



O'BRIEN & GERE

March 7, 2008

Mr. John Piston
Division of Environmental Remediation – Region 7
NYSDEC
615 Erie Boulevard West
Syracuse, NY 13204-2400

Re: Eagle Comtronics, Inc.
Site No. 7-34-058
Clay, New York
Soil Vapor Intrusion Evaluation Report

File: 2665/39870 #2

Dear Mr. Piston:

On behalf of Eagle Comtronics, Inc. (Eagle), O'Brien & Gere has prepared this letter report summarizing the Soil Vapor Intrusion Evaluation at the International Brotherhood of Electrical Workers (IBEW) facility (formerly Eagle) located at 4562 Waterhouse Road in Clay, New York.

Site Description

The IBEW property consists of approximately 18 acres and is located in a rural area used for both agricultural and residential purposes. The topography of the site and surrounding area is generally flat, sloping gradually to the northeast. The site includes an Administration Building, Training Facility Building and paved parking areas. Refer to **Figure 1**.

The Administration Building and the Training Facility Building have footprints that are approximately 12,500 and 12,000 square feet, respectively. Both buildings are on-grade concrete slab construction except for a small basement (approximately 1,500 square feet) in the southwest corner of the Administration Building.

Site History

Prior to IBEW, Eagle owned and operated the facility as a product development and management facility for the production of components for the cable television industry. The existing Administration Building was referred to as the Office Building and the existing Training Facility Building was referred to as the Engineering Building. A solvent, 1,1,1-trichloroethane (1,1,1-TCA), was used by Eagle to rinse spent soldering flux from printed circuit boards.

In 1981, waste solvents were accidentally released to the ground near the southwest corner of the Training Facility Building. Drums of spent solvent were temporarily stored in this area prior to offsite disposal. The drums had frozen to the ground and were accidentally punctured by a forklift when a contractor attempted to load them on a truck. The amount of solvent spilled is not known.

In 1989 monitoring wells were installed and groundwater samples were collected to evaluate potential impact to the ground water. Analyses of the samples identified the presence of volatile organic compounds (VOCs) in several of the wells.

Soil samples were collected in 1993 around the Training Facility Building and an area of impacted soil, believed to be the source of the impacted ground water, was identified. Approximately 90 yd³ of impacted soil was excavated for on site treatment using an Ex-Situ Soil Venting (ESSV) system. Treatment of the soil was initiated in October 1993 and completed in May 1996. The ESSV system was dismantled in July 2005 and the area graded to match the existing contours.

In January 1997, at the request of NYSDEC, Eagle collected four subsurface soil samples at the Training Facility Building to verify the effectiveness of the soil removal activities previously conducted in this area. Two subsurface soil samples were collected from under the concrete floor inside the building and two subsurface soil samples were collected outside the building along the foundation of the east wall. Except for the presence of methylene chloride in one sample, VOCs were non-detect in all four soil samples.

The Waterhouse Road facility was sold to the IBEW in 2005, however, Eagle still retains responsibility for sampling and analyses of ground water monitoring well MW-7 (annually) and five residential wells and sentinel well MW-8 (semi annually). Refer to **Figure 1**. The site is currently listed as a Class 4 site (site properly closed or remediated but requires continued management) on the NYS List of Inactive Hazardous Waste Disposal Sites.

On September 28, 2005, NYSDEC sent a letter to Eagle regarding a new program that NYSDEC and NYS Department of Health (NYSDOH) are implementing regarding soil vapor intrusion. Based on the letter, Eagle agreed to conduct a soil vapor intrusion evaluation at the IBEW site.

On behalf of Eagle, a Soil Vapor Intrusion Work Plan was developed by O'Brien & Gere and submitted to NYSDEC for review and approval on January 3, 2007. The Work Plan originally proposed two indoor sampling locations. One indoor and one sub-slab air sample would be collected in each of the two on-site buildings and an ambient air sample would be collected upgradient of the buildings. In addition, two soil vapor probes would be installed along Waterhouse Road and an air sample would be collected from each probe.

On March 16, 2007 a conditional verbal approval of the Work Plan was provided by NYSDEC. NYSDEC indicated that they wanted a second sample location to be included in the Training Facility Building (sub-slab and indoor air samples). The additional sample location was included in the proposed sampling activities.

Prior to conducting sampling activities, O'Brien & Gere contacted NYSDEC regarding the soil vapor probes along Waterhouse Road. Due to the high ground water conditions (2 ft below grade) the soil vapor probe installation and sampling could not be conducted. NYSDEC agreed that the soil vapor probes did not have to be installed due to site conditions. However, NYSDOH indicated that they

wanted a second sample location to be included in the Administration Building (sub-slab and indoor air samples). The additional sample location was included in the proposed sampling activities.

Soil Vapor and Indoor Air Sampling

On March 30, 2007, Mr. Ed Rahn from O'Brien & Gere initiated sampling activities at the site. Prior to collecting the sub-slab and indoor air samples, Mr. Rahn interviewed Mr. Dennis McDermott of IBEW and completed the building surveys for the Administration Building and Training Facility Building. The building survey is documented on the "Indoor Air Quality Questionnaire and Building Inventory" forms found in **Attachment 1**. As noted in the product inventory, there were several containers of paint products stored in the basement of the Administration Building.

O'Brien & Gere collected air samples from beneath concrete floors in the buildings (sub-slab or SS), inside the buildings (indoor air or IA) and outside the buildings (ambient) to evaluate on-site conditions. The ambient air sample was collected near Waterhouse Road. Refer to **Figure 1**. In the Administration Building, one sub-slab and one indoor air sample were collected in the basement and on first floor. Refer to **Figure 2**. In the Training Facility Building, one sub-slab and one indoor air sample were collected at two first floor locations, southwest (SW) and northeast (NE). Refer to **Figure 3**. A duplicate sub-slab sample was also collected at the SW location of the Training Facility Building. Photos of the sampling locations are presented in **Attachment 2**.

For each sub-slab sample, a 3/8-inch hole was drilled in the concrete slab to a depth just beneath the slab and a 1/4-inch Teflon tube was inserted into the bored hole. To prevent infiltration of ambient air and dilution of the samples, the holes were sealed with modeling clay around the tubing. The sample collection lines were purged and connected to a 6-liter (L) pre-evacuated summa canister to collect the samples. The samples were collected over a 5-hour period. The canister vacuum gauge readings were recorded at the start and end of each sampling period.

Indoor air samples were collected concurrently with the sub-slab sampling described above. The samples were also collected using 6-L pre-evacuated canisters. Similar to the sub-slab sampling, the samples were collected over a 5-hour period and the canister vacuum gauge readings were recorded at the start and end of each sampling period.

One upwind ambient air sample was collected concurrently with the sub-slab and indoor air samples. Similar to the sub-slab and indoor air sampling, the ambient air sample was collected using a 6-L pre-evacuated canister over a 5-hour period and the canister vacuum gauge readings were recorded at the start and end of the sampling period.

The air/vapor samples were submitted to Air Toxics Limited in Folsom, California for VOC analysis using USEPA Method TO-15.

As previously discussed, the soil vapor probes were not installed and sampled as proposed in the Work Plan due to the high water table at the time of the site visit.

Analytical Results

A summary of the VOC analytical results is provided in **Table 1**. The laboratory report is provided in **Attachment 3**. In addition to the sub-slab, indoor air, and ambient air samples data, the table also presents the attenuation factors (AF), recommended actions as provided in New York State Department of Health's (NYSDOH's) *Guidance for Evaluating Soil Vapor Intrusion in the State of*

New York (October 2006), and typical indoor air concentrations (background levels). Based on the results, the data was used to assess how much of the indoor air concentrations are due to an ambient or indoor source and how much is due to the intrusion of vapors from underneath the building's slab-on-grade.

The AF is derived via the equation presented below, for each VOC and sample set:

$$AF = \text{Indoor air concentration } (\mu\text{g}/\text{m}^3) / \text{Sub-slab concentration } (\mu\text{g}/\text{m}^3)$$

An AF greater than 1 indicates that the indoor air concentration is higher than the associated sub-slab concentration. When this occurs, it is likely attributable to ambient, indoor or other sources rather than vapor intrusion. AFs less than 1 indicate that the indoor air concentration may be partially or entirely attributable to vapor intrusion.

As shown in **Table 1**, carbon tetrachloride was the only compound detected in the ambient and indoor air samples. The indoor air concentrations of carbon tetrachloride were typically higher than the detected sub-slab concentrations.

Tetrachloroethene (PCE), trichloroethene (TCE), and 1,1,1-TCA were detected in all four of the sub-slab sampling locations. 1,1-dichloroethane (1,1-DCA) and 1,1-dichloroethene (1,1-DCE) were detected at both sampling locations in the Training Facility Building and chloroethane was detected at the NE sampling location of the Training Facility Building.

Data Evaluation

NYSDOH uses soil vapor / indoor air matrices 1 and 2 presented in *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* to recommend corrective action based on sub-slab and indoor air concentrations. Matrix 1 pertains to carbon tetrachloride, TCE, and vinyl chloride (VC) and Matrix 2 pertains to PCE, 1,1,1-TCA, cis-1,2-dichloroethene (cis-1,2-DCE) and 1,1-DCE. **Table 1** includes columns with our interpretation of the matrix-recommended actions using sub-slab concentrations and the indoor air concentrations for these compounds.

Since the indoor air concentrations for carbon tetrachloride are likely attributable to carbon tetrachloride present in the ambient air or other indoor sources in both buildings, it is assumed that the indoor air concentrations for carbon tetrachloride are not attributable to vapor intrusion.

Based on the low VOC concentrations found in the sub-slab samples from the Administration Building, no further action is recommended. Higher sub-slab concentrations of PCE, TCE, and 1,1-DCE were found in the Training Facility Building. The recommended action is to monitor the sub-slab and indoor air concentrations (such as annual sampling). Monitoring is used to assess changes to the building conditions or sub-slab concentrations in an effort to avoid a potential future exposure due to the high sub-slab concentrations. However, due to the concentrations of TCE and 1,1,1-TCA in the sub-slab samples from the Training Facility Building, the recommended action is to mitigate the exposures related to soil vapor intrusion.

For all other compounds for which NYSDOH does not have matrices, NYSDOH recommends that the indoor air concentrations be compared to background levels (concentrations typically found in commercial and public buildings) published by the US Environmental Protection Agency's BASE database that is presented and referenced in the NYSDOH guidance document. NYSDOH specifically

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recommends comparison with the 90th percentile of that database. **Table 1** includes a column with these background levels. It can be noted that the estimated indoor air concentrations for all compounds are less than the background levels and do not pose a current health risk.

Recommended Actions

As discussed above, a soil vapor mitigation (SVM) system is recommended for the Training Facility Building due to the concentrations of TCE and 1,1,1-TCA in the sub-slab samples. The indoor air concentrations are less than typical background concentrations and do not pose a current health risk.

Initially, design-testing activities will be conducted in the Training Facility Building to collect sufficient data regarding the building and the conditions under the slab. This will involve drilling small holes in the slab and checking, with a vacuum gauge, to see if there is communication between a temporary vacuum source and whole sub-slab area. Based on the results of the design-testing, a SVM system will be designed. The design will be submitted to NYSDEC, NYSDOH and IBEW for review and approval. Following approval of the SVM design, a contractor will be solicited and the SVM will be installed. The SVM system may consist of PVC pipe installed through a hole(s) in the slab, piping to a fan and discharge piping to exhaust the sub-slab vapors to the atmosphere. Following installation of the SVM system, commissioning activities will be conducted that evaluate the performance of the system through sub-slab monitoring (vacuum readings), equipment testing and overall system operations.

Should you have any questions or comments regarding this report, please contact me at your convenience.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.



Marc J. Dent, PE.
Managing Engineer

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cc: John Taddeo – Eagle Comtronics
Mark Distler – O'Brien & Gere



Table 1

Summary of Subslab, Indoor Air and Ambient Air Sample Results

Eagle Comtronics
Clay, New York

Administration Building																							
Sample Location:			Indoor Air Background Levels ^(a)	Sample Location:																			
Compound	CAS Number	Sample Type:		Ambient Upwind	Basement Sub-Slab Base.-SS	Basement Indoor Air Base.-IA	NYSDOH Matrix ^(b)	AF (α)	First Floor Sub-Slab 1st.FL-SS	First Floor Indoor Air 1st.FL-IA	NYSDOH Matrix ^(b)	AF (α)											
													Sample I.D.:	Sample Date:	Ambient Air	Basement Sub-Slab Base.-SS	Basement Indoor Air Base.-IA	NYSDOH Matrix ^(b)	AF (α)	First Floor Sub-Slab 1st.FL-SS	First Floor Indoor Air 1st.FL-IA	NYSDOH Matrix ^(b)	AF (α)
Carbon Tetrachloride	79-01-6		0.5	0.38	0.52	NFA ^(c)	1.37	<0.19	0.50	NFA ^(c)	>2.63												
Tetrachloroethene (PCE)	56-23-5		<0.98	1.7	<1.00	NFA	<0.59	1.6	<1.00	NFA	<0.63												
Trichloroethene (TCE)	71-55-6		<0.15	0.42	<0.16	NFA	<0.38	11	<0.16	NFA	<0.01												
1,1,1-Trichloroethane (TCA)	67-64-1		<0.78	24	<0.83	NFA	<0.03	1.6	<0.81	NFA	<0.51												
Chloroethane	75-27-4		<0.38	<0.40	<0.40	NA	NA	<0.40	<0.39	NA	NA												
1,1-Dichloroethane	593-60-2		<0.58	<0.62	<0.62	NA	NA	<0.62	<0.60	NA	NA												
1,2-Dichloroethane	75-25-2		<0.58	<0.62	<0.62	NA	NA	<0.62	<0.60	NA	NA												
1,1-Dichloroethene (DCE)	74-83-9		<0.57	<0.60	<0.60	NFA	NA	<0.60	<0.59	NFA	NA												
trans-1,2-Dichloroethene	67-66-3		<0.57	<0.60	<0.60	NA	NA	<0.60	<0.59	NA	NA												
Vinyl Chloride (VC)	75-15-0		<0.37	<0.39	<0.39	NFA	NA	<0.39	<0.38	NFA	NA												

Training Building																							
Sample Location:			Indoor Air Background Levels ^(a)	Sample Location:																			
Compound	CAS Number	Sample Type:		Ambient Upwind	Train. SW Sub-Slab	Train. SW Indoor Air	NYSDOH Matrix ^(b)	AF (α)	Train. NE Sub-Slab	Train. NE Indoor Air	NYSDOH Matrix ^(b)	AF (α)											
													Sample I.D.:	Sample Date:	Ambient Air	Train. SW Sub-Slab	Train. SW Indoor Air	NYSDOH Matrix ^(b)	AF (α)	Train. NE Sub-Slab	Train. NE Indoor Air	NYSDOH Matrix ^(b)	AF (α)
Carbon Tetrachloride	79-01-6		0.5	<1.40	0.52	NFA ^(c)	>0.37	<0.20	0.53	NFA ^(c)	>2.65												
Tetrachloroethene (PCE)	56-23-5		<0.98	240	<1.00	Monitor	<0.00	2.1	<1.10	NFA	<0.52												
Trichloroethene (TCE)	71-55-6		<0.15	350	<0.17	Mitigate	<0.00	64	<0.18	Monitor	<0.00												
1,1,1-Trichloroethane (TCA)	67-64-1		<0.78	1400	<0.84	Mitigate	<0.00	84	<0.89	NFA	<0.01												
Chloroethane	75-27-4		<0.38	<2.90	<0.41	NA	NA	3.6	<0.43	NA	<0.12												
1,1-Dichloroethane	593-60-2		<0.58	600	<0.63	NA	<0.00	1600	<0.66	NA	<0.00												
1,2-Dichloroethane	75-25-2		<0.58	<4.40	<0.63	NA	NA	<0.65	<0.66	NA	NA												
1,1-Dichloroethene (DCE)	74-83-9		<0.57	60	<0.61	NFA	<0.01	950	<0.65	Monitor	<0.001												
trans-1,2-Dichloroethene	67-66-3		<0.57	<4.30	<0.61	NA	NA	<0.64	<0.65	NA	NA												
Vinyl Chloride (VC)	75-15-0		<0.37	<2.80	<0.40	NFA	NA	<0.41	<0.42	NFA	NA												

Notes:

Results are reported in units of micrograms per cubic meter (μg/m³).

- (a) Indoor air concentrations measured in commercial and public buildings that do not have vapor intrusion. The values are the 90th percentile values taken from the EPA BASE 2001 Database as reported in the NYSDOH *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006).
- (b) NYSDOH *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (Oct 2006) recommends actions based on the combination of sub-slab and indoor air concentrations (available for Carbon Tetrachloride, TCE, Vinyl Chloride, PCE, 1,1,1-TCA, cis-1,2-DCE and 1,1-DCE only).
- (c) Due to obvious ambient air sourcing of this compound, the action presented assumes the indoor air concentration is not attributable to vapor intrusion.

NA - Not available

AF = Attenuation factor (basement indoor conc. / sub-slab conc.). Not calculated when both sample results are below the reporting limit.

NFA = No further action as recommended by NYSDOH guidance.

IRE = Take reasonable and practical actions to identify source(s) and reduce exposures as recommended by NYSDOH guidance.

Monitor = Monitoring is recommended to assess changes in sub-slab and indoor air concentrations and/or building conditions.

Mitigate = Mitigation is needed to minimize current or potential exposures associated with soil vapor intrusion.

FIGURE 1



LEGEND

PROPERTY LINE

TREE LINE

WELL-1

RESIDENTIAL WELL

MW-8 SENTINEL WELL MW-8

MW-5 MONITORING WELL MW-5

GROUNDWATER FLOW DIRECTION

AMBIENT AIR

AA SAMPLE LOCATION

FORMER
EAGLE COMTRONICS INC.
CLAY, NEW YORK

SITE PLAN
AND EXISTING
RESIDENTIAL/SENTINEL
AND MONITORING WELL
LOCATIONS

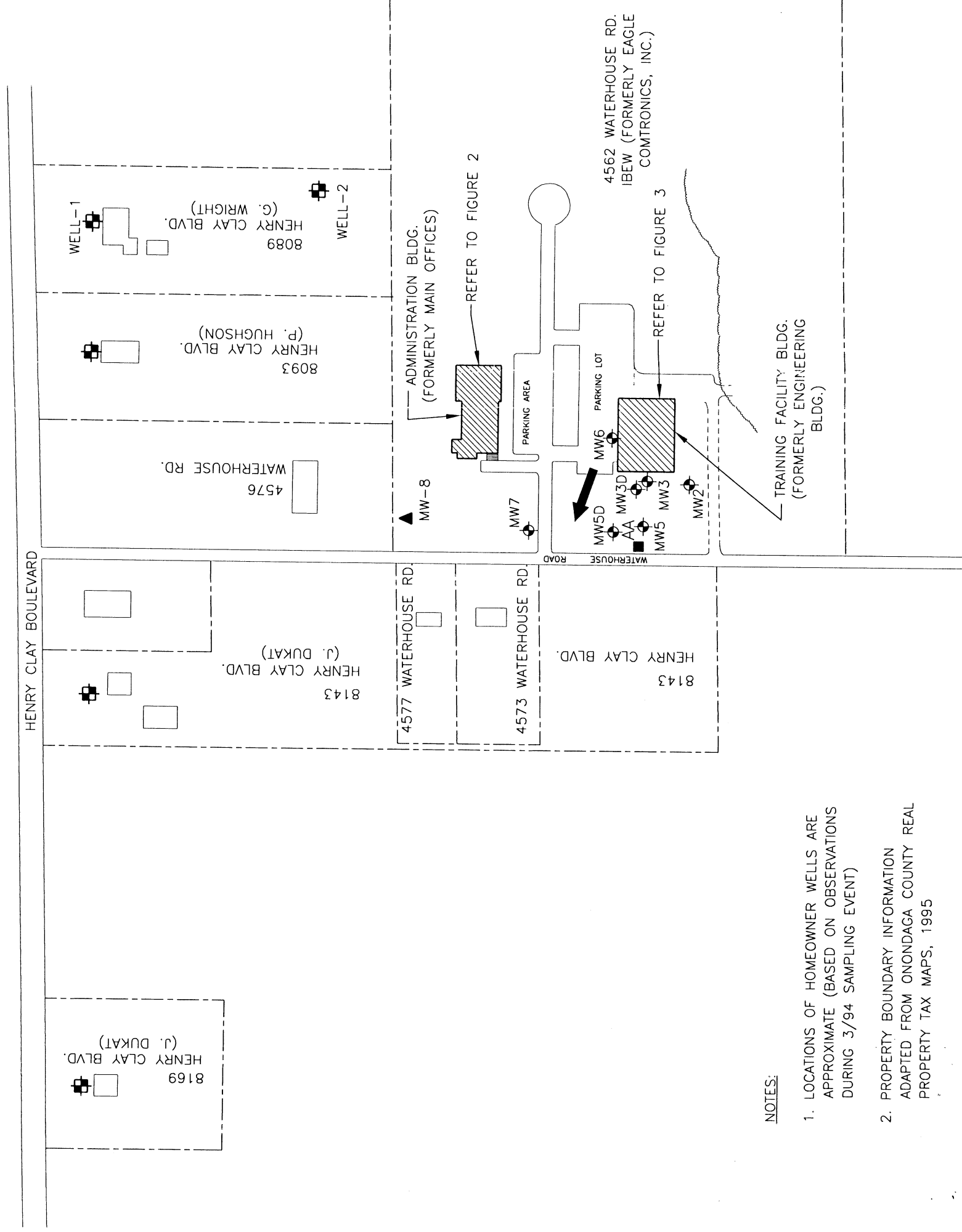
NOT TO SCALE

FEBRUARY 2008

FILE NO: 2665.39870.001

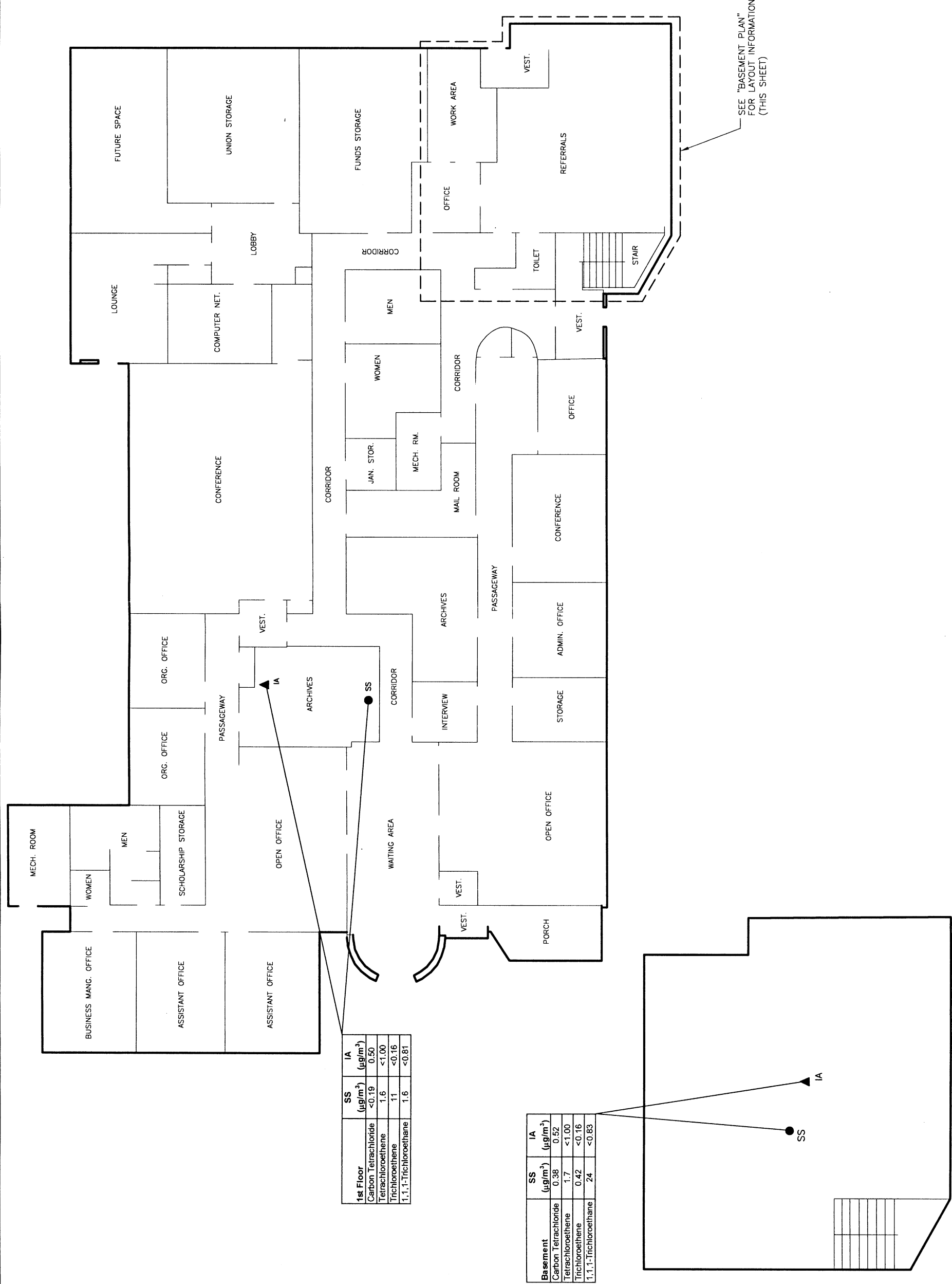


OBRIEN & GERE
ENGINEERS INC.



NOTES:

1. LOCATIONS OF HOMEOWNER WELLS ARE APPROXIMATE (BASED ON OBSERVATIONS DURING 3/94 SAMPLING EVENT)
2. PROPERTY BOUNDARY INFORMATION ADAPTED FROM ONONDAGA COUNTY REAL PROPERTY TAX MAPS, 1995



BASEMENT PLAN
NOT TO SCALE

Basement	SS ($\mu\text{g}/\text{m}^3$)	IA ($\mu\text{g}/\text{m}^3$)
Carbon Tetrachloride	0.38	0.52
Tetrachloroethene	1.7	<1.00
Trichloroethene	0.42	<0.16
1,1,1-Trichloroethane	24	<0.83

1st Floor	SS ($\mu\text{g}/\text{m}^3$)	IA ($\mu\text{g}/\text{m}^3$)
Carbon Tetrachloride	<0.19	0.50
Tetrachloroethene	1.6	<1.00
Trichloroethene	11	<0.16
1,1,1-Trichloroethane	1.6	<0.81

FIGURE 2



LEGEND
▲ INDOOR AIR SAMPLING LOCATION
● SUB-SLAB SAMPLING LOCATION

NOTES:
SS= SUB-SLAB
IA= INDOOR AIR
1. FIGURE DEVELOPED BY
ARCHITECTURAL ASSOCIATES
(1/7/2005) AND REVISED BY
O'BRIEN AND GERE.

FORMER EAGLE
COMTRONICS INC.
CLAY, NEW YORK

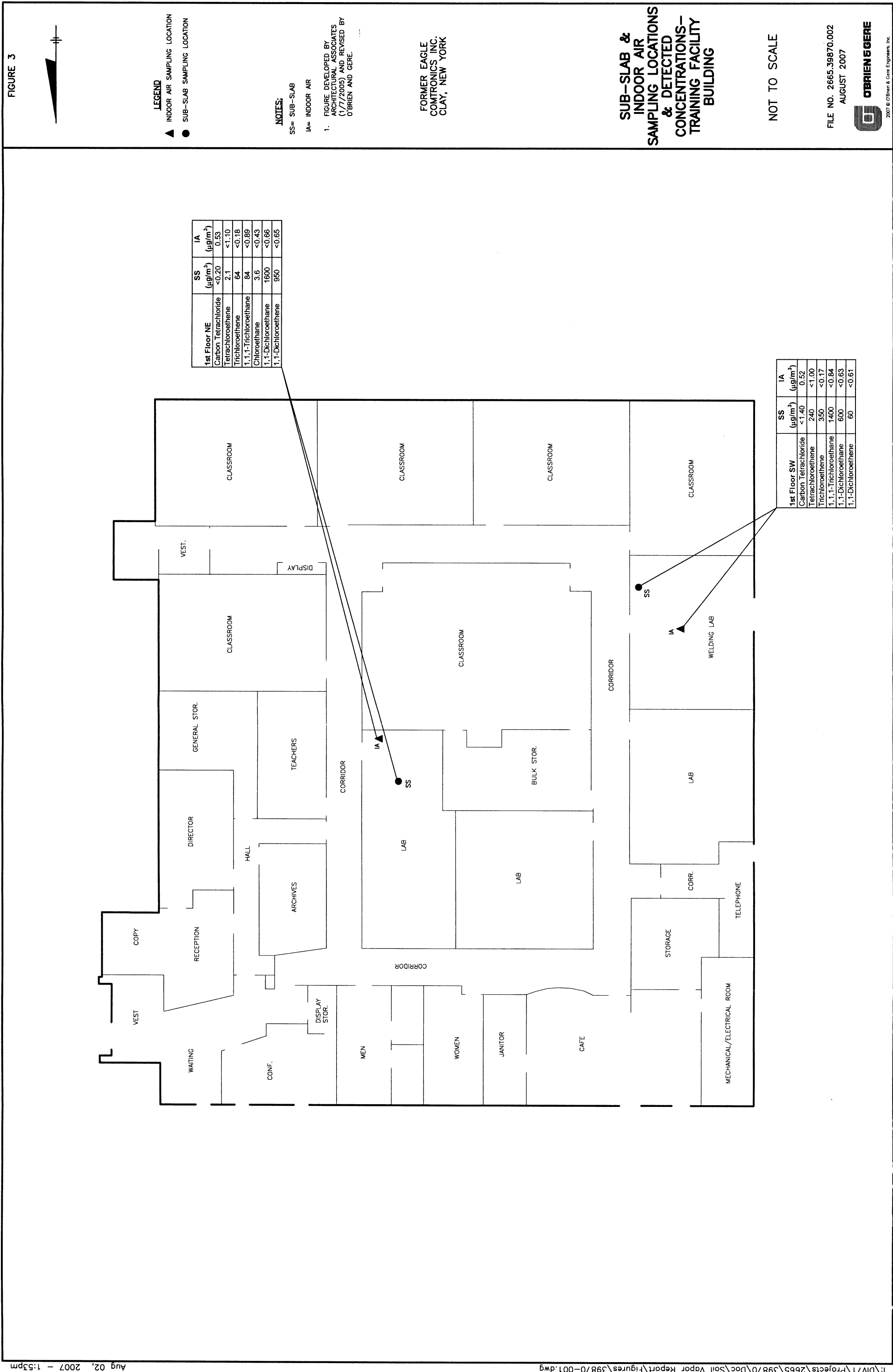
SUB-SLAB &
INDOOR AIR
SAMPLING LOCATIONS
& DETECTED
CONCENTRATIONS--
ADMINISTRATION
BUILDING

NOT TO SCALE

2665.39870.001
AUGUST 2007



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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 Ed Rahn Date/Time Prepared 3/30/07

Preparer's Affiliation O'Brien & Gere Engineers Phone No. (315) 437-6100

Purpose of Investigation Sub Slab Vapor Sampling

1. OCCUPANT:

Interviewed: Y/N

Last Name: McDermott First Name: Dennis

Address: 4562 Waterhouse Road, Clay, NY

County: Onondaga

Home Phone: _____ Office Phone: 315-437-6100 422-0435

Number of Occupants/persons at this location 25-30 Age of Occupants _____

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

Interviewed: Y/N

Last Name: IBEW Local 43 Realty Corp First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential
Industrial

School
Church

Commercial/Multi-use
Other: Office Bldg

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) Labor Organization

Does it include residences (i.e., multi-use)? Y / N

If yes, how many? 25-30

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 _____
- d. Basement floor: uncovered covered covered with _____
- e. Concrete floor: unsealed sealed sealed with _____
- f. Foundation walls: poured block stone other _____
- g. Foundation walls: unsealed sealed sealed with _____
- h. The basement is: wet damp dry moldy
- i. The basement is: finished unfinished partially finished
- j. Sump present? Y N
- k. Water in sump? Y N / not applicable

Basement/Lowest level depth below grade: 10 (feet)

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

Sump

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	Other <u>Roof Top</u> <u>Forced Air</u>
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	

The primary type of fuel used is:

<u>Natural Gas</u>	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: Gas

Boiler/furnace located in: Basement Outdoors Main Floor Other Roof

Air conditioning: Central Air Window units Open Windows None

Are there air distribution ducts present?

☒ Y ☐ N

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

7. OCCUPANCY

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

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

Basement Storage

1st Floor Offices

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? Locket Semi Tor

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? *Spray waxes in restrooms*

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? _____

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)

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

Yes, work at a dry-cleaning service

☒ No

☐ Unknown

Is there a radon mitigation system for the building/structure? Y ☒ N Date of Installation: _____

Is the system active or passive?

Active/Passive

9. WATER AND SEWAGE

Water Supply:

☒ Public Water

☐ Drilled Well

☐ Driven Well

☐ Dug Well

Other: _____

Sewage Disposal:

☒ Public Sewer

☐ Septic Tank

☐ Leach Field

☐ Dry Well

Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

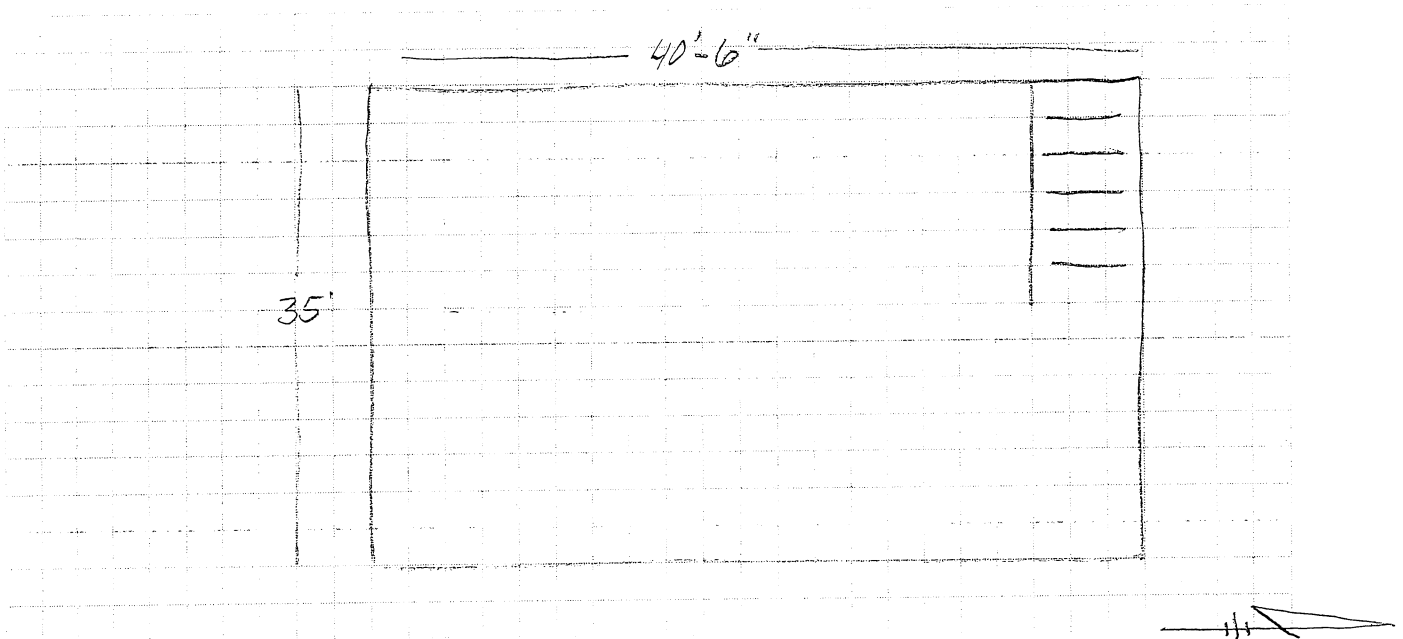
c. Responsibility for costs associated with reimbursement explained? Y / N

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

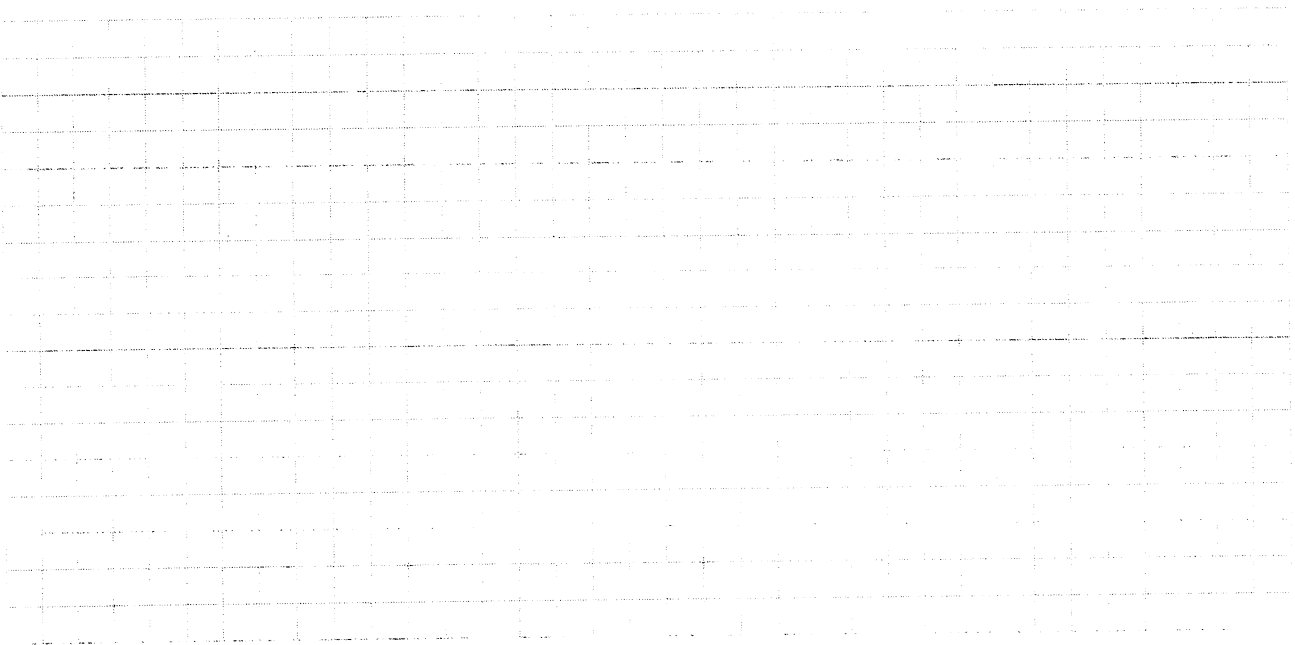
11. FLOOR PLANS

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

Basement:



First Floor:



12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

A large grid of graph paper, consisting of approximately 20 columns and 20 rows of small squares, intended for drawing a sketch of the area surrounding the building being sampled. The grid is empty and occupies the lower two-thirds of the page.

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: _____

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

[illegible]

* 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.

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 Ed Rahn Date/Time Prepared 3/30/07
Preparer's Affiliation O'Brien & Gere Engineers Phone No. (315) 437-6100
Purpose of Investigation Sub Slab Vapor Sampling

1. OCCUPANT:

Interviewed: ☒ Y ☐ N

Last Name: McDermott First Name: Pennis

Address: 4562 Waterhouse Road, Clay, NY

County: Onondaga

Home Phone: _____ Office Phone: 315-422-0435

Number of Occupants/persons at this location 15-30 Age of Occupants 20+

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
Industrial

☒ School
☐ Church

☒ Commercial/Multi-use
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) Labor Organization - Training

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 _____
- d. Basement floor: uncovered covered covered with _____
- e. Concrete floor: unsealed sealed sealed with _____
- f. Foundation walls: poured block stone other _____
- g. Foundation walls: unsealed sealed sealed with _____
- h. The basement is: wet damp dry moldy
- i. The basement is: finished unfinished partially finished
- j. Sump present? Y / N
- k. Water in sump? Y / N / not applicable

Basement/Lowest level depth below grade: _____ (feet)

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

6. HEATING, VENTING and AIR CONDITIONING (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	Other <u>Roof Top</u> <u>Forced Air</u>
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	

The primary type of fuel used is:

<u>Natural Gas</u>	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: Gas

Boiler/furnace located in: Basement Outdoors Main Floor Other Roof

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

Offices and Training Rooms

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? *Welding*

g. Is there smoking in the building?

Y / N How frequently? _____

h. Have cleaning products been used recently?

Y / N When & Type? *Locked in Janitor's Closet*

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? Spray units in restrooms

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? _____

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)

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

Yes, work at a dry-cleaning service

☒ No

Unknown

Is there a radon mitigation system for the building/structure? Y / ☒ N Date of Installation: _____

Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply:

☒ Public Water

Drilled Well

Driven Well

Dug Well

Other: _____

Sewage Disposal:

☒ Public Sewer

Septic Tank

Leach Field

Dry Well

Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

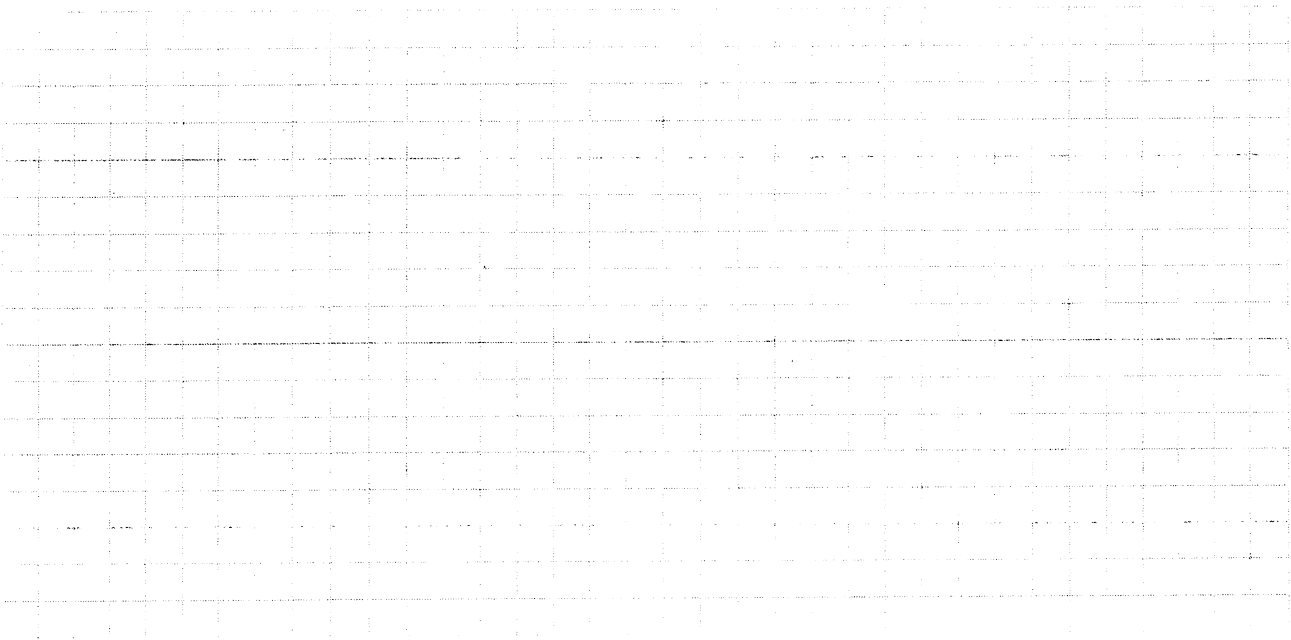
c. Responsibility for costs associated with reimbursement explained? Y / N

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

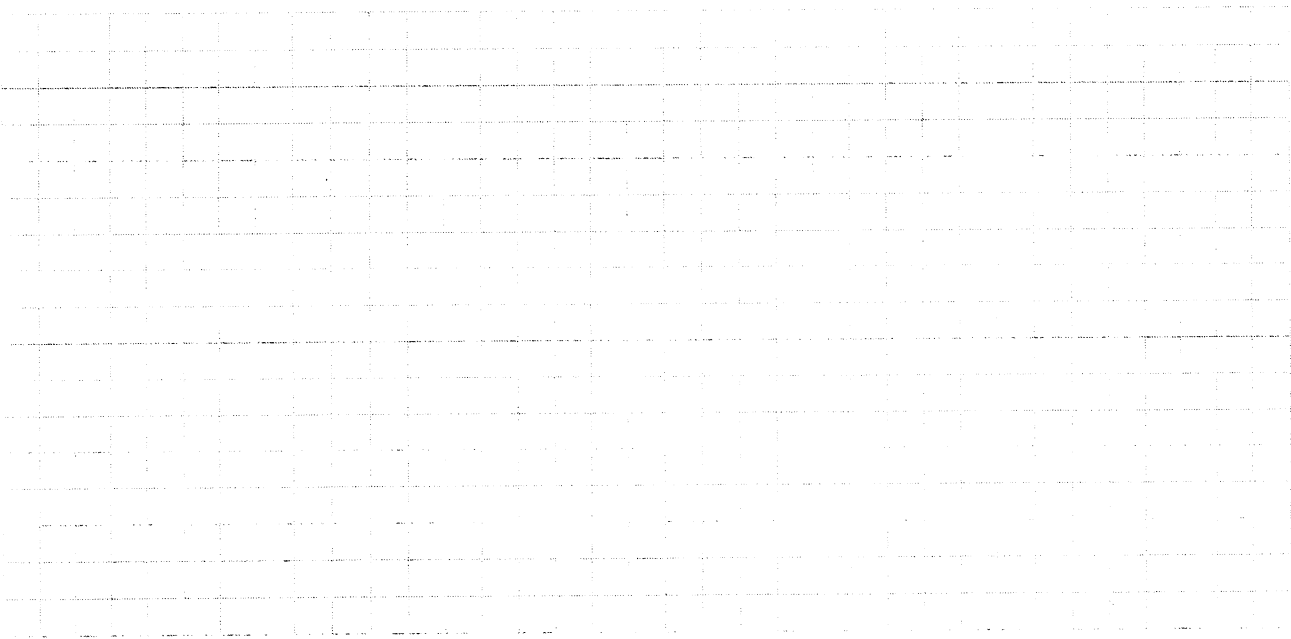
11. FLOOR PLANS

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

Basement:



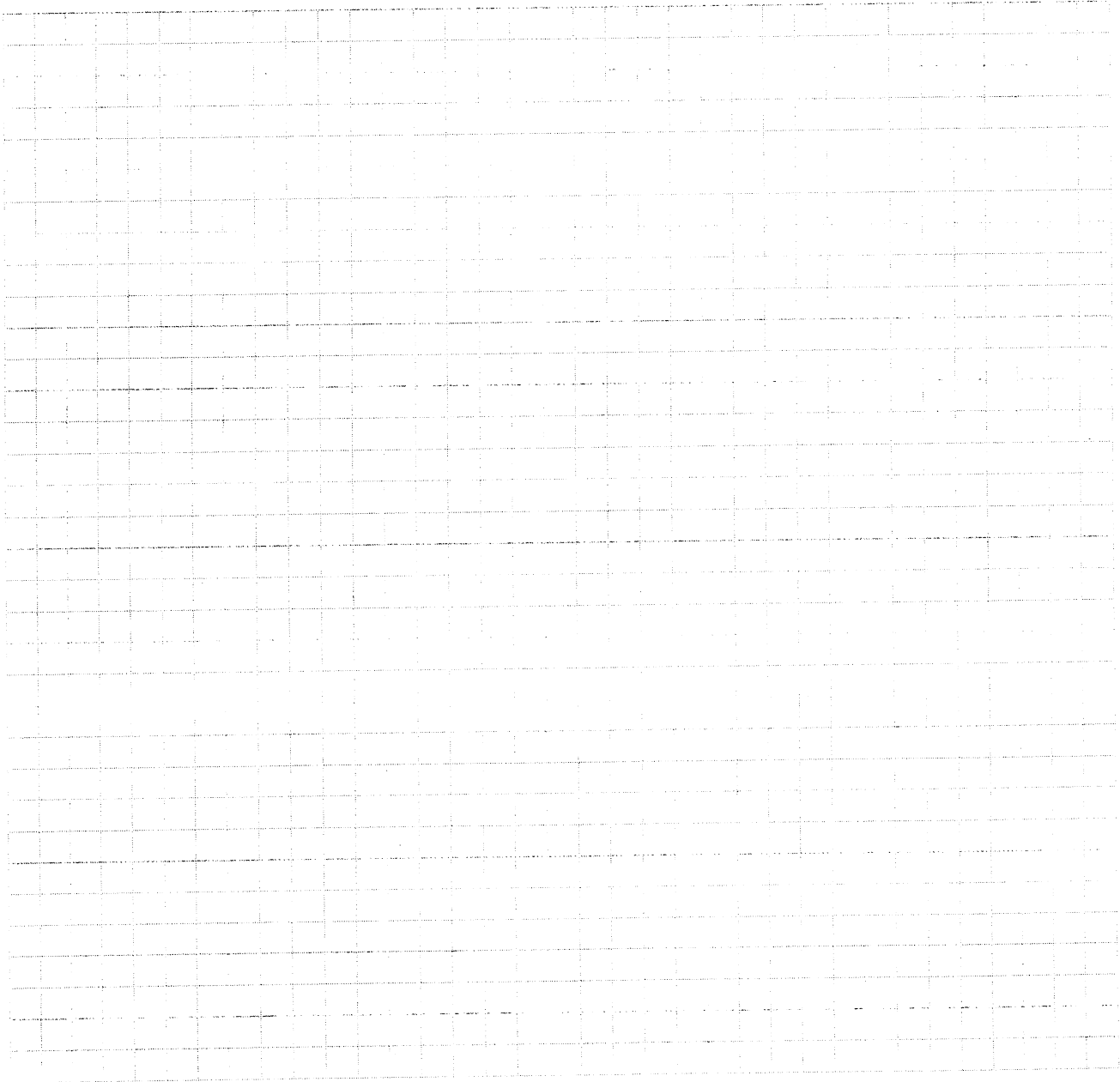
First Floor:



12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



Make & Model of field instrument used: _____

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

[illegible]

** 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.

Soil Vapor and Indoor Air Sampling Photos

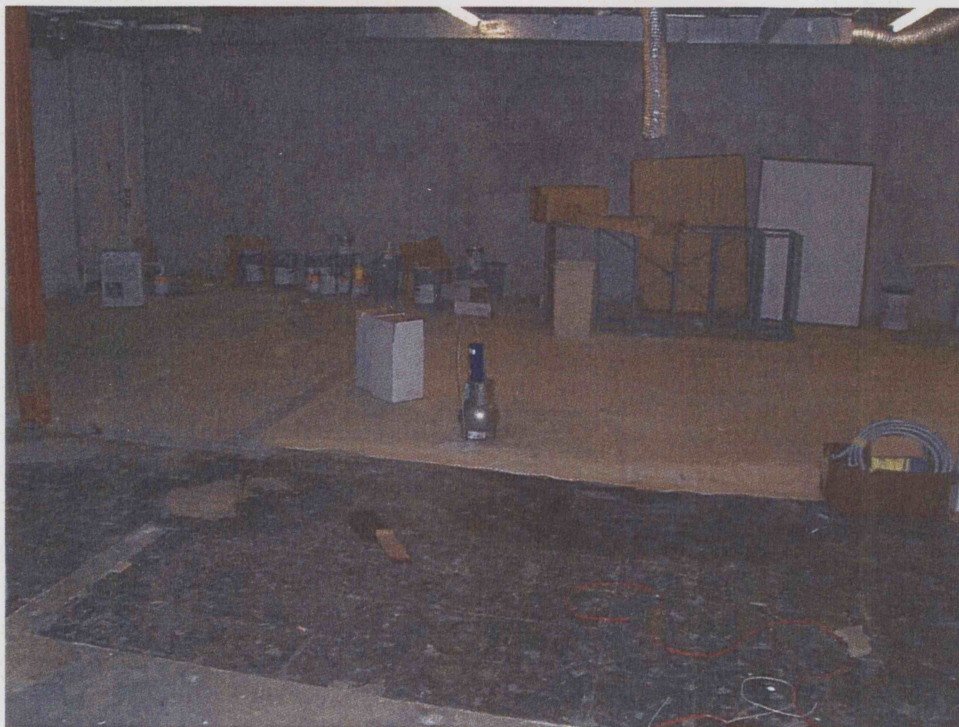


Photo #1: Administration Building, basement, sub-slab sampling.



Photo #2: Administration Building, basement, indoor air sampling.

Soil Vapor and Indoor Air Sampling Photos



Photo #3: Administration Building, 1st floor, sub-slab sampling.

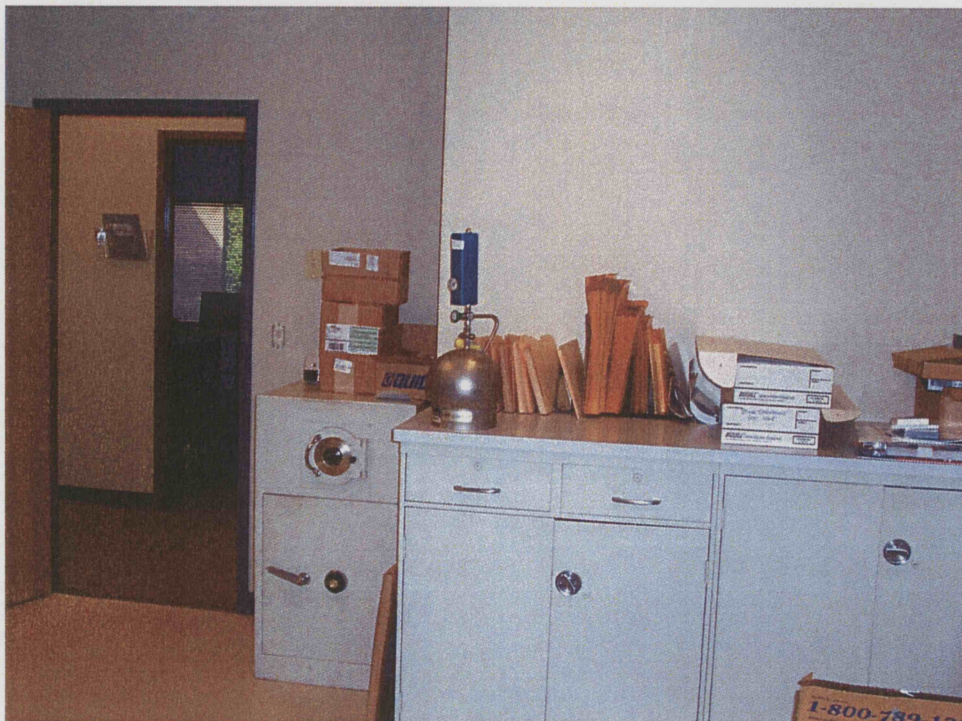


Photo #4: Administration Building, 1st floor, indoor air sampling.

Soil Vapor and Indoor Air Sampling Photos

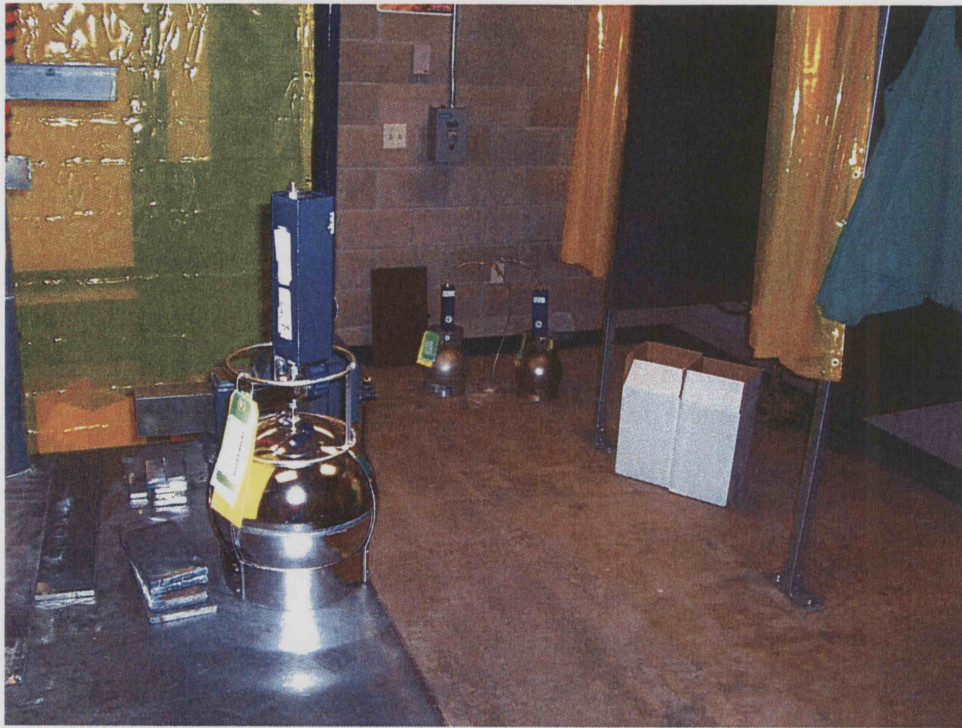


Photo #5: Training Facility Building, 1st floor southwest, indoor air (foreground) and sub-slab (background) sampling.



Photo #5: Training Facility Building, 1st floor northeast, sub-slab sampling.



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020

Hours 8:00 A.M to 6:00 P.M. Pacific



AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0704182

Work Order Summary

CLIENT: Mr. Marc Dent
OBrien & Gere
8000 Britonfield Parkway
E. Syracuse, NY 13057

BILL TO: Mr. Marc Dent
OBrien & Gere
8000 Britonfield Parkway
E. Syracuse, NY 13057

PHONE: 315-437-6100x2258

P.O. #

FAX: 315-463-7554

PROJECT # 2665/39870

DATE RECEIVED: 04/09/2007

CONTACT: Kelly Buettner

DATE COMPLETED: 04/20/2007

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>
07BB	TRAINING NE-SS Duplicate	Modified TO-15	5.0 "Hg
08A	TRAINING NE-IA	Modified TO-15	5.5 "Hg
08B	TRAINING NE-IA	Modified TO-15	5.5 "Hg
09A	AMBIENT AIR	Modified TO-15	2.0 "Hg
09B	AMBIENT AIR	Modified TO-15	2.0 "Hg
10A	DUPLICATE	Modified TO-15	0.0 "Hg
10B	DUPLICATE	Modified TO-15	0.0 "Hg
11A	Lab Blank	Modified TO-15	NA
11B	Lab Blank	Modified TO-15	NA
11C	Lab Blank	Modified TO-15	NA
11D	Lab Blank	Modified TO-15	NA
12A	CCV	Modified TO-15	NA
12B	CCV	Modified TO-15	NA
12C	CCV	Modified TO-15	NA
12D	CCV	Modified TO-15	NA
13A	LCS	Modified TO-15	NA
13B	LCS	Modified TO-15	NA
13C	LCS	Modified TO-15	NA
13D	LCS	Modified TO-15	NA

CERTIFIED BY:

Laboratory Director

DATE: 04/20/07

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,

Accreditation number: E87680, Effective date: 07/01/06, Expiration date: 06/30/07

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

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 not 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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: ADMIN. 1st FL.-IA

Lab ID#: 0704182-04A

No Detections Were Found.

Client Sample ID: ADMIN. 1st FL.-IA

Lab ID#: 0704182-04B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Carbon Tetrachloride	0.030	0.079	0.19	0.50

Client Sample ID: TRAINING SW-SS

Lab ID#: 0704182-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1-Dichloroethene	1.1	15	4.3	60
1,1-Dichloroethane	1.1	150	4.4	600
1,1,1-Trichloroethane	1.1	230	5.9	1300
Tetrachloroethene	1.1	36	7.4	240

Client Sample ID: TRAINING SW-SS Duplicate

Lab ID#: 0704182-05AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1-Dichloroethene	1.6	15	6.5	59
1,1-Dichloroethane	1.6	150	6.6	620
1,1,1-Trichloroethane	1.6	240	8.9	1300
Tetrachloroethene	1.6	36	11	240

Client Sample ID: TRAINING SW-SS

Lab ID#: 0704182-05B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	0.22	66	1.2	350

Client Sample ID: TRAINING SW-SS Duplicate

Lab ID#: 0704182-05BB



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: TRAINING NE-SS

Lab ID#: 0704182-07B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	0.21	11	1.2	57

Client Sample ID: TRAINING NE-SS Duplicate

Lab ID#: 0704182-07BB

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Trichloroethene	0.032	12	0.17	64

Client Sample ID: TRAINING NE-IA

Lab ID#: 0704182-08A

No Detections Were Found.

Client Sample ID: TRAINING NE-IA

Lab ID#: 0704182-08B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Carbon Tetrachloride	0.033	0.084	0.21	0.53

Client Sample ID: AMBIENT AIR

Lab ID#: 0704182-09A

No Detections Were Found.

Client Sample ID: AMBIENT AIR

Lab ID#: 0704182-09B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Carbon Tetrachloride	0.029	0.080	0.18	0.50

Client Sample ID: DUPLICATE

Lab ID#: 0704182-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: ADMIN. BASE.-SS

Lab ID#: 0704182-01A

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

File Name:	z041713	Date of Collection:	3/30/07
Dil. Factor:	1.52	Date of Analysis:	4/17/07 06:13 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.15	Not Detected	0.39	Not Detected
Chloroethane	0.15	Not Detected	0.40	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.60	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected
1,1-Dichloroethane	0.15	Not Detected	0.62	Not Detected
1,1,1-Trichloroethane	0.15	4.3	0.83	24
1,2-Dichloroethane	0.15	Not Detected	0.62	Not Detected
Tetrachloroethene	0.15	0.25	1.0	1.7

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	87	70-130
4-Bromofluorobenzene	97	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: ADMIN. BASE.-IA

Lab ID#: 0704182-02A

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

File Name:	z041714	Date of Collection:	3/30/07
Dil. Factor:	1.52	Date of Analysis:	4/17/07 07:21 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.15	Not Detected	0.39	Not Detected
Chloroethane	0.15	Not Detected	0.40	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.60	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected
1,1-Dichloroethane	0.15	Not Detected	0.62	Not Detected
1,1,1-Trichloroethane	0.15	Not Detected	0.83	Not Detected
1,2-Dichloroethane	0.15	Not Detected	0.62	Not Detected
Tetrachloroethene	0.15	Not Detected	1.0	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	90	70-130
4-Bromofluorobenzene	96	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: ADMIN. 1st FL.-SS

Lab ID#: 0704182-03A

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

File Name:	z041715	Date of Collection: 3/30/07
Dil. Factor:	1.52	Date of Analysis: 4/17/07 07:52 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.15	Not Detected	0.39	Not Detected
Chloroethane	0.15	Not Detected	0.40	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.60	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected
1,1-Dichloroethane	0.15	Not Detected	0.62	Not Detected
1,1,1-Trichloroethane	0.15	0.28	0.83	1.6
1,2-Dichloroethane	0.15	Not Detected	0.62	Not Detected
Tetrachloroethene	0.15	0.24	1.0	1.6

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	94	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: ADMIN. 1st FL.-IA

Lab ID#: 0704182-04A

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

File Name:	z041716	Date of Collection: 3/30/07
Dil. Factor:	1.49	Date of Analysis: 4/17/07 08:55 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.15	Not Detected	0.38	Not Detected
Chloroethane	0.15	Not Detected	0.39	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.59	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	0.59	Not Detected
1,1-Dichloroethane	0.15	Not Detected	0.60	Not Detected
1,1,1-Trichloroethane	0.15	Not Detected	0.81	Not Detected
1,2-Dichloroethane	0.15	Not Detected	0.60	Not Detected
Tetrachloroethene	0.15	Not Detected	1.0	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	93	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: TRAINING SW-SS

Lab ID#: 0704182-05A

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

File Name:	z041723	Date of Collection: 3/30/07
Dil. Factor:	10.9	Date of Analysis: 4/18/07 02:41 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
Chloroethane	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	15	4.3	60
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
1,1-Dichloroethane	1.1	150	4.4	600
1,1,1-Trichloroethane	1.1	230	5.9	1300
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected
Tetrachloroethene	1.1	36	7.4	240

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	99	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: TRAINING SW-SS

Lab ID#: 0704182-05B

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

File Name:	z041723sim	Date of Collection: 3/30/07
Dil. Factor:	10.9	Date of Analysis: 4/18/07 02:41 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Carbon Tetrachloride	0.22	Not Detected	1.4	Not Detected
Trichloroethene	0.22	66	1.2	350

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	0-130
Toluene-d8	97	0-130
4-Bromofluorobenzene	98	0-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: TRAINING SW-IA

Lab ID#: 0704182-06A

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

File Name:	z041724	Date of Collection: 3/30/07
Dil. Factor:	1.55	Date of Analysis: 4/18/07 04:10 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.16	Not Detected	0.40	Not Detected
Chloroethane	0.16	Not Detected	0.41	Not Detected
1,1-Dichloroethene	0.16	Not Detected	0.61	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.61	Not Detected
1,1-Dichloroethane	0.16	Not Detected	0.63	Not Detected
1,1,1-Trichloroethane	0.16	Not Detected	0.84	Not Detected
1,2-Dichloroethane	0.16	Not Detected	0.63	Not Detected
Tetrachloroethene	0.16	Not Detected	1.0	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	101	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: TRAINING NE-SS

Lab ID#: 0704182-07A

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

File Name:	z041722	Date of Collection:	3/30/07
Dil. Factor:	10.7	Date of Analysis:	4/18/07 01:54 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	1.1	Not Detected	2.7	Not Detected
Chloroethane	1.1	1.2	2.8	3.2
1,1-Dichloroethene	1.1	240	4.2	950
trans-1,2-Dichloroethene	1.1	Not Detected	4.2	Not Detected
1,1-Dichloroethane	1.1	390	4.3	1600
1,1,1-Trichloroethane	1.1	14	5.8	79
1,2-Dichloroethane	1.1	Not Detected	4.3	Not Detected
Tetrachloroethene	1.1	Not Detected	7.2	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	98	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: TRAINING NE-SS

Lab ID#: 0704182-07B

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

File Name:	z041722sim	Date of Collection:	3/30/07
Dil. Factor:	10.7	Date of Analysis:	4/18/07 01:54 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Carbon Tetrachloride	0.21	Not Detected	1.3	Not Detected
Trichloroethene	0.21	11	1.2	57

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	0-130
Toluene-d8	107	0-130
4-Bromofluorobenzene	98	0-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: TRAINING NE-IA

Lab ID#: 0704182-08A

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

File Name:	z041725	Date of Collection: 3/30/07
Dil. Factor:	1.64	Date of Analysis: 4/18/07 05:20 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.16	Not Detected	0.42	Not Detected
Chloroethane	0.16	Not Detected	0.43	Not Detected
1,1-Dichloroethene	0.16	Not Detected	0.65	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.65	Not Detected
1,1-Dichloroethane	0.16	Not Detected	0.66	Not Detected
1,1,1-Trichloroethane	0.16	Not Detected	0.89	Not Detected
1,2-Dichloroethane	0.16	Not Detected	0.66	Not Detected
Tetrachloroethene	0.16	Not Detected	1.1	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: AMBIENT AIR

Lab ID#: 0704182-09A

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

File Name:	z041726	Date of Collection:	3/30/07
Dil. Factor:	1.44	Date of Analysis:	4/18/07 06:04 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.14	Not Detected	0.37	Not Detected
Chloroethane	0.14	Not Detected	0.38	Not Detected
1,1-Dichloroethene	0.14	Not Detected	0.57	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	0.57	Not Detected
1,1-Dichloroethane	0.14	Not Detected	0.58	Not Detected
1,1,1-Trichloroethane	0.14	Not Detected	0.78	Not Detected
1,2-Dichloroethane	0.14	Not Detected	0.58	Not Detected
Tetrachloroethene	0.14	Not Detected	0.98	Not Detected

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

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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: DUPLICATE

Lab ID#: 0704182-10A

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

File Name:	z041820	Date of Collection: 3/30/07
Dil. Factor:	13.4	Date of Analysis: 4/19/07 12:13 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	1.3	Not Detected	3.4	Not Detected
Chloroethane	1.3	Not Detected	3.5	Not Detected
1,1-Dichloroethene	1.3	12	5.3	46
trans-1,2-Dichloroethene	1.3	Not Detected	5.3	Not Detected
1,1-Dichloroethane	1.3	140	5.4	570
1,1,1-Trichloroethane	1.3	260	7.3	1400
1,2-Dichloroethane	1.3	Not Detected	5.4	Not Detected
Tetrachloroethene	1.3	35	9.1	240

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	102	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0704182-11A

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

File Name:	z041706	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/17/07 01:04 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
Chloroethane	0.10	Not Detected	0.26	Not Detected
1,1-Dichloroethene	0.10	Not Detected	0.40	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
1,1-Dichloroethane	0.10	Not Detected	0.40	Not Detected
1,1,1-Trichloroethane	0.10	Not Detected	0.54	Not Detected
1,2-Dichloroethane	0.10	Not Detected	0.40	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	103	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0704182-11C

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

File Name:	z041807	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/18/07 02:27 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
Chloroethane	0.10	Not Detected	0.26	Not Detected
1,1-Dichloroethene	0.10	Not Detected	0.40	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
1,1-Dichloroethane	0.10	Not Detected	0.40	Not Detected
1,1,1-Trichloroethane	0.10	Not Detected	0.54	Not Detected
1,2-Dichloroethane	0.10	Not Detected	0.40	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	101	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0704182-12A

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

File Name:	z041704	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/17/07 11:20 AM

Compound	%Recovery
Vinyl Chloride	94
Chloroethane	92
1,1-Dichloroethene	97
trans-1,2-Dichloroethene	95
1,1-Dichloroethane	94
1,1,1-Trichloroethane	92
1,2-Dichloroethane	87
Tetrachloroethene	106

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	88	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	96	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0704182-12C

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

File Name:	z041802	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/18/07 09:45 AM

Compound	%Recovery
Vinyl Chloride	102
Chloroethane	97
1,1-Dichloroethene	98
trans-1,2-Dichloroethene	95
1,1-Dichloroethane	98
1,1,1-Trichloroethane	96
1,2-Dichloroethane	104
Tetrachloroethene	103

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	97	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0704182-13A

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

File Name:	z041703	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/17/07 10:42 AM

Compound	%Recovery
Vinyl Chloride	90
Chloroethane	87
1,1-Dichloroethene	107
trans-1,2-Dichloroethene	95
1,1-Dichloroethane	95
1,1,1-Trichloroethane	88
1,2-Dichloroethane	88
Tetrachloroethene	104

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	85	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0704182-13C

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

File Name:	z041803	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/18/07 10:31 AM

Compound	%Recovery
Vinyl Chloride	94
Chloroethane	92
1,1-Dichloroethene	101
trans-1,2-Dichloroethene	92
1,1-Dichloroethane	97
1,1,1-Trichloroethane	95
1,2-Dichloroethane	104
Tetrachloroethene	110

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	98	70-130



CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice

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(916) 985-1000 FAX (916) 985-1020

Page 1 of 1

Project Manager MARC DENT
Collected by: (Print and Sign) ED RAHN
Company O'BRIEN & GERE ENG. Email dentm@obg.com
Address 5800 BRITTONFIELD City SYRACUSE State NY Zip 13159
Phone (315) 437-6100 Fax (315) 463-7554

Project Info:		Lab Use Only	
P.O. #	Turn Around Time:	Pressurized by:	He
Project # <u>2665/39870</u>	<input checked="" type="checkbox"/> Normal	Date: <u>4/19/07</u>	
Project Name	<input type="checkbox"/> Rush	Pressurization Gas:	
	specify		

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum		
						Initial	Final	Final (psi)
01AB	ADMIN. BASE. - SS	33666	3/30/07	1904	TD-15	-30	-5.5	3.5% 5.0% 251
02AB	ADMIN. BASE. - IA	36031		1904		-30	-6	3.5%
03AB	ADMIN. 1ST FL. - SS	35274		1850		-30	-5.5	3.5%
04AB	ADMIN. 1ST FL. - IA	03111		1850		-30	-4.5	3.0%
05AB	TRAINING SW - SS	36042		1827		-30	-7	5.5%
06AB	TRAINING SW - IA	3726		1827		-30	-8.5	4.0%
07AB	TRAINING NE - SS	35139		1812		-30	-6	5.0%
08AB	TRAINING NE - IA	34416		1813		-30	-7	5.5%
09AB	AMBIENT AIR	4201		1920		-30	-5	2.0%
10AB	DUPLICATE	12680				-30	-2	0.0%

Relinquished by: (signature) <u>Edwin B. Rahn</u> Date/Time <u>4/19/07 11:22</u>	Notes:
Relinquished by: (signature) _____ Date/Time _____	
Relinquished by: (signature) _____ Date/Time _____	
Relinquished by: (signature) _____ Date/Time _____	

Lab Use Only	Shipper Name <u>FedEx</u>	Air Bill # <u>301924162008161</u>	Temp (°C) <u>NA</u>	Condition <u>Good</u>	Custody Seals Intact? <u>Yes</u> <u>No</u> <u>None</u>	Work Order # <u>0704182</u>
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