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June 6, 2011

Mr. Eugene Melnyk, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue
Buffalo, New York 14203-2999

Subject: **Vapor Intrusion Investigation Report**
Former Buffalo Color Corporation Site – Areas ABCE
Former Hospital Building (Area B)
Buffalo, New York
Order on Consent and Administrative Settlement #B9-0802-09-02
Mactec Project No. 3410090701

Dear Mr. Melnyk,

Mactec Engineering and Consulting, Inc. (Mactec) has prepared this Vapor Intrusion Investigation Report (VI Report) on behalf of our client, South Buffalo Development LLC (SBD), to document the completion of vapor intrusion sampling at the former "Hospital" building (Building 121) in Area B of the Former Buffalo Color Corporation (BCC) Site. The work was performed pursuant to the referenced Consent Order between the New York State Department of Environmental Conservation (NYSDEC) and Honeywell International, Inc. (Honeywell).

SITE DESCRIPTION & BACKGROUND

The former BCC Site is located on the south side of the City of Buffalo, Erie County, New York, in an area of heavy industrial development that dates to the mid-1800s. The former BCC Site consists of four distinct areas (Areas A, B, C, and E).

Area B (Figure 1) is approximately 5.5 acres in size and is located to the north of Area A. Area B is fenced and is accessible by vehicle via a gated entrance along Lee Street. Area B is bounded by a rail spur and Area C to the north, Lee Street to the east, South Park Avenue to the south, and railroad tracks to the west. The western portion of Area B (approximately 2.5 acres) is owned and controlled by SBD. The eastern portion of Area B includes the former BCC office building (100 Lee Street address), the former "Hospital" building (Building 121), several smaller buildings, and surrounding asphalt parking area which totals approximately three acres and is owned by another party. The former "Hospital" building is a single story structure with no basement. The building is currently vacant with some evidence of use for

storage. All building utilities but electric have been shut off; therefore, the building was unheated at the time of the investigation.

In 2009, Honeywell and NYSDEC executed a Consent Order that required the completion of VI studies for several structures that will remain on the former BCC Site, including the former "Hospital" building and the 100 Lee Street office building located on Area B. In February 2009, Mactec issued a Scope of Work document for the VI sampling effort which was submitted to and accepted by NYSDEC. VI sampling was completed by Mactec for the 100 Lee Street building in March 2010, and a letter report that documented the results was prepared by Mactec and issued to NYSDEC in November 2010.

This letter report has been prepared to document the completion of VI sampling activities completed in January 2011 for the former "Hospital" building.

SCOPE OF WORK

The VI investigation was completed for the former "Hospital" building in accordance with the February 2009 Scope of Work document and subsequent Pre-Design Investigation (PDI) Work Plan (Mactec, August 2009). The procedures used for sample collection and analyses are described below.

- One sub-slab soil vapor sample, one indoor air sample, and one outdoor (ambient) air sample were collected at the former Hospital building. The sample locations are shown on Figure 1. The VI samples were collected via the following procedure:

    1. The ambient air at each sample location was screened prior to sample collection with a photoionization detector (PID) and an Indoor Air Quality Questionnaire and Building Inventory Form was completed. A copy of the completed form is provided as Attachment A.

    2. A hole was drilled through the floor slab at each of the chosen sub-slab locations and a section of ¼-inch Teflon tubing was inserted into the hole, making sure that the tubing did not touch the bottom of the hole. The annular space around the tubing was sealed to the concrete floor with modeling clay to approximately ½ inch below the surface, and bees wax was poured into the remaining void of the hole to seal it to grade. One tubing volume was purged with a 60 cc syringe prior to connecting a SUMMA canister to the tubing for collection of the sub slab air samples.

    3. SUMMA canisters were set up directly next to each of the sub-slab SUMMA canister locations. An outdoor ambient air SUMMA canister was set up in the courtyard east of the former Hospital building.

4. Once all SUMMA canisters were set up, the valves on all canisters were opened at roughly the same time at each building. The valves were left open for the 8-hour sample collection time.

5. Mactec personnel checked the sample flow valves periodically during the 8-hour time frame to ensure that proper vacuum existed over the duration of the sample collection interval.

6. After the 8-hour sampling period had elapsed, Mactec retrieved the canisters and sealed the holes in the floor with a fast drying concrete patch (i.e. Quickcrete™);

- The SUMMA canister samples were labeled and hand-delivered with chain-of-custody documents to TestAmerica's Amherst NY laboratory. TestAmerica shipped the samples to the TestAmerica laboratory in Burlington, VT (a NYSDOH ELAP certified laboratory), where they were analyzed for volatile organic compounds (VOCs) by USEPA TO-15 analysis.

- Mactec evaluated and validated the laboratory data consistent with NY guidance and policy.

The results of the investigation are provided below.

RESULTS

Upon receipt of the laboratory analysis results, a data validation summary report (DVSR) was completed by a Mactec Project Chemist. Based on the outcome of the data review and validation process, the data was deemed usable as presented in this report. The DVSR is included as Attachment B. The validated analytical results are summarized in Table 3 of the DVSR. A complete copy of the laboratory report is provided as Attachment C.

As shown in Table 3 of the DVSR (Appendix B), various VOCs were detected in the one sub-slab soil vapor sample (BLDG121-SS-1), one indoor air sample (BLDG121-IA-1), and one outdoor (ambient) air sample (BLDG121-OA-1) at the former "Hospital" building. Mactec has evaluated the results in accordance with the latest version of the New York State Department of Health (NYSDOH) document "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (October 2006). Based on this evaluation, the following conclusions are presented:

- None of the four chlorinated compounds addressed in Section 3.4 of the NYSDOH soil vapor intrusion guidance document (carbon tetrachloride, tetrachloroethene, 1,1,1-trichloroethane, and trichloroethene) were detected in the subslab and indoor air VI samples collected at the former "Hospital" building at concentrations that exceeded the NYSDOH monitoring or mitigation levels as presented in Matrices 1 and 2. Therefore, no further action is required at this time. If the

building is to be renovated and used for human occupancy in the future, the building owner may choose to reevaluate the VI pathway at that time.

CONCLUSIONS

Based on these findings, no further investigation of the VI pathway is necessary at the former "Hospital" building.

We trust that this report satisfies the requirements of NYSDEC. Please contact Mr. Richard Galloway of Honeywell at (973) 455-4640 or Mr. John Scrabis of Mactec at (412) 279-6661 should you have any questions or require additional information.

Sincerely,

Mactec Engineering and Consulting, Inc.

Jason Trentini
Project Scientist

John M. Scrabis
Sr. Principal Engineer

JT:JMS

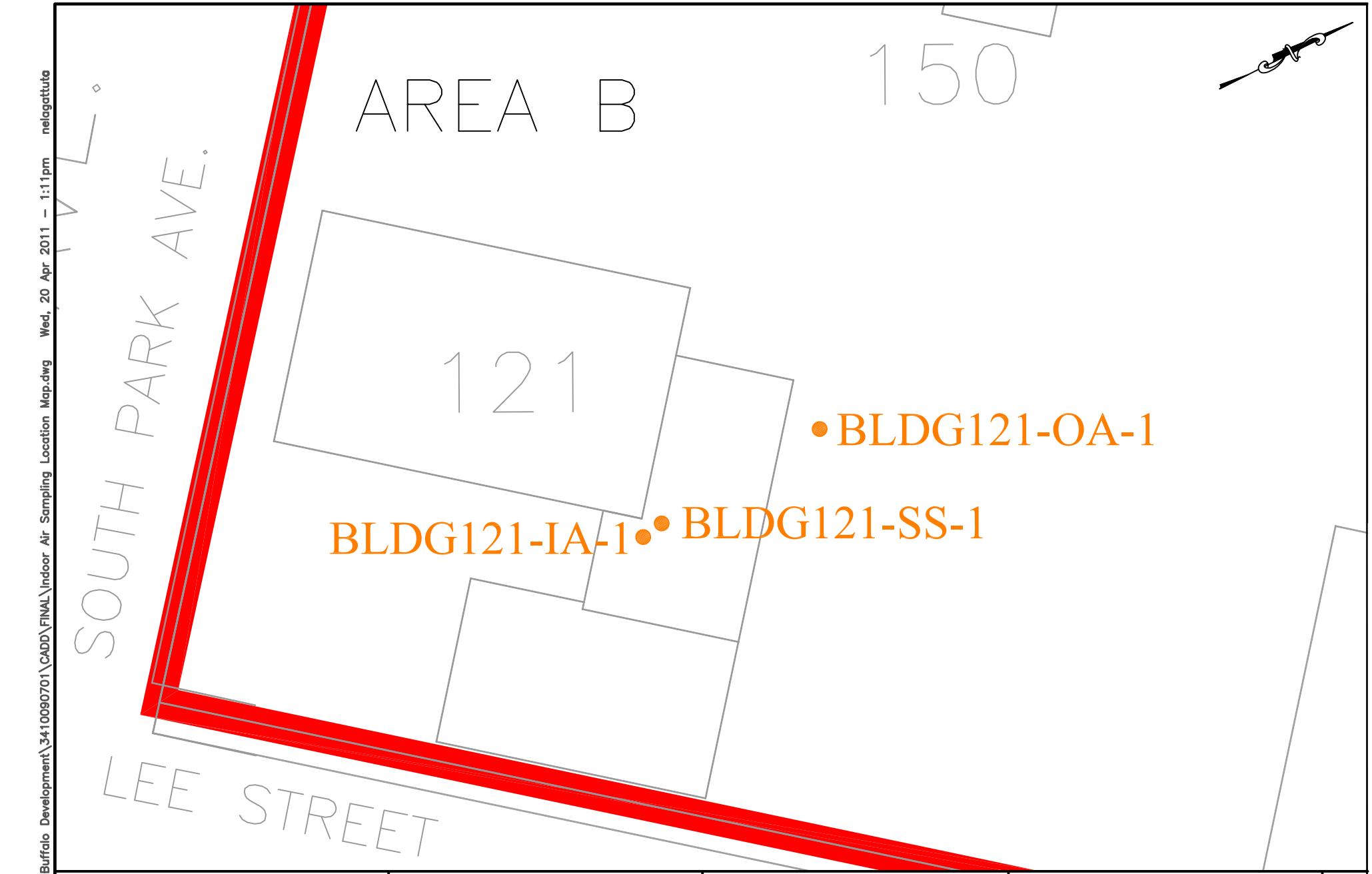
w/atts

cc: R. Galloway (Honeywell)
T. Perkins (Honeywell)
T. Burton

P:\PROJECTS\South Buffalo Development\3410090701\FINAL DELIVERABLES\VI Sampling - Hospital Bldg & Armor Electric (Jan 2011)\Hospital BLDG 121_Draft Buffalo Color - JAN2011 VI Report.docx

FIGURE

DRAWN BY: NEL 2-28-2011 APPROVED BY: JAT



P:\PROJECTS\South Buffalo Development\3410090701\CADD\FINAL\Indoor Air Sampling Location Map.dwg Wed, 20 Apr 2011 - 1:11pm nelagattuta

20 0 20
SCALE: 1"= 20'

SOUTH BUFFALO DEVELOPMENT
BUFFALO, NEW YORK

Project No.: 3410090701

MACTEC
Engineering & Consulting Inc.
800 North Bell Avenue, Suite 200
Pittsburgh, PA 15106

Vapor Intrusion Sample Locations
Building 121
Former 'HOSPITAL WING'

Figure: 1

1

ATTACHMENT A

INDOOR AIR QUALITY QUESTIONNAIRE & BUILDING INVENTORY FORM

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 Jason Trentini Date/Time Prepared 1-26-11 / 1315

Preparer's Affiliation MACTEC Phone No. _____

Purpose of Investigation Soil Vapor Intrusion

1. OCCUPANT:

Interviewed: Y (N)

Last Name: _____ First Name: _____

Address: _____

County: _____

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? _____

If the property is commercial, type?

Business Type(s) ? Former Hospital Bldg. for Buffalo Color

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

Other characteristics:

Number of floors 1 Building age ?

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 NA
d. Basement floor:	uncovered	covered	covered with NA	
e. Concrete floor:	unsealed	sealed	sealed with covered w/tile in places	
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: 0 (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

"centered" in rooms + hallway
drains appear to be abandoned, shower drain in locker room, ...

6. **HEATING, VENTING and AIR CONDITIONING** (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary) * Not in operation

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

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: * Not in operation

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other NA
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~~	_____
1st Floor	Storage
~~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 _____

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? _____

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

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? _____

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: "musty"

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

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: P Unknown
Is the system active or passive? Active/Passive Not in operation.

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) Not Applicable

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

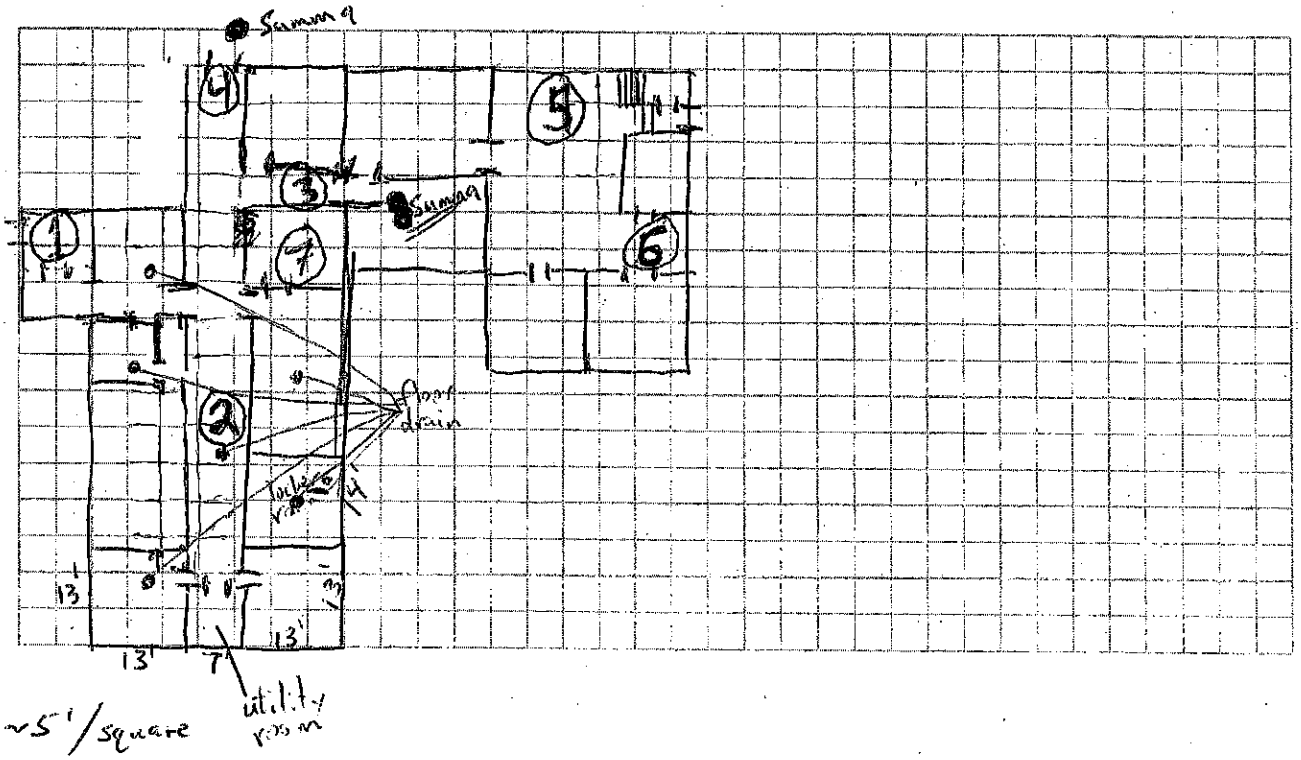
d. **Relocation package provided and explained to residents?** Y / N

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: No Basement

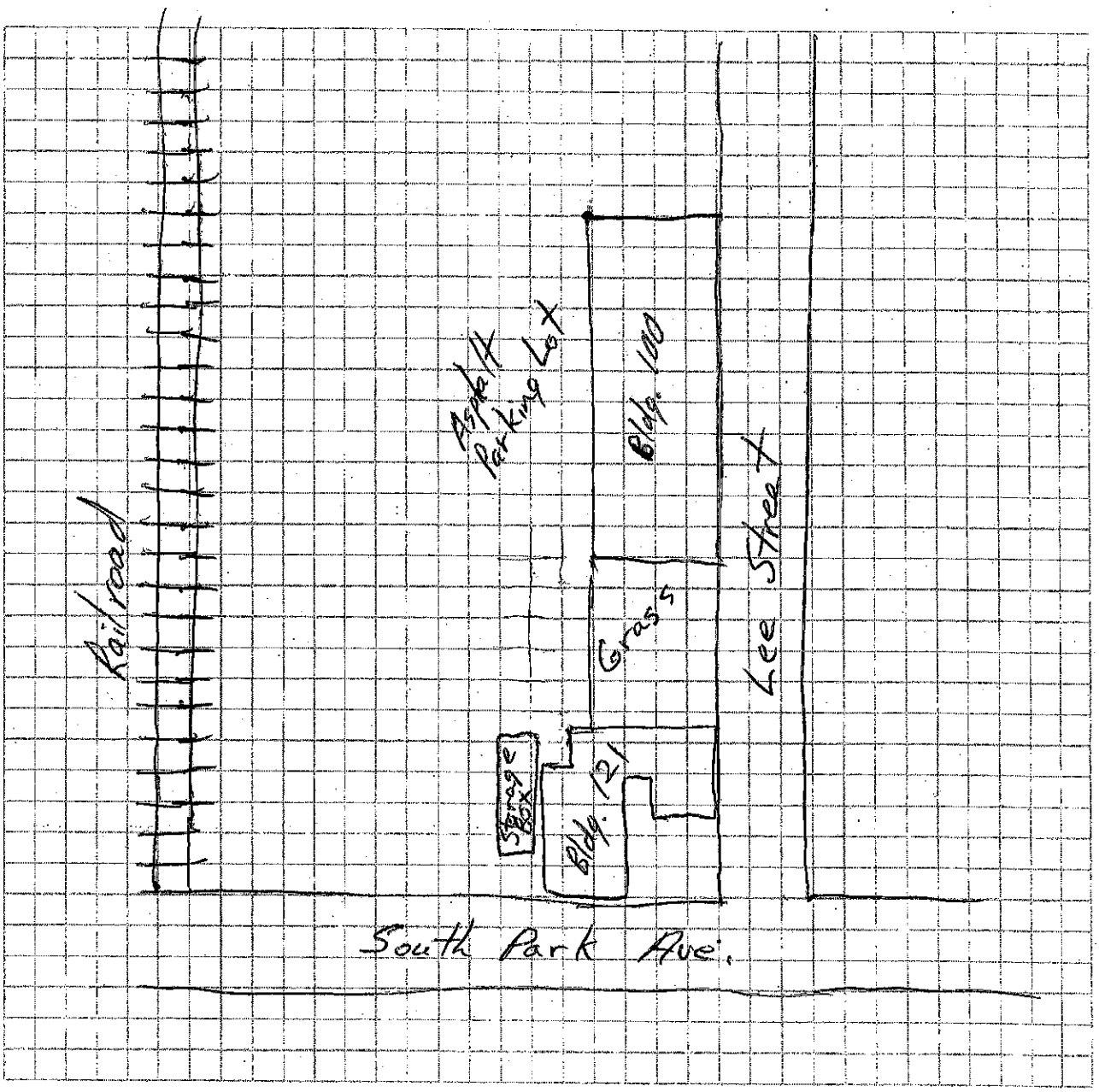
First Floor:



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: Mini Rae 2000

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

Bldg. 121

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
1	3-6% Fluoropolydol	4x 5gals.	UO	Fluoropolydol	0.0	
2	Shineline MultiSurface Cleaner	6x 1gal.	UO/U	CAS# 9016-45-9 64-02-8 1300-72-7	0.0	
2	Sunny Side Floor Finish	1x 1gal.	U	CAS# 63744-68-3, 111900, 9010-79	0.0	
2	Bar + Chain Lubricant	1x 1gal	U	100% Virgin Oil	0.0	
2	Valvoline Non-Detergent	1x 1qt.	U	Motor Oil	0.0	
2	3M Trouble Shooter Cleaner	1x 2oz. can	U	CAS# (7732-18-5), (111-76-2), (75-28-5), (141-43-5), (74-98-6), (68131-40-8)	0.0	
2	Brillo Pads	14 pads	UO		0.0	
2	Stainless Steel Betco Cleaner/Polish	1x 17oz can.	U	White Mineral Oil, Petrol Gas, Citrus Terpenes, Polydimethylsiloxane	0.0	
2	Comet Disinfectant Cleanser w/ Chlorinol	1x 21oz can	U	dichloro-s-triazinetrione	0.0	
3	CLR	1x 128 fl. oz.	U	See MSDS - not on container	0.0	
4	KARNAK Aluminum Asphalt Seal.	3x 5gal.	U	Unable to Read - See MSDS	0.0	
5	Coronado LAlkyd Traffic Paint	1x 5gal.	U	CAS# 14807-96-6, 61317-65-3, Alkyd Resin, 1344-37-2, 8032-32-4	0.0	
5	MS glass cleaner	1x 15oz can	U	See MSDS - Not Listed	0.0	
5	Harvey Heat	2x 1gal.	U	Antifreeze	0.0	
5	Tire Sealant "Slime"	1x 1gal.	U	See MSDS - Not listed	0.0	
6	Coverie Metal Coat. labeled Acetone	4x 1/2gal.	U	Acetone	2.1	
6	Rustoleum	7x 1gal.	U	Paint Enamel - Oil Basal	0.0	
6	Kleen Strip	4x 1gal.	U	Paint Thinner - Mineral Spirits	0.0	
7	Arnold Engine Oil	1x 1qt.	U	Engine Oil - no other listings	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.

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: MiniRae 2000

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

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
7	Lysol Disinfectant	1x 19oz can	U	Alkyl, Ethanol, Dimethyl Benzyl Ammonium Saccharinate	0.0	
7	Sheet Rock Joint Compound	1x 1gal	UO	Vinyl Acetone polymer	0.0	
7	Biozide Disinfectant	1x 16oz	U	2-Phenylphenol, 4 Tert Amylphenol, Ethanol	0.0	
7	ABCO - Hands Massage Lanofresh Lotion	1x 8oz	U	Not Listed	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.

ATTACHMENT B

DATA VALIDATION SUMMARY REPORT

DATA VALIDATION SUMMARY REPORT
JANUARY 2011 AIR SAMPLING - FORMER HOSPITAL BLDG. 121
HONEYWELL – BUFFALO COLOR
BUFFALO, NEW YORK

1.0 INTRODUCTION

Sub-slab vapor and indoor air samples were collected at the Buffalo Color site on January 26, 2011. Samples were analyzed by TestAmerica in South Burlington, Vermont. A listing of samples included in this investigation is presented in Table 1. Samples were analyzed using the following methods:

- Volatile Organic Compounds (VOCs) in Ambient Air by EPA Method TO-15
- VOCs in Ambient Air, Low Concentration by EPA Method TO-15 LL

A subset of samples including BLDG121-OA-1 and BLDG121-IA-1 were analyzed by the low concentration method to obtain lower detection limits.

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

A data quality validation was completed by the project chemist using NYSDEC Division of Environmental Remediation guidance for Data Usability Summary Reports (NYSDEC, 2002). Quality control (QC) limits for the TO-15 analysis specified in the USEPA Region II guidelines (USEPA, 2006) were used during the data evaluation unless noted otherwise. The project chemist review included evaluations of sample collection, data package completeness, holding times, QC data (blanks, instrument calibrations, duplicates, surrogate recovery, and spike recovery), internal standard performance, data transcription, electronic data reporting, sample calculations, and data qualification.

A summary of data qualification actions is presented on Table 2. Final sample results are presented on Table 3. The following qualifiers are used in the final data presentation.

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

With the exception of the items discussed below, results are interpreted to be usable as reported by the laboratory.

2.0 VOLATILE ORGANIC COMPOUNDS

Continuing Calibration

The continuing calibration associated with a subset of samples had percent differences outside the QC limit of 30 percent for vinyl chloride (49), 1,3-butadiene (34), and methylene chloride (50). Vinyl chloride, 1,3-butadiene, and methylene chloride were not detected in associated samples BLDG121-OA-1 and BLDG121-IA-1 and reporting limits were qualified as estimated (UJ).

Laboratory Control Sample

The LCS associated with a subset of samples had a percent recovery greater than upper QC limit of 130 percent for n-hexane (131), which may indicate a high bias. Detections of n-hexane in associated samples BLDG121-OA and BLDG121-IA-1 were qualified as estimated (J).

Reference:

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

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

U.S. Environmental Protection Agency (USEPA), 2006. "Validating Air Samples Volatile Organic Analysis of Ambient Air in Canister by Method TO-15"; USEPA Region II; HW-31; Revision #4; October 2006.

Project chemist: Bradley B. LaForest, NRCC-EAC

Date: March 15, 2011

Reviewed by: Chris Ricardi, NRCC-EAC

Date: March 16, 2011

TABLE 1
SAMPLE SUMMARY
DATA VALIDATION SUMMARY REPORT
JANUARY 2011 AIR SAMPLING
HONEYWELL – BUFFALO COLOR
BUFFALO, NEW YORK

SDG	Field Sample ID	Lab Sample ID	Sample Purpose	Date Sampled	Method
200-3569	BLDG121-OA-1	200-3569-6	REG	1/26/2011	TO-15
200-3569	BLDG121-IA-1	200-3569-7	REG	1/26/2011	TO-15
200-3569	BLDG121-SS-1	200-3569-8	REG	1/26/2011	TO-15

TABLE 2 - SUMMARY OF VALIDAITON ACTIONS
DATA VALIDATION SUMMARY REPORT
JANUARY 2011 AIR SAMPLING
HONEYWELL – BUFFALO COLOR
BUFFALO, NEW YORK

Field Sample ID	Lab Sample ID	Sample Purpose	Parameter Name	Lab Result	Lab Units	Lab Qualifier	Validation Qualifier	Reason Codes
BLDG121-OA-1	200-3569-6	REG	1,3-Butadiene	0.18	ug/m3	U *	UJ	CCV
BLDG121-IA-1	200-3569-7	REG	1,3-Butadiene	0.18	ug/m3	U *	UJ	CCV
BLDG121-OA-1	200-3569-6	REG	Methylene Chloride	2.8	ug/m3	U ^ *	UJ	CCV
BLDG121-IA-1	200-3569-7	REG	Methylene Chloride	2.8	ug/m3	U ^ *	UJ	CCV
BLDG121-OA-1	200-3569-6	REG	n-Hexane	0.85	ug/m3	*	J	LCSH
BLDG121-IA-1	200-3569-7	REG	n-Hexane	0.99	ug/m3	*	J	LCSH
BLDG121-OA-1	200-3569-6	REG	Vinyl chloride	0.2	ug/m3	U *	UJ	CCV
BLDG121-IA-1	200-3569-7	REG	Vinyl chloride	0.2	ug/m3	U *	UJ	CCV

Notes:
U = not detected
J = estimated
CCV = continuing calibration outside limit
LCSH = high recovery in lab control sample

prepared by CSR
reviewed by BBL
3/16/11

TABLE 3 - FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
JANUARY 2011 AIR SAMPLING
HONEYWELL – BUFFALO COLOR
BUFFALO, NEW YORK

		Field Sample ID	BLDG121-IA-1	BLDG121-OA-1	BLDG121-SS-1
		Location	QC	QC	QC
		Sample Date	1/27/2011	1/27/2011	1/27/2011
Units	Method	Parameter Name			
ug/m3	TO15	1,1,1-Trichloroethane	0.22 U	0.22 U	1.1 U
ug/m3	TO15	1,1,2,2-Tetrachloroethane	0.27 U	0.27 U	1.4 U
ug/m3	TO15	1,1,2-Trichloroethane	0.22 U	0.22 U	1.1 U
ug/m3	TO15	1,1-Dichloroethane	0.16 U	0.16 U	0.81 U
ug/m3	TO15	1,1-Dichloroethene	0.16 U	0.16 U	0.79 U
ug/m3	TO15	1,2-Dibromoethane	0.31 U	0.31 U	1.5 U
ug/m3	TO15	1,2-Dichloroethane	0.32 U	0.32 U	0.81 U
ug/m3	TO15	1,2-Dichloroethene, Total	0.16 U	0.16 U	0.79 U
ug/m3	TO15	1,2-Dichloropropane	0.37 U	0.37 U	0.92 U
ug/m3	TO15	1,2-Dichlorotetrafluoroethane	0.28 U	0.28 U	1.4 U
ug/m3	TO15	1,3,5-Trimethylbenzene	0.53	0.39 U	5.7
ug/m3	TO15	1,3-Butadiene	0.18 UJ	0.18 UJ	0.44 U
ug/m3	TO15	2,2,4-Trimethylpentane	0.4	0.35	0.93 U
ug/m3	TO15	3-Chloropropene	0.25 U	0.25 U	1.6 U
ug/m3	TO15	4-Ethyltoluene	0.74	0.2 U	1.9
ug/m3	TO15	Benzene	0.85	0.86	5
ug/m3	TO15	Bromodichloromethane	0.27 U	0.27 U	1.3 U
ug/m3	TO15	Bromoethene(Vinyl Bromide)	0.35 U	0.35 U	0.87 U
ug/m3	TO15	Bromoform	0.41 U	0.41 U	2.1 U
ug/m3	TO15	Bromomethane	0.31 U	0.31 U	0.78 U
ug/m3	TO15	Carbon tetrachloride	0.51	0.42	1.3 U
ug/m3	TO15	Chloroethane	0.21 U	0.21 U	1.3 U
ug/m3	TO15	Chloroform	0.2 U	0.2 U	0.98 U
ug/m3	TO15	cis-1,2-Dichloroethene	0.16 U	0.16 U	0.79 U
ug/m3	TO15	cis-1,3-Dichloropropene	0.18 U	0.18 U	0.91 U
ug/m3	TO15	Cyclohexane	0.22	0.19	6.8
ug/m3	TO15	Dibromochloromethane	0.34 U	0.34 U	1.7 U
ug/m3	TO15	Dichlorodifluoromethane	2.7	2.6	3.6
ug/m3	TO15	Ethylbenzene	0.36	0.25	3.5
ug/m3	TO15	m,p-Xylene			21
ug/m3	TO15	m-Xylene & p-Xylene	1.2	0.65	
ug/m3	TO15	Methyl tert-butyl ether	0.14 U	0.14 U	0.72 U
ug/m3	TO15	Methylene Chloride	2.8 UJ	2.8 UJ	1.7 U
ug/m3	TO15	n-Heptane	0.59	0.37	23

prepared by WCG
reviewed by CSR
3/16/11

TABLE 3 - FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
JANUARY 2011 AIR SAMPLING
HONEYWELL – BUFFALO COLOR
BUFFALO, NEW YORK

		Field Sample ID	BLDG121-IA-1	BLDG121-OA-1	BLDG121-SS-1
		Location	QC	QC	QC
		Sample Date	1/27/2011	1/27/2011	1/27/2011
Units	**Method**	**Parameter Name**			
ug/m3	TO15	n-Hexane	0.99 J	0.85 J	20
ug/m3	TO15	o-Xylene	0.52	0.25	
ug/m3	TO15	Tetrachloroethene	0.46	0.27 U	7.4
ug/m3	TO15	Toluene	1.6	1.3	15
ug/m3	TO15	trans-1,2-Dichloroethene	0.16 U	0.16 U	0.79 U
ug/m3	TO15	trans-1,3-Dichloropropene	0.18 U	0.18 U	0.91 U
ug/m3	TO15	Trichloroethene	0.5	0.34	3
ug/m3	TO15	Trichlorofluoromethane	2.1	1.5	1.2
ug/m3	TO15	Vinyl chloride	0.2 UJ	0.2 UJ	0.51 U
ug/m3	TO15	Xylene (total)			27
ug/m3	TO15	Xylene, o-			6
ug/m3	TO15	Xylenes, Total	1.7	0.9	

Notes:
U = undetected
J = estimated value

prepared by WCG
reviewed by CSR
3/16/11

ATTACHMENT C

LABORATORY REPORT

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 200-3569-1

SDG Number: 200-3569

Job Description: Buffalo Color

For:
MACTEC Engineering and Consulting Inc
700 North Bell Avenue, Suite 200
Carnegie, PA 15106

Attention: John Scrabis

Approved for release.
Don C Dawicki
Project Manager II
2/14/2011 3:53 PM

Don C Dawicki
Project Manager II
don.dawicki@testamericainc.com
02/14/2011

The test results in this report relate only to sample(s) as received by the laboratory. These test results were derived under a quality system that adheres to the requirements of NELAC. Pursuant to NELAC, this report may not be produced in full without written approval from the laboratory

EXECUTIVE SUMMARY - Detections

Client: MACTEC Engineering and Consulting Inc

Job Number: 200-3569-1
Sdg Number: 200-3569

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
200-3569-6	**BLDG121-OA-1**					
Dichlorodifluoromethane		0.52		0.040	ppb v/v	TO15 LL
Dichlorodifluoromethane		2.6		0.20	ug/m3	TO15 LL
Trichlorofluoromethane		0.26		0.040	ppb v/v	TO15 LL
Trichlorofluoromethane		1.5		0.22	ug/m3	TO15 LL
n-Hexane		0.24	*	0.080	ppb v/v	TO15 LL
n-Hexane		0.85	*	0.28	ug/m3	TO15 LL
Cyclohexane		0.054		0.040	ppb v/v	TO15 LL
Cyclohexane		0.19		0.14	ug/m3	TO15 LL
Carbon tetrachloride		0.066		0.040	ppb v/v	TO15 LL
Carbon tetrachloride		0.42		0.25	ug/m3	TO15 LL
2,2,4-Trimethylpentane		0.075		0.040	ppb v/v	TO15 LL
2,2,4-Trimethylpentane		0.35		0.19	ug/m3	TO15 LL
Benzene		0.27		0.040	ppb v/v	TO15 LL
Benzene		0.86		0.13	ug/m3	TO15 LL
n-Heptane		0.091		0.040	ppb v/v	TO15 LL
n-Heptane		0.37		0.16	ug/m3	TO15 LL
Trichloroethene		0.062		0.040	ppb v/v	TO15 LL
Trichloroethene		0.34		0.21	ug/m3	TO15 LL
Toluene		0.33		0.040	ppb v/v	TO15 LL
Toluene		1.3		0.15	ug/m3	TO15 LL
Ethylbenzene		0.058		0.040	ppb v/v	TO15 LL
Ethylbenzene		0.25		0.17	ug/m3	TO15 LL
o-Xylene		0.057		0.040	ppb v/v	TO15 LL
o-Xylene		0.25		0.17	ug/m3	TO15 LL
m-Xylene & p-Xylene		0.15		0.080	ppb v/v	TO15 LL
m-Xylene & p-Xylene		0.65		0.35	ug/m3	TO15 LL
Xylenes, Total		0.21		0.040	ppb v/v	TO15 LL
Xylenes, Total		0.90		0.17	ug/m3	TO15 LL

EXECUTIVE SUMMARY - Detections

Client: MACTEC Engineering and Consulting Inc

Job Number: 200-3569-1
Sdg Number: 200-3569

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
200-3569-7	**BLDG121-IA-1**					
Dichlorodifluoromethane		0.55		0.040	ppb v/v	TO15 LL
Dichlorodifluoromethane		2.7		0.20	ug/m3	TO15 LL
Trichlorofluoromethane		0.37		0.040	ppb v/v	TO15 LL
Trichlorofluoromethane		2.1		0.22	ug/m3	TO15 LL
n-Hexane		0.28	*	0.080	ppb v/v	TO15 LL
n-Hexane		0.99	*	0.28	ug/m3	TO15 LL
Cyclohexane		0.064		0.040	ppb v/v	TO15 LL
Cyclohexane		0.22		0.14	ug/m3	TO15 LL
Carbon tetrachloride		0.081		0.040	ppb v/v	TO15 LL
Carbon tetrachloride		0.51		0.25	ug/m3	TO15 LL
2,2,4-Trimethylpentane		0.086		0.040	ppb v/v	TO15 LL
2,2,4-Trimethylpentane		0.40		0.19	ug/m3	TO15 LL
Benzene		0.27		0.040	ppb v/v	TO15 LL
Benzene		0.85		0.13	ug/m3	TO15 LL
n-Heptane		0.15		0.040	ppb v/v	TO15 LL
n-Heptane		0.59		0.16	ug/m3	TO15 LL
Trichloroethene		0.093		0.040	ppb v/v	TO15 LL
Trichloroethene		0.50		0.21	ug/m3	TO15 LL
Toluene		0.43		0.040	ppb v/v	TO15 LL
Toluene		1.6		0.15	ug/m3	TO15 LL
Tetrachloroethene		0.068		0.040	ppb v/v	TO15 LL
Tetrachloroethene		0.46		0.27	ug/m3	TO15 LL
Ethylbenzene		0.084		0.040	ppb v/v	TO15 LL
Ethylbenzene		0.36		0.17	ug/m3	TO15 LL
o-Xylene		0.12		0.040	ppb v/v	TO15 LL
o-Xylene		0.52		0.17	ug/m3	TO15 LL
4-Ethyltoluene		0.15		0.040	ppb v/v	TO15 LL
4-Ethyltoluene		0.74		0.20	ug/m3	TO15 LL
1,3,5-Trimethylbenzene		0.11		0.080	ppb v/v	TO15 LL
1,3,5-Trimethylbenzene		0.53		0.39	ug/m3	TO15 LL
m-Xylene & p-Xylene		0.27		0.080	ppb v/v	TO15 LL
m-Xylene & p-Xylene		1.2		0.35	ug/m3	TO15 LL
Xylenes, Total		0.39		0.040	ppb v/v	TO15 LL
Xylenes, Total		1.7		0.17	ug/m3	TO15 LL

EXECUTIVE SUMMARY - Detections

Client: MACTEC Engineering and Consulting Inc

Job Number: 200-3569-1
Sdg Number: 200-3569

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
200-3569-8	**BLDG121-SS-1**				
Dichlorodifluoromethane		0.72	0.50	ppb v/v	TO-15
Dichlorodifluoromethane		3.6	2.5	ug/m3	TO-15
Trichlorofluoromethane		0.22	0.20	ppb v/v	TO-15
Trichlorofluoromethane		1.2	1.1	ug/m3	TO-15
n-Hexane		5.7	0.20	ppb v/v	TO-15
n-Hexane		20	0.70	ug/m3	TO-15
Cyclohexane		2.0	0.20	ppb v/v	TO-15
Cyclohexane		6.8	0.69	ug/m3	TO-15
Benzene		1.6	0.20	ppb v/v	TO-15
Benzene		5.0	0.64	ug/m3	TO-15
n-Heptane		5.5	0.20	ppb v/v	TO-15
n-Heptane		23	0.82	ug/m3	TO-15
Trichloroethene		0.55	0.20	ppb v/v	TO-15
Trichloroethene		3.0	1.1	ug/m3	TO-15
Toluene		4.1	0.20	ppb v/v	TO-15
Toluene		15	0.75	ug/m3	TO-15
Tetrachloroethene		1.1	0.20	ppb v/v	TO-15
Tetrachloroethene		7.4	1.4	ug/m3	TO-15
Ethylbenzene		0.80	0.20	ppb v/v	TO-15
Ethylbenzene		3.5	0.87	ug/m3	TO-15
m,p-Xylene		4.9	0.50	ppb v/v	TO-15
m,p-Xylene		21	2.2	ug/m3	TO-15
Xylene, o-		1.4	0.20	ppb v/v	TO-15
Xylene, o-		6.0	0.87	ug/m3	TO-15
Xylene (total)		6.3	0.20	ppb v/v	TO-15
Xylene (total)		27	0.87	ug/m3	TO-15
4-Ethyltoluene		0.39	0.20	ppb v/v	TO-15
4-Ethyltoluene		1.9	0.98	ug/m3	TO-15
1,3,5-Trimethylbenzene		1.2	0.20	ppb v/v	TO-15
1,3,5-Trimethylbenzene		5.7	0.98	ug/m3	TO-15

METHOD SUMMARY

Client: MACTEC Engineering and Consulting Inc

Job Number: 200-3569-1
Sdg Number: 200-3569

Description	Lab Location	Method	Preparation Method
Matrix: Air			
Volatile Organic Compounds in Ambient Air	TAL BUR	EPA TO-15	
Collection via Summa Canister	TAL BUR		Summa Canister
Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	TAL BUR	EPA TO15 LL	
Collection via Summa Canister	TAL BUR		Summa Canister

Lab References:

TAL BUR = TestAmerica Burlington

Method References:

EPA = US Environmental Protection Agency

METHOD / ANALYST SUMMARY

Client: MACTEC Engineering and Consulting Inc

Job Number: 200-3569-1
Sdg Number: 200-3569

Method	Analyst	Analyst ID
EPA TO-15	Valjevac, Sanel	SV
EPA TO15 LL	Desjardins, William R	WRD

Client: MACTEC Engineering and Consulting Inc

Job Number: 200-3569-1
Sdg Number: 200-3569

Client Sample ID: **BLDG121-SS-1**

Lab Sample ID: 200-3569-8
Client Matrix: Air

Date Sampled: 01/26/2011 1630
Date Received: 01/27/2011 1000

TO-15 Volatile Organic Compounds in Ambient Air

Method:	TO-15	Analysis Batch: 200-12887	Instrument ID: B.i
Preparation:	Summa Canister		Lab File ID: bjwz016.d
Dilution:	1.0		Initial Weight/Volume: 200 mL
Date Analyzed:	01/28/2011 2321		Final Weight/Volume: 200 mL
Date Prepared:	01/28/2011 2321		Injection Volume: 200 mL

Analyte	Result (ppb v/v)	Qualifier	RL
Dichlorodifluoromethane	0.72		0.50
1,2-Dichlorotetrafluoroethane	0.20	U	0.20
Vinyl chloride	0.20	U	0.20
1,3-Butadiene	0.20	U	0.20
Bromomethane	0.20	U	0.20
Chloroethane	0.50	U	0.50
Bromoethene(Vinyl Bromide)	0.20	U	0.20
Trichlorofluoromethane	0.22		0.20
1,1-Dichloroethene	0.20	U	0.20
3-Chloropropene	0.50	U	0.50
Methylene Chloride	0.50	U	0.50
Methyl tert-butyl ether	0.20	U	0.20
trans-1,2-Dichloroethene	0.20	U	0.20
n-Hexane	5.7		0.20
1,1-Dichloroethane	0.20	U	0.20
cis-1,2-Dichloroethene	0.20	U	0.20
1,2-Dichloroethene, Total	0.20	U	0.20
Chloroform	0.20	U	0.20
1,1,1-Trichloroethane	0.20	U	0.20
Cyclohexane	2.0		0.20
Carbon tetrachloride	0.20	U	0.20
2,2,4-Trimethylpentane	0.20	U	0.20
Benzene	1.6		0.20
1,2-Dichloroethane	0.20	U	0.20
n-Heptane	5.5		0.20
Trichloroethene	0.55		0.20
1,2-Dichloropropane	0.20	U	0.20
Bromodichloromethane	0.20	U	0.20
cis-1,3-Dichloropropene	0.20	U	0.20
Toluene	4.1		0.20
trans-1,3-Dichloropropene	0.20	U	0.20
1,1,2-Trichloroethane	0.20	U	0.20
Tetrachloroethene	1.1		0.20
Dibromochloromethane	0.20	U	0.20
1,2-Dibromoethane	0.20	U	0.20
Ethylbenzene	0.80		0.20
m,p-Xylene	4.9		0.50
Xylene, o-	1.4		0.20
Xylene (total)	6.3		0.20
Bromoform	0.20	U	0.20
1,1,2,2-Tetrachloroethane	0.20	U	0.20
4-Ethyltoluene	0.39		0.20
1,3,5-Trimethylbenzene	1.2		0.20

Analyte	Result (ug/m3)	Qualifier	RL
Dichlorodifluoromethane	3.6		2.5

Client: MACTEC Engineering and Consulting Inc

Job Number: 200-3569-1
Sdg Number: 200-3569

Client Sample ID: **BLDG121-SS-1**

Lab Sample ID: 200-3569-8
Client Matrix: Air

Date Sampled: 01/26/2011 1630
Date Received: 01/27/2011 1000

TO-15 Volatile Organic Compounds in Ambient Air

Method:	TO-15	Analysis Batch: 200-12887		Instrument ID:	B.i
Preparation:	Summa Canister			Lab File ID:	bjwz016.d
Dilution:	1.0			Initial Weight/Volume:	200 mL
Date Analyzed:	01/28/2011 2321			Final Weight/Volume:	200 mL
Date Prepared:	01/28/2011 2321			Injection Volume:	200 mL

Analyte	Result (ug/m3)	Qualifier	RL
1,2-Dichlorotetrafluoroethane	1.4	U	1.4
Vinyl chloride	0.51	U	0.51
1,3-Butadiene	0.44	U	0.44
Bromomethane	0.78	U	0.78
Chloroethane	1.3	U	1.3
Bromoethene(Vinyl Bromide)	0.87	U	0.87
Trichlorofluoromethane	1.2		1.1
1,1-Dichloroethene	0.79	U	0.79
3-Chloropropene	1.6	U	1.6
Methylene Chloride	1.7	U	1.7
Methyl tert-butyl ether	0.72	U	0.72
trans-1,2-Dichloroethene	0.79	U	0.79
n-Hexane	20		0.70
1,1-Dichloroethane	0.81	U	0.81
cis-1,2-Dichloroethene	0.79	U	0.79
1,2-Dichloroethene, Total	0.79	U	0.79
Chloroform	0.98	U	0.98
1,1,1-Trichloroethane	1.1	U	1.1
Cyclohexane	6.8		0.69
Carbon tetrachloride	1.3	U	1.3
2,2,4-Trimethylpentane	0.93	U	0.93
Benzene	5.0		0.64
1,2-Dichloroethane	0.81	U	0.81
n-Heptane	23		0.82
Trichloroethene	3.0		1.1
1,2-Dichloropropane	0.92	U	0.92
Bromodichloromethane	1.3	U	1.3
cis-1,3-Dichloropropene	0.91	U	0.91
Toluene	15		0.75
trans-1,3-Dichloropropene	0.91	U	0.91
1,1,2-Trichloroethane	1.1	U	1.1
Tetrachloroethene	7.4		1.4
Dibromochloromethane	1.7	U	1.7
1,2-Dibromoethane	1.5	U	1.5
Ethylbenzene	3.5		0.87
m,p-Xylene	21		2.2
Xylene, o-	6.0		0.87
Xylene (total)	27		0.87
Bromoform	2.1	U	2.1
1,1,2,2-Tetrachloroethane	1.4	U	1.4
4-Ethyltoluene	1.9		0.98
1,3,5-Trimethylbenzene	5.7		0.98

Client: MACTEC Engineering and Consulting Inc

Job Number: 200-3569-1
Sdg Number: 200-3569

Client Sample ID: **BLDG121-OA-1**

Lab Sample ID: 200-3569-6
Client Matrix: Air

Date Sampled: 01/26/2011 1620
Date Received: 01/27/2011 1000

TO15 LL Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Method:	TO15 LL	Analysis Batch: 200-13601	Instrument ID:	E.i	
Preparation:	Summa Canister		Lab File ID:	eehba007.d	
Dilution:	4.0		Initial Weight/Volume:	125	mL
Date Analyzed:	02/10/2011 1934		Final Weight/Volume:	500	mL
Date Prepared:	02/10/2011 1934		Injection Volume:	500	mL

Analyte	Result (ppb v/v)	Qualifier	RL
Dichlorodifluoromethane	0.52		0.040
1,2-Dichlorotetrafluoroethane	0.040	U *	0.040
Vinyl chloride	0.080	U *	0.080
1,3-Butadiene	0.080	U *	0.080
Bromomethane	0.080	U	0.080
Chloroethane	0.080	U	0.080
Bromoethene(Vinyl Bromide)	0.080	U	0.080
Trichlorofluoromethane	0.26		0.040
1,1-Dichloroethene	0.040	U	0.040
3-Chloropropene	0.080	U	0.080
Methylene Chloride	0.80	U ^ *	0.80
Methyl tert-butyl ether	0.040	U	0.040
trans-1,2-Dichloroethene	0.040	U	0.040
n-Hexane	0.24	*	0.080
1,1-Dichloroethane	0.040	U	0.040
cis-1,2-Dichloroethene	0.040	U	0.040
Chloroform	0.040	U	0.040
1,1,1-Trichloroethane	0.040	U	0.040
Cyclohexane	0.054		0.040
Carbon tetrachloride	0.066		0.040
2,2,4-Trimethylpentane	0.075		0.040
Benzene	0.27		0.040
1,2-Dichloroethane	0.080	U	0.080
n-Heptane	0.091		0.040
Trichloroethene	0.062		0.040
1,2-Dichloropropane	0.080	U	0.080
Bromodichloromethane	0.040	U	0.040
cis-1,3-Dichloropropene	0.040	U	0.040
Toluene	0.33		0.040
trans-1,3-Dichloropropene	0.040	U	0.040
1,1,2-Trichloroethane	0.040	U	0.040
Tetrachloroethene	0.040	U	0.040
Dibromochloromethane	0.040	U	0.040
1,2-Dibromoethane	0.040	U	0.040
Ethylbenzene	0.058		0.040
o-Xylene	0.057		0.040
Bromoform	0.040	U	0.040
1,1,2,2-Tetrachloroethane	0.040	U	0.040
4-Ethyltoluene	0.040	U	0.040
1,3,5-Trimethylbenzene	0.080	U	0.080
1,2-Dichloroethene, Total	0.040	U	0.040
m-Xylene & p-Xylene	0.15		0.080
Xylenes, Total	0.21		0.040

Analyte	Result (ug/m3)	Qualifier	RL
Dichlorodifluoromethane	2.6		0.20

Client: MACTEC Engineering and Consulting Inc

Job Number: 200-3569-1
Sdg Number: 200-3569

Client Sample ID: **BLDG121-OA-1**

Lab Sample ID: 200-3569-6
Client Matrix: Air

Date Sampled: 01/26/2011 1620
Date Received: 01/27/2011 1000

TO15 LL Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Method:	TO15 LL	Analysis Batch: 200-13601	Instrument ID:	E.i	
Preparation:	Summa Canister		Lab File ID:	eehba007.d	
Dilution:	4.0		Initial Weight/Volume:	125	mL
Date Analyzed:	02/10/2011 1934		Final Weight/Volume:	500	mL
Date Prepared:	02/10/2011 1934		Injection Volume:	500	mL

Analyte	Result (ug/m3)	Qualifier	RL
1,2-Dichlorotetrafluoroethane	0.28	U *	0.28
Vinyl chloride	0.20	U *	0.20
1,3-Butadiene	0.18	U *	0.18
Bromomethane	0.31	U	0.31
Chloroethane	0.21	U	0.21
Bromoethene(Vinyl Bromide)	0.35	U	0.35
Trichlorofluoromethane	1.5		0.22
1,1-Dichloroethene	0.16	U	0.16
3-Chloropropene	0.25	U	0.25
Methylene Chloride	2.8	U ^ *	2.8
Methyl tert-butyl ether	0.14	U	0.14
trans-1,2-Dichloroethene	0.16	U	0.16
n-Hexane	0.85	*	0.28
1,1-Dichloroethane	0.16	U	0.16
cis-1,2-Dichloroethene	0.16	U	0.16
Chloroform	0.20	U	0.20
1,1,1-Trichloroethane	0.22	U	0.22
Cyclohexane	0.19		0.14
Carbon tetrachloride	0.42		0.25
2,2,4-Trimethylpentane	0.35		0.19
Benzene	0.86		0.13
1,2-Dichloroethane	0.32	U	0.32
n-Heptane	0.37		0.16
Trichloroethene	0.34		0.21
1,2-Dichloropropane	0.37	U	0.37
Bromodichloromethane	0.27	U	0.27
cis-1,3-Dichloropropene	0.18	U	0.18
Toluene	1.3		0.15
trans-1,3-Dichloropropene	0.18	U	0.18
1,1,2-Trichloroethane	0.22	U	0.22
Tetrachloroethene	0.27	U	0.27
Dibromochloromethane	0.34	U	0.34
1,2-Dibromoethane	0.31	U	0.31
Ethylbenzene	0.25		0.17
o-Xylene	0.25		0.17
Bromoform	0.41	U	0.41
1,1,2,2-Tetrachloroethane	0.27	U	0.27
4-Ethyltoluene	0.20	U	0.20
1,3,5-Trimethylbenzene	0.39	U	0.39
1,2-Dichloroethene, Total	0.16	U	0.16
m-Xylene & p-Xylene	0.65		0.35
Xylenes, Total	0.90		0.17

Client: MACTEC Engineering and Consulting Inc

Job Number: 200-3569-1
Sdg Number: 200-3569

Client Sample ID: **BLDG121-IA-1**

Lab Sample ID: 200-3569-7
Client Matrix: Air

Date Sampled: 01/26/2011 1625
Date Received: 01/27/2011 1000

TO15 LL Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Method:	TO15 LL	Analysis Batch: 200-13601	Instrument ID:	E.i	
Preparation:	Summa Canister		Lab File ID:	eehba008.d	
Dilution:	4.0		Initial Weight/Volume:	125	mL
Date Analyzed:	02/10/2011 2029		Final Weight/Volume:	500	mL
Date Prepared:	02/10/2011 2029		Injection Volume:	500	mL

Analyte	Result (ppb v/v)	Qualifier	RL
Dichlorodifluoromethane	0.55		0.040
1,2-Dichlorotetrafluoroethane	0.040	U *	0.040
Vinyl chloride	0.080	U *	0.080
1,3-Butadiene	0.080	U *	0.080
Bromomethane	0.080	U	0.080
Chloroethane	0.080	U	0.080
Bromoethene(Vinyl Bromide)	0.080	U	0.080
Trichlorofluoromethane	0.37		0.040
1,1-Dichloroethene	0.040	U	0.040
3-Chloropropene	0.080	U	0.080
Methylene Chloride	0.80	U ^ *	0.80
Methyl tert-butyl ether	0.040	U	0.040
trans-1,2-Dichloroethene	0.040	U	0.040
n-Hexane	0.28	*	0.080
1,1-Dichloroethane	0.040	U	0.040
cis-1,2-Dichloroethene	0.040	U	0.040
Chloroform	0.040	U	0.040
1,1,1-Trichloroethane	0.040	U	0.040
Cyclohexane	0.064		0.040
Carbon tetrachloride	0.081		0.040
2,2,4-Trimethylpentane	0.086		0.040
Benzene	0.27		0.040
1,2-Dichloroethane	0.080	U	0.080
n-Heptane	0.15		0.040
Trichloroethene	0.093		0.040
1,2-Dichloropropane	0.080	U	0.080
Bromodichloromethane	0.040	U	0.040
cis-1,3-Dichloropropene	0.040	U	0.040
Toluene	0.43		0.040
trans-1,3-Dichloropropene	0.040	U	0.040
1,1,2-Trichloroethane	0.040	U	0.040
Tetrachloroethene	0.068		0.040
Dibromochloromethane	0.040	U	0.040
1,2-Dibromoethane	0.040	U	0.040
Ethylbenzene	0.084		0.040
o-Xylene	0.12		0.040
Bromoform	0.040	U	0.040
1,1,2,2-Tetrachloroethane	0.040	U	0.040
4-Ethyltoluene	0.15		0.040
1,3,5-Trimethylbenzene	0.11		0.080
1,2-Dichloroethene, Total	0.040	U	0.040
m-Xylene & p-Xylene	0.27		0.080
Xylenes, Total	0.39		0.040

Analyte	Result (ug/m3)	Qualifier	RL
Dichlorodifluoromethane	2.7		0.20

Client: MACTEC Engineering and Consulting Inc

Job Number: 200-3569-1
Sdg Number: 200-3569

Client Sample ID: **BLDG121-IA-1**

Lab Sample ID: 200-3569-7
Client Matrix: Air

Date Sampled: 01/26/2011 1625
Date Received: 01/27/2011 1000

TO15 LL Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Method:	TO15 LL	Analysis Batch: 200-13601	Instrument ID:	E.i	
Preparation:	Summa Canister		Lab File ID:	eehba008.d	
Dilution:	4.0		Initial Weight/Volume:	125	mL
Date Analyzed:	02/10/2011 2029		Final Weight/Volume:	500	mL
Date Prepared:	02/10/2011 2029		Injection Volume:	500	mL

Analyte	Result (ug/m3)	Qualifier	RL
1,2-Dichlorotetrafluoroethane	0.28	U *	0.28
Vinyl chloride	0.20	U *	0.20
1,3-Butadiene	0.18	U *	0.18
Bromomethane	0.31	U	0.31
Chloroethane	0.21	U	0.21
Bromoethene(Vinyl Bromide)	0.35	U	0.35
Trichlorofluoromethane	2.1		0.22
1,1-Dichloroethene	0.16	U	0.16
3-Chloropropene	0.25	U	0.25
Methylene Chloride	2.8	U ^ *	2.8
Methyl tert-butyl ether	0.14	U	0.14
trans-1,2-Dichloroethene	0.16	U	0.16
n-Hexane	0.99	*	0.28
1,1-Dichloroethane	0.16	U	0.16
cis-1,2-Dichloroethene	0.16	U	0.16
Chloroform	0.20	U	0.20
1,1,1-Trichloroethane	0.22	U	0.22
Cyclohexane	0.22		0.14
Carbon tetrachloride	0.51		0.25
2,2,4-Trimethylpentane	0.40		0.19
Benzene	0.85		0.13
1,2-Dichloroethane	0.32	U	0.32
n-Heptane	0.59		0.16
Trichloroethene	0.50		0.21
1,2-Dichloropropane	0.37	U	0.37
Bromodichloromethane	0.27	U	0.27
cis-1,3-Dichloropropene	0.18	U	0.18
Toluene	1.6		0.15
trans-1,3-Dichloropropene	0.18	U	0.18
1,1,2-Trichloroethane	0.22	U	0.22
Tetrachloroethene	0.46		0.27
Dibromochloromethane	0.34	U	0.34
1,2-Dibromoethane	0.31	U	0.31
Ethylbenzene	0.36		0.17
o-Xylene	0.52		0.17
Bromoform	0.41	U	0.41
1,1,2,2-Tetrachloroethane	0.27	U	0.27
4-Ethyltoluene	0.74		0.20
1,3,5-Trimethylbenzene	0.53		0.39
1,2-Dichloroethene, Total	0.16	U	0.16
m-Xylene & p-Xylene	1.2		0.35
Xylenes, Total	1.7		0.17