



engineering and constructing a better tomorrow

November 5, 2007

Mr. Joseph T. Martella II, Senior Engineer  
RIDEM Office of Waste Management  
Site Remediation Program  
235 Providence Street  
Providence, RI 02908

**RE: Indoor Air Investigation Results**  
**Former Gorham Manufacturing Facility, Parcel A Retail Complex**  
**333 Adelaide Avenue, Providence, Rhode Island**  
**MACTEC Project No. 3650050041.12**

Dear Mr. Martella:

This letter summarizes the Indoor Air Investigation activities conducted by MACTEC Engineering & Consulting, Inc. (MACTEC) at the Parcel A retail complex located at the Former Gorham Manufacturing Facility, 333 Adelaide Avenue, Providence, Rhode Island (the Site) on September 12, 2007.

#### **BACKGROUND**

Currently, two of the four spaces of the retail complex are occupied. A check-cashing service and a video rental store are open for business. The former Dollar Store and Stop & Shop retail spaces are unoccupied.

#### **WORK ACTIVITIES CONDUCTED**

Based on the results of the August 7, 2007 soil vapor investigation beneath and adjacent to the retail building and in coordination with the Rhode Island Department of Environmental Management (RIDEM), MACTEC conducted an indoor air investigation on September 12, 2007 in accordance with the MACTEC *Indoor Air Sampling Work Plan* (MACTEC, 2007) submitted to RIDEM on August 22, 2007 to characterize the indoor air quality of the retail complex at the Site. These activities included a building reconnaissance, restoration of previously removed concrete from the concrete slab inside Stop & Shop, and the collection of air samples at 14 locations at the Site.

#### **INDOOR AIR PRE-SAMPLING INSPECTION**

MACTEC personnel performed a pre-sampling inspection on September 7, 2007 to identify conditions that may affect or interfere with the indoor air sampling activities, including conduits for vapor between the subsurface and the building interior. In the Stop & Shop retail space, numerous floor drains (with grates and without grates), exposed electrical conduit, and exposed

water supply lines were present in the concrete floor. In addition, there was a sump in the concrete floor and vent pipes in the wall. These areas were screened with two photoionization detectors (PIDs): a ppb RAE (10.6 eV lamp) and a MiniRAE (11.7 eV lamp). There were no PID readings detected above background readings measured outside the retail complex. Based on MACTEC's observations and PID results, the utilities were not conduits of soil vapor from beneath the building. An Indoor Air Questionnaire and Building Inventory Form (Attachment A) was completed, and it identifies locations and results of the building interior PID screening.

There was one hole (approximately 1 square feet) in the concrete floor, which appeared to have been created by a jackhammer. This hole did access the soil beneath the building, and it was patched with grout by MACTEC personnel because this condition was not representative of normal operating conditions. Also, there was a  $\frac{1}{2}$  inch crack (approximately 10 ft long) that appeared to have been created by movement/storage of heavy ovens and/or freezers. It was not apparent if this crack accessed the soil beneath the building; however, the crack was sealed with grout.

Carpeting covered the concrete slab in the former Dollar Store, the existing Hollywood Video, and the check cashing retail space. Thus, no visual observation of the integrity of the floor was conducted in these retail spaces.

#### AIR SAMPLING AND ANALYSIS

On September 12, 2007, MACTEC collected fifteen (15) air samples (including one duplicate) at the Site using certified pre-cleaned Summa canisters. Each of the 6-liter Summa canisters was equipped with a pressure guage and flow regulator that had been set for an 8-hour collection period. The air intakes of the Summa canisters were located at approximately 4 feet above the floor/ground. A trip blank (unused Summa canister) was also submitted to the laboratory for analysis.

Nine (9) air samples were collected from inside the retail building complex (Figure 1) including one inside the former Dollar Store (AIR-2), one inside Hollywood Video (AIR-1), one inside the check cashing store (AIR-3), and six (6) inside the former Stop & Shop space (AIR-4, AIR-5 and a duplicate, AIR-6, AIR-7, AIR-8, and AIR-13). Four (4) air samples were also collected outdoors along the perimeter of the building (AIR-9, AIR-10, AIR-11, and AIR-12), and one (1) sample was collected upwind (southwest) of the retail stores near Adelaide Avenue (AIR-14). The outdoor air samples were collected to provide perspective, since the outdoor air is the source of makeup air for the building's ventilation system. Ambient air was screened at each sample location prior to sample collection using a MiniRAE and a ppbRAE Photoionization Detectors (PIDs). Figure 1 shows the locations of the fourteen air sampling locations.

Air samples were collected in accordance with the MACTEC Indoor Air Sampling Work Plan (MACTEC, 2007) approved by RIDEM, and were submitted under chain of custody to Alpha Woods Hole Labs of Mansfield, Massachusetts for volatile organic compound (VOC) analysis by U.S. Environmental Protection Agency (US EPA) Method TO-15 SIM. The laboratory report including the analytical results and chains of custody is provided in Attachment B. The laboratory completed the analysis of all submitted samples as requested.

## RESULTS, CONCLUSIONS, AND PROPOSED ACTIONS

The chemical concentrations detected in all of the air samples are well below the workplace air standards published by OSHA. Table 1 presents the analytical results for all samples in units of micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ). Table 1 also presents the Connecticut Department of Environmental Protection Draft Industrial/ Commercial Target Air Concentrations (TACs) (CTDEP, 2003) and identifies detected concentrations that are above the corresponding TACs. Analyte concentrations above the corresponding CT TACs are shaded and bolded in Table 1. The air concentrations are compared to the Draft CT TACs because the State of Rhode Island Remediation Regulations do not contain indoor air criteria or screening values and RIDEM has required that indoor air data collected at the nearby Adelaide High School be evaluated by comparison to the Residential CT Draft TACs (consistent evaluation at the Site).

No volatiles were detected at concentrations greater than the TACs in the outdoor ambient air samples. Four indoor air exposure points were characterized by the sampling and analysis: the currently occupied Hollywood Video (AIR-1); the currently unoccupied former Dollar Store (AIR-2); the Check Cashing Store (AIR-3), and the currently unoccupied former Stop & Shop space (AIR-4, AIR-5 and a duplicate, AIR-6, AIR-7, AIR-8, and AIR-13). As can be seen in Table 1, all chemical concentrations in the air samples from the currently occupied Hollywood Video Store and Check Cashing Store were below the Draft CT TACs. In the former Dollar Store, concentrations of all chemicals except trichloroethylene were below the Draft CT TACs. The trichloroethylene concentration from that area ( $2.97 \mu\text{g}/\text{m}^3$ ) was above the Draft TAC of  $1 \mu\text{g}/\text{m}^3$ .

In the former Stop & Shop retail space, concentrations of two compounds (tetrachloroethylene and trichloroethylene) were greater than the corresponding Draft Industrial/Commercial TAC in one or more indoor air samples. Tetrachloroethylene concentrations were greater than the TAC ( $5 \mu\text{g}/\text{m}^3$ ) for indoor air at three locations AIR-5 ( $6.24 \mu\text{g}/\text{m}^3$ ), AIR-8 ( $5.20 \mu\text{g}/\text{m}^3$ ), and AIR-13 ( $9.07 \mu\text{g}/\text{m}^3$ ). The average tetrachloroethylene concentration in this space was  $5.40 \mu\text{g}/\text{m}^3$ . Trichloroethylene concentrations were greater than the TAC ( $1 \mu\text{g}/\text{m}^3$ ) for indoor air at six locations AIR-4 ( $2.48 \mu\text{g}/\text{m}^3$ ), AIR-5 ( $2.78 \mu\text{g}/\text{m}^3$ ), AIR-6 ( $1.97 \mu\text{g}/\text{m}^3$ ), AIR-7 ( $1.69 \mu\text{g}/\text{m}^3$ ), AIR-8 ( $2.43 \mu\text{g}/\text{m}^3$ ), and AIR-13 ( $3.37 \mu\text{g}/\text{m}^3$ ). The average trichloroethylene concentration in this space was  $2.45 \mu\text{g}/\text{m}^3$ . The average concentrations of trichloroethylene and tetrachloroethylene in the air samples from this space were above the average concentrations in the five outdoor air samples.

The sampling that was conducted on September 12, 2007 provides a snapshot of air quality in the retail complex and in outdoor air on the day of sampling. These results can be used in a screening evaluation to assess the need for further investigation or mitigation at this retail building.

- Based on the September 12, 2007 results, the inhalation health risks would meet the Remediation Regulations requirements for hypothetical store employees or members of the community that have shopped at the buildings for up to six years. The duration of six years was used in this analysis based on the building's maximum potential occupancy duration due to its date of construction. This evaluation is based on a full-time commercial/retail employee working for six years at the retail complex (all four exposure points); the non-cancer hazard index is below one (below a level of concern) and the estimated cancer risk is below one in one million (below a level of concern).

- The cancer risk conclusion is based on the cancer toxicity information for trichloroethylene that was most recently in use (but which has been withdrawn) by the USEPA Superfund program. This cancer toxicity information was used in developing the soil and groundwater standards in the Rhode Island Remediation Regulations and in the most recent (2006) soil and groundwater standards published in the Massachusetts Contingency Plan.
- The California EPA toxicity value is the preferred value, as recommended by USEPA (USEPA, 2003), when there is not an official, published, peer reviewed value available from USEPA. Using the cancer toxicity information for trichloroethylene published by the California EPA, the estimated cancer risk is also less than one in one million (below any level of concern).
- A proposed range of cancer toxicity values for trichloroethylene was released by USEPA for comment in 2001 and is still under review. The proposed range of values and their basis have been the focus of considerable debate among members of the scientific community since 2001. If the cancer toxicity value at the upper end of the range (most conservative) proposed in 2001 is used to estimate risks for a six-year worker scenario, the risk is within the acceptable risk range under Superfund.
- An assessment of human health risks based on this single set of data indicates that both cancer and non-cancer risks are below any levels of concern for shoppers who may visit the property for 2 hours per week for a period of six years.
- There is no indication that any immediate action is required to protect public health in the currently occupied portions of the retail complex.

Attachment C includes weather data for the date of the air sampling event.

Because concentrations of trichloroethylene and tetrachloroethylene in indoor air samples were above Draft CT TACs and because the indoor concentrations are higher than concentrations in outdoor samples, Textron proposes to collect pre-design information to support a mitigation system for the vapor intrusion pathway that would be designed to achieve the Draft CT TACs. In addition, an investigation will be conducted to assess the source of volatiles that have been detected in soil gas samples and indoor air samples. The scope of work for collection of pre-design data collection and an assessment of the source of volatiles is included below for review by RIDEM. Textron would like to proceed with this work in a timely manner.

#### SOURCE IDENTIFICATION

The source identification program will include conducting a soil gas investigation within the retail space at up to 15 locations. At each location, three discrete soil gas samples will be collected at different depths below the concrete slab. One soil gas sample will be collected immediately below the concrete slab; the second soil gas sample will be collected at approximately 8 ft bgs; and the third sample will be collected at 15 ft bgs. Soil gas samples will be collected with microwell screens or using the lost point method. Sampling with microwell screens includes driving a microwell with a one foot screen to the sampling depth. The lost point method involves driving a hollow steel probe fitted with a drive point to a selected depth below grade and then pulling the probe back 6 inches while the point is held in place creating a sampling cavity.

In both methods, the sampling system is purged and then sampled. Samples will be collected in sample vials and analyzed on-site by a subcontractor's mobile laboratory. The mobile laboratory consists of two gas chromatographs connected in series and fitted with an electron capture detector (ECD), a PID, and a flame ionization detector (FID) in accordance with modified EPA Method 8021B. Soil vapor samples will be analyzed on-site for trichloroethylene, tetrachloroethylene, cis-1,2-dichloroethylene, vinyl chloride, 1,1,1-trichloroethane, 1,1-dichloroethane, 1,1-dichloroethylene, acetone, benzene, toluene, ethyl benzene, and xylene. All penetrations in the concrete slab will be resealed with grout.

Also, three shallow groundwater monitoring wells will be installed immediately downgradient of the retail space. These wells will be developed and sampled for VOCs by EPA Method 8260.

#### **PRE-DESIGN DATA COLLECTION**

Pre-design data collection at the retail space will include drilling a new centrally located hole in the building slab to provide a communication test to be used in an Active Soil Depressurization (ASD) system design. An industrial vacuum will be used to apply a negative pressure to the sub slab. Then, communication testing will occur at regular intervals (e.g., every 20 feet) proceeding away from the pilot testing location to determine the vacuum's influence on the subslab. A second test located in the building's western wing may be necessary. In addition, likely pipe routing scenarios will be identified. This will include potential lengths of pipe runs, pipe run locations, accessibility, and wall and roof penetrations for the ASD system. All penetrations in the concrete slab will be resealed with grout.

#### **SOURCE IDENTIFICATION REPORT**

A source identification report documenting the soil gas investigation program and analytical results will be prepared and submitted to RIDEM approximately 30 days following the soil gas investigation. The report will include an evaluation of the results and recommendations for further action, as warranted.

Please contact Michael Murphy at (781) 213-5600 or Greg Simpson of Textron at (401) 457-2635 with any questions.

Sincerely,  
**MACTEC Engineering and Consulting, Inc.**

  
Michael Murphy  
Senior Principal Scientist

  
David E. Heislein  
Principal Engineer

Attachments: Table  
Figures  
Attachment A – Indoor Air Quality Questionnaire and Building Inventory  
Attachment B – Laboratory Analytical Report  
Attachment C – Meteorological Information for Sampling Date  
Attachment D – References

cc: T. Dellar, City of Providence  
P. Grivers, EA Engineering, Science, and Technology  
T. Regan, EA Engineering, Science, and Technology  
G. Simpson, Textron, Inc.  
Knight Memorial Library Repository  
G. Wilson, Kimco Realty Corporation (including tenants)  
J. Morgan, The Stop & Shop Supermarket Co. LLC  
MACTEC Project File [P:\TEXTRON\GORHAM\Stop & Shop\Soil Vapor Report and Indoor Air WP\Indoor Air Results 102907.doc]

**Table 1**  
**Comparison of Analytical Results for Ambient Air to**  
**CT Target Air Concentrations**

**Comparison of Analytical Results for Indoor Air in the Retail Buildings and Outdoor Air to CT Target Air Concentrations**

**Former Gorham Manufacturing Site  
333 Adelaide Avenue  
Providence, Rhode Island**

	CT TAC <sup>a</sup>	AIR-1	AIR-2	AIR-3	AIR-4	AIR-5	AIR-5 DUP	AIR-6	AIR-7	AIR-8
	Industrial/ Commercial ( $\mu\text{g}/\text{m}^3$ )	9/12/2007 Indoor Air L0713396-01	9/12/2007 Indoor Air L0713396-02	9/12/2007 Indoor Air L0713396-03	9/12/2007 Indoor Air L0713396-04	9/12/2007 Indoor Air L0713396-05	9/12/2007 Indoor Air L0713396-06	9/12/2007 Indoor Air L0713396-07	9/12/2007 Indoor Air L0713396-08	9/12/2007 Indoor Air L0713396-09
<b>Volatile Organics (<math>\mu\text{g}/\text{m}^3</math>)</b>										
1,1,1,2-Tetrachloroethane	1.1	< 0.137	< 0.137	< 0.137	< 0.137	< 0.137	< 0.137	< 0.137	< 0.137	< 0.137
1,1,1-Trichloroethane	500	1.57	11.5	1.9	2.35	2.18	2.11	1.68	1.81	2.11
1,1,2,2-Tetrachloroethane	0.14	< 0.137	< 0.137	< 0.137	< 0.137	< 0.137	< 0.137	< 0.137	< 0.327	< 0.137
1,1,2-Trichloroethane	12	< 0.109	< 0.109	< 0.109	< 0.109	< 0.109	< 0.109	< 0.109	< 0.26	< 0.109
1,1-Dichloroethane	430	0.086	0.634	0.111	0.321	0.231	0.233	0.224	0.218	0.235
1,1-Dichloroethene	20	< 0.0792	< 0.0792	< 0.0792	0.098	0.097	0.091	0.08	< 0.189	0.086
1,2,4-Trimethylbenzene	52	0.201	0.141	< 0.0982	0.236	0.233	0.265	0.212	< 0.234	0.22
1,2-Dibromoethane	0.038	< 0.154	< 0.154	< 0.154	< 0.154	< 0.154	< 0.154	< 0.154	< 0.366	< 0.154
1,2-Dichlorobenzene	410	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.287	< 0.12
1,2-Dichloroethane	0.31	< 0.0809	< 0.0809	< 0.0809	< 0.0809	< 0.0809	< 0.0809	< 0.0809	< 0.193	< 0.0809
1,2-Dichloropropane	0.42	0.095	< 0.0924	< 0.0924	< 0.0924	< 0.0924	< 0.0924	< 0.0924	< 0.22	< 0.0924
1,3,5-Trimethylbenzene	52	0.112	< 0.0882	0.18	0.103	0.11	0.115	< 0.0982	< 0.234	< 0.0982
1,3-Butadiene	NA	< 0.0442	< 0.0442	< 0.0442	< 0.0442	< 0.0442	< 0.0442	< 0.0442	< 0.106	< 0.0442
1,3-Dichlorobenzene	410	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.287	< 0.12
1,4-Dichlorobenzene	24	< 0.12	0.133	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.193	< 0.0809
2-Butanone	500	2.26	2.05	2.56	< 1.47	2.02	2.42	2.47	< 3.52	2.86
4-Methyl-2-pentanone	200	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 4.88	< 2.05
Acetone	500	10.5	8.69	11.1	8.88	8.26	8.52	8.39	< 11.3	9.34
Acrylonitrile	NA	< 1.08	< 1.08	< 1.08	< 1.08	< 1.08	< 1.08	< 1.08	< 2.59	< 1.08
Benzene	3.3	0.314	0.28	0.234	0.663	0.721	0.731	0.621	0.746	0.707
Bromodichloromethane	0.46	< 0.134	< 0.134	< 0.134	< 0.134	< 0.134	< 0.134	< 0.134	< 0.32	< 0.134
Bromoform	7.3	< 0.206	< 0.206	< 0.206	< 0.206	< 0.206	< 0.206	< 0.206	< 0.493	< 0.206
Bromomethane	NA	< 0.0776	< 0.0776	< 0.0776	< 0.0776	0.095	0.086	< 0.0776	< 0.185	< 0.0776
Carbon tetrachloride	0.54	0.419	0.404	0.394	0.414	0.522	0.522	0.402	0.408	0.505
Chlorobenzene	200	< 0.092	< 0.092	< 0.092	< 0.092	< 0.092	< 0.092	< 0.092	< 0.22	< 0.092
Chloroethane	500	< 0.0527	< 0.0527	< 0.0527	< 0.0527	< 0.0527	< 0.0527	< 0.0527	< 0.126	< 0.0527
Chloroform	0.5	< 0.0976	< 0.0976	< 0.0976	0.163	0.222	0.225	0.173	< 0.233	0.204
Chloromethane	80	< 2.44	< 2.44	< 2.44	< 2.44	< 2.44	< 2.44	< 2.44	< 5.82	2.44
cis-1,2-Dichloroethene	100	< 0.0792	< 0.0792	< 0.0792	1.21	1.47	1.38	1.01	0.787	1.26
cis-1,3-Dichloropropene	NA	< 0.0907	< 0.0907	< 0.0907	< 0.0907	< 0.0907	< 0.0907	< 0.0907	< 0.216	< 0.0907
Dibromochloromethane	NA	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.229	< 0.096
Dichlorodifluoromethane	500	1.85	1.91	1.85	1.98	2.32	2.38	1.95	1.95	2.2
Ethylbenzene	290	0.224	0.176	0.122	0.278	0.25	0.288	0.223	< 0.207	0.238
Freon-113	NA	0.469	0.473	0.443	0.513	0.558	0.625	0.466	< 0.914	0.564
Freon-114	NA	< 0.349	< 0.349	< 0.349	< 0.349	< 0.349	< 0.349	< 0.349	< 0.834	< 0.349
Isopropylbenzene	120	< 2.46	< 2.46	< 2.46	< 2.46	< 2.46	< 2.46	< 2.46	< 5.86	< 2.46
Methyl tert butyl ether	190	< 0.072	< 0.072	< 0.072	< 0.072	< 0.072	< 0.072	< 0.072	< 0.172	< 0.072

## **Comparison of Analytical Results for Indoor Air in the Retail Buildings and Outdoor Air to CT Target Air Concentrations**

**Former Gorham Manufacturing Site  
333 Adelaide Avenue  
Providence, Rhode Island**

[a] Connecticut Target Air Concentrations (TACs) for Industrial/Commercial Scenario from CTDEP, 2003.  
Shaded and bold results are greater than the CT TAC.

CTTDEP, 2003, Proposed Revisions. Connecticut's Remediation Standard Regulations Volatilization Criteria. March.

Air samples analyzed by Alpha Woods Hole Labs, Mansfield, MA.

**Comparison of Analytical Results for Indoor Air in the Retail Buildings and Outdoor Air to CT Target Air Concentrations**

**Former Gorham Manufacturing Site  
333 Adelaide Avenue  
Providence, Rhode Island**

	CT TAC <sup>a</sup> Industrial/ Commercial ( $\mu\text{g}/\text{m}^3$ )	AIR-9 9/12/2007	AIR-10 9/12/2007	AIR-11 9/12/2007	AIR-12 9/12/2007	AIR-13 9/12/2007	AIR-14 9/12/2007	TRIP BLANK 9/12/2007
		Outdoor Air L0713396-10	Outdoor Air L0713396-11	Outdoor Air L0713396-12	Outdoor Air L0713396-13	Indoor Air L0713396-14	Outdoor Air L0713396-15	QC Sample L0713396-16
<b>Volatile Organics (<math>\mu\text{g}/\text{m}^3</math>)</b>								
1,1,1,2-Tetrachloroethane	1.1	< 0.137	< 0.137	< 0.137	< 0.137	< 0.137	< 0.137	< 0.137
1,1,1-Trichloroethane	500	< 0.109	0.161	< 0.109	< 0.109	1.54	< 0.109	< 0.109
1,1,2,2-Tetrachloroethane	0.14	< 0.137	< 0.137	< 0.137	< 0.137	< 0.137	< 0.137	< 0.137
1,1,2-Trichloroethane	12	< 0.109	< 0.109	< 0.109	< 0.109	< 0.109	< 0.109	< 0.109
1,1-Dichloroethane	430	< 0.0809	< 0.0809	< 0.0809	< 0.0809	0.182	< 0.0809	< 0.0809
1,1-Dichloroethene	20	< 0.0792	< 0.0792	< 0.0792	< 0.0792	0.104	< 0.0792	< 0.0792
1,2,4-Trimethylbenzene	52	< 0.0982	< 0.0982	< 0.0982	< 0.0982	0.176	< 0.0982	< 0.0982
1,2-Dibromoethane	0.038	< 0.154	< 0.154	< 0.154	< 0.154	< 0.154	< 0.154	< 0.154
1,2-Dichlorobenzene	410	< 0.12	< 0.12	0.13	< 0.12	< 0.12	< 0.12	< 0.12
1,2-Dichloroethane	0.31	< 0.0809	< 0.0809	< 0.0809	< 0.0809	< 0.0809	< 0.0809	< 0.0809
1,2-Dichloropropane	0.42	< 0.0924	< 0.0924	< 0.0924	< 0.0924	< 0.0924	< 0.0924	< 0.0924
1,3,5-Trimethylbenzene	52	< 0.0982	< 0.0982	< 0.0982	< 0.0982	< 0.0982	< 0.0982	< 0.0982
1,3-Butadiene	NA	< 0.0442	< 0.0442	0.06	< 0.0442	< 0.0442	< 0.0442	< 0.0442
1,3-Dichlorobenzene	410	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
1,4-Dichlorobenzene	24	< 0.12	< 0.12	0.144	< 0.12	< 0.12	< 0.12	< 0.12
2-Butanone	500	< 1.47	< 1.47	3.44	3.03	2.12	< 1.47	< 1.47
4-Methyl-2-pentanone	200	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05
Acetone	500	4.8	5.59	< 4.75	5.94	7.48	7.49	< 4.75
Acrylonitrile	NA	< 1.08	< 1.08	< 1.08	< 1.08	< 1.08	< 1.08	< 1.08
Benzene	3.3	0.286	0.275	0.23	0.23	0.46	0.257	< 0.223
Bromodichloromethane	0.46	< 0.134	< 0.134	< 0.134	< 0.134	< 0.134	< 0.134	< 0.134
Bromoform	7.3	< 0.206	< 0.206	< 0.206	< 0.206	< 0.206	< 0.206	< 0.206
Bromomethane	NA	< 0.0776	< 0.0776	< 0.0776	< 0.0776	0.092	< 0.0776	< 0.0776
Carbon tetrachloride	0.54	0.508	0.482	0.438	0.425	0.412	0.392	< 0.126
Chlorobenzene	200	< 0.092	< 0.092	< 0.092	< 0.092	< 0.092	< 0.092	< 0.092
Chloroethane	500	< 0.0527	< 0.0527	< 0.0527	< 0.0527	< 0.0527	< 0.0527	< 0.0527
Chloroform	0.5	< 0.0976	< 0.0976	< 0.0976	< 0.0976	0.335	< 0.0976	< 0.0976
Chloromethane	80	< 2.44	< 2.44	< 2.44	< 2.44	< 2.44	< 2.44	< 2.44
cis-1,2-Dichloroethene	100	< 0.0792	< 0.0792	< 0.0792	< 0.0792	2.35	< 0.0792	< 0.0792
cis-1,3-Dichloropropene	NA	< 0.0907	< 0.0907	< 0.0907	< 0.0907	< 0.0907	< 0.0907	< 0.0907
Dibromochloromethane	NA	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096	< 0.096
Dichlorodifluoromethane	500	2.28	2.14	1.94	1.9	1.92	1.81	< 0.247
Ethylbenzene	290	0.096	0.099	0.102	0.093	0.18	0.106	< 0.0868
Freon-113	NA	0.836	0.502	0.455	0.48	0.478	0.465	< 0.383
Freon-114	NA	< 0.349	< 0.349	< 0.349	< 0.349	< 0.349	< 0.349	< 0.349
Isopropylbenzene	120	< 2.46	< 2.46	< 2.46	< 2.46	< 2.46	< 2.46	< 2.46
Methyl tert butyl ether	190	< 0.072	< 0.072	< 0.072	< 0.072	< 0.072	< 0.072	< 0.072

**Comparison of Analytical Results for Indoor Air in the Retail Buildings and Outdoor Air to CT Target Air Concentrations**

**Former Gorham Manufacturing Site  
333 Adelaide Avenue  
Providence, Rhode Island**

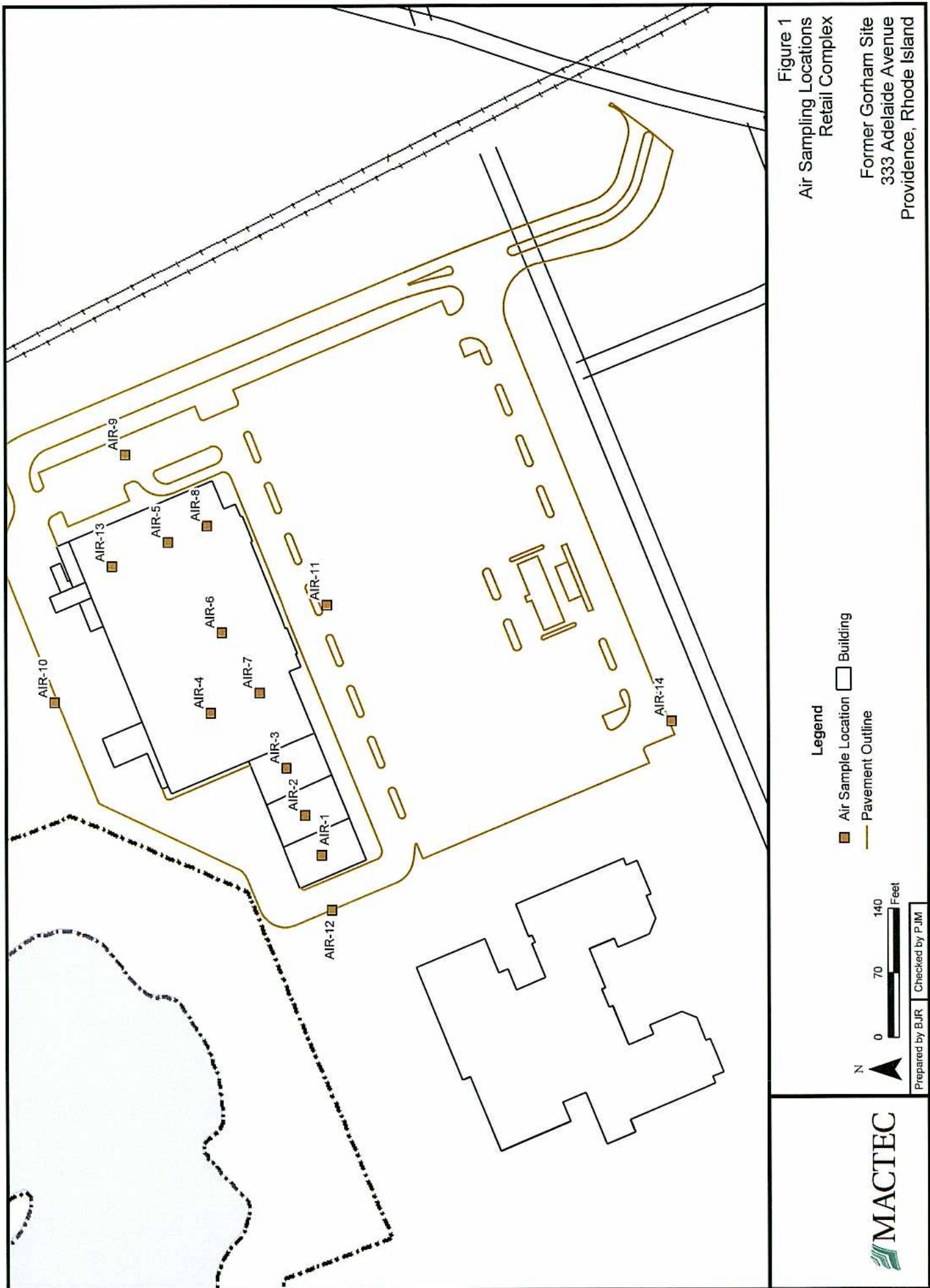
	CT TAC <sup>a</sup>	AIR-9	AIR-10	AIR-11	AIR-12	AIR-13	AIR-14	TRIP BLANK
Industrial/ Commercial	9/12/2007 Outdoor Air ( $\mu\text{g}/\text{m}^3$ )	9/12/2007 Outdoor Air L0713396-10	9/12/2007 Outdoor Air L0713396-11	9/12/2007 Outdoor Air L0713396-12	9/12/2007 Indoor Air L0713396-13	9/12/2007 Indoor Air L0713396-14	9/12/2007 Outdoor Air L0713396-15	9/12/2007 QC Sample L0713396-16
Methylene chloride	17	< 3.47	< 3.47	< 3.47	< 3.47	< 3.47	< 3.47	< 3.47
Naphthalene	NA	< 0.262	< 0.262	1.92	< 0.262	< 0.262	< 0.262	< 0.262
n-Butylbenzene	410	< 2.74	< 2.74	< 2.74	< 2.74	< 2.74	< 2.74	< 2.74
o-Xylene	500	< 0.0868	< 0.0868	< 0.0868	< 0.0868	0.229	< 0.0868	< 0.0868
p/m-Xylene	500	0.212	0.24	0.226	0.222	0.616	0.256	< 0.174
p-Isopropyltoluene	370	< 2.74	< 2.74	< 2.74	< 2.74	< 2.74	< 2.74	< 2.74
sec-Butylbenzene	410	< 2.74	< 2.74	< 2.74	< 2.74	< 2.74	< 2.74	< 2.74
Styrene	290	< 0.0851	< 0.0851	0.146	< 0.0851	0.448	< 0.0851	< 0.0851
Tetrachloroethene	5	0.184	0.154	0.242	< 0.136	<b>9.07</b>	< 0.136	< 0.136
Toluene	500	0.451	0.438	0.379	0.382	1.18	0.591	< 0.0753
trans-1,2-Dichloroethene	200	< 0.0792	< 0.0792	< 0.0792	< 0.0792	< 0.0792	< 0.0792	< 0.0792
trans-1,3-Dichloropropene	NA	< 0.0907	< 0.0907	< 0.0907	< 0.0907	< 0.0907	< 0.0907	< 0.0907
Trichloroethene	1	0.124	0.178	0.128	0.124	<b>3.37</b>	< 0.107	< 0.107
Trichlorofluoromethane	500	1.25	1.18	1.04	1.01	1.11	1	< 0.281
Vinyl chloride	1.9	< 0.0511	< 0.0511	< 0.0511	< 0.0511	0.352	< 0.0511	< 0.0511

[a] Connecticut Target Air Concentrations (TACs) for Industrial/Commercial Scenario from CTDEP, 2003.  
Shaded and bold results are greater than the CT TAC.

CTDEP, 2003. Proposed Revisions. Connecticut's Remediation Standard Regulations Volatilization Criteria. March.

Air samples analyzed by Alpha Woods Hole Labs, Mansfield, MA.

**Figure 1  
Air Sampling Locations**



**Attachment A**  
**Indoor Air Quality Questionnaire and Building Inventory**

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 Phil Muller Date/Time Prepared 9-7-07 / 1100

Preparer's Affiliation MACTEC Phone No. 603 315 4402

Purpose of Investigation Indoor Air Sampling Prep.

1. OCCUPANT: Building is unoccupied

Interviewed: Y / N

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_

Address: \_\_\_\_\_

County: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Office Phone: \_\_\_\_\_

Number of Occupants/persons at this location \_\_\_\_\_ Age of Occupants \_\_\_\_\_

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

Interviewed: Y / N

Last Name: Kimco Realty First Name: \_\_\_\_\_

Address: Burlington, MA

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) Supermarket (former)

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

Other characteristics:

Number of floors 2 Building age 5 yrs.

Is the building insulated? Y/N Y 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

Significant

Airflow near source

---

---

Outdoor air infiltration

Significant (HVAC system)

Infiltration into air ducts

Significant

---

---

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

- |                              |                 |                |                    |             |               |
|------------------------------|-----------------|----------------|--------------------|-------------|---------------|
| a. Above grade construction: | wood frame      | concrete       | stone              | brick       | steel frame   |
| b. Basement type:            | full            | crawl space    | <u>slab</u>        | other _____ | (no basement) |
| c. Basement floor:           | concrete        | dirt           | stone              | other _____ |               |
| d. Basement floor:           | uncovered       | covered        | covered with _____ |             |               |
| e. Concrete floor:           | <u>unsealed</u> | sealed         | sealed with _____  |             |               |
| f. Foundation walls:         | poured          | <u>block</u>   | stone              | other _____ |               |
| g. Foundation walls:         | <u>unsealed</u> | sealed         | sealed with _____  |             |               |
| h. The basement is:          | wet             | damp           | dry                | moldy       |               |
| i. The basement is:          | finished        | unfinished     | partially finished |             |               |
| j. Sump present?             | <u>Y</u> N      |                |                    |             |               |
| k. Water in sump?            | Y / <u>N</u>    | not applicable |                    |             |               |

Basement/Lowest level depth below grade: \_\_\_\_\_ (feet) @ Sump

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

utility penetrations incl. floor drains, plumbing, water

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)

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

The primary type of fuel used is:

- |                    |          |          |
|--------------------|----------|----------|
| <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 \_\_\_\_\_

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

1<sup>st</sup> Floor      Vacant supermarket

2<sup>nd</sup> Floor      Vacant offices

3<sup>rd</sup> Floor

4<sup>th</sup> Floor

## 8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

- a. Is there an attached garage?  Y/N
- b. Does the garage have a separate heating unit?  Y/N/NA
- c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car)?  Y/N/NA  
Please specify \_\_\_\_\_
- d. Has the building ever had a fire?  Y/N When? \_\_\_\_\_
- e. Is a kerosene or unvented gas space heater present?  Y/N Where? \_\_\_\_\_
- f. Is there a workshop or hobby/craft area?  Y/N Where & Type? \_\_\_\_\_
- g. Is there smoking in the building?  Y/N How frequently? \_\_\_\_\_
- h. Have cleaning products been used recently?  Y/N When & Type? \_\_\_\_\_
- i. Have cosmetic products been used recently?  Y/N When & Type? \_\_\_\_\_

- j. Has painting/staining been done in the last 6 months? Y  N Where & When? \_\_\_\_\_
- k. Is there new carpet, drapes or other textiles? Y  N Where & When? \_\_\_\_\_
- l. Have air fresheners been used recently? Y  N When & Type? \_\_\_\_\_
- m. Is there a kitchen exhaust fan? Y / N If yes, where vented? \_\_\_\_\_
- n. Is there a bathroom exhaust fan? Y / N If yes, where vented? \_\_\_\_\_
- o. Is there a clothes dryer? Y  N If yes, is it vented outside? Y / N
- p. Has there been a pesticide application? Y  N When & Type? \_\_\_\_\_

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

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

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:	<input checked="" type="radio"/> Public Water	Drilled Well	Driven Well	Dug Well	Other: _____
Sewage Disposal:	<input checked="" type="radio"/> Public Sewer	Septic Tank	Leach Field	Dry Well	Other: _____

#### 10. RELOCATION INFORMATION (for oil spill residential emergency)

N/A

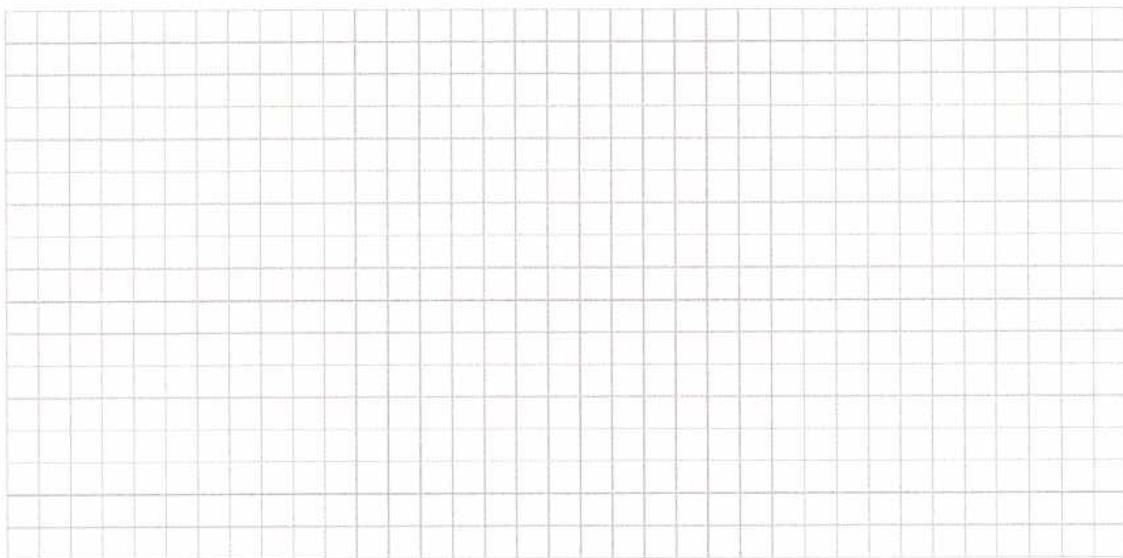
- a. Provide reasons why relocation is recommended: \_\_\_\_\_
- b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel
- c. Responsibility for costs associated with reimbursement explained? Y / N
- d. Relocation package provided and explained to residents? Y / N

## 11. FLOOR PLANS

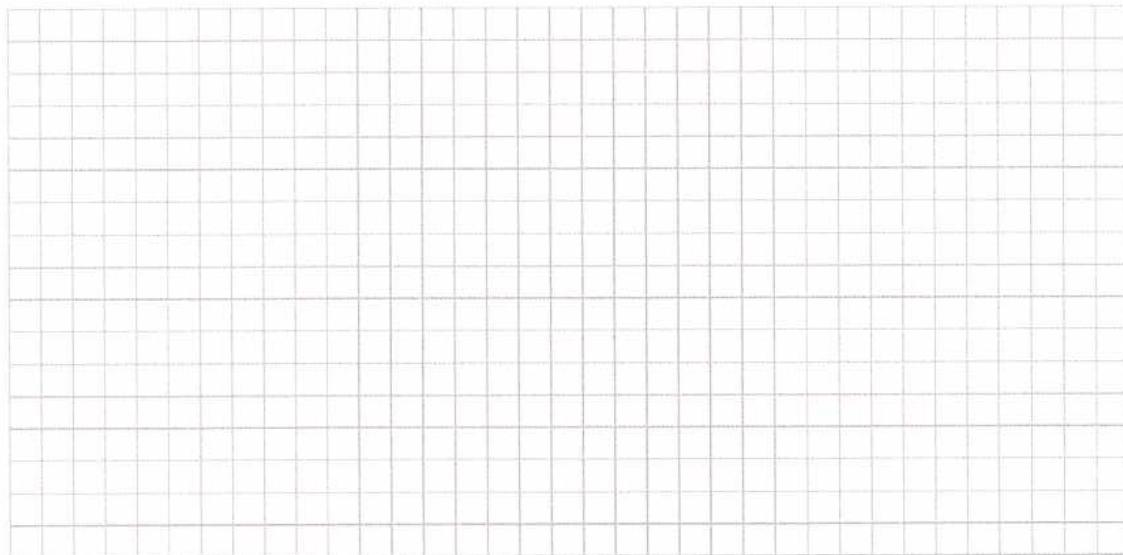
Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

*See attached and construction drawings*

Basement:



First Floor:

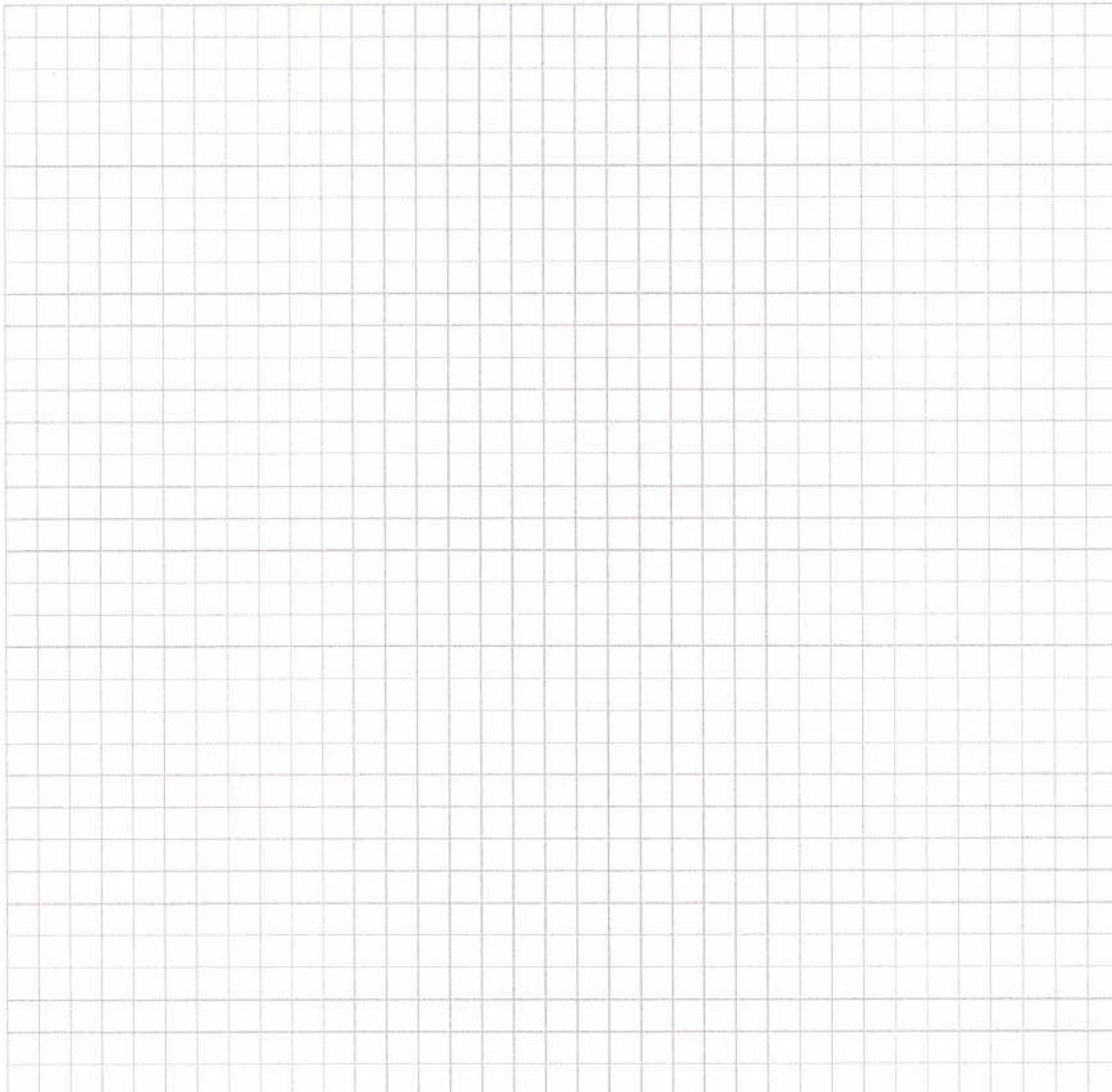


## 12. OUTDOOR PLOT

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.

See attached



### **13. PRODUCT INVENTORY FORM**

Make & Model of field instrument used: Mini RAE and ppb RAE

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

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

\*\* Describe the condition of the product containers as Unopened (U), Used (C), or Leaked (L).  
\*\* 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.



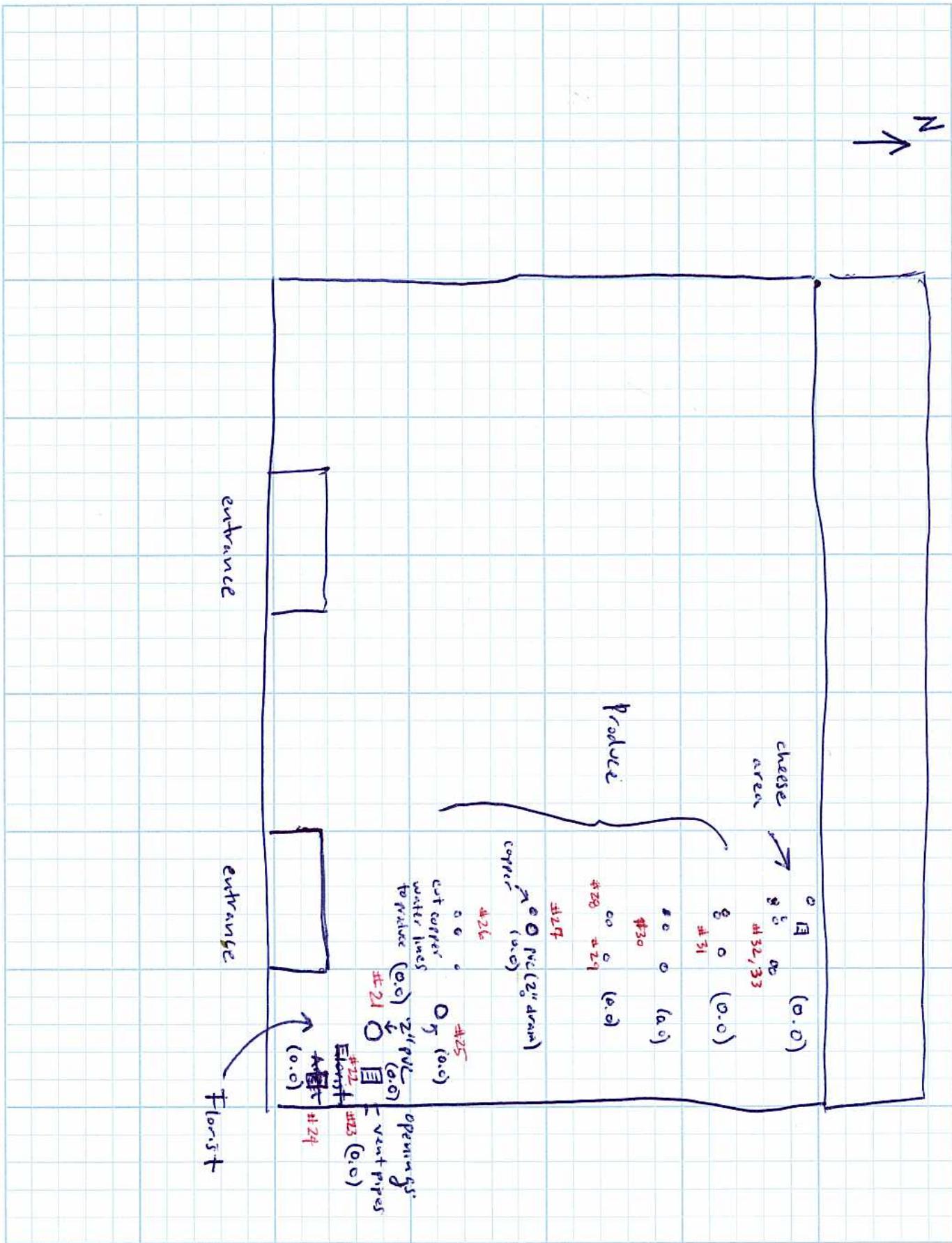
**Harding Lawson Associates**  
Engineering  
and  
Environmental Services

PROJECT Gorham

Grorham

SUBJECT Stop + Shop Inventory / PIB Readings

SHEET 1 OF 2  
JOB NO. 365005 0041. 10/09  
DATE 9/7/07  
COMPUTED BY PSM  
CHECKED BY DEH





**Harding Lawson Associates**  
Engineering  
and  
Environmental Services

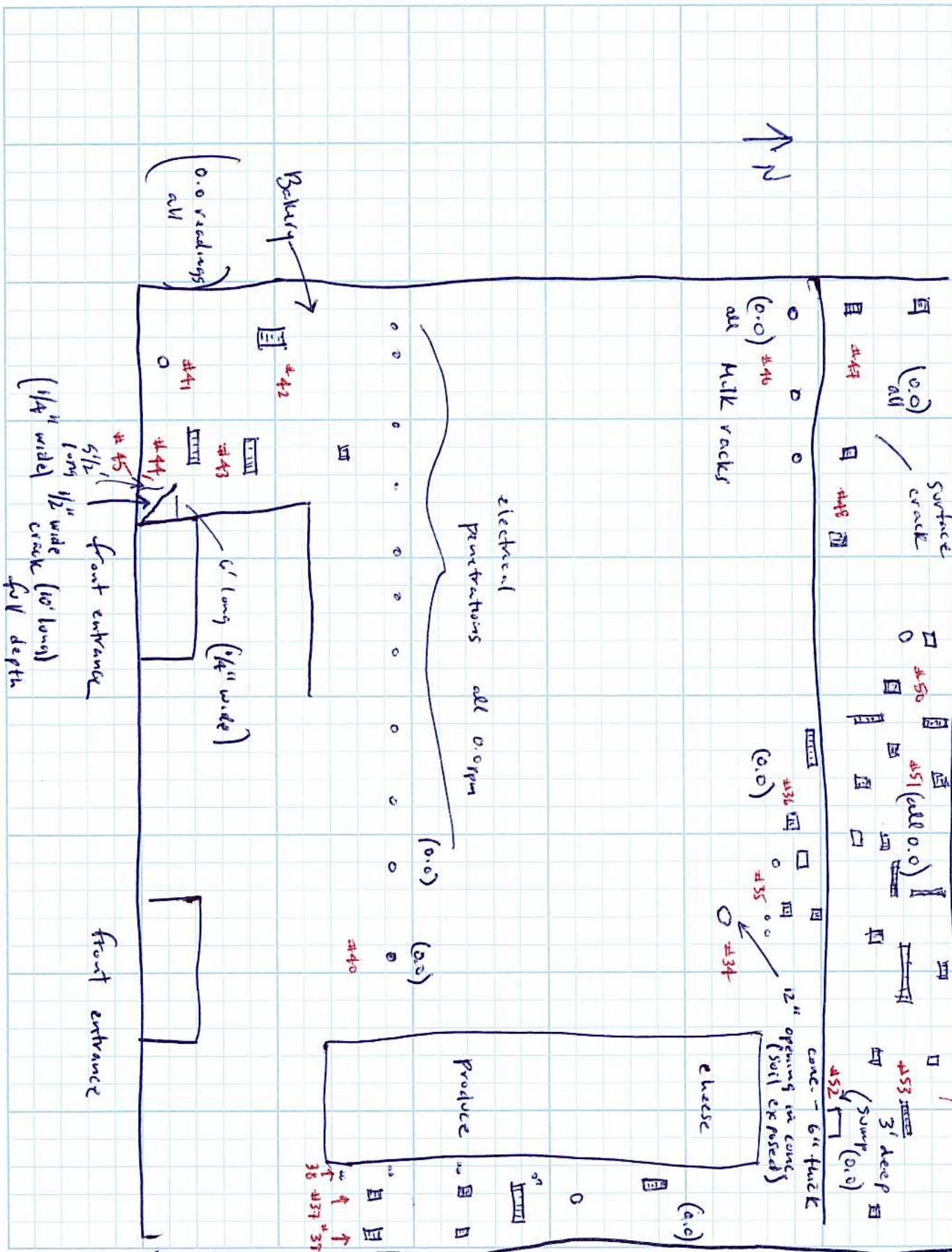
PROJECT

Gorham

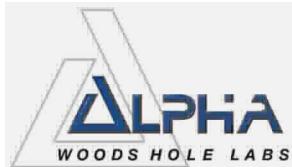
SUBJECT

Shop + Shop Inventory / P.D. Readings

SHEET 2 OF 2  
JOB NO. 3650050041.09  
DATE 9/7/07  
COMPUTED BY PJM  
CHECKED BY DET



**Attachment B  
Laboratory Report  
Analytical Results**



## ANALYTICAL REPORT

Lab Number:	L0713396
Client:	MACTEC Engineering & Consulting Services 107 Audubon Road Building II, Suite 301
ATTN:	Wakefield, MA 01880
Project Name:	Dave Heislein
Project Number:	GORHAM
Report Date:	3650050041.12 09/28/07

Certifications & Approvals: MA (M-MA030), NY (11627), CT (PH-0141), NH (2206), NJ (MA015), RI (LAO00299), ME (MA0030), PA (Registration #68-02089), LA NELAC (03090), FL NELAC (E87814), US Army Corps of Engineers.

---

320 Forbes Boulevard, Mansfield, MA 02048-1806  
508-822-9300 (Fax) 508-822-3288 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>
L0713396-01	AIR-1	PROVIDENCE, RI
L0713396-02	AIR-2	PROVIDENCE, RI
L0713396-03	AIR-3	PROVIDENCE, RI
L0713396-04	AIR-4	PROVIDENCE, RI
L0713396-05	AIR-5	PROVIDENCE, RI
L0713396-06	AIR-5 DUP	PROVIDENCE, RI
L0713396-07	AIR-6	PROVIDENCE, RI
L0713396-08	AIR-7	PROVIDENCE, RI
L0713396-09	AIR-8	PROVIDENCE, RI
L0713396-10	AIR-9	PROVIDENCE, RI
L0713396-11	AIR-10	PROVIDENCE, RI
L0713396-12	AIR-11	PROVIDENCE, RI
L0713396-13	AIR-12	PROVIDENCE, RI
L0713396-14	AIR-13	PROVIDENCE, RI
L0713396-15	AIR-14	PROVIDENCE, RI
L0713396-16	TRIP BLANK	PROVIDENCE, RI

**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### Case Narrative

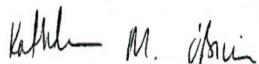
The samples were received in accordance with the chain of custody and no significant deviations were encountered during preparation or analysis unless otherwise noted below.

TO15-SIM

L0713396-08 was analyzed on dilution because the sample was received with low pressure. The canister was pressurized in order to facilitate the transfer of sample to the Gas Chromatograph for analysis. The pressurization resulted in a dilution of the sample, and the reporting limits have been adjusted accordingly. Toluene is present in the WG295147-3 method blank, however, associated samples L0713396-01 through -15 have results that are greater than 5x the amount detected in the blank. Associated sample L0713396-16 is non-detect for Toluene. No further action was taken.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Title: Technical Director/Representative

Date: 09/28/07



AIR



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-01	Date Collected:	09/12/07 14:05
Client ID:	AIR-1	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	09/22/07 16:33		
Analyst:	RY		

Parameter	ppbV		ug/m3		Dilution Factor
	Results	RDL	Results	RDL	
<b>Volatile Organic Compounds in Air by SIM</b>					
1,1,1-Trichloroethane	0.288	0.020	1.57	0.109	1
1,1,1,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2-Trichloroethane	ND	0.020	ND	0.109	1
1,1-Dichloroethane	0.021	0.020	0.086	0.081	1
1,1-Dichloroethene	ND	0.020	ND	0.079	1
1,2,4-Trimethylbenzene	0.041	0.020	0.201	0.098	1
1,2-Dibromoethane	ND	0.020	ND	0.154	1
1,2-Dichlorobenzene	ND	0.020	ND	0.120	1
1,2-Dichloroethane	ND	0.020	ND	0.081	1
1,2-Dichloropropane	0.021	0.020	0.095	0.092	1
1,3,5-Trimethylbenzene	0.023	0.020	0.112	0.098	1
1,3-Butadiene	ND	0.020	ND	0.044	1
1,3-Dichlorobenzene	ND	0.020	ND	0.120	1
1,4-Dichlorobenzene	ND	0.020	ND	0.120	1
Benzene	0.099	0.070	0.314	0.223	1
Bromodichloromethane	ND	0.020	ND	0.134	1
Bromoform	ND	0.020	ND	0.206	1
Bromomethane	ND	0.020	ND	0.078	1
Carbon tetrachloride	0.067	0.020	0.419	0.126	1
Chlorobenzene	ND	0.020	ND	0.092	1
Chloroethane	ND	0.020	ND	0.053	1
Chloroform	ND	0.020	ND	0.098	1
Chloromethane	ND	0.500	ND	2.44	1
cis-1,2-Dichloroethene	ND	0.020	ND	0.079	1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID: L0713396-01 Date Collected: 09/12/07 14:05  
Client ID: AIR-1 Date Received: 09/13/07  
Sample Location: PROVIDENCE, RI Field Prep: Not Specified

Parameter	ppbV		ug/m3		Qualifier	Dilution Factor
	Results	RDL	Results	RDL		
<b>Volatile Organic Compounds in Air by SIM</b>						
cis-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Dibromochloromethane	ND	0.020	ND	0.096		1
Dichlorodifluoromethane	0.375	0.050	1.85	0.247		1
Ethylbenzene	0.052	0.020	0.224	0.087		1
Freon-113	0.061	0.050	0.469	0.383		1
Freon-114	ND	0.050	ND	0.349		1
Methylene chloride	1.04	1.00	3.62	3.47		1
Methyl tert butyl ether	ND	0.020	ND	0.072		1
Naphthalene	0.060	0.050	0.313	0.262		1
p/m-Xylene	0.126	0.040	0.548	0.174		1
o-Xylene	0.042	0.020	0.181	0.087		1
Styrene	0.059	0.020	0.250	0.085		1
Tetrachloroethene	0.049	0.020	0.332	0.136		1
Toluene	0.376	0.020	1.42	0.075		1
trans-1,2-Dichloroethene	ND	0.020	ND	0.079		1
trans-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Trichloroethene	0.097	0.020	0.520	0.107		1
Trichlorofluoromethane	0.222	0.050	1.24	0.281		1
Vinyl chloride	ND	0.020	ND	0.051		1
Acrylonitrile	ND	0.500	ND	1.08		1
n-Butylbenzene	ND	0.500	ND	2.74		1
sec-Butylbenzene	ND	0.500	ND	2.74		1
Isopropylbenzene	ND	0.500	ND	2.46		1
p-Isopropyltoluene	ND	0.500	ND	2.74		1
Acetone	4.41	2.00	10.5	4.75		1
2-Butanone	0.768	0.500	2.26	1.47		1
4-Methyl-2-pentanone	ND	0.500	ND	2.05		1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-02	Date Collected:	09/12/07 17:53
Client ID:	AIR-2	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	09/22/07 17:11		
Analyst:	RY		

Parameter	ppbV		ug/m3		Dilution Factor
	Results	RDL	Results	RDL	
<b>Volatile Organic Compounds in Air by SIM</b>					
1,1,1-Trichloroethane	2.11	0.020	11.5	0.109	1
1,1,1,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2-Trichloroethane	ND	0.020	ND	0.109	1
1,1-Dichloroethane	0.157	0.020	0.634	0.081	1
1,1-Dichloroethene	ND	0.020	ND	0.079	1
1,2,4-Trimethylbenzene	0.029	0.020	0.141	0.098	1
1,2-Dibromoethane	ND	0.020	ND	0.154	1
1,2-Dichlorobenzene	ND	0.020	ND	0.120	1
1,2-Dichloroethane	ND	0.020	ND	0.081	1
1,2-Dichloropropane	ND	0.020	ND	0.092	1
1,3,5-Trimethylbenzene	ND	0.020	ND	0.098	1
1,3-Butadiene	ND	0.020	ND	0.044	1
1,3-Dichlorobenzene	ND	0.020	ND	0.120	1
1,4-Dichlorobenzene	0.022	0.020	0.133	0.120	1
Benzene	0.088	0.070	0.280	0.223	1
Bromodichloromethane	ND	0.020	ND	0.134	1
Bromoform	ND	0.020	ND	0.206	1
Bromomethane	ND	0.020	ND	0.078	1
Carbon tetrachloride	0.064	0.020	0.404	0.126	1
Chlorobenzene	ND	0.020	ND	0.092	1
Chloroethane	ND	0.020	ND	0.053	1
Chloroform	ND	0.020	ND	0.098	1
Chloromethane	ND	0.500	ND	2.44	1
cis-1,2-Dichloroethene	ND	0.020	ND	0.079	1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-02	Date Collected:	09/12/07 17:53
Client ID:	AIR-2	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV		ug/m3		Qualifier	Dilution Factor
	Results	RDL	Results	RDL		
<b>Volatile Organic Compounds in Air by SIM</b>						
cis-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Dibromochloromethane	ND	0.020	ND	0.096		1
Dichlorodifluoromethane	0.387	0.050	1.91	0.247		1
Ethylbenzene	0.041	0.020	0.176	0.087		1
Freon-113	0.062	0.050	0.473	0.383		1
Freon-114	ND	0.050	ND	0.349		1
Methylene chloride	ND	1.00	ND	3.47		1
Methyl tert butyl ether	ND	0.020	ND	0.072		1
Naphthalene	ND	0.050	ND	0.262		1
p/m-Xylene	0.108	0.040	0.468	0.174		1
o-Xylene	0.035	0.020	0.154	0.087		1
Styrene	0.044	0.020	0.188	0.085		1
Tetrachloroethene	0.073	0.020	0.495	0.136		1
Toluene	0.234	0.020	0.883	0.075		1
trans-1,2-Dichloroethene	ND	0.020	ND	0.079		1
trans-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Trichloroethene	0.553	0.020	2.97	0.107		1
Trichlorofluoromethane	0.284	0.050	1.59	0.281		1
Vinyl chloride	ND	0.020	ND	0.051		1
Acrylonitrile	ND	0.500	ND	1.08		1
n-Butylbenzene	ND	0.500	ND	2.74		1
sec-Butylbenzene	ND	0.500	ND	2.74		1
Isopropylbenzene	ND	0.500	ND	2.46		1
p-Isopropyltoluene	ND	0.500	ND	2.74		1
Acetone	3.66	2.00	8.69	4.75		1
2-Butanone	0.694	0.500	2.05	1.47		1
4-Methyl-2-pentanone	ND	0.500	ND	2.05		1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-03	Date Collected:	09/12/07 16:21
Client ID:	AIR-3	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	09/22/07 17:49		
Analyst:	RY		

Parameter	ppbV		ug/m3		Dilution Factor
	Results	RDL	Results	RDL	
<b>Volatile Organic Compounds in Air by SIM</b>					
1,1,1-Trichloroethane	0.348	0.020	1.90	0.109	1
1,1,1,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2-Trichloroethane	ND	0.020	ND	0.109	1
1,1-Dichloroethane	0.028	0.020	0.111	0.081	1
1,1-Dichloroethene	ND	0.020	ND	0.079	1
1,2,4-Trimethylbenzene	ND	0.020	ND	0.098	1
1,2-Dibromoethane	ND	0.020	ND	0.154	1
1,2-Dichlorobenzene	ND	0.020	ND	0.120	1
1,2-Dichloroethane	ND	0.020	ND	0.081	1
1,2-Dichloropropane	ND	0.020	ND	0.092	1
1,3,5-Trimethylbenzene	0.037	0.020	0.180	0.098	1
1,3-Butadiene	ND	0.020	ND	0.044	1
1,3-Dichlorobenzene	ND	0.020	ND	0.120	1
1,4-Dichlorobenzene	ND	0.020	ND	0.120	1
Benzene	0.073	0.070	0.234	0.223	1
Bromodichloromethane	ND	0.020	ND	0.134	1
Bromoform	ND	0.020	ND	0.206	1
Bromomethane	ND	0.020	ND	0.078	1
Carbon tetrachloride	0.063	0.020	0.394	0.126	1
Chlorobenzene	ND	0.020	ND	0.092	1
Chloroethane	ND	0.020	ND	0.053	1
Chloroform	ND	0.020	ND	0.098	1
Chloromethane	ND	0.500	ND	2.44	1
cis-1,2-Dichloroethene	ND	0.020	ND	0.079	1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-03	Date Collected:	09/12/07 16:21
Client ID:	AIR-3	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV		ug/m3		Qualifier	Dilution Factor
	Results	RDL	Results	RDL		
<b>Volatile Organic Compounds in Air by SIM</b>						
cis-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Dibromochloromethane	ND	0.020	ND	0.096		1
Dichlorodifluoromethane	0.375	0.050	1.85	0.247		1
Ethylbenzene	0.028	0.020	0.122	0.087		1
Freon-113	0.058	0.050	0.443	0.383		1
Freon-114	ND	0.050	ND	0.349		1
Methylene chloride	ND	1.00	ND	3.47		1
Methyl tert butyl ether	ND	0.020	ND	0.072		1
Naphthalene	0.860	0.050	4.50	0.262		1
p/m-Xylene	0.071	0.040	0.306	0.174		1
o-Xylene	0.025	0.020	0.108	0.087		1
Styrene	0.051	0.020	0.217	0.085		1
Tetrachloroethene	0.029	0.020	0.196	0.136		1
Toluene	0.147	0.020	0.555	0.075		1
trans-1,2-Dichloroethene	ND	0.020	ND	0.079		1
trans-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Trichloroethene	0.102	0.020	0.545	0.107		1
Trichlorofluoromethane	0.198	0.050	1.11	0.281		1
Vinyl chloride	ND	0.020	ND	0.051		1
Acrylonitrile	ND	0.500	ND	1.08		1
n-Butylbenzene	ND	0.500	ND	2.74		1
sec-Butylbenzene	ND	0.500	ND	2.74		1
Isopropylbenzene	ND	0.500	ND	2.46		1
p-Isopropyltoluene	ND	0.500	ND	2.74		1
Acetone	4.68	2.00	11.1	4.75		1
2-Butanone	0.868	0.500	2.56	1.47		1
4-Methyl-2-pentanone	ND	0.500	ND	2.05		1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-04	Date Collected:	09/12/07 13:42
Client ID:	AIR-4	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	09/22/07 18:27		
Analyst:	RY		

Parameter	ppbV		ug/m3		Dilution Factor
	Results	RDL	Results	RDL	
<b>Volatile Organic Compounds in Air by SIM</b>					
1,1,1-Trichloroethane	0.431	0.020	2.35	0.109	1
1,1,1,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2-Trichloroethane	ND	0.020	ND	0.109	1
1,1-Dichloroethane	0.079	0.020	0.321	0.081	1
1,1-Dichloroethene	0.025	0.020	0.098	0.079	1
1,2,4-Trimethylbenzene	0.048	0.020	0.236	0.098	1
1,2-Dibromoethane	ND	0.020	ND	0.154	1
1,2-Dichlorobenzene	ND	0.020	ND	0.120	1
1,2-Dichloroethane	ND	0.020	ND	0.081	1
1,2-Dichloropropane	ND	0.020	ND	0.092	1
1,3,5-Trimethylbenzene	0.021	0.020	0.103	0.098	1
1,3-Butadiene	ND	0.020	ND	0.044	1
1,3-Dichlorobenzene	ND	0.020	ND	0.120	1
1,4-Dichlorobenzene	ND	0.020	ND	0.120	1
Benzene	0.208	0.070	0.663	0.223	1
Bromodichloromethane	ND	0.020	ND	0.134	1
Bromoform	ND	0.020	ND	0.206	1
Bromomethane	ND	0.020	ND	0.078	1
Carbon tetrachloride	0.066	0.020	0.414	0.126	1
Chlorobenzene	ND	0.020	ND	0.092	1
Chloroethane	ND	0.020	ND	0.053	1
Chloroform	0.033	0.020	0.163	0.098	1
Chloromethane	ND	0.500	ND	2.44	1
cis-1,2-Dichloroethene	0.305	0.020	1.21	0.079	1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-04	Date Collected:	09/12/07 13:42
Client ID:	AIR-4	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV		ug/m3		Qualifier	Dilution Factor
	Results	RDL	Results	RDL		
<b>Volatile Organic Compounds in Air by SIM</b>						
cis-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Dibromochloromethane	ND	0.020	ND	0.096		1
Dichlorodifluoromethane	0.401	0.050	1.98	0.247		1
Ethylbenzene	0.064	0.020	0.278	0.087		1
Freon-113	0.067	0.050	0.513	0.383		1
Freon-114	ND	0.050	ND	0.349		1
Methylene chloride	ND	1.00	ND	3.47		1
Methyl tert butyl ether	ND	0.020	ND	0.072		1
Naphthalene	ND	0.050	ND	0.262		1
p/m-Xylene	0.230	0.040	0.998	0.174		1
o-Xylene	0.080	0.020	0.349	0.087		1
Styrene	0.037	0.020	0.158	0.085		1
Tetrachloroethene	0.702	0.020	4.76	0.136		1
Toluene	0.346	0.020	1.30	0.075		1
trans-1,2-Dichloroethene	ND	0.020	ND	0.079		1
trans-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Trichloroethene	0.462	0.020	2.48	0.107		1
Trichlorofluoromethane	0.222	0.050	1.24	0.281		1
Vinyl chloride	0.068	0.020	0.174	0.051		1
Acrylonitrile	ND	0.500	ND	1.08		1
n-Butylbenzene	ND	0.500	ND	2.74		1
sec-Butylbenzene	ND	0.500	ND	2.74		1
Isopropylbenzene	ND	0.500	ND	2.46		1
p-Isopropyltoluene	ND	0.500	ND	2.74		1
Acetone	3.74	2.00	8.88	4.75		1
2-Butanone	ND	0.500	ND	1.47		1
4-Methyl-2-pentanone	ND	0.500	ND	2.05		1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-05	Date Collected:	09/12/07 17:56
Client ID:	AIR-5	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	09/22/07 19:06		
Analyst:	RY		

Parameter	ppbV		ug/m3		Dilution Factor
	Results	RDL	Results	RDL	
<b>Volatile Organic Compounds in Air by SIM</b>					
1,1,1-Trichloroethane	0.400	0.020	2.18	0.109	1
1,1,1,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2-Trichloroethane	ND	0.020	ND	0.109	1
1,1-Dichloroethane	0.057	0.020	0.231	0.081	1
1,1-Dichloroethene	0.025	0.020	0.097	0.079	1
1,2,4-Trimethylbenzene	0.048	0.020	0.233	0.098	1
1,2-Dibromoethane	ND	0.020	ND	0.154	1
1,2-Dichlorobenzene	ND	0.020	ND	0.120	1
1,2-Dichloroethane	ND	0.020	ND	0.081	1
1,2-Dichloropropane	ND	0.020	ND	0.092	1
1,3,5-Trimethylbenzene	0.022	0.020	0.110	0.098	1
1,3-Butadiene	ND	0.020	ND	0.044	1
1,3-Dichlorobenzene	ND	0.020	ND	0.120	1
1,4-Dichlorobenzene	ND	0.020	ND	0.120	1
Benzene	0.226	0.070	0.721	0.223	1
Bromodichloromethane	ND	0.020	ND	0.134	1
Bromoform	ND	0.020	ND	0.206	1
Bromomethane	0.025	0.020	0.095	0.078	1
Carbon tetrachloride	0.083	0.020	0.522	0.126	1
Chlorobenzene	ND	0.020	ND	0.092	1
Chloroethane	ND	0.020	ND	0.053	1
Chloroform	0.046	0.020	0.222	0.098	1
Chloromethane	ND	0.500	ND	2.44	1
cis-1,2-Dichloroethene	0.372	0.020	1.47	0.079	1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-05	Date Collected:	09/12/07 17:56
Client ID:	AIR-5	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

<b>Parameter</b>	<b>ppbV</b>		<b>ug/m3</b>		<b>Qualifier</b>	<b>Dilution Factor</b>
	<b>Results</b>	<b>RDL</b>	<b>Results</b>	<b>RDL</b>		
<b>Volatile Organic Compounds in Air by SIM</b>						
cis-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Dibromochloromethane	ND	0.020	ND	0.096		1
Dichlorodifluoromethane	0.469	0.050	2.32	0.247		1
Ethylbenzene	0.058	0.020	0.250	0.087		1
Freon-113	0.073	0.050	0.558	0.383		1
Freon-114	ND	0.050	ND	0.349		1
Methylene chloride	ND	1.00	ND	3.47		1
Methyl tert butyl ether	ND	0.020	ND	0.072		1
Naphthalene	ND	0.050	ND	0.262		1
p/m-Xylene	0.220	0.040	0.954	0.174		1
o-Xylene	0.081	0.020	0.353	0.087		1
Styrene	0.057	0.020	0.242	0.085		1
Tetrachloroethene	0.921	0.020	6.24	0.136		1
Toluene	0.324	0.020	1.22	0.075		1
trans-1,2-Dichloroethene	ND	0.020	ND	0.079		1
trans-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Trichloroethene	0.518	0.020	2.78	0.107		1
Trichlorofluoromethane	0.238	0.050	1.34	0.281		1
Vinyl chloride	0.089	0.020	0.226	0.051		1
Acrylonitrile	ND	0.500	ND	1.08		1
n-Butylbenzene	ND	0.500	ND	2.74		1
sec-Butylbenzene	ND	0.500	ND	2.74		1
Isopropylbenzene	ND	0.500	ND	2.46		1
p-Isopropyltoluene	ND	0.500	ND	2.74		1
Acetone	3.48	2.00	8.26	4.75		1
2-Butanone	0.686	0.500	2.02	1.47		1
4-Methyl-2-pentanone	ND	0.500	ND	2.05		1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-06	Date Collected:	09/12/07 17:56
Client ID:	AIR-5 DUP	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	09/22/07 19:44		
Analyst:	RY		

Parameter	ppbV		ug/m3		Dilution Factor
	Results	RDL	Results	RDL	
<b>Volatile Organic Compounds in Air by SIM</b>					
1,1,1-Trichloroethane	0.387	0.020	2.11	0.109	1
1,1,1,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2-Trichloroethane	ND	0.020	ND	0.109	1
1,1-Dichloroethane	0.058	0.020	0.233	0.081	1
1,1-Dichloroethene	0.023	0.020	0.091	0.079	1
1,2,4-Trimethylbenzene	0.054	0.020	0.265	0.098	1
1,2-Dibromoethane	ND	0.020	ND	0.154	1
1,2-Dichlorobenzene	ND	0.020	ND	0.120	1
1,2-Dichloroethane	ND	0.020	ND	0.081	1
1,2-Dichloropropane	ND	0.020	ND	0.092	1
1,3,5-Trimethylbenzene	0.024	0.020	0.115	0.098	1
1,3-Butadiene	ND	0.020	ND	0.044	1
1,3-Dichlorobenzene	ND	0.020	ND	0.120	1
1,4-Dichlorobenzene	ND	0.020	ND	0.120	1
Benzene	0.229	0.070	0.731	0.223	1
Bromodichloromethane	ND	0.020	ND	0.134	1
Bromoform	ND	0.020	ND	0.206	1
Bromomethane	0.022	0.020	0.086	0.078	1
Carbon tetrachloride	0.083	0.020	0.522	0.126	1
Chlorobenzene	ND	0.020	ND	0.092	1
Chloroethane	ND	0.020	ND	0.053	1
Chloroform	0.046	0.020	0.225	0.098	1
Chloromethane	ND	0.500	ND	2.44	1
cis-1,2-Dichloroethene	0.348	0.020	1.38	0.079	1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-06	Date Collected:	09/12/07 17:56
Client ID:	AIR-5 DUP	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

<b>Parameter</b>	<b>ppbV</b>		<b>ug/m3</b>		<b>Qualifier</b>	<b>Dilution Factor</b>
	<b>Results</b>	<b>RDL</b>	<b>Results</b>	<b>RDL</b>		
<b>Volatile Organic Compounds in Air by SIM</b>						
cis-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Dibromochloromethane	ND	0.020	ND	0.096		1
Dichlorodifluoromethane	0.481	0.050	2.38	0.247		1
Ethylbenzene	0.066	0.020	0.288	0.087		1
Freon-113	0.082	0.050	0.625	0.383		1
Freon-114	ND	0.050	ND	0.349		1
Methylene chloride	ND	1.00	ND	3.47		1
Methyl tert butyl ether	ND	0.020	ND	0.072		1
Naphthalene	ND	0.050	ND	0.262		1
p/m-Xylene	0.250	0.040	1.08	0.174		1
o-Xylene	0.092	0.020	0.397	0.087		1
Styrene	0.064	0.020	0.270	0.085		1
Tetrachloroethene	0.823	0.020	5.58	0.136		1
Toluene	0.339	0.020	1.28	0.075		1
trans-1,2-Dichloroethene	ND	0.020	ND	0.079		1
trans-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Trichloroethene	0.477	0.020	2.56	0.107		1
Trichlorofluoromethane	0.247	0.050	1.39	0.281		1
Vinyl chloride	0.079	0.020	0.202	0.051		1
Acrylonitrile	ND	0.500	ND	1.08		1
n-Butylbenzene	ND	0.500	ND	2.74		1
sec-Butylbenzene	ND	0.500	ND	2.74		1
Isopropylbenzene	ND	0.500	ND	2.46		1
p-Isopropyltoluene	ND	0.500	ND	2.74		1
Acetone	3.59	2.00	8.52	4.75		1
2-Butanone	0.823	0.500	2.42	1.47		1
4-Methyl-2-pentanone	ND	0.500	ND	2.05		1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-07	Date Collected:	09/12/07 17:19
Client ID:	AIR-6	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	09/22/07 20:22		
Analyst:	RY		

Parameter	ppbV		ug/m3		Dilution Factor
	Results	RDL	Results	RDL	
<b>Volatile Organic Compounds in Air by SIM</b>					
1,1,1-Trichloroethane	0.309	0.020	1.68	0.109	1
1,1,1,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2-Trichloroethane	ND	0.020	ND	0.109	1
1,1-Dichloroethane	0.055	0.020	0.224	0.081	1
1,1-Dichloroethene	0.020	0.020	0.080	0.079	1
1,2,4-Trimethylbenzene	0.043	0.020	0.212	0.098	1
1,2-Dibromoethane	ND	0.020	ND	0.154	1
1,2-Dichlorobenzene	ND	0.020	ND	0.120	1
1,2-Dichloroethane	ND	0.020	ND	0.081	1
1,2-Dichloropropane	ND	0.020	ND	0.092	1
1,3,5-Trimethylbenzene	ND	0.020	ND	0.098	1
1,3-Butadiene	ND	0.020	ND	0.044	1
1,3-Dichlorobenzene	ND	0.020	ND	0.120	1
1,4-Dichlorobenzene	ND	0.020	ND	0.120	1
Benzene	0.195	0.070	0.621	0.223	1
Bromodichloromethane	ND	0.020	ND	0.134	1
Bromoform	ND	0.020	ND	0.206	1
Bromomethane	ND	0.020	ND	0.078	1
Carbon tetrachloride	0.064	0.020	0.402	0.126	1
Chlorobenzene	ND	0.020	ND	0.092	1
Chloroethane	ND	0.020	ND	0.053	1
Chloroform	0.036	0.020	0.173	0.098	1
Chloromethane	ND	0.500	ND	2.44	1
cis-1,2-Dichloroethene	0.255	0.020	1.01	0.079	1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-07	Date Collected:	09/12/07 17:19
Client ID:	AIR-6	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

<b>Parameter</b>	<b>ppbV</b>		<b>ug/m3</b>		<b>Qualifier</b>	<b>Dilution Factor</b>
	<b>Results</b>	<b>RDL</b>	<b>Results</b>	<b>RDL</b>		
<b>Volatile Organic Compounds in Air by SIM</b>						
cis-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Dibromochloromethane	ND	0.020	ND	0.096		1
Dichlorodifluoromethane	0.394	0.050	1.95	0.247		1
Ethylbenzene	0.051	0.020	0.223	0.087		1
Freon-113	0.061	0.050	0.466	0.383		1
Freon-114	ND	0.050	ND	0.349		1
Methylene chloride	ND	1.00	ND	3.47		1
Methyl tert butyl ether	ND	0.020	ND	0.072		1
Naphthalene	ND	0.050	ND	0.262		1
p/m-Xylene	0.198	0.040	0.859	0.174		1
o-Xylene	0.073	0.020	0.316	0.087		1
Styrene	0.040	0.020	0.170	0.085		1
Tetrachloroethene	0.571	0.020	3.87	0.136		1
Toluene	0.269	0.020	1.01	0.075		1
trans-1,2-Dichloroethene	ND	0.020	ND	0.079		1
trans-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Trichloroethene	0.367	0.020	1.97	0.107		1
Trichlorofluoromethane	0.201	0.050	1.13	0.281		1
Vinyl chloride	0.057	0.020	0.146	0.051		1
Acrylonitrile	ND	0.500	ND	1.08		1
n-Butylbenzene	ND	0.500	ND	2.74		1
sec-Butylbenzene	ND	0.500	ND	2.74		1
Isopropylbenzene	ND	0.500	ND	2.46		1
p-Isopropyltoluene	ND	0.500	ND	2.74		1
Acetone	3.53	2.00	8.39	4.75		1
2-Butanone	0.838	0.500	2.47	1.47		1
4-Methyl-2-pentanone	ND	0.500	ND	2.05		1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-08	Date Collected:	09/12/07 17:53
Client ID:	AIR-7	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	09/22/07 21:01		
Analyst:	RY		

Parameter	ppbV		ug/m3		Dilution Factor
	Results	RDL	Results	RDL	
<b>Volatile Organic Compounds in Air by SIM</b>					
1,1,1-Trichloroethane	0.332	0.048	1.81	0.260	2.387
1,1,1,2-Tetrachloroethane	ND	0.048	ND	0.327	2.387
1,1,2,2-Tetrachloroethane	ND	0.048	ND	0.327	2.387
1,1,2-Trichloroethane	ND	0.048	ND	0.260	2.387
1,1-Dichloroethane	0.054	0.048	0.218	0.193	2.387
1,1-Dichloroethene	ND	0.048	ND	0.189	2.387
1,2,4-Trimethylbenzene	ND	0.048	ND	0.234	2.387
1,2-Dibromoethane	ND	0.048	ND	0.366	2.387
1,2-Dichlorobenzene	ND	0.048	ND	0.287	2.387
1,2-Dichloroethane	ND	0.048	ND	0.193	2.387
1,2-Dichloropropane	ND	0.048	ND	0.220	2.387
1,3,5-Trimethylbenzene	ND	0.048	ND	0.234	2.387
1,3-Butadiene	ND	0.048	ND	0.106	2.387
1,3-Dichlorobenzene	ND	0.048	ND	0.287	2.387
1,4-Dichlorobenzene	ND	0.048	ND	0.287	2.387
Benzene	0.234	0.167	0.746	0.533	2.387
Bromodichloromethane	ND	0.048	ND	0.320	2.387
Bromoform	ND	0.048	ND	0.493	2.387
Bromomethane	ND	0.048	ND	0.185	2.387
Carbon tetrachloride	0.065	0.048	0.408	0.300	2.387
Chlorobenzene	ND	0.048	ND	0.220	2.387
Chloroethane	ND	0.048	ND	0.126	2.387
Chloroform	ND	0.048	ND	0.233	2.387
Chloromethane	ND	1.19	ND	5.82	2.387
cis-1,2-Dichloroethene	0.198	0.048	0.787	0.189	2.387



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

## SAMPLE RESULTS

Lab ID:	L0713396-08	Date Collected:	09/12/07 17:53
Client ID:	AIR-7	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

<b>Parameter</b>	<b>ppbV</b>		<b>ug/m3</b>		<b>Qualifier</b>	<b>Dilution Factor</b>
	<b>Results</b>	<b>RDL</b>	<b>Results</b>	<b>RDL</b>		
<b>Volatile Organic Compounds in Air by SIM</b>						
cis-1,3-Dichloropropene	ND	0.048	ND	0.216		2.387
Dibromochloromethane	ND	0.048	ND	0.229		2.387
Dichlorodifluoromethane	0.396	0.119	1.95	0.590		2.387
Ethylbenzene	ND	0.048	ND	0.207		2.387
Freon-113	ND	0.119	ND	0.914		2.387
Freon-114	ND	0.119	ND	0.834		2.387
Methylene chloride	ND	2.39	ND	8.30		2.387
Methyl tert butyl ether	ND	0.048	ND	0.172		2.387
Naphthalene	ND	0.119	ND	0.625		2.387
p/m-Xylene	0.158	0.096	0.688	0.414		2.387
o-Xylene	0.055	0.048	0.240	0.207		2.387
Styrene	ND	0.048	ND	0.203		2.387
Tetrachloroethene	0.477	0.048	3.23	0.324		2.387
Toluene	0.242	0.048	0.911	0.180		2.387
trans-1,2-Dichloroethene	ND	0.048	ND	0.189		2.387
trans-1,3-Dichloropropene	ND	0.048	ND	0.216		2.387
Trichloroethene	0.314	0.048	1.69	0.256		2.387
Trichlorofluoromethane	0.206	0.119	1.15	0.670		2.387
Vinyl chloride	0.052	0.048	0.133	0.122		2.387
Acrylonitrile	ND	1.19	ND	2.59		2.387
n-Butylbenzene	ND	1.19	ND	6.55		2.387
sec-Butylbenzene	ND	1.19	ND	6.55		2.387
Isopropylbenzene	ND	1.19	ND	5.86		2.387
p-Isopropyltoluene	ND	1.19	ND	6.55		2.387
Acetone	ND	4.77	ND	11.3		2.387
2-Butanone	ND	1.19	ND	3.52		2.387
4-Methyl-2-pentanone	ND	1.19	ND	4.88		2.387



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-09	Date Collected:	09/12/07 17:14
Client ID:	AIR-8	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	09/22/07 21:39		
Analyst:	RY		

Parameter	ppbV		ug/m3		Dilution Factor
	Results	RDL	Results	RDL	
<b>Volatile Organic Compounds in Air by SIM</b>					
1,1,1-Trichloroethane	0.388	0.020	2.11	0.109	1
1,1,1,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2-Trichloroethane	ND	0.020	ND	0.109	1
1,1-Dichloroethane	0.058	0.020	0.235	0.081	1
1,1-Dichloroethene	0.022	0.020	0.086	0.079	1
1,2,4-Trimethylbenzene	0.045	0.020	0.220	0.098	1
1,2-Dibromoethane	ND	0.020	ND	0.154	1
1,2-Dichlorobenzene	ND	0.020	ND	0.120	1
1,2-Dichloroethane	ND	0.020	ND	0.081	1
1,2-Dichloropropane	ND	0.020	ND	0.092	1
1,3,5-Trimethylbenzene	ND	0.020	ND	0.098	1
1,3-Butadiene	ND	0.020	ND	0.044	1
1,3-Dichlorobenzene	ND	0.020	ND	0.120	1
1,4-Dichlorobenzene	ND	0.020	ND	0.120	1
Benzene	0.221	0.070	0.707	0.223	1
Bromodichloromethane	ND	0.020	ND	0.134	1
Bromoform	ND	0.020	ND	0.206	1
Bromomethane	ND	0.020	ND	0.078	1
Carbon tetrachloride	0.080	0.020	0.505	0.126	1
Chlorobenzene	ND	0.020	ND	0.092	1
Chloroethane	ND	0.020	ND	0.053	1
Chloroform	0.042	0.020	0.204	0.098	1
Chloromethane	0.500	0.500	2.44	2.44	1
cis-1,2-Dichloroethene	0.319	0.020	1.26	0.079	1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-09	Date Collected:	09/12/07 17:14
Client ID:	AIR-8	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

<b>Parameter</b>	<b>ppbV</b>		<b>ug/m3</b>		<b>Qualifier</b>	<b>Dilution Factor</b>
	<b>Results</b>	<b>RDL</b>	<b>Results</b>	<b>RDL</b>		
<b>Volatile Organic Compounds in Air by SIM</b>						
cis-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Dibromochloromethane	ND	0.020	ND	0.096		1
Dichlorodifluoromethane	0.445	0.050	2.20	0.247		1
Ethylbenzene	0.055	0.020	0.238	0.087		1
Freon-113	0.074	0.050	0.564	0.383		1
Freon-114	ND	0.050	ND	0.349		1
Methylene chloride	ND	1.00	ND	3.47		1
Methyl tert butyl ether	ND	0.020	ND	0.072		1
Naphthalene	ND	0.050	ND	0.262		1
p/m-Xylene	0.206	0.040	0.894	0.174		1
o-Xylene	0.076	0.020	0.329	0.087		1
Styrene	0.045	0.020	0.190	0.085		1
Tetrachloroethene	0.768	0.020	5.20	0.136		1
Toluene	0.308	0.020	1.16	0.075		1
trans-1,2-Dichloroethene	ND	0.020	ND	0.079		1
trans-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Trichloroethene	0.453	0.020	2.43	0.107		1
Trichlorofluoromethane	0.233	0.050	1.31	0.281		1
Vinyl chloride	0.075	0.020	0.191	0.051		1
Acrylonitrile	ND	0.500	ND	1.08		1
n-Butylbenzene	ND	0.500	ND	2.74		1
sec-Butylbenzene	ND	0.500	ND	2.74		1
Isopropylbenzene	ND	0.500	ND	2.46		1
p-Isopropyltoluene	ND	0.500	ND	2.74		1
Acetone	3.94	2.00	9.34	4.75		1
2-Butanone	0.971	0.500	2.86	1.47		1
4-Methyl-2-pentanone	ND	0.500	ND	2.05		1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-10	Date Collected:	09/12/07 16:58
Client ID:	AIR-9	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	09/22/07 22:17		
Analyst:	RY		

Parameter	ppbV		ug/m3		Dilution Factor
	Results	RDL	Results	RDL	
<b>Volatile Organic Compounds in Air by SIM</b>					
1,1,1-Trichloroethane	ND	0.020	ND	0.109	1
1,1,1,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2-Trichloroethane	ND	0.020	ND	0.109	1
1,1-Dichloroethane	ND	0.020	ND	0.081	1
1,1-Dichloroethene	ND	0.020	ND	0.079	1
1,2,4-Trimethylbenzene	ND	0.020	ND	0.098	1
1,2-Dibromoethane	ND	0.020	ND	0.154	1
1,2-Dichlorobenzene	ND	0.020	ND	0.120	1
1,2-Dichloroethane	ND	0.020	ND	0.081	1
1,2-Dichloropropane	ND	0.020	ND	0.092	1
1,3,5-Trimethylbenzene	ND	0.020	ND	0.098	1
1,3-Butadiene	ND	0.020	ND	0.044	1
1,3-Dichlorobenzene	ND	0.020	ND	0.120	1
1,4-Dichlorobenzene	ND	0.020	ND	0.120	1
Benzene	0.090	0.070	0.286	0.223	1
Bromodichloromethane	ND	0.020	ND	0.134	1
Bromoform	ND	0.020	ND	0.206	1
Bromomethane	ND	0.020	ND	0.078	1
Carbon tetrachloride	0.081	0.020	0.508	0.126	1
Chlorobenzene	ND	0.020	ND	0.092	1
Chloroethane	ND	0.020	ND	0.053	1
Chloroform	ND	0.020	ND	0.098	1
Chloromethane	ND	0.500	ND	2.44	1
cis-1,2-Dichloroethene	ND	0.020	ND	0.079	1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-10	Date Collected:	09/12/07 16:58
Client ID:	AIR-9	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV		ug/m3		Qualifier	Dilution Factor
	Results	RDL	Results	RDL		
<b>Volatile Organic Compounds in Air by SIM</b>						
cis-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Dibromochloromethane	ND	0.020	ND	0.096		1
Dichlorodifluoromethane	0.462	0.050	2.28	0.247		1
Ethylbenzene	0.022	0.020	0.096	0.087		1
Freon-113	0.109	0.050	0.836	0.383		1
Freon-114	ND	0.050	ND	0.349		1
Methylene chloride	ND	1.00	ND	3.47		1
Methyl tert butyl ether	ND	0.020	ND	0.072		1
Naphthalene	ND	0.050	ND	0.262		1
p/m-Xylene	0.049	0.040	0.212	0.174		1
o-Xylene	ND	0.020	ND	0.087		1
Styrene	ND	0.020	ND	0.085		1
Tetrachloroethene	0.027	0.020	0.184	0.136		1
Toluene	0.120	0.020	0.451	0.075		1
trans-1,2-Dichloroethene	ND	0.020	ND	0.079		1
trans-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Trichloroethene	0.023	0.020	0.124	0.107		1
Trichlorofluoromethane	0.223	0.050	1.25	0.281		1
Vinyl chloride	ND	0.020	ND	0.051		1
Acrylonitrile	ND	0.500	ND	1.08		1
n-Butylbenzene	ND	0.500	ND	2.74		1
sec-Butylbenzene	ND	0.500	ND	2.74		1
Isopropylbenzene	ND	0.500	ND	2.46		1
p-Isopropyltoluene	ND	0.500	ND	2.74		1
Acetone	2.02	2.00	4.80	4.75		1
2-Butanone	ND	0.500	ND	1.47		1
4-Methyl-2-pentanone	ND	0.500	ND	2.05		1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-11	Date Collected:	09/12/07 18:04
Client ID:	AIR-10	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	09/22/07 23:33		
Analyst:	RY		

Parameter	ppbV		ug/m3		Dilution Factor
	Results	RDL	Results	RDL	
<b>Volatile Organic Compounds in Air by SIM</b>					
1,1,1-Trichloroethane	0.030	0.020	0.161	0.109	1
1,1,1,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2-Trichloroethane	ND	0.020	ND	0.109	1
1,1-Dichloroethane	ND	0.020	ND	0.081	1
1,1-Dichloroethene	ND	0.020	ND	0.079	1
1,2,4-Trimethylbenzene	ND	0.020	ND	0.098	1
1,2-Dibromoethane	ND	0.020	ND	0.154	1
1,2-Dichlorobenzene	ND	0.020	ND	0.120	1
1,2-Dichloroethane	ND	0.020	ND	0.081	1
1,2-Dichloropropane	ND	0.020	ND	0.092	1
1,3,5-Trimethylbenzene	ND	0.020	ND	0.098	1
1,3-Butadiene	ND	0.020	ND	0.044	1
1,3-Dichlorobenzene	ND	0.020	ND	0.120	1
1,4-Dichlorobenzene	ND	0.020	ND	0.120	1
Benzene	0.086	0.070	0.275	0.223	1
Bromodichloromethane	ND	0.020	ND	0.134	1
Bromoform	ND	0.020	ND	0.206	1
Bromomethane	ND	0.020	ND	0.078	1
Carbon tetrachloride	0.077	0.020	0.482	0.126	1
Chlorobenzene	ND	0.020	ND	0.092	1
Chloroethane	ND	0.020	ND	0.053	1
Chloroform	ND	0.020	ND	0.098	1
Chloromethane	ND	0.500	ND	2.44	1
cis-1,2-Dichloroethene	ND	0.020	ND	0.079	1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-11	Date Collected:	09/12/07 18:04
Client ID:	AIR-10	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

<b>Parameter</b>	<b>ppbV</b>		<b>ug/m3</b>		<b>Qualifier</b>	<b>Dilution Factor</b>
	<b>Results</b>	<b>RDL</b>	<b>Results</b>	<b>RDL</b>		
<b>Volatile Organic Compounds in Air by SIM</b>						
cis-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Dibromochloromethane	ND	0.020	ND	0.096		1
Dichlorodifluoromethane	0.434	0.050	2.14	0.247		1
Ethylbenzene	0.023	0.020	0.099	0.087		1
Freon-113	0.066	0.050	0.502	0.383		1
Freon-114	ND	0.050	ND	0.349		1
Methylene chloride	ND	1.00	ND	3.47		1
Methyl tert butyl ether	ND	0.020	ND	0.072		1
Naphthalene	ND	0.050	ND	0.262		1
p/m-Xylene	0.055	0.040	0.240	0.174		1
o-Xylene	ND	0.020	ND	0.087		1
Styrene	ND	0.020	ND	0.085		1
Tetrachloroethene	0.023	0.020	0.154	0.136		1
Toluene	0.116	0.020	0.438	0.075		1
trans-1,2-Dichloroethene	ND	0.020	ND	0.079		1
trans-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Trichloroethene	0.033	0.020	0.178	0.107		1
Trichlorofluoromethane	0.211	0.050	1.18	0.281		1
Vinyl chloride	ND	0.020	ND	0.051		1
Acrylonitrile	ND	0.500	ND	1.08		1
n-Butylbenzene	ND	0.500	ND	2.74		1
sec-Butylbenzene	ND	0.500	ND	2.74		1
Isopropylbenzene	ND	0.500	ND	2.46		1
p-Isopropyltoluene	ND	0.500	ND	2.74		1
Acetone	2.36	2.00	5.59	4.75		1
2-Butanone	ND	0.500	ND	1.47		1
4-Methyl-2-pentanone	ND	0.500	ND	2.05		1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-12	Date Collected:	09/12/07 13:38
Client ID:	AIR-11	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	09/23/07 00:12		
Analyst:	RY		

Parameter	ppbV		ug/m3		Dilution Factor
	Results	RDL	Results	RDL	
<b>Volatile Organic Compounds in Air by SIM</b>					
1,1,1-Trichloroethane	ND	0.020	ND	0.109	1
1,1,1,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2-Trichloroethane	ND	0.020	ND	0.109	1
1,1-Dichloroethane	ND	0.020	ND	0.081	1
1,1-Dichloroethene	ND	0.020	ND	0.079	1
1,2,4-Trimethylbenzene	ND	0.020	ND	0.098	1
1,2-Dibromoethane	ND	0.020	ND	0.154	1
1,2-Dichlorobenzene	0.022	0.020	0.130	0.120	1
1,2-Dichloroethane	ND	0.020	ND	0.081	1
1,2-Dichloropropane	ND	0.020	ND	0.092	1
1,3,5-Trimethylbenzene	ND	0.020	ND	0.098	1
1,3-Butadiene	0.027	0.020	0.060	0.044	1
1,3-Dichlorobenzene	ND	0.020	ND	0.120	1
1,4-Dichlorobenzene	0.024	0.020	0.144	0.120	1
Benzene	0.072	0.070	0.230	0.223	1
Bromodichloromethane	ND	0.020	ND	0.134	1
Bromoform	ND	0.020	ND	0.206	1
Bromomethane	ND	0.020	ND	0.078	1
Carbon tetrachloride	0.070	0.020	0.438	0.126	1
Chlorobenzene	ND	0.020	ND	0.092	1
Chloroethane	ND	0.020	ND	0.053	1
Chloroform	ND	0.020	ND	0.098	1
Chloromethane	ND	0.500	ND	2.44	1
cis-1,2-Dichloroethene	ND	0.020	ND	0.079	1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-12	Date Collected:	09/12/07 13:38
Client ID:	AIR-11	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV		ug/m3		Qualifier	Dilution Factor
	Results	RDL	Results	RDL		
<b>Volatile Organic Compounds in Air by SIM</b>						
cis-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Dibromochloromethane	ND	0.020	ND	0.096		1
Dichlorodifluoromethane	0.392	0.050	1.94	0.247		1
Ethylbenzene	0.023	0.020	0.102	0.087		1
Freon-113	0.059	0.050	0.455	0.383		1
Freon-114	ND	0.050	ND	0.349		1
Methylene chloride	ND	1.00	ND	3.47		1
Methyl tert butyl ether	ND	0.020	ND	0.072		1
Naphthalene	0.366	0.050	1.92	0.262		1
p/m-Xylene	0.052	0.040	0.226	0.174		1
o-Xylene	ND	0.020	ND	0.087		1
Styrene	0.034	0.020	0.146	0.085		1
Tetrachloroethene	0.036	0.020	0.242	0.136		1
Toluene	0.101	0.020	0.379	0.075		1
trans-1,2-Dichloroethene	ND	0.020	ND	0.079		1
trans-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Trichloroethene	0.024	0.020	0.128	0.107		1
Trichlorofluoromethane	0.185	0.050	1.04	0.281		1
Vinyl chloride	ND	0.020	ND	0.051		1
Acrylonitrile	ND	0.500	ND	1.08		1
n-Butylbenzene	ND	0.500	ND	2.74		1
sec-Butylbenzene	ND	0.500	ND	2.74		1
Isopropylbenzene	ND	0.500	ND	2.46		1
p-Isopropyltoluene	ND	0.500	ND	2.74		1
Acetone	ND	2.00	ND	4.75		1
2-Butanone	1.17	0.500	3.44	1.47		1
4-Methyl-2-pentanone	ND	0.500	ND	2.05		1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-13	Date Collected:	09/12/07 17:56
Client ID:	AIR-12	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	09/23/07 00:50		
Analyst:	RY		

Parameter	ppbV		ug/m3		Dilution Factor
	Results	RDL	Results	RDL	
<b>Volatile Organic Compounds in Air by SIM</b>					
1,1,1-Trichloroethane	ND	0.020	ND	0.109	1
1,1,1,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2-Trichloroethane	ND	0.020	ND	0.109	1
1,1-Dichloroethane	ND	0.020	ND	0.081	1
1,1-Dichloroethene	ND	0.020	ND	0.079	1
1,2,4-Trimethylbenzene	ND	0.020	ND	0.098	1
1,2-Dibromoethane	ND	0.020	ND	0.154	1
1,2-Dichlorobenzene	ND	0.020	ND	0.120	1
1,2-Dichloroethane	ND	0.020	ND	0.081	1
1,2-Dichloropropane	ND	0.020	ND	0.092	1
1,3,5-Trimethylbenzene	ND	0.020	ND	0.098	1
1,3-Butadiene	ND	0.020	ND	0.044	1
1,3-Dichlorobenzene	ND	0.020	ND	0.120	1
1,4-Dichlorobenzene	ND	0.020	ND	0.120	1
Benzene	0.072	0.070	0.230	0.223	1
Bromodichloromethane	ND	0.020	ND	0.134	1
Bromoform	ND	0.020	ND	0.206	1
Bromomethane	ND	0.020	ND	0.078	1
Carbon tetrachloride	0.068	0.020	0.425	0.126	1
Chlorobenzene	ND	0.020	ND	0.092	1
Chloroethane	ND	0.020	ND	0.053	1
Chloroform	ND	0.020	ND	0.098	1
Chloromethane	ND	0.500	ND	2.44	1
cis-1,2-Dichloroethene	ND	0.020	ND	0.079	1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-13	Date Collected:	09/12/07 17:56
Client ID:	AIR-12	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

<b>Parameter</b>	<b>ppbV</b>		<b>ug/m3</b>		<b>Qualifier</b>	<b>Dilution Factor</b>
	<b>Results</b>	<b>RDL</b>	<b>Results</b>	<b>RDL</b>		
<b>Volatile Organic Compounds in Air by SIM</b>						
cis-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Dibromochloromethane	ND	0.020	ND	0.096		1
Dichlorodifluoromethane	0.385	0.050	1.90	0.247		1
Ethylbenzene	0.022	0.020	0.093	0.087		1
Freon-113	0.063	0.050	0.480	0.383		1
Freon-114	ND	0.050	ND	0.349		1
Methylene chloride	ND	1.00	ND	3.47		1
Methyl tert butyl ether	ND	0.020	ND	0.072		1
Naphthalene	ND	0.050	ND	0.262		1
p/m-Xylene	0.051	0.040	0.222	0.174		1
o-Xylene	ND	0.020	ND	0.087		1
Styrene	ND	0.020	ND	0.085		1
Tetrachloroethene	ND	0.020	ND	0.136		1
Toluene	0.102	0.020	0.382	0.075		1
trans-1,2-Dichloroethene	ND	0.020	ND	0.079		1
trans-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Trichloroethene	0.023	0.020	0.124	0.107		1
Trichlorofluoromethane	0.181	0.050	1.01	0.281		1
Vinyl chloride	ND	0.020	ND	0.051		1
Acrylonitrile	ND	0.500	ND	1.08		1
n-Butylbenzene	ND	0.500	ND	2.74		1
sec-Butylbenzene	ND	0.500	ND	2.74		1
Isopropylbenzene	ND	0.500	ND	2.46		1
p-Isopropyltoluene	ND	0.500	ND	2.74		1
Acetone	2.50	2.00	5.94	4.75		1
2-Butanone	1.03	0.500	3.03	1.47		1
4-Methyl-2-pentanone	ND	0.500	ND	2.05		1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-14	Date Collected:	09/12/07 17:57
Client ID:	AIR-13	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	09/23/07 01:28		
Analyst:	RY		

Parameter	ppbV		ug/m3		Dilution Factor
	Results	RDL	Results	RDL	
<b>Volatile Organic Compounds in Air by SIM</b>					
1,1,1-Trichloroethane	0.282	0.020	1.54	0.109	1
1,1,1,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2-Trichloroethane	ND	0.020	ND	0.109	1
1,1-Dichloroethane	0.045	0.020	0.182	0.081	1
1,1-Dichloroethene	0.026	0.020	0.104	0.079	1
1,2,4-Trimethylbenzene	0.036	0.020	0.176	0.098	1
1,2-Dibromoethane	ND	0.020	ND	0.154	1
1,2-Dichlorobenzene	ND	0.020	ND	0.120	1
1,2-Dichloroethane	ND	0.020	ND	0.081	1
1,2-Dichloropropane	ND	0.020	ND	0.092	1
1,3,5-Trimethylbenzene	ND	0.020	ND	0.098	1
1,3-Butadiene	ND	0.020	ND	0.044	1
1,3-Dichlorobenzene	ND	0.020	ND	0.120	1
1,4-Dichlorobenzene	ND	0.020	ND	0.120	1
Benzene	0.144	0.070	0.460	0.223	1
Bromodichloromethane	ND	0.020	ND	0.134	1
Bromoform	ND	0.020	ND	0.206	1
Bromomethane	0.024	0.020	0.092	0.078	1
Carbon tetrachloride	0.066	0.020	0.412	0.126	1
Chlorobenzene	ND	0.020	ND	0.092	1
Chloroethane	ND	0.020	ND	0.053	1
Chloroform	0.069	0.020	0.335	0.098	1
Chloromethane	ND	0.500	ND	2.44	1
cis-1,2-Dichloroethene	0.594	0.020	2.35	0.079	1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

**SAMPLE RESULTS**

Lab ID:	L0713396-14	Date Collected:	09/12/07 17:57
Client ID:	AIR-13	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV		ug/m3		Qualifier	Dilution Factor
	Results	RDL	Results	RDL		
<b>Volatile Organic Compounds in Air by SIM</b>						
cis-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Dibromochloromethane	ND	0.020	ND	0.096		1
Dichlorodifluoromethane	0.388	0.050	1.92	0.247		1
Ethylbenzene	0.042	0.020	0.180	0.087		1
Freon-113	0.063	0.050	0.478	0.383		1
Freon-114	ND	0.050	ND	0.349		1
Methylene chloride	ND	1.00	ND	3.47		1
Methyl tert butyl ether	ND	0.020	ND	0.072		1
Naphthalene	ND	0.050	ND	0.262		1
p/m-Xylene	0.142	0.040	0.616	0.174		1
o-Xylene	0.053	0.020	0.229	0.087		1
Styrene	0.105	0.020	0.448	0.085		1
Tetrachloroethene	1.34	0.020	9.07	0.136		1
Toluene	0.313	0.020	1.18	0.075		1
trans-1,2-Dichloroethene	ND	0.020	ND	0.079		1
trans-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Trichloroethene	0.628	0.020	3.37	0.107		1
Trichlorofluoromethane	0.198	0.050	1.11	0.281		1
Vinyl chloride	0.138	0.020	0.352	0.051		1
Acrylonitrile	ND	0.500	ND	1.08		1
n-Butylbenzene	ND	0.500	ND	2.74		1
sec-Butylbenzene	ND	0.500	ND	2.74		1
Isopropylbenzene	ND	0.500	ND	2.46		1
p-Isopropyltoluene	ND	0.500	ND	2.74		1
Acetone	3.15	2.00	7.48	4.75		1
2-Butanone	0.718	0.500	2.12	1.47		1
4-Methyl-2-pentanone	ND	0.500	ND	2.05		1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-15	Date Collected:	09/12/07 18:00
Client ID:	AIR-14	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	09/23/07 02:07		
Analyst:	RY		

Parameter	ppbV		ug/m3		Dilution Factor
	Results	RDL	Results	RDL	
<b>Volatile Organic Compounds in Air by SIM</b>					
1,1,1-Trichloroethane	ND	0.020	ND	0.109	1
1,1,1,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2-Trichloroethane	ND	0.020	ND	0.109	1
1,1-Dichloroethane	ND	0.020	ND	0.081	1
1,1-Dichloroethene	ND	0.020	ND	0.079	1
1,2,4-Trimethylbenzene	ND	0.020	ND	0.098	1
1,2-Dibromoethane	ND	0.020	ND	0.154	1
1,2-Dichlorobenzene	ND	0.020	ND	0.120	1
1,2-Dichloroethane	ND	0.020	ND	0.081	1
1,2-Dichloropropane	ND	0.020	ND	0.092	1
1,3,5-Trimethylbenzene	ND	0.020	ND	0.098	1
1,3-Butadiene	ND	0.020	ND	0.044	1
1,3-Dichlorobenzene	ND	0.020	ND	0.120	1
1,4-Dichlorobenzene	ND	0.020	ND	0.120	1
Benzene	0.080	0.070	0.257	0.223	1
Bromodichloromethane	ND	0.020	ND	0.134	1
Bromoform	ND	0.020	ND	0.206	1
Bromomethane	ND	0.020	ND	0.078	1
Carbon tetrachloride	0.062	0.020	0.392	0.126	1
Chlorobenzene	ND	0.020	ND	0.092	1
Chloroethane	ND	0.020	ND	0.053	1
Chloroform	ND	0.020	ND	0.098	1
Chloromethane	ND	0.500	ND	2.44	1
cis-1,2-Dichloroethene	ND	0.020	ND	0.079	1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-15	Date Collected:	09/12/07 18:00
Client ID:	AIR-14	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV		ug/m3		Qualifier	Dilution Factor
	Results	RDL	Results	RDL		
<b>Volatile Organic Compounds in Air by SIM</b>						
cis-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Dibromochloromethane	ND	0.020	ND	0.096		1
Dichlorodifluoromethane	0.366	0.050	1.81	0.247		1
Ethylbenzene	0.025	0.020	0.106	0.087		1
Freon-113	0.061	0.050	0.465	0.383		1
Freon-114	ND	0.050	ND	0.349		1
Methylene chloride	ND	1.00	ND	3.47		1
Methyl tert butyl ether	ND	0.020	ND	0.072		1
Naphthalene	ND	0.050	ND	0.262		1
p/m-Xylene	0.059	0.040	0.256	0.174		1
o-Xylene	ND	0.020	ND	0.087		1
Styrene	ND	0.020	ND	0.085		1
Tetrachloroethene	ND	0.020	ND	0.136		1
Toluene	0.157	0.020	0.591	0.075		1
trans-1,2-Dichloroethene	ND	0.020	ND	0.079		1
trans-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Trichloroethene	ND	0.020	ND	0.107		1
Trichlorofluoromethane	0.178	0.050	1.00	0.281		1
Vinyl chloride	ND	0.020	ND	0.051		1
Acrylonitrile	ND	0.500	ND	1.08		1
n-Butylbenzene	ND	0.500	ND	2.74		1
sec-Butylbenzene	ND	0.500	ND	2.74		1
Isopropylbenzene	ND	0.500	ND	2.46		1
p-Isopropyltoluene	ND	0.500	ND	2.74		1
Acetone	3.16	2.00	7.49	4.75		1
2-Butanone	ND	0.500	ND	1.47		1
4-Methyl-2-pentanone	ND	0.500	ND	2.05		1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-16	Date Collected:	09/12/07 00:00
Client ID:	TRIP BLANK	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	09/23/07 02:45		
Analyst:	RY		

Parameter	ppbV		ug/m3		Dilution Factor
	Results	RDL	Results	RDL	
<b>Volatile Organic Compounds in Air by SIM</b>					
1,1,1-Trichloroethane	ND	0.020	ND	0.109	1
1,1,1,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2,2-Tetrachloroethane	ND	0.020	ND	0.137	1
1,1,2-Trichloroethane	ND	0.020	ND	0.109	1
1,1-Dichloroethane	ND	0.020	ND	0.081	1
1,1-Dichloroethene	ND	0.020	ND	0.079	1
1,2,4-Trimethylbenzene	ND	0.020	ND	0.098	1
1,2-Dibromoethane	ND	0.020	ND	0.154	1
1,2-Dichlorobenzene	ND	0.020	ND	0.120	1
1,2-Dichloroethane	ND	0.020	ND	0.081	1
1,2-Dichloropropane	ND	0.020	ND	0.092	1
1,3,5-Trimethylbenzene	ND	0.020	ND	0.098	1
1,3-Butadiene	ND	0.020	ND	0.044	1
1,3-Dichlorobenzene	ND	0.020	ND	0.120	1
1,4-Dichlorobenzene	ND	0.020	ND	0.120	1
Benzene	ND	0.070	ND	0.223	1
Bromodichloromethane	ND	0.020	ND	0.134	1
Bromoform	ND	0.020	ND	0.206	1
Bromomethane	ND	0.020	ND	0.078	1
Carbon tetrachloride	ND	0.020	ND	0.126	1
Chlorobenzene	ND	0.020	ND	0.092	1
Chloroethane	ND	0.020	ND	0.053	1
Chloroform	ND	0.020	ND	0.098	1
Chloromethane	ND	0.500	ND	2.44	1
cis-1,2-Dichloroethene	ND	0.020	ND	0.079	1



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

### SAMPLE RESULTS

Lab ID:	L0713396-16	Date Collected:	09/12/07 00:00
Client ID:	TRIP BLANK	Date Received:	09/13/07
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

<b>Parameter</b>	<b>ppbV</b>		<b>ug/m3</b>		<b>Qualifier</b>	<b>Dilution Factor</b>
	<b>Results</b>	<b>RDL</b>	<b>Results</b>	<b>RDL</b>		
<b>Volatile Organic Compounds in Air by SIM</b>						
cis-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Dibromochloromethane	ND	0.020	ND	0.096		1
Dichlorodifluoromethane	ND	0.050	ND	0.247		1
Ethylbenzene	ND	0.020	ND	0.087		1
Freon-113	ND	0.050	ND	0.383		1
Freon-114	ND	0.050	ND	0.349		1
Methylene chloride	ND	1.00	ND	3.47		1
Methyl tert butyl ether	ND	0.020	ND	0.072		1
Naphthalene	ND	0.050	ND	0.262		1
p/m-Xylene	ND	0.040	ND	0.174		1
o-Xylene	ND	0.020	ND	0.087		1
Styrene	ND	0.020	ND	0.085		1
Tetrachloroethene	ND	0.020	ND	0.136		1
Toluene	ND	0.020	ND	0.075		1
trans-1,2-Dichloroethene	ND	0.020	ND	0.079		1
trans-1,3-Dichloropropene	ND	0.020	ND	0.091		1
Trichloroethene	ND	0.020	ND	0.107		1
Trichlorofluoromethane	ND	0.050	ND	0.281		1
Vinyl chloride	ND	0.020	ND	0.051		1
Acrylonitrile	ND	0.500	ND	1.08		1
n-Butylbenzene	ND	0.500	ND	2.74		1
sec-Butylbenzene	ND	0.500	ND	2.74		1
Isopropylbenzene	ND	0.500	ND	2.46		1
p-Isopropyltoluene	ND	0.500	ND	2.74		1
Acetone	ND	2.00	ND	4.75		1
2-Butanone	ND	0.500	ND	1.47		1
4-Methyl-2-pentanone	ND	0.500	ND	2.05		1



Project Name: GORHAM

Lab Number: L0713396

Project Number: 3650050041.12

Report Date: 09/28/07

## Method Blank Analysis

### Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 09/22/07 15:06

Parameter	ppbV		ug/m3		Qualifier	Dilution Factor
	Results	RDL	Results	RDL		
<b>Volatile Organic Compounds in Air by SIM for sample(s): 01-16 Batch: WG295147-3</b>						
1,1,1-Trichloroethane	ND	0.020	ND	0.109		1
1,1,1,2-Tetrachloroethane	ND	0.020	ND	0.137		1
1,1,2,2-Tetrachloroethane	ND	0.020	ND	0.137		1
1,1,2-Trichloroethane	ND	0.020	ND	0.109		1
1,1-Dichloroethane	ND	0.020	ND	0.081		1
1,1-Dichloroethene	ND	0.020	ND	0.079		1
1,2,4-Trimethylbenzene	ND	0.020	ND	0.098		1
1,2-Dibromoethane	ND	0.020	ND	0.154		1
1,2-Dichlorobenzene	ND	0.020	ND	0.120		1
1,2-Dichloroethane	ND	0.020	ND	0.081		1
1,2-Dichloropropane	ND	0.020	ND	0.092		1
1,3,5-Trimethylbenzene	ND	0.020	ND	0.098		1
1,3-Butadiene	ND	0.020	ND	0.044		1
1,3-Dichlorobenzene	ND	0.020	ND	0.120		1
1,4-Dichlorobenzene	ND	0.020	ND	0.120		1
Benzene	ND	0.070	ND	0.223		1
Bromodichloromethane	ND	0.020	ND	0.134		1
Bromoform	ND	0.020	ND	0.206		1
Bromomethane	ND	0.020	ND	0.078		1
Carbon tetrachloride	ND	0.020	ND	0.126		1
Chlorobenzene	ND	0.020	ND	0.092		1
Chloroethane	ND	0.020	ND	0.053		1
Chloroform	ND	0.020	ND	0.098		1
Chloromethane	ND	0.500	ND	2.44		1
cis-1,2-Dichloroethene	ND	0.020	ND	0.079		1



Project Name: GORHAM

Lab Number: L0713396

Project Number: 3650050041.12

Report Date: 09/28/07

## Method Blank Analysis

### Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 09/22/07 15:06

Parameter	ppbV		ug/m3		Dilution Factor
	Results	RDL	Results	RDL	
<b>Volatile Organic Compounds in Air by SIM for sample(s): 01-16 Batch: WG295147-3</b>					
cis-1,3-Dichloropropene	ND	0.020	ND	0.091	1
Dibromochloromethane	ND	0.020	ND	0.096	1
Dichlorodifluoromethane	ND	0.050	ND	0.247	1
Ethylbenzene	ND	0.020	ND	0.087	1
Freon-113	ND	0.050	ND	0.383	1
Freon-114	ND	0.050	ND	0.349	1
Methylene chloride	ND	1.00	ND	3.47	1
Methyl tert butyl ether	ND	0.020	ND	0.072	1
Naphthalene	ND	0.050	ND	0.262	1
p/m-Xylene	ND	0.040	ND	0.174	1
o-Xylene	ND	0.020	ND	0.087	1
Styrene	ND	0.020	ND	0.085	1
Tetrachloroethene	ND	0.020	ND	0.136	1
Toluene	0.026	0.020	0.097	0.075	1
trans-1,2-Dichloroethene	ND	0.020	ND	0.079	1
trans-1,3-Dichloropropene	ND	0.020	ND	0.091	1
Trichloroethene	ND	0.020	ND	0.107	1
Trichlorofluoromethane	ND	0.050	ND	0.281	1
Vinyl chloride	ND	0.020	ND	0.051	1
Acrylonitrile	ND	0.500	ND	1.08	1
n-Butylbenzene	ND	0.500	ND	2.74	1
sec-Butylbenzene	ND	0.500	ND	2.74	1
Isopropylbenzene	ND	0.500	ND	2.46	1
p-Isopropyltoluene	ND	0.500	ND	2.74	1
Acetone	ND	2.00	ND	4.75	1



Project Name: GORHAM

Lab Number: L0713396

Project Number: 3650050041.12

Report Date: 09/28/07

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 48,TO-15-SIM  
 Analytical Date: 09/22/07 15:06

Parameter	ppbV		ug/m3		Qualifier	Dilution Factor
	Results	RDL	Results	RDL		
Volatile Organic Compounds in Air by SIM for sample(s): 01-16 Batch: WG295147-3						
2-Butanone	ND	0.500	ND	1.47		1
4-Methyl-2-pentanone	ND	0.500	ND	2.05		1



# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organic Compounds in Air by SIM Associated sample(s): 01-16 Batch: WG295147-2					
1,1,1-Trichloroethane	94	-	70-130	-	
1,1,1,2-Tetrachloroethane	97	-	70-130	-	
1,1,2,2-Tetrachloroethane	95	-	70-130	-	
1,1,2-Trichloroethane	94	-	70-130	-	
1,1-Dichloroethane	97	-	70-130	-	
1,1-Dichloroethene	102	-	70-130	-	
1,2,4-Trimethylbenzene	98	-	70-130	-	
1,2-Dibromoethane	96	-	70-130	-	
1,2-Dichlorobenzene	98	-	70-130	-	
1,2-Dichloroethane	93	-	70-130	-	
1,2-Dichloropropane	92	-	70-130	-	
1,3,5-Trimethylbenzene	98	-	70-130	-	
1,3-Butadiene	99	-	70-130	-	
1,3-Dichlorobenzene	99	-	70-130	-	
1,4-Dichlorobenzene	100	-	70-130	-	
Benzene	80	-	70-130	-	
Bromodichloromethane	94	-	70-130	-	
Bromoform	95	-	70-130	-	
Bromomethane	101	-	70-130	-	
Carbon tetrachloride	96	-	70-130	-	
Chlorobenzene	97	-	70-130	-	

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organic Compounds in Air by SIM Associated sample(s): 01-16 Batch: WG295147-2					
Chloroethane	102	-	70-130	-	
Chloroform	97	-	70-130	-	
Chloromethane	97	-	70-130	-	
cis-1,2-Dichloroethene	99	-	70-130	-	
cis-1,3-Dichloropropene	93	-	70-130	-	
Dibromochloromethane	96	-	70-130	-	
Dichlorodifluoromethane	101	-	70-130	-	
Ethylbenzene	97	-	70-130	-	
1,1,2-Trichloro-1,2,2-Trifluoroethane	101	-	70-130	-	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	100	-	70-130	-	
Methylene chloride	91	-	70-130	-	
Methyl tert butyl ether	94	-	70-130	-	
Naphthalene	96	-	70-130	-	
p/m-Xylene	97	-	70-130	-	
o-Xylene	97	-	70-130	-	
Styrene	95	-	70-130	-	
Tetrachloroethene	100	-	70-130	-	
Toluene	86	-	70-130	-	
trans-1,2-Dichloroethene	99	-	70-130	-	
trans-1,3-Dichloropropene	92	-	70-130	-	
Trichloroethene	97	-	70-130	-	

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Volatile Organic Compounds in Air by SIM Associated sample(s): 01-16 Batch: WG295147-2					
Trichlorofluoromethane	101	-	70-130	-	-
Vinyl chloride	103	-	70-130	-	-
Acrylonitrile	89	-	70-130	-	-
n-Butylbenzene	93	-	70-130	-	-
sec-Butylbenzene	94	-	70-130	-	-
Isopropylbenzene	96	-	70-130	-	-
p-Isopropyltoluene	89	-	70-130	-	-
Acetone	79	-	70-130	-	-
2-Butanone	89	-	70-130	-	-
4-Methyl-2-pentanone	83	-	70-130	-	-

**Lab Duplicate Analysis**  
Batch Quality Control

**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organic Compounds in Air by SIM Associated sample(s): 01-16 QC Batch ID: WG295147-4 QC Sample: L0713396-10 Client ID: AIR-9					
1,1,1-Trichloroethane	ND	ND	ppbV	NC	25
1,1,1,2-Tetrachloroethane	ND	ND	ppbV	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
1,1-Dichloroethane	ND	ND	ppbV	NC	25
1,1-Dichloroethene	ND	ND	ppbV	NC	25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2-Dichloroethane	ND	ND	ppbV	NC	25
1,2-Dichloropropane	ND	ND	ppbV	NC	25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC	25
1,3-Butadiene	ND	ND	ppbV	NC	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	ND	ND	ppbV	NC	25
Benzene	0.090	0.096	ppbV	7	25
Bromodichloromethane	ND	ND	ppbV	NC	25
Bromoform	ND	ND	ppbV	NC	25
Bromomethane	ND	ND	ppbV	NC	25

**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Duplicate Analysis**  
**Batch Quality Control**

**Lab Number:** L0713396  
**Report Date:** 09/28/07

<b>Parameter</b>	<b>Native Sample</b>	<b>Duplicate Sample</b>	<b>Units</b>	<b>RPD</b>	<b>RPD Limits</b>
Volatile Organic Compounds in Air by SIM Associated sample(s): 01-16 QC Batch ID: WG295147-4 QC Sample: L0713396-10 Client ID: AIR-9					
Carbon tetrachloride	0.081	0.085	ppbV	5	25
Chlorobenzene	ND	ND	ppbV	NC	25
Chloroethane	ND	ND	ppbV	NC	25
Chloroform	ND	ND	ppbV	NC	25
Chloromethane	ND	ND	ppbV	NC	25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
Dibromochloromethane	ND	ND	ppbV	NC	25
Dichlorodifluoromethane	0.462	0.471	ppbV	2	25
Ethylbenzene	0.022	0.025	ppbV	11	25
Freon-113	0.109	0.112	ppbV	3	25
Freon-114	ND	ND	ppbV	NC	25
Methylene chloride	ND	ND	ppbV	NC	25
Methyl tert butyl ether	ND	ND	ppbV	NC	25
Naphthalene	ND	ND	ppbV	NC	25
p/m-Xylene	0.049	0.054	ppbV	11	25
o-Xylene	ND	ND	ppbV	NC	25
Styrene	ND	ND	ppbV	NC	25
Tetrachloroethene	0.027	0.029	ppbV	7	25

**Lab Duplicate Analysis**  
Batch Quality Control

**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organic Compounds in Air by SIM Associated sample(s): 01-16 QC Batch ID: WG295147-4 QC Sample: L0713396-10 Client ID: AIR-9					
Toluene	0.120	0.133	ppbV	10	25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
Trichloroethene	0.023	0.025	ppbV	6	25
Trichlorofluoromethane	0.223	0.229	ppbV	3	25
Vinyl chloride	ND	ND	ppbV	NC	25
Acrylonitrile	ND	ND	ppbV	NC	25
n-Butylbenzene	ND	ND	ppbV	NC	25
sec-Butylbenzene	ND	ND	ppbV	NC	25
Isopropylbenzene	ND	ND	ppbV	NC	25
p-Isopropyltoluene	ND	ND	ppbV	NC	25
Acetone	2.02	2.30	ppbV	13	25
2-Butanone	ND	ND	ppbV	NC	25
4-Methyl-2-pentanone	ND	ND	ppbV	NC	25

**Project Name:** GORHAM**Project Number:** 3650050041.12**Lab Number:** L0713396**Report Date:** 09/28/07**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
N/A	Absent

**Container Information**

Container ID	Container Type	Cooler	pH	Temp	Pres	Seal	Analysis
L0713396-01A	Canister - 2.7 Liter	NA	NA	NA	NA	Absent	TO15-SIM
L0713396-02A	Canister - 2.7 Liter	NA	NA	NA	NA	Absent	TO15-SIM
L0713396-03A	Canister - 2.7 Liter	NA	NA	NA	NA	Absent	TO15-SIM
L0713396-04A	Canister - 2.7 Liter	NA	NA	NA	NA	Absent	TO15-SIM
L0713396-05A	Canister - 2.7 Liter	NA	NA	NA	NA	Absent	TO15-SIM
L0713396-06A	Canister - 2.7 Liter	NA	NA	NA	NA	Absent	TO15-SIM
L0713396-07A	Canister - 2.7 Liter	NA	NA	NA	NA	Absent	TO15-SIM
L0713396-08A	Canister - 2.7 Liter	NA	NA	NA	NA	Absent	TO15-SIM
L0713396-09A	Canister - 2.7 Liter	NA	NA	NA	NA	Absent	TO15-SIM
L0713396-10A	Canister - 2.7 Liter	NA	NA	NA	NA	Absent	TO15-SIM
L0713396-11A	Canister - 2.7 Liter	NA	NA	NA	NA	Absent	TO15-SIM
L0713396-12A	Canister - 2.7 Liter	NA	NA	NA	NA	Absent	TO15-SIM
L0713396-13A	Canister - 2.7 Liter	NA	NA	NA	NA	Absent	TO15-SIM
L0713396-14A	Canister - 2.7 Liter	NA	NA	NA	NA	Absent	TO15-SIM
L0713396-15A	Canister - 2.7 Liter	NA	NA	NA	NA	Absent	TO15-SIM
L0713396-16A	Canister - 2.7 Liter	NA	NA	NA	NA	Absent	TO15-SIM

**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

## GLOSSARY

### **Acronyms**

- EPA - Environmental Protection Agency.
- LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
- LCSD - Laboratory Control Sample Duplicate: Refer to LCS.
- MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
- MSD - Matrix Spike Sample Duplicate: Refer to MS.
- NA - Not Applicable.
- NI - Not Ignitable.
- NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
- ND - Not detected at the reported detection limit for the sample.
- RDL - Reported Detection Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
- RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

### **Terms**

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

### **Data Qualifiers**

The following data qualifiers have been identified for use under the CT DEP Reasonable Confidence Protocols.

- A - Spectra identified as "Aldol Condensation Product".
- B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte.
- E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- J - Estimated value. The analyte was tentatively identified; the quantitation is an estimation. (Tentatively identified compounds only.)

### **Standard Qualifiers**

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

---

Report Format: Not Specified



**Project Name:** GORHAM  
**Project Number:** 3650050041.12

**Lab Number:** L0713396  
**Report Date:** 09/28/07

## REFERENCES

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

## LIMITATION OF LIABILITIES

Alpha Woods Hole Labs performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Woods Hole Labs shall be to re-perform the work at its own expense. In no event shall Alpha Woods Hole Labs be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Woods Hole Labs.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.




**AIR ANALYSIS**
PAGE 1 OF 2

ALPHA LABS

Eight Walkup Drive Westborough, MA 01581

TEL: 508-898-9220 FAX: 508-898-9193

**Client Information**Client: **MACTEC**Address: **107 Audubon Rd.**Site: **301 Warkfield, MA**Phone: **781 246 5060**Fax: **781 246 5060**Email: **dheislein@mactec.com**Project #: **3650050041.12**Project Manager: **Dave Heislein**ALPHA Quote #: **10713396**

These samples have been previously analyzed by Alpha

 Standard RUSH (only confirmed if pre-approved)  
TO-13: 10 DAYS Turn-Around Time Date Due:

Time:

**Other Project Specific Requirements/Comments:**

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Start Time	End Time	Sample Matrix	Sampler's Initials	ID Can	ID - Flow Controller
-01	AIV - 1	9-12-07	1038	1405 1621	A	PBM	1655	0146 X
-02	AIV - 2	9-12-07	0953	1405 1621	A	PBM	1660	0237 X
-03	AIV - 3	9-12-07	0950	1621	A	PBM	1654	0130 X
-04	AIV - 4	9-12-07	0958	1342	A	PBM	140	0002 X
-05	AIV - 5	9-12-07	1000	1756	A	PBM	1505	0209 X
-06	AIV - 5 DUP	9-12-07	1000	1756	A	PBM	1540	0384 X
-07	AIV - 6	9-12-07	0959	1719	A	PBM	1544	0064 X
-08	AIV - 7	9-12-07	0957	1753	A	PBM	1649	0065 X
-09	AIV - 8	9-12-07	0956	1714	A	PBM	1556	0262 X
-10	AIV - 9	9-12-07	0952	1658	A	PBM	635	0318 X

**Shaded Gray Areas For Lab Use Only**

Relinquished By:	Date/Time	Received By:	Date/Time:
<i>J. Heislein</i>	9/13/07 1330	<i>J. Heislein</i>	9/13/07 1330

Container Type: **G**

Please print clearly, legibly and completely. Samples can not be

logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

<b>Report Information - Data Deliverables</b>			
<input type="checkbox"/> FAX <input type="checkbox"/> ADEX <input type="checkbox"/> Criteria Checker: _____ <small>(Default based on Regulatory Criteria indicated)</small>			
<input type="checkbox"/> EMAIL (standard pdf report) <input checked="" type="checkbox"/> Additional Deliverables: <b>ECD EASIS</b>			
<input type="checkbox"/> Report to: (if different than Project Manager)			
<b>ANALYSIS</b>			
<b>Regulatory Requirements/Report Limits</b>	<b>State/Fed</b>	<b>Program</b>	<b>Criteria</b>
TO-14A TO-15 TO-15 SIM APH DISSOLVED GASES FIXEDGASES TO-13A TO-15 SULFIDES/MERCAPTANS DISS GASES CO2 ONLY TO-4/TO-10			
Sample Comments (i.e. PID)			
$P_i = -2.9, S \quad P_f = 3.5$ $P_i = -30 \quad P_f = -4.5$ $P_i = -28.5 \quad P_f = -4.5$ $P_i = -30 \quad P_f = 0$ $P_i = -30 \quad P_f = -10$ $P_i = -21.5 \quad P_f = -4.5$ $P_i = -29 \quad P_f = -16$ $P_i = -24.5 \quad P_f = -2$ $P_i = -30 \quad P_f = -3.5$			



**AIR ANALYSIS**

PAGE 2 OF 2

Date Rec'd in Lab:

Eight Walkup Drive Westborough, MA 01581  
TEL: 508-898-9220 FAX: 508-898-9193

**Client Information**

Client: **MACTER**  
Address: **107 Audubon Rd, Suite 31 Wellesfield, MA 01860**

Phone: **481-245-6600**  
Fax: **481-246-5060**  
Email: **deheisler@macter.com**

Standard  RUSH (only confirmed if pre-approval)  
TO-13: 10 DAYS  
Date Due: **Turn-Around Time**

Time:

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

**Project Information**

Project Name:

**Gormann**

Project Location:

**Providence, RI**

Project #:

**365005004H-12**

ALPHA Quote #:

**365005004H-12**

Report to:

(if different than Project Manager)

EMAIL (standard pdf report)

**DeHeisler E2 EDD**

Additional Deliverables:

**EQUIS E2 EDD**

FAX

**481-245-6600**

ADEX

**481-246-5060**

Criteria Checker:

**(Default based on Regulatory Criteria Indicated)**

Regulatory Requirements/Report Limits

**State/Fed**

**Program**

**Criteria**

**ANALYSIS**

ALPHA Lab ID (Lab Use Only)	SampleID	Collection		Sample Matrix	Sampler's Initials	ID	ID-Flow Controller
		Date	Start Time				
-11	AIV - 10	9.12.07	1004	P3M	921	0241	X
-12	AIV - 11	9.12.07	0954	P3M	931	0397	X
-13	AIV - 12	9.12.07	0956	P3M	1658	0231	X
-14	AIV - 13	9.12.07	1010	P3M	1652	0232	X
-15	AIV - 14	9.12.07	1000	P3M	624	0268	X
-16	Trip blank	9.12.07	1000	P3M	4	0251	X

**Shaded Gray Areas For Lab Use Only**

Relinquished By:	Date/Time	Received By:	Date/Time:
<i>J. DeHeisler</i>	9-13-07 1720	<i>J. DeHeisler</i>	9-13-07 1330

Container Type

CS

TO-14A							
TO-15							
TO-15 SIM							
APH							
DISSOLVED GASES							
FIXED GASES							
TO-13A							
TO-15 SULFIDES/MERCAPTANS							
DISS GASES CO2 ONLY							
TO-4/TO-10							
Sample Comments (i.e. P1D)							
$P_i = -29.5$ $P_f = -5$ $P_i = -29$ $P_f = -1$ $P_i = -30$ $P_f = -9$ $P_i = -30$ $P_f = -6$ $P_i = -29$ $P_f = -3$							

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time

logged in and turnaround time block will not start until any

ambiguities are resolved.

All samples submitted are subject to

Alpha's Payment Terms. See

reverse side

**Attachment C**  
**Meteorological Data for Sampling Date**  
**September 12, 2007**

## History for Providence, RI

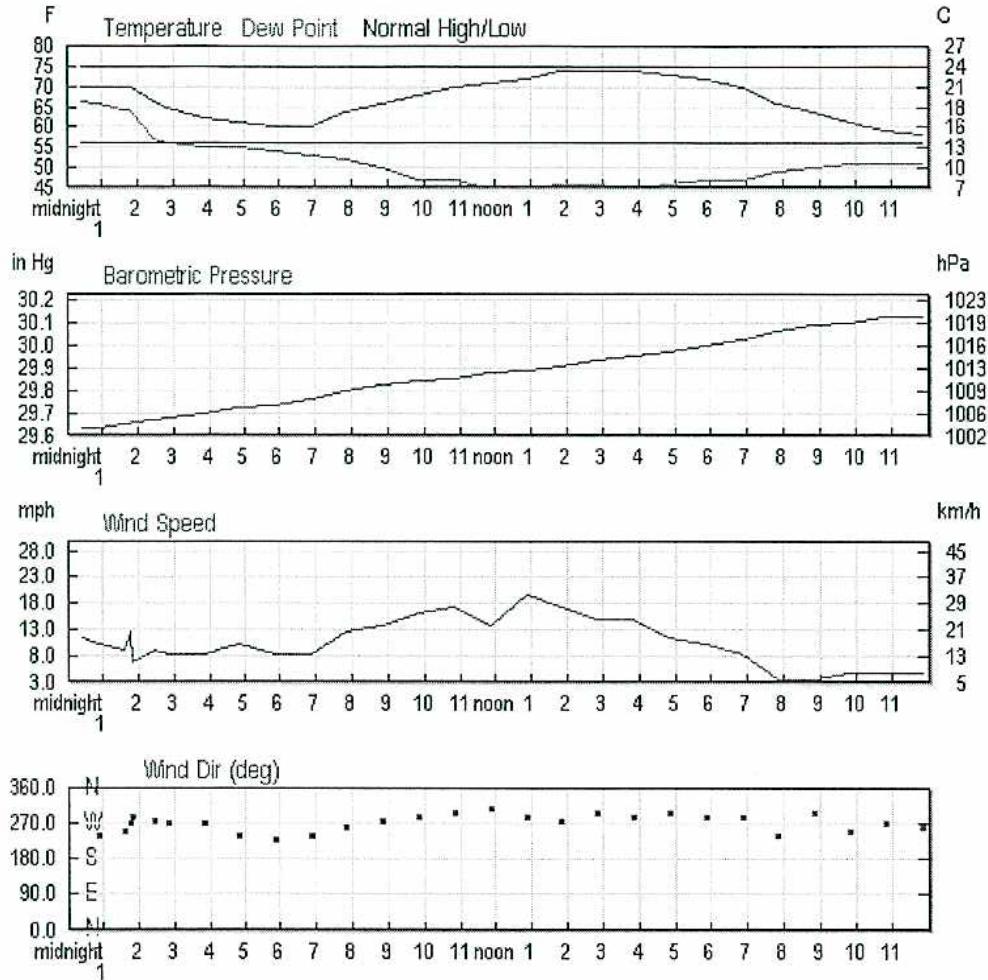
Wednesday, September 12, 2007

### Daily Summary

	Actual:	Average :	Record :
<b>Temperature:</b>			
Mean Temperature	66 °F / 18 °C	65 °F / 18 °C	
Max Temperature	76 °F / 24 °C	75 °F / 23 °C	91 °F / 32 °C (2005)
Min Temperature	56 °F / 13 °C	56 °F / 13 °C	42 °F / 5 °C (1917)
<b>Degree Days:</b>			
Heating Degree Days	0	2	
Month to date heating degree days	0	18	
Since 1 July heating degree days	8	30	
Cooling Degree Days	1	3	
Month to date cooling degree days	64	43	
Year to date cooling degree days	810	681	
Growing Degree Days	16 (Base 50)		
<b>Moisture:</b>			
Dew Point	53 °F / 11 °C		
Average Humidity	63		
Maximum Humidity	90		
Minimum Humidity	35		
<b>Precipitation:</b>			
Precipitation	0.00 in / 0.00 cm	0.12 in / 0.30 cm	2.22 in / 5.64 cm (1960)
Month to date precipitation	2.11	1.54	
Year to date precipitation	33.04	32.06	
<b>Snow:</b>			
Snow	0.00 in / 0.00 cm	0.00 in / 0.00 cm	0.00 in / 0.00 cm (2002)
Month to date snowfall	0.0	0.0	
Since 1 July snowfall	0.0	0.0	
Since 1 September snowfall	0.0	0.0	
Snow Depth	0.00 in / 0.00 cm		
<b>Sea Level Pressure:</b>			
Sea Level Pressure	29.86 in / 1011 hPa		
<b>Wind:</b>			
Wind Speed	10 mph / 16 km/h (West)		
Max Wind Speed	23 mph / 37 km/h		
Max Gust Speed	29 mph / 47 km/h		
Visibility	9 miles / 14 kilometers		
Events			

T = Trace of Precipitation, MM = Missing Value

Source: NWS Daily Summar



## Hourly Observations

Time (EDT):	Temp:	Dew Point:	Humidity:	Sea Level Pressure:	Visibility:	Wind Dir:	Wind Speed:	Gust Speed:	Precip:	Events:	Conditions
12:24 AM	69.8 °F 21.0 °C	66.2 °F 19.0 °C	/ /	88%	29.63 in / 1003.3 hPa	5.0 miles / 8.0 kilometers	WSW /	11.5 mph 18.5 km/h / 5.1 m/s	-	N/A	Mostly Cloudy
12:51 AM	70.0 °F 21.1 °C	66.0 °F 18.9 °C	/ /	87%	29.63 in / 1003.4 hPa	5.0 miles / 8.0 kilometers	WSW /	10.4 mph 16.7 km/h / 4.6 m/s	-	N/A	Mostly Cloudy
1:37 AM	69.8 °F 21.0 °C	64.4 °F 18.0 °C	/ /	83%	29.65 in / 1003.9 hPa	5.0 miles / 8.0 kilometers	WSW /	9.2 mph 14.8 km/h / 4.1 m/s	-	N/A	Haze
1:46 AM	69.8 °F 21.0 °C	64.4 °F 18.0 °C	/ /	83%	29.65 in / 1003.9 hPa	5.0 miles / 8.0 kilometers	West /	12.7 mph 20.4 km/h / 5.7 m/s	19.6 mph 31.5 km/h / 8.7 m/s	N/A	Haze
1:51 AM	70.0 °F 21.1 °C	64.0 °F 17.8 °C	/ /	81%	29.66 in / 1004.2 hPa	5.0 miles / 8.0 kilometers	WNW /	6.9 mph 11.1 km/h / 3.1 m/s	19.6 mph 31.5 km/h / 8.7 m/s	N/A	Haze
2:25	66.2 °F /	57.2 °F /	73%		29.67 in /	10.0 miles /	West /	9.2 mph 14.8 km/h	-	N/A	Scattered

AM	19.0 °C 14.0 °C	1004.6 hPa	16.1 kilometers	/ 4.1 m/s	Clouds					
2:51 AM	64.9 °F / 18.3 °C	55.9 °F / 13.3 °C	73%	29.68 in / 1004.9 hPa	10.0 miles / 16.1 kilometers	West	8.1 mph / 13.0 km/h - / 3.6 m/s	N/A	Partly Cloudy	
3:51 AM	62.1 °F / 16.7 °C	55.0 °F / 12.8 °C	78%	29.70 in / 1005.8 hPa	10.0 miles / 16.1 kilometers	West	8.1 mph / 13.0 km/h - / 3.6 m/s	N/A	Clear	
4:51 AM	61.0 °F / 16.1 °C	55.0 °F / 12.8 °C	81%	29.72 in / 1006.4 hPa	10.0 miles / 16.1 kilometers	WSW	10.4 mph / 16.7 km/h - / 4.6 m/s	N/A	Clear	
5:51 AM	60.1 °F / 15.6 °C	54.0 °F / 12.2 °C	80%	29.73 in / 1006.8 hPa	10.0 miles / 16.1 kilometers	SW	8.1 mph / 13.0 km/h - / 3.6 m/s	N/A	Partly Cloudy	
6:51 AM	60.1 °F / 15.6 °C	53.1 °F / 11.7 °C	78%	29.76 in / 1007.8 hPa	10.0 miles / 16.1 kilometers	WSW	8.1 mph / 13.0 km/h - / 3.6 m/s	N/A	Scattered Clouds	
7:51 AM	64.0 °F / 17.8 °C	52.0 °F / 11.1 °C	65%	29.80 in / 1009.0 hPa	10.0 miles / 16.1 kilometers	West	12.7 mph / 20.4 km/h / 5.7 m/s	24.2 mph / 38.9 km/h / 10.8 m/s	N/A	Partly Cloudy
8:51 AM	66.0 °F / 18.9 °C	50.0 °F / 10.0 °C	56%	29.82 in / 1009.7 hPa	10.0 miles / 16.1 kilometers	West	13.8 mph / 22.2 km/h / 6.2 m/s	23.0 mph / 37.0 km/h / 10.3 m/s	N/A	Partly Cloudy
9:51 AM	68.0 °F / 20.0 °C	46.9 °F / 8.3 °C	47%	29.84 in / 1010.5 hPa	10.0 miles / 16.1 kilometers	WNW	16.1 mph / 25.9 km/h / 7.2 m/s	23.0 mph / 37.0 km/h / 10.3 m/s	N/A	Scattered Clouds
10:51 AM	70.0 °F / 21.1 °C	46.9 °F / 8.3 °C	44%	29.85 in / 1010.8 hPa	10.0 miles / 16.1 kilometers	WNW	17.3 mph / 27.8 km/h / 7.7 m/s	23.0 mph / 37.0 km/h / 10.3 m/s	N/A	Scattered Clouds
11:51 AM	71.1 °F / 21.7 °C	45.0 °F / 7.2 °C	39%	29.88 in / 1011.7 hPa	10.0 miles / 16.1 kilometers	NW	13.8 mph / 22.2 km/h / 6.2 m/s	25.3 mph / 40.7 km/h / 11.3 m/s	N/A	Scattered Clouds
12:51 PM	72.0 °F / 22.2 °C	45.0 °F / 7.2 °C	38%	29.89 in / 1012.0 hPa	10.0 miles / 16.1 kilometers	WNW	19.6 mph / 31.5 km/h / 8.7 m/s	25.3 mph / 40.7 km/h / 11.3 m/s	N/A	Scattered Clouds
1:51 PM	73.9 °F / 23.3 °C	46.0 °F / 7.8 °C	37%	29.91 in / 1012.8 hPa	10.0 miles / 16.1 kilometers	West	17.3 mph / 27.8 km/h / 7.7 m/s	25.3 mph / 40.7 km/h / 11.3 m/s	N/A	Scattered Clouds
2:51 PM	73.9 °F / 23.3 °C	46.0 °F / 7.8 °C	37%	29.93 in / 1013.5 hPa	10.0 miles / 16.1 kilometers	WNW	15.0 mph / 24.1 km/h / 6.7 m/s	23.0 mph / 37.0 km/h / 10.3 m/s	N/A	Scattered Clouds
3:51 PM	73.9 °F / 23.3 °C	45.0 °F / 7.2 °C	35%	29.95 in / 1014.1 hPa	10.0 miles / 16.1 kilometers	WNW	15.0 mph / 24.1 km/h / 6.7 m/s	23.0 mph / 37.0 km/h / 10.3 m/s	N/A	Mostly Cloudy
4:51 PM	73.0 °F / 22.8 °C	46.0 °F / 7.8 °C	38%	29.97 in / 1014.7 hPa	10.0 miles / 16.1 kilometers	WNW	11.5 mph / 18.5 km/h / 5.1 m/s	23.0 mph / 37.0 km/h / 10.3 m/s	N/A	Mostly Cloudy
5:51	72.0 °F / 22.0 °C	46.9 °F / 6.9 °C		30.00 in /	10.0 miles /		10.4 mph /		Partly	

PM 22.2 °C	/ 8.3 °C 22.2 °C	41%	1015.7 hPa	16.1 kilometers	WNW	16.7 km/h / 4.6 m/s	-	N/A	Cloudy
6:51 PM 21.1 °C	70.0 °F / 8.3 °C	44%	30.02 in / 1016.4 hPa	10.0 miles / 16.1 kilometers	WNW	8.1 mph / 13.0 km/h / / 3.6 m/s	-	N/A	Partly Cloudy
7:51 PM 18.9 °C	66.0 °F / 9.4 °C	54%	30.06 in / 1017.8 hPa	10.0 miles / 16.1 kilometers	WSW	3.5 mph / 5.6 km/h / - 1.5 m/s	-	N/A	Partly Cloudy
8:51 PM 17.8 °C	64.0 °F / 10.0 °C	60%	30.09 in / 1018.8 hPa	10.0 miles / 16.1 kilometers	WNW	3.5 mph / 5.6 km/h / - 1.5 m/s	-	N/A	Partly Cloudy
9:51 PM 16.1 °C	61.0 °F / 10.6 °C	70%	30.10 in / 1019.2 hPa	10.0 miles / 16.1 kilometers	WSW	4.6 mph / 7.4 km/h / - 2.1 m/s	-	N/A	Clear
10:51 PM 15.0 °C	59.0 °F / 10.6 °C	75%	30.12 in / 1019.7 hPa	10.0 miles / 16.1 kilometers	West	4.6 mph / 7.4 km/h / - 2.1 m/s	-	N/A	Clear
11:51 PM 14.4 °C	57.9 °F / 10.6 °C	78%	30.12 in / 1019.8 hPa	10.0 miles / 16.1 kilometers	West	4.6 mph / 7.4 km/h / - 2.1 m/s	-	N/A	Clear



Copyright © 2007 The Weather Underground, Inc.

**Attachment D  
References**

## **Attachment D**

### **References**

- Connecticut Department of Environmental Protection (CT DEP), 2003. “Connecticut’s Remediation Standard Regulations Volatilization Criteria”. Proposed Revisions. Permitting, Enforcement and Remediation Division. Bureau of Water Management. March.
- The Interstate Technology & Regulatory Council (ITRC), 2007a. “Vapor Intrusion Pathway: A Practical Guideline”. January.
- ITRC, 2007b. “Vapor Intrusion Pathway: Investigative Approaches for Typical Scenarios A Supplement to Vapor Intrusion Pathway: A Practical Guideline”. January.
- MACTEC, 2007. MACTEC Engineering and Consulting, Inc., Indoor Air Sampling Work Plan, August 22, 2007.
- New York State Department of Health (NYS DOH), 2006. “Guidance for Evaluating Soil Vapor Intrusion in the State of New York”. Final. Center for Environmental Health. Bureau of Environmental Exposure Investigation. October.
- United States Environmental Protection Agency (USEPA), 2002. “Evaluating the Vapor Intrusion into Indoor Air”. EPA530-F-02-052. November.
- USEPA, 2003. Human Health Toxicity Values in Superfund Risk Assessments, OSWER Directive 9285.7-53, December.