	0.32		0.58		(<0.42)	U
1,1,1- Trichloroethane	(µg/m3)	93		0.58		0.81		1.3		(<0.34)	U
Trichloroethene	(µg/m3)	2,100		0.37		0.42		0.46		0.35	
Vinyl Chloride	(µg/m3)	(<0.25)	U	0.066		(<0.052)	U	(<0.031)	U	(<0.032)	U

Parameter List EPA Method TO-15	Property ID	Structure 43							
	Sample ID	C755012A-BA-43-0711		C755012A-OA-43		C755012A-BA-43-0212		C755012A-OA-43-0212	
	Lab ID	1107285-03A/03B		1012390AR1-05A/05B		1202465-01A/01B		1202465-02A/02B	
	Sample Type	Basement Indoor Air		Outdoor Air		Basement Indoor Air		Outdoor Air	
	Sample Date	7/14/2011		7/14/2011		2/17/2012		2/17/2012	
Carbon Tetrachloride	(µg/m3)	0.44		0.53		0.52		0.58	
1,1- Dichloroethene	(µg/m3)	(<0.74)	U	(<0.55)	U	(<0.62)	U	(<0.57)	U
trans-1,2- Dichloroethene	(µg/m3)	(<0.74)	U	(<0.55)	U	(<0.62)	U	(<0.57)	U
cis-1,2- Dichloroethene	(µg/m3)	(<0.74)	U	(<0.55)	U	(<0.62)	U	(<0.57)	U
Tetrachloroethene	(µg/m3)	(<0.63)	U	(<0.47)	U	(<0.53)	U	(<0.49)	U
1,1,1- Trichloroethane	(µg/m3)	0.52		(<0.38)	U	1.0		(<0.39)	U
Trichloroethene	(µg/m3)	0.53		(<0.15)	U	0.24		(<0.15)	U
Vinyl Chloride	(µg/m3)	0.20		(<0.036)	U	0.063		(<0.37)	U

Appendix A

Daily Field Reports

DAILY OBSERVATION REPORT **Day: Monday** **Date: 6 February 2012**

NYSDEC

Temperature: (F) 30 (am) 50 (pm)

Wind Direction: SW (am) SW (pm)

Weather: (am) sunny/overcast
(pm) sunny

Ithaca Offsite

NYSDEC Site # C755012A

Contract # D-00438-19

Ithaca, New York

Arrive at site 1000 (am)

Leave site: 415 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (x)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?

Soil	Yes ( )	n/a (x)	* No ( )
Waters	Yes ( )	n/a (x)	* No ( )
Air	Yes ( )	n/a (x)	* No ( )

- *If No, provide comments*

OTHER ITEMS:

Site Sketch Attached: Yes ( ) No (x)
Photos Taken: Yes (x) No ( )

DESCRIPTION OF DAILY WORK PERFORMED:

David Crandall with EA onsite 1000am. Bob Gannon and John Stutzke with Aztech ready to enter Structure 35 to assess floor drain in finished portion of basement and begin process of sealing floor drain to prevent vapors from infiltrating to basement through drain.

Met with homeowner and inspected drain. Determined that best course of action would be to connect clay drain pipe beneath floor drain, fill in void with gravel and seal at floor surface with hydraulic cement to eliminate vapor intrusion potential.

At 1100, NYSDEC representative and EA PM arrive onsite. Based on their observations and discussions, determined that 5" to 4" fernco will be utilized to connect 4" pvc line between the 2 sections of clay pipe. After Aztech left site to purchase required parts, the clay drain line was cleared out and connected with ferncos/PVC piping. Void under floor was filled completed with pea gravel and hydraulic cement was utilized to seal the former drain location.

In addition. The carpeting was removed from the living area in the basement and major cracks observed in the floor were sealed by Aztech. Carpeting in this area was replaced after sealing of floor cracks.

EA and Aztech left site at 415pm.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:	DEC Sample ID:	Description:

DAILY OBSERVATION REPORT Day: Monday Date: 6 February 2012

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: David Crandall (Scientist) and Bob Casey (Project Manager)

(Name of Subcontractor) personnel: Bob Gannon and John Stutzke with Aztech (mitigation contractors

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. Karen Cahill (NYSDEC Representative)

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

None.

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

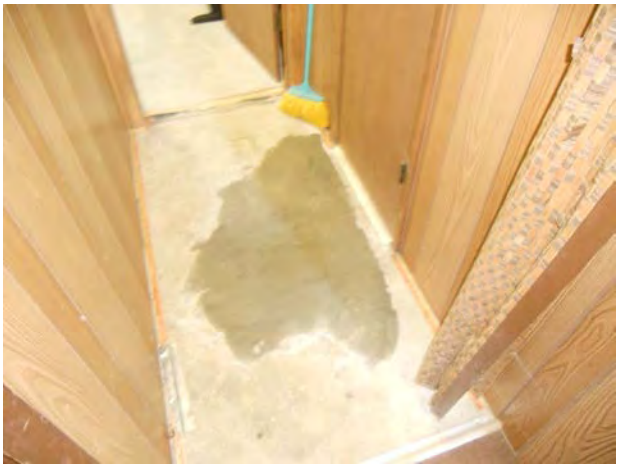
Name: *David Crandall*
cc:

DAILY PHOTOLOG

Cleaning out of floor drain/drain tile area

Connection of clay drain tile with PVC/Ferncos

Gravel placed to fill void area where drain was previously located.



Hydraulic cement seal over former floor drain.

Sealed cracks beneath carpeting in living area.

DAILY OBSERVATION REPORT **Day: Tuesday** **Date: 7 February 2012**

NYSDEC

Temperature: (F)	25	(am)	35	(pm)
Wind Direction:	NW	(am)	NW	(pm)
Weather:	(am) clear			
	(pm) overcast			

Ithaca Offsite

NYSDEC Site # C755012A

Contract # D-00438-19

Ithaca, New York

Arrive at site	715	(am)
Leave site:	305	(pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (x)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?	Soil	Yes ( )	n/a (x)	* No ( )
	Waters	Yes ( )	n/a (x)	* No ( )
	Air	Yes ( )	n/a (x)	* No ( )

- *If No, provide comments*

OTHER ITEMS:

Site Sketch Attached: Yes ( ) No (x)
Photos Taken: Yes (x) No ( )

DAILY OBSERVATION REPORT **Day: Tuesday Date: 7 February 2012**

DESCRIPTION OF DAILY WORK PERFORMED:

David Crandall with EA onsite 715am. Bob Gannon and John Stutzke with Aztech and R. Casey with EA ready to enter Structure 43 to perform pressure field extension testing for existing SSDS and determine if second extraction point should be added to system.

Based on conversations with homeowner, a second point can only be added if in utility room area in south east corner of home. Also, homeowner noted that the fan on the east side of building was creating excessive vibrations in the home (particularly kitchen cabinets). To address this situation, Aztech removed a bracket near the fan which was observed to be tight to the home's exterior wall and causing the excess vibration.

Based on PFE testing, limited to no communication was observed within the rear portion of the home, necessitating the installation of a second extraction point. PFE Readings (in in. of water/column) prior to point installation are shown below:

TP-1	-0.000
TP-2	-0.025
TP-3	-0.008
TP-4	-0.006
TP-5	-0.003
TP-6	-0.000
TP-7	-0.000
TP-8	-0.005

Prior to initiation of SSDS modifications at Structure 43, EA and Aztech went to structure 35 to assess the hydraulic cement seal. Based on the seal and at the satisfaction of the homeowner, the carpeting over the former floor drain was reinstalled and supplemental indoor air testing was set up for February 9-10.

Per conversation with NYSDEC Rep, the second extraction point was located in the utility room, towards the rear portion of the home, in hopes of improving communication beneath the slab which is known to site on bedrock. The second extraction point was installed through 2.5" of concrete, and 10.5" of bedrock with was able to be cored out by Aztech. 2nd extraction point was installed 13ft. from first extraction point. The extraction point was installed and tied in with existing line leading the fan from EP-1. Once system piping was installed, system was switched on. Will return to structure 43 on 2/8/12 to perform additional PFE testing to assess initial performance of EP-2.

During SSDS installation by Aztech, EA performed review of chemical storage in basement of home, EA noted some chemicals, including old Rustoleum©, shoe polishes, etc. that may contain Chemicals of Concern.

Offsite at 305pm.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:	DEC Sample ID:	Description:

DAILY OBSERVATION REPORT Day: Tuesday Date: 7 February 2012

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: David Crandall (Scientist) and Bob Casey (Project Manager)

(Name of Subcontractor) personnel: Bob Gannon and John Stutzke with Aztech (mitigation contractors)

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

None.

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: *David Crandall*

cc:

DAILY PHOTOLOG

Concrete/Bedrock cored for EP-2

Screen and pea gravel for EP-2

Seal and EP-2 extension

Tie-in between EP-2 and main line.

EP-2 in utility area.

Suspected chemicals of concern (note Rustleum© from 1982).

DAILY OBSERVATION REPORT **Day: Wednesday** **Date: 8 February 2012**

NYSDEC

Temperature: (F)	20	(am)	31	(pm)
Wind Direction:	WNW	(am)	WNW	(pm)
Weather:	(am) overcast			
	(pm) overcast			

Ithaca Offsite

NYSDEC Site # C755012A

Contract # D-00438-19

Ithaca, New York

Arrive at site	700	(am)
Leave site:	430	(pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (x)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?	Soil	Yes ( )	n/a (x)	* No ( )
	Waters	Yes ( )	n/a (x)	* No ( )
	Air	Yes ( )	n/a (x)	* No ( )

OTHER ITEMS:

- *If No, provide comments*

Site Sketch Attached: Yes ( ) No (x)
Photos Taken: Yes (x) No ( )

DAILY OBSERVATION REPORT **Day: Wednesday Date: 8 February 2012**

DESCRIPTION OF DAILY WORK PERFORMED:

David Crandall with EA onsite 700am. Bob Gannon and John Stutzke with Aztech ready to enter Structure 39 to perform pressure field extension testing for existing SSDS and determine if second extraction point should be added to system. Based on conversations with homeowner, work will be able to start at 1030am.

In the meantime, performed PFE testing at Structure 43 following system operation overnight. (* - water in point)

Test Point	Manometer Reading	Distance to EP-1	Distance to EP-2
1	0.000	14.3	25.5
2	-0.003 - -0.015	12.5	24.5
3	-0.007 - -0.009	10.75	21.5
4	-0.005 - -0.007	7	11
5*	-0.003	13	8
6*	-0.001 - -0.004	14	4
7	-0.002	17	7
8	-0.008	6	8
9*	-0.001	9	13.5
10*	0.000 - -0.023	14.5	9.5

Returned to Structure 39 to begin PFE testing/SSDS upgrades. Based on conversations with homeowner, a second extraction point can only be added underneath stairs to tie in to existing piping. PFE testing

TP-1	-0.004
TP-2	-0.118
TP-3	0.000
TP-4	0.000
TP-5	-0.006

EP-2 was installed in the agreed area, but core revealed that hole was partially on footer for chimney/stairs in middle of home. Aztech removed gravel beneath main floor and got to beneath footer to ensure communication beneath all portions of the sub-slab environment. Extraction point screening was installed to depth of footer and peastone filled voids prior to sealing point and beginning to tie in with existing system piping. When EP-2 was set to be installed with existing piping, Aztech noted that existing piping is an odd size of PVC (4 inch inner diameter, but not schedule 40), as such, they need to locate a section “T” in order to connect new extraction point. Aztech will attempt to find necessary parts to complete system upgrades on 2/9/12

Offsite at 430pm.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:	**DEC Sample ID:**	**Description:**

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: David Crandall (Scientist)

(Name of Subcontractor) personnel: Bob Gannon and John Stutzke with Aztech (mitigation contractors)

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

None.

ITEMS OF CONCERN:

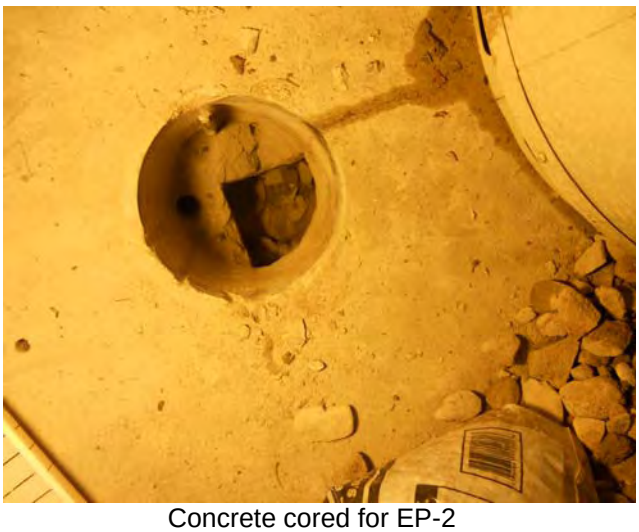
COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: *David Crandall*
cc:

DAILY PHOTOLOG



Concrete cored for EP-2

Screen and pea gravel for EP-2

Seal and EP-2 extension

Piping around water heater and chimney to existing line.

Extraction point and piping around water heater.

DAILY OBSERVATION REPORT **Day: Thursday** **Date: 9 February 2012**

NYSDEC

Temperature: (F)	20	(am)	41	(pm)
Wind Direction:	W	(am)	W	(pm)
Weather:	(am) overcast (pm) sunny			

Ithaca Offsite

NYSDEC Site # C755012A

Contract # D-00438-19

Ithaca, New York

Arrive at site	730	(am)
Leave site:	430	(pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (x)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?	Soil	Yes ( )	n/a (x)	* No ( )
	Waters	Yes ( )	n/a (x)	* No ( )
	Air	Yes ( )	n/a (x)	* No ( )

- *If No, provide comments*

OTHER ITEMS:

Site Sketch Attached: Yes ( ) No (x)
Photos Taken: Yes (x) No ( )

DAILY OBSERVATION REPORT **Day: Thursday Date: 9 February 2012**

DESCRIPTION OF DAILY WORK PERFORMED:

David Crandall with EA onsite 730am. Bob Gannon and John Stutzke with Aztech ready to enter Structure 39 completed system upgrade. Access granted to structure at 830am. New T connected to existing SSDS and tied in with EP-2 to complete system upgrade. Upon turning system on, manometer readings were collected.

Test Point	Manometer Reading	Distance to EP-1	Distance to EP-2
1	-0.011	16	8.5
2	-0.081	5	17
3	-0.006	16	13
4	-0.012	18	6.5
5	-0.007	14	18.5

At 1000am, EA to Structure 37 to complete additional indoor air sampling. Sub-Slab Vapor, Basement Air, and Outdoor Air samples collected in locations similar to previous sampling events.

During EA sampling at Structure 37, Aztech installed U-Tube Manometers on new extraction points in Structures 43 and 39, and also replaced old U-Tube Manometer that was no longer functional on EP-1 in Structure 39.

NYSDEC Representative onsite at 1045am and observed system work completed in Structure 43. Upon approval of work, Aztech left site for week.

1100am, EA and NYSDEC rep to Structure 38 for additional indoor air sampling. Sub-Slab Vapor, Basement Air, and Outdoor Air samples collected in locations similar to previous sampling events.

1230pm, EA and NYSDEC to Structure 35 for additional indoor air sampling, Basement Air, Basement Air Duplicate collected from finished portion of basement after sealing of floor drain and cracks and allowing basement to “air out” for several days prior to sampling.

Following sample setup at Structure 35, EA and NYSDEC to Structure 39 to view system upgrades completed. Also removed some suspect chemicals and placed in bin outside prior to sampling to be completed February 16-17. U-Tube readings 1.1 in. W/C at EP1 and EP2.

EA and NYSDEC then to Structure 43 to remove some suspect chemicals and place in bin. EA to contact homeowner and ask to remove bin from basement prior to sampling to be completed February 16-17. U-Tube Readings 2.4 in. W/C at EP1 and 2.5 in. W/C at EP2.

Offsite at 200pm.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:	DEC Sample ID:	Description:
Structure 37 (SS-37, BA-37, OA-37)		Sub-slab, Basement Air, and Outdoor air resamples for TO-15
Structure 38 (SS-38, BA-38, OA-38)		Sub-slab, Basement Air, and Outdoor air resamples for TO-15
Structure 35 (BA-35, BA-Dup)		Basement Air, and Basement Air Duplicate resamples for TO-15

DAILY OBSERVATION REPORT Day: Thursday Date: 9 February 2012

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: David Crandall (Scientist)

(Name of Subcontractor) personnel: Bob Gannon and John Stutzke with Aztech (mitigation contractors)

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. Karen Cahill, NYSDEC

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

None.

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: *David Crandall*
cc:

DAILY PHOTOLOG

Connection of EP-2 to existing SSDS line in Structure 39

Resealed sump pit in Structure 39.

Structure 37 – Basement Air and Sub-Slab Vapor

Structure 37 – Outdoor Air

Structure 38 – Sub-Slab Vapor

Structure 38 – Basement Air

Outdoor Air Sample – Structure 38

Basment Air Sample/Duplicate – Structure 35

DAILY OBSERVATION REPORT **Day: Friday** **Date: 10 February 2012**

NYSDEC

Temperature: (F)	25	(am)	34	(pm)
Wind Direction:	SW	(am)	SW	(pm)
Weather:	(am) sunny			
	(pm) sunny			

Ithaca Offsite

NYSDEC Site # C755012A

Contract # D-00438-19

Ithaca, New York

Arrive at site 930 (am)

Leave site: 1230 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (x)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?

Soil	Yes ( )	n/a (x)	* No ( )
Waters	Yes ( )	n/a (x)	* No ( )
Air	Yes ( )	n/a (x)	* No ( )

- *If No, provide comments*

OTHER ITEMS:

Site Sketch Attached: Yes ( ) No (x)
Photos Taken: Yes ( ) No (x)

DESCRIPTION OF DAILY WORK PERFORMED:

David Crandall with EA onsite 930am. Indoor Air Samples collected from Structure 35, 37, and 38. No Additional work completed onsite today. Samples were shipped out via FEDEX to Air Toxics.

Offsite 1230pm.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:	DEC Sample ID:	Description:
Structure 37 (SS-37, BA-37, OA-37)		Sub-slab, Basement Air, and Outdoor air resamples for TO-15
Structure 38 (SS-38, BA-38, OA-38)		Sub-slab, Basement Air, and Outdoor air resamples for TO-15
Structure 35 (BA-35, BA-Dup)		Basement Air, and Basement Air Duplicate resamples for TO-15

DAILY OBSERVATION REPORT Day: Friday Date: 10 February 2012

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: David Crandall (Scientist)

(Name of Subcontractor) personnel:

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

None.

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: *David Crandall*

cc:

DAILY OBSERVATION REPORT **Day: Friday** **Date: 16 February 2012**

NYSDEC

Temperature: (F) 36 (am) NA (pm)

Wind Direction: SW (am) NA (pm)

Weather: (am) Light Rain/Overcast

(pm) NA

Ithaca Offsite

NYSDEC Site # C755012A

Contract # D-00438-19

Ithaca, New York

Arrive at site 1035 (am)

Leave site: 1130 (am)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (x)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?

Soil	Yes ( )	n/a (x)	* No ( )
Waters	Yes ( )	n/a (x)	* No ( )
Air	Yes ( )	n/a (x)	* No ( )

- *If No, provide comments*

OTHER ITEMS:

Site Sketch Attached: Yes ( ) No (x)
Photos Taken: Yes ( ) No (x)

DESCRIPTION OF DAILY WORK PERFORMED:

David Crandall and Chris Schroer with EA onsite 1035am. Proceeded to Structure 43 where one basement air sample and one outdoor air sample was set up following SSDS operation for 1 week after system upgrades (bin of sorted chemicals selected for removal by EA/NYSDEC) had been previously cleared from basement.

Following setup at Structure 43, proceeded on to structure 39, where one basement air sample and one outdoor air sample was set up following SSDS operation for 1 week after system upgrades.

Offsite 1130am.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:	DEC Sample ID:	Description:
Structure 43(BA-43-0212, OA-43-0212)		Basement Air, and Outdoor air resamples for TO-15
Structure 39 (BA-39-0212, OA-39-0212		Basement Air, and Outdoor air resamples for TO-15

DAILY OBSERVATION REPORT Day: Friday Date: 16 February 2012

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: David Crandall (Scientist), Chris Schroer (Scientist)

(Name of Subcontractor) personnel:

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

None.

ITEMS OF CONCERN:

COMMENTS:

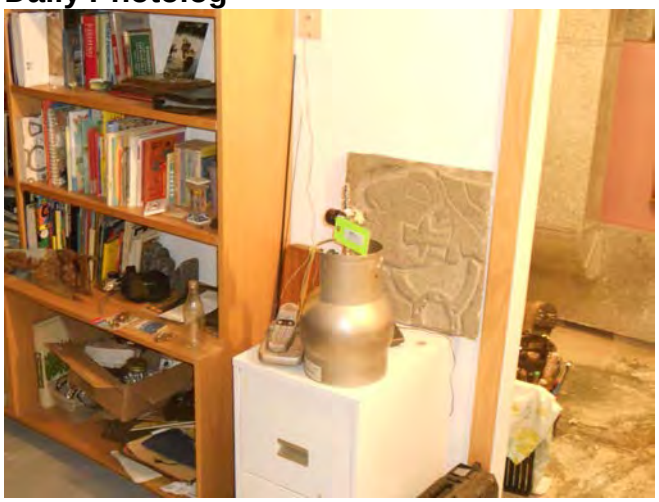
ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: *David Crandall*

cc:

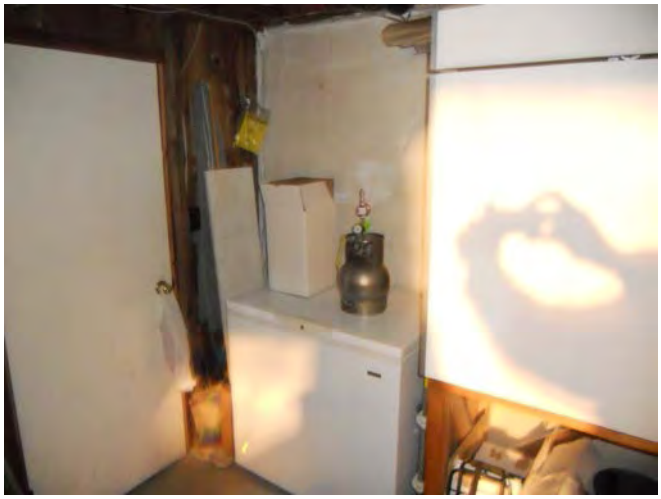
Daily Photolog



Structure 43 – Basement Air

Structure 39 – Outdoor Air

Structure 43 – Outdoor Air



Structure 39 – Basement Air

DAILY OBSERVATION REPORT **Day: Friday** **Date: 17 February 2012**

NYSDEC

Temperature: (F) 41 (am) NA (pm)

Wind Direction: SW (am) NA (pm)

Weather: (am) Sunny
(pm) NA

Ithaca Offsite

NYSDEC Site # C755012A

Contract # D-00438-19

Ithaca, New York

Arrive at site 1030 (am)

Leave site: 1130 (am)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (x)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?

Soil	Yes ( )	n/a (x)	* No ( )
Waters	Yes ( )	n/a (x)	* No ( )
Air	Yes ( )	n/a (x)	* No ( )

- *If No, provide comments*

OTHER ITEMS:

Site Sketch Attached: Yes ( ) No (x)
Photos Taken: Yes ( ) No (x)

DESCRIPTION OF DAILY WORK PERFORMED:

David Crandall and Chris Schroer with EA onsite 1030am. Proceeded to Structure 43 where one basement air sample and one outdoor air sample was collected following 24-hour sample period.

Following sample pickup at Structure 43, proceeded on to structure 39, where one basement air sample and one outdoor air sample collected following 24-hour sample period.

Note: both outdoor air samples registered low final reading (-0.5 in. Hg) when checked before 24-hour period ended.

Offsite 1130am.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:	DEC Sample ID:	Description:
Structure 43(BA-43-0212, OA-43-0212)		Basement Air, and Outdoor air resamples for TO-15
Structure 39 (BA-39-0212, OA-39-0212		Basement Air, and Outdoor air resamples for TO-15

DAILY OBSERVATION REPORT Day: Friday Date: 17 February 2012

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: David Crandall (Scientist), Chris Schroer (Scientist)

(Name of Subcontractor) personnel:

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

None.

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

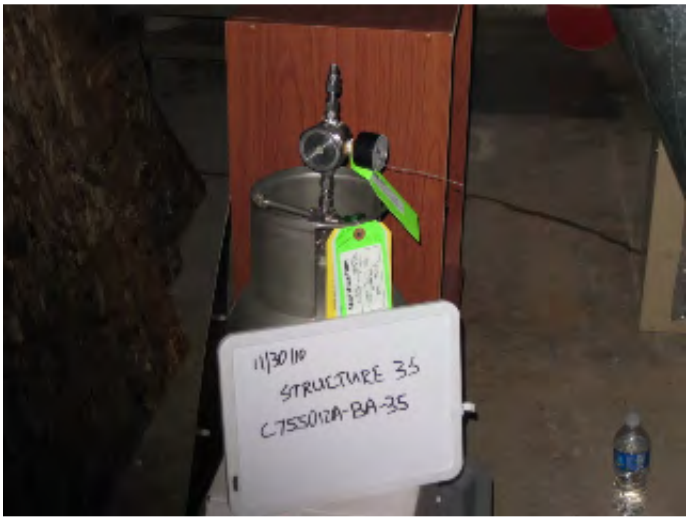
Name: *David Crandall*

cc:

Appendix B

Indoor Air/Sub-slab Vapor Sampling Forms

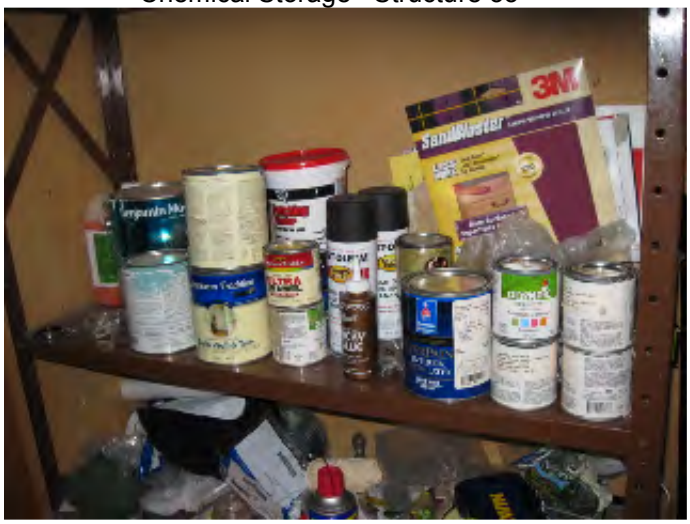
Indoor Air Sampling Photolog – Axiohm OU2 Site – December, 2010



Basement Air Sample – Structure 35

Chemical Storage –Structure 35

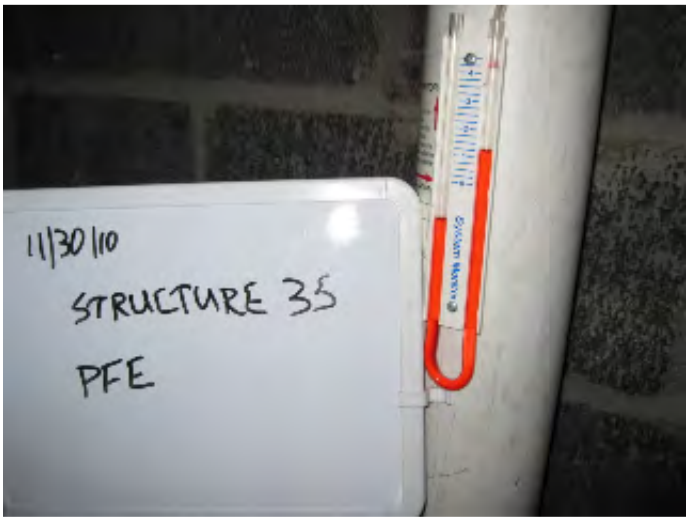
Chemical Storage –Structure 35



Chemical Storage –Structure 35

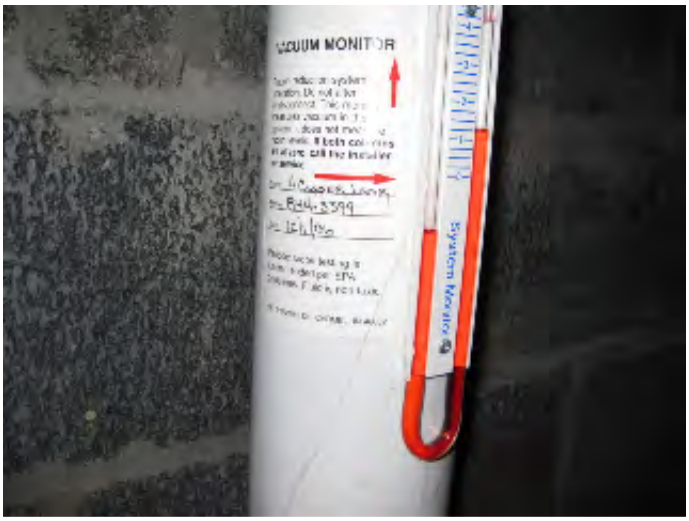
Chemical Storage –Structure 35

Chemical Storage –Structure 35



Radon System – Structure 35

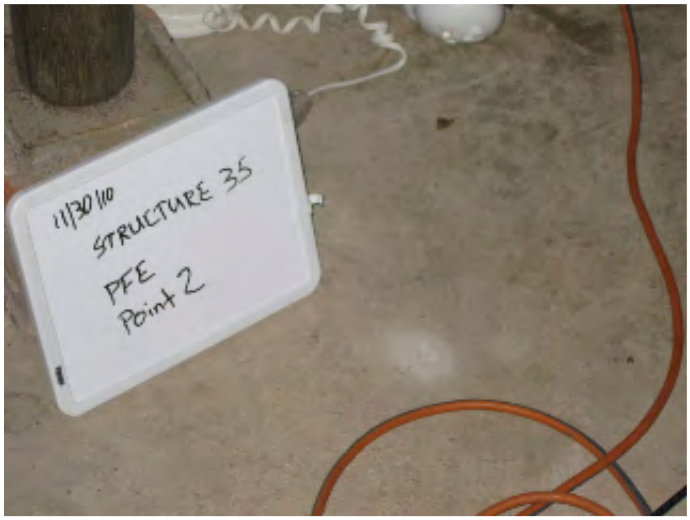

Radon System – Structure 35



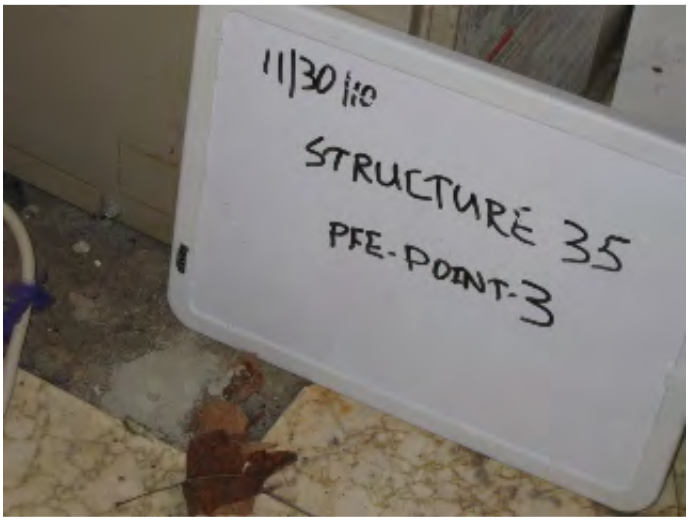
Radon System – Structure 35


Radon System – Structure 35

PFE point 1 – Structure 35



PFE point 2 – Structure 35



PFE point 3 – Structure 35

Indoor Air Sampling Photolog – Ithaca Off-Site – May 2011

Basement Air Sample – Structure 35

Basement Air Sample – Finished Portion –Structure 35

Basement Air and Radon Sample –Structure 35

Indoor Air Sampling Photolog – Ithaca Off-Site – February 2012

Unsealed, open floor drain – Structure 35

Floor drain reconnected –Structure 35

Peastone fill in former floor drain –Structure 35

Sealed former floor drain –Structure 35

Sealed floor cracks –Structure 35

Basement air sampling – Structure 35

FIELD AIR SAMPLING FORM

® EA Engineering and Its Affiliate EA Science & Technology 6712 Brooklawn Parkway, Suite 104 Syracuse, NY 13211		Project #:	14368.19 0002
		Project Name:	Ithaca OffSite
		Location:	Ithaca NY
		Project Manager:	R. Casey/K. Cahill

Sample Location Information:

Site ID Number:				Sampler(s):	D CRANDALL
PID Meter Used: (Model, Serial #)				Building I.D. No.:	Structure 35

SUMMA Canister Record: Duplicate

INDOOR AIR - ~~FIRST FLOOR~~		INDOOR AIR - BASEMENT		SUBSLAB SOIL GAS		OUTDOOR AIR	
Flow Regulator No.:	40444	Flow Regulator No.:	40107	Flow Regulator No.:		Flow Regulator No.:	
Canister Serial No.:	1586	Canister Serial No.:	10767	Canister Serial No.:	FD	Canister Serial No.:	
Start Date/Time:	2/9/12 1249	Start Date/Time:	2/9/12 1249	Start Date/Time:		Start Date/Time:	
Start Pressure: (inches Hg)	-29.5	Start Pressure: (inches Hg)	-30	Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	
Stop Date/Time:	2/10/12 1214	Stop Date/Time:	2/10/12 1214	Stop Date/Time:		Stop Date/Time:	
Stop Pressure: (inches Hg)	-4	Stop Pressure: (inches Hg)	-6	Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	
Sample ID:	C755012A-BA-DUP-0212	Sample ID:	C755012A-BA-35-0212	Sample ID:		Sample ID:	

Other Sampling Information:

Story/Level	BSMT	Story/Level	BSMT	Basement or Crawl Space?		Direction from Building	
Room	office.	Room	office.	Floor Slab Thickness (inches) *[if present]*		Distance from Building	
Indoor Air Temp (°F)	53F	Indoor Air Temp	53F	Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	
Barometric Pressure?	-	Barometric Pressure?	-	Ground Surface Condition (Crawl Space Only)		Intake Tubing Used?	
Intake Height Above Floor Level (ft.)	3.5'	Intake Height Above Floor Level (ft.)	3.5'	If slab, intake Depth If Crawl Space, intake height		Distance to nearest Roadway	
Noticeable Odor?	-	Noticeable Odor?	-	Noticeable Odor?		Noticeable Odor?	
PID Reading (ppb)	0 ppb	PID Reading (ppb)	0 ppb	PID Reading (ppb)		PID Reading (ppb)	
Duplicate Sample?	-	Duplicate Sample?	-	Duplicate Sample?		Duplicate Sample?	

Comments:

- Sample in same location as previous

-

Sampler Signature:

FIELD AIR SAMPLING FORM

EA Engineering and Its Affiliate
EA Science & Technology
6712 Brooklawn Parkway, Suite 104
Syracuse, NY 13211

Project #:	14368.19
Project Name:	Ithaca Off-Site
Location:	Ithaca, NY
Project Manager:	Bob Casey/Karen Cahill

Sample Location Information:

Site ID Number:	C755012A			Sampler(s):	DC/SB
PID Meter Used: (Model, Serial #)	ppbRAE			Building I.D. No.:	35

SUMMA Canister Record:

~~INDOOR AIR - FIRST FLOOR~~ Tenant		INDOOR AIR - BASEMENT		SUBSLAB SOIL GAS		OUTDOOR AIR	
Flow Regulator No.:	40401	Flow Regulator No.:	40351	Flow Regulator No.:		Flow Regulator No.:	
Canister Serial No.:	23992	Canister Serial No.:	9420	Canister Serial No.:		Canister Serial No.:	
Start Date/Time:	5/4/11 1031	Start Date/Time:	5/4/11 1049	Start Date/Time:		Start Date/Time:	
Start Pressure: (inches Hg)	> -30	Start Pressure: (inches Hg)	-29.5	Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	
Stop Date/Time:	5/5/11 0933	Stop Date/Time:	5/5/11 0937	Stop Date/Time:		Stop Date/Time:	
Stop Pressure: (inches Hg)	-7	Stop Pressure: (inches Hg)	-5.5	Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	
Sample ID:	C755012A-BA-35A-0511	Sample ID:	C755012A-BA-35B-0511	Sample ID:		Sample ID:	

Other Sampling Information:

Story/Level	Basement	Story/Level	Basement	Basement or Crawl Space?		Direction from Building	
Room	Basement	Room	Basement	Floor Slab Thickness (inches) *[if present]*		Distance from Building	
Indoor Air Temp (°F)	50-60	Indoor Air Temp	50-60	Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	
Barometric Pressure?	—	Barometric Pressure?	—	Ground Surface Condition (Crawl Space Only)		Intake Tubing Used?	
Intake Height Above Floor Level (ft.)	5'	Intake Height Above Floor Level (ft.)		If slab, intake Depth If Crawl Space, intake height		Distance to nearest Roadway	
Noticeable Odor?	—	Noticeable Odor?		Noticeable Odor?		Noticeable Odor?	
PID Reading (ppb)	—	PID Reading (ppb)	—	PID Reading (ppb)		PID Reading (ppb)	
Duplicate Sample?	—	Duplicate Sample?	—	Duplicate Sample?		Duplicate Sample?	

Comments:

Radon SBA on owner side in living Space

owner requested early pickup. Spoke w/ Karen.

REMOVE THIS PORTION AND KEEP FOR YOUR RECORDS
2106323
Client
RADON TESTING CORP. OF AMERICA

Resample on Tenant Side. INitial & Radon samples on owner side

Sampler Signature:

FIELD AIR SAMPLING FORM

EA Engineering and Its Affiliate EA Science & Technology 6712 Brooklawn Parkway, Suite 104 Syracuse, NY 13211	Project #: 14368.19 Project Name: NYSDEC C75012A Offsite Axiohm Location: Ithaca, NY Project Manager: Bob Casey/Karen Cahill

Sample Location Information:

Site ID Number:	C75012A	Sampler(s):	?/DC
PID Meter Used: (Model, Serial #)	ppbRAE	Building I.D. No.:	Structure 35

SUMMA Canister Record:

INDOOR AIR - FIRST FLOOR		INDOOR AIR - BASEMENT		SUBSLAB SOIL GAS		OUTDOOR AIR	
Flow Regulator No.:		Flow Regulator No.:	10232	Flow Regulator No.:		Flow Regulator No.:	
Canister Serial No.:		Canister Serial No.:	359960	Canister Serial No.:		Canister Serial No.:	
Start Date/Time:		Start Date/Time:	11/30/10 1035	Start Date/Time:		Start Date/Time:	
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-30	Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	
Stop Date/Time:		Stop Date/Time:	12/1/10 1548	Stop Date/Time:		Stop Date/Time:	
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-1.5	Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	
Sample ID:		Sample ID:	C75012A-BA-35	Sample ID:		Sample ID:	

Other Sampling Information:

Story/Level		Story/Level	2 basement	Basement or Crawl Space?		Direction from Building	
Room		Room	basement	Floor Slab Thickness (inches) *(if present)*		Distance from Building	
Indoor Air Temp (°F)		Indoor Air Temp	~50°	Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	
Barometric Pressure?		Barometric Pressure?	na	Ground Surface Condition (Crawl Space Only)		Intake Tubing Used?	
Intake Height Above Floor Level (ft.)		Intake Height Above Floor Level (ft.)	~3'	If slab, intake Depth If Crawl Space, intake height		Distance to nearest Roadway	
Noticeable Odor?		Noticeable Odor?	none	Noticeable Odor?		Noticeable Odor?	
PID Reading (ppb)		PID Reading (ppb)	0	PID Reading (ppb)		PID Reading (ppb)	
Duplicate Sample?		Duplicate Sample?	none	Duplicate Sample?		Duplicate Sample?	

Comments:

* collected sample on side w/ radon system + sewer piping (new)

Sampler Signature:

(35)

NEW YORK STATE DEPARTMENT OF HEALTH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name _____ Date/Time Prepared _____

Preparer's Affiliation Independent Consultant – EA Engineering Phone No. 315-431-4610

Purpose of Investigation: Ithaca Offsite Former Axiohm Facility C75012A

1. OCCUPANT: Interviewed: Y / N

Last Name: _____ First Name: _____

Address: [redacted]

County: Tompkins

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location _____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS Type of

Building: (Circle appropriate response)

(Residential) School Commercial/Multi-use

Industrial Church Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch		
	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other: 2family colonial

164/166

If multiple units, how many?
(2) **If the property is commercial, type?**

Business Type(s) _____

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics: basement 1st 2nd

Number of floors (2) Building age 1940's

Is the building insulated? (Y) N How air tight? Tight / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors
Airflow near source
Outdoor air infiltration
Infiltration into air ducts

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full 164 166	crawlspace	slab	other _____
c. Basement floor:	concrete 164 166	dirt	stone	other _____
d. Basement floor:	uncovered 164	covered 164	covered with rug	
e. Concrete floor:	unsealed 164	sealed	sealed with _____	
f. Foundation walls:	poured	block 164 166	stone	other _____
g. Foundation walls:	unsealed	sealed 164	sealed with _____	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished 164	unfinished 164	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: 0-6' (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains) Several cracks in floor on 164 side

6. HEATING, VENTING and AIR CONDITIONING

Type of heating system(s) used in this building: (circle all that apply –note primary)

Hot air circulation - Heat pump - Hot water baseboard - Space Heaters - Steam radiation - Radiant floor - Electric baseboard - Wood stove - Outdoor wood boiler - Other _____

The primary type of fuel used is:

Natural Gas - Fuel Oil - Kerosene - Electric - Propane - Solar - Wood - Coal

Domestic hot water tank fueled by: Natural Gas

Boiler/furnace located in: Basement - Outdoors - Main Floor - Other _____

Air conditioning: Central Air - Window units - Open Windows - None

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY

Is basement/lowest level occupied? Full-time - Occasionally - Seldom - Almost Never

Level General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)

	164	166
Basement	Storage/laundry	
1st Floor	Living Kitchen	living kitchen
2nd Floor	bedrooms	bedrooms
3rd Floor		
4th Floor		

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y (N)

b. Does the garage have a separate heating unit? Y / N / (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / (NA)
Please specify_____

d. Has the building ever had a fire? Y (N) When?_____

e. Is a kerosene or unvented gas space heater present? Y (N) Where? _____

f. Is there a workshop or hobby/craft area? Y (N) Where & Type? _____

g. Is there smoking in the building? Y / (N) How frequently? _____

h. Have cleaning products been used recently? Y (N) When & Type? _____

i. Have cosmetic products been used recently? Y (N) When & Type? _____

1935

j. Has painting/staining been done in the last 6 months? (Y) / N When & Type? 1111 side some painting

k. Is there new carpet, drapes or other textiles? Y / (N) Where & When? _____

l. Have air fresheners been used recently? Y (N) When & Type? _____

m. Is there a kitchen exhaust fan? Y (N) If yes, where vented? _____

n. Is there a bathroom exhaust fan? (Y) / N If yes, where vented? bath (#1) 3

o. Is there a clothes dryer? (Y) / N If yes, is it vented outside? (Y) / N both

p. Has there been a pesticide application? Y (N) When &Type? _____ outside

Are there odors in the building? Y / N
If yes, please describe:

Do any of the building occupants use solvents at work? Y (N)

(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? _____
If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

no-116
no-114

Is there a radon mitigation system for the building/structure? Y / N Date of Installation:
Is the system active or passive? Active/Passive

#6. 2007 Radon installed

9. WATER AND SEWAGE
Water Supply: Public Water Drilled Well Driven Well Dug Well Other: _____
Sewage Disposal: Public Sewer Septic Tank Leach Field Dry Well Other: _____

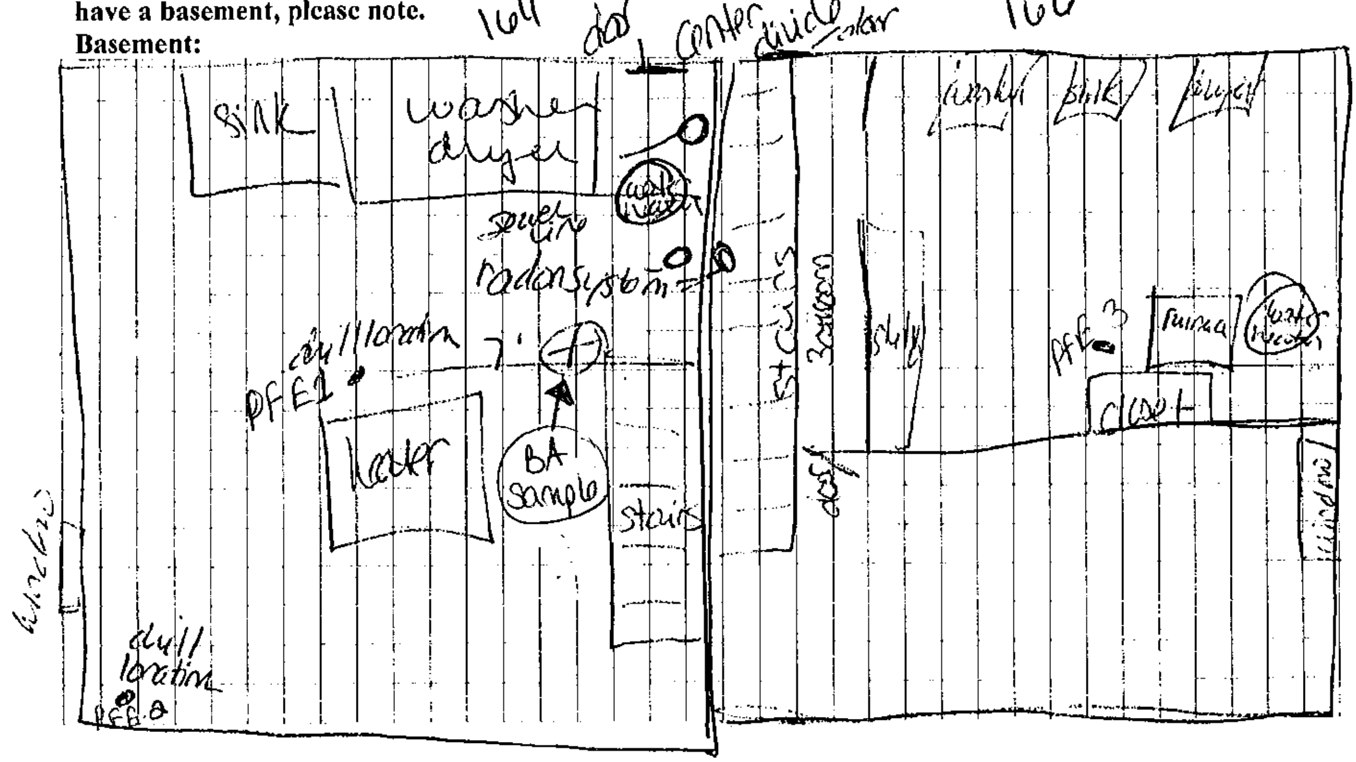
.10. RELOCATION INFORMATION (for oil spill residential emergency)
.a. Provide reasons why relocation is recommended: _____
.b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel
.c. Responsibility for costs associated with reimbursement explained? Y / N
.d. Relocation package provided and explained to residents? Y / N

split house
split basement

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:

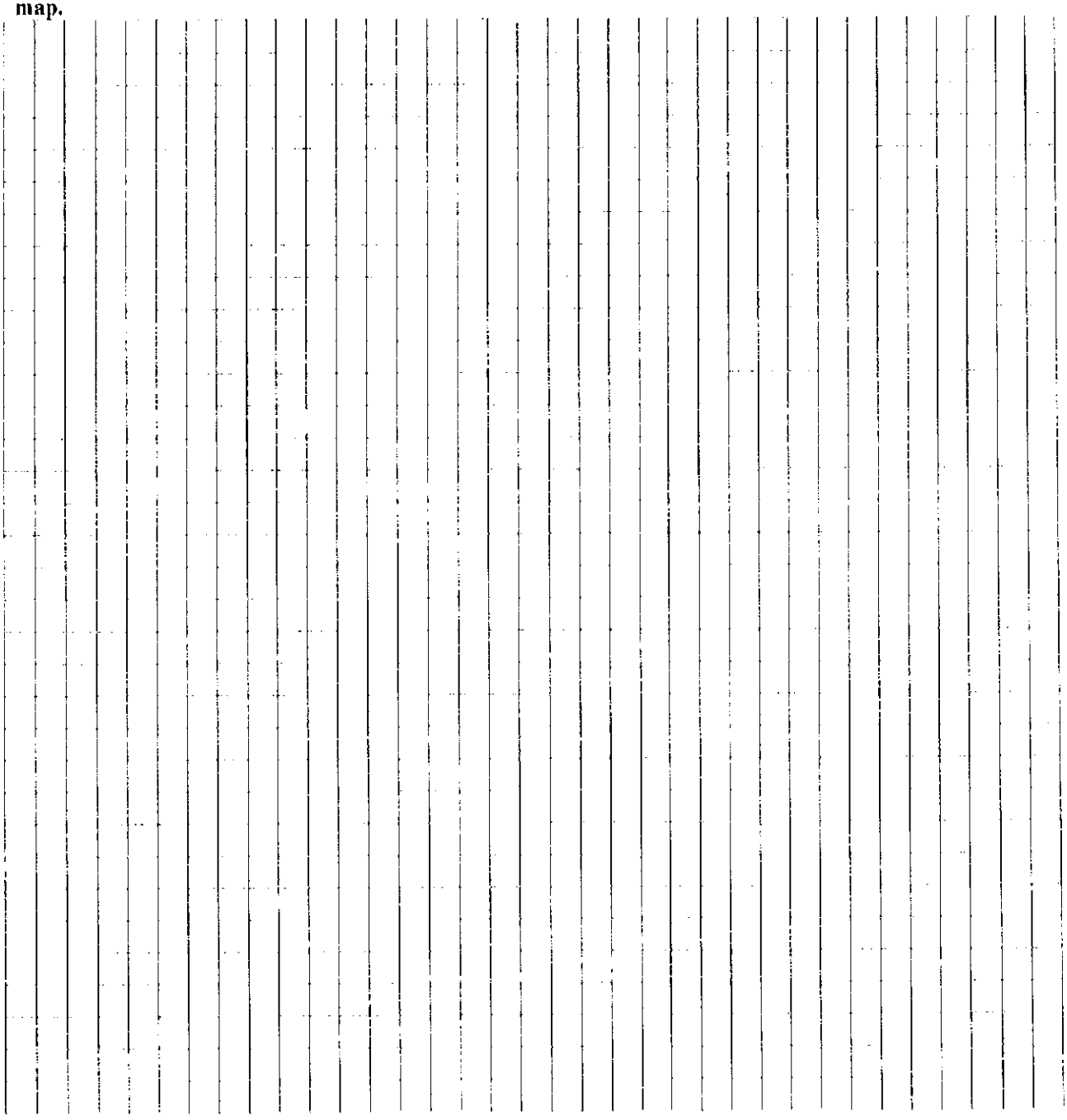


First Floor: 12. OUTDOOR PLOT

164 PFE point 1 - 7' f/b extraction system
-0.098
PFE point 2 - 15' f/b extraction system
-0.018

166 PFE point 3 - 15' f/b extraction point 2
-0.014

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.
Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ______________________

List specific products found in the residences that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
1&1	clack detergent	44oz	good	[illegible] surfactants	0.0	Y
basement	arm Hammer	3lb		"	↓	↓
↓	Bruce	1bx				
	woolite	40oz	↓	"		
↓	~~[illegible]~~ natures miracle	1qt		isopropyl alcohol	✓	✓
Tile basement	gooisportsmagnum 32oz					
	paint	10-1gal	good	Latex	0.0	Y
	paint	1qt	good		0.0	
	paint	7.75oz	good		0.0	
	WD40	8oz		petroleum distillates	0.0	
	motor oil	3-			0.0	
↓	power steering fluid	12.5oz		petroleum oil / zinc dio phosphate	0.0	
	Brake fluid		↓	oil	0.0	
	Peak-anti freeze	1gal	✓	ethylene glycol diethylene glycol dipotassium phosphate silicates	0.0	
	Lamp oil	1/2gal			0.0	
	silicone water guard	1	U	polymers / [illegible]	0.0	↓
	tacky glue	4oz	U			
	petroleum enamel	2-12oz	U	toluene/acetone/xylene	16.0ppm	

dap plaster patch 2-32oz U calcium carbonate, MgAlSi, clay, mica, silica

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

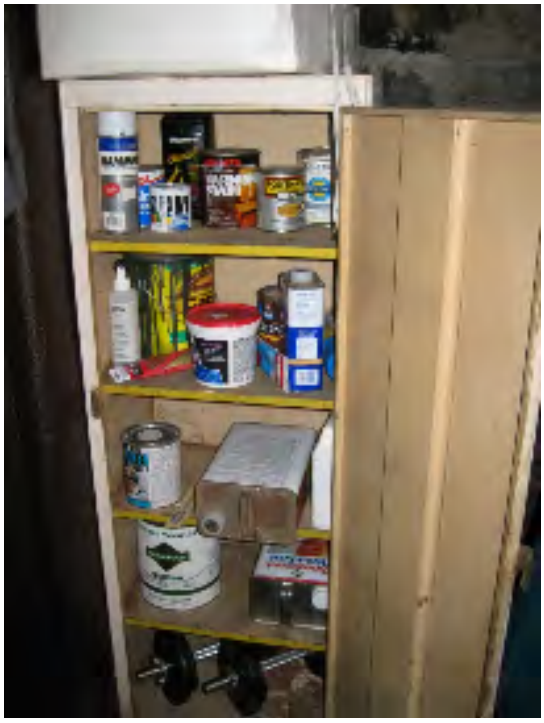
BTSA\Sections\SIS\Oil Spills\Guidance Docs\Aiproto4.doc

[illegible] 32floz U ethylene glycol vinyl acetate acetate [illegible] formaldehyde 0.0

ink 0.0

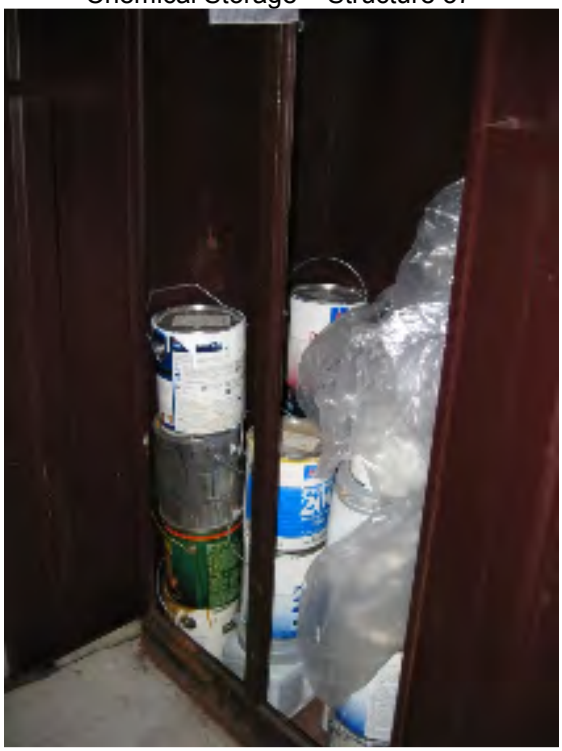
[illegible] nitrate 0.0 Y

Indoor Air Sampling Photolog – Axiohm OU2 Site – December, 2010



Chemical Storage – Structure 37

Chemical Storage – Structure 37



Chemical Storage – Structure 37

Chemical Storage – Structure 37

Chemical Storage – Structure 37

Chemical Storage – Structure 37

Chemical Storage – Structure 37

Chemical Storage – Structure 37

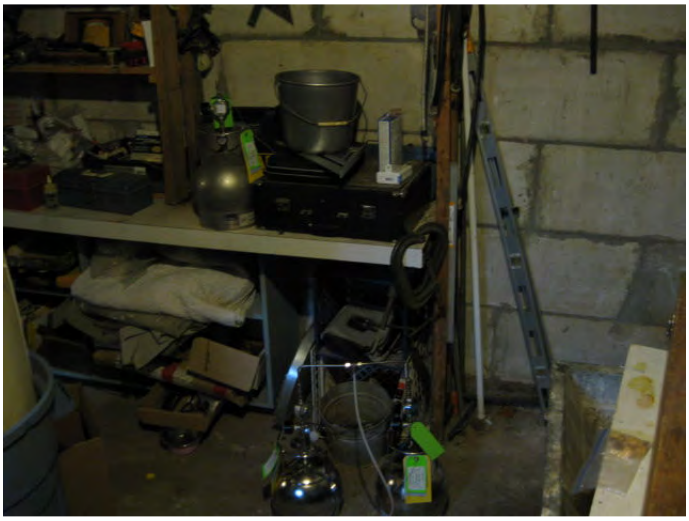
Chemical Storage – Structure 37

Sub Slab Air Sample – Structure 37

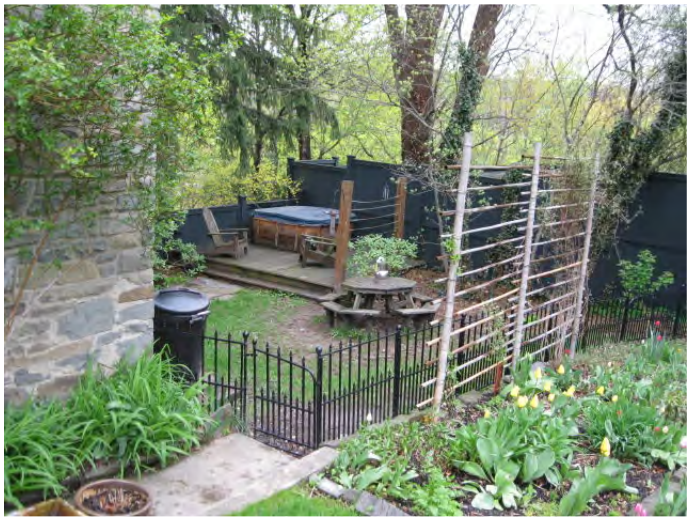
Basement Air Sample – Structure 37

Flooding Area in Basement – Structure 37

Indoor Air Sampling Photolog – Ithaca Off-Site – May 2011



Basement Air, Sub-Slab Vapor/Duplicate Samples – Structure 37



Outdoor Air Sample – Structure 37

Indoor Air Sampling Photolog – Axiohm OU2 Site – February 2012

Sun-Slab Vapor Sample – Structure 37

Basement Air Sample– Structure 37

Basement Air/Sub-Slab Vapor Samples – Structure 37

Outdoor Air Sample– Structure 37

FIELD AIR SAMPLING FORM

EA Engineering and Its Affiliate EA Science & Technology 6712 Brooklawn Parkway, Suite 104 Syracuse, NY 13211	Project #: 14368.19 0002 Project Name: Ithaca OffSite Location: Ithaca NY Project Manager: R. Casey/K. Cahill

Sample Location Information:

Site ID Number:	C755012A			Sampler(s):	D. Crandall
PID Meter Used: (Model, Serial #)	ppbRAE 3000			Building I.D. No.:	STRUCTURE-37

SUMMA Canister Record:

INDOOR AIR - FIRST FLOOR		INDOOR AIR - BASEMENT		SUBSLAB SOIL GAS		OUTDOOR AIR	
Flow Regulator No.:		Flow Regulator No.:	40143	Flow Regulator No.:	40439	Flow Regulator No.:	40555
Canister Serial No.:		Canister Serial No.:	10770	Canister Serial No.:	14873	Canister Serial No.:	5603
Start Date/Time:		Start Date/Time:	2/9/12 1037	Start Date/Time:	2/9/12 1035	Start Date/Time:	2/9/12 1041
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-29	Start Pressure: (inches Hg)	-30	Start Pressure: (inches Hg)	-30
Stop Date/Time:		Stop Date/Time:	2/10/12 1037	Stop Date/Time:	2/10/12 1035	Stop Date/Time:	2/10/12 1009
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	~~2/10/12~~ -5	Stop Pressure: (inches Hg)	~~2/10/12~~ -5.5	Stop Pressure: (inches Hg)	-3
Sample ID:		Sample ID: C755012A-BA-37-0212		Sample ID: C755012A-SS-37-0212		Sample ID: C755012A-OA-37-0212	

Other Sampling Information:

Story/Level		Story/Level	Bsmt	Basement or Crawl Space?	Bsmt	Direction from Building	E
Room		Room	Bsmt	Floor Slab Thickness (inches) *[if present]*	5"	Distance from Building	20ft
Indoor Air Temp (°F)		Indoor Air Temp	59F	Potential Vapor Entry Points Observed?	—	Intake Height Above Ground Level (ft.)	4ft.
Barometric Pressure?		Barometric Pressure?	—	Ground Surface Condition (Crawl Space Only)	—	Intake Tubing Used?	steel "4"
Intake Height Above Floor Level (ft.)		Intake Height Above Floor Level (ft.)	4ft.	If slab, intake Depth If Crawl Space, intake height	5.5"	Distance to nearest Roadway	50ft
Noticeable Odor?		Noticeable Odor?		Noticeable Odor?	—	Noticeable Odor?	
PID Reading (ppb)		PID Reading (ppb)	0 ppb	PID Reading (ppb)	631 ppb	PID Reading (ppb)	0 ppb.
Duplicate Sample?		Duplicate Sample?		Duplicate Sample?		Duplicate Sample?	

Comments:

Helium Leak Test - Dome 100% Purge - 250 ppm - PASS

- NO additional Products observed for inventory
- Samples collected in same place As previous events

Sampler Signature:

FIELD AIR SAMPLING FORM

EA Engineering and Its Affiliate
EA Science & Technology
6712 Brooklawn Parkway, Suite 104
Syracuse, NY 13211

Project #: 14368.19
Project Name: Ithaca Off-Site
Location: Ithaca, NY
Project Manager: Bob Casey/Karen Cahill

Sample Location Information:

Site ID Number:	C755012A			Sampler(s):	DC/SB
PID Meter Used: (Model, Serial #)	ppbRAE			Building I.D. No.:	37

SUMMA Canister Record:

INDOOR AIR - FIRST FLOOR		INDOOR AIR - BASEMENT		SUBSLAB SOIL GAS		OUTDOOR AIR	
Flow Regulator No.:		Flow Regulator No.:	40242	Flow Regulator No.:	40521	Flow Regulator No.:	401A
Canister Serial No.:		Canister Serial No.:	34002	Canister Serial No.:	4339	Canister Serial No.:	R-18
Start Date/Time:		Start Date/Time:	5/4/11 1149	Start Date/Time:	5/4/11 1148	Start Date/Time:	5/4/11 1158
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-28.5	Start Pressure: (inches Hg)	-30+	Start Pressure: (inches Hg)	-28.5
Stop Date/Time:		Stop Date/Time:	5/5/11 1145	Stop Date/Time:	5/5/11 1143	Stop Date/Time:	5/5/11 1157
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-5.5	Stop Pressure: (inches Hg)	-4	Stop Pressure: (inches Hg)	-10.5
Sample ID:		Sample ID: C755012A-IA-37-0511		Sample ID: C755012A-SS-37-0511		Sample ID: C755012A-OA-37-0511	

Other Sampling Information:

Story/Level		Story/Level	Basement	Basement or Crawl Space?	Basement	Direction from Building	E
Room		Room	Basement	Floor Slab Thickness (inches) *[if present]*	5"	Distance from Building	20'
Indoor Air Temp (°F)		Indoor Air Temp	50-60	Potential Vapor Entry Points Observed?	NA	Intake Height Above Ground Level (ft.)	4'
Barometric Pressure?		Barometric Pressure?	—	Ground Surface Condition (Crawl Space Only)	~~[illegible]~~	Intake Tubing Used?	No
Intake Height Above Floor Level (ft.)		Intake Height Above Floor Level (ft.)		If slab, intake Depth If Crawl Space, intake height	5 1/2"	Distance to nearest Roadway	50'
Noticeable Odor?		Noticeable Odor?	—	Noticeable Odor?		Noticeable Odor?	—
PID Reading (ppb)		PID Reading (ppb)	—	PID Reading (ppb)	—	PID Reading (ppb)	—
Duplicate Sample?		Duplicate Sample?	—	Duplicate Sample?	No	Duplicate Sample?	—

Comments:

Leak Test - Purge: 225 ppb Dome 100% He.
Sub Slab Duplicate
Regulator #: ~~40208~~ ~~40242~~ 40572
Canister #: ~~34002~~ 5778
Start Date/Time/Pressure: 5/4/11 / 1148 / -29
ID# C755012A-~~SS~~-DUP-01-0511
Stop date/Time/pressure: 5/5/11 / 1143 / -5
400ppb Along floor cracks (1,000 ppb in some spots)
363ppb PID Background 279 ppb

Sampler Signature:

FIELD AIR SAMPLING FORM

® EA Engineering and Its Affiliate EA Science & Technology 6712 Brooklawn Parkway, Suite 104 Syracuse, NY 13211		Project #: Project Name: Location: Project Manager:	14368.19 NYSDEC C75012A Offsite Axiohm Ithaca, NY Bob Casey/Karen Cahill

Sample Location Information:

Site ID Number:	C75012A	Sampler(s):	SH/DC/SB
PID Meter Used: (Model, Serial #)	ppbRAE	Building I.D. No.:	Structure 37

SUMMA Canister Record:

INDOOR AIR - FIRST FLOOR		INDOOR AIR - BASEMENT		SUBSLAB SOIL GAS		OUTDOOR AIR	
Flow Regulator No.:		Flow Regulator No.:	40078	Flow Regulator No.:	9573	Flow Regulator No.:	
Canister Serial No.:		Canister Serial No.:	14875	Canister Serial No.:	40451	Canister Serial No.:	
Start Date/Time:		Start Date/Time:	12/1/10 1105	Start Date/Time:	12/1/10 1105	Start Date/Time:	
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-28.5	Start Pressure: (inches Hg)	-28.5	Start Pressure: (inches Hg)	
Stop Date/Time:		Stop Date/Time:	12/2/10 1017	Stop Date/Time:	12/2/10 1020	Stop Date/Time:	
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-7.5	Stop Pressure: (inches Hg)	-5.5	Stop Pressure: (inches Hg)	
Sample ID:		Sample ID:	C75012A-B1-37	Sample ID:	C75012A-S-37	Sample ID:	

Other Sampling Information:

Story/Level		Story/Level	basement	Basement or Crawl Space?	basement	Direction from Building	
Room		Room	basement	Floor Slab Thickness (inches) *(if present)*	5"	Distance from Building	
Indoor Air Temp (°F)		Indoor Air Temp	~60'	Potential Vapor Entry Points Observed?	NA	Intake Height Above Ground Level (ft.)	
Barometric Pressure?		Barometric Pressure?	na	Ground Surface Condition (Crawl Space Only)		Intake Tubing Used?	
Intake Height Above Floor Level (ft.)		Intake Height Above Floor Level (ft.)	4.5'	If slab, intake Depth If Crawl Space, intake height	5.5"	Distance to nearest Roadway	
Noticeable Odor?		Noticeable Odor?	none	Noticeable Odor?	none	Noticeable Odor?	
PID Reading (ppb)		PID Reading (ppb)		PID Reading (ppb)		PID Reading (ppb)	
Duplicate Sample?		Duplicate Sample?	none	Duplicate Sample?	none	Duplicate Sample?	

Comments:

100' to helium purge 63 ppb

400 ppm ~~ppb~~

Sampler Signature:

37

NEW YORK STATE DEPARTMENT OF HEALTH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Sarah Hebron Date/Time Prepared 12/1/10

Preparer's Affiliation Independent Consultant – EA Engineering Phone No. 315-431-4610

Purpose of Investigation: Ithaca Offsite Former Axiohm Facility C75012A

1. OCCUPANT: Interviewed: Y / N

Last Name: [redacted] First Name: Angela

Address: [redacted]

County: Tompkins Co

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location 2-4 Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS Type of

Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many?
__1____ **If the property is commercial, type?**
Business Type(s) _____
Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics: attic basement 1st & 2nd
Number of floors 2 & 4 Building age 1930's
Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

4. AIRFLOW
Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors
Airflow near source
Outdoor air infiltration
Infiltration into air ducts

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	+ brick
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	uncovered	covered	covered with _____	
e. Concrete floor:	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	+ other brick
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: _____(feet)
Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

6. HEATING, VENTING and AIR CONDITIONING

Type of heating system(s) used in this building: (circle all that apply –note primary)

Hot air circulation - Heat pump - Hot water baseboard - Space Heaters - Stream radiation - Radiant floor - Electric baseboard - Wood stove - Outdoor wood boiler - Other _____

The primary type of fuel used is:
Natural Gas - Fuel Oil - Kerosene - Electric - Propane - Solar - Wood - Coal

Domestic hot water tank fueled by: natural gas
Boiler/furnace located in: Basement - Outdoors - Main Floor - Other _____
Air conditioning: Central Air - Window units - Open Windows - None
Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY

Is basement/lowest level occupied? Full-time - Occasionally - Seldom - Almost Never

Level General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)

Basement storage, laundry
1st Floor living, kitchen, bedroom, office
2nd Floor bedrooms ~~office~~
3rd Floor
4th Floor

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / N

b. Does the garage have a separate heating unit? Y / N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / NA
Please specify _____

d. Has the building ever had a fire? Y / N When? unknown

e. Is a kerosene or unvented gas space heater present? Y / N Where? _____

f. Is there a workshop or hobby/craft area? Y / N Where & Type? _____

g. Is there smoking in the building? Y / N How frequently? _____

h. Have cleaning products been used recently? Y / N When & Type? _____

i. Have cosmetic products been used recently? Y / N When & Type? _____

j. Has painting/staining been done in the last 6 months? Y / N When & Type? ~2-3 months outside side porch basement

k. Is there new carpet, drapes or other textiles? Y / N Where & When? _____

l. Have air fresheners been used recently? Y / N When & Type? _____

m. Is there a kitchen exhaust fan? Y / N If yes, where vented? _____

n. Is there a bathroom exhaust fan? Y / N If yes, where vented? attic 1st Floor yes | 1st Floor no

o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / N When &Type? _____

Are there odors in the building? Y / N
If yes, please describe:

Do any of the building occupants use solvents at work? Y / N

(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? _____
If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service 1 time a month -

Is there a radon mitigation system for the building/structure? Y / N Date of Installation:
Is the system active or passive? Active/Passive

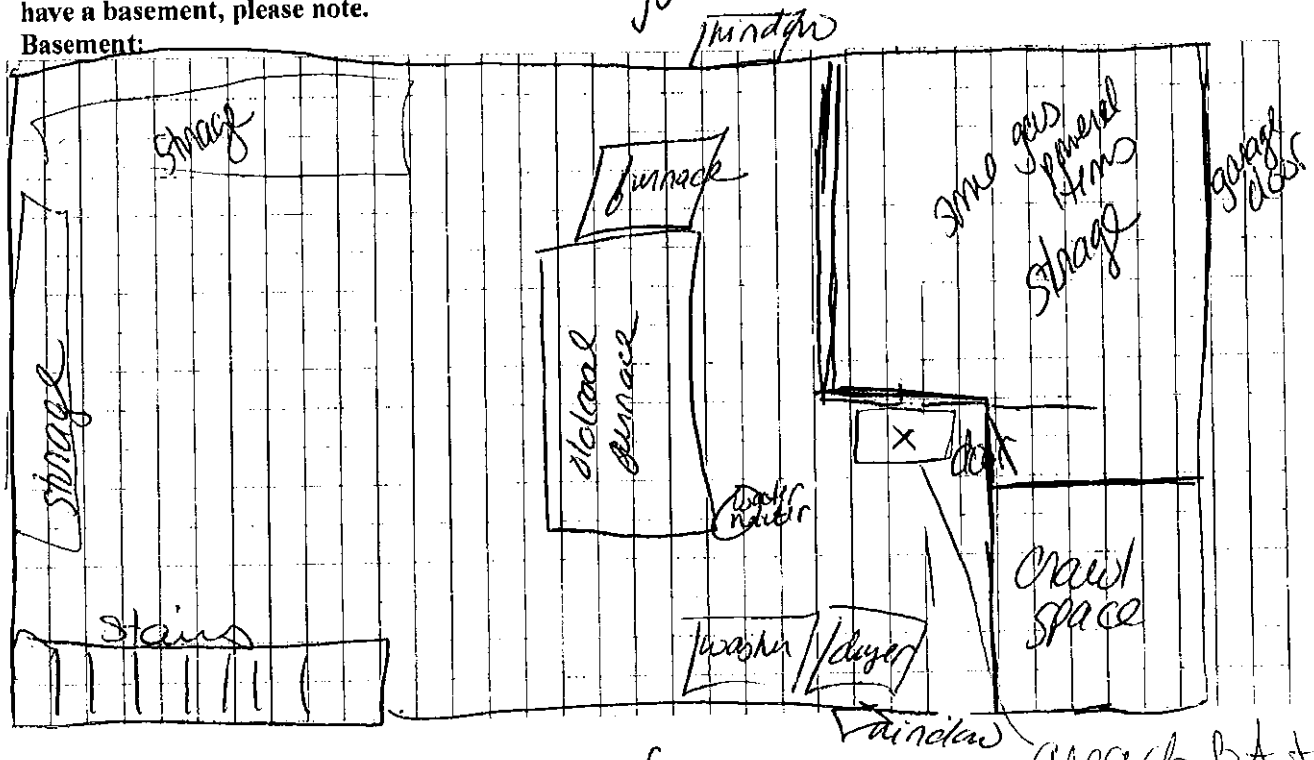
9. WATER AND SEWAGE
Water Supply: Public Water Drilled Well Driven Well Dug Well Other: _____
Sewage Disposal: Public Sewer Septic Tank Leach Field Dry Well Other: _____

.10. RELOCATION INFORMATION (for oil spill residential emergency)
.a. Provide reasons why relocation is recommended: _____
.b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel
.c. Responsibility for costs associated with reimbursement explained? Y / N
.d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS

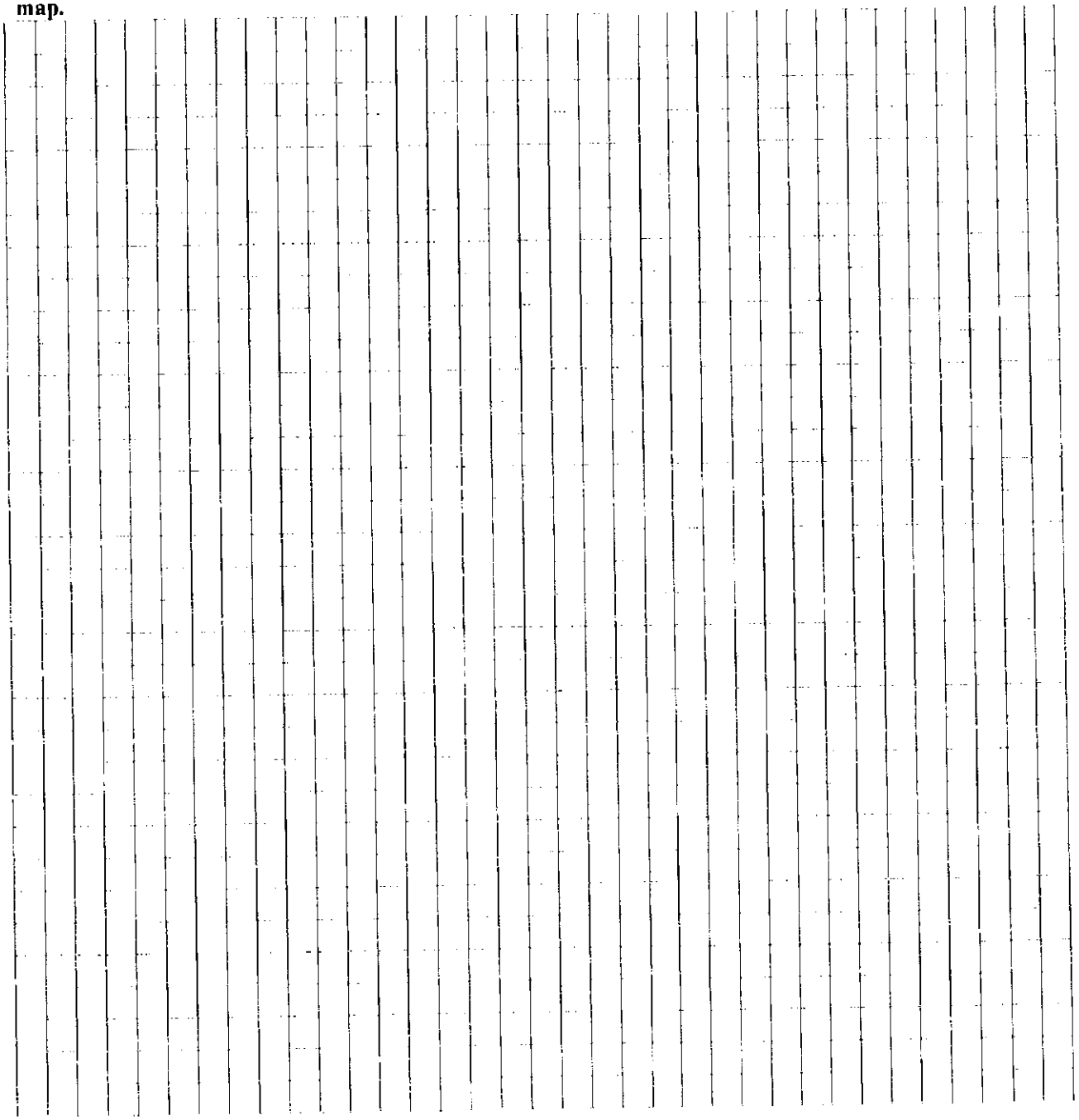
Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID/meter readings. If the building does not have a basement, please note.

Basement:



First Floor: 12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.
Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: _____

List specific products found in the residences that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
former garage area	carb gasoline	3gal	U	gas	0.0	Y
	Bromating tablets	2-5lbs	U	1 bromo 3 chloro 5 5 dimethyl - hydantantoin	0.0	
basement	lawn fertilizers	bags	U			
	loctite epoxy	4oz	U			
	wood glue	4oz	U			
	WD-40	8oz	U	petroleum distillates		
	rustoleum frosted glass	12oz	U	toluene & xylene		
	dap foam sealer	12oz	U	dimethyl ether, propane, n butane isopropanol, ethylene glycol		
	Paint	20-1gal	U			
	varnish	10-1gt	U			
	stripeze		U	acetone, methylene chloride toluene, methanol		
	mineral spirits	30 floz	U	mineral spirits petroleum distillates		
	laundry detergents	10-15 oz	U	surfactants		
	clorox	2-1gal	U			
	dryer sheets	box				

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**

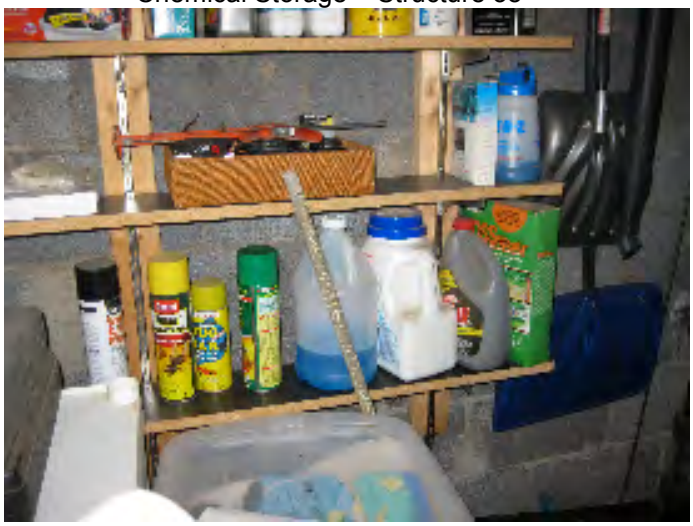
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Indoor Air Sampling Photolog – Axiohm OU2 Site – December, 2010

Chemical Storage – Structure 38

Chemical Storage – Structure 38

Chemical Storage – Structure 38



Chemical Storage – Structure 38

Chemical Storage and Dryer Area – Structure 38

Sub Slab Air Sample – Structure 38

Basement Air Sample – Structure 38

Outdoor Air Sample – Structure 38

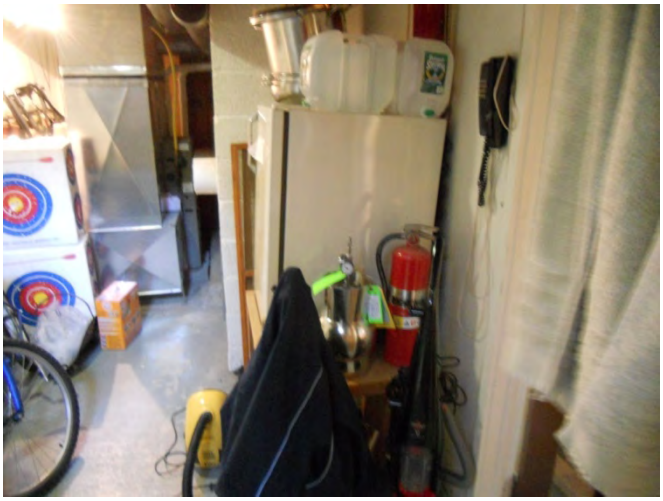
Indoor Air Sampling Photolog – Ithaca Off-Site – May 2011

Sub-Slab Vapor Sample – Structure 38

Basement Air and Radon Samples – Structure 38

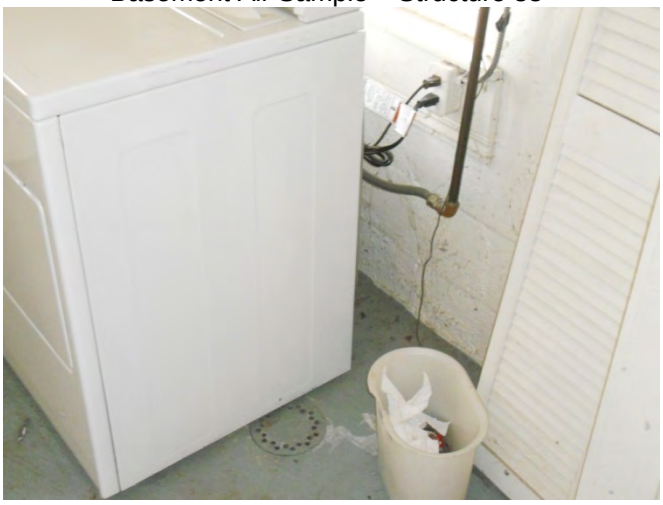
Indoor Air Sampling Photolog – Axiohm OU2 Site – February 2012

Sub-Slab Vapor Sample – Structure 38



Basement Air Sample – Structure 38

Outdoor Air Sample – Structure 38



Observed Floor Drain – Structure 38

FIELD AIR SAMPLING FORM

® EA Engineering and Its Affiliate EA Science & Technology 6712 Brooklawn Parkway, Suite 104 Syracuse, NY 13211	Project #:	14368.19 0002
	Project Name:	Ithaca OffSite
	Location:	Ithaca NY
	Project Manager:	R. Casey/K. Cahill

Sample Location Information:

Site ID Number:	C755012A			Sampler(s):	D. CRANDALL
PID Meter Used: (Model, Serial #)	PPb RAE			Building I.D. No.:	STRUCTURE 38

SUMMA Canister Record:

INDOOR AIR - FIRST FLOOR		INDOOR AIR - BASEMENT		SUBSLAB SOIL GAS		OUTDOOR AIR	
Flow Regulator No.:		Flow Regulator No.:	40241	Flow Regulator No.:	40305	Flow Regulator No.:	40609
Canister Serial No.:		Canister Serial No.:	925	Canister Serial No.:	3475	Canister Serial No.:	34740
Start Date/Time:		Start Date/Time:	2/9/12 1210	Start Date/Time:	2/9/12 1210	Start Date/Time:	2/9/12 1220
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-30	Start Pressure: (inches Hg)	-30	Start Pressure: (inches Hg)	~~-29~~ -29
Stop Date/Time:		Stop Date/Time:	2/10/12 1210	Stop Date/Time:	2/10/12 1210	Stop Date/Time:	2/9/12 1141
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-7	Stop Pressure: (inches Hg)	-6.5	Stop Pressure: (inches Hg)	-3
Sample ID:		Sample ID: C755012A-BA-38-0212		Sample ID: C755012A-SS-38-0212		Sample ID: C755012A-OA-38-0212	

Other Sampling Information:

Story/Level		Story/Level	Bsmt	Basement or Crawl Space?	Bsmt	Direction from Building	N
Room		Room	Utility/ storage	Floor Slab Thickness (inches) *[if present]*	6"	Distance from Building	30-ft.
Indoor Air Temp (°F)		Indoor Air Temp	60 F	Potential Vapor Entry Points Observed?	slight cracking (sealed)	Intake Height Above Ground Level (ft.)	~~4ft~~ 4ft.
Barometric Pressure?		Barometric Pressure?	-	Ground Surface Condition (Crawl Space Only)	Good	Intake Tubing Used?	Y (Stainless)
Intake Height Above Floor Level (ft.)		Intake Height Above Floor Level (ft.)	4ft	If slab, intake Depth If Crawl Space, intake height	6.5'	Distance to nearest Roadway	75ft.
Noticeable Odor?		Noticeable Odor?	-	Noticeable Odor?	-	Noticeable Odor?	-
PID Reading (ppb)		PID Reading (ppb)	0ppb	PID Reading (ppb)	375ppb	PID Reading (ppb)	~~0ppb~~
Duplicate Sample?		Duplicate Sample?	-	Duplicate Sample?	-	Duplicate Sample?	-

Comments:

- Helium Leak test - Dome 100% Purge - 125,ppm - PASS
- Sampling Duplicated from previous efforts.
- Discovered Fl. Drain in Laundry Room.

Sampler Signature:

FIELD AIR SAMPLING FORM

EA Engineering and Its Affiliate
EA Science & Technology
6712 Brooklawn Parkway, Suite 104
Syracuse, NY 13211

Project #:	14368.19
Project Name:	Ithaca Off-Site
Location:	Ithaca, NY
Project Manager:	Bob Casey/Karen Cahill

Sample Location Information:

Site ID Number:	C755012A			Sampler(s):	DC/SB
PID Meter Used: (Model, Serial #)	ppbRAE			Building I.D. No.:	38

SUMMA Canister Record:

INDOOR AIR - FIRST FLOOR		INDOOR AIR - BASEMENT		SUBSLAB SOIL GAS		OUTDOOR AIR	
Flow Regulator No.:		Flow Regulator No.:	615	Flow Regulator No.:	10415	Flow Regulator No.:	
Canister Serial No.:		Canister Serial No.:	11890	Canister Serial No.:	5581	Canister Serial No.:	
Start Date/Time:		Start Date/Time:	5/4/11 1523	Start Date/Time:	5/4/11 1523	Start Date/Time:	
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-25.5	Start Pressure: (inches Hg)	-29	Start Pressure: (inches Hg)	
Stop Date/Time:		Stop Date/Time:	5/5/11 1505	Stop Date/Time:	5/5/11 1433	Stop Date/Time:	
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-7	Stop Pressure: (inches Hg)	0	Stop Pressure: (inches Hg)	
Sample ID:		Sample ID: C755012A-IA-38-0511		Sample ID: C755012A-SS-38-0511		Sample ID:	

Other Sampling Information:

Story/Level		Story/Level	BSMT	Basement or Crawl Space?	BSMT	Direction from Building	
Room		Room	Utility	Floor Slab Thickness (inches) *[if present]*	5"	Distance from Building	
Indoor Air Temp (°F)		Indoor Air Temp	60	Potential Vapor Entry Points Observed?	Sump Pit	Intake Height Above Ground Level (ft.)	
Barometric Pressure?		Barometric Pressure?	—	Ground Surface Condition (Crawl Space Only)	—	Intake Tubing Used?	
Intake Height Above Floor Level (ft.)		Intake Height Above Floor Level (ft.)	4'	If slab, intake Depth If Crawl Space, intake height	5'/2	Distance to nearest Roadway	
Noticeable Odor?		Noticeable Odor?	—	Noticeable Odor?	—	Noticeable Odor?	
PID Reading (ppb)		PID Reading (ppb)		PID Reading (ppb)		PID Reading (ppb)	
Duplicate Sample?		Duplicate Sample?	—	Duplicate Sample?	—	Duplicate Sample?	

Comments:

Radon set

Helium Test Purge: ~~0~~ 25ppm
Dome: 100%
PID: 417 ppb

Ambient 134 ppb

REMOVE THIS PORTION AND KEEP FOR YOUR RECORDS
2106396
Client
RADON TESTING CORP. OF AMERICA

Sampler Signature:

FIELD AIR SAMPLING FORM

® EA Engineering and Its Affiliate
EA Science & Technology
6712 Brooklawn Parkway, Suite 104
Syracuse, NY 13211

Project #:	14368.19
Project Name:	NYSDEC C75012A Offsite Axiohm
Location:	Ithaca, NY
Project Manager:	Bob Casey/Karen Cahill

Sample Location Information:

Site ID Number:	C75012A	Sampler(s):	SM IDC
PID Meter Used: (Model, Serial #)	ppbRAE	Building I.D. No.:	Structure 38

SUMMA Canister Record:

INDOOR AIR - FIRST FLOOR		INDOOR AIR - BASEMENT		SUBSLAB SOIL GAS		OUTDOOR AIR	
Flow Regulator No.:		Flow Regulator No.:	40157	Flow Regulator No.:	34748	Flow Regulator No.:	0607
Canister Serial No.:		Canister Serial No.:	1591	Canister Serial No.:	407668	Canister Serial No.:	40409
Start Date/Time:		Start Date/Time:	12/11/16 1730	Start Date/Time:	12/11/16 1730	Start Date/Time:	12/11/16 1734
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-30	Start Pressure: (inches Hg)	-28.5	Start Pressure: (inches Hg)	-29.5
Stop Date/Time:		Stop Date/Time:	12-2-16 1712	Stop Date/Time:	12-2-16 1712	Stop Date/Time:	12-2-16 1700
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-3.5	Stop Pressure: (inches Hg)	-2	Stop Pressure: (inches Hg)	-5
Sample ID:		Sample ID:	C75012A-BA-38	Sample ID:	C75012A-SS-38	Sample ID:	C75012A-OA-38

Other Sampling Information:

Story/Level		Story/Level	Bsmt	Basement or Crawl Space?	Bsmt	Direction from Building	N
Room		Room	Utility Hall	Floor Slab Thickness (inches) *(if present)*	5"	Distance from Building	15ft
Indoor Air Temp (°F)		Indoor Air Temp	60F.	Potential Vapor Entry Points Observed?	Sump Pit.	Intake Height Above Ground Level (ft.)	5ft
Barometric Pressure?		Barometric Pressure?	NA	Ground Surface Condition (Crawl Space Only)	N A.	Intake Tubing Used?	Y
Intake Height Above Floor Level (ft.)		Intake Height Above Floor Level (ft.)	4.5ft.	If slab intake Depth If Crawl Space, intake height	5.5"	Distance to nearest Roadway	65ft.
Noticeable Odor?		Noticeable Odor?	NO	Noticeable Odor?	NO	Noticeable Odor?	NO
PID Reading (ppb)		PID Reading (ppb)	0	PID Reading (ppb)	0	PID Reading (ppb)	0
Duplicate Sample?		Duplicate Sample?	none	Duplicate Sample?	none	Duplicate Sample?	none

Comments:

purge - 475 ppm) 100% helium)

0 ppb

Sampler Signature:

NEW YORK STATE DEPARTMENT OF HEALTH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY CENTER FOR ENVIRONMENTAL HEALTH

38

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Sarah Nelson Date/Time Prepared 12/1/10 4:30

Preparer's Affiliation Independent Consultant – EA Engineering Phone No. 315-431-4610

Purpose of Investigation: Ithaca Offsite Former Axiohm Facility C75012A

1. OCCUPANT: Interviewed: Y / N

Last Name: [redacted] First Name: _____

Address: [redacted]

County: Tompkins

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location _____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ✓)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS Type of

Building: (Circle appropriate response)

(Residential)	School	Commercial/Multi-use
Industrial	Church	Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch		
	2-Family	3-Family
Raised Ranch	Split Level	Colonial
(Cape Cod)	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? 2 studioapt **If the property is commercial, type?**

Business Type(s) _____

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics: 1st floor basement

Number of floors 1 & Building age 1950s

Is the building insulated? (Y) N How air tight? Tight (Average) Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors
Airflow near source
Outdoor air infiltration
Infiltration into air ducts

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	uncovered	covered	covered with _____	
e. Concrete floor:	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: _____(feet)
Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

6. HEATING, VENTING and AIR CONDITIONING

Type of heating system(s) used in this building: (circle all that apply –note primary)

Hot air circulation - Heat pump - Hot water baseboard - Space Heaters - Stream radiation - Radiant floor - Electric baseboard - Wood stove - Outdoor wood boiler - Other _____

The primary type of fuel used is:

Natural Gas - Fuel Oil - Kerosene - Electric - Propane - Solar - Wood - Coal

Domestic hot water tank fueled by: _____

Boiler/furnace located in: Basement - Outdoors - Main Floor - Other _____

Air conditioning: Central Air - Window units - Open Windows - None

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

-studio apt

laundry

7. OCCUPANCY

Is basement/lowest level occupied? Full-time - Occasionally - Seldom - Almost Never

Level General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)

Basement laundry, storage - studio apt - living
1st Floor kitchen · living bedrooms
2nd Floor
3rd Floor
4th Floor

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y (N)

b. Does the garage have a separate heating unit? Y / N / (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / (NA)
Please specify in basement area

d. Has the building ever had a fire? Y (N) When?_____

e. Is a kerosene or unvented gas space heater present? Y (N) Where? _____

f. Is there a workshop or hobby/craft area? Y (N) Where & Type? _____

g. Is there smoking in the building? (Y) / N How frequently? simplegreen

h. Have cleaning products been used recently? Y (N) When & Type? _____

i. Have cosmetic products been used recently? Y / (N) When & Type? _____

j. Has painting/staining been done in the last 6 months? Y / (N) When & Type? _____

k. Is there new carpet, drapes or other textiles? Y (N) Where & When? _____

l. Have air fresheners been used recently? Y / (N) When & Type? _____

m. Is there a kitchen exhaust fan? Y (N) If yes, where vented? _____

n. Is there a bathroom exhaust fan? (Y) / N If yes, where vented? bathapts - vented outside

o. Is there a clothes dryer? (Y) / N If yes, is it vented outside? (Y) N

p. Has there been a pesticide application? Y (N) When &Type? _____

Are there odors in the building? Y (N)
If yes, please describe:

_____

Do any of the building occupants use solvents at work? Y (N)

(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? _____
If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

NO

Is there a radon mitigation system for the building/structure? Y / N Date of Installation:
Is the system active or passive? Active/Passive

~~n/y earlier ago~~

9. WATER AND SEWAGE
Water Supply: Public Water Drilled Well Driven Well Dug Well Other: _______
Sewage Disposal: Public Sewer Septic Tank Leach Field Dry Well Other: _______

Studio apt
~~basement~~ 8

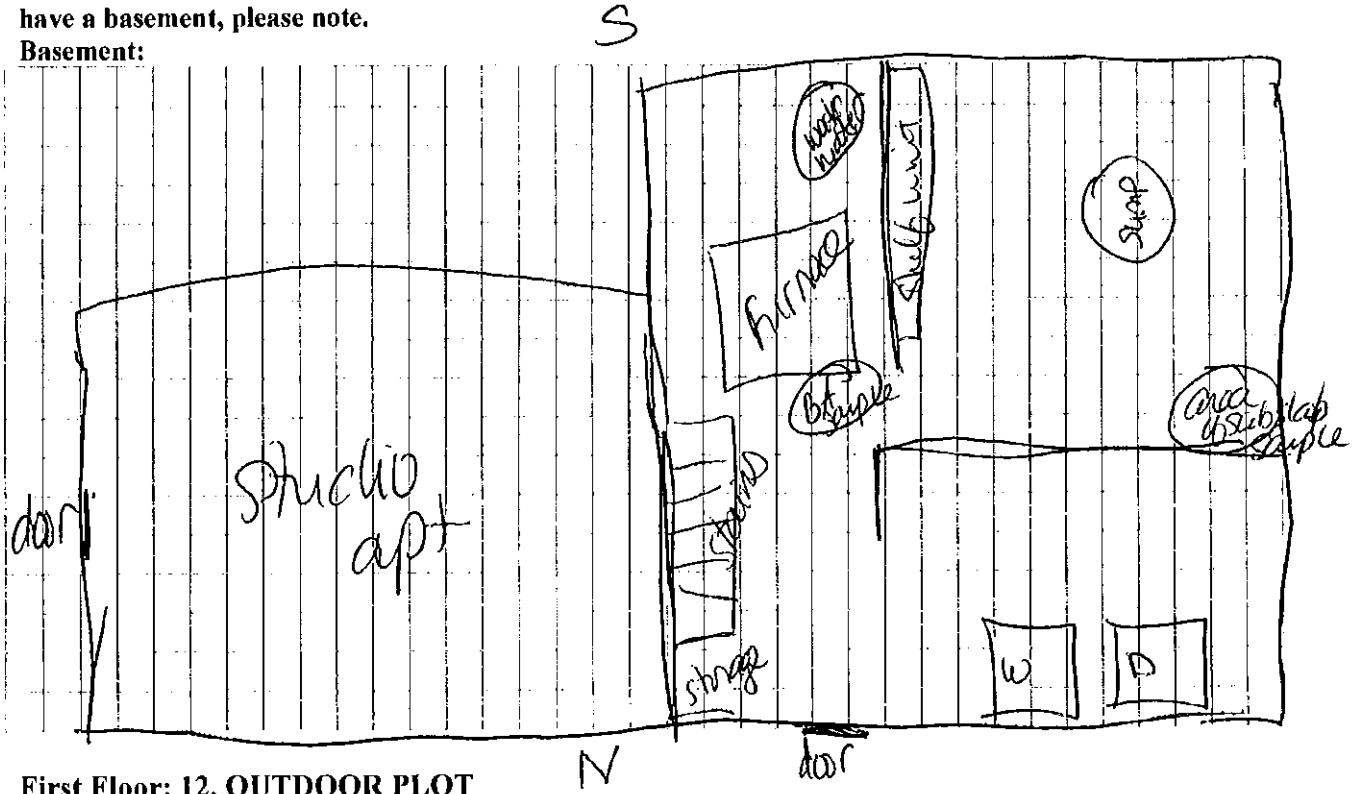
.10. RELOCATION INFORMATION (for oil spill residential emergency)
.a. Provide reasons why relocation is recommended: ________________________________
.b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel
.c. Responsibility for costs associated with reimbursement explained? Y / N
.d. Relocation package provided and explained to residents? Y / N

- ~~house tested July~~ 06
with ~~radon unit~~ ~~grainstone~~

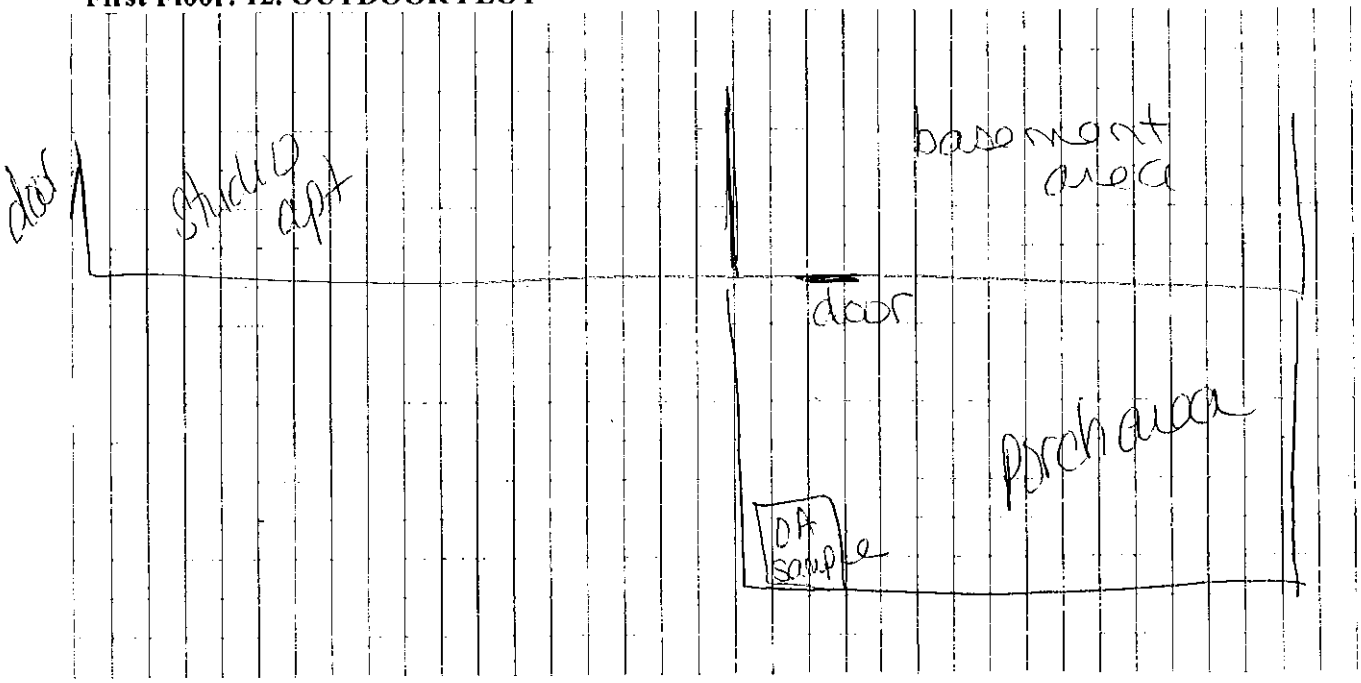
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

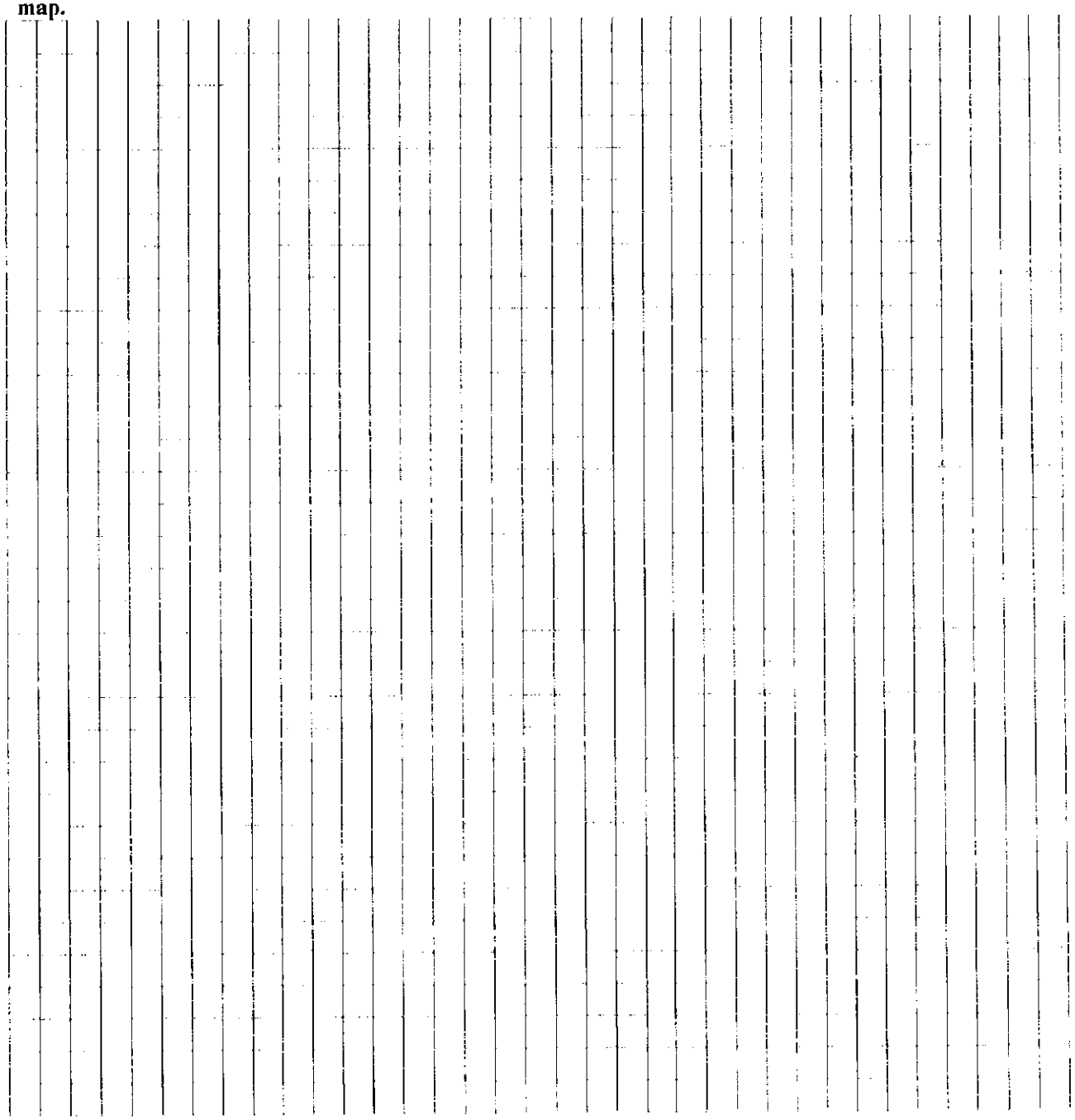
Basement:



First Floor: 12. OUTDOOR PLOT



Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.
Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used:

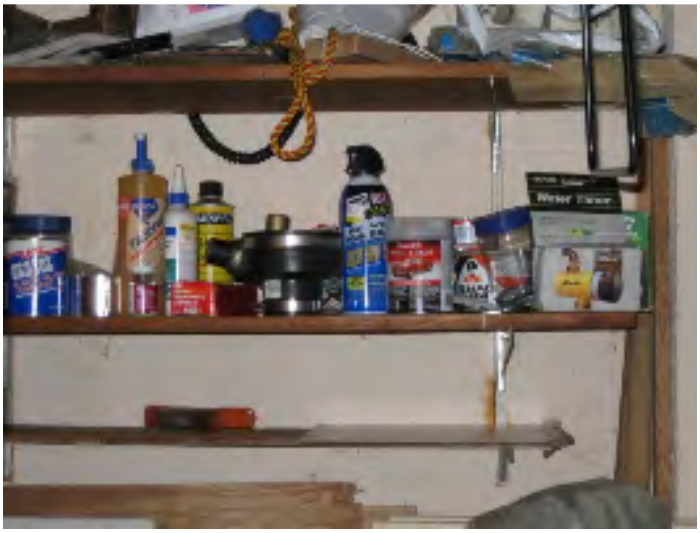
List specific products found in the residences that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
Basement	Paint	20-1gal	U	Latex paint	0.0	Y
	Paint	10-1qt	U	" "	0.0	↓
—	Lawnmower	—	—	—	~700ppb+	↓
	wasp/bee spray	15oz	U	Sumithrin 3 Phenoxybenzoic Permethrin Cyclohexane 1,2dicarboximide methyl 2 2dimethyl 3 cyclopropanecarboxylate	0.0	
	Bug-tar				0	
	prestone de-icer	11oz	U	ethylene glycol	0.0	
	mineral spirits	1gal	U		0.0	
	Dif wallpaper stripper	32oz	U		0.0	
	charcoal starter		U		0.0	
	CLR		↓		0.0	
	Linseed oil				0.0	
	wood filler	16oz			0.0	
	liquid Draino				0.0	
			↓		0.0	↓
	detergent			surfactants		

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

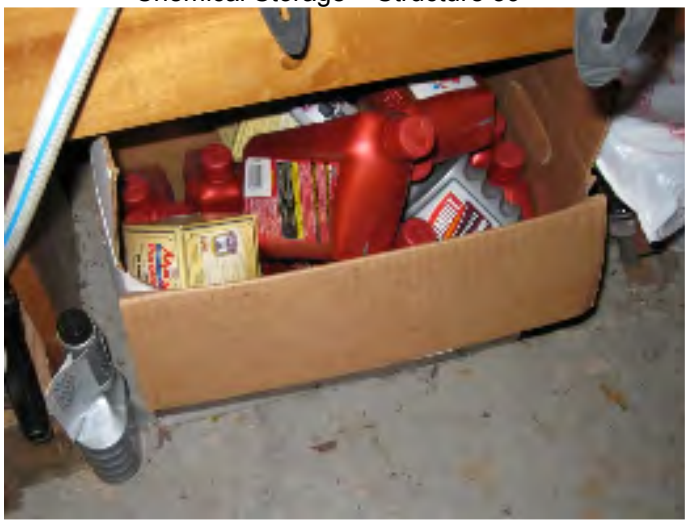
Indoor Air Sampling Photolog – Axiohm OU2 Site – December, 2010



Chemical Storage – Structure 39

Chemical Storage – Structure 39

Chemical Storage – Structure 39



Chemical Storage – Structure 39

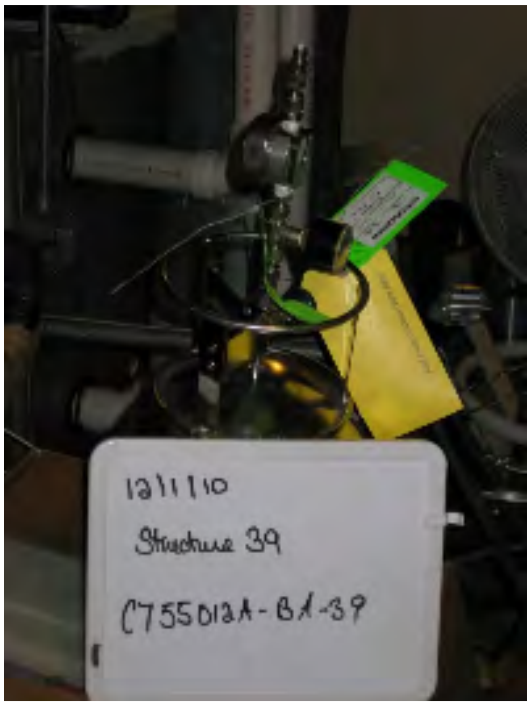
Radon System – Structure 39

Radon System – Structure 39

Radon System – Structure 39

Radon System – Structure 39

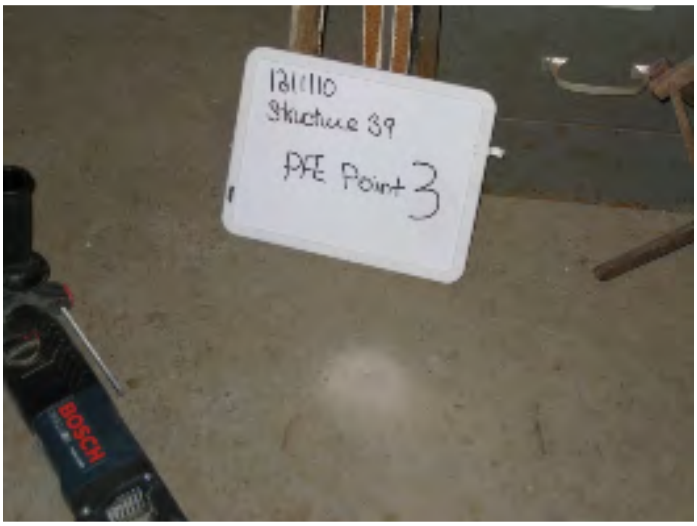
Radon System – Structure 39



Basement Air Sample – Structure 39

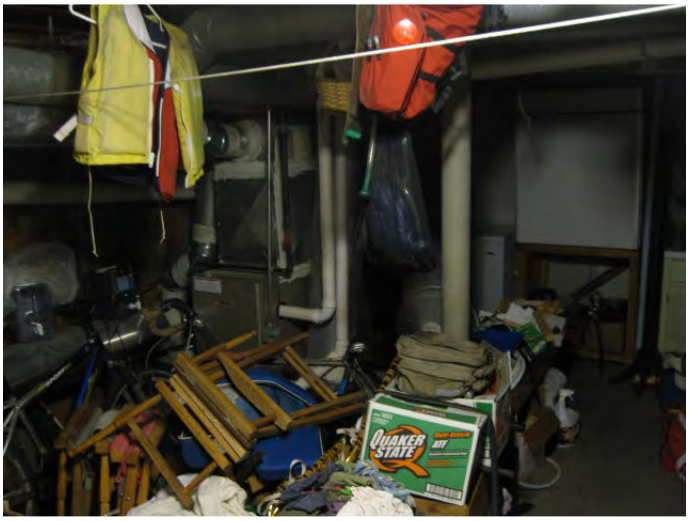
PFE Point 1 – Structure 39

PFE Point 2 – Structure 39



PFE Point 3 – Structure 39

Indoor Air Sampling Photolog – Ithaca Off-Site – May 2011



Unfinished Basement Area – Structure 39

Basement Air and Radon Samples – Structure 39

Indoor Air Sampling Photolog – Axiohm OU2 Site – February 2012

Basement Air Sample – Structure 39

Outdoor Air Sample – Structure 39

FIELD AIR SAMPLING FORM

EA Engineering and Its Affiliate EA Science & Technology 6712 Brooklawn Parkway, Suite 104 Syracuse, NY 13211		Project #:	14368.19 0005
		Project Name:	Ithaca Offsite
		Location:	Ithaca, New York
		Project Manager:	Bob Casey/Karen Cahill

Sample Location Information:

Site ID Number:	C755012A			Sampler(s):	D Crandall/C. Schroer
PID Meter Used: (Model, Serial #)	ppbRAE			Building I.D. No.:	Structure 39

SUMMA Canister Record:

INDOOR AIR - FIRST FLOOR		INDOOR AIR - BASEMENT		SUBSLAB SOIL GAS		OUTDOOR AIR	
Flow Regulator No.:		Flow Regulator No.:	40299	Flow Regulator No.:		Flow Regulator No.:	40705
Canister Serial No.:		Canister Serial No.:	14871	Canister Serial No.:		Canister Serial No.:	35269
Start Date/Time:		Start Date/Time:	2/16/12 1057	Start Date/Time:		Start Date/Time:	2/16/12 1103
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-29	Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-30
Stop Date/Time:		Stop Date/Time:	2/17/12 1041	Stop Date/Time:		Stop Date/Time:	2/17/12 1039
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-3	Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-0.5
Sample ID:		Sample ID:	C755012A-BA-39-0212	Sample ID:		Sample ID:	C755012A-OA-39-0212

Other Sampling Information:

Story/Level		Story/Level	BSMT	Basement or Crawl Space?		Direction from Building	N
Room		Room	BSMT	Floor Slab Thickness (inches) *[if present]*		Distance from Building	30 ft.
Indoor Air Temp (°F)		Indoor Air Temp	58 f	Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	4 ft
Barometric Pressure?		Barometric Pressure?	—	Ground Surface Condition (Crawl Space Only)		Intake Tubing Used?	Y
Intake Height Above Floor Level (ft.)		Intake Height Above Floor Level (ft.)	4 ft.	If slab, intake Depth If Crawl Space, intake height		Distance to nearest Roadway	80 ft.
Noticeable Odor?		Noticeable Odor?		Noticeable Odor?		Noticeable Odor?	-
PID Reading (ppb)		PID Reading (ppb)	11 ppb.	PID Reading (ppb)		PID Reading (ppb)	6 ppb
Duplicate Sample?		Duplicate Sample?		Duplicate Sample?		Duplicate Sample?	

Comments:

Post SSDS upgrade sample.

Sampler Signature:

FIELD AIR SAMPLING FORM

EA Engineering and Its Affiliate EA Science & Technology 6712 Brooklawn Parkway, Suite 104 Syracuse, NY 13211	Project #: 14368.19 Project Name: Ithaca Off-Site Location: Ithaca, NY Project Manager: Bob Casey/Karen Cahill

Sample Location Information:

Site ID Number: C	C755012A			Sampler(s):	DC/SB
PID Meter Used: (Model, Serial #)	ppbRAE			Building I.D. No.:	39

SUMMA Canister Record:

INDOOR AIR - FIRST FLOOR		INDOOR AIR - BASEMENT		SUBSLAB SOIL GAS		OUTDOOR AIR	
Flow Regulator No.:		Flow Regulator No.:	40079	Flow Regulator No.:		Flow Regulator No.:	
Canister Serial No.:		Canister Serial No.:	415	Canister Serial No.:		Canister Serial No.:	
Start Date/Time:		Start Date/Time:	9/4/11 0853	Start Date/Time:		Start Date/Time:	
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-29	Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	
Stop Date/Time:		Stop Date/Time:	9/5/11 0861	Stop Date/Time:		Stop Date/Time:	
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-7	Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	
Sample ID:		Sample ID: C755012A-BA-39-0511		Sample ID:		Sample ID:	

Other Sampling Information:

Story/Level		Story/Level	Basement	Basement or Crawl Space?		Direction from Building	
Room		Room	Basement/ Storage	Floor Slab Thickness (inches) *[if present]*		Distance from Building	
Indoor Air Temp (°F)		Indoor Air Temp	55-60	Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	
Barometric Pressure?		Barometric Pressure?	—	Ground Surface Condition (Crawl Space Only)		Intake Tubing Used?	
Intake Height Above Floor Level (ft.)		Intake Height Above Floor Level (ft.)	4'	If slab, intake Depth If Crawl Space, intake height		Distance to nearest Roadway	
Noticeable Odor?		Noticeable Odor?	—	Noticeable Odor?		Noticeable Odor?	
PID Reading (ppb)		PID Reading (ppb)	0	PID Reading (ppb)		PID Reading (ppb)	
Duplicate Sample?		Duplicate Sample?	—	Duplicate Sample?		Duplicate Sample?	

Comments:

Radon Sampler left
basement Air resample After removal of chemicals on 9/28/11

REMOVE THIS PORTION AND KEEP
FOR YOUR RECORDS
2106315

Client
RADON TESTING CORP. OF AMERICA

Sampler Signature:

FIELD AIR SAMPLING FORM

EA Engineering and Its Affiliate EA Science & Technology 6712 Brooklawn Parkway, Suite 104 Syracuse, NY 13211		Project #: Project Name: Location: Project Manager:	14368.19 NYSDEC C75012A Offsite Axiohm Ithaca, NY Bob Casey/Karen Cahill

Sample Location Information:

Site ID Number:	C75012A	Sampler(s):	SMDC
PID Meter Used: (Model, Serial #)	ppbRAE	Building I.D. No.:	Structure 39

SUMMA Canister Record:

INDOOR AIR - FIRST FLOOR		INDOOR AIR - BASEMENT		SUBSLAB SOIL GAS		OUTDOOR AIR	
Flow Regulator No.:		Flow Regulator No.:	40007	Flow Regulator No.:		Flow Regulator No.:	
Canister Serial No.:		Canister Serial No.:	4038	Canister Serial No.:		Canister Serial No.:	
Start Date/Time:		Start Date/Time:	12/1/10 1953	Start Date/Time:		Start Date/Time:	
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-30	Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	
Stop Date/Time:		Stop Date/Time:	12/2/10 1856	Stop Date/Time:		Stop Date/Time:	
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-5	Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	
Sample ID:		Sample ID:	C75012A-BA-39	Sample ID:		Sample ID:	

Other Sampling Information:

Story/Level		Story/Level	BSMT	Basement or Crawl Space?		Direction from Building	
Room		Room	basement (storage)	Floor Slab Thickness (inches) *[if present]*		Distance from Building	
Indoor Air Temp (°F)		Indoor Air Temp	~50°	Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	
Barometric Pressure?		Barometric Pressure?	na	Ground Surface Condition (Crawl Space Only)		Intake Tubing Used?	
Intake Height Above Floor Level (ft.)		Intake Height Above Floor Level (ft.)	3.5'	If slab, intake Depth If Crawl Space, intake height		Distance to nearest Roadway	
Noticeable Odor?		Noticeable Odor?	none	Noticeable Odor?		Noticeable Odor?	
PID Reading (ppb)		PID Reading (ppb)	0	PID Reading (ppb)		PID Reading (ppb)	
Duplicate Sample?		Duplicate Sample?	no	Duplicate Sample?		Duplicate Sample?	

Comments:

PFE point #2 -0.053 PFE point 1 -0.006

PFE point 3: 0.000

Sampler Signature:

(39)

NEW YORK STATE DEPARTMENT OF HEALTH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name S. Nelson Date/Time Prepared 12/1/10 7 00 pm

Preparer's Affiliation Independent Consultant – EA Engineering Phone No. 315-431-4610

Purpose of Investigation: Ithaca Offsite Former Axiohm Facility C75012A

1. OCCUPANT: Interviewed: Y / N

Last Name: _____ First Name: _____

Address: [redacted]

County: Tompkins

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location 2 Age of Occupants adults

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS Type of

Building: (Circle appropriate response)

(Residential)	School	Commercial/Multi-use
Industrial	Church	Other: _____

If the property is residential, type? (Circle appropriate response)

(Ranch)		
	2-Family	3-Family
Raised Ranch	Split Level	Colonial
(Cape Cod)	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many?
_____ **If the property is commercial, type?**
Business Type(s) _____
Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:
Number of floors 2 Building age 1946
Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

4. AIRFLOW
Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors
Airflow near source
Outdoor air infiltration
Infiltration into air ducts

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	laundry side uncovered	covered	covered with carpet on unfinished side	
e. Concrete floor:	unsealed	sealed	sealed with paint	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with paint	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: grade level (feet)
Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

6. HEATING, VENTING and AIR CONDITIONING

Type of heating system(s) used in this building: (circle all that apply –note primary)

Hot air circulation - Heat pump - Hot water baseboard - Space Heaters - Stream radiation - Radiant floor - Electric baseboard - Wood stove - Outdoor wood boiler - Other _____

The primary type of fuel used is:
Natural Gas - Fuel Oil - Kerosene - Electric - Propane - Solar - Wood - Coal

Domestic hot water tank fueled by: natural gas
Boiler/furnace located in: Basement - Outdoors - Main Floor - Other _____
Air conditioning: Central Air - Window units - Open Windows - None
Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY

Is basement/lowest level occupied? Full-time - (Occasionally) - Seldom - Almost Never

Level General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)

Basement half storage / half finished
1st Floor living, kitchen, bedroom
2nd Floor
3rd Floor
4th Floor

attic - no livable space

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / (N)

b. Does the garage have a separate heating unit? Y / N / (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / (NA)
Please specify_____

d. Has the building ever had a fire? Y (N) When? but - water in finished side

e. Is a kerosene or unvented gas space heater present? Y (N) Where? _____

f. Is there a workshop or hobby/craft area? Y / (N) Where & Type? _____

g. Is there smoking in the building? Y (N) How frequently? previously - 15 ago

h. Have cleaning products been used recently? Y (N) When & Type? _____

i. Have cosmetic products been used recently? Y (N) When & Type? _____

j. Has painting/staining been done in the last 6 months? Y (N) When & Type? _____

k. Is there new carpet, drapes or other textiles? Y (N) Where & When? _____

l. Have air fresheners been used recently? Y (N) When & Type? _____

m. Is there a kitchen exhaust fan? (Y) N If yes, where vented? outside

n. Is there a bathroom exhaust fan? (Y) / N If yes, where vented? outside

o. Is there a clothes dryer? (Y) / N If yes, is it vented outside? (Y) / N

p. Has there been a pesticide application? Y / (N) When &Type? _____

Are there odors in the building? Y (N)
If yes, please describe:

Do any of the building occupants use solvents at work? Y (N)

(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? _____
If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

no

Is there a radon mitigation system for the building/structure? Y / N Date of Installation:
Is the system active or passive? Active/Passive

John Kaminsky installed between 94-98

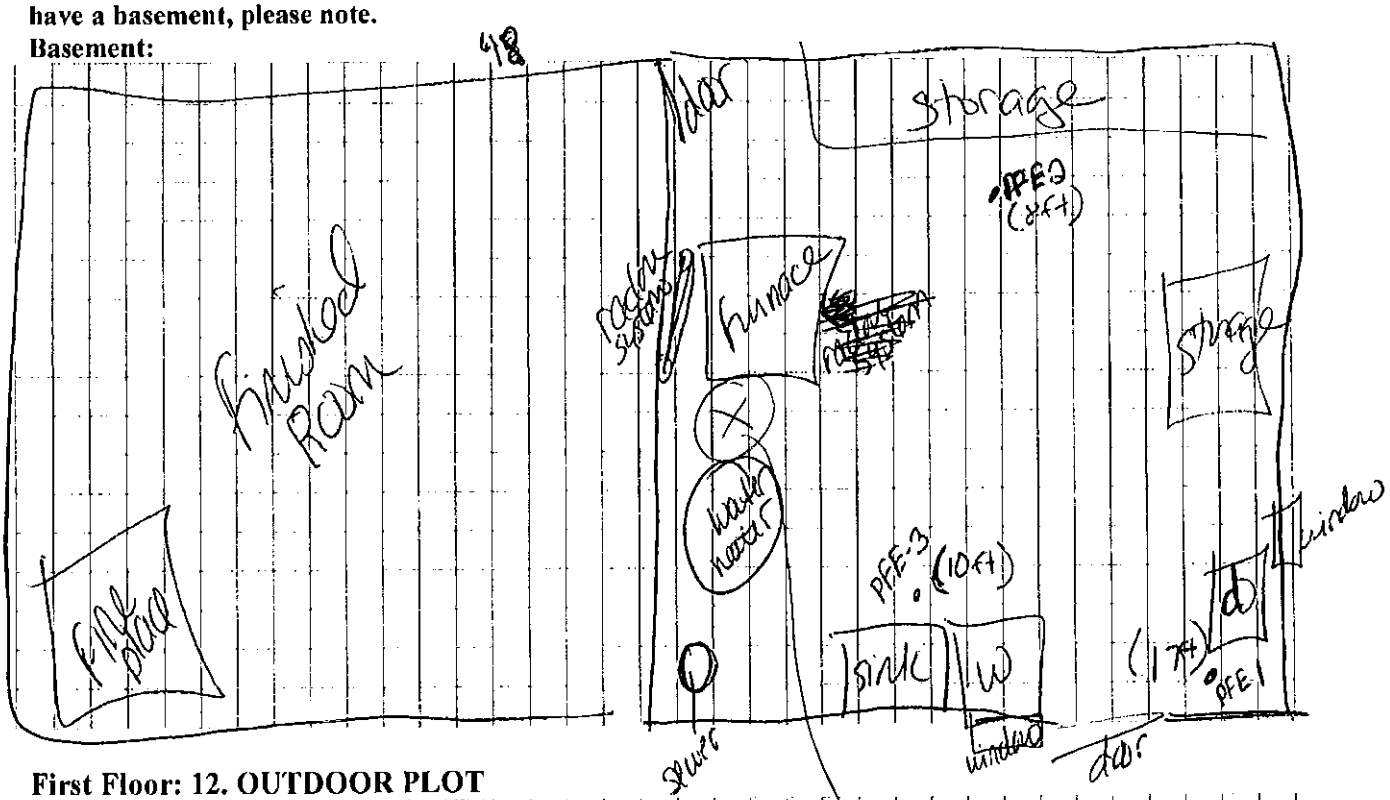
9. WATER AND SEWAGE
Water Supply: Public Water Drilled Well Driven Well Dug Well Other: _____
Sewage Disposal: Public Sewer Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)
a. Provide reasons why relocation is recommended: _____
b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel
c. Responsibility for costs associated with reimbursement explained? Y / N
d. Relocation package provided and explained to residents? Y / N

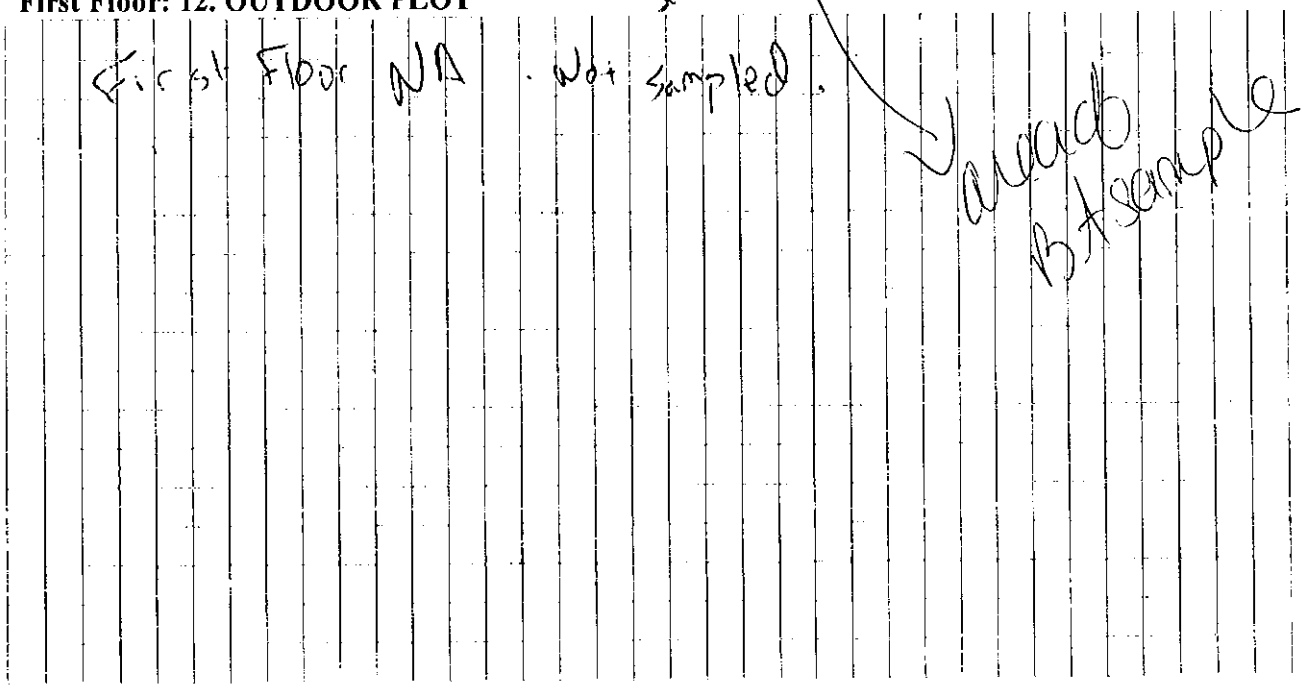
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

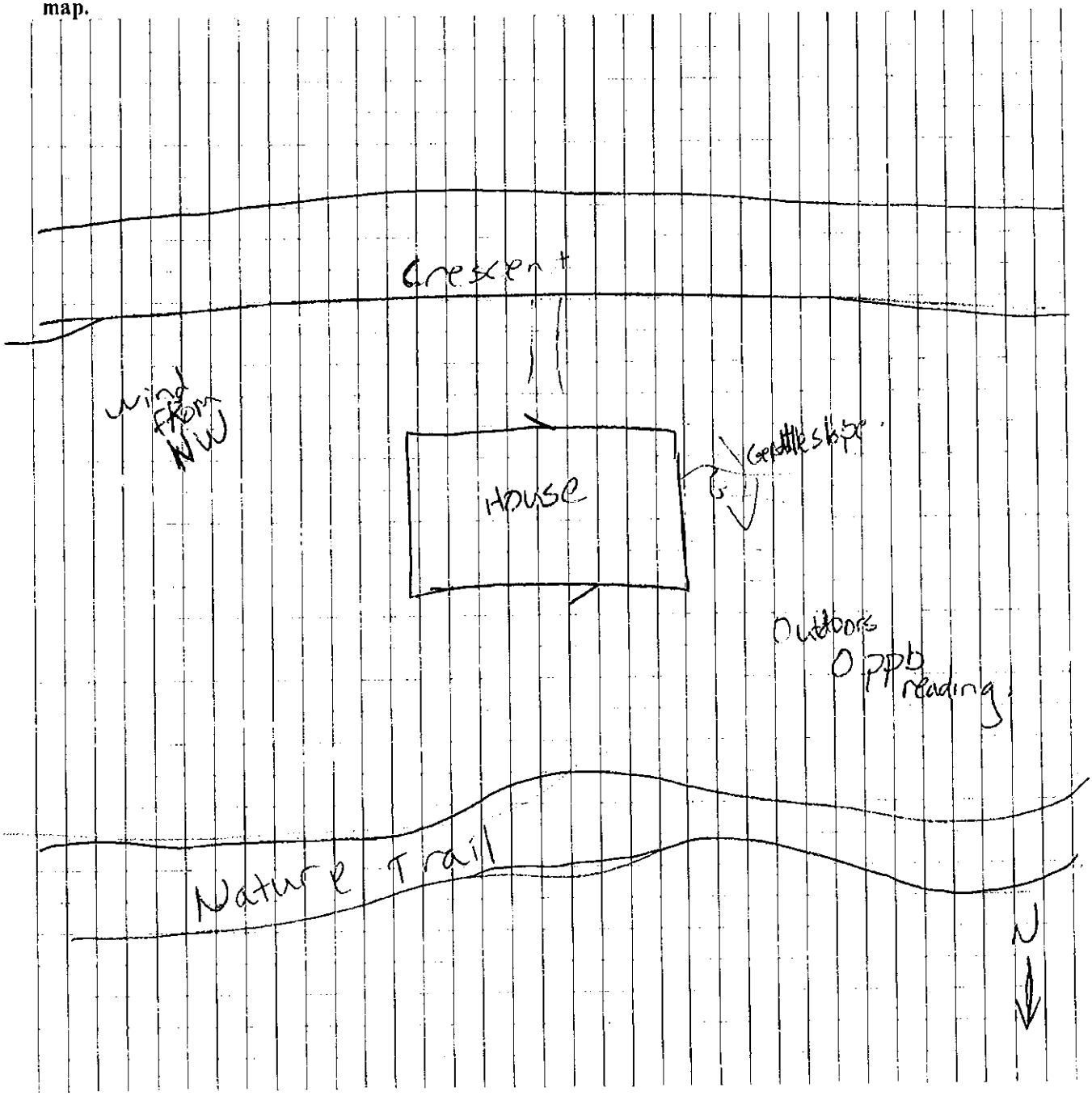
Basement:



First Floor: 12. OUTDOOR PLOT



Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.
Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ____________________

List specific products found in the residences that have the potential to affect indoor air quality:

laundry area contractors solvent U organic hydrocarbons 0.0

Location	Product Description	Size (units)	Condition*	Chemical Ingredients (Aliphatic)	Field Instrument Reading (units)	Photo ** Y / N
Valspar	wood filler	1/2 pt	u	linseed oil - hydrocarbons		
near washer	laundry det.	53 fl oz	u	surfactants	0.0	y
	woolite	16 fl oz	u	surfactants	0.0	↓
	Rit dye	8 fl oz	u	-	↓	↓
	7th generation non chlorine bleach	48 fl oz	u	-	↓	↓
Bondo	body filler	14 oz	u	polyester resin asbestos form	↓	↓
Glazol	glazing compound ~~Plastic sealer~~	1 pt	u	-	↓	
	tex foam seal	12 oz	~~U~~ UO	dimethyl ether propane n butane isopropanol ethylene glycol vinyl acetate	↓	
	wood glues		U			
	Sandable primer		u	keytones toluene	0.0	
	box of woodstains	1/4 pt / 1 qts	D	sold nothing listed 1970's	0.0	
	spray paint			hydrocarbon propellants ethyl benzene keytones xylene acetates toluene	0.0	
	mineral spirits	1 qt	u		0.0	
very old	box of paints - & waterproof sealer -	1 gal / 1 qt / 1 pt	D	very old 1970's nothing listed	0.0	
	box of oil - motor oil	12 - 1 qts	UO		0.0	
	box full of rusted	1 gal / 1 pt	D	of old paint & spray paint		
				old paint - nothing listed - 1970's	0.0	

testor plastic cement 1 oz u mek 0.0

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

BTSA\Sections\SIS\Oil Spills\Guidance Docs\Aiproto4.doc

quickcrete - 1 gal u 0.0

household glue 2.8 oz u voc is <28 g/L 0.0

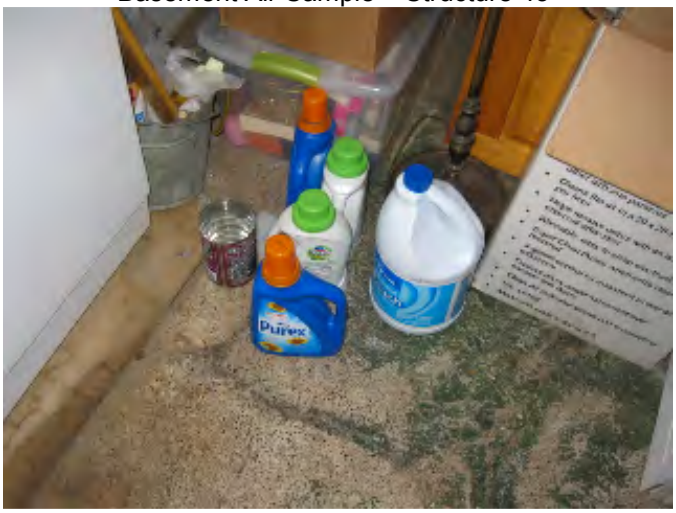
titebond 2 wood glue 16 oz u 0.0

min wax wood hardener 1 pt u 0.0

Indoor Air Sampling Photolog – Axiohm OU2 Site – December, 2010

Basement Air Sample – Structure 43

Sub-Slab Vapor Sample – Structure 43



Chemical Storage – Structure 43

Chemical Storage – Structure 43

Chemical Storage – Structure 43

Chemical Storage – Structure 43

Chemical Storage – Structure 43

Chemical Storage – Structure 43

Chemical Storage – Structure 43


Chemical Storage – Structure 43

Chemical Storage – Structure 43


Chemical Storage – Structure 43

Indoor Air Sampling Photolog – Axiohm OU2 Site – February 2012

Basement Air Sample – Structure 43

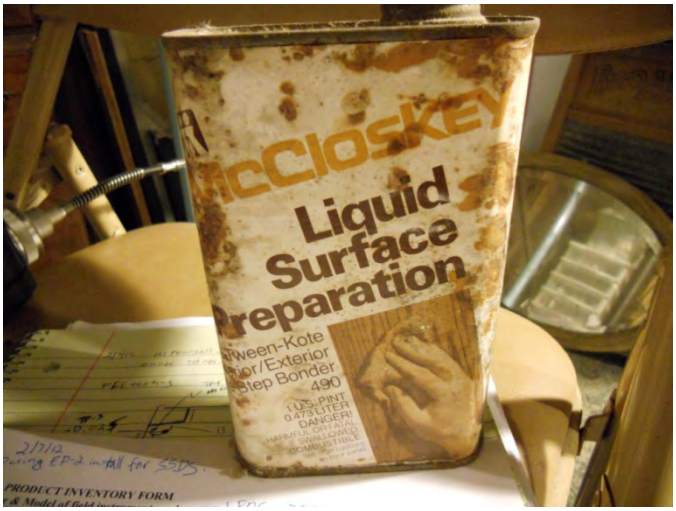
Outdoor Air Sample – Structure 43

Chemical Storage – Structure 43

Chemical Storage – Structure 43

Chemical removed prior to sampling – Structure 43

Chemical removed prior to sampling – Structure 43



Chemical removed prior to sampling – Structure 43

Chemical removed prior to sampling – Structure 43

Chemical removed prior to sampling – Structure 43


Chemical removed prior to sampling – Structure 43

FIELD AIR SAMPLING FORM

EA Engineering and Its Affiliate EA Science & Technology 6712 Brooklawn Parkway, Suite 104 Syracuse, NY 13211		Project #:	14368.19 0005
		Project Name:	Ithaca Offsite
		Location:	Ithaca, New York
		Project Manager:	Bob Casey/Karen Cahill

Sample Location Information:

Site ID Number:	C755012A			Sampler(s):	D Crandall/C. Schroer
PID Meter Used: (Model, Serial #)	ppbRAE			Building I.D. No.:	structure 43

SUMMA Canister Record:

INDOOR AIR - FIRST FLOOR		INDOOR AIR - BASEMENT		SUBSLAB SOIL GAS		OUTDOOR AIR	
Flow Regulator No.:		Flow Regulator No.:	2097?	Flow Regulator No.:		Flow Regulator No.:	40003
Canister Serial No.:		Canister Serial No.:	34320	Canister Serial No.:		Canister Serial No.:	5673
Start Date/Time:		Start Date/Time:	2/16/12 1034	Start Date/Time:		Start Date/Time:	2/16/12 1041
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-29	Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-29
Stop Date/Time:	21	Stop Date/Time:	2/17/12 1033	Stop Date/Time:		Stop Date/Time:	2/17/12 1030
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-4.5	Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-0.5
Sample ID:		Sample ID:	C755012A-BA-43-0212	Sample ID:		Sample ID:	C755012A-OA-43-0212

Other Sampling Information:

Story/Level		Story/Level	BSMT	Basement or Crawl Space?		Direction from Building	SE
Room		Room	BSMT	Floor Slab Thickness (inches) *[if present]*		Distance from Building	15ft
Indoor Air Temp (°F)		Indoor Air Temp	60 F	Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	4ft
Barometric Pressure?		Barometric Pressure?	—	Ground Surface Condition (Crawl Space Only)		Intake Tubing Used?	Y
Intake Height Above Floor Level (ft.)		Intake Height Above Floor Level (ft.)	3.5ft	If slab, intake Depth If Crawl Space, intake height		Distance to nearest Roadway	70f
Noticeable Odor?		Noticeable Odor?	—	Noticeable Odor?		Noticeable Odor?	—
PID Reading (ppb)		PID Reading (ppb)	0ppb	PID Reading (ppb)		PID Reading (ppb)	0ppb
Duplicate Sample?		Duplicate Sample?	—	Duplicate Sample?		Duplicate Sample?	—

Comments:

Post SSDS improvement sampling.

Sampler Signature:

5

FIELD AIR SAMPLING FORM

® EA Engineering and Its Affiliate EA Science & Technology 6712 Brooklawn Parkway, Suite 104 Syracuse, NY 13211	Project #: 14368.19 Project Name: NYSDEC C75012A Offsite Axiohm Location: Ithaca, NY Project Manager: Bob Casey/Karen Cahill

Sample Location Information:

Site ID Number:	C75012A	Sampler(s):	SAIC
PID Meter Used: (Model, Serial #)	ppbRAE	Building I.D. No.:	Structure 43

SUMMA Canister Record:

INDOOR AIR - FIRST FLOOR		INDOOR AIR - BASEMENT		SUBSLAB SOIL GAS		OUTDOOR AIR	
Flow Regulator No.:		Flow Regulator No.:	40190	Flow Regulator No.:	40393	Flow Regulator No.:	
Canister Serial No.:		Canister Serial No.:	33789	Canister Serial No.:	934	Canister Serial No.:	
Start Date/Time:		Start Date/Time:	12-6-10 1656	Start Date/Time:	12-6-10 1655	Start Date/Time:	
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-26	Start Pressure: (inches Hg)	-30+	Start Pressure: (inches Hg)	
Stop Date/Time:		Stop Date/Time:	12-7-10 1655	Stop Date/Time:	12-7-10 1653	Stop Date/Time:	
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-1.5	Stop Pressure: (inches Hg)	-7.5	Stop Pressure: (inches Hg)	
Sample ID:		Sample ID: C75012A-BA-43		Sample ID: C75012A-SS-43		Sample ID:	

Other Sampling Information:

Story/Level		Story/Level		Basement or Crawl Space?		Direction from Building	
Room		Room		Floor Slab Thickness (inches) *(if present)*		Distance from Building	
Indoor Air Temp (°F)		Indoor Air Temp		Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	
Barometric Pressure?		Barometric Pressure?		Ground Surface Condition (Crawl Space Only)		Intake Tubing Used?	
Intake Height Above Floor Level (ft.)		Intake Height Above Floor Level (ft.)		If slab, intake Depth If Crawl Space, intake height		Distance to nearest Roadway	
Noticeable Odor?		Noticeable Odor?		Noticeable Odor?		Noticeable Odor?	
PID Reading (ppb)		PID Reading (ppb)		PID Reading (ppb)		PID Reading (ppb)	
Duplicate Sample?		Duplicate Sample?		Duplicate Sample?		Duplicate Sample?	

Comments:

helium 100% 675 ppm purge

ppb-purge 1077 ppb

Passive Samplers 12-6-10 12-7-10

Radiello - C75012A-RAD-43 1650

ULTRA-3 - C75012A-ULTRA-43 12-6-10 1650 12-7-10

sampler DUP SC

Sampler Signature:

43

NEW YORK STATE DEPARTMENT OF HEALTH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name S. Nelson Date/Time Prepared 12/6/10

Preparer's Affiliation Independent Consultant – EA Engineering Phone No. 315-431-4610

Purpose of Investigation: Ithaca Offsite Former Axiohm Facility C75012A

1. OCCUPANT: Interviewed: Y / N

Last Name: [redacted] First Name: _____

Address: [redacted]

County: Tompkins

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location _____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant X)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS Type of

Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch		
Raised Ranch	~~2-Family~~ Split Level	3-Family Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

Sawbuck house

If multiple units, how many?
____ If the property is commercial, type?

Business Type(s) _____

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors 3 plus? Building age 1950s

Is the building insulated? Y / N How air tight? Tight / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors
Airflow near source
Outdoor air infiltration
Infiltration into air ducts

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	uncovered	covered	covered with lava lock carpet linoleum	
e. Concrete floor:	unsealed	sealed	sealed with paint	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with paint + Sheetrock	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: 4 (feet)
Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

6. HEATING, VENTING and AIR CONDITIONING

Type of heating system(s) used in this building: (circle all that apply –note primary)
Hot air circulation - Heat pump - Hot water baseboard - Space Heaters - Stream radiation - Radiant floor - Electric baseboard - Wood stove - Outdoor wood boiler - Other _____

The primary type of fuel used is:
Natural Gas - Fuel Oil - Kerosene - Electric - Propane - Solar - Wood - Coal

Domestic hot water tank fueled by: natural gas
Boiler/furnace located in: Basement - Outdoors - Main Floor - Other _____
Air conditioning: Central Air - Window units - Open Windows - None
Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY

Is basement/lowest level occupied? Full-time - Occasionally - Seldom - Almost Never

Level General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)

Basement living / bedroom / laundry
1st Floor kitchen living
2nd Floor bedrooms
3rd Floor
4th Floor

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / (N)

b. Does the garage have a separate heating unit? Y / N / (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / (NA) Lawnmower next to SS area

Please specify ~~Water~~ 16.2 ppm

d. Has the building ever had a fire? Y / (N) When? unknown

e. Is a kerosene or unvented gas space heater present? Y / (N) Where? _____

f. Is there a workshop or hobby/craft area? (Y) / N Where & Type? _____

g. Is there smoking in the building? Y (N) How frequently? _____

h. Have cleaning products been used recently? Y (N) When & Type? _____

i. Have cosmetic products been used recently? Y / (N) When & Type? _____

j. Has painting/staining been done in the last 6 months? (Y) / N When & Type? hallway area 1st Floor

k. Is there new carpet, drapes or other textiles? Y / (N) Where & When? _____

l. Have air fresheners been used recently? Y / (N) When & Type? _____

m. Is there a kitchen exhaust fan? (Y) / N If yes, where vented? outside

n. Is there a bathroom exhaust fan? Y / (N) If yes, where vented? bathroom

o. Is there a clothes dryer? (Y) / N If yes, is it vented outside? (Y) / N

p. Has there been a pesticide application? Y (N) When &Type? _____

Are there odors in the building? Y / (N)

If yes, please describe:

_____

Do any of the building occupants use solvents at work? Y / (N)

(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No

Yes, use dry-cleaning infrequently (monthly or less) Unknown

Yes, work at a dry-cleaning service

ND

Is there a radon mitigation system for the building/structure? Y / N Date of Installation:
Is the system active or passive? Active/Passive

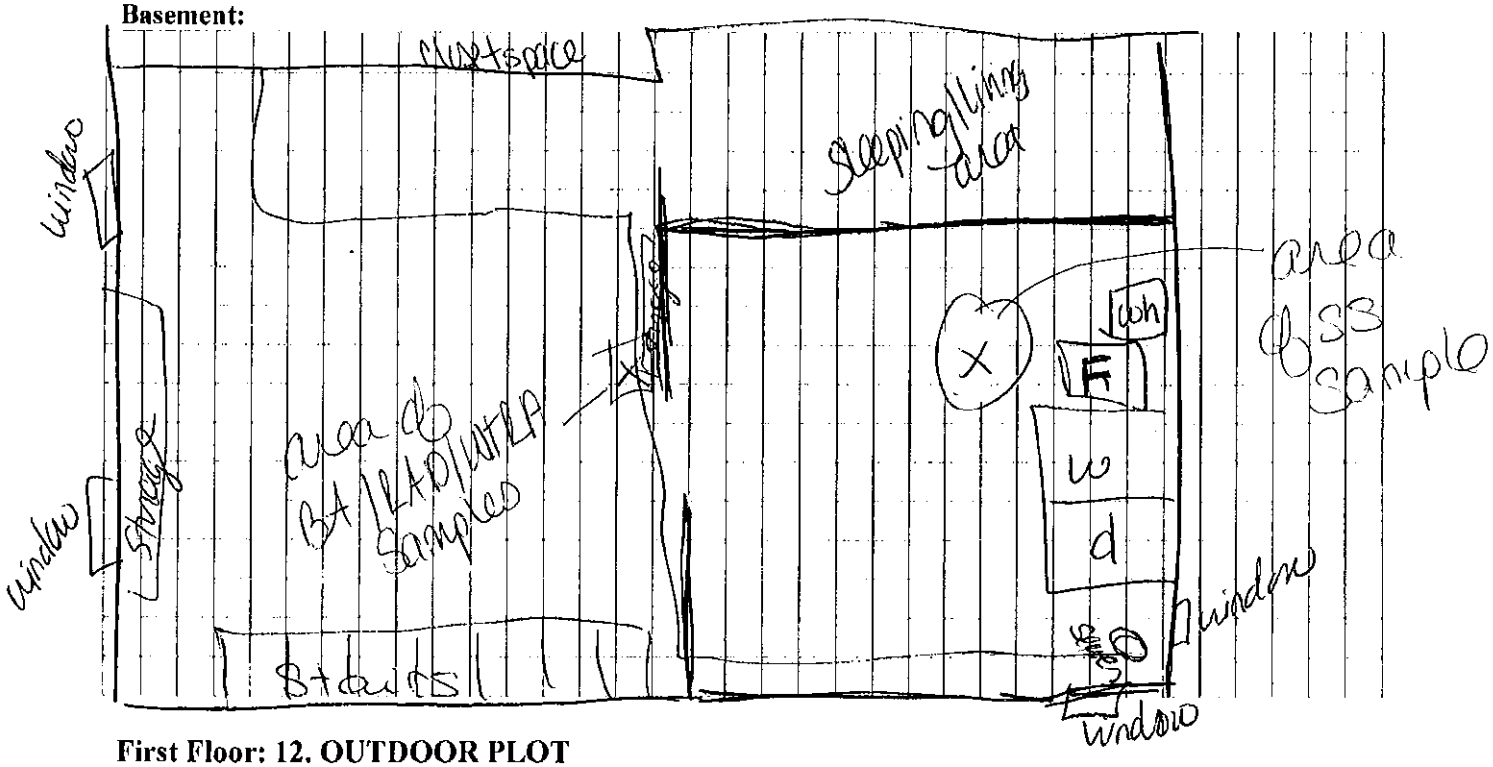
9. WATER AND SEWAGE
Water Supply: Public Water Drilled Well Driven Well Dug Well Other: _____
Sewage Disposal: Public Sewer Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)
a. Provide reasons why relocation is recommended: _____
b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel
c. Responsibility for costs associated with reimbursement explained? Y / N
d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS

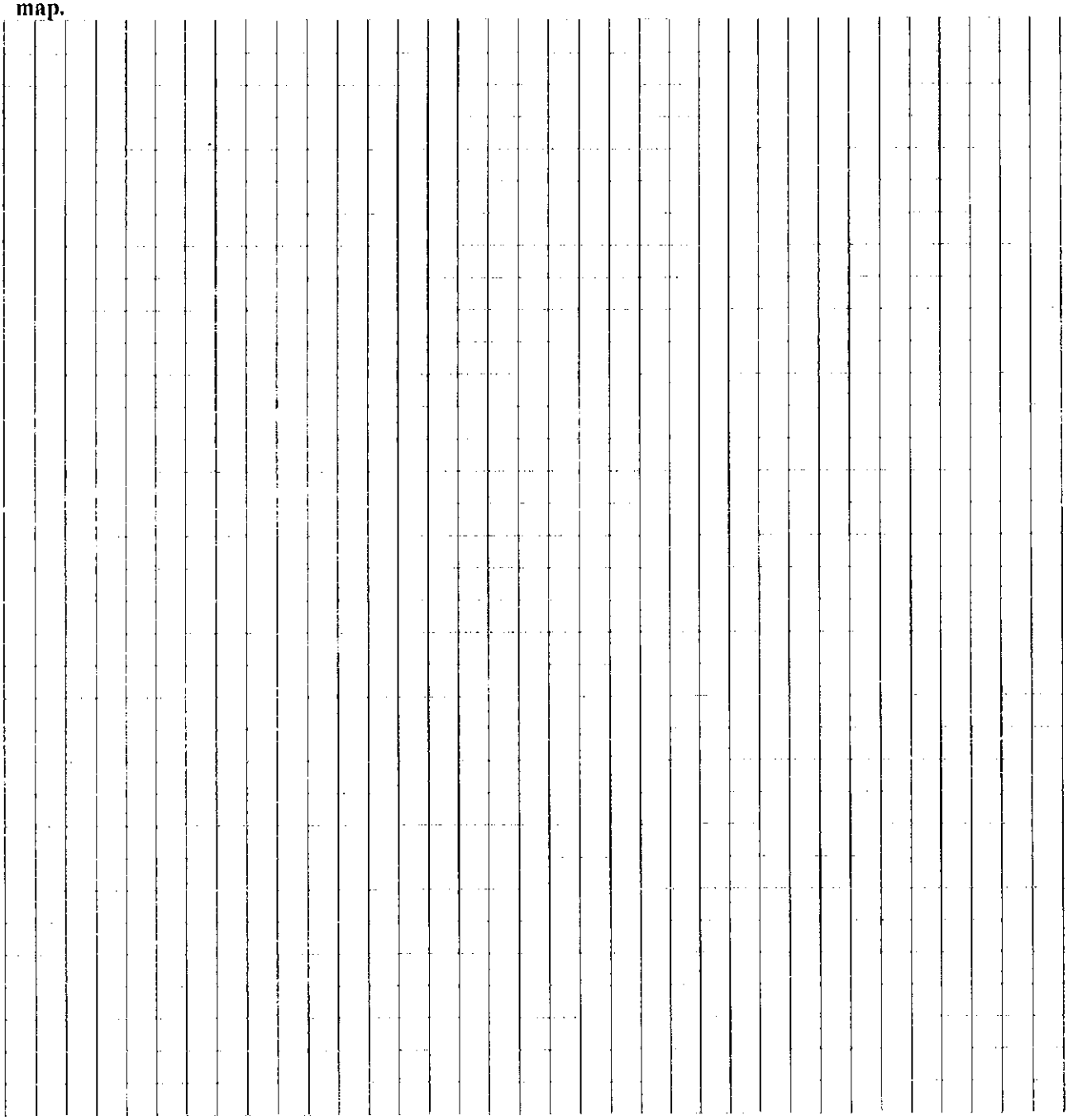
Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



First Floor: 12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.
Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ____________________

List specific products found in the residences that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
	Great Stuff	12oz	UO	polyol resin, hydrocarbon polymericisocyanate		Y
	great stuff window & door	12oz	UO	—		
	clorox prewash	16oz	UO	—		
	Shout advanced	8.7oz	U	surfactants		
	art detergent	dynamo 50oz / purex	U	surfactants		
	clorox	2 1.42gal	U	-		
	Pledge	14oz	U	no CFCs		
	ivory soap	22.5oz	U	—		
	clorox oxygenagent	32oz	U			
	Paint - art	1gal/1qt	U	latex		
	leather care	8oz	U			
	Dap fast n final	8oz	U	ethylene glycol vinyl acetate formaldehyde		
	Dap window glaze	10.1oz	U	ethylene glycol crystalline silica phthalate esters formaldehyde		
	Bin Primer & Sealer	1qt	U	titanium dioxide silicates		
	latex gloss enamel	1qt	U	2 naphthalenol 1-4 methyl 2 nitrophenyl 1-2 ethanediol formaldehyde, propanoic acid		
	the fresh look	11oz	U	toluol + xylol ketones + alcohol	186 ppb	
	tarnish metal polish	9oz	U		0.6	
	Lucite	1qt	U	latex paint		
	rustoleum	1qt	U			

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

		U		0.0
Dap Woodcraft wood filler	4oz		acetone, nitrocellulose isopropyl alcohol / methyl ethyl keytone pet. naphtha + dibutyl phthalate	3.0
Famowood wood filler	4oz	U		2400ppb
unitherp	1qt	U	petroleum distillates / aromatic hydrocarbons	
Alumax all purpose rubber sealant	10.5oz	U	mineral spirits	0.0
tsp-pf	16oz	U	sodium metasilicate	0.0
Dap caulk	4-10.1oz	no	phthalate, ethoxylated alcohol + formaldehyde	0.0
de-con 5min fast drying epoxy	2-9oz	no	—	0.0
armorall	10oz	no	—	0.0
krylon rust-tulb	12oz	U	ketones xylene toluene petroleum distillates	0.0
shoegoo		U	toluene & petroleum distillates	0.0
Kiwi Spot Superclean	8oz	U		0.0
wallcovering seam repair	3oz	U	—	0.0
lightweight spackling compd	8oz	U		
Bulls eye paint & finish remover	64oz	U		

2/7/12
During EP-2 install for SSDS.

13. PRODUCT INVENTORY FORM
Make & Model of field instrument used: PPbRAE -3000
List specific products found in the residences that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
	Leather Care (Apple Brand)	8oz	U	—	19.9ppm	Y
	Rustoleum Wood (2) Saver (1987)	8oz	U	—	—	Y
	Rustoleum (1982)	32oz	U.	Aliphatic Hydrocarbons,	—	Y
	United coatings Uniturp thinner.	1qt.	U	aromatic Hydrocarbons	87ppb	Y
	M C Closkey Liquid Surface prep	1 pint.	D	Aliophatic + Aromatic Hydro Carbons	—	Y
	Krylon Rust Tough Spray Paint.	12oz	U	Ketones, Xylene, toluene	—	Y
	Rustoleum Painters touch	12oz (3)	U	Acetone + xylene	—	Y
	Dutch Boy (1983) Spray Enamel	12oz (2)	U	Toluol + xylol, Aromatic Hydrocarbons	1598ppb	Y
	Finish Line by Kiwi Rain + Stain	10.5oz.	U	Hydrocarbons	3170ppb	Y

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

NO additional chemicals of Potential concern / products not in original inventories.

Appendix C

Data Usability Summary Reports

ENVIRONMENTAL
Data Services, Inc.

DATA USABILITY SUMMARY REPORT
AXIOHM OU2, ITHACA, NEW YORK

Client: EA Engineering, Science and Technology, Syracuse, New York
SDG: 1202298
Laboratory: VaporTrail Analytics, Rochester, New York
Site: Axiohm OU2, Ithaca, New York
Date: April 2, 2012

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1A	C755012A-BA-37-0212	1202298-01A	Air
1B	C755012A-BA-37-0212	1202298-01B	Air
2A	C755012A-SS-37-0212	1202298-02A	Air
2B	C755012A-SS-37-0212	1202298-02B	Air
3A	C755012A-OA-37-0212	1202298-03A	Air
3B	C755012A-OA-37-0212	1202298-03B	Air
4A	C755012A-BA-38-0212	1202298-04A	Air
4B	C755012A-BA-38-0212	1202298-04B	Air
5A	C755012A-SS-38-0212	1202298-05A	Air
5B	C755012A-SS-38-0212	1202298-05B	Air
6A	C755012A-OA-38-0212	1202298-06A	Air
6B	C755012A-OA-38-0212	1202298-06B	Air
7A	C755012A-BA-35-0212	1202298-07A	Air
7B	C755012A-BA-35-0212	1202298-07B	Air
8A	C755012A-BA-DUP-0212	1202298-08A	Air
8B	C755012A-BA-DUP-0212	1202298-08B	Air

A Data Usability Summary Review was performed on the analytical data for eight air samples collected on February 10, 2012 by EA Engineering at the Axiohm OU2 site in Ithaca, New York. The samples were analyzed under "*Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition, January 1999, EPA/625/R-96/010B*", Compendium Method TO-17, "*Determination Of Volatile Organic Compounds (VOCs) In Ambient Air Using Active Sampling Onto Sorbent Tubes*".

The data have been evaluated according to the protocols and quality control (QC) requirements of the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-31, Revision 4, October 2006: Validating Air Samples - Volatile Organic Analysis of Ambient Air in Canister and the reviewer's professional judgment.

Organics

The following items/criteria were reviewed for this report:

- Data Completeness
- Cover letter, Narrative, and Data Reporting Forms

- Chains-of-Custody and Traffic Reports
- Holding Times
- Laboratory Control Samples
- Surrogate Spike Recoveries
- GC/MS Tuning
- Method Blank
- Initial Calibration
- Continuing Calibration
- Compound Quantitation
- Internal Standard (IS) Area Performance
- Field Duplicate Sample Precision

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

Overall Evaluation of Data and Potential Usability Issues

There were no rejections of data.

Overall the remaining data is acceptable for the intended purposes. Data were qualified for the following deficiencies.

- Positive results were qualified as estimated in two samples due to high surrogate recoveries.

Data Completeness

- All criteria were met.

Cover letter, Narrative, and Data Reporting Forms

- All criteria were met

Chains-of-Custody and Traffic Reports

- The final canister vacuums for EDS sample ID #3 was measured at ambient pressure in the field and confirmed by the laboratory upon sample receipt.

Holding Times

- All samples were analyzed within 30 days for air samples.

Laboratory Control Samples

- The LCS samples exhibited acceptable %R values.

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate %R values except the following.

Sample ID	Surrogate	%R	Qualifier
2A	1,2-Dichloroethane-d4	132%	J - Associated Positive Results
2B	1,2-Dichloroethane-d4	133%	
8B	1,2-Dichloroethane-d4	131%	

GC/MS Tuning

- All criteria were met.

Method Blank

- The method blanks were free of contamination.

Field and Trip Blanks

- Field QC samples were not analyzed.

Initial Calibration

- All %RSD and/or correlation coefficient criteria were met.

Continuing Calibration

- All %D and/or RRF criteria were met.

Compound Quantitation

- All criteria were met.

Internal Standard (IS) Area Performance

- All criteria were met.

Field Duplicate Sample Precision

- Field duplicate results are summarized below.

Compound	C755012A-BA-35-0212 ppbv	C755012A-BA-DUP-0212 ppbv	RPD	Qualifier
Tetrachloroethene	0.30	0.28	7%	None
Trichloroethene	0.21	0.25	17%	
Carbon tetrachloride	0.083	0.10	19%	

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Very truly yours,
Environmental Data Services, Inc.

Nancy Weaver 4/3/12

Nancy Weaver Date
Senior Chemist

Data Qualifiers

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 sample reporting limit; and the reporting limit is approximate.

U = The analyte was analyzed for, but was not detected above the sample reporting limit.

R = The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified.

eurofins | Air Toxics

Client Sample ID: C755012A-BA-37-0212

Lab ID#: 1202298-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022206**	**Date of Collection:**	**2/10/12 10:37:00 AM**
Dil. Factor:	**1.58**	**Date of Analysis:**	**2/22/12 01:34 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.079	Not Detected	0.54	Not Detected
1,1,1-Trichloroethane	0.079	Not Detected	0.43	Not Detected
1,1-Dichloroethene	0.16	Not Detected	0.63	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	125	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	91	70-130

NW
4/2/12

eurofins | Air Toxics

Client Sample ID: C755012A-BA-37-0212

Lab ID#: 1202298-01B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022206sim**	**Date of Collection: 2/10/12 10:37:00 AM**	
Dil. Factor:	**1.58**	**Date of Analysis: 2/22/12 01:34 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected	0.040	Not Detected
Trichloroethene	0.032	Not Detected	0.17	Not Detected
Carbon Tetrachloride	0.032	0.082	0.20	0.52

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	128	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	98	70-130

NW
4/2/12

2A

eurofins | Air Toxics

Client Sample ID: C755012A-SS-37-0212

Lab ID#: 1202298-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022208**	**Date of Collection:**	**2/10/12 10:35:00 AM**
Dil. Factor:	**1.61**	**Date of Analysis:**	**2/22/12 03:36 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.080	31 J	0.55	210 J
1,1,1-Trichloroethane	0.080	Not Detected	0.44	Not Detected
1,1-Dichloroethene	0.16	Not Detected	0.64	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected

Q = Exceeds Quality Control limits.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	132 Q	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	88	70-130

NW
4/2/12

2B

eurofins | Air Toxics

Client Sample ID: C755012A-SS-37-0212

Lab ID#: 1202298-02B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022208sim**	**Date of Collection:**	**2/10/12 10:35:00 AM**
Dil. Factor:	**1.61**	**Date of Analysis:**	**2/22/12 03:36 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected	0.041	Not Detected
Trichloroethene	0.032	2.5 J	0.17	13 J
Carbon Tetrachloride	0.032	0.069 J	0.20	0.43 J

Q = Exceeds Quality Control limits.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	133 Q	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	92	70-130

NW
4/2/12

eurofins | Air Toxics

Client Sample ID: C755012A-OA-37-0212

Lab ID#: 1202298-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022218**	**Date of Collection:**	**2/10/12 10:09:00 AM**
Dil. Factor:	**1.34**	**Date of Analysis:**	**2/22/12 10:30 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.067	Not Detected	0.45	Not Detected
1,1,1-Trichloroethane	0.067	Not Detected	0.36	Not Detected
1,1-Dichloroethene	0.13	Not Detected	0.53	Not Detected
trans-1,2-Dichloroethene	0.13	Not Detected	0.53	Not Detected
cis-1,2-Dichloroethene	0.13	Not Detected	0.53	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	122	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	87	70-130

NW
4/12/12

eurofins | Air Toxics

Client Sample ID: C755012A-OA-37-0212

Lab ID#: 1202298-03B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022218sim**	**Date of Collection:**	**2/10/12 10:09:00 AM**
Dil. Factor:	**1.34**	**Date of Analysis:**	**2/22/12 10:30 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.013	Not Detected	0.034	Not Detected
Trichloroethene	0.027	Not Detected	0.14	Not Detected
Carbon Tetrachloride	0.027	0.084	0.17	0.53

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	129	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	94	70-130

MW
4/2/12

4/A

eurofins | Air Toxics

Client Sample ID: C755012A-BA-38-0212

Lab ID#: 1202298-04A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022209**	**Date of Collection: 2/10/12 12:10:00 PM**	
Dil. Factor:	**1.58**	**Date of Analysis: 2/22/12 04:17 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.079	0.69	0.54	4.7
1,1,1-Trichloroethane	0.079	0.16	0.43	0.86
1,1-Dichloroethene	0.16	Not Detected	0.63	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	124	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	90	70-130

NW
4/12/12

4B

eurofins | Air Toxics

Client Sample ID: C755012A-BA-38-0212

Lab ID#: 1202298-04B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022209sim**	**Date of Collection: 2/10/12 12:10:00 PM**	
Dil. Factor:	**1.58**	**Date of Analysis: 2/22/12 04:17 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected	0.040	Not Detected
Trichloroethene	0.032	0.12	0.17	0.66
Carbon Tetrachloride	0.032	0.072	0.20	0.45

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	127	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	95	70-130

MW
4/2/12

5A

eurofins | Air Toxics

Client Sample ID: C755012A-SS-38-0212

Lab ID#: 1202298-05A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022210**	**Date of Collection: 2/10/12 12:10:00 PM**	
Dil. Factor:	**1.71**	**Date of Analysis: 2/22/12 04:53 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.086	4.0	0.58	27
1,1,1-Trichloroethane	0.086	Not Detected	0.47	Not Detected
1,1-Dichloroethene	0.17	Not Detected	0.68	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.68	Not Detected
cis-1,2-Dichloroethene	0.17	Not Detected	0.68	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	127	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	92	70-130

NW
4/2/12

5B

eurofins | Air Toxics

Client Sample ID: C755012A-SS-38-0212

Lab ID#: 1202298-05B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022210sim**	**Date of Collection: 2/10/12 12:10:00 PM**	
Dil. Factor:	**1.71**	**Date of Analysis: 2/22/12 04:53 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.017	Not Detected	0.044	Not Detected
Trichloroethene	0.034	0.053	0.18	0.28
Carbon Tetrachloride	0.034	0.067	0.22	0.42

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	129	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	96	70-130

MJ
4/2/12

6A

eurofins | Air Toxics

Client Sample ID: C755012A-OA-38-0212

Lab ID#: 1202298-06A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022211**	**Date of Collection:**	**2/10/12 11:41:00 AM**
Dil. Factor:	**1.46**	**Date of Analysis:**	**2/22/12 05:29 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.073	Not Detected	0.50	Not Detected
1,1,1-Trichloroethane	0.073	Not Detected	0.40	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.58	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	0.58	Not Detected
cis-1,2-Dichloroethene	0.15	Not Detected	0.58	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	124	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	94	70-130

MW
4/12/12

6B

eurofins | Air Toxics

Client Sample ID: C755012A-OA-38-0212

Lab ID#: 1202298-06B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022211sim**	**Date of Collection:**	**2/10/12 11:41:00 AM**
Dil. Factor:	**1.46**	**Date of Analysis:**	**2/22/12 05:29 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.015	Not Detected	0.037	Not Detected
Trichloroethene	0.029	Not Detected	0.16	Not Detected
Carbon Tetrachloride	0.029	0.078	0.18	0.49

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	123	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	98	70-130

NW
4/2/12

7A

eurofins | Air Toxics

Client Sample ID: C755012A-BA-35-0212

Lab ID#: 1202298-07A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v022212**	**Date of Collection: 2/10/12 12:14:00 PM**	
Dil. Factor:	**1.52**	**Date of Analysis: 2/23/12 11:28 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.076	0.30	0.52	2.0
1,1,1-Trichloroethane	0.076	Not Detected	0.41	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.60	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected
cis-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	90	70-130
4-Bromofluorobenzene	97	70-130

NW
4/2/12

7B

eurofins | Air Toxics

Client Sample ID: C755012A-BA-35-0212

Lab ID#: 1202298-07B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v022212sim**	**Date of Collection: 2/10/12 12:14:00 PM**	
Dil. Factor:	**1.52**	**Date of Analysis: 2/23/12 11:28 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.015	Not Detected	0.039	Not Detected
Trichloroethene	0.030	0.21	0.16	1.1
Carbon Tetrachloride	0.030	0.083	0.19	0.52

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	90	70-130
4-Bromofluorobenzene	100	70-130

NW
4/2/12

8A

eurofins | Air Toxics

Client Sample ID: C755012A-BA-DUP-0212

Lab ID#: 1202298-08A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022213**	**Date of Collection: 2/10/12 12:00:00 PM**	
Dil. Factor:	**1.58**	**Date of Analysis: 2/22/12 06:50 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.079	0.28	0.54	1.9
1,1,1-Trichloroethane	0.079	Not Detected	0.43	Not Detected
1,1-Dichloroethene	0.16	Not Detected	0.63	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	129	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	90	70-130

NW
4/2/12

8B

eurofins | Air Toxics

Client Sample ID: C755012A-BA-DUP-0212

Lab ID#: 1202298-08B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022213sim**	**Date of Collection: 2/10/12 12:00:00 PM**	
Dil. Factor:	**1.58**	**Date of Analysis: 2/22/12 06:50 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected	0.040	Not Detected
Trichloroethene	0.032	0.25 J	0.17	1.4 J
Carbon Tetrachloride	0.032	0.10 J	0.20	0.65 J

Q = Exceeds Quality Control limits.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	131 Q	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	94	70-130

MW
4/2/12

ENVIRONMENTAL
Data Services, Inc.

DATA USABILITY SUMMARY REPORT
AXIOHM OU2, ITHACA, NEW YORK

Client: EA Engineering, Science and Technology, Syracuse, New York
SDG: 1202465
Laboratory: VaporTrail Analytics, Rochester, New York
Site: Axiohm OU2, Ithaca, New York
Date: April 2, 2012

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1A	C755012A-BA-43-0212	1202465-01A	Air
1B	C755012A-BA-43-0212	1202465-01B	Air
2A	C755012A-OA-43-0212	1202465-02A	Air
2B	C755012A-OA-43-0212	1202465-02B	Air
3A	C755012A-BA-39-0212	1202465-03A	Air
3B	C755012A-BA-39-0212	1202465-03B	Air
4A	C755012A-OA-39-0212	1202465-04A	Air
4B	C755012A-OA-39-0212	1202465-04B	Air

A Data Usability Summary Review was performed on the analytical data for four air samples collected on February 27, 2012 by EA Engineering at the Axiohm OU2 site in Ithaca, New York. The samples were analyzed under "*Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition, January 1999, EPA/625/R-96/010B*", Compendium Method TO-17, "*Determination Of Volatile Organic Compounds (VOCs) In Ambient Air Using Active Sampling Onto Sorbent Tubes*".

The data have been evaluated according to the protocols and quality control (QC) requirements of the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-31, Revision 4, October 2006: Validating Air Samples - Volatile Organic Analysis of Ambient Air in Canister and the reviewer's professional judgment.

Organics

The following items/criteria were reviewed for this report:

- Data Completeness
- Cover letter, Narrative, and Data Reporting Forms
- Chains-of-Custody and Traffic Reports
- Holding Times
- Laboratory Control Samples
- Surrogate Spike Recoveries
- GC/MS Tuning
- Method Blank
- Initial Calibration

- Continuing Calibration
- Compound Quantitation
- Internal Standard (IS) Area Performance
- Field Duplicate Sample Precision

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

Overall Evaluation of Data and Potential Usability Issues

There were no rejections of data.

Overall the remaining data is acceptable for the intended purposes. Data were not qualified.

Data Completeness

- All criteria were met.

Cover letter, Narrative, and Data Reporting Forms

- All criteria were met

Chains-of-Custody and Traffic Reports

- All criteria were met.

Holding Times

- All samples were analyzed within 30 days for air samples.

Laboratory Control Samples

- The LCS samples exhibited acceptable %R values.

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate %R values.

GC/MS Tuning

- All criteria were met.

Method Blank

- The method blanks were free of contamination.

Field and Trip Blanks

- Field QC samples were not analyzed.

Initial Calibration

- All %RSD and/or correlation coefficient criteria were met.

Continuing Calibration

- All %D and/or RRF criteria were met.

Compound Quantitation

- All criteria were met.

Internal Standard (IS) Area Performance

- All criteria were met.

Field Duplicate Sample Precision

- Field duplicate samples were not analyzed.

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Very truly yours,
Environmental Data Services, Inc.

Nancy Weaver 4/3/12

Nancy Weaver Date
Senior Chemist

Data Qualifiers

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 sample reporting limit; and the reporting limit is approximate.

U = The analyte was analyzed for, but was not detected above the sample reporting limit.

R = The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified.

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Client Sample ID: C755012A-BA-43-0212

Lab ID#: 1202465-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v022421**	**Date of Collection:**	**2/17/12 10:33:00 AM**
Dil. Factor:	**1.57**	**Date of Analysis:**	**2/25/12 08:25 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.078	Not Detected	0.53	Not Detected
1,1,1-Trichloroethane	0.078	0.19	0.43	1.0
1,1-Dichloroethene	0.16	Not Detected	0.62	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.62	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.62	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	88	70-130
4-Bromofluorobenzene	100	70-130

NW
4/2/12

1B

eurofins | Air Toxics

Client Sample ID: C755012A-BA-43-0212

Lab ID#: 1202465-01B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v022421sim**	**Date of Collection: 2/17/12 10:33:00 AM**	
Dil. Factor:	**1.57**	**Date of Analysis: 2/25/12 08:25 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	0.025	0.040	0.063
Trichloroethene	0.031	0.045	0.17	0.24
Carbon Tetrachloride	0.031	0.083	0.20	0.52

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	88	70-130
4-Bromofluorobenzene	102	70-130

MW
4/2/12

eurofins | Air Toxics

Client Sample ID: C755012A-OA-43-0212

Lab ID#: 1202465-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v022422**	**Date of Collection: 2/17/12 10:30:00 AM**	
Dil. Factor:	**1.44**	**Date of Analysis: 2/25/12 09:01 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.072	Not Detected	0.49	Not Detected
1,1,1-Trichloroethane	0.072	Not Detected	0.39	Not Detected
1,1-Dichloroethene	0.14	Not Detected	0.57	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	0.57	Not Detected
cis-1,2-Dichloroethene	0.14	Not Detected	0.57	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	88	70-130
4-Bromofluorobenzene	103	70-130

NW
4/2/12

eurofins | Air Toxics

Client Sample ID: C755012A-OA-43-0212

Lab ID#: 1202465-02B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v022422sim**	**Date of Collection: 2/17/12 10:30:00 AM**	
Dil. Factor:	**1.44**	**Date of Analysis: 2/25/12 09:01 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.014	Not Detected	0.037	Not Detected
Trichloroethene	0.029	Not Detected	0.15	Not Detected
Carbon Tetrachloride	0.029	0.092	0.18	0.58

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	88	70-130
4-Bromofluorobenzene	104	70-130

NW
9/2/12

eurofins | Air Toxics

Client Sample ID: C755012A-BA-39-0212

Lab ID#: 1202465-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v022423**	**Date of Collection:**	**2/17/12 10:41:00 AM**
Dil. Factor:	**1.47**	**Date of Analysis:**	**2/25/12 09:37 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.074	1.2	0.50	8.4
1,1,1-Trichloroethane	0.074	Not Detected	0.40	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.58	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	0.58	Not Detected
cis-1,2-Dichloroethene	0.15	Not Detected	0.58	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	88	70-130
4-Bromofluorobenzene	108	70-130

NW
4/2/12

eurofins | Air Toxics

Client Sample ID: C755012A-BA-39-0212

Lab ID#: 1202465-03B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v022423sim**	**Date of Collection:**	**2/17/12 10:41:00 AM**
Dil. Factor:	**1.47**	**Date of Analysis:**	**2/25/12 09:37 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.015	Not Detected	0.038	Not Detected
Trichloroethene	0.029	Not Detected	0.16	Not Detected
Carbon Tetrachloride	0.029	0.090	0.18	0.57

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	88	70-130
4-Bromofluorobenzene	108	70-130

MW
4/2/12

eurofins | Air Toxics

Client Sample ID: C755012A-OA-39-0212

Lab ID#: 1202465-04A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v022424**	**Date of Collection: 2/17/12 10:39:00 AM**	
Dil. Factor:	**1.37**	**Date of Analysis: 2/25/12 10:13 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.068	Not Detected	0.46	Not Detected
1,1,1-Trichloroethane	0.068	Not Detected	0.37	Not Detected
1,1-Dichloroethene	0.14	Not Detected	0.54	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	0.54	Not Detected
cis-1,2-Dichloroethene	0.14	Not Detected	0.54	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	89	70-130
4-Bromofluorobenzene	102	70-130

NW
4/2/12

4B

eurofins | Air Toxics

Client Sample ID: C755012A-OA-39-0212

Lab ID#: 1202465-04B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v022424sim**	**Date of Collection: 2/17/12 10:39:00 AM**	
Dil. Factor:	**1.37**	**Date of Analysis: 2/25/12 10:13 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.014	Not Detected	0.035	Not Detected
Trichloroethene	0.027	Not Detected	0.15	Not Detected
Carbon Tetrachloride	0.027	0.075	0.17	0.47

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	88	70-130
4-Bromofluorobenzene	104	70-130

MW
4/2/12

Appendix D

Laboratory Analytical Data Form Is, Chain of Custody Forms

Electronic Comprehensive Validation Package (eCVP)

eurofins | Air Toxics

Client Sample ID: C755012A-BA-43-0212

Lab ID#: 1202465-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v022421**	**Date of Collection:**	**2/17/12 10:33:00 AM**
Dil. Factor:	**1.57**	**Date of Analysis:**	**2/25/12 08:25 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.078	Not Detected	0.53	Not Detected
1,1,1-Trichloroethane	0.078	0.19	0.43	1.0
1,1-Dichloroethene	0.16	Not Detected	0.62	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.62	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.62	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	88	70-130
4-Bromofluorobenzene	100	70-130

eurofins | Air Toxics

Client Sample ID: C755012A-BA-43-0212

Lab ID#: 1202465-01B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v022421sim**	**Date of Collection: 2/17/12 10:33:00 AM**	
Dil. Factor:	**1.57**	**Date of Analysis: 2/25/12 08:25 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	0.025	0.040	0.063
Trichloroethene	0.031	0.045	0.17	0.24
Carbon Tetrachloride	0.031	0.083	0.20	0.52

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	88	70-130
4-Bromofluorobenzene	102	70-130

eurofins | Air Toxics

Client Sample ID: C755012A-OA-43-0212

Lab ID#: 1202465-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v022422**	**Date of Collection:**	**2/17/12 10:30:00 AM**
Dil. Factor:	**1.44**	**Date of Analysis:**	**2/25/12 09:01 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.072	Not Detected	0.49	Not Detected
1,1,1-Trichloroethane	0.072	Not Detected	0.39	Not Detected
1,1-Dichloroethene	0.14	Not Detected	0.57	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	0.57	Not Detected
cis-1,2-Dichloroethene	0.14	Not Detected	0.57	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	88	70-130
4-Bromofluorobenzene	103	70-130

eurofins | Air Toxics

Client Sample ID: C755012A-OA-43-0212

Lab ID#: 1202465-02B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v022422sim**	**Date of Collection: 2/17/12 10:30:00 AM**	
Dil. Factor:	**1.44**	**Date of Analysis: 2/25/12 09:01 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.014	Not Detected	0.037	Not Detected
Trichloroethene	0.029	Not Detected	0.15	Not Detected
Carbon Tetrachloride	0.029	0.092	0.18	0.58

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	88	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: C755012A-BA-39-0212

Lab ID#: 1202465-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v022423**	**Date of Collection:**	**2/17/12 10:41:00 AM**
Dil. Factor:	**1.47**	**Date of Analysis:**	**2/25/12 09:37 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.074	1.2	0.50	8.4
1,1,1-Trichloroethane	0.074	Not Detected	0.40	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.58	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	0.58	Not Detected
cis-1,2-Dichloroethene	0.15	Not Detected	0.58	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	88	70-130
4-Bromofluorobenzene	108	70-130

eurofins | Air Toxics

Client Sample ID: C755012A-BA-39-0212

Lab ID#: 1202465-03B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v022423sim**	**Date of Collection:**	**2/17/12 10:41:00 AM**
Dil. Factor:	**1.47**	**Date of Analysis:**	**2/25/12 09:37 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.015	Not Detected	0.038	Not Detected
Trichloroethene	0.029	Not Detected	0.16	Not Detected
Carbon Tetrachloride	0.029	0.090	0.18	0.57

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	88	70-130
4-Bromofluorobenzene	108	70-130

eurofins | Air Toxics

Client Sample ID: C755012A-OA-39-0212

Lab ID#: 1202465-04A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v022424**	**Date of Collection:**	**2/17/12 10:39:00 AM**
Dil. Factor:	**1.37**	**Date of Analysis:**	**2/25/12 10:13 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.068	Not Detected	0.46	Not Detected
1,1,1-Trichloroethane	0.068	Not Detected	0.37	Not Detected
1,1-Dichloroethene	0.14	Not Detected	0.54	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	0.54	Not Detected
cis-1,2-Dichloroethene	0.14	Not Detected	0.54	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	89	70-130
4-Bromofluorobenzene	102	70-130

eurofins | Air Toxics

Client Sample ID: C755012A-OA-39-0212

Lab ID#: 1202465-04B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v022424sim**	**Date of Collection: 2/17/12 10:39:00 AM**	
Dil. Factor:	**1.37**	**Date of Analysis: 2/25/12 10:13 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.014	Not Detected	0.035	Not Detected
Trichloroethene	0.027	Not Detected	0.15	Not Detected
Carbon Tetrachloride	0.027	0.075	0.17	0.47

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	88	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Page 1 of 1

Project Manager: Robert Casey
Collected by: (Print and Sign) David Crandall
Company: EA Engineering Email: rcasey@eaest.com
Address: 6712 Brooklawn Pkwy Ste 104 City: Syracuse State: NY Zip: 13211
Phone: 315 431 4610 Fax: 315 431 4280

Project Info:
P.O. #:
Project #: 14368.19 0005
Project Name: ~~Ithaca~~ Offsite

Turn Around Time:
[X] Normal
[ ] Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01AB	C755012A-BA-43-0212	34320	2/16/12 to 2/17/12	1034-1033	TO-15	-29	-4.5		
02AB	C755012A-OA-43-0212	5673	2/16/12 to 2/17/12	1041-1030	TO-15	-29	-0.5		
03AB	C755012A-BA-39-0212	14871	2/16/12 to 2/17/12	1057-1041	TO-15	-29	-3		
04AB	C755012A-OA-39-0212	35269	2/16/12 to 2/17/12	1103-1039	TO-15	-30	-0.5		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
	2/17/12 1500 TO UPS		2/22/12 1030
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes: Report PCE, TCE, 1,1-DCE, trans-1,2-DCE, cis-1,2-DCE, 1,1,1-TCA, VC, & carbontetr. only

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	UPS		NA	Good	Yes No None	1202465

2/22/12

Form 1293 rev.11

eurofins | Air Toxics

Client Sample ID: C755012A-BA-37-0212

Lab ID#: 1202298-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022206**	**Date of Collection: 2/10/12 10:37:00 AM**	
Dil. Factor:	**1.58**	**Date of Analysis: 2/22/12 01:34 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.079	Not Detected	0.54	Not Detected
1,1,1-Trichloroethane	0.079	Not Detected	0.43	Not Detected
1,1-Dichloroethene	0.16	Not Detected	0.63	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	125	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	91	70-130

eurofins | Air Toxics

Client Sample ID: C755012A-BA-37-0212

Lab ID#: 1202298-01B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022206sim**	**Date of Collection: 2/10/12 10:37:00 AM**	
Dil. Factor:	**1.58**	**Date of Analysis: 2/22/12 01:34 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected	0.040	Not Detected
Trichloroethene	0.032	Not Detected	0.17	Not Detected
Carbon Tetrachloride	0.032	0.082	0.20	0.52

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	128	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	98	70-130

eurofins | Air Toxics

Client Sample ID: C755012A-SS-37-0212

Lab ID#: 1202298-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022208**	**Date of Collection: 2/10/12 10:35:00 AM**	
Dil. Factor:	**1.61**	**Date of Analysis: 2/22/12 03:36 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.080	31	0.55	210
1,1,1-Trichloroethane	0.080	Not Detected	0.44	Not Detected
1,1-Dichloroethene	0.16	Not Detected	0.64	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected

Q = Exceeds Quality Control limits.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	132 Q	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	88	70-130

eurofins | Air Toxics

Client Sample ID: C755012A-SS-37-0212

Lab ID#: 1202298-02B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022208sim**	**Date of Collection: 2/10/12 10:35:00 AM**	
Dil. Factor:	**1.61**	**Date of Analysis: 2/22/12 03:36 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected	0.041	Not Detected
Trichloroethene	0.032	2.5	0.17	13
Carbon Tetrachloride	0.032	0.069	0.20	0.43

Q = Exceeds Quality Control limits.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	133 Q	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	92	70-130

eurofins | Air Toxics

Client Sample ID: C755012A-OA-37-0212

Lab ID#: 1202298-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022218**	**Date of Collection: 2/10/12 10:09:00 AM**	
Dil. Factor:	**1.34**	**Date of Analysis: 2/22/12 10:30 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.067	Not Detected	0.45	Not Detected
1,1,1-Trichloroethane	0.067	Not Detected	0.36	Not Detected
1,1-Dichloroethene	0.13	Not Detected	0.53	Not Detected
trans-1,2-Dichloroethene	0.13	Not Detected	0.53	Not Detected
cis-1,2-Dichloroethene	0.13	Not Detected	0.53	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	122	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	87	70-130

eurofins | Air Toxics

Client Sample ID: C755012A-OA-37-0212

Lab ID#: 1202298-03B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022218sim**	**Date of Collection: 2/10/12 10:09:00 AM**	
Dil. Factor:	**1.34**	**Date of Analysis: 2/22/12 10:30 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.013	Not Detected	0.034	Not Detected
Trichloroethene	0.027	Not Detected	0.14	Not Detected
Carbon Tetrachloride	0.027	0.084	0.17	0.53

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	129	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	94	70-130

eurofins | Air Toxics

Client Sample ID: C755012A-BA-38-0212

Lab ID#: 1202298-04A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022209**	**Date of Collection: 2/10/12 12:10:00 PM**	
Dil. Factor:	**1.58**	**Date of Analysis: 2/22/12 04:17 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.079	0.69	0.54	4.7
1,1,1-Trichloroethane	0.079	0.16	0.43	0.86
1,1-Dichloroethene	0.16	Not Detected	0.63	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	124	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	90	70-130

eurofins | Air Toxics

Client Sample ID: C755012A-BA-38-0212

Lab ID#: 1202298-04B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022209sim**	**Date of Collection: 2/10/12 12:10:00 PM**	
Dil. Factor:	**1.58**	**Date of Analysis: 2/22/12 04:17 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected	0.040	Not Detected
Trichloroethene	0.032	0.12	0.17	0.66
Carbon Tetrachloride	0.032	0.072	0.20	0.45

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	127	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	95	70-130

eurofins | Air Toxics

Client Sample ID: C755012A-SS-38-0212

Lab ID#: 1202298-05A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022210**	**Date of Collection: 2/10/12 12:10:00 PM**	
Dil. Factor:	**1.71**	**Date of Analysis: 2/22/12 04:53 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.086	4.0	0.58	27
1,1,1-Trichloroethane	0.086	Not Detected	0.47	Not Detected
1,1-Dichloroethene	0.17	Not Detected	0.68	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.68	Not Detected
cis-1,2-Dichloroethene	0.17	Not Detected	0.68	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	127	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	92	70-130

eurofins | Air Toxics

Client Sample ID: C755012A-SS-38-0212

Lab ID#: 1202298-05B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022210sim**	**Date of Collection: 2/10/12 12:10:00 PM**	
Dil. Factor:	**1.71**	**Date of Analysis: 2/22/12 04:53 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.017	Not Detected	0.044	Not Detected
Trichloroethene	0.034	0.053	0.18	0.28
Carbon Tetrachloride	0.034	0.067	0.22	0.42

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	129	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	96	70-130

eurofins | Air Toxics

Client Sample ID: C755012A-OA-38-0212

Lab ID#: 1202298-06A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022211**	**Date of Collection: 2/10/12 11:41:00 AM**	
Dil. Factor:	**1.46**	**Date of Analysis: 2/22/12 05:29 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.073	Not Detected	0.50	Not Detected
1,1,1-Trichloroethane	0.073	Not Detected	0.40	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.58	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	0.58	Not Detected
cis-1,2-Dichloroethene	0.15	Not Detected	0.58	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	124	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	94	70-130

eurofins | Air Toxics

Client Sample ID: C755012A-OA-38-0212

Lab ID#: 1202298-06B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022211sim**	**Date of Collection: 2/10/12 11:41:00 AM**	
Dil. Factor:	**1.46**	**Date of Analysis: 2/22/12 05:29 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.015	Not Detected	0.037	Not Detected
Trichloroethene	0.029	Not Detected	0.16	Not Detected
Carbon Tetrachloride	0.029	0.078	0.18	0.49

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	123	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	98	70-130

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Client Sample ID: C755012A-BA-35-0212

Lab ID#: 1202298-07A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v022212**	**Date of Collection:**	**2/10/12 12:14:00 PM**
Dil. Factor:	**1.52**	**Date of Analysis:**	**2/23/12 11:28 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.076	0.30	0.52	2.0
1,1,1-Trichloroethane	0.076	Not Detected	0.41	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.60	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected
cis-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	90	70-130
4-Bromofluorobenzene	97	70-130

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Client Sample ID: C755012A-BA-35-0212

Lab ID#: 1202298-07B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v022212sim**	**Date of Collection: 2/10/12 12:14:00 PM**	
Dil. Factor:	**1.52**	**Date of Analysis: 2/23/12 11:28 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.015	Not Detected	0.039	Not Detected
Trichloroethene	0.030	0.21	0.16	1.1
Carbon Tetrachloride	0.030	0.083	0.19	0.52

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	90	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: C755012A-BA-DUP-0212

Lab ID#: 1202298-08A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022213**	**Date of Collection: 2/10/12 12:00:00 PM**	
Dil. Factor:	**1.58**	**Date of Analysis: 2/22/12 06:50 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	0.079	0.28	0.54	1.9
1,1,1-Trichloroethane	0.079	Not Detected	0.43	Not Detected
1,1-Dichloroethene	0.16	Not Detected	0.63	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	129	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	90	70-130

eurofins | Air Toxics

Client Sample ID: C755012A-BA-DUP-0212

Lab ID#: 1202298-08B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**a022213sim**	**Date of Collection: 2/10/12 12:00:00 PM**	
Dil. Factor:	**1.58**	**Date of Analysis: 2/22/12 06:50 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected	0.040	Not Detected
Trichloroethene	0.032	0.25	0.17	1.4
Carbon Tetrachloride	0.032	0.10	0.20	0.65

Q = Exceeds Quality Control limits.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	131 Q	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	94	70-130

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
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Project Manager: Robert Casey

Collected by: (Print and Sign) Dave Crandall

Company: EA Engineering Email: rcasey@eaest.com

Address: 6712 Brooklawn Pkwy Ste. 104 City: Syracuse State: NY Zip: 13211

Phone: 315 431 4610 Fax: 315 431 4280

Project Info:
P.O. #:
Project #: 14368.19 0005
Project Name: Ithaca Offsite

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	C755012A-BA-37-0212	10770	2/10/12	1037-1037	TO-15	-29	-5		
02A	C755012A-SS-37-0212	14873	2/10/12	1035-1035	TO-15	-30	-5.5		
03A	C755012A-OA-37-0212	15603	2/10/12	1041-1009	TO-15	-30	-3		
04A	C755012A-BA-38-0212	925	2/10/12	1210-1210	TO-15	-30	-7		
05A	C755012A-SS-38-0212	3475	2/10/12	1210-1210	TO-15	-30	-6.5		
06A	C755012A-OA-38-0212	34740	2/10/12	1229-1141	TO-15	-29	-3		
07A	C755012A-BA-35-0212	10767	2/10/12	1249-1214	TO-15	-30	-6		
08A	C755012A-BA-Dup-0212	1586	2/10/12	1200-1200	TO-15	-29.5	-4		

Relinquished by: (signature) Date/Time: 2/10/12 1400 TO UPS
Received by: (signature) Date/Time: 2.14.12 0920

Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:

Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:

Notes:
Report only the following Analytes
PCE, TCE, 1,1-DCE, trans-1,2-DCE, cis-1,2-DCE, 1,1,1-TCA, VC, Carbon Tet

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	UPS		NA	Good	Yes No (None)	1202298

Form 1293 rev.11