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November 4, 2010

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
Area B (Site #915184)
100 Lee Street
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 office building located at 100 Lee Street on 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 occupies approximately 47 acres near and adjacent to the Buffalo River and 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. 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), several smaller buildings, and surrounding asphalt parking area which totals approximately three acres and is owned by another party. 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 100 Lee Street office building is a two-story structure that previously was used by BCC for its administrative offices. The building has no basement. A portion of the first floor of the building is currently leased and used as a field office by Ontario Specialty Contracting, Inc. (OSC) for the ongoing demolition and remediation of the BCC site. The remainder of the office building is currently vacant.

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 100 Lee Street building. In February 2009, Mactec issued a Scope of Work document for the VI sampling effort which was submitted to and accepted by NYSDEC.

SCOPE OF WORK

The VI investigation was completed for the 100 Lee Street building in accordance with the February 2009 Scope of Work document and subsequent Pre-Design Investigation (PDI) Work Plan (Mactec, August 2009). The work included the following tasks:

- Collection of two subslab soil vapor samples, two indoor air samples, and one outdoor (ambient) air sample via the following procedure:

    1. Survey the sampling locations with a photoionization detector (PID) and complete an Indoor Air Quality Questionnaire and Building Inventory Form.

    2. Drill a hole through the floor slab at each of the two chosen sub-slab locations (one to the north and one to the south), insert a ¼-inch Teflon tubing into the hole, making sure that the tubing did not touch the bottom of the hole, and seal tubing to concrete with bees wax. One tubing volume was purged with a 60 cc syringe prior to connecting a SUMMA canister to the tubing for collection of the subslab soil vapor samples.

    3. Set up two indoor air SUMMA canisters (one to the north and one to the south) and one outdoor ambient air SUMMA canister (set in open courtyard).

    4. Open valves on all canisters at roughly the same time for 8-hour sample collection time.

    5. Check the sample flow valves periodically during the 8-hour time frame to ensure that the samples were being collected over the proper time interval.

    6. After the 8-hour sampling period had elapsed, pick up the canisters and seal the holes in the floor with a fast drying concrete patch (i.e. Quickcrete^{TM});

- Labeling and shipment of the SUMMA canister samples with chain-of-custody to Air Toxics, a NYSDOH ELAP certified laboratory. Samples were analyzed for VOCs by USEPA TO-15 analysis.

- Evaluation and validation of the laboratory data consistent with NY guidance and policy; and
- Preparation of a report that documents the results of the VI investigation.

The results of the investigation are provided below.

RESULTS

A copy of the completed Questionnaire and Building Inventory Form is provided as Attachment A. Locations of the VI samples are shown on Figure 1.

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. A complete copy of the laboratory report is provided as Attachment C. The analytical results are summarized in Table 1.

As shown in Table 1, various VOCs were detected in the two subslab vapor samples (SS-1S and SS-2N), two indoor air samples (IA-2S and IA-2N), duplicate indoor air sample (IA-2ND), and ambient air sample (AA). 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 guidance document (carbon tetrachloride, tetrachloroethene, 1,1,1-trichloroethane, and trichloroethene) were detected in any of the VI samples. This indicates that the low levels of chlorinated compounds detected previously in groundwater samples collected from monitoring well RFI-27, which is located on the southwestern side of Area B, have not affected the 100 Lee Street Building.
- The compound 1,4-dichlorobenzene (1,4-DCB) was detected in both indoor air samples (sample designations IA-1S and IA2N) at concentrations of 80 ug/m3 and 140 ug/m3, respectively. However, 1,4-DCB was not detected in the either of the subslab vapor samples. During the building inventory, it was noted that perfumed urinal cakes were stored in the first floor bathroom area. The label on the packaging indicated that the urinal cakes contain 1,4-DCB. Elevated PID readings were obtained at this location during the PID survey of the building, as documented on the Building Inventory form (Attachment B). These factors indicate that the source of the 1,4-DCB detected in the indoor air of the building is associated with the urinal cakes and is not related to vapor intrusion.

Based on these findings, Mactec does not believe there is an increased health risk to workers within the 100 Lee Street building as a result of soil vapor intrusion, and therefore no further investigation of the VI pathway is necessary at the 100 Lee Street 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.

Eric Weiler
Project Scientist

John M. Scrabis
Sr. Principal Engineer

CS:JMS/llg

w/atts

cc: R. Galloway (Honeywell)
J. Yensan (for SBD)

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TABLE

TABLE 1
DETECTED COMPOUNDS
FORMER BUFFALO COLOR - 100 LEE STREET
VAPOR INTRUSION SAMPLING EVENT - MARCH 2010

	Field Sample ID:	BLDG100-SS-1S	BLDG100-SS-2N	BLDG100-AA	BLDG100-IA-1S	BLDG100-IA-2N	BLDG100-IA-2ND
	Location:	BLDG100-1S	BLDG100-2N	BLDG100-1S	BLDG100-1S	BLDG100-2N	BLDG100-2N
	Sample Date:	3/17/2010	3/17/2010	3/17/2010	3/17/2010	3/17/2010	3/17/2010
Parameter Name	Units						
1,2,4-TRIMETHYLBENZENE	ug/m3	29	9.5	0.78 U	0.87	0.81 U	0.84 U
1,3,5-TRIMETHYLBENZENE	ug/m3	12	5.8	0.78 U	0.76 U	0.81 U	0.84 U
1,4-DICHLOROBENZENE	ug/m3	5.3 U	4.9 U	0.95 U	80	140	130
2-BUTANONE (METHYL ETHYL KETONE)	ug/m3	2.8	2.4 U	0.5	1.3	1.9	1.4
2-PROPANOL	ug/m3	8.6 U	8 U	1.9 U	30	20	21
4-ETHYLTOLUENE	ug/m3	17	5.8	0.78 U	0.76 U	0.81 U	0.84 U
ACETONE	ug/m3	33	9.1	3.4	11	13	11
BENZENE	ug/m3	16	13	0.63	1.6	1.4	1.4
CARBON DISULFIDE	ug/m3	13	27	2.5 U	2.4 U	2.6 U	2.7 U
CHLOROMETHANE	ug/m3	7.2 U	6.7 U	0.84 J	0.95 J	1 J	0.98 J
CYCLOHEXANE	ug/m3	250	65	0.54 U	0.53 U	0.56 U	0.59 U
ETHANOL	ug/m3	15	9.8	1.5	36	37	36
ETHYL BENZENE	ug/m3	13	5.2	0.69 U	0.78	0.85	0.83
FREON 11	ug/m3	10	7.6	1.1	20	18	18
FREON 12	ug/m3	4.3 U	4 U	2.2	8.7	7.7	8
HEPTANE	ug/m3	220	54	0.65 U	1	0.71	0.83
HEXANE	ug/m3	230	44	0.56 U	2.6	2.3	2.3
M,P-XYLENE	ug/m3	92	38	0.69 U	2.1	1.9	2.1
METHYLENE CHLORIDE	ug/m3	3 U	2.8 U	1.1 UJ	1.2 J	1.1 UJ	1.5 J
O-XYLENE	ug/m3	26	8.5	0.69 U	0.84	0.75	0.81
PROPYLBENZENE	ug/m3	5.6	4 U	0.78 U	0.76 U	0.81 U	0.84 U
TOLUENE	ug/m3	76	37	0.8	3.8	3.5	3.5

Notes:
U = undetected
J = estimated concentration

prepared by ESW
reviewed by
6/25/2010

FIGURE

DRAWN BY: ESW 7/7/2010

APPROVED BY:

Area-B

SOUTH PARK AVE.

150

121

BLDG100-AA

BLDG100-1S

100

BLDG100-2N

123

LEE STREET

50 0 50

SCALE: 1"= 50'

SOUTH BUFFALO DEVELOPMENT BUFFALO, NEW YORK Project No.: 3410090701	MACTEC Engineering & Consulting Inc. 600 North Bell Avenue, Suite 200 Pittsburgh, PA 15106	VAPOR INTRUSION SAMPLE LOCATIONS 100 LEE STREET FIGURE: 1

1

P:\PROJECTS\South Buffalo Development\3410090701\CADD\FINAL\Indoor Air Sampling Location Map.dwg Wed, 03 Nov 2010 - 2:25pm nelogattuda

ATTACHMENT A

INDOOR AIR QUALITY QUESTIONNAIRE & BUILDING INVENTORY FORM

OSR – 3

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 Chuck Staples Date/Time Prepared 3/17/10

Preparer's Affiliation MACTEC Phone No. 207-775-5401

Purpose of Investigation Pre Design Investigation

1. OCCUPANT:

Interviewed: Y / N - MACTEC/OSC/Honeywell office space

Last Name: _____ First Name: _____

Address: 100 Lee Street

County: _____ Office Building - currently houses construction office

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location 5 Age of Occupants _____
day time only

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: 2 story cement block office

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) Office space

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

Other characteristics:

Number of floors 2 Building age ≈ 1960 - 1970

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) Slab on grade

a. Above grade construction:	wood frame	(concrete)	stone	brick
b. Basement type:	full	crawlspace	slab	other None
~~**c. Basement floor:**~~	concrete	dirt	stone	other _____
~~**d. Basement floor:**~~	uncovered	covered	covered with _____	
e. Concrete floor: 1st floor	unsealed	sealed	sealed with tile	
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 – Utility Room (Depth to water ≈ 4' bgs)			
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)

Bathroom floor drains

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)

(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 Utility Room outside Access

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.

AC unit likely on roof - ducts in ceiling

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	None
1st Floor	Office, bathrooms
2nd Floor	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? _____

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? unknown

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? Bathroom

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: _____

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? Unknown

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: _____
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

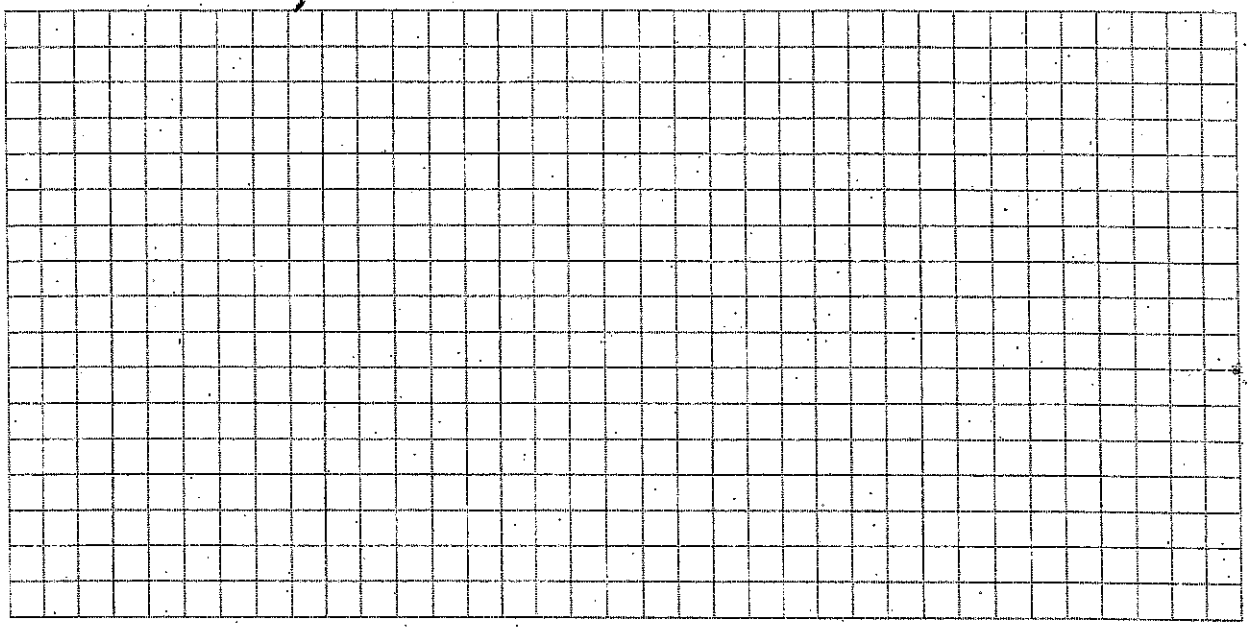
d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS

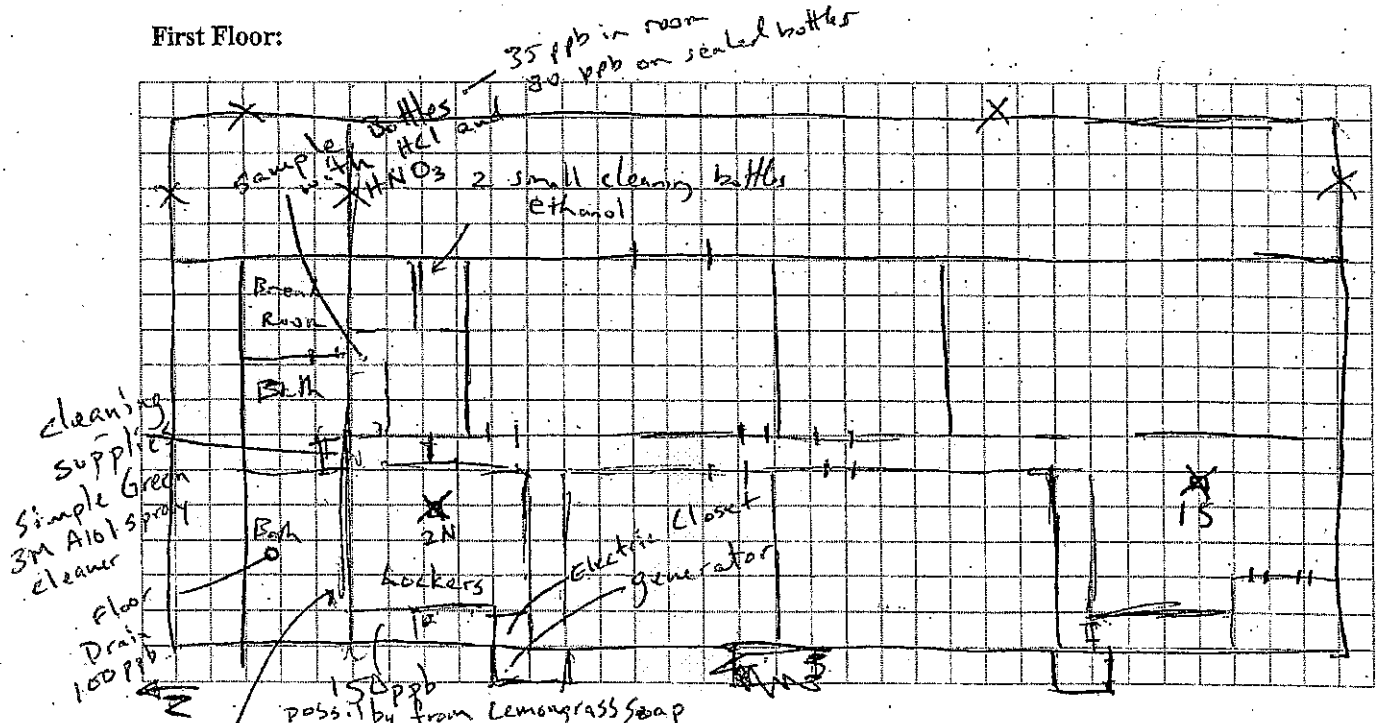
Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:

NO BASEMENT



First Floor:



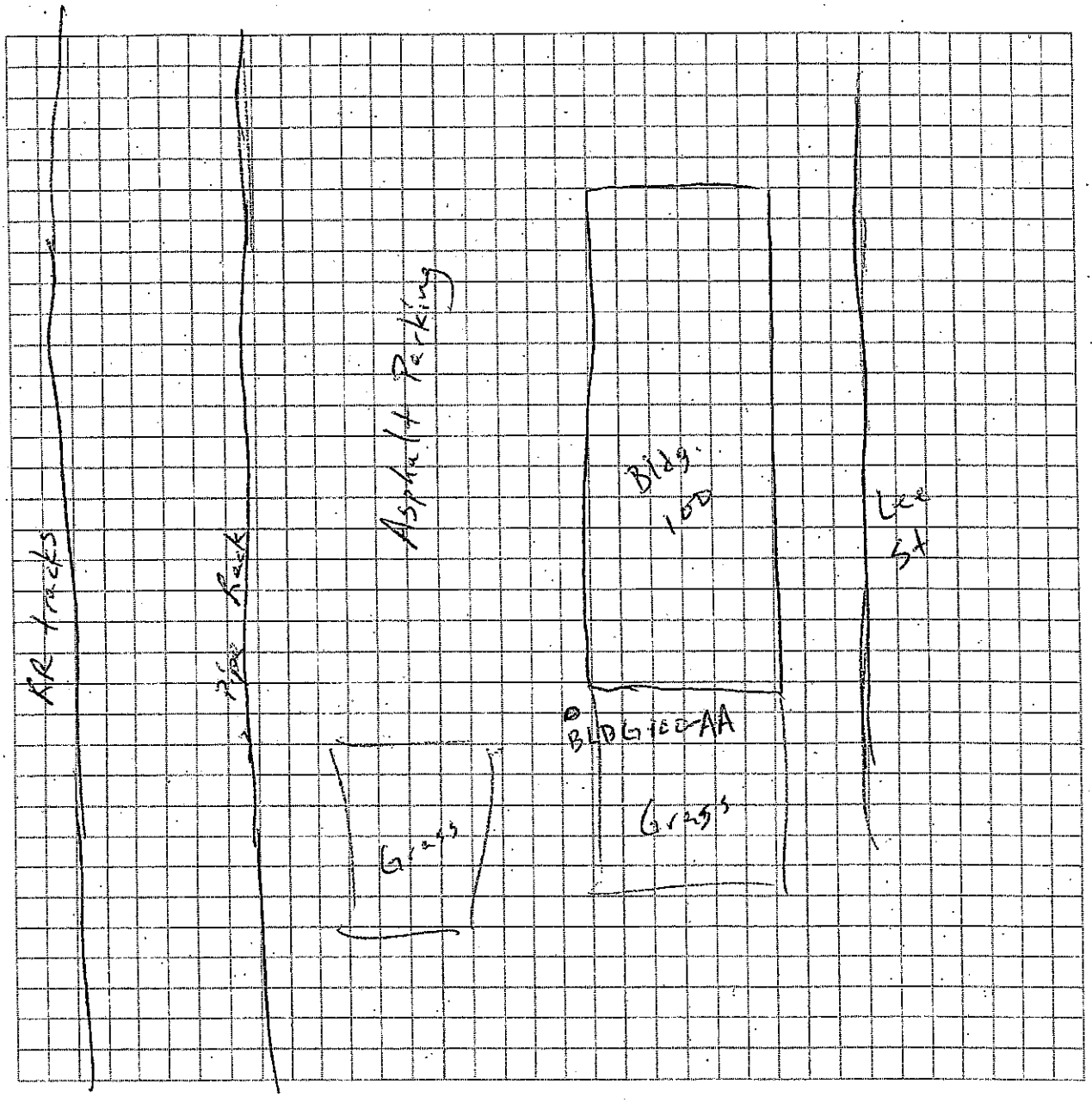
PID readings generally 30-40 ppb unless otherwise noted.

Closet with
Urinal Blocks - paradichlorobenzene

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: PPB MiniRae

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
Closet	3M Aldi Spray Cleaner	15oz		Butene	Bkg	
↓	Simple Clean				Bkg	
	Lysol				Bkg	
	Twinkle	15oz.		Propane, 2 Methyl, Silicones Mineral Oil Dimethyl	Bkg	
	Spitfire Cleaner				Bkg	
↓	Spray Nine			Dimethyl Benzel ~~Diethyl~~ Amonnia Chloride	Bkg	
Bathroom	Hand Soap				Bkg	
↓	Perfumed Urinal Blocks			Paradichlorobenzene	1300 ppb	
Lockers	Lemongrass Carpet Cleaner				150 ppb	
Break Room	Nader Research Nut & Bolt Release	15oz		Petroleum Distolets	390 ppb	
2nd Bathroom	Metered Air-555 Freshener			Acetone Isobutane/Propane Blend	140 ppb	
↓	Spray Nine			Same As Above	Bkg	
↓	Zep Commercial Glass Cleaner			Isoproply Alcohole	Bkg	
Electric Closet	3M Desk/Office Cleaner 573			Isopropyl Alcohol Isobutane Sodium Carbonate	Bkg	
	Quality Care Oven Cleaner			Sodium Hydroxide	Bkg	
	Fire Extinguisher				Bkg	
	35 Dust Math Treatment			Petroleum Distolates	Bkg	
	CC 505 Spot/Stain Remover			Hydrogen Peroxide	Bkg	
	Vinegar				Bkg	

* 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.

8 9

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: PPB Mini Rae

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
Electric closets	AMPHYL			Phenyl Phenol Dibromosalicylanilide	BKg	
	505 Pads					
	AJAX					
OFFice	TOP Glass Cleaner				Background 20 ppb	
2nd Floor	Vacant — ≈ 20 ppb background					

* 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 RECORD

Project Name: Buffalo Color Client: SBT Location ID: BLDG. 100

Project Number: 341009070 1 Collector: Chuck Staples Date: 3/17/10

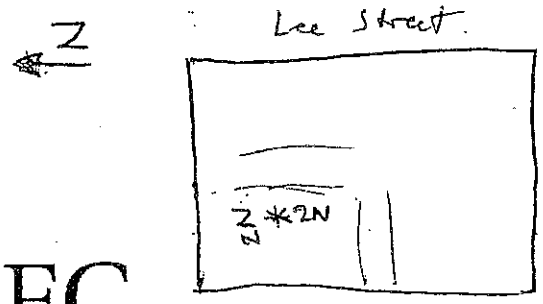
SUMMA Canister Record Information:

SUBSLAB SOIL VAPOR SAMPLE		INDOOR AIR - BASEMENT		INDOOR AIR - ~~FIRST FLOOR~~ Duplicate		ASSOCIATED AMBIENT	
Flow Regulator No:	FC00829	Flow Regulator No:	FC06795	Flow Regulator No:	FC00544	Flow Regulator No:	FC00652
Flow Rate (mL/min):	14.29	Flow Rate (mL/min):	14.29	Flow Rate (mL/min):	14.29 (8 hr)	Flow Rate (mL/min):	14.29
Canister Serial No:	13343	Canister Serial No:	5775	Canister Serial No:	R-18	Canister Serial No:	31426
Start Date/Time:	3/17/10 0855	Start Date/Time:	3/17/10 0855	Start Date/Time:	3/17/10 0955	Start Date/Time:	3/17/10 0900
Start Pressure ("Hg):	-30	Start Pressure ("Hg):	-30	Start Pressure ("Hg):	-30	Start Pressure ("Hg):	-30
Stop Date/Time:	3/17/10 1730	Stop Date/Time:	3/17/10 1730	Stop Date/Time:	3/17/10 1730	Stop Date/Time:	3/17/10 1705
Stop Pressure ("Hg):	-7	Stop Pressure ("Hg):	-8	Stop Pressure ("Hg):	-8.5	Stop Pressure ("Hg):	-7.5
Sample ID: BLDG100-SS-2N		Sample ID: BLDG100-IA-2N		Sample ID: BLDG100-IA-2MD		Sample ID: BLDG100-AA	

Other Sampling Information:

Finished Basement, Crawl Space, Unfinished Basement	Slab on Grade	Story/Level:	1st Floor	Story/Level:		Direction from Building:	SE
Floor Slab Thickness:	4"	Room:	North	Room:		Distance from Building:	10'
Potential Vapor Entry Points:	Floor Drain	Potential Vapor Entry Points:	Floor Drain	Potential Vapor Entry Points:		Distance from Roadway:	100'
Floor Surface:	T/L	Floor Surface:	T/L	Floor Surface:		Ground Surface:	Grass
Noticable Odor:	None	Noticable Odor:	None	Noticable Odor:	ESO	Noticable Odor:	None
PID Reading (ppb):	170	PID Reading (ppb):	170	PID Reading (ppb):		PID Reading (ppb):	0
Intake Depth/Height:	-4"	Intake Height:	3'	Intake Height:		Intake Hieght Above Ground Surface:	5'
Helium Test Conducted? Breakthrough %:	NO	Indoor Air Temp:		Indoor Air Temp:		Intake Tubing Used?	No

Comments/Location Sketch:



MACTEC

511 Congress Street, Portland, ME 04101

FIGURE 4-18
INDOOR AIR SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

INDOOR AIR SAMPLING RECORD

Project Name: Buffalo Color Client: SBD Location ID: BLDG-100

Project Number: 3416090701 Collector: Chuck Staples Date: 3/17/10

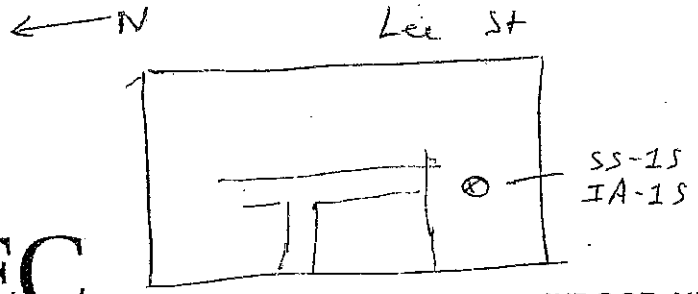
SUMMA Canister Record Information:

SUBSLAB SOIL VAPOR SAMPLE		INDOOR AIR - BASEMENT		INDOOR AIR - FIRST FLOOR		ASSOCIATED AMBIENT	
Flow Regulator No:	FC00255	Flow Regulator No:	FC00414	Flow Regulator No:		Flow Regulator No:	
Flow Rate (mL/min):	14.29	Flow Rate (mL/min):	14.29 (ml/min)	Flow Rate (mL/min):		Flow Rate (mL/min):	
Canister Serial No:	34194	Canister Serial No:	96109	Canister Serial No:	ESW	Canister Serial No:	
Start Date/Time:	3/17/10 0855	Start Date/Time:	3/17/10 0855	Start Date/Time:		Start Date/Time:	
Start Pressure ("Hg):	-30	Start Pressure ("Hg):	-30	Start Pressure ("Hg):		Start Pressure ("Hg):	
Stop Date/Time:	3/17/10 1720	Stop Date/Time:	3/17/10 1710	Stop Date/Time:		Stop Date/Time:	
Stop Pressure ("Hg):	-8.0	Stop Pressure ("Hg):	-5.5	Stop Pressure ("Hg):		Stop Pressure ("Hg):	
Sample ID:	BLDG100-SS-1S	Sample ID:	BLDG100-IA-1S	Sample ID:		Sample ID:	See other Sheet (BLDG100-AA)

Other Sampling Information:

Finished Basement, Crawl Space, Unfinished Basement	Slab on Grade	Story/Level:	1st	Story/Level:		Direction from Building:	
Floor Slab Thickness:	4"	Room:	South	Room:		Distance from Building:	
Potential Vapor Entry Points:	None	Potential Vapor Entry Points:	None	Potential Vapor Entry Points:		Distance from Roadway:	
Floor Surface:	Tile	Floor Surface:	Tile	Floor Surface:	ESW	Ground Surface:	
Noticable Odor:	None	Noticable Odor:	None	Noticable Odor:		Noticable Odor:	
PID Reading (ppb):	70	PID Reading (ppb):	70	PID Reading (ppb):		PID Reading (ppb):	
Intake Depth/Height:	-4"	Intake Height:	~~ESW~~ 3'	Intake Height:		Intake Hieght Above Ground Surface:	
Helium Test Conducted? Breakthrough %:	NO	Indoor Air Temp:	70°F	Indoor Air Temp:		Intake Tubing Used?	

Comments/Location Sketch:



MACTEC

511 Congress Street, Portland, ME 04101

FIGURE 4-18
INDOOR AIR SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

ATTACHMENT B

DATA VALIDATION SUMMARY REPORT

DATA VALIDATION SUMMARY REPORT
MARCH 2010 AIR SAMPLING
HONEYWELL – BUFFALO COLOR
BUFFALO, NEW YORK

1.0 INTRODUCTION

Sub-slab vapor and indoor air samples were collected at the Buffalo Color on March 17, 2010. Samples were analyzed by Air Toxics in Folsom, California. A listing of samples included in this investigation is presented in Table 1. Samples were analyzed for Volatile Organic Compounds (VOCs) by EPA Method TO-15. An additional selective ion monitoring (SIM) analysis was added to the indoor air samples to obtain lower detection limits for trichloroethene.

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, calculations, and data qualification.

Field duplicate results are summarized 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 reported detection limit
J = concentration is estimated
UJ = target analyte is not detected at the reported detection 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

Laboratory Control Sample

SDG 1003423B: The percent recoveries for chloromethane (69%) and methylene chloride (62%) are less than the QC limit of 70-130 percent. Sample results for chloromethane and methylene chloride were qualified estimated J/UJ.

Field Duplicates

A field duplicate sample was collected in association with sample BLDG100-1A-2N. Results for detected compounds are summarized on Table 2. Good agreement was observed for detected analytes with all relative percent difference ≤ 30.

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: Chris Ricardi, NRCC-EAC

Chris Ricardi

Date: May 4, 2010

Reviewed by: Bradley B. LaForest, NRCC-EAC

Bradley B LaF

Date: May 10, 2010

TABLE 1
SAMPLE SUMMARY
DATA VALIDATION SUMMARY REPORT
MARCH 2010 AIR SAMPLING
HONEYWELL – BUFFALO COLOR
BUFFALO, NEW YORK

SDG	Field Sample ID	Lab Sample ID	Sample Purpose	Date Sampled	Method
1003423A	BLDG100-SS-2N	1003423A-01A	REG	3/17/2010	TO-15
1003423A	BLDG100-SS-1S	1003423A-05A	REG	3/17/2010	TO-15
1003423B	BLDG100-IA-2N	1003423B-02A	REG	3/17/2010	TO-15
1003423B	BLDG100-IA-2ND	1003423B-03A	FD	3/17/2010	TO-15
1003423B	BLDG100-AA	1003423B-04A	REG	3/17/2010	TO-15
1003423B	BLDG100-IA-1S	1003423B-06A	REG	3/17/2010	TO-15

TABLE 1
SAMPLE SUMMARY
DATA VALIDATION SUMMARY REPORT
MARCH 2010 AIR SAMPLING
HONEYWELL – BUFFALO COLOR
BUFFALO, NEW YORK

SDG	Field Sample ID	Lab Sample ID	Sample Purpose	Date Sampled	Method
1003423A	BLDG100-SS-2N	1003423A-01A	REG	3/17/2010	TO-15
1003423A	BLDG100-SS-1S	1003423A-05A	REG	3/17/2010	TO-15
1003423B	BLDG100-IA-2N	1003423B-02A	REG	3/17/2010	TO-15
1003423B	BLDG100-IA-2ND	1003423B-03A	FD	3/17/2010	TO-15
1003423B	BLDG100-AA	1003423B-04A	REG	3/17/2010	TO-15
1003423B	BLDG100-IA-1S	1003423B-06A	REG	3/17/2010	TO-15

TABLE 2
FIELD DUPLIATE RESULT SUMMARY
DATA VALIDATION SUMMARY REPORT
MARCH 2010 AIR SAMPLING
HONEYWELL – BUFFALO COLOR
BUFFALO, NEW YORK

Field Sample ID	Date Sampled	Parameter Name	sample		dup		RPD	Lab Units
BLDG100-IA-2N	3/17/2010	1,1,1-TRICHLOROETHANE	0.89	U	0.93	U		ug/m3
BLDG100-IA-2N	3/17/2010	1,1,2,2-TETRACHLOROETHANE	1.1	U	1.2	U		ug/m3
BLDG100-IA-2N	3/17/2010	1,1,2-TRICHLOROETHANE	0.89	U	0.93	U		ug/m3
BLDG100-IA-2N	3/17/2010	1,1-DICHLOROETHANE	0.66	U	0.69	U		ug/m3
BLDG100-IA-2N	3/17/2010	1,1-DICHLOROETHENE	0.65	U	0.68	U		ug/m3
BLDG100-IA-2N	3/17/2010	1,2,4-TRICHLOROBENZENE	6.1	U	6.3	U		ug/m3
BLDG100-IA-2N	3/17/2010	1,2,4-TRIMETHYLBENZENE	0.81	U	0.84	U		ug/m3
BLDG100-IA-2N	3/17/2010	1,2-DIBROMOETHANE (EDB)	1.3	U	1.3	U		ug/m3
BLDG100-IA-2N	3/17/2010	1,2-DICHLOROBENZENE	0.99	U	1	U		ug/m3
BLDG100-IA-2N	3/17/2010	1,2-DICHLOROETHANE	0.66	U	0.69	U		ug/m3
BLDG100-IA-2N	3/17/2010	1,2-DICHLOROPROPANE	0.76	U	0.79	U		ug/m3
BLDG100-IA-2N	3/17/2010	1,3,5-TRIMETHYLBENZENE	0.81	U	0.84	U		ug/m3
BLDG100-IA-2N	3/17/2010	1,3-BUTADIENE	0.36	U	0.38	U		ug/m3
BLDG100-IA-2N	3/17/2010	1,3-DICHLOROBENZENE	0.99	U	1	U		ug/m3
BLDG100-IA-2N	3/17/2010	1,4-DICHLOROBENZENE	140		130		7	ug/m3
BLDG100-IA-2N	3/17/2010	1,4-DIOXANE	0.59	U	0.62	U		ug/m3
BLDG100-IA-2N	3/17/2010	2,2,4-TRIMETHYLPENTANE	3.8	U	4	U		ug/m3
BLDG100-IA-2N	3/17/2010	2-BUTANONE (METHYL ETHYL KET	1.9		1.4		30	ug/m3
BLDG100-IA-2N	3/17/2010	2-HEXANONE	3.4	U	3.5	U		ug/m3
BLDG100-IA-2N	3/17/2010	2-PROPANOL	20		21		-5	ug/m3
BLDG100-IA-2N	3/17/2010	3-CHLOROPROPENE	2.6	U	2.7	U		ug/m3
BLDG100-IA-2N	3/17/2010	4-BROMOFLUOROBENZENE	67		68		-1	ug/m3
BLDG100-IA-2N	3/17/2010	4-BROMOFLUOROBENZENE	72		72		0	ug/m3
BLDG100-IA-2N	3/17/2010	4-ETHYLTOLUENE	0.81	U	0.84	U		ug/m3
BLDG100-IA-2N	3/17/2010	4-METHYL-2-PENTANONE	0.67	U	0.7	U		ug/m3
BLDG100-IA-2N	3/17/2010	ACETONE	13		11		17	ug/m3
BLDG100-IA-2N	3/17/2010	ALPHA-CHLOROTOLUENE	0.85	U	0.88	U		ug/m3
BLDG100-IA-2N	3/17/2010	BENZENE	1.4		1.4		0	ug/m3
BLDG100-IA-2N	3/17/2010	BROMODICHLOROMETHANE	1.1	U	1.1	U		ug/m3
BLDG100-IA-2N	3/17/2010	BROMOFORM	1.7	U	1.8	U		ug/m3
BLDG100-IA-2N	3/17/2010	BROMOMETHANE	0.64	U	0.66	U		ug/m3
BLDG100-IA-2N	3/17/2010	CARBON DISULFIDE	2.6	U	2.7	U		ug/m3
BLDG100-IA-2N	3/17/2010	CARBON TETRACHLORIDE	1	U	1.1	U		ug/m3
BLDG100-IA-2N	3/17/2010	CHLOROBENZENE	0.76	U	0.79	U		ug/m3
BLDG100-IA-2N	3/17/2010	CHLOROETHANE	0.43	U	0.45	U		ug/m3
BLDG100-IA-2N	3/17/2010	CHLOROFORM	0.8	U	0.83	U		ug/m3
BLDG100-IA-2N	3/17/2010	CHLOROMETHANE	1	J	0.98	J	2	ug/m3
BLDG100-IA-2N	3/17/2010	CIS-1,2-DICHLOROETHENE	0.65	U	0.68	U		ug/m3
BLDG100-IA-2N	3/17/2010	CIS-1,3-DICHLOROPROPENE	0.74		0.78	U		ug/m3
BLDG100-IA-2N	3/17/2010	CUMENE	0.81	U	0.84	U		ug/m3
BLDG100-IA-2N	3/17/2010	CYCLOHEXANE	0.56	U	0.59	U		ug/m3
BLDG100-IA-2N	3/17/2010	DIBROMOCHLOROMETHANE	1.4	U	1.4	U		ug/m3

TABLE 2
FIELD DUPLIATE RESULT SUMMARY
DATA VALIDATION SUMMARY REPORT
MARCH 2010 AIR SAMPLING
HONEYWELL – BUFFALO COLOR
BUFFALO, NEW YORK

Field Sample ID	Date Sampled	Parameter Name	sample		dup		RPD	Lab Units
BLDG100-IA-2N	3/17/2010	ETHANOL	37		36		3	ug/m3
BLDG100-IA-2N	3/17/2010	ETHYL BENZENE	0.85		0.83		2	ug/m3
BLDG100-IA-2N	3/17/2010	FREON 11	18		18		0	ug/m3
BLDG100-IA-2N	3/17/2010	FREON 113	1.2	U	1.3	U		ug/m3
BLDG100-IA-2N	3/17/2010	FREON 114	1.1	U	1.2	U		ug/m3
BLDG100-IA-2N	3/17/2010	FREON 12	7.7		8		-4	ug/m3
BLDG100-IA-2N	3/17/2010	HEPTANE	0.71		0.83		-16	ug/m3
BLDG100-IA-2N	3/17/2010	HEXACHLOROBUTADIENE	8.7	U	9.1	U		ug/m3
BLDG100-IA-2N	3/17/2010	HEXANE	2.3		2.3		0	ug/m3
BLDG100-IA-2N	3/17/2010	M,P-XYLENE	1.9		2.1		-10	ug/m3
BLDG100-IA-2N	3/17/2010	METHYL TERT-BUTYL ETHER	0.59	U	0.62	U		ug/m3
BLDG100-IA-2N	3/17/2010	METHYLENE CHLORIDE	1.1	UJ	1.5	J	-31	ug/m3
BLDG100-IA-2N	3/17/2010	O-XYLENE	0.75		0.81		-8	ug/m3
BLDG100-IA-2N	3/17/2010	PROPYLBENZENE	0.81	U	0.84	U		ug/m3
BLDG100-IA-2N	3/17/2010	STYRENE	0.7	U	0.73	U		ug/m3
BLDG100-IA-2N	3/17/2010	TETRACHLOROETHENE	1.1	U	1.2	U		ug/m3
BLDG100-IA-2N	3/17/2010	TETRAHYDROFURAN	2.4	U	2.5	U		ug/m3
BLDG100-IA-2N	3/17/2010	TOLUENE	3.5		3.5		0	ug/m3
BLDG100-IA-2N	3/17/2010	TRANS-1,2-DICHLOROETHENE	0.65	U	0.68	U		ug/m3
BLDG100-IA-2N	3/17/2010	TRANS-1,3-DICHLOROPROPENE	0.74	U	0.78	U		ug/m3
BLDG100-IA-2N	3/17/2010	TRICHLOROETHENE	0.18	U	0.18	U		ug/m3
BLDG100-IA-2N	3/17/2010	VINYL CHLORIDE	0.42	U	0.44	U		ug/m3

TABLE 3
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
MARCH 2010 AIR SAMPLING
HONEYWELL – BUFFALO COLOR
BUFFALO, NEW YORK

		Field Sample ID:	**BLDG100-SS-1S**	**BLDG100-SS-2N**
		Location:	**BLDG100-1S**	**BLDG100-2N**
		Sample Date:	**3/17/2010**	**3/17/2010**
Units	**Method**	**Parameter Name**		
ug/m3	TO-15	1,1,1-TRICHLOROETHANE	4.8 U	4.4 U
ug/m3	TO-15	1,1,2,2-TETRACHLOROETHANE	6 U	5.6 U
ug/m3	TO-15	1,1,2-TRICHLOROETHANE	4.8 U	4.4 U
ug/m3	TO-15	1,1-DICHLOROETHANE	3.5 U	3.3 U
ug/m3	TO-15	1,1-DICHLOROETHENE	3.5 U	3.2 U
ug/m3	TO-15	1,2,4-TRICHLOROBENZENE	26 U	24 U
ug/m3	TO-15	1,2,4-TRIMETHYLBENZENE	29	9.5
ug/m3	TO-15	1,2-DIBROMOETHANE (EDB)	6.7 U	6.2 U
ug/m3	TO-15	1,2-DICHLOROBENZENE	5.3 U	4.9 U
ug/m3	TO-15	1,2-DICHLOROETHANE	3.5 U	3.3 U
ug/m3	TO-15	1,2-DICHLOROPROPANE	4 U	3.7 U
ug/m3	TO-15	1,3,5-TRIMETHYLBENZENE	12	5.8
ug/m3	TO-15	1,3-BUTADIENE	1.9 U	1.8 U
ug/m3	TO-15	1,3-DICHLOROBENZENE	5.3 U	4.9 U
ug/m3	TO-15	1,4-DICHLOROBENZENE	5.3 U	4.9 U
ug/m3	TO-15	1,4-DIOXANE	13 U	12 U
ug/m3	TO-15	2,2,4-TRIMETHYLPENTANE	4.1 U	3.8 U
ug/m3	TO-15	2-BUTANONE (METHYL ETHYL KETONE)	2.8	2.4 U
ug/m3	TO-15	2-HEXANONE	14 U	13 U
ug/m3	TO-15	2-PROPANOL	8.6 U	8 U
ug/m3	TO-15	3-CHLOROPROPENE	11 U	10 U
ug/m3	TO-15	4-ETHYLTOLUENE	17	5.8
ug/m3	TO-15	4-METHYL-2-PENTANONE	3.6 U	3.3 U
ug/m3	TO-15	ACETONE	33	9.1
ug/m3	TO-15	ALPHA-CHLOROTOLUENE	4.5 U	4.2 U
ug/m3	TO-15	BENZENE	16	13
ug/m3	TO-15	BROMODICHLOROMETHANE	5.9 U	5.4 U
ug/m3	TO-15	BROMOFORM	9 U	8.4 U
ug/m3	TO-15	BROMOMETHANE	3.4 U	3.1 U
ug/m3	TO-15	CARBON DISULFIDE	13	27
ug/m3	TO-15	CARBON TETRACHLORIDE	5.5 U	5.1 U
ug/m3	TO-15	CHLOROBENZENE	4 U	3.7 U
ug/m3	TO-15	CHLOROETHANE	2.3 U	2.1 U
ug/m3	TO-15	CHLOROFORM	4.3 U	4 U
ug/m3	TO-15	CHLOROMETHANE	7.2 U	6.7 U
ug/m3	TO-15	CIS-1,2-DICHLOROETHENE	3.5 U	3.2 U
ug/m3	TO-15	CIS-1,3-DICHLOROPROPENE	4 U	3.7 U
ug/m3	TO-15	CUMENE	4.3 U	4 U
ug/m3	TO-15	CYCLOHEXANE	250	65

prepared by WCG
reviewed by CSR
5/5/10

TABLE 3
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
MARCH 2010 AIR SAMPLING
HONEYWELL – BUFFALO COLOR
BUFFALO, NEW YORK

		Field Sample ID:	BLDG100-SS-1S	BLDG100-SS-2N
		Location:	BLDG100-1S	BLDG100-2N
		Sample Date:	3/17/2010	3/17/2010
Units	**Method**	**Parameter Name**		
ug/m3	TO-15	DIBROMOCHLOROMETHANE	7.4 U	6.9 U
ug/m3	TO-15	ETHANOL	15	9.8
ug/m3	TO-15	ETHYL BENZENE	13	5.2
ug/m3	TO-15	FREON 11	10	7.6
ug/m3	TO-15	FREON 113	6.7 U	6.2 U
ug/m3	TO-15	FREON 114	6.1 U	5.7 U
ug/m3	TO-15	FREON 12	4.3 U	4 U
ug/m3	TO-15	HEPTANE	220	54
ug/m3	TO-15	HEXACHLOROBUTADIENE	37 U	34 U
ug/m3	TO-15	HEXANE	230	44
ug/m3	TO-15	M,P-XYLENE	92	38
ug/m3	TO-15	METHYL TERT-BUTYL ETHER	3.2 U	2.9 U
ug/m3	TO-15	METHYLENE CHLORIDE	3 U	2.8 U
ug/m3	TO-15	O-XYLENE	26	8.5
ug/m3	TO-15	PROPYLBENZENE	5.6	4 U
ug/m3	TO-15	STYRENE	3.7 U	3.4 U
ug/m3	TO-15	TETRACHLOROETHENE	5.9 U	5.5 U
ug/m3	TO-15	TETRAHYDROFURAN	2.6 U	2.4 U
ug/m3	TO-15	TOLUENE	76	37
ug/m3	TO-15	TRANS-1,2-DICHLOROETHENE	3.5 U	3.2 U
ug/m3	TO-15	TRANS-1,3-DICHLOROPROPENE	4 U	3.7 U
ug/m3	TO-15	TRICHLOROETHENE	4.7 U	4.4 U
ug/m3	TO-15	VINYL CHLORIDE	2.2 U	2.1 U

Notes:
U = undetected
J = estimated concentration

prepared by WCG
reviewed by CSR
5/5/10

TABLE 3
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
MARCH 2010 AIR SAMPLING
HONEYWELL – BUFFALO COLOR
BUFFALO, NEW YORK

		Field Sample ID:	**BLDG100-AA**	**BLDG100-IA-1S**
		Location:	**BLDG100-1S**	**BLDG100-1S**
		Sample Date:	**3/17/2010**	**3/17/2010**
Units	**Method**	**Parameter Name**		
ug/m3	TO-15	1,1,1-TRICHLOROETHANE	0.86 U	0.84 U
ug/m3	TO-15	1,1,2,2-TETRACHLOROETHANE	1.1 U	1.1 U
ug/m3	TO-15	1,1,2-TRICHLOROETHANE	0.86 U	0.84 U
ug/m3	TO-15	1,1-DICHLOROETHANE	0.64 U	0.63 U
ug/m3	TO-15	1,1-DICHLOROETHENE	0.63 U	0.61 U
ug/m3	TO-15	1,2,4-TRICHLOROBENZENE	5.9 U	5.8 U
ug/m3	TO-15	1,2,4-TRIMETHYLBENZENE	0.78 U	0.87
ug/m3	TO-15	1,2-DIBROMOETHANE (EDB)	1.2 U	1.2 U
ug/m3	TO-15	1,2-DICHLOROBENZENE	0.95 U	0.93 U
ug/m3	TO-15	1,2-DICHLOROETHANE	0.64 U	0.63 U
ug/m3	TO-15	1,2-DICHLOROPROPANE	0.73 U	0.72 U
ug/m3	TO-15	1,3,5-TRIMETHYLBENZENE	0.78 U	0.76 U
ug/m3	TO-15	1,3-BUTADIENE	0.35 U	0.34 U
ug/m3	TO-15	1,3-DICHLOROBENZENE	0.95 U	0.93 U
ug/m3	TO-15	1,4-DICHLOROBENZENE	0.95 U	80
ug/m3	TO-15	1,4-DIOXANE	0.57 U	0.56 U
ug/m3	TO-15	2,2,4-TRIMETHYLPENTANE	3.7 U	3.6 U
ug/m3	TO-15	2-BUTANONE (METHYL ETHYL KETONE)	0.5	1.3
ug/m3	TO-15	2-HEXANONE	3.2 U	3.2 U
ug/m3	TO-15	2-PROPANOL	1.9 U	30
ug/m3	TO-15	3-CHLOROPROPENE	2.5 U	2.4 U
ug/m3	TO-15	4-ETHYLTOLUENE	0.78 U	0.76 U
ug/m3	TO-15	4-METHYL-2-PENTANONE	0.65 U	0.63 U
ug/m3	TO-15	ACETONE	3.4	11
ug/m3	TO-15	ALPHA-CHLOROTOLUENE	0.82 U	0.8 U
ug/m3	TO-15	BENZENE	0.63	1.6
ug/m3	TO-15	BROMODICHLOROMETHANE	1 U	1 U
ug/m3	TO-15	BROMOFORM	1.6 U	1.6 U
ug/m3	TO-15	BROMOMETHANE	0.61 U	0.6 U
ug/m3	TO-15	CARBON DISULFIDE	2.5 U	2.4 U
ug/m3	TO-15	CARBON TETRACHLORIDE	0.99 U	0.98 U
ug/m3	TO-15	CHLOROBENZENE	0.73 U	0.71 U
ug/m3	TO-15	CHLOROETHANE	0.42 U	0.41 U
ug/m3	TO-15	CHLOROFORM	0.77 U	0.76 U
ug/m3	TO-15	CHLOROMETHANE	0.84 J	0.95 J
ug/m3	TO-15	CIS-1,2-DICHLOROETHENE	0.63 U	0.61 U
ug/m3	TO-15	CIS-1,3-DICHLOROPROPENE	0.72 U	0.7 U
ug/m3	TO-15	CUMENE	0.78 U	0.76 U

prepared by WCG
reviewed by CSR
5/5/10

TABLE 3
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
MARCH 2010 AIR SAMPLING
HONEYWELL – BUFFALO COLOR
BUFFALO, NEW YORK

			Field Sample ID:	BLDG100-AA	BLDG100-IA-1S
			Location:	BLDG100-1S	BLDG100-1S
			Sample Date:	3/17/2010	3/17/2010
Units	**Method**	**Parameter Name**			
ug/m3	TO-15	CYCLOHEXANE		0.54 U	0.53 U
ug/m3	TO-15	DIBROMOCHLOROMETHANE		1.3 U	1.3 U
ug/m3	TO-15	ETHANOL		1.5	36
ug/m3	TO-15	ETHYL BENZENE		0.69 U	0.78
ug/m3	TO-15	FREON 11		1.1	20
ug/m3	TO-15	FREON 113		1.2 U	1.2 U
ug/m3	TO-15	FREON 114		1.1 U	1.1 U
ug/m3	TO-15	FREON 12		2.2	8.7
ug/m3	TO-15	HEPTANE		0.65 U	1
ug/m3	TO-15	HEXACHLOROBUTADIENE		8.4 U	8.3 U
ug/m3	TO-15	HEXANE		0.56 U	2.6
ug/m3	TO-15	M,P-XYLENE		0.69 U	2.1
ug/m3	TO-15	METHYL TERT-BUTYL ETHER		0.57 U	0.56 U
ug/m3	TO-15	METHYLENE CHLORIDE		1.1 UJ	1.2 J
ug/m3	TO-15	O-XYLENE		0.69 U	0.84
ug/m3	TO-15	PROPYLBENZENE		0.78 U	0.76 U
ug/m3	TO-15	STYRENE		0.67 U	0.66 U
ug/m3	TO-15	TETRACHLOROETHENE		1.1 U	1 U
ug/m3	TO-15	TETRAHYDROFURAN		2.3 U	2.3 U
ug/m3	TO-15	TOLUENE		0.8	3.8
ug/m3	TO-15	TRANS-1,2-DICHLOROETHENE		0.63 U	0.61 U
ug/m3	TO-15	TRANS-1,3-DICHLOROPROPENE		0.72 U	0.7 U
ug/m3	TO-15	TRICHLOROETHENE		0.17 U	0.17 U
ug/m3	TO-15	VINYL CHLORIDE		0.4 U	0.4 U

Notes:
U = undetected
J = estimated concentration

prepared by WCG
reviewed by CSR
5/5/10

TABLE 3
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
MARCH 2010 AIR SAMPLING
HONEYWELL – BUFFALO COLOR
BUFFALO, NEW YORK

		Field Sample ID:	BLDG100-IA-2N	BLDG100-IA-2ND
		Location:	BLDG100-2N	BLDG100-2N
		Sample Date:	3/17/2010	3/17/2010
Units	**Method**	**Parameter Name**		
ug/m3	TO-15	1,1,1-TRICHLOROETHANE	0.89 U	0.93 U
ug/m3	TO-15	1,1,2,2-TETRACHLOROETHANE	1.1 U	1.2 U
ug/m3	TO-15	1,1,2-TRICHLOROETHANE	0.89 U	0.93 U
ug/m3	TO-15	1,1-DICHLOROETHANE	0.66 U	0.69 U
ug/m3	TO-15	1,1-DICHLOROETHENE	0.65 U	0.68 U
ug/m3	TO-15	1,2,4-TRICHLOROBENZENE	6.1 U	6.3 U
ug/m3	TO-15	1,2,4-TRIMETHYLBENZENE	0.81 U	0.84 U
ug/m3	TO-15	1,2-DIBROMOETHANE (EDB)	1.3 U	1.3 U
ug/m3	TO-15	1,2-DICHLOROBENZENE	0.99 U	1 U
ug/m3	TO-15	1,2-DICHLOROETHANE	0.66 U	0.69 U
ug/m3	TO-15	1,2-DICHLOROPROPANE	0.76 U	0.79 U
ug/m3	TO-15	1,3,5-TRIMETHYLBENZENE	0.81 U	0.84 U
ug/m3	TO-15	1,3-BUTADIENE	0.36 U	0.38 U
ug/m3	TO-15	1,3-DICHLOROBENZENE	0.99 U	1 U
ug/m3	TO-15	1,4-DICHLOROBENZENE	140	130
ug/m3	TO-15	1,4-DIOXANE	0.59 U	0.62 U
ug/m3	TO-15	2,2,4-TRIMETHYLPENTANE	3.8 U	4 U
ug/m3	TO-15	2-BUTANONE (METHYL ETHYL KETONE)	1.9	1.4
ug/m3	TO-15	2-HEXANONE	3.4 U	3.5 U
ug/m3	TO-15	2-PROPANOL	20	21
ug/m3	TO-15	3-CHLOROPROPENE	2.6 U	2.7 U
ug/m3	TO-15	4-ETHYLTOLUENE	0.81 U	0.84 U
ug/m3	TO-15	4-METHYL-2-PENTANONE	0.67 U	0.7 U
ug/m3	TO-15	ACETONE	13	11
ug/m3	TO-15	ALPHA-CHLOROTOLUENE	0.85 U	0.88 U
ug/m3	TO-15	BENZENE	1.4	1.4
ug/m3	TO-15	BROMODICHLOROMETHANE	1.1 U	1.1 U
ug/m3	TO-15	BROMOFORM	1.7 U	1.8 U
ug/m3	TO-15	BROMOMETHANE	0.64 U	0.66 U
ug/m3	TO-15	CARBON DISULFIDE	2.6 U	2.7 U
ug/m3	TO-15	CARBON TETRACHLORIDE	1 U	1.1 U
ug/m3	TO-15	CHLOROBENZENE	0.76 U	0.79 U
ug/m3	TO-15	CHLOROETHANE	0.43 U	0.45 U
ug/m3	TO-15	CHLOROFORM	0.8 U	0.83 U
ug/m3	TO-15	CHLOROMETHANE	1 J	0.98 J
ug/m3	TO-15	CIS-1,2-DICHLOROETHENE	0.65 U	0.68 U
ug/m3	TO-15	CIS-1,3-DICHLOROPROPENE	0.74 U	0.78 U
ug/m3	TO-15	CUMENE	0.81 U	0.84 U

prepared by WCG
reviewed by CSR
5/5/10

TABLE 3
FINAL RESULTS
DATA VALIDATION SUMMARY REPORT
MARCH 2010 AIR SAMPLING
HONEYWELL – BUFFALO COLOR
BUFFALO, NEW YORK

		Field Sample ID:	**BLDG100-IA-2N**	**BLDG100-IA-2ND**
		Location:	**BLDG100-2N**	**BLDG100-2N**
		Sample Date:	**3/17/2010**	**3/17/2010**
Units	**Method**	**Parameter Name**		
ug/m3	TO-15	CYCLOHEXANE	0.56 U	0.59 U
ug/m3	TO-15	DIBROMOCHLOROMETHANE	1.4 U	1.4 U
ug/m3	TO-15	ETHANOL	37	36
ug/m3	TO-15	ETHYL BENZENE	0.85	0.83
ug/m3	TO-15	FREON 11	18	18
ug/m3	TO-15	FREON 113	1.2 U	1.3 U
ug/m3	TO-15	FREON 114	1.1 U	1.2 U
ug/m3	TO-15	FREON 12	7.7	8
ug/m3	TO-15	HEPTANE	0.71	0.83
ug/m3	TO-15	HEXACHLOROBUTADIENE	8.7 U	9.1 U
ug/m3	TO-15	HEXANE	2.3	2.3
ug/m3	TO-15	M,P-XYLENE	1.9	2.1
ug/m3	TO-15	METHYL TERT-BUTYL ETHER	0.59 U	0.62 U
ug/m3	TO-15	METHYLENE CHLORIDE	1.1 UJ	1.5 J
ug/m3	TO-15	O-XYLENE	0.75	0.81
ug/m3	TO-15	PROPYLBENZENE	0.81 U	0.84 U
ug/m3	TO-15	STYRENE	0.7 U	0.73 U
ug/m3	TO-15	TETRACHLOROETHENE	1.1 U	1.2 U
ug/m3	TO-15	TETRAHYDROFURAN	2.4 U	2.5 U
ug/m3	TO-15	TOLUENE	3.5	3.5
ug/m3	TO-15	TRANS-1,2-DICHLOROETHENE	0.65 U	0.68 U
ug/m3	TO-15	TRANS-1,3-DICHLOROPROPENE	0.74 U	0.78 U
ug/m3	TO-15	TRICHLOROETHENE	0.18 U	0.18 U
ug/m3	TO-15	VINYL CHLORIDE	0.42 U	0.44 U

Notes:
U = undetected
J = estimated concentration

prepared by WCG
reviewed by CSR
5/5/10

ATTACHMENT C

LABORATORY REPORT

Air Toxics LTD.
Laboratory Services Since 1989

3/25/2010
Mr. John Scrabis
Mactec, Inc.
800 N. Bell Ave

Carnegie PA 15106

Project Name: Buffalo Color
Project #: 3410090701
Workorder #: 1003423A

Dear Mr. John Scrabis

The following report includes the data for the above referenced project for sample(s) received on 3/18/2010 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Bryanna Langley at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Bryanna Langley

Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1003423A

Work Order Summary

CLIENT:	Mr. John Scrabis Mactec, Inc. 800 N. Bell Ave Carnegie, PA 15106	**BILL TO:**	Accounts Payable Mactec, Inc. 1105 Lakewood Parkway, Suite 300 Alpharetta, GA 30004
PHONE:	412-279-6661	**P.O. #**	
FAX:	412-279-8567	**PROJECT #**	3410090701 Buffalo Color
DATE RECEIVED:	03/18/2010	**CONTACT:**	Bryanna Langley
DATE COMPLETED:	03/25/2010		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	BLDG100-SS-2N	Modified TO-15	5.2 "Hg	5 psi
05A	BLDG100-SS-1S	Modified TO-15	7.0 "Hg	5 psi
05AA	BLDG100-SS-1S Lab Duplicate	Modified TO-15	7.0 "Hg	5 psi
06A	Lab Blank	Modified TO-15	NA	NA
07A	CCV	Modified TO-15	NA	NA
08A	LCS	Modified TO-15	NA	NA

CERTIFIED BY: Linda A. Truman DATE: 03/25/10

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/10
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15
Mactec, Inc.
Workorder# 1003423A

Two 6 Liter Summa Canister (100% Certified) samples were received on March 18, 2010. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	*TO-15*	*ATL Modifications*
Daily CCV	</= 30% Difference	</= 30% Difference; Compounds exceeding this criterion and associated data are flagged and narrated.
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction no performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: BLDG100-SS-2N

Lab ID#: 1003423A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	0.81	1.4	4.6	7.6
Ethanol	3.2	5.2	6.1	9.8
Acetone	3.2	3.8	7.7	9.1
Carbon Disulfide	0.81	8.6	2.5	27
Hexane	0.81	13	2.8	44
Cyclohexane	0.81	19	2.8	65
Benzene	0.81	4.0	2.6	13
Heptane	0.81	13	3.3	54
Toluene	0.81	9.8	3.0	37
Ethyl Benzene	0.81	1.2	3.5	5.2
m,p-Xylene	0.81	8.7	3.5	38
o-Xylene	0.81	1.9	3.5	8.5
4-Ethyltoluene	0.81	1.2	4.0	5.8
1,3,5-Trimethylbenzene	0.81	1.2	4.0	5.8
1,2,4-Trimethylbenzene	0.81	1.9	4.0	9.5

Client Sample ID: BLDG100-SS-1S

Lab ID#: 1003423A-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	0.88	1.8	4.9	10
Ethanol	3.5	8.2	6.6	15
Acetone	3.5	14	8.3	33
Carbon Disulfide	0.88	4.1	2.7	13
Hexane	0.88	64	3.1	230
2-Butanone (Methyl Ethyl Ketone)	0.88	0.94	2.6	2.8
Cyclohexane	0.88	72	3.0	250
Benzene	0.88	4.9	2.8	16
Heptane	0.88	53	3.6	220
Toluene	0.88	20	3.3	76
Ethyl Benzene	0.88	3.0	3.8	13
m,p-Xylene	0.88	21	3.8	92
o-Xylene	0.88	6.0	3.8	26
Propylbenzene	0.88	1.1	4.3	5.6
4-Ethyltoluene	0.88	3.5	4.3	17
1,3,5-Trimethylbenzene	0.88	2.5	4.3	12

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: BLDG100-SS-1S

Lab ID#: 1003423A-05A

1,2,4-Trimethylbenzene	0.88	6.0	4.3	29

Client Sample ID: BLDG100-SS-1S Lab Duplicate

Lab ID#: 1003423A-05AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	1.4	2.0	7.9	11
Ethanol	5.6	7.3	10	14
Acetone	5.6	14	13	32
Carbon Disulfide	1.4	4.3	4.4	13
Hexane	1.4	78	4.9	270
Cyclohexane	1.4	81	4.8	280
Benzene	1.4	5.0	4.5	16
Heptane	1.4	56	5.7	230
Toluene	1.4	21	5.3	78
Ethyl Benzene	1.4	3.0	6.1	13
m,p-Xylene	1.4	21	6.1	93
o-Xylene	1.4	5.7	6.1	25
4-Ethyltoluene	1.4	3.4	6.9	17
1,3,5-Trimethylbenzene	1.4	2.6	6.9	13
1,2,4-Trimethylbenzene	1.4	5.7	6.9	28

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: BLDG100-SS-2N

Lab ID#: 1003423A-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p032218**	**Date of Collection: 3/17/10 8:55:00 AM**	
Dil. Factor:	**1.62**	**Date of Analysis: 3/22/10 05:04 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.81	Not Detected	4.0	Not Detected
Freon 114	0.81	Not Detected	5.7	Not Detected
Chloromethane	3.2	Not Detected	6.7	Not Detected
Vinyl Chloride	0.81	Not Detected	2.1	Not Detected
1,3-Butadiene	0.81	Not Detected	1.8	Not Detected
Bromomethane	0.81	Not Detected	3.1	Not Detected
Chloroethane	0.81	Not Detected	2.1	Not Detected
Freon 11	0.81	1.4	4.6	7.6
Ethanol	3.2	5.2	6.1	9.8
Freon 113	0.81	Not Detected	6.2	Not Detected
1,1-Dichloroethene	0.81	Not Detected	3.2	Not Detected
Acetone	3.2	3.8	7.7	9.1
2-Propanol	3.2	Not Detected	8.0	Not Detected
Carbon Disulfide	0.81	8.6	2.5	27
3-Chloropropene	3.2	Not Detected	10	Not Detected
Methylene Chloride	0.81	Not Detected	2.8	Not Detected
Methyl tert-butyl ether	0.81	Not Detected	2.9	Not Detected
trans-1,2-Dichloroethene	0.81	Not Detected	3.2	Not Detected
Hexane	0.81	13	2.8	44
1,1-Dichloroethane	0.81	Not Detected	3.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.81	Not Detected	2.4	Not Detected
cis-1,2-Dichloroethene	0.81	Not Detected	3.2	Not Detected
Tetrahydrofuran	0.81	Not Detected	2.4	Not Detected
Chloroform	0.81	Not Detected	4.0	Not Detected
1,1,1-Trichloroethane	0.81	Not Detected	4.4	Not Detected
Cyclohexane	0.81	19	2.8	65
Carbon Tetrachloride	0.81	Not Detected	5.1	Not Detected
2,2,4-Trimethylpentane	0.81	Not Detected	3.8	Not Detected
Benzene	0.81	4.0	2.6	13
1,2-Dichloroethane	0.81	Not Detected	3.3	Not Detected
Heptane	0.81	13	3.3	54
Trichloroethene	0.81	Not Detected	4.4	Not Detected
1,2-Dichloropropane	0.81	Not Detected	3.7	Not Detected
1,4-Dioxane	3.2	Not Detected	12	Not Detected
Bromodichloromethane	0.81	Not Detected	5.4	Not Detected
cis-1,3-Dichloropropene	0.81	Not Detected	3.7	Not Detected
4-Methyl-2-pentanone	0.81	Not Detected	3.3	Not Detected
Toluene	0.81	9.8	3.0	37
trans-1,3-Dichloropropene	0.81	Not Detected	3.7	Not Detected

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: BLDG100-SS-2N

Lab ID#: 1003423A-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p032218**	**Date of Collection: 3/17/10 8:55:00 AM**	
Dil. Factor:	**1.62**	**Date of Analysis: 3/22/10 05:04 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,2-Trichloroethane	0.81	Not Detected	4.4	Not Detected
Tetrachloroethene	0.81	Not Detected	5.5	Not Detected
2-Hexanone	3.2	Not Detected	13	Not Detected
Dibromochloromethane	0.81	Not Detected	6.9	Not Detected
1,2-Dibromoethane (EDB)	0.81	Not Detected	6.2	Not Detected
Chlorobenzene	0.81	Not Detected	3.7	Not Detected
Ethyl Benzene	0.81	1.2	3.5	5.2
m,p-Xylene	0.81	8.7	3.5	38
o-Xylene	0.81	1.9	3.5	8.5
Styrene	0.81	Not Detected	3.4	Not Detected
Bromoform	0.81	Not Detected	8.4	Not Detected
Cumene	0.81	Not Detected	4.0	Not Detected
1,1,2,2-Tetrachloroethane	0.81	Not Detected	5.6	Not Detected
Propylbenzene	0.81	Not Detected	4.0	Not Detected
4-Ethyltoluene	0.81	1.2	4.0	5.8
1,3,5-Trimethylbenzene	0.81	1.2	4.0	5.8
1,2,4-Trimethylbenzene	0.81	1.9	4.0	9.5
1,3-Dichlorobenzene	0.81	Not Detected	4.9	Not Detected
1,4-Dichlorobenzene	0.81	Not Detected	4.9	Not Detected
alpha-Chlorotoluene	0.81	Not Detected	4.2	Not Detected
1,2-Dichlorobenzene	0.81	Not Detected	4.9	Not Detected
1,2,4-Trichlorobenzene	3.2	Not Detected	24	Not Detected
Hexachlorobutadiene	3.2	Not Detected	34	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	112	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: BLDG100-SS-1S

Lab ID#: 1003423A-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p032221	Date of Collection:	3/17/10 8:55:00 AM
Dil. Factor:	1.75	Date of Analysis:	3/22/10 06:02 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.88	Not Detected	4.3	Not Detected
Freon 114	0.88	Not Detected	6.1	Not Detected
Chloromethane	3.5	Not Detected	7.2	Not Detected
Vinyl Chloride	0.88	Not Detected	2.2	Not Detected
1,3-Butadiene	0.88	Not Detected	1.9	Not Detected
Bromomethane	0.88	Not Detected	3.4	Not Detected
Chloroethane	0.88	Not Detected	2.3	Not Detected
Freon 11	0.88	1.8	4.9	10
Ethanol	3.5	8.2	6.6	15
Freon 113	0.88	Not Detected	6.7	Not Detected
1,1-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Acetone	3.5	14	8.3	33
2-Propanol	3.5	Not Detected	8.6	Not Detected
Carbon Disulfide	0.88	4.1	2.7	13
3-Chloropropene	3.5	Not Detected	11	Not Detected
Methylene Chloride	0.88	Not Detected	3.0	Not Detected
Methyl tert-butyl ether	0.88	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Hexane	0.88	64	3.1	230
1,1-Dichloroethane	0.88	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.88	0.94	2.6	2.8
cis-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.88	Not Detected	2.6	Not Detected
Chloroform	0.88	Not Detected	4.3	Not Detected
1,1,1-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Cyclohexane	0.88	72	3.0	250
Carbon Tetrachloride	0.88	Not Detected	5.5	Not Detected
2,2,4-Trimethylpentane	0.88	Not Detected	4.1	Not Detected
Benzene	0.88	4.9	2.8	16
1,2-Dichloroethane	0.88	Not Detected	3.5	Not Detected
Heptane	0.88	53	3.6	220
Trichloroethene	0.88	Not Detected	4.7	Not Detected
1,2-Dichloropropane	0.88	Not Detected	4.0	Not Detected
1,4-Dioxane	3.5	Not Detected	13	Not Detected
Bromodichloromethane	0.88	Not Detected	5.9	Not Detected
cis-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
4-Methyl-2-pentanone	0.88	Not Detected	3.6	Not Detected
Toluene	0.88	20	3.3	76
trans-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: BLDG100-SS-1S

Lab ID#: 1003423A-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p032221**	**Date of Collection: 3/17/10 8:55:00 AM**	
Dil. Factor:	**1.75**	**Date of Analysis: 3/22/10 06:02 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,2-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Tetrachloroethene	0.88	Not Detected	5.9	Not Detected
2-Hexanone	3.5	Not Detected	14	Not Detected
Dibromochloromethane	0.88	Not Detected	7.4	Not Detected
1,2-Dibromoethane (EDB)	0.88	Not Detected	6.7	Not Detected
Chlorobenzene	0.88	Not Detected	4.0	Not Detected
Ethyl Benzene	0.88	3.0	3.8	13
m,p-Xylene	0.88	21	3.8	92
o-Xylene	0.88	6.0	3.8	26
Styrene	0.88	Not Detected	3.7	Not Detected
Bromoform	0.88	Not Detected	9.0	Not Detected
Cumene	0.88	Not Detected	4.3	Not Detected
1,1,2,2-Tetrachloroethane	0.88	Not Detected	6.0	Not Detected
Propylbenzene	0.88	1.1	4.3	5.6
4-Ethyltoluene	0.88	3.5	4.3	17
1,3,5-Trimethylbenzene	0.88	2.5	4.3	12
1,2,4-Trimethylbenzene	0.88	6.0	4.3	29
1,3-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,4-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
alpha-Chlorotoluene	0.88	Not Detected	4.5	Not Detected
1,2-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,2,4-Trichlorobenzene	3.5	Not Detected	26	Not Detected
Hexachlorobutadiene	3.5	Not Detected	37	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	110	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: BLDG100-SS-1S Lab Duplicate

Lab ID#: 1003423A-05AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p032219**	**Date of Collection: 3/17/10 8:55:00 AM**	
Dil. Factor:	**2.80**	**Date of Analysis: 3/22/10 05:27 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.4	Not Detected	6.9	Not Detected
Freon 114	1.4	Not Detected	9.8	Not Detected
Chloromethane	5.6	Not Detected	12	Not Detected
Vinyl Chloride	1.4	Not Detected	3.6	Not Detected
1,3-Butadiene	1.4	Not Detected	3.1	Not Detected
Bromomethane	1.4	Not Detected	5.4	Not Detected
Chloroethane	1.4	Not Detected	3.7	Not Detected
Freon 11	1.4	2.0	7.9	11
Ethanol	5.6	7.3	10	14
Freon 113	1.4	Not Detected	11	Not Detected
1,1-Dichloroethene	1.4	Not Detected	5.6	Not Detected
Acetone	5.6	14	13	32
2-Propanol	5.6	Not Detected	14	Not Detected
Carbon Disulfide	1.4	4.3	4.4	13
3-Chloropropene	5.6	Not Detected	18	Not Detected
Methylene Chloride	1.4	Not Detected	4.9	Not Detected
Methyl tert-butyl ether	1.4	Not Detected	5.0	Not Detected
trans-1,2-Dichloroethene	1.4	Not Detected	5.6	Not Detected
Hexane	1.4	78	4.9	270
1,1-Dichloroethane	1.4	Not Detected	5.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.4	Not Detected	4.1	Not Detected
cis-1,2-Dichloroethene	1.4	Not Detected	5.6	Not Detected
Tetrahydrofuran	1.4	Not Detected	4.1	Not Detected
Chloroform	1.4	Not Detected	6.8	Not Detected
1,1,1-Trichloroethane	1.4	Not Detected	7.6	Not Detected
Cyclohexane	1.4	81	4.8	280
Carbon Tetrachloride	1.4	Not Detected	8.8	Not Detected
2,2,4-Trimethylpentane	1.4	Not Detected	6.5	Not Detected
Benzene	1.4	5.0	4.5	16
1,2-Dichloroethane	1.4	Not Detected	5.7	Not Detected
Heptane	1.4	56	5.7	230
Trichloroethene	1.4	Not Detected	7.5	Not Detected
1,2-Dichloropropane	1.4	Not Detected	6.5	Not Detected
1,4-Dioxane	5.6	Not Detected	20	Not Detected
Bromodichloromethane	1.4	Not Detected	9.4	Not Detected
cis-1,3-Dichloropropene	1.4	Not Detected	6.4	Not Detected
4-Methyl-2-pentanone	1.4	Not Detected	5.7	Not Detected
Toluene	1.4	21	5.3	78
trans-1,3-Dichloropropene	1.4	Not Detected	6.4	Not Detected

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: BLDG100-SS-1S Lab Duplicate

Lab ID#: 1003423A-05AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p032219**	**Date of Collection: 3/17/10 8:55:00 AM**	
Dil. Factor:	**2.80**	**Date of Analysis: 3/22/10 05:27 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,2-Trichloroethane	1.4	Not Detected	7.6	Not Detected
Tetrachloroethene	1.4	Not Detected	9.5	Not Detected
2-Hexanone	5.6	Not Detected	23	Not Detected
Dibromochloromethane	1.4	Not Detected	12	Not Detected
1,2-Dibromoethane (EDB)	1.4	Not Detected	11	Not Detected
Chlorobenzene	1.4	Not Detected	6.4	Not Detected
Ethyl Benzene	1.4	3.0	6.1	13
m,p-Xylene	1.4	21	6.1	93
o-Xylene	1.4	5.7	6.1	25
Styrene	1.4	Not Detected	6.0	Not Detected
Bromoform	1.4	Not Detected	14	Not Detected
Cumene	1.4	Not Detected	6.9	Not Detected
1,1,2,2-Tetrachloroethane	1.4	Not Detected	9.6	Not Detected
Propylbenzene	1.4	Not Detected	6.9	Not Detected
4-Ethyltoluene	1.4	3.4	6.9	17
1,3,5-Trimethylbenzene	1.4	2.6	6.9	13
1,2,4-Trimethylbenzene	1.4	5.7	6.9	28
1,3-Dichlorobenzene	1.4	Not Detected	8.4	Not Detected
1,4-Dichlorobenzene	1.4	Not Detected	8.4	Not Detected
alpha-Chlorotoluene	1.4	Not Detected	7.2	Not Detected
1,2-Dichlorobenzene	1.4	Not Detected	8.4	Not Detected
1,2,4-Trichlorobenzene	5.6	Not Detected	42	Not Detected
Hexachlorobutadiene	5.6	Not Detected	60	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	109	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1003423A-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p032206**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/22/10 10:33 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	2.0	Not Detected	4.1	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1003423A-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p032206**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/22/10 10:33 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	103	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1003423A-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p032203	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 3/22/10 08:47 AM	

Compound	%Recovery
Freon 12	104
Freon 114	96
Chloromethane	127
Vinyl Chloride	102
1,3-Butadiene	98
Bromomethane	101
Chloroethane	105
Freon 11	104
Ethanol	88
Freon 113	92
1,1-Dichloroethene	89
Acetone	90
2-Propanol	91
Carbon Disulfide	92
3-Chloropropene	90
Methylene Chloride	97
Methyl tert-butyl ether	95
trans-1,2-Dichloroethene	92
Hexane	93
1,1-Dichloroethane	96
2-Butanone (Methyl Ethyl Ketone)	97
cis-1,2-Dichloroethene	92
Tetrahydrofuran	95
Chloroform	95
1,1,1-Trichloroethane	98
Cyclohexane	95
Carbon Tetrachloride	94
2,2,4-Trimethylpentane	107
Benzene	92
1,2-Dichloroethane	96
Heptane	95
Trichloroethene	92
1,2-Dichloropropane	100
1,4-Dioxane	95
Bromodichloromethane	96
cis-1,3-Dichloropropene	94
4-Methyl-2-pentanone	100
Toluene	98
trans-1,3-Dichloropropene	85

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1003423A-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p032203**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/22/10 08:47 AM**	

Compound	%Recovery
1,1,2-Trichloroethane	88
Tetrachloroethene	83
2-Hexanone	92
Dibromochloromethane	89
1,2-Dibromoethane (EDB)	90
Chlorobenzene	89
Ethyl Benzene	94
m,p-Xylene	93
o-Xylene	95
Styrene	96
Bromoform	90
Cumene	97
1,1,2,2-Tetrachloroethane	97
Propylbenzene	97
4-Ethyltoluene	96
1,3,5-Trimethylbenzene	98
1,2,4-Trimethylbenzene	98
1,3-Dichlorobenzene	92
1,4-Dichlorobenzene	95
alpha-Chlorotoluene	95
1,2-Dichlorobenzene	96
1,2,4-Trichlorobenzene	87
Hexachlorobutadiene	85

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	107	70-130
1,2-Dichloroethane-d4	110	70-130
4-Bromofluorobenzene	112	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1003423A-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p032204**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/22/10 09:17 AM**	

Compound	%Recovery
Freon 12	110
Freon 114	104
Chloromethane	130
Vinyl Chloride	110
1,3-Butadiene	110
Bromomethane	109
Chloroethane	114
Freon 11	112
Ethanol	89
Freon 113	87
1,1-Dichloroethene	87
Acetone	94
2-Propanol	96
Carbon Disulfide	97
3-Chloropropene	97
Methylene Chloride	93
Methyl tert-butyl ether	100
trans-1,2-Dichloroethene	97
Hexane	100
1,1-Dichloroethane	96
2-Butanone (Methyl Ethyl Ketone)	102
cis-1,2-Dichloroethene	96
Tetrahydrofuran	102
Chloroform	96
1,1,1-Trichloroethane	100
Cyclohexane	100
Carbon Tetrachloride	97
2,2,4-Trimethylpentane	111
Benzene	100
1,2-Dichloroethane	99
Heptane	102
Trichloroethene	100
1,2-Dichloropropane	105
1,4-Dioxane	106
Bromodichloromethane	102
cis-1,3-Dichloropropene	104
4-Methyl-2-pentanone	106
Toluene	100
trans-1,3-Dichloropropene	92

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1003423A-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**p032204**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/22/10 09:17 AM**	

Compound	%Recovery
1,1,2-Trichloroethane	93
Tetrachloroethene	88
2-Hexanone	100
Dibromochloromethane	93
1,2-Dibromoethane (EDB)	98
Chlorobenzene	93
Ethyl Benzene	98
m,p-Xylene	99
o-Xylene	100
Styrene	102
Bromoform	95
Cumene	99
1,1,2,2-Tetrachloroethane	107
Propylbenzene	100
4-Ethyltoluene	99
1,3,5-Trimethylbenzene	104
1,2,4-Trimethylbenzene	104
1,3-Dichlorobenzene	101
1,4-Dichlorobenzene	106
alpha-Chlorotoluene	115
1,2-Dichlorobenzene	107
1,2,4-Trichlorobenzene	113
Hexachlorobutadiene	96

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	108	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	111	70-130

MACTEC

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2010 Holiday Processing Schedules

Timesheet Schedules

Dear MACTEC Employee,

The MACTEC payroll department would like to inform you that your timesheet submission schedule will be impacted by the upcoming holidays. Listed below you will find additional information regarding required timesheet submission deadlines. This information will ensure the delivery of your payroll check and posting of your direct deposit in a timely manner. In order to allow for adequate payroll processing time, the below schedule must be met. Failure to follow the below schedule could result in delay of your pay. Should you have any further questions, please e-mail **payrollinquiries@mactec.com**.

Schedules

Timesheets Due on the following dates:	Holiday
Friday, November 5th by 8:00 p.m. EST	***Veterans Day, November 11th**
Friday, November 19th by 8:00 p.m. EST	***Thanksgiving, November 25th**
Friday, December 17th by 8:00 p.m. EST	***Christmas, December 24th**
Friday, December 24th by 8:00 p.m. EST	***New Year's, December 31st**

***Veterans Day** – Not a MACTEC Holiday, but will impact our payroll due to banks and other federal agencies being closed.

***Thanksgiving Holiday** – MACTEC will be closed November 24th & 25th. Pay dates will remain the same as banks are open Friday November 25th.

***Christmas** – MACTEC will be closed December 24th. Pay dates will remain the same as banks are open.

***New Year's** – MACTEC employees that are paid weekly will be paid on December 31st as banks are open.

Have happy and safe holidays!