



EA Engineering, Science, and Technology, Inc.

Airport Professional Park
2350 Post Road
Warwick, Rhode Island 02886
Telephone: 401-736-3440
Fax: 401-736-3423
www.eaest.com

5 October 2010

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

RE: Quarterly O&M Status Report No. 12
Alvarez High School, 333 Adelaide Avenue, Providence, Rhode Island
Case No. 2005-029
EA Project No. 14687.01

Dear Mr. Martella:

On behalf of the City of Providence School Department (City), EA Engineering, Science, and Technology, Inc. (EA) is providing this Quarterly Operations and Maintenance (O&M) Status Report in accordance with Provision 6(f) of the Order of Approval and amendments (Amended OA) for the referenced Alvarez High School site (the Site, formerly Adelaide Avenue High School).

This O&M Report summarizes recently completed Site activities related to compliance subslab vapor and indoor air sampling from the period between June 2010 and August 2010.

If you have any questions or require additional information, please contact me at 401-736-3440, Ext. 203.

Sincerely,

EA ENGINEERING, SCIENCE,
AND TECHNOLOGY, INC.



Frank B. Postma, LSP, LEP, PG
Project Manager

cc:	C. Jones, Prov. Dept. of Public Schools T. Deller, Prov. Redevelopment Agency J. Fernandez, City of Prov. Law Department R. Dorr, Neighborhood Resident Rep. Scott Slater Knight Memorial Library Repository	A. Sepe, Prov. Dept. of Public Property S. Fischbach, RI Legal Services J. Ryan, Partridge, Snow, & Hahn J. Pichardo, Senator Principal Torchon, Alvarez High School
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Quarterly O&M Status Report No. 12

Summarizing Subslab Depressurization and Indoor Air Monitoring and Sampling Activities

**Alvarez High School Site
(Formerly Adelaide Avenue High School)
Providence, Rhode Island**

Prepared for

City of Providence School Department
797 Westminster Street
Providence, Rhode Island 02903

Prepared by

EA Engineering, Science, and Technology, Inc.
2350 Post Road
Warwick, Rhode Island 02886
(401) 736-3440

October 2010
EA Project No. 14687.01

CONTENTS

	<u>Page</u>
1. INTRODUCTION AND BACKGROUND	1
2. STATUS OF SSD SYSTEM AND INDOOR METHANE MONITORING SYSTEM PERFORMANCE	2
2.1 SSD System	2
2.2 Indoor Methane Monitoring System	2
2.3 Ambient Outdoor and Indoor Air Sampling	3
2.4 Subslab Vapor Sampling and Evaluation of Potential VOC Rebound Effect	4
2.5 Summary of Rooftop VOC Emissions.....	4
2.6 Floor Slab Crack Evaluation.....	5
2.7 Conclusions.....	5
3. FUTURE ACTIVITIES.....	7

FIGURES

FIGURE 1: SITE LOCATION MAP

FIGURE 2: INDOOR AIR SAMPLING AND METHANE MONITORING LOCATIONS

FIGURE 3: AS-BUILT SUBSLAB MONITORING AND SAMPLING LOCATIONS

APPENDICES

APPENDIX A: O&M FIELD FORMS

APPENDIX B: INDOOR AND AMBIENT OUTDOOR AIR ANALYTICAL SUMMARY
AND LAB REPORT

APPENDIX C: SUBSLAB VAPOR ANALYTICAL SUMMARY AND LAB REPORT

APPENDIX D: ROOFTOP EFFLUENT ANALYTICAL SUMMARY

APPENDIX E: LABORATORY REPORTING LIMITS CORRESPONDENCE

1. INTRODUCTION AND BACKGROUND

On behalf of the City of Providence School Department (the City), EA Engineering, Science, and Technology, Inc. (EA) has prepared this Quarterly Operations and Maintenance (O&M) Status Report No. 12 for the Parcel B area of the former Gorham Manufacturing site in Providence, Rhode Island, formerly referred to as the Adelaide Avenue High School and now referred to as the Alvarez High School site (the Site). A Site Location Map is provided as Figure 1. This report has been prepared to satisfy provision 6(f) of the Rhode Island Department of Environmental Management (RIDEM) Order of Approval (OA) issued in June 2006, as amended in February 2007, July 2007, and July 2009. For the purposes of this report, the original and the amended Orders of Approval will collectively be referred to as the Amended OA.

The Amended OA specifies the details of the approved remedy for the Site including, but not limited to, the installation of a subslab depressurization (SSD) system, installation of a continuous indoor air methane monitoring system, and implementation of an associated periodic monitoring and sampling program. In August 2007, the RIDEM-approved remedy for the Site was completed and a Remedial Action Closure Report (RACR) was submitted to RIDEM. In July 2009, the periodic indoor air and subslab vapor sampling schedule was reduced to quarterly sampling from previously required monthly sampling.

This report summarizes the O&M, monitoring, and sampling activities completed at the Site for the 3-month period from June 2010 through August 2010 (Quarterly Reporting Period No. 12) and also includes an overall evaluation of volatile organic compound (VOC) concentrations within soil gas as they pertain to a potential rebound effect at the Site. Please refer to the Quarterly O&M Status Reports No. 1 through No. 11 for information regarding monitoring and sampling at the Site during the previous quarters. The RACR and previously submitted monthly correspondence contain details regarding the results of the monitoring and sampling program for the period between March and August 2007.

2. SUMMARY OF SSD SYSTEM AND INDOOR METHANE MONITORING SYSTEM PERFORMANCE

2.1 SSD SYSTEM

The following SSD System performance parameters were inspected and/or monitored at the frequencies indicated below in accordance with the Amended OA to evaluate system performance:

- Monthly subslab vacuum monitoring at 11 monitoring locations, as illustrated on the As-Built Subslab Monitoring and Sampling Plan included in Appendix C.
- Monthly inspections and monitoring of rooftop fans (air velocity and vacuum) to verify proper operation.
- Continuous electronic monitoring (with automatic alarm notification via audible signal and phone notification) at each of three SSD System extraction fans to ensure continuous operation.

All vacuum measurements taken at each interior and perimeter subslab monitoring/sampling location were between -0.02 and -0.19 in. of water column, indicating continuous negative pressure values beneath the building slab.

Inspections and monitoring of all other system equipment revealed proper system operation, and no equipment shutdowns, failures, alarms, or interruptions of any type occurred during this reporting period. The continuous, verified zone of negative pressure beneath the school's concrete slab, along with the monthly inspections and continuous monitoring of both the indoor air monitoring system and the subslab depressurization system, confirms proper operation of the SSD System during this reporting period.

Copies of O&M field forms summarizing SSD System monitoring data collected during this reporting period are provided in Appendix A.

2.2 INDOOR METHANE MONITORING SYSTEM

Indoor methane concentrations were continuously monitored by an indoor methane monitoring system (equipped with automatic alarm notification via audible signal and phone notification) within the school at eight RIDEM-approved locations (refer to the Indoor Air Sampling and Methane Monitoring System Diagram included in Appendix B) during this reporting period. In addition, the methane monitoring system was inspected and filters are replaced on a regular basis. The indoor methane monitoring system operated continuously throughout this reporting period with no equipment shutdowns, failures, alarms, or interruptions of any type, and no methane was detected during any of the supplemental monthly indoor methane monitoring events.

In August 2010, filter discs at each of the eight continuous methane sensors were replaced in accordance with a quarterly frequency schedule. The next filter replacement is scheduled for November 2010.

No other maintenance or repairs to the methane monitoring system or components were performed or required during this reporting period.

2.3 AMBIENT OUTDOOR AND INDOOR AIR SAMPLING

One outdoor ambient air sample and eight indoor air samples within the school at RIDEM-approved sampling locations were collected and analyzed for VOCs via Method TO-15 SIM (Selective Ion Monitoring) on 16 July 2010. The outdoor ambient sample was collected from the south face of the school (upwind) to ensure that system effluent was not captured in the sample. The sampling frequency has been reduced to quarterly sampling, per Order of Approval Addendum 3 prepared by RIDEM and dated 19 July 2009. Sampling locations are shown on the Indoor Air Sampling and Methane Monitoring System Diagram provided in Appendix B. The indoor air sampling results were compared to the State of Connecticut's Draft Proposed Indoor Residential Targeted Air Concentrations (CT RTACs) in accordance with the Amended OA. The laboratory reporting limits (RLs) for several VOCs reported via TO-15 analysis, even though analyzed via the SIM procedure were greater than the respective CT RTACs. In accordance with the Amended OA, EA contacted the laboratory prior to sample analysis to verify that the RLs provided would be the lowest currently achievable limits. An RL verification letter from Alpha Analytical Laboratory is provided in Appendix E. A data summary table and copies of the laboratory data reports associated with this sampling event is provided in Appendix B.

One compound, methylene chloride, was detected within all indoor and outdoor ambient air samples collected from the Alvarez High School at concentrations that exceed the State of Connecticut's Draft Proposed Indoor Residential Targeted Air Concentrations in accordance with the Order of Approval and amendments (Amended OA) for this Site. The methylene chloride concentrations range from 13.9 to 48.2 $\mu\text{g}/\text{m}^3$. Methylene chloride was detected in the ambient outdoor air at a concentration of 20.6 $\mu\text{g}/\text{m}^3$. Review of the analytical report, provided in Appendix B, demonstrates that the LCS recovery for methylene chloride (132%) is outside of the acceptable range (70% - 130%) which would bias the data high. Methylene chloride has not been a contaminant of concern at the Site. Additionally, the presence of methylene chloride in the outdoor air indicates the source is unrelated to the subsurface impacts. Methylene chloride is also a common laboratory contaminant.

EA routinely measures the vacuum at 11 soil vapor monitoring points throughout the school using a Magnahelic vacuum gauge capable of measuring to 0.01 inches of water. The results indicate that a vacuum is being maintained by the SSD system at each sampling point. Therefore, controlled prevention of the soil vapors from entering the school is being maintained.

Carbon tetrachloride, a documented background ambient compound present at the Site, has consistently been detected in ambient outdoor air and inside the school during every sampling

event completed at the Site at concentrations ranging between 0.19 to 0.77 ug/m³. Similarly, during this reporting period the ambient outdoor and indoor air concentrations of carbon tetrachloride ranged between 0.465 and 0.547 ug/m³. Discussions and guidance provided by the Rhode Island Department of Health, RIDEM Office of Waste Management, and RIDEM Office of Air Resources resulted in an understanding that these carbon tetrachloride results do not constitute Indoor Air Action Level exceedances for the Site since they are consistent with documented background concentrations.

2.4 SUBSLAB VAPOR SAMPLING AND EVALUATION OF POTENTIAL VOC REBOUND EFFECT

A total of 11 RIDEM-approved subslab sampling locations exist at the Site. Six subslab vapor samples were collected in accordance with a RIDEM-approved (Amended OA) rotating sampling schedule and analyzed for VOCs via Method TO-15 SIM on 21 April 2010 in accordance with the Amended OA. The subslab data is summarized in Appendix C, along with copies of the laboratory data reports associated with these sampling events.

Data from the previous two sampling rounds (April 2010 and July 2010) indicate elevated concentrations of tetrachloroethene within subslab vapor. This data will be monitored for the upcoming sampling rounds to determine if this relates to a potential VOC rebound. Indoor air concentrations of tetrachloroethene have remained well below the standard of 5.0 µg/m³, indicating ongoing effective operation of the SSD system.

The subslab data has been evaluated and there is no evidence of increasing VOCs (i.e., VOC rebound) beneath the school in accordance with the Amended OA.

2.5 SUMMARY OF ROOFTOP VOC EMISSIONS

The Amended OA requires that rooftop VOC sampling be completed on an annual basis. The latest rooftop VOC sampling event was completed during this sampling period on 16 July 2010 and is summarized in Appendix D. Please refer to the previously submitted Quarterly Status Report No. 9 (dated December 2009) for more details regarding previous rooftop VOC data. The next annual rooftop effluent VOC sampling event is scheduled for July 2011 to accommodate the revised quarterly sampling schedule.

Previous rooftop effluent sampling rounds conducted in March 2007 (immediately after SSD system startup), June 2007, June 2008 and September 2009 indicated compliance with all Air Pollution Control Permit Applicability Thresholds. In general, the VOC concentrations in the rooftop effluent associated with the July 2010 sampling round indicate continuance of the decreasing trend of VOC concentrations in subsurface soils and do not exceed the Air Pollution Control Permit Applicability Thresholds. Tabulation of the data and the rooftop sampling analytical report is provided as Appendix E.

2.6 FLOOR SLAB CRACK EVALUATION

EA observed several cracks along the floor of the kitchen and kitchen storage area during routing monitoring at the school. EA notified the school promptly and allowed the school department to develop a scope of work to determine the severity of the observed cracks. On 13 August 2010 EA oversaw the coring of the school foundation in three locations where significant cracks were observed. Each of the cores were observed following extraction to determine if the cracks extended through the foundation. Results of the investigation indicate each of the cracks do not extend through the foundation. The vapor barrier was observed to be present beneath each core. Additionally, pressure readings taken at the nearest subslab vapor sampling point (IMP-1) remained constant and negative throughout the coring and repair work. All penetrations were sealed with concrete following the investigation.

2.7 CONCLUSIONS

The following conclusions are made based upon the completed inspections, monitoring, and sampling performed during this reporting period:

- Analytical results from indoor air sampling conducted this quarter indicate the presence of one contaminant present above the CT RTACs but consistent with outdoor ambient air quality.
- There is no evidence that soil vapor intrusion into the Alvarez High School is occurring.
- Data indicates increasing concentrations of tetrachloroethene within subslab vapor at the school.
- The continuous operation of the SSD System, with no equipment malfunctions or alarm conditions, and confirmation of continuous subslab vacuum beneath the school illustrates ongoing, effective operation of the SSD System. No soil vapor intrusion pathway exists at the school while the SSD System is operational.
- No SSD System modifications or other actions to address current site conditions are warranted or proposed at this time.

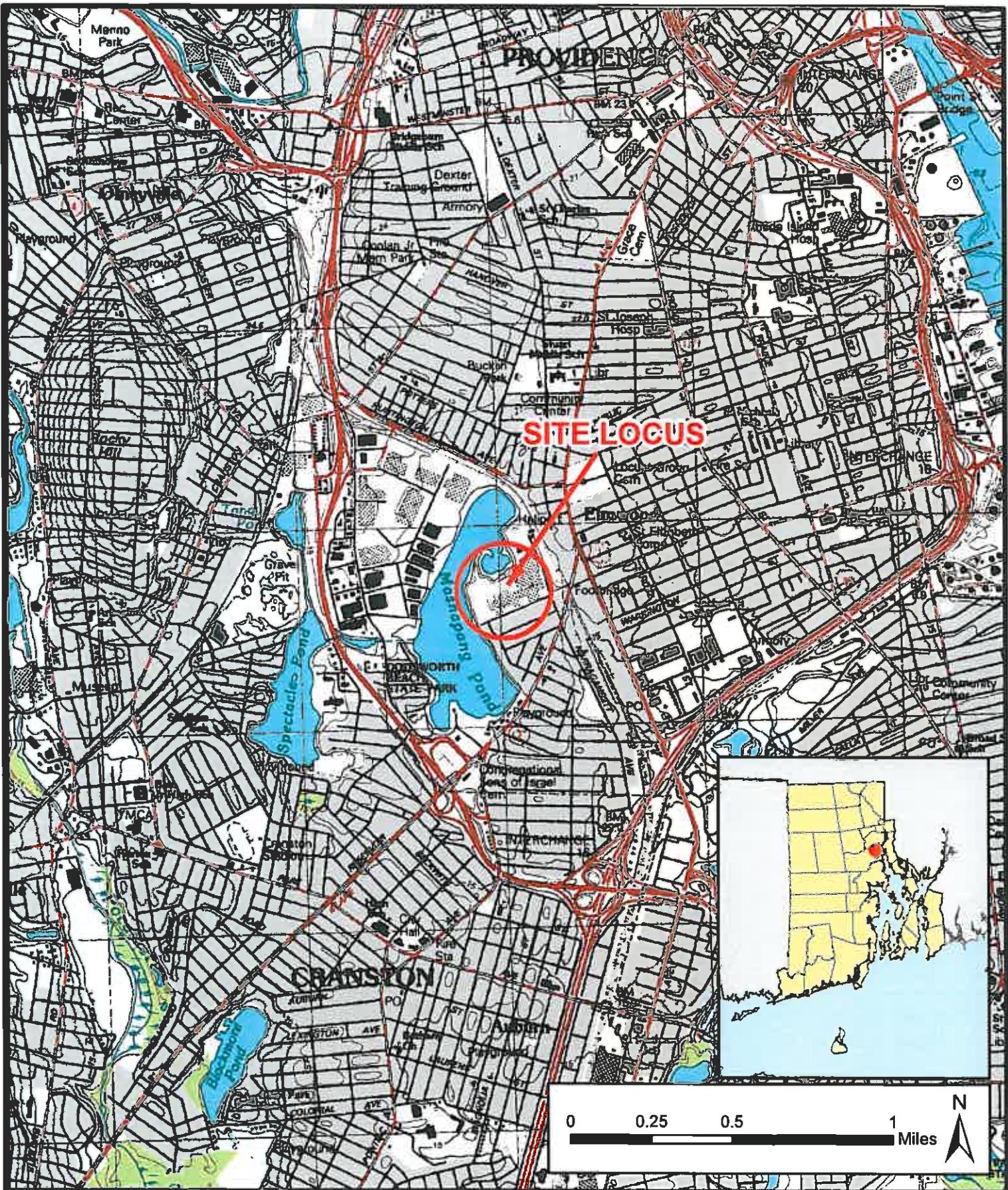
3. FUTURE ACTIVITIES AND NEXT QUARTERLY SUMMARY REPORT

The following activities will be completed in accordance with the Amended OA during the next quarterly status reporting period ending 30 November 2010:

- Continuous monitoring of the operational status of the three rooftop fans
- Monthly site inspections and monitoring using a photoionization detector with part-per-billion sensitivity
- Collection of air samples from eight indoor locations, one ambient location, and six subslab monitoring points in October 2010.

These activities will be summarized in the next status report (Quarterly Status Report No. 13), expected to be submitted by the end of December 2010.

Figures



ALVAREZ HIGH SCHOOL
333 ADELAIDE AVENUE
PROVIDENCE, RHODE ISLAND

FIGURE 1
SITE LOCUS

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
FP	PT	PT	FP	1:24,000	FEBRUARY 2010	14687.01	SITE_LOCUS.MXD

Appendix A

O&M Field Forms

Alvarez High School - SSD & Interior Methane Monitoring System O&M Form

Date of O&M: 6/24/2010 Performed by: _____
 PID/Methane Calibration? US Environmental DMA _____
 Date of Last Methane Sensor Filter Replacement: May 2010 Replaced this O&M Visit? No (yes/no)

General Status of SSD System: On-line

General Status of Methane Monitoring System: On-line

General Status of Methane Monitoring Notes: EA performed an evaluation of the cracked ceramic kitchen floor tiles

Eng. Cap/Fence Inspection Performed/Notes: EA performed an evaluation of the cracked ceramic kitchen floor tiles

Monitoring/ Sampling Location	Sub-slab or gauge vacuum	Air Velocity (fpm)	VOC Monitoring PID (ppb)	Methane Monitoring		Summa Can ID	Controller ID	Start Time (minutes Hg)	End Vac (inches Hg)	Comments/Notes (Ambient weather conditions, status of HVAC, possible monitoring/sampling interferences, etc ... continue on separate sheet if needed)
				Indoor Sensor (ppm)	% LEL)*					
Gymnasium	NA	NA	0.0	0	0					Occupied
Cafeteria	NA	NA	14.0	0	0					Occupied
Kitchen Storage Room	NA	NA	0.0	0	0					Occupied
Elevator Hallway	NA	NA	3.0	0	0					
Room 145	NA	NA	0.0	0	0					
Ridith 152	NA	NA	0.0	0	0					
Room 118	NA	NA	0.0	0	0					
Room 110	NA	NA	0.0	0	0					
MP-1	-0.05	NA	1.4ppm	NA	0	0				
MP-2	-0.06	NA	10.5ppm	NA	0	0				
MP-3	-0.04	NA	558.0	NA	0	0				
MP-4	-0.05	NA	2.2ppm	NA	0	0				
MP-5	-0.05	NA	956.0	NA	0	0				
MP-6	-0.08	NA	2.4	NA	0	0				
MP-7	-0.15	NA	2.0 ppm	NA	0	0				
MP-8	-0.14	NA	11.3 ppm	NA	0	0				
IMP-1	-0.02	NA	48.0	NA	0	0				Water in annulus
IMP-2	-0.02	NA	15.0	NA	0	0				
IMP-3	-0.02	NA	26.0	NA	0	0				
Root-Top Fan 1	2.00	2423	235.0	NA	0	0				
Root-Top Fan 2	1.80	1426	160.0	NA	0	0				
Root-Top Fan 3	2.20	2180	6.0	NA	0	0				
Ambient Outdoor Air	NA	NA	0.0	NA	0	0				

NA: not applicable

NM: not monitored on this date.

NS : not sampled on this date.

* RIDEM Action Level for methane %LEL beneath the building is 10% and within the building is 1%. If these methane levels are exceeded, immediately notify EA Project Manager to initiate response protocol

Alvarez High School - SSD & Interior Methane Monitoring System O&M Form

Date of O&M: 7/16/2010 Performed by: _____
 PID/Methane Calibration? US Environmental DMA _____

Date of Last Methane Sensor Filter Replacement: May 2010 Replaced this O&M Visit? No (yes/no)

General Status of SSD System: On-line

General Status of Methane Monitoring System: On-line

Eng. Cap/Fence Inspection Performed/Notes:

Monitoring/ Sampling Location	Sub-slab or Gauge vacuum	Air Velocity (fpm)	VOC Monitoring PID (ppb)	Methane Monitoring		Summa Can ID	Controller ID	Start Time (inches Hg)	Start Vac (inches Hg)	End Time	End Vac (inches Hg)	Comments/Notes (Ambient weather conditions, status of HVAC, possible monitoring/sampling interferences, etc ... continue on separate sheet if needed)
				Sensor (ppm)	(% LEL)							
Gymnasium	NA	NA	7.0	0	0	0	471	0252	1006	-30*	1035	-2
Cafeteria	NA	NA	0.0	0	0	0	323	0451	1002	-28	1032	-6
Kitchen Storage Room	NA	NA	50.0	0	0	0	543	0301	1005	-30*	1034	+10
Elevator Hallway	NA	NA	0.0	0	0	0	1737	0165	1010	-30+	1042	-6
Room 145	NA	NA	0.0	0	0	0	545	0289	1011	-25	1042	-6
Room 152	NA	NA	57.0	0	0	0	415	0271	1012	-30+	1043	-3
Room 118	NA	NA	0.0	0	0	0	485	0270	1014	-30	1045	-3
Room 110	NA	NA	43.0	0	0	0	379	0019	1015	-28.5	1046	-4
MP-1	-0.06	NA	4.01 ppm	NA	0	0.0	1743	0435	1140	-30	1209	-10
MP-2	-0.08	NA	0.0	NA	0	0.0	—	—	—	—	—	—
MP-3	-0.08	NA	26.5	NA	0	0.0	118	0268	1205	-30	1236	-9
MP-4	-0.05	NA	0.3	NA	0	0.0	395	0150	1201	-29	1229	-6
MP-5	-0.07	NA	3.2 ppm	NA	0	0.0	—	—	—	—	—	—
MP-6	-0.07	NA	47.1 ppm	NA	0	0.0	388	0152	1226	-30+	1251	-11
MP-7	-0.11	NA	7.7 ppm	NA	0	0.0	—	—	—	—	—	—
MP-8	-0.13	NA	20.3 ppm	NA	0	0.0	—	—	—	—	—	—
IMP-1	-0.02	NA	0.0	NA	0	0.0	463	0001	1039	-30+	1108	-6
IMP-2	-0.02	NA	0.0	NA	0	0.0	376	0446	1120	-30+	1146	-10
IMP-3	-0.02	NA	52.0	NA	0	0.0	—	—	—	—	—	—
Roof-Top Fan 1	2.00	2468	256.0	NA	0	0.0	518	—	1315	-19	—	-3
Roof-Top Fan 2	1.80	1486	239.0	NA	0	0.0	455	—	1351	-25	—	-4
Roof-Top Fan 3	4.20	2210	503.0	NA	0	0.0	460	—	1346	-19	—	-3
Ambient Outdoor Air	NA	NA	0.0	NA	0	0.0	406	0279	1205	-30	1233	-10

NA: not applicable

NM: not monitored on this date.

NS : not sampled on this date.

* RIDEM Action Level for methane %LEL beneath the building is 10% and within the building is 1%. If these methane levels are exceeded, immediately notify EA Project Manager to initiate response protocol

Alvarez High School - SSD & Interior Methane Monitoring System O&M Form

Date of O&M 8/31/2010

Performed by P Theroux

PID/Methane Calibration? US Environmental

(yes/no)

Date of Last Methane Sensor Filter Replacement: May 2010

Replaced this O&M Visit? Yes (yes/no)

General Status of SSD System: On-line

Eng. Cap/Fence Inspection Performed/Notes Concrete cores were advanced in cracks in kitchen and gym storage room. Poly barrier intact.

Monitoring/ Sampling Location	Sub-slab or Gauge vacuum	VOC Monitoring	Air Velocity (fpm)	PID (ppb)	Indoor Sensor (ppm)	Methane Monitoring	Summa Can ID	Controller ID	Air/Vapor Sample Collection			Comments/Notes (Ambient weather conditions, status of HVAC, possible monitoring/sampling interferences, etc ... continue on separate sheet if needed)
									Start Vac	Shut Time (inches Hg)	End Time (inches Hg)	
Gymnasium	NA	NA	0	0	0	0	0	0				
Cafeteria	NA	NA	0	0	0	0	0	0				
Kitchen Storage Room	NA	NA	0	0	0	0	0	0				
Elevator Hallway	NA	NA	0	0	0	0	0	0				
Room 145	NA	NA	0	0	0	0	0	0				
Room 152	NA	NA	0	0	0	0	0	0				
Room 118	NA	NA	0	0	0	0	0	0				
Room 110	NA	NA	0	0	0	0	0	0				
MP-1	-0.07	NA	129	NA	0	0	0	0				
MP-2	-0.09	NA	4.5 ppm	NA	0	0	0	0				
MP-3	-0.19	NA	24.3 ppm	NA	0	0	0	0				
MP-4	-0.05	NA	19.2 ppm	NA	0	0	0	0				
MP-5	-0.09	NA	5.4 ppm	NA	0	0	0	0				
MP-6	-0.07	NA	25.1 ppm	NA	0	0	0	0				
MP-7	-0.12	NA	28.2 ppm	NA	0	0	0	0				
MP-8	-0.11	NA	46.7 ppm	NA	0	0	0	0				
IMP-1	-0.02	NA	122	NA	0	0	0	0				
IMP-2	-0.03	NA	46	NA	0	0	0	0				
IMP-3	-0.02	NA	136	NA	0	0	0	0				
Root-Top Fan 1	-1.80	2423	6	NA	0	0	0	0				
Root-Top Fan 2	-2.00	1426	203	NA	0	0	0	0				
Root-Top Fan 3	-2.50	2180	90	NA	0	0	0	0				
Ambient Outdoor Air	NA	NA	0	NA	0	0	0	0				

N/A - not applicable

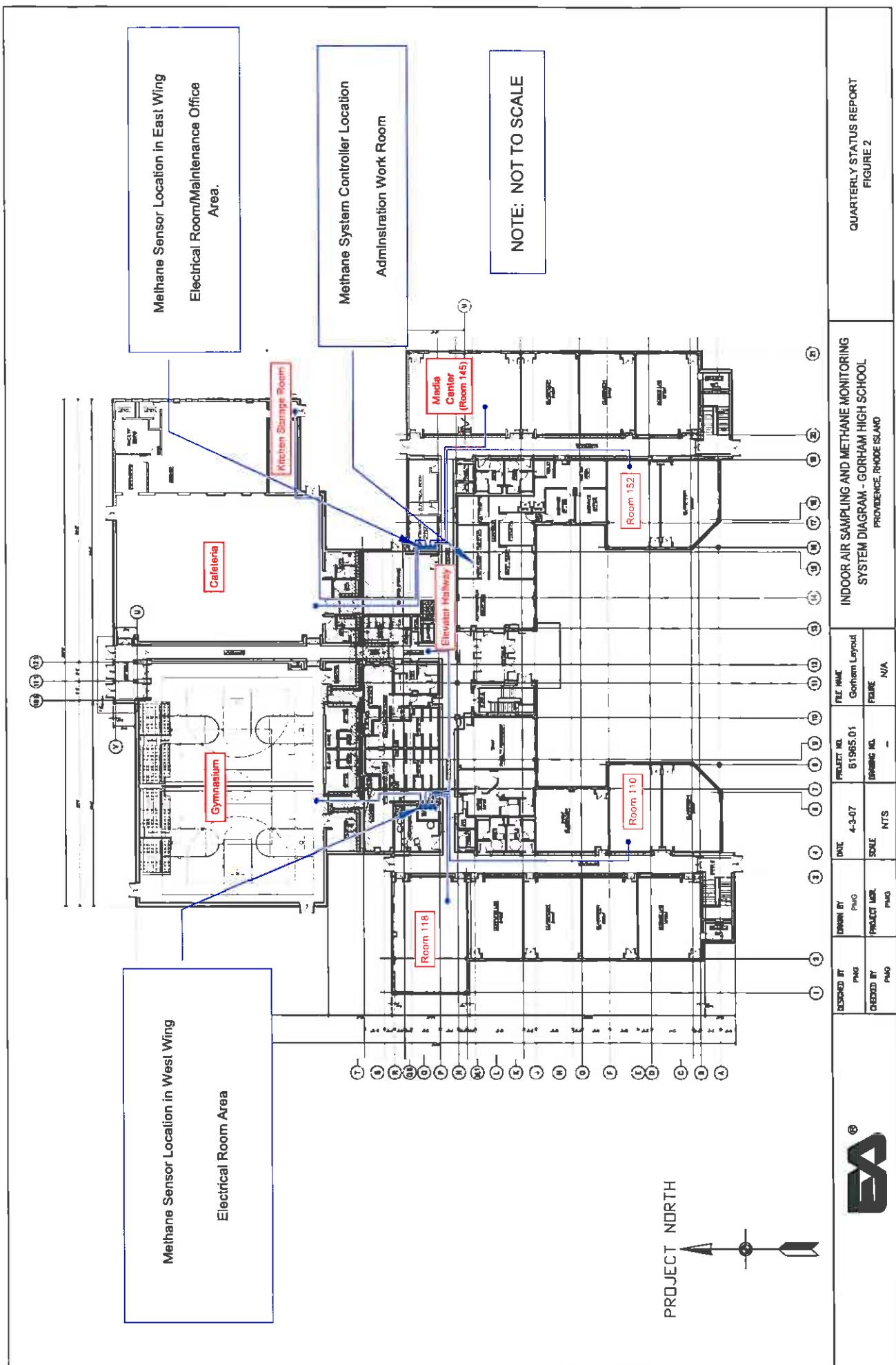
NA - not monitored on this date

NS - not sampled on this date

* RI DEM Action Level for methane %LEL beneath the building is 1%. If these methane levels are exceeded, immediately notify EA Project Manager to initiate response protocol.

Appendix B

Indoor and Ambient Outdoor Air Analytical Summary and Lab Report



Summary of Indoor Ambient Outdoor Air Sampling Data - Alvarez School Project - Volatile Organic Compounds

HB 2701 - July 2016

Summary of Indoor Ambient Outdoor Air Sampling Data - Alvarez School Project - Volatile Organic Compounds

Feb 2008 - July 2010

Summary of Indoor Ambient Outdoor Air Sampling Data - Alvarez School Project - Volatile Organic Compounds

Feb 2008 - July 2010

Summary of Indoor Ambient Outdoor Air Sampling Data - Alvarez School Project - Volatile Organic Compounds

Feb 2008 - July 2010

Summary of Indoor Ambient Outdoor Air Sampling Data - Alvarez School Project - Volatile Organic Compounds

Feb 2008 - July 2010

Summary of Indoor Ambient Outdoor Air Sampling Data - Alvarez School Project - Volatile Organic Compounds

Feb 2008 - July 2010

Summary of Indoor Ambient Outdoor Air Sampling Data - Alvarez School Project - Volatile Organic Compounds

Feb 2008 - July 2010

Summary of Indoor Ambient Outdoor Air Sampling Data - Alvarez School Project - Volatile Organic Compounds

Fact 2008 - July 2010

Summary of Indoor Ambient Outdoor Air Sampling Data - Alvarez School Project - Volatile Organic Compounds
Feb 2008 - July 2010

FEB 2008 • JELLY ZONE

Summary of Indoor Ambient Outdoor Air Sampling Data - Alvarez School Project - Volatile Organic Compounds
Feb 2008 - July 2010

Volatile Organic Compounds (VOCS)	Sample Date	CT Event Proposed indoor Residential Target Air Concentration/Measurement Rate & Approved Action Level	Minimum Sampling Time		Column	Pump	Concentration	Cham	Exterior Holloway	Cham	Pump 110	Cham	Ambient Outside	Cham						
			Start	End																
1,1,2,2-Tetrachloroethane	8-Sept-08	CT Event Proposed indoor Residential Target Air Concentration/Measurement Rate & Approved Action Level	0.050	1.0	0.140	U	0.140	U	0.157	U	0.140	U								
	27-Oct-08		0.157	U	0.157	U	0.157	U	0.157	U	0.157	U	0.157	U	0.157	U	0.157	U	0.157	U
	22-Nov-08		0.157	U	0.157	U	0.157	U	0.157	U	0.157	U	0.157	U	0.157	U	0.157	U	0.157	U
	28-Nov-08		0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	19-Dec-08		0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	21-Jan-09		0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	25-Feb-09		0.157	U	0.157	U	0.157	U	0.157	U	0.157	U	0.157	U	0.157	U	0.157	U	0.157	U
	26-Mar-09		0.139	U	0.139	U	0.139	U	0.139	U	0.139	U	0.139	U	0.139	U	0.139	U	0.139	U
	26-Apr-09		0.157	U	0.157	U	0.157	U	0.157	U	0.157	U	0.157	U	0.157	U	0.157	U	0.157	U
	27-Apr-09		0.139	U	0.139	U	0.139	U	0.139	U	0.139	U	0.139	U	0.139	U	0.139	U	0.139	U
	22-Jul-09		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	15-Aug-10		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	21-Aug-10		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	16-Aug-10		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
c, Xylenes	8-Feb-08		0.050	0.270	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	27-Oct-08		0.050	0.170	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	25-Nov-08		0.050	0.120	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	27-Jan-09		0.050	0.085	0.085	U	0.085	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	0.011±0.14	18-Dec-08	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	21-Jan-09		0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	25-Feb-09		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	26-Mar-09		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	26-Apr-09		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	26-May-09		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	27-Jun-09		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	25-Jul-09		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	26-Aug-09		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	27-Sep-09		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	25-Oct-09		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	26-Nov-09		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	27-Dec-09		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	28-Jan-10		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	21-Feb-10		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	16-Mar-10		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	27-Mar-10		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	28-Apr-10		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	29-May-10		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	20-Jun-10		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	21-Jul-10		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	16-Aug-10		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	21-Aug-10		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	16-Aug-10		0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U	0.137	U
	8-Feb-09		0.050	2.000	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	27-Oct-09		0.050	2.000	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	25-Nov-09		0.050	2.000	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	27-Dec-09		0.050	2.000	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	28-Jan-10		0.050	2.000	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	25-Feb-10		0.050	2.000	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	26-Mar-10		0.050	2.000	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	27-Apr-10		0.050	2.000	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	28-May-10		0.050	2.000	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	29-Jun-10		0.050	2.000	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	20-Jul-10		0.050	2.000	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	21-Aug-10		0.050	2.000	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	16-Aug-10		0.050	2.000	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	21-Aug-10		0.050	2.000	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	16-Aug-10		0.050	2.000	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	8-Feb-09		0.050	2.000	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	27-Oct-09		0.050	2.000	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	25-Nov-09		0.050	2.000	0.070	U	0.070	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U	0.140	U
	27-Dec-09		0.050	2.000	0.070	U	0.070	U	0.140	U	0.140	U	0.1							

Summary of Indoor Ambient Outdoor Air Sampling Data - Alvarez School Project - Volatile Organic Compounds

Feb 2008 - July 2010

Summary of Indoor Ambient Outdoor Air Sampling Data - Alvarez School Project - Volatile Organic Compounds
Feb 2008 - July 2010

Feb 2008 - July 2010

400

Abb. 3: Einzelne Ergebnisse der Zytokinanalyse (pg/ml)

U chelation therapy that the chelated metal ions are removed from the body.

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National Health Proprietary Act 1962

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2020 年度第 1 回定期評議會

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ANALYTICAL REPORT

Lab Number: L1010918

Client: EA Engineering, Science and Tech
2350 Post Road
Warwick, RI 02886

ATTN: Frank Postma
Phone: (401) 736-3440
Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01
Report Date: 07/26/10

Certifications & Approvals: MA (M-MA030), NY (11627), CT (PH-0141), NH (2206), NJ (MA015), RI (LA000298), 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



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1010918-01	CAFETERIA	PROVIDENCE, RI	07/16/10 10:32
L1010918-02	KITCHEN STORAGE RM	PROVIDENCE, RI	07/16/10 10:34
L1010918-03	GYM	PROVIDENCE, RI	07/16/10 10:35
L1010918-04	ELEVATOR HALLWAY	PROVIDENCE, RI	07/16/10 10:42
L1010918-05	ROOM 145	PROVIDENCE, RI	07/16/10 10:42
L1010918-06	ROOM 152	PROVIDENCE, RI	07/16/10 10:43
L1010918-07	ROOM 118	PROVIDENCE, RI	07/16/10 10:45
L1010918-08	ROOM 110	PROVIDENCE, RI	07/16/10 10:46
L1010918-09	AMBIENT OUTDOOR	PROVIDENCE, RI	07/16/10 12:33



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

The canister certification results are provided as an addendum.

The internal standards were within method criteria.

L1010918-03 and -04: The RPD of the pre- and post-flow controller calibration check (33% and 27% RPD, respectively) was outside acceptable limits (< or = 20% RPD).

Volatile Organics in Air (SIM)

The WG423835-3 LCS recovery for Methylene chloride (132%) is outside the 70%-130% acceptance limit.

The LCS was within overall method allowances, therefore the analysis proceeded.

WG423835-5: The relative percent difference for 2-Butanone is above the RPD limit of 25% at 28%. This compound represented less than 10% of the compounds detected, therefore 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:

Kathleen O'Brien

Title: Technical Director/Representative

Date: 07/26/10

AIR



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-01	Date Collected:	07/16/10 10:32
Client ID:	CAFETERIA	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/21/10 22:01		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualfler	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	0.519	0.050	—	2.56	0.247	—	1
Chloromethane	0.804	0.500	—	1.66	1.03	—	1
Vinyl chloride	ND	0.020	—	ND	0.051	—	1
Chloroethane	ND	0.020	—	ND	0.053	—	1
Acetone	6.95	2.00	—	16.5	4.75	—	1
Trichlorofluoromethane	0.262	0.050	—	1.47	0.281	—	1
Acrylonitrile	ND	0.500	—	ND	1.08	—	1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Methylene chloride	6.71	1.00	—	23.3	3.47	—	1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—	1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—	1
2-Butanone	0.645	0.500	—	1.90	1.47	—	1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Chloroform	0.051	0.020	—	0.249	0.098	—	1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—	1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Benzene	ND	0.100	—	ND	0.319	—	1
Carbon tetrachloride	0.080	0.020	—	0.503	0.126	—	1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—	1
Bromodichloromethane	ND	0.020	—	ND	0.134	—	1
Trichloroethene	ND	0.020	—	ND	0.107	—	1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—	1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-01	Date Collected:	07/16/10 10:32
Client ID:	CAFETERIA	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—		1
Toluene	0.321	0.020	—	1.21	0.075	—		1
Dibromochloromethane	ND	0.020	—	ND	0.170	—		1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—		1
Tetrachloroethene	0.062	0.020	—	0.420	0.136	—		1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—		1
Chlorobenzene	ND	0.020	—	ND	0.092	—		1
Ethylbenzene	0.052	0.020	—	0.226	0.087	—		1
p/m-Xylene	0.131	0.040	—	0.568	0.174	—		1
Bromoform	ND	0.020	—	ND	0.206	—		1
Styrene	ND	0.020	—	ND	0.085	—		1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—		1
o-Xylene	0.043	0.020	—	0.186	0.087	—		1
Isopropylbenzene	ND	0.500	—	ND	2.46	—		1
1,3,5-Trimethylbenzene	ND	0.020	—	ND	0.098	—		1
1,2,4-Trimethylbenzene	0.044	0.020	—	0.216	0.098	—		1
1,3-Dichlorobenzene	ND	0.020	—	ND	0.120	—		1
1,4-Dichlorobenzene	0.082	0.020	—	0.493	0.120	—		1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—		1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—		1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—		1
n-Butylbenzene	ND	0.500	—	ND	2.74	—		1



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-01	Date Collected:	07/16/10 10:32
Client ID:	CAFETERIA	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	104		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	97		60-140

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010918

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID: L1010918-02 Date Collected: 07/16/10 10:34
 Client ID: KITCHEN STORAGE RM Date Received: 07/19/10
 Sample Location: PROVIDENCE, RI Field Prep: Not Specified
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 07/21/10 23:18
 Analyst: RY

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	0.501	0.050	—	2.48	0.247	—	1
Chloromethane	0.732	0.500	—	1.51	1.03	—	1
Vinyl chloride	ND	0.020	—	ND	0.051	—	1
Chloroethane	ND	0.020	—	ND	0.053	—	1
Acetone	11.9	2.00	—	28.2	4.75	—	1
Trichlorofluoromethane	0.262	0.050	—	1.47	0.281	—	1
Acrylonitrile	ND	0.500	—	ND	1.08	—	1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Methylene chloride	5.30	1.00	—	18.4	3.47	—	1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—	1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—	1
2-Butanone	0.855	0.500	—	2.52	1.47	—	1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Chloroform	0.065	0.020	—	0.317	0.098	—	1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—	1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Benzene	ND	0.100	—	ND	0.319	—	1
Carbon tetrachloride	0.079	0.020	—	0.497	0.126	—	1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—	1
Bromodichloromethane	ND	0.020	—	ND	0.134	—	1
Trichloroethene	ND	0.020	—	ND	0.107	—	1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—	1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-02	Date Collected:	07/16/10 10:34
Client ID:	KITCHEN STORAGE RM	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—		1
Toluene	0.549	0.020	—	2.07	0.075	—		1
Dibromochloromethane	ND	0.020	—	ND	0.170	—		1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—		1
Tetrachloroethene	0.047	0.020	—	0.318	0.136	—		1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—		1
Chlorobenzene	ND	0.020	—	ND	0.092	—		1
Ethylbenzene	0.077	0.020	—	0.334	0.087	—		1
p/m-Xylene	0.200	0.040	—	0.868	0.174	—		1
Bromoform	ND	0.020	—	ND	0.206	—		1
Styrene	0.165	0.020	—	0.702	0.085	—		1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—		1
o-Xylene	0.063	0.020	—	0.273	0.087	—		1
Isopropylbenzene	ND	0.500	—	ND	2.46	—		1
1,3,5-Trimethylbenzene	0.023	0.020	—	0.113	0.098	—		1
1,2,4-Trimethylbenzene	0.072	0.020	—	0.354	0.098	—		1
1,3-Dichlorobenzene	ND	0.020	—	ND	0.120	—		1
1,4-Dichlorobenzene	0.264	0.020	—	1.58	0.120	—		1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—		1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—		1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—		1
n-Butylbenzene	ND	0.500	—	ND	2.74	—		1



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-02	Date Collected:	07/16/10 10:34
Client ID:	KITCHEN STORAGE RM	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		ug/m3		Qualfler	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	105		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	98		60-140

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-03	Date Collected:	07/16/10 10:35
Client ID:	GYM	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/21/10 23:56		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualfler	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	0.492	0.050	—	2.43	0.247	—	1
Chloromethane	0.507	0.500	—	1.05	1.03	—	1
Vinyl chloride	ND	0.020	—	ND	0.051	—	1
Chloroethane	ND	0.020	—	ND	0.053	—	1
Acetone	5.81	2.00	—	13.8	4.75	—	1
Trichlorofluoromethane	0.264	0.050	—	1.48	0.281	—	1
Acrylonitrile	ND	0.500	—	ND	1.08	—	1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Methylene chloride	4.86	1.00	—	16.9	3.47	—	1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—	1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—	1
2-Butanone	0.714	0.500	—	2.10	1.47	—	1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Chloroform	0.029	0.020	—	0.141	0.098	—	1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—	1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Benzene	ND	0.100	—	ND	0.319	—	1
Carbon tetrachloride	0.077	0.020	—	0.484	0.126	—	1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—	1
Bromodichloromethane	ND	0.020	—	ND	0.134	—	1
Trichloroethene	ND	0.020	—	ND	0.107	—	1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—	1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-03	Date Collected:	07/16/10 10:35
Client ID:	GYM	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Toluene	0.313	0.020	—	1.18	0.075	—	1
Dibromochloromethane	ND	0.020	—	ND	0.170	—	1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—	1
Tetrachloroethene	0.062	0.020	—	0.420	0.136	—	1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	1
Chlorobenzene	ND	0.020	—	ND	0.092	—	1
Ethylbenzene	0.096	0.020	—	0.416	0.087	—	1
p/m-Xylene	0.298	0.040	—	1.29	0.174	—	1
Bromoform	ND	0.020	—	ND	0.206	—	1
Styrene	ND	0.020	—	ND	0.085	—	1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	1
o-Xylene	0.072	0.020	—	0.312	0.087	—	1
Isopropylbenzene	ND	0.500	—	ND	2.46	—	1
1,3,5-Trimethylbenzene	0.028	0.020	—	0.138	0.098	—	1
1,2,4-Trimethylbenzene	0.079	0.020	—	0.388	0.098	—	1
1,3-Dichlorobenzene	ND	0.020	—	ND	0.120	—	1
1,4-Dichlorobenzene	0.106	0.020	—	0.637	0.120	—	1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—	1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—	1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—	1
n-Butylbenzene	ND	0.500	—	ND	2.74	—	1



Serial_No:07261016:19

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010918

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-03	Date Collected:	07/16/10 10:35
Client ID:	GYM	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Dilution Factor
		RL	MDL		RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	107		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	102		60-140

Project Name: ALVAREZ HIGH SCHOOL

Lab Number: L1010918

Project Number: 14687.01

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-04	Date Collected:	07/16/10 10:42
Client ID:	ELEVATOR HALLWAY	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/22/10 00:34		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	0.511	0.050	-	2.52	0.247	-	1
Chloromethane	0.527	0.500	-	1.09	1.03	-	1
Vinyl chloride	ND	0.020	-	ND	0.051	-	1
Chloroethane	ND	0.020	-	ND	0.053	-	1
Acetone	6.79	2.00	-	16.1	4.75	-	1
Trichlorofluoromethane	0.262	0.050	-	1.47	0.281	-	1
Acrylonitrile	ND	0.500	-	ND	1.08	-	1
1,1-Dichloroethene	ND	0.020	-	ND	0.079	-	1
Methylene chloride	4.01	1.00	-	13.9	3.47	-	1
trans-1,2-Dichloroethene	ND	0.020	-	ND	0.079	-	1
1,1-Dichloroethane	ND	0.020	-	ND	0.081	-	1
Methyl tert butyl ether	ND	0.020	-	ND	0.072	-	1
2-Butanone	0.749	0.500	-	2.21	1.47	-	1
cis-1,2-Dichloroethene	ND	0.020	-	ND	0.079	-	1
Chloroform	0.033	0.020	-	0.161	0.098	-	1
1,2-Dichloroethane	ND	0.020	-	ND	0.081	-	1
1,1,1-Trichloroethane	ND	0.020	-	ND	0.109	-	1
Benzene	ND	0.100	-	ND	0.319	-	1
Carbon tetrachloride	0.084	0.020	-	0.528	0.126	-	1
1,2-Dichloropropane	ND	0.020	-	ND	0.092	-	1
Bromodichloromethane	ND	0.020	-	ND	0.134	-	1
Trichloroethene	0.041	0.020	-	0.220	0.107	-	1
cis-1,3-Dichloropropene	ND	0.020	-	ND	0.091	-	1
4-Methyl-2-pentanone	ND	0.500	-	ND	2.05	-	1
trans-1,3-Dichloropropene	ND	0.020	-	ND	0.091	-	1



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-04	Date Collected:	07/16/10 10:42
Client ID:	ELEVATOR HALLWAY	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—	—	1
Toluene	0.362	0.020	—	1.36	0.075	—	—	1
Dibromochloromethane	ND	0.020	—	ND	0.170	—	—	1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—	—	1
Tetrachloroethene	0.063	0.020	—	0.427	0.136	—	—	1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	—	1
Chlorobenzene	ND	0.020	—	ND	0.092	—	—	1
Ethylbenzene	0.094	0.020	—	0.408	0.087	—	—	1
p/m-Xylene	0.258	0.040	—	1.12	0.174	—	—	1
Bromoform	ND	0.020	—	ND	0.206	—	—	1
Styrene	ND	0.020	—	ND	0.085	—	—	1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	—	1
o-Xylene	0.070	0.020	—	0.304	0.087	—	—	1
Isopropylbenzene	ND	0.500	—	ND	2.46	—	—	1
1,3,5-Trimethylbenzene	0.024	0.020	—	0.118	0.098	—	—	1
1,2,4-Trimethylbenzene	0.070	0.020	—	0.344	0.098	—	—	1
1,3-Dichlorobenzene	ND	0.020	—	ND	0.120	—	—	1
1,4-Dichlorobenzene	0.051	0.020	—	0.306	0.120	—	—	1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—	—	1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—	—	1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—	—	1
n-Butylbenzene	ND	0.500	—	ND	2.74	—	—	1



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-04	Date Collected:	07/16/10 10:42
Client ID:	ELEVATOR HALLWAY	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	99		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	98		60-140



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-05	Date Collected:	07/16/10 10:42
Client ID:	ROOM 145	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/22/10 01:12		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualifler	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	0.516	0.050	—	2.55	0.247	—	1
Chloromethane	0.630	0.500	—	1.30	1.03	—	1
Vinyl chloride	ND	0.020	—	ND	0.051	—	1
Chloroethane	ND	0.020	—	ND	0.053	—	1
Acetone	17.2	2.00	—	40.7	4.75	—	1
Trichlorofluoromethane	0.262	0.050	—	1.47	0.281	—	1
Acrylonitrile	ND	0.500	—	ND	1.08	—	1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Methylene chloride	13.4	1.00	—	46.7	3.47	—	1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—	1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—	1
2-Butanone	8.33	0.500	—	24.6	1.47	—	1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Chloroform	0.053	0.020	—	0.258	0.098	—	1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—	1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Benzene	0.152	0.100	—	0.485	0.319	—	1
Carbon tetrachloride	0.077	0.020	—	0.484	0.126	—	1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—	1
Bromodichloromethane	ND	0.020	—	ND	0.134	—	1
Trichloroethene	ND	0.020	—	ND	0.107	—	1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—	1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-05	Date Collected:	07/16/10 10:42
Client ID:	ROOM 145	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,1,2-Trichloroethane	ND	0.020	-	ND	0.109	-		1
Toluene	0.998	0.020	-	3.76	0.075	-		1
Dibromochloromethane	ND	0.020	-	ND	0.170	-		1
1,2-Dibromoethane	ND	0.020	-	ND	0.154	-		1
Tetrachloroethene	0.066	0.020	-	0.447	0.136	-		1
1,1,1,2-Tetrachloroethane	ND	0.020	-	ND	0.137	-		1
Chlorobenzene	ND	0.020	-	ND	0.092	-		1
Ethylbenzene	0.201	0.020	-	0.872	0.087	-		1
p/m-Xylene	0.435	0.040	-	1.89	0.174	-		1
Bromoform	ND	0.020	-	ND	0.206	-		1
Styrene	0.076	0.020	-	0.323	0.085	-		1
1,1,2,2-Tetrachloroethane	ND	0.020	-	ND	0.137	-		1
o-Xylene	0.162	0.020	-	0.703	0.087	-		1
Isopropylbenzene	ND	0.500	-	ND	2.46	-		1
1,3,5-Trimethylbenzene	0.030	0.020	-	0.147	0.098	-		1
1,2,4-Trimethylbenzene	0.104	0.020	-	0.511	0.098	-		1
1,3-Dichlorobenzene	ND	0.020	-	ND	0.120	-		1
1,4-Dichlorobenzene	1.90	0.020	-	11.4	0.120	-		1
sec-Butylbenzene	ND	0.500	-	ND	2.74	-		1
p-Isopropyltoluene	ND	0.500	-	ND	2.74	-		1
1,2-Dichlorobenzene	ND	0.020	-	ND	0.120	-		1
n-Butylbenzene	ND	0.500	-	ND	2.74	-		1



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-05	Date Collected:	07/16/10 10:42
Client ID:	ROOM 145	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	108		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	100		60-140

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-06	Date Collected:	07/16/10 10:43
Client ID:	ROOM 152	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/22/10 01:50		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	0.501	0.050	—	2.48	0.247	—	1
Chloromethane	0.534	0.500	—	1.10	1.03	—	1
Vinyl chloride	ND	0.020	—	ND	0.051	—	1
Chloroethane	ND	0.020	—	ND	0.053	—	1
Acetone	6.75	2.00	—	16.0	4.75	—	1
Trichlorofluoromethane	0.262	0.050	—	1.47	0.281	—	1
Acrylonitrile	ND	0.500	—	ND	1.08	—	1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Methylene chloride	6.39	1.00	—	22.2	3.47	—	1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—	1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—	1
2-Butanone	0.634	0.500	—	1.87	1.47	—	1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Chloroform	0.032	0.020	—	0.156	0.098	—	1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—	1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Benzene	ND	0.100	—	ND	0.319	—	1
Carbon tetrachloride	0.077	0.020	—	0.484	0.126	—	1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—	1
Bromodichloromethane	ND	0.020	—	ND	0.134	—	1
Trichloroethene	ND	0.020	—	ND	0.107	—	1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—	1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-06	Date Collected:	07/16/10 10:43
Client ID:	ROOM 152	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Toluene	0.353	0.020	—	1.33	0.075	—	1
Dibromochloromethane	ND	0.020	—	ND	0.170	—	1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—	1
Tetrachloroethene	0.070	0.020	—	0.474	0.136	—	1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	1
Chlorobenzene	ND	0.020	—	ND	0.092	—	1
Ethylbenzene	0.060	0.020	—	0.260	0.087	—	1
p/m-Xylene	0.160	0.040	—	0.694	0.174	—	1
Bromoform	ND	0.020	—	ND	0.206	—	1
Styrene	ND	0.020	—	ND	0.085	—	1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	1
o-Xylene	0.053	0.020	—	0.230	0.087	—	1
Isopropylbenzene	ND	0.500	—	ND	2.46	—	1
1,3,5-Trimethylbenzene	ND	0.020	—	ND	0.098	—	1
1,2,4-Trimethylbenzene	0.038	0.020	—	0.187	0.098	—	1
1,3-Dichlorobenzene	ND	0.020	—	ND	0.120	—	1
1,4-Dichlorobenzene	0.092	0.020	—	0.553	0.120	—	1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—	1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—	1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—	1
n-Butylbenzene	ND	0.500	—	ND	2.74	—	1



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-06	Date Collected:	07/16/10 10:43
Client ID:	ROOM 152	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	106		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	99		60-140

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010918

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-07	Date Collected:	07/16/10 10:45
Client ID:	ROOM 118	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/22/10 02:28		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualifler	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	0.747	0.050	—	3.69	0.247	—	1
Chloromethane	0.816	0.500	—	1.68	1.03	—	1
Vinyl chloride	ND	0.020	—	ND	0.051	—	1
Chloroethane	ND	0.020	—	ND	0.053	—	1
Acetone	15.6	2.00	—	36.9	4.75	—	1
Trichlorofluoromethane	0.384	0.050	—	2.16	0.281	—	1
Acrylonitrile	ND	0.500	—	ND	1.08	—	1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Methylene chloride	5.73	1.00	—	19.9	3.47	—	1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—	1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—	1
2-Butanone	1.08	0.500	—	3.18	1.47	—	1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Chloroform	0.039	0.020	—	0.190	0.098	—	1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—	1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Benzene	ND	0.100	—	ND	0.319	—	1
Carbon tetrachloride	0.074	0.020	—	0.465	0.126	—	1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—	1
Bromodichloromethane	ND	0.020	—	ND	0.134	—	1
Trichloroethene	ND	0.020	—	ND	0.107	—	1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—	1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010918

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-07	Date Collected:	07/16/10 10:45
Client ID:	ROOM 118	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—	—	1
Toluene	0.597	0.020	—	2.25	0.075	—	—	1
Dibromochloromethane	ND	0.020	—	ND	0.170	—	—	1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—	—	1
Tetrachloroethene	0.074	0.020	—	0.501	0.136	—	—	1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	—	1
Chlorobenzene	ND	0.020	—	ND	0.092	—	—	1
Ethylbenzene	0.132	0.020	—	0.573	0.087	—	—	1
p/m-Xylene	0.298	0.040	—	1.29	0.174	—	—	1
Bromoform	ND	0.020	—	ND	0.206	—	—	1
Styrene	0.183	0.020	—	0.779	0.085	—	—	1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	—	1
o-Xylene	0.116	0.020	—	0.503	0.087	—	—	1
Isopropylbenzene	ND	0.500	—	ND	2.46	—	—	1
1,3,5-Trimethylbenzene	ND	0.020	—	ND	0.098	—	—	1
1,2,4-Trimethylbenzene	0.051	0.020	—	0.250	0.098	—	—	1
1,3-Dichlorobenzene	ND	0.020	—	ND	0.120	—	—	1
1,4-Dichlorobenzene	0.083	0.020	—	0.499	0.120	—	—	1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—	—	1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—	—	1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—	—	1
n-Butylbenzene	ND	0.500	—	ND	2.74	—	—	1



Project Name: ALVAREZ HIGH SCHOOL**Project Number:** 14687.01**Lab Number:** L1010918**Report Date:** 07/26/10**SAMPLE RESULTS**

Lab ID:	L1010918-07	Date Collected:	07/16/10 10:45
Client ID:	ROOM 118	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	108		60-140
bromochloromethane	68		60-140
chlorobenzene-d5	100		60-140

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-08	Date Collected:	07/16/10 10:46
Client ID:	ROOM 110	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/22/10 03:06		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualifler	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	0.503	0.050	—	2.48	0.247	—	1
Chloromethane	0.539	0.500	—	1.11	1.03	—	1
Vinyl chloride	ND	0.020	—	ND	0.051	—	1
Chloroethane	ND	0.020	—	ND	0.053	—	1
Acetone	10.5	2.00	—	24.9	4.75	—	1
Trichlorofluoromethane	0.262	0.050	—	1.47	0.281	—	1
Acrylonitrile	ND	0.500	—	ND	1.08	—	1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Methylene chloride	13.9	1.00	—	48.2	3.47	—	1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—	1
Methyl tert butyl ether	NO	0.020	—	ND	0.072	—	1
2-Butanone	0.950	0.500	—	2.80	1.47	—	1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Chloroform	0.029	0.020	—	0.141	0.098	—	1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—	1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Benzene	ND	0.100	—	ND	0.319	—	1
Carbon tetrachloride	0.087	0.020	—	0.547	0.126	—	1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—	1
Bromodichloromethane	ND	0.020	—	ND	0.134	—	1
Trichloroethene	ND	0.020	—	ND	0.107	—	1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—	1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-08	Date Collected:	07/16/10 10:46
Client ID:	ROOM 110	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—		1
Toluene	0.416	0.020	—	1.57	0.075	—		1
Dibromochloromethane	ND	0.020	—	ND	0.170	—		1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—		1
Tetrachloroethene	0.034	0.020	—	0.230	0.136	—		1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—		1
Chlorobenzene	ND	0.020	—	ND	0.092	—		1
Ethylbenzene	0.066	0.020	—	0.286	0.087	—		1
p/m-Xylene	0.168	0.040	—	0.729	0.174	—		1
Bromoform	ND	0.020	—	ND	0.206	—		1
Styrene	ND	0.020	—	ND	0.085	—		1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—		1
o-Xylene	0.046	0.020	—	0.200	0.087	—		1
Isopropylbenzene	ND	0.500	—	ND	2.46	—		1
1,3,5-Trimethylbenzene	ND	0.020	—	ND	0.098	—		1
1,2,4-Trimethylbenzene	0.028	0.020	—	0.138	0.098	—		1
1,3-Dichlorobenzene	ND	0.020	—	ND	0.120	—		1
1,4-Dichlorobenzene	0.109	0.020	—	0.655	0.120	—		1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—		1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—		1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—		1
n-Butylbenzene	ND	0.500	—	ND	2.74	—		1



Project Name: ALVAREZ HIGH SCHOOL**Project Number:** 14687.01**Lab Number:** L1010918**Report Date:** 07/26/10**SAMPLE RESULTS**

Lab ID:	L1010918-08	Date Collected:	07/16/10 10:46
Client ID:	ROOM 110	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	93		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	91		60-140

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-09	Date Collected:	07/16/10 12:33
Client ID:	AMBIENT OUTDOOR	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/21/10 21:23		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	0.554	0.050	—	2.74	0.247	—	1
Chloromethane	0.733	0.500	—	1.51	1.03	—	1
Vinyl chloride	ND	0.020	—	ND	0.051	—	1
Chloroethane	ND	0.020	—	ND	0.053	—	1
Acetone	6.04	2.00	—	14.3	4.75	—	1
Trichlorofluoromethane	0.277	0.050	—	1.56	0.281	—	1
Acrylonitrile	ND	0.500	—	ND	1.08	—	1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Methylene chloride	5.93	1.00	—	20.6	3.47	—	1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—	1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—	1
2-Butanone	0.552	0.500	—	1.63	1.47	—	1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Chloroform	0.027	0.020	—	0.132	0.098	—	1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—	1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Benzene	ND	0.100	—	ND	0.319	—	1
Carbon tetrachloride	0.086	0.020	—	0.541	0.126	—	1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—	1
Bromodichloromethane	ND	0.020	—	ND	0.134	—	1
Trichloroethene	ND	0.020	—	ND	0.107	—	1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—	1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-09	Date Collected:	07/16/10 12:33
Client ID:	AMBIENT OUTDOOR	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—		1
Toluene	0.209	0.020	—	0.787	0.075	—		1
Dibromochloromethane	ND	0.020	—	ND	0.170	—		1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—		1
Tetrachloroethene	0.034	0.020	—	0.230	0.136	—		1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—		1
Chlorobenzene	ND	0.020	—	ND	0.092	—		1
Ethylbenzene	0.033	0.020	—	0.143	0.087	—		1
p/m-Xylene	0.076	0.040	—	0.330	0.174	—		1
Bromoform	ND	0.020	—	ND	0.206	—		1
Styrene	ND	0.020	—	ND	0.085	—		1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—		1
o-Xylene	0.029	0.020	—	0.126	0.087	—		1
Isopropylbenzene	ND	0.500	—	ND	2.46	—		1
1,3,5-Trimethylbenzene	ND	0.020	—	ND	0.098	—		1
1,2,4-Trimethylbenzene	0.022	0.020	—	0.108	0.098	—		1
1,3-Dichlorobenzene	ND	0.020	—	ND	0.120	—		1
1,4-Dichlorobenzene	0.064	0.020	—	0.384	0.120	—		1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—		1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—		1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—		1
n-Butylbenzene	ND	0.500	—	ND	2.74	—		1



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010918-09	Date Collected:	07/16/10 12:33
Client ID:	AMBIENT OUTDOOR	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	96		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	93		60-140

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 07/21/10 16:13

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-09 Batch: WG423835-4								
Dichlorodifluoromethane	ND	0.050	-	ND	0.247	-		1
Chloromethane	ND	0.500	-	ND	1.03	-		1
Vinyl chloride	ND	0.020	-	ND	0.051	-		1
Chloroethane	ND	0.020	-	ND	0.053	-		1
Acetone	ND	2.00	-	ND	4.75	-		1
Trichlorofluoromethane	ND	0.050	-	ND	0.281	-		1
Acrylonitrile	ND	0.500	-	ND	1.08	-		1
1,1-Dichloroethene	ND	0.020	-	ND	0.079	-		1
Methylene chloride	ND	1.00	-	ND	3.47	-		1
trans-1,2-Dichloroethene	ND	0.020	-	ND	0.079	-		1
1,1-Dichloroethane	ND	0.020	-	ND	0.081	-		1
Methyl tert butyl ether	ND	0.020	-	ND	0.072	-		1
2-Butanone	ND	0.500	-	ND	1.47	-		1
cis-1,2-Dichloroethene	ND	0.020	-	ND	0.079	-		1
Chloroform	ND	0.020	-	ND	0.098	-		1
1,2-Dichloroethane	ND	0.020	-	ND	0.081	-		1
1,1,1-Trichloroethane	ND	0.020	-	ND	0.109	-		1
Benzene	ND	0.100	-	ND	0.319	-		1
Carbon tetrachloride	ND	0.020	-	ND	0.126	-		1
1,2-Dichloropropane	ND	0.020	-	ND	0.092	-		1
Bromodichloromethane	ND	0.020	-	ND	0.134	-		1
Trichloroethene	ND	0.020	-	ND	0.107	-		1
cis-1,3-Dichloropropene	ND	0.020	-	ND	0.091	-		1
4-Methyl-2-pentanone	ND	0.500	-	ND	2.05	-		1
trans-1,3-Dichloropropene	ND	0.020	-	ND	0.091	-		1



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010918

Report Date: 07/26/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 07/21/10 16:13

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-09 Batch: WG423835-4								
1,1,2-Trichloroethane	ND	0.020	-	ND	0.109	-		1
Toluene	ND	0.020	-	ND	0.075	-		1
Dibromochloromethane	ND	0.020	-	ND	0.170	-		1
1,2-Dibromoethane	ND	0.020	-	ND	0.154	-		1
Tetrachloroethene	ND	0.020	-	ND	0.136	-		1
1,1,1,2-Tetrachloroethane	ND	0.020	-	ND	0.137	-		1
Chlorobenzene	ND	0.020	-	ND	0.092	-		1
Ethylbenzene	ND	0.020	-	ND	0.087	-		1
p/m-Xylene	ND	0.040	-	ND	0.174	-		1
Bromoform	ND	0.020	-	ND	0.206	-		1
Styrene	ND	0.020	-	ND	0.085	-		1
1,1,2,2-Tetrachloroethane	ND	0.020	-	ND	0.137	-		1
o-Xylene	ND	0.020	-	ND	0.087	-		1
Isopropylbenzene	ND	0.500	-	ND	2.46	-		1
1,3,5-Trimethylbenzene	ND	0.020	-	ND	0.098	-		1
1,2,4-Trimethylbenzene	ND	0.020	-	ND	0.098	-		1
1,3-Dichlorobenzene	ND	0.020	-	ND	0.120	-		1
1,4-Dichlorobenzene	ND	0.020	-	ND	0.120	-		1
sec-Butylbenzene	ND	0.500	-	ND	2.74	-		1
p-Isopropyltoluene	ND	0.500	-	ND	2.74	-		1
1,2-Dichlorobenzene	ND	0.020	-	ND	0.120	-		1
n-Butylbenzene	ND	0.500	-	ND	2.74	-		1



Lab Control Sample Analysis

Batch Quality Control

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

Parameter	LCS	%Recovery	Qual	%Recovery	LCSD	Qual	%Recovery	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 Batch: WG423835-3										
Dichlorodifluoromethane	112	-	-	-	-	-	70-130	-	-	25
Chloromethane	124	-	-	-	-	-	70-130	-	-	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	104	-	-	-	-	-	70-130	-	-	25
Vinyl chloride	101	-	-	-	-	-	70-130	-	-	25
1,3-Butadiene	105	-	-	-	-	-	70-130	-	-	25
Bromomethane	100	-	-	-	-	-	70-130	-	-	25
Chloroethane	102	-	-	-	-	-	70-130	-	-	25
Acetone	107	-	-	-	-	-	70-130	-	-	25
Trichlorofluoromethane	107	-	-	-	-	-	70-130	-	-	25
Acrylonitrile	98	-	-	-	-	-	70-130	-	-	25
1,1-Dichloroethene	109	-	-	-	-	-	70-130	-	-	25
Methylene chloride	132	-	-	-	-	-	70-130	-	-	25
1,1,2-Trichloro-1,2,2-Trifluoroethane	114	-	-	-	-	-	70-130	-	-	25
Halothane	112	-	-	-	-	-	70-130	-	-	25
trans-1,2-Dichloroethene	106	-	-	-	-	-	70-130	-	-	25
1,1-Dichloroethane	109	-	-	-	-	-	70-130	-	-	25
Methyl tert butyl ether	110	-	-	-	-	-	70-130	-	-	25
2-Buandone	72	-	-	-	-	-	70-130	-	-	25
cis-1,2-Dichloroethene	80	-	-	-	-	-	70-130	-	-	25
Chloroform	111	-	-	-	-	-	70-130	-	-	25
1,2-Dichloroethane	101	-	-	-	-	-	70-130	-	-	25

Lab Control Sample Analysis

Batch Quality Control

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

Parameter	LCS	%Recovery	Qual	%Recovery	Qual	LCSD	%Recovery	Qual	%Recovery	Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 Batch: WG423835-3													
1,1,1-Trichloroethane	107	-	-	-	-	70-130	-	-	-	-	25	-	-
Benzene	87	-	-	-	-	70-130	-	-	-	-	25	-	-
Carbon tetrachloride	106	-	-	-	-	70-130	-	-	-	-	25	-	-
1,2-Dichloropropane	87	-	-	-	-	70-130	-	-	-	-	25	-	-
Bromodichloromethane	96	-	-	-	-	70-130	-	-	-	-	25	-	-
1,4-Dioxane	92	-	-	-	-	70-130	-	-	-	-	25	-	-
Trichloroethene	102	-	-	-	-	70-130	-	-	-	-	25	-	-
cis-1,3-Dichloropropene	94	-	-	-	-	70-130	-	-	-	-	25	-	-
4-Methyl-2-pentanone	98	-	-	-	-	70-130	-	-	-	-	25	-	-
trans-1,3-Dichloropropene	83	-	-	-	-	70-130	-	-	-	-	25	-	-
1,1,2-Trichloroethane	94	-	-	-	-	70-130	-	-	-	-	25	-	-
Toluene	84	-	-	-	-	70-130	-	-	-	-	25	-	-
Dibromochloromethane	88	-	-	-	-	70-130	-	-	-	-	25	-	-
1,2-Dibromoethane	96	-	-	-	-	70-130	-	-	-	-	25	-	-
Tetrachloroethylene	99	-	-	-	-	70-130	-	-	-	-	25	-	-
1,1,1,2-Tetrachloroethane	96	-	-	-	-	70-130	-	-	-	-	25	-	-
Chlorobenzene	96	-	-	-	-	70-130	-	-	-	-	25	-	-
Ethylbenzene	101	-	-	-	-	70-130	-	-	-	-	25	-	-
p/m-Xylene	105	-	-	-	-	70-130	-	-	-	-	25	-	-
Bromoform	109	-	-	-	-	70-130	-	-	-	-	25	-	-
Styrene	107	-	-	-	-	70-130	-	-	-	-	25	-	-

Lab Control Sample Analysis
Batch Quality Control

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

Parameter	LCS	%Recovery	LCSD	%Recovery	Qual	%Recovery	Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 Batch: WG423835-3										
1,1,2,2-Tetrachloroethane	105	-	-	-	-	-	70-130	-	-	25
o-Xylene	107	-	-	-	-	-	70-130	-	-	25
Isopropylbenzene	102	-	-	-	-	-	70-130	-	-	25
1,3,5-Trimethylbenzene	113	-	-	-	-	-	70-130	-	-	25
1,2,4-Trimethylbenzene	118	-	-	-	-	-	70-130	-	-	25
1,3-Dichlorobenzene	111	-	-	-	-	-	70-130	-	-	25
1,4-Dichlorobenzene	110	-	-	-	-	-	70-130	-	-	25
sec-Butylbenzene	106	-	-	-	-	-	70-130	-	-	25
p-Isopropyltoluene	106	-	-	-	-	-	70-130	-	-	25
1,2-Dichlorobenzene	111	-	-	-	-	-	70-130	-	-	25
n-Butylbenzene	112	-	-	-	-	-	70-130	-	-	25
1,2,4-Trichlorobenzene	135	Q	-	-	-	-	70-130	-	-	25
Naphthalene	119	-	-	-	-	-	70-130	-	-	25
1,2,3-Trichlorobenzene	128	-	-	-	-	-	70-130	-	-	25
Hexachlorobutadiene	119	-	-	-	-	-	70-130	-	-	25

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L10109-18
Report Date: 07/26/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab	Associated sample(s): 01-09	QC Batch ID: WG423835-5	QC Sample: L1010918-01	Client ID: CAFETERIA		
Dichlorodifluoromethane	0.519	0.522	ppbV	1	1	25
Chloromethane	0.804	0.795	ppbV	1	1	25
Vinyl chloride	ND	ND	ppbV	NC	NC	25
Chloroethane	ND	ND	ppbV	NC	NC	25
Acetone	6.95	7.14	ppbV	3	3	25
Trichlorofluoromethane	0.262	0.265	ppbV	1	1	25
Acrylonitrile	ND	ND	ppbV	NC	NC	25
1,1-Dichloroethene	ND	ND	ppbV	NC	NC	25
Methylene chloride	6.71	6.82	ppbV	2	2	25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC	NC	25
1,1-Dichloroethane	ND	ND	ppbV	NC	NC	25
Methyl tert butyl ether	ND	ND	ppbV	NC	NC	25
2-Butanone	0.645	0.856	ppbV	28	Q	25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC	NC	25
Chloroform	0.051	0.051	ppbV	0	0	25
1,2-Dichloroethane	ND	ND	ppbV	NC	NC	25
1,1,1-Trichloroethane	ND	ND	ppbV	NC	NC	25
Benzene	ND	ND	ppbV	10	10	25
Carbon tetrachloride	0.080	0.088	ppbV			



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L1010918
Report Date: 07/26/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG423835-5 QC Sample: L1010918-01 Client ID: CAFETERIA					
1,2-Dichloropropane	ND	ND	ppbV	NC	25
Bromodichloromethane	ND	ND	ppbV	NC	25
Trichloroethene	ND	ND	ppbV	NC	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
4-Methyl-2-pentanone	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
Toluene	0.321	0.327	ppbV	2	25
Dibromochloromethane	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
Tetrachloroethene	0.062	0.064	ppbV	3	25
Ethylbenzene	ND	ND	ppbV	NC	25
p/m-Xylene	0.052	0.051	ppbV	2	25
Bromoform	ND	ND	ppbV	NC	25
Styrene	ND	ND	ppbV	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	5	25
o-Xylene	0.043	0.045	ppbV		

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Duplicate Analysis

Lab Number: L1010918
Report Date: 07/26/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab	Associated sample(s): 01-09	QC Batch ID: WG423835-5	QC Sample: L1010918-01	Client ID: CAFETERIA	
Isopropylbenzene	ND	ND	ppbV	NC	25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC	25
1,2,4-Trimethylbenzene	0.044	0.045	ppbV	2	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	0.082	0.083	ppbV	1	25
sec-Butylbenzene	ND	ND	ppbV	NC	25
p-Isopropyltoluene	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
n-Butylbenzene	ND	ND	ppbV	NC	25

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Serial_No:07261016:19
Lab Number: L1010918

Report Date: 07/26/10

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Cleaning Batch ID	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Out mL/min	Flow In mL/min	% RSD
L1010918-01	CAFETERIA	0451	#90 SV		-	-	69	74	7
L1010918-01	CAFETERIA	323	2.7L Can	I1010362	-28.5	-7.5	-	-	-
L1010918-02	KITCHEN STORAGE RM	0391	#90 SV		-	-	71	74	4
L1010918-02	KITCHEN STORAGE RM	543	2.7L Can	I1010362	-29.3	-7.8	-	-	-
L1010918-03	GYM	0252	#90 SV		-	-	72	100	33
L1010918-03	GYM	471	2.7L Can	I1010362	-28.5	0	-	-	-
L1010918-04	ELEVATOR HALLWAY	0165	#90 AMB		-	-	67	88	27
L1010918-04	ELEVATOR HALLWAY	1737	2.7L Can	I1010362	-29.4	-1.7	-	-	-
L1010918-05	ROOM 145	0280	#90 SV		-	-	69	70	1
L1010918-05	ROOM 145	545	2.7L Can	I1010362	-28.2	-2.0	-	-	-
L1010918-06	ROOM 152	0271	#90 AMB		-	-	71	80	12
L1010918-06	ROOM 152	415	2.7L Can	I1010362	-28.5	-0.6	-	-	-
L1010918-07	ROOM 118	0270	#90 SV		-	-	72	77	7
L1010918-07	ROOM 118	485	2.7L Can	I1010362	-29.3	-1.7	-	-	-
L1010918-08	ROOM 110	0019	#90 SV		-	-	72	72	0
L1010918-08	ROOM 110	379	2.7L Can	I1010362	-28.5	-3.9	-	-	-
L1010918-09	AMBIENT OUTDOOR	0279	#90 AMB		-	-	70	72	3



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Serial_No:07261016:19

Lab Number: L1010918

Report Date: 07/26/10

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Cleaning Batch ID	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Out mL/min	Flow In mL/min	% RSD
L1010918-09	AMBIENT OUTDOOR	406	2.7L Can	I1010362	-29.0	-9.0	-	-	-



Air Volatiles Can Certification

Project Name: BATCH CANISTER CERTIFICATION**Project Number:** CANISTER QC BAT**Lab Number:** L1010362**Report Date:** 07/26/10**Air Canister Certification Results**

Lab ID: L1010362-01 Date Collected: 07/08/10 00:00
 Client ID: CAN 395 SHELF 7 Date Received: 07/08/10
 Sample Location: Field Prep: Not Specified
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 07/09/10 19:35
 Analyst: RY

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air (Low Level) - Mansfield Lab							
Chlorodifluoromethane	ND	0.200	—	ND	0.707	—	1
Propylene	ND	0.200	—	ND	0.344	—	1
Propane	ND	0.200	—	ND	0.606	—	1
Dichlorodifluoromethane	ND	0.200	—	ND	0.988	—	1
Chloromethane	ND	0.200	—	ND	0.413	—	1
Freon-114	ND	0.200	—	ND	1.40	—	1
Methanol	ND	5.00	—	ND	6.55	—	1
Vinyl chloride	ND	0.200	—	ND	0.511	—	1
1,3-Butadiene	ND	0.200	—	ND	0.442	—	1
Butane	ND	0.200	—	ND	0.475	—	1
Bromomethane	ND	0.200	—	ND	0.776	—	1
Chloroethane	ND	0.200	—	ND	0.527	—	1
Ethanol	ND	2.50	—	ND	4.71	—	1
Dichlorofluoromethane	ND	0.200	—	ND	0.841	—	1
Vinyl bromide	ND	0.200	—	ND	0.874	—	1
Acrolein	ND	0.500	—	ND	1.14	—	1
Acetone	ND	1.00	—	ND	2.37	—	1
Acetonitrile	ND	0.200	—	ND	0.336	—	1
Trichlorofluoromethane	ND	0.200	—	ND	1.12	—	1
Isopropanol	ND	0.500	—	ND	1.23	—	1
Acrylonitrile	ND	0.200	—	ND	0.434	—	1
Pentane	ND	0.200	—	ND	0.590	—	1
Ethyl ether	ND	0.200	—	ND	0.606	—	1
1,1-Dichloroethene	ND	0.200	—	ND	0.792	—	1
Tertiary butyl Alcohol	ND	0.500	—	ND	1.52	—	1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1010362

Project Number: CANISTER QC BAT

Report Date: 07/26/10

Air Canister Certification Results

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air (Low Level) - Mansfield Lab								
Methylene chloride	ND	1.00	—	ND	3.47	—		1
3-Chloropropene	ND	0.200	—	ND	0.626	—		1
Carbon disulfide	ND	0.200	—	ND	0.622	—		1
Freon-113	ND	0.200	—	ND	1.53	—		1
trans-1,2-Dichloroethene	ND	0.200	—	ND	0.792	—		1
1,1-Dichloroethane	ND	0.200	—	ND	0.809	—		1
Methyl tert butyl ether	ND	0.200	—	ND	0.720	—		1
Vinyl acetate	ND	0.200	—	ND	0.704	—		1
2-Butanone	ND	0.200	—	ND	0.589	—		1
cis-1,2-Dichloroethene	ND	0.200	—	ND	0.792	—		1
Ethyl Acetate	ND	0.500	—	ND	1.80	—		1
Chloroform	ND	0.200	—	ND	0.976	—		1
Tetrahydrofuran	ND	0.200	—	ND	0.589	—		1
2,2-Dichloropropane	ND	0.200	—	ND	0.923	—		1
1,2-Dichloroethane	ND	0.200	—	ND	0.809	—		1
n-Hexane	ND	0.200	—	ND	0.704	—		1
Diisopropyl ether	ND	0.200	—	ND	0.835	—		1
tert-Butyl Ethyl Ether	ND	0.200	—	ND	0.835	—		1
1,1,1-Trichloroethane	ND	0.200	—	ND	1.09	—		1
1,1-Dichloropropene	ND	0.200	—	ND	0.907	—		1
Benzene	ND	0.200	—	ND	0.638	—		1
Carbon tetrachloride	ND	0.200	—	ND	1.26	—		1
Cyclohexane	ND	0.200	—	ND	0.688	—		1
tert-Amyl Methyl Ether	ND	0.200	—	ND	0.835	—		1
Dibromomethane	ND	0.200	—	ND	1.42	—		1
1,2-Dichloropropane	ND	0.200	—	ND	0.924	—		1
Bromodichloromethane	ND	0.200	—	ND	1.34	—		1
1,4-Dioxane	ND	0.200	—	ND	0.720	—		1



Project Name: BATCH CANISTER CERTIFICATION**Project Number:** CANISTER QC BAT**Lab Number:** L1010362**Report Date:** 07/26/10**Air Canister Certification Results**

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air (Low Level) - Mansfield Lab								
Trichloroethene	ND	0.200	-	ND	1.07	-		1
2,2,4-Trimethylpentane	ND	0.200	-	ND	0.934	-		1
Heptane	ND	0.200	-	ND	0.819	-		1
2,4,4-trimethyl-1-pentene	ND	0.500	-	ND	2.29	-		1
cis-1,3-Dichloropropene	ND	0.200	-	ND	0.907	-		1
4-Methyl-2-pentanone	ND	0.200	-	ND	0.819	-		1
2,4,4-trimethyl-2-pentene	ND	0.500	-	ND	2.29	-		1
trans-1,3-Dichloropropene	ND	0.200	-	ND	0.907	-		1
1,1,2-Trichloroethane	ND	0.200	-	ND	1.09	-		1
Toluene	ND	0.200	-	ND	0.753	-		1
1,3-Dichloropropane	ND	0.200	-	ND	0.923	-		1
2-Hexanone	ND	0.200	-	ND	0.819	-		1
Dibromochloromethane	ND	0.200	-	ND	1.70	-		1
1,2-Dibromoethane	ND	0.200	-	ND	1.54	-		1
Butyl acetate	ND	0.500	-	ND	2.37	-		1
Octane	ND	0.200	-	ND	0.934	-		1
Tetrachloroethene	ND	0.200	-	ND	1.36	-		1
1,1,1,2-Tetrachloroethane	ND	0.200	-	ND	1.37	-		1
Chlorobenzene	ND	0.200	-	ND	0.920	-		1
Ethylbenzene	ND	0.200	-	ND	0.868	-		1
p/m-Xylene	ND	0.400	-	ND	1.74	-		1
Bromoform	ND	0.200	-	ND	2.06	-		1
Styrene	ND	0.200	-	ND	0.851	-		1
1,1,2,2-Tetrachloroethane	ND	0.200	-	ND	1.37	-		1
o-Xylene	ND	0.200	-	ND	0.868	-		1
1,2,3-Trichloropropane	ND	0.200	-	ND	1.20	-		1
Nonane	ND	0.200	-	ND	1.05	-		1
Isopropylbenzene	ND	0.200	-	ND	0.982	-		1



Project Name: BATCH CANISTER CERTIFICATION**Project Number:** CANISTER QC BAT**Lab Number:** L1010362**Report Date:** 07/26/10**Air Canister Certification Results**

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air (Low Level) - Mansfield Lab								
Bromobenzene	ND	0.200	—	ND	1.28	—		1
2-Chlorotoluene	ND	0.200	—	ND	1.03	—		1
n-Propylbenzene	ND	0.200	—	ND	0.982	—		1
4-Chlorotoluene	ND	0.200	—	ND	1.03	—		1
4-Ethyltoluene	ND	0.200	—	ND	0.982	—		1
1,3,5-Trimethylbenzene	ND	0.200	—	ND	0.982	—		1
tert-Butylbenzene	ND	0.200	—	ND	1.10	—		1
1,2,4-Trimethylbenzene	ND	0.200	—	ND	0.982	—		1
Decane	ND	0.200	—	ND	1.16	—		1
Benzyl chloride	ND	0.200	—	ND	1.03	—		1
1,3-Dichlorobenzene	ND	0.200	—	ND	1.20	—		1
1,4-Dichlorobenzene	ND	0.200	—	ND	1.20	—		1
sec-Butylbenzene	ND	0.200	—	ND	1.10	—		1
p-Isopropyltoluene	ND	0.200	—	ND	1.10	—		1
1,2-Dichlorobenzene	ND	0.200	—	ND	1.20	—		1
n-Butylbenzene	ND	0.200	—	ND	1.10	—		1
1,2-Dibromo-3-chloropropane	ND	0.200	—	ND	1.93	—		1
Undecane	ND	0.200	—	ND	1.28	—		1
Dodecane	ND	0.200	—	ND	1.39	—		1
1,2,4-Trichlorobenzene	ND	0.200	—	ND	1.48	—		1
Naphthalene	ND	0.200	—	ND	1.05	—		1
1,2,3-Trichlorobenzene	ND	0.200	—	ND	1.48	—		1
Hexachlorobutadiene	ND	0.200	—	ND	2.13	—		1



Project Name: BATCH CANISTER CERTIFICATION**Project Number:** CANISTER QC BAT**Lab Number:** L1010362**Report Date:** 07/26/10**Air Canister Certification Results**

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
Volatile Organics in Air (Low Level) - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	87		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	89		60-140

Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1010362**Project Number:** CANISTER QC BAT**Report Date:** 07/26/10**Air Canister Certification Results**

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/09/10 19:35		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3			Qualifier	Dilution Factor
		RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.050	-	ND	0.247	-		1
Chloromethane	ND	0.500	-	ND	1.03	-		1
Freon-114	ND	0.050	-	ND	0.349	-		1
Vinyl chloride	ND	0.020	-	ND	0.051	-		1
1,3-Butadiene	ND	0.020	-	ND	0.044	-		1
Bromomethane	ND	0.020	-	ND	0.078	-		1
Chloroethane	ND	0.020	-	ND	0.053	-		1
Acetone	ND	2.00	-	ND	4.75	-		1
Trichlorofluoromethane	ND	0.050	-	ND	0.281	-		1
Acrylonitrile	ND	0.500	-	ND	1.08	-		1
1,1-Dichloroethene	ND	0.020	-	ND	0.079	-		1
Methylene chloride	ND	1.00	-	ND	3.47	-		1
Freon-113	ND	0.050	-	ND	0.383	-		1
Halothane	ND	0.050	-	ND	0.403	-		1
trans-1,2-Dichloroethene	ND	0.020	-	ND	0.079	-		1
1,1-Dichloroethane	ND	0.020	-	ND	0.081	-		1
Methyl tert butyl ether	ND	0.020	-	ND	0.072	-		1
2-Butanone	ND	0.500	-	ND	1.47	-		1
cis-1,2-Dichloroethene	ND	0.020	-	ND	0.079	-		1
Chloroform	ND	0.020	-	ND	0.098	-		1
1,2-Dichloroethane	ND	0.020	-	ND	0.081	-		1
1,1,1-Trichloroethane	ND	0.020	-	ND	0.109	-		1
Benzene	ND	0.100	-	ND	0.319	-		1
Carbon tetrachloride	ND	0.020	-	ND	0.126	-		1
1,2-Dichloropropane	ND	0.020	-	ND	0.092	-		1



Project Name: BATCH CANISTER CERTIFICATION

Project Number: CANISTER QC BAT

Lab Number: L1010362

Report Date: 07/26/10

Air Canister Certification Results

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	—	ND	0.134	—		1
Trichloroethene	ND	0.020	—	ND	0.107	—		1
1,4-Dioxane	ND	0.100	—	ND	0.360	—		1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—		1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—		1
Toluene	ND	0.020	—	ND	0.075	—		1
Dibromochloromethane	ND	0.020	—	ND	0.170	—		1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—		1
Tetrachloroethene	ND	0.020	—	ND	0.136	—		1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—		1
Chlorobenzene	ND	0.020	—	ND	0.092	—		1
Ethylbenzene	ND	0.020	—	ND	0.087	—		1
p/m-Xylene	ND	0.040	—	ND	0.174	—		1
Bromoform	ND	0.020	—	ND	0.206	—		1
Styrene	ND	0.020	—	ND	0.085	—		1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—		1
o-Xylene	ND	0.020	—	ND	0.087	—		1
Isopropylbenzene	ND	0.500	—	ND	2.46	—		1
1,3,5-Trimethylbenzene	ND	0.020	—	ND	0.098	—		1
1,2,4-Trimethylbenzene	ND	0.020	—	ND	0.098	—		1
1,3-Dichlorobenzene	ND	0.020	—	ND	0.120	—		1
1,4-Dichlorobenzene	ND	0.020	—	ND	0.120	—		1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—		1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—		1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—		1
n-Butylbenzene	ND	0.500	—	ND	2.74	—		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1010362**Project Number:** CANISTER QC BAT**Report Date:** 07/26/10**Air Canister Certification Results**

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2,4-Trichlorobenzene	ND	0.050	—	ND	0.371	—		1
Naphthalene	ND	0.050	—	ND	0.262	—		1
1,2,3-Trichlorobenzene	ND	0.050	—	ND	0.371	—		1
Hexachlorobutadiene	ND	0.050	—	ND	0.533	—		1



Project Name: BATCH CANISTER CERTIFICATION**Project Number:** CANISTER QC BAT**Lab Number:** L1010362**Report Date:** 07/26/10**Air Canister Certification Results**

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	83		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	89		60-140

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

Sample Receipt and Container Information

Were project specific reporting limits specified? **YES**

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

N/A Present/Intact

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1010918-01A	Canister - 2.7 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1010918-02A	Canister - 2.7 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1010918-03A	Canister - 2.7 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1010918-04A	Canister - 2.7 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1010918-05A	Canister - 2.7 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1010918-06A	Canister - 2.7 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1010918-07A	Canister - 2.7 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1010918-08A	Canister - 2.7 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1010918-09A	Canister - 2.7 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)

*Values in parentheses indicate holding time in days



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010918
Report Date: 07/26/10

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.
- MDL · Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
- 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.
- 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.
- NI · Not Ignitable.
- RL · Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL 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

- 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 at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- D · Concentration of analyte was quantified from diluted analysis. Flag only applies to 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.
- H · The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I · The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
- P · The RPD between the results for the two columns exceeds the method-specified criteria.
- Q · The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R · Analytical results are from sample re-analysis.

Report Format: Data Usability Report



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010918

Report Date: 07/26/10

Data Qualifiers

RE - Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010918

Report Date: 07/26/10

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 Analytical 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 Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical 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 Analytical.

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.



Certificate/Approval Program Summary

Last revised July 19, 2010 – Mansfield Facility

The following list includes only those analytes/methods for which certification/approval is currently held. For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0141.

Wastewater/Non-Potable Water (Inorganic Parameters: pH, Turbidity, Conductivity, Alkalinity, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Vanadium, Zinc, Total Residue (Solids), Total Suspended Solids (non-filterable), Total Cyanide. **Organic Parameters:** PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables, Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, PAHs, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)

Solid Waste/Soil (Inorganic Parameters: pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Organic Carbon, Total Cyanide, Corrosivity, TCLP 1311. **Organic Parameters:** PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Volatile Organics, Acid Extractables, Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Florida Department of Health Certificate/Lab ID: E87814. NELAP Accredited.

Non-Potable Water (Inorganic Parameters: SM2320B, EPA 120.1, SM2510B, EPA 245.1, EPA 150.1, EPA 160.2, SM2540D, EPA 335.2, SM2540G, EPA 180.1. **Organic Parameters:** EPA 625, 608.)

Solid & Chemical Materials (Inorganic Parameters: 6020, 7470, 7471, 9045, 9014. **Organic Parameters:** EPA 8260, 8270, 8082, 8081.)

Air & Emissions (EPA TO-15.)

Louisiana Department of Environmental Quality Certificate/Lab ID: 03090. NELAP Accredited.

Non-Potable Water (Inorganic Parameters: EPA 120.1, 150.1, 160.2, 180.1, 200.8, 245.1, 310.1, 335.2, 608, 625, 1631, 3010, 3015, 3020, 6020, 9010, 9014, 9040, SM2320B, 2510B, 2540D, 2540G, 4500CN-E, 4500H-B, **Organic Parameters:** EPA 3510, 3580, 3630, 3640, 3660, 3665, 5030, 8015 (mod), 3570, 8081, 8082, 8260, 8270,)

Solid & Chemical Materials (Inorganic Parameters: 6020, 7196, 7470, 7471, 7474, 9010, 9014, 9040, 9045, 9060. **Organic Parameters:** EPA 8015 (mod), EPA 3570, 1311, 3050, 3051, 3060, 3580, 3630, 3640, 3660, 3665, 5035, 8081, 8082, 8260, 8270.)

Biological Tissue (Inorganic Parameters: EPA 6020. **Organic Parameters:** EPA 3570, 3510, 3610, 3630, 3640, 8270.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA030.

Non-Potable Water (Inorganic Parameters: SM4500H+B. **Organic Parameters:** EPA 624.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 2206. NELAP Accredited.

Non-Potable Water (Inorganic Parameters: EPA 200.8, 245.1, 1631E, 120.1, 150.1, 180.1, 310.1, 335.2, 160.2, SM2540D, 2540G, 4500CN-E, 4500H+B, 2320B, 2510B. **Organic Parameters:** EPA 625, 608.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA015. NELAP Accredited.

Non-Potable Water (Inorganic Parameters: SW-846 1312, 3010, 3020A, 3015, 6020, SM2320B, EPA 200.8, SM2540C, 2540D, 2540G, EPA 120.1, SM2510B, EPA 180.1, 245.1, 1631E, SW-846 9040B, 6020, 9010B, 9014 **Organic Parameters:** EPA 608, 625, SW-846 3510C, 3580A, 5030B, 3035L, 5035H, 3630C, 3640A, 3660B, 3665A, 8081A, 8082 8260B, 8270C)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6020, 9010B, 9014, 1311, 1312, 3050B, 3051, 3060A, 7196A, 7470A, 7471A, 9045C, 9060. Organic Parameters: SW-846 3580A, 5030B, 3035L, 5035H, 3630C, 3640A, 3660B, 3665A, 8081A, 8082, 8260B, 8270C, 3570, 8015B.)

Air & Emissions (EPA TO-15)

Biological Tissue (Inorganic Parameters: SW-846 6020 Organic Parameters: SW-846 8270C, 3510C, 3570, 3610B, 3630C, 3640A)

New York Department of Health Certificate/Lab ID: 11627. NELAP Accredited.

Non-Potable Water (Inorganic Parameters: EPA 310.1, SM2320B, EPA 365.2, 160.1, EPA 160.2, SM2540D, EPA 200.8, 6020, 1631E, 245.1, 335.2, 9014, 150.1, 9040B, 120.1, SM2510B, EPA 376.2, 180.1, 9010B. Organic Parameters: EPA 624, 8260B, 8270C, 608, 8081A, 625, 8082, 3510C, 3511, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 9040B, 9045C, SW-846 Ch7 Sec 7.3, EPA 6020, 7196A, 7471A, 7474, 9014, 9040B, 9045C, 9010B. Organic Parameters: EPA 8260B, 8270C, 8081A, DRO 8015B, 8082, 1311, 3050B, 3580, 3050B, 3035, 3570, 3051, 5035, 5030B.)

Air & Emissions (EPA TO-15.)

Rhode Island Department of Health Certificate/Lab ID: LA000299. NELAP Accredited via LA-DEQ.

Refer to MA-DEP Certificate for Non-Potable Water.

Refer to LA-DEQ Certificate for Non-Potable Water.

Texas Commission of Environmental Quality Certificate/Lab ID: T104704419-08-TX. NELAP Accredited.

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 1311, 7196, 9014, 9040, 9045, 9060. Organic Parameters: EPA 8015, 8270, 8260, 8081, 8082.)

Air (Organic Parameters): EPA TO-15)

U.S. Army Corps of Engineers

Department of Defense Certificate/Lab ID: L2217.01.

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 3051, 6020, 747A, 7474, 9045C, 9060, SM 2540G, ASTM D422-63. Organic Parameters: EPA 3580, 3570, 3540C, 5035, 8260B, 8270C, 8270 Alk-PAH, 8082, 8081A, 8015 (SHC), 8015 (DRO).

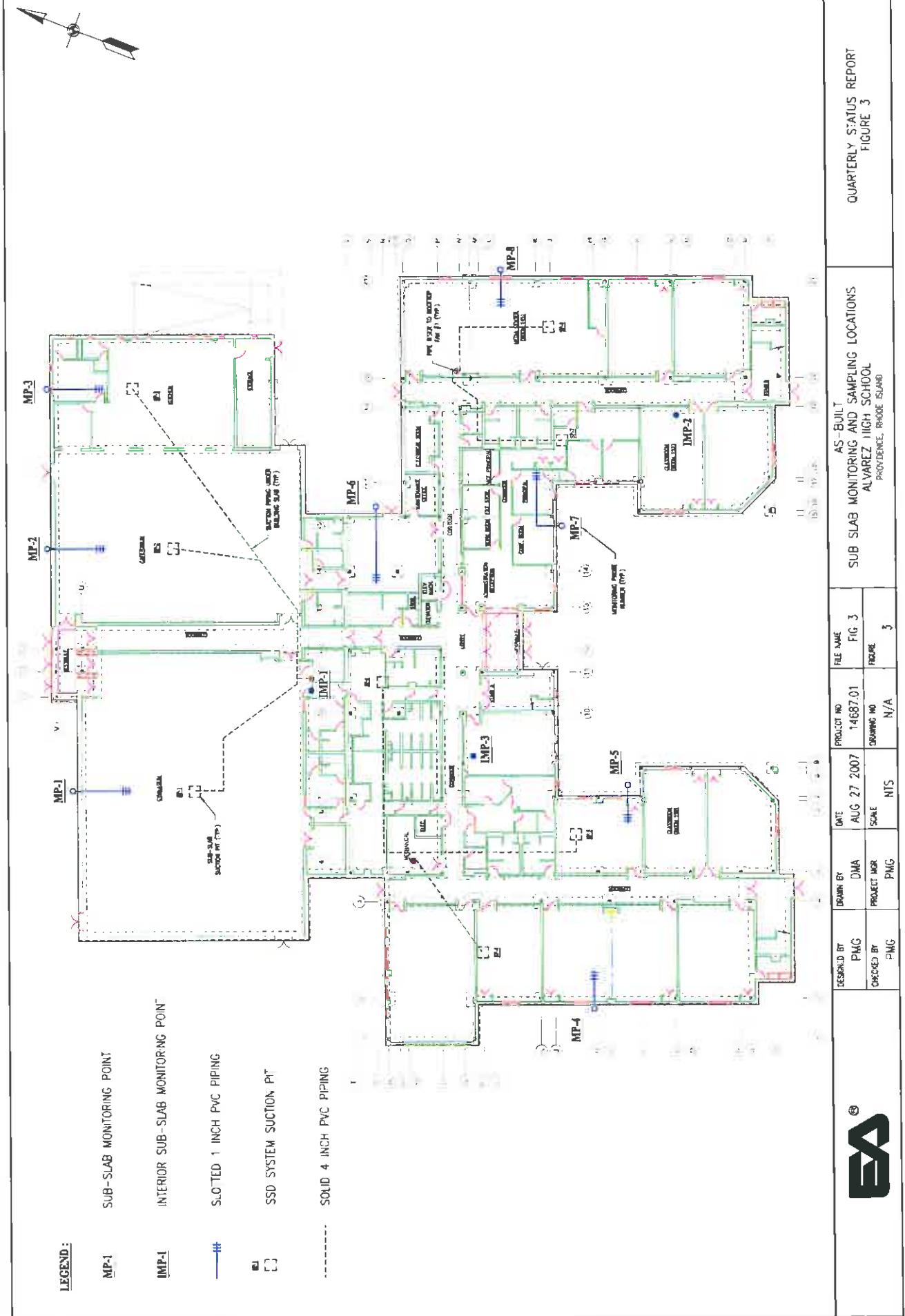
Air & Emissions (EPA TO-15.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: 8270C: Biphenyl.

Appendix C

Sub-Slab Air Analytical Summary and Lab Report



Summary of Sub-Slab Air Sampling Data - Alvarez School Project - Volatile Organic Compounds
February 2008 - July 2010

February 2009 - July 2010

Summary of Sub-Slab Air Sampling Data - Alvarez School Project - Volatile Organic Compounds

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Summary of Sub-Slab Air Sampling Data - Alvarez School Project - Volatile Organic Compounds
February 2008 - July 2010

PREDICTION 2001

Summary of Sub-Slab Air Sampling Data - Alvarez School Project - Volatile Organic Compounds

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Sample Date	Chai	MAP 1			MAP 2			MAP 3		
		MAP 1	MAP 2	Chai	MAP 1	MAP 2	Chai	MAP 1	MAP 2	Chai
8-Apr-05	N5	129,000	278,000	HS	HS	HS	HS	HS	129,000	HS
27-Apr-05	HS	24,000	35,000	HS	HS	HS	HS	HS	24,000	HS
27-May-05	HS	24,000	35,000	HS	HS	HS	HS	HS	24,000	HS
27-Jun-05	1040,000	1350,000	HS	HS	HS	HS	HS	HS	1040,000	HS
5-Jul-05	HS	1350,000	1700,000	HS	HS	HS	HS	HS	1350,000	HS
26-Aug-05	HS	830,000	1010,000	HS	HS	HS	HS	HS	830,000	HS
10-Sep-05	HS	1010,000	1200,000	HS	HS	HS	HS	HS	1010,000	HS
27-Oct-05	55,000	55,000	HS	HS	HS	HS	HS	HS	55,000	HS
25-Nov-05	HS	55,000	65,000	HS	HS	HS	HS	HS	55,000	HS
18-Dec-05	HS	65,000	85,000	HS	HS	HS	HS	HS	65,000	HS
21-Jan-06	20,000	20,000	HS	HS	HS	HS	HS	HS	20,000	HS
25-Feb-06	HS	20,000	25,000	HS	HS	HS	HS	HS	20,000	HS
27-Mar-06	HS	25,000	30,000	HS	HS	HS	HS	HS	25,000	HS
27-Apr-06	HS	30,000	35,000	HS	HS	HS	HS	HS	30,000	HS
27-May-06	HS	35,000	40,000	HS	HS	HS	HS	HS	35,000	HS
27-Jun-06	HS	40,000	45,000	HS	HS	HS	HS	HS	40,000	HS
27-Jul-06	HS	45,000	50,000	HS	HS	HS	HS	HS	45,000	HS
27-Aug-06	HS	50,000	55,000	HS	HS	HS	HS	HS	50,000	HS
27-Sep-06	HS	55,000	60,000	HS	HS	HS	HS	HS	55,000	HS
27-Oct-06	HS	60,000	65,000	HS	HS	HS	HS	HS	60,000	HS
25-Nov-06	HS	65,000	70,000	HS	HS	HS	HS	HS	65,000	HS
26-Dec-06	HS	70,000	75,000	HS	HS	HS	HS	HS	70,000	HS
27-Jan-07	HS	75,000	80,000	HS	HS	HS	HS	HS	75,000	HS
27-Feb-07	HS	80,000	85,000	HS	HS	HS	HS	HS	80,000	HS
27-Mar-07	HS	85,000	90,000	HS	HS	HS	HS	HS	85,000	HS
27-Apr-07	HS	90,000	95,000	HS	HS	HS	HS	HS	90,000	HS
27-May-07	HS	95,000	100,000	HS	HS	HS	HS	HS	95,000	HS
27-Jun-07	HS	100,000	105,000	HS	HS	HS	HS	HS	100,000	HS
27-Jul-07	HS	105,000	110,000	HS	HS	HS	HS	HS	105,000	HS
27-Aug-07	HS	110,000	115,000	HS	HS	HS	HS	HS	110,000	HS
27-Sep-07	HS	115,000	120,000	HS	HS	HS	HS	HS	115,000	HS
27-Oct-07	HS	120,000	125,000	HS	HS	HS	HS	HS	120,000	HS
25-Nov-07	HS	125,000	130,000	HS	HS	HS	HS	HS	125,000	HS
26-Dec-07	HS	130,000	135,000	HS	HS	HS	HS	HS	130,000	HS
27-Jan-08	HS	135,000	140,000	HS	HS	HS	HS	HS	135,000	HS
27-Feb-08	HS	140,000	145,000	HS	HS	HS	HS	HS	140,000	HS
27-Mar-08	HS	145,000	150,000	HS	HS	HS	HS	HS	145,000	HS
27-Apr-08	HS	150,000	155,000	HS	HS	HS	HS	HS	150,000	HS
27-May-08	HS	155,000	160,000	HS	HS	HS	HS	HS	155,000	HS
27-Jun-08	HS	160,000	165,000	HS	HS	HS	HS	HS	160,000	HS
27-Jul-08	HS	165,000	170,000	HS	HS	HS	HS	HS	165,000	HS
27-Aug-08	HS	170,000	175,000	HS	HS	HS	HS	HS	170,000	HS
27-Sep-08	HS	175,000	180,000	HS	HS	HS	HS	HS	175,000	HS
27-Oct-08	HS	180,000	185,000	HS	HS	HS	HS	HS	180,000	HS
25-Nov-08	HS	185,000	190,000	HS	HS	HS	HS	HS	185,000	HS
26-Dec-08	HS	190,000	195,000	HS	HS	HS	HS	HS	190,000	HS
27-Jan-09	HS	195,000	200,000	HS	HS	HS	HS	HS	195,000	HS
27-Feb-09	HS	200,000	205,000	HS	HS	HS	HS	HS	200,000	HS
27-Mar-09	HS	205,000	210,000	HS	HS	HS	HS	HS	205,000	HS
27-Apr-09	HS	210,000	215,000	HS	HS	HS	HS	HS	210,000	HS
27-May-09	HS	215,000	220,000	HS	HS	HS	HS	HS	215,000	HS
27-Jun-09	HS	220,000	225,000	HS	HS	HS	HS	HS	220,000	HS
27-Jul-09	HS	225,000	230,000	HS	HS	HS	HS	HS	225,000	HS
27-Aug-09	HS	230,000	235,000	HS	HS	HS	HS	HS	230,000	HS
27-Sep-09	HS	235,000	240,000	HS	HS	HS	HS	HS	235,000	HS
27-Oct-09	HS	240,000	245,000	HS	HS	HS	HS	HS	240,000	HS
25-Nov-09	HS	245,000	250,000	HS	HS	HS	HS	HS	245,000	HS
26-Dec-09	HS	250,000	255,000	HS	HS	HS	HS	HS	250,000	HS
27-Jan-10	HS	255,000	260,000	HS	HS	HS	HS	HS	255,000	HS
27-Feb-10	HS	260,000	265,000	HS	HS	HS	HS	HS	260,000	HS
27-Mar-10	HS	265,000	270,000	HS	HS	HS	HS	HS	265,000	HS
27-Apr-10	HS	270,000	275,000	HS	HS	HS	HS	HS	270,000	HS
27-May-10	HS	275,000	280,000	HS	HS	HS	HS	HS	275,000	HS
27-Jun-10	HS	280,000	285,000	HS	HS	HS	HS	HS	280,000	HS
27-Jul-10	HS	285,000	290,000	HS	HS	HS	HS	HS	285,000	HS
27-Aug-10	HS	290,000	295,000	HS	HS	HS	HS	HS	290,000	HS
27-Sep-10	HS	295,000	300,000	HS	HS	HS	HS	HS	295,000	HS
27-Oct-10	HS	300,000	305,000	HS	HS	HS	HS	HS	300,000	HS
25-Nov-10	HS	305,000	310,000	HS	HS	HS	HS	HS	305,000	HS
26-Dec-10	HS	310,000	315,000	HS	HS	HS	HS	HS	310,000	HS
27-Jan-11	HS	315,000	320,000	HS	HS	HS	HS	HS	315,000	HS
27-Feb-11	HS	320,000	325,000	HS	HS	HS	HS	HS	320,000	HS
27-Mar-11	HS	325,000	330,000	HS	HS	HS	HS	HS	325,000	HS
27-Apr-11	HS	330,000	335,000	HS	HS	HS	HS	HS	330,000	HS
27-May-11	HS	335,000	340,000	HS	HS	HS	HS	HS	335,000	HS
27-Jun-11	HS	340,000	345,000	HS	HS	HS	HS	HS	340,000	HS
27-Jul-11	HS	345,000	350,000	HS	HS	HS	HS	HS	345,000	HS
27-Aug-11	HS	350,000	355,000	HS	HS	HS	HS	HS	350,000	HS
27-Sep-11	HS	355,000	360,000	HS	HS	HS	HS	HS	355,000	HS
27-Oct-11	HS	360,000	365,000	HS	HS	HS	HS	HS	360,000	HS
25-Nov-11	HS	365,000	370,000	HS	HS	HS	HS	HS	365,000	HS
26-Dec-11	HS	370,000	375,000	HS	HS	HS	HS	HS	370,000	HS
27-Jan-12	HS	375,000	380,000	HS	HS	HS	HS	HS	375,000	HS
27-Feb-12	HS	380,000	385,000	HS	HS	HS	HS	HS	380,000	HS
27-Mar-12	HS	385,000	390,000	HS	HS	HS	HS	HS	385,000	HS
27-Apr-12	HS	390,000	395,000	HS	HS	HS	HS	HS	390,000	HS
27-May-12	HS	395,000	400,000	HS	HS	HS	HS	HS	395,000	HS
27-Jun-12	HS	400,000	405,000	HS	HS	HS	HS	HS	400,000	HS
27-Jul-12	HS	405,000	410,000	HS	HS	HS	HS	HS	405,000	HS
27-Aug-12	HS	410,000	415,000	HS	HS	HS	HS	HS	410,000	HS
27-Sep-12	HS	415,000	420,000	HS	HS	HS	HS	HS	415,000	HS
27-Oct-12	HS	420,000	425,000	HS	HS	HS	HS	HS	420,000	HS
25-Nov-12	HS	425,000	430,000	HS	HS	HS	HS	HS	425,000	HS
26-Dec-12	HS	430,000	435,000	HS	HS	HS	HS	HS	430,000	HS
27-Jan-13	HS	435,000	440,000	HS	HS	HS	HS	HS	435,000	HS
27-Feb-13	HS	440,000	445,000	HS	HS	HS	HS	HS	440,000	HS
27-Mar-13	HS	445,000	450,000	HS	HS	HS	HS	HS	445,000	HS
27-Apr-13	HS	450,000	455,000	HS	HS	HS	HS	HS	450,000	HS
27-May-13	HS	455,000	460,000	HS	HS	HS	HS	HS	455,000	HS
27-Jun-13	HS	460,000	465,000	HS	HS	HS	HS	HS	460,000	HS
27-Jul-13	HS	465,000	470,000	HS	HS	HS	HS	HS	465,000	HS
27-Aug-13	HS	470,000	475,000	HS	HS	HS	HS	HS	470,000	HS
27-Sep-13	HS	475,000	480,000	HS	HS	HS	HS	HS	475,000	HS
27-Oct-13	HS	480,000	485,000	HS	HS	HS	HS	HS	480,000	HS
25-Nov-13	HS	485,000	490,000	HS	HS	HS	HS	HS	485,000	HS
26-Dec-13	HS	490,000	495,000	HS	HS	HS	HS	HS	490,000	HS
27-Jan-14	HS	495,000	500,000	HS	HS	HS	HS	HS	495,000	HS
27-Feb-14	HS	500,000	505,000	HS	HS	HS	HS	HS	500,000	HS
27-Mar-14	HS	505,000	510,000	HS	HS	HS	HS	HS	505,000	HS
27-Apr-14	HS	510,000	515,000	HS	HS	HS	HS	HS	510,000	HS
27-May-14	HS	515,000	520,000	HS	HS	HS	HS	HS	515,000	HS
27-Jun-14	HS	520,000	525,000	HS	HS	HS	HS	HS	520,000	HS
27-Jul-14	HS	525,000	530,000	HS	HS	HS	HS	HS	525,000	HS
27-Aug-14	HS	530,000	535,000	HS	HS	HS	HS	HS	530,000	HS
27-Sep-14	HS	535,000	540,000	HS	HS	HS	HS	HS	535,000	HS
27-Oct-14	HS	540,000	545,000	HS	HS	HS	HS	HS	540,000	HS
25-Nov-14	HS	545,000	550,000	HS	HS	HS	HS	HS	545,000	HS
26-Dec-14	HS	550,000	555,000	HS	HS	HS	HS	HS	550,000	HS
27-Jan-15	HS	555,000	560,000	HS	HS	HS	HS	HS	555,000	HS
27-Feb-15	HS	560,000	565,000	HS	HS	HS	HS	HS	560,000	HS
27-Mar-15	HS	565,000	570,000	HS	HS	HS	HS	HS	565,000	HS
27-Apr-15	HS	570,000	575,000	HS	HS	HS	HS	HS	570,000	HS
27-May-15	HS	575,000	580,000	HS	HS	HS	HS	HS	575,000	HS
27-Jun-15	HS	580,000	585,000	HS	HS	HS	HS	HS	580,000	HS
27-Jul-15	HS	585,000	590,000	HS	HS	HS	HS	HS	585,000	HS
27-Aug-15	HS	590,000	595,000	HS	HS	HS	HS	HS	590,000	HS
27-Sep-15	HS	595,000	600,000	HS	HS	HS	HS	HS	595,000	HS
27-Oct-15	HS	600,000	605,00							

Summary of Sub-Slab Air Sampling Data - Alvarez School Project - Volatile Organic Compounds

February 2018 - July 2018

Summary of Sub-Slab Air Sampling Data - Alvarez School Project - Volatile Organic Compounds
February 2008 - July 2010

February 2009 • July 2010

Summary of Sub-Slab Air Sampling Data - Alvarez School Project - Volatile Organic Compounds
February 2008 - July 2010

Summary of Sub-Slab Air Sampling Data - Alvarez School Project - Volatile Organic Compounds

February 2008 - July 2010

Summary of Sub-Slab Air Sampling Data - Alvarez School Project - Volatile Organic Compounds

February 2008 • July 2010

Summary of Sub-Slab Air Sampling Data - Alvarez School Project - Volatile Organic Compounds
February 2008 - July 2010

Summary of Sub-Slab Air Sampling Data - Alvarez School Project - Volatile Organic Compounds
February 2008 - July 2010

Summary of Sub-Slab Air Sampling Data - Alvarez School Project - Volatile Organic Compounds

Friday 2008 - July 2010

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ANALYTICAL REPORT

Lab Number: L1010920

Client: EA Engineering, Science and Tech
2350 Post Road
Warwick, RI 02886

ATTN: Frank Postma
Phone: (401) 736-3440
Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01
Report Date: 07/26/10

Certifications & Approvals: MA (M-MA030), NY (11627), CT (PH-0141), NH (2206), NJ (MA015), RI (LA000299), 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



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1010920-01	IMP-2	PROVIDENCE, RI	07/16/10 11:46
L1010920-02	IMP-1	PROVIDENCE, RI	07/16/10 11:08
L1010920-03	MP-1	PROVIDENCE, RI	07/16/10 12:09
L1010920-04	MP-3	PROVIDENCE, RI	07/16/10 12:36
L1010920-05	MP-4	PROVIDENCE, RI	07/16/10 12:29
L1010920-06	MP-6	PROVIDENCE, RI	07/16/10 12:51
L1010920-07	RT-1	PROVIDENCE, RI	07/16/10 13:15
L1010920-08	RT-2	PROVIDENCE, RI	07/16/10 13:51
L1010920-09	RT-3	PROVIDENCE, RI	07/16/10 13:46

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

The canister certification results are provided as an addendum.

The internal standards were within method criteria.

Volatile Organics in Air (SIM)

L1010920-01, -03, -05, and -07 through -09: results for Chloromethane should be considered estimated due to co-elution with a non-target peak.

L1010920-03 through -06 and WG424047-5 Duplicate were re-analyzed on dilution in order to quantitate the sample within the calibration range. The result should be considered estimated, and is qualified with an E flag, for any compound that exceeded the calibration on the initial analysis. The re-analysis was performed only for the compound that exceeded the calibration range.

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

Case Narrative (continued)

L1010920-06 and WG424047-5 have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

The WG424047-3 LCS recoveries for Methylene chloride (134%), Methyl tert butyl ether (132%), and 1,2,4-Trimethylbenzene (133%) are outside the 70%-130% acceptance limit. The LCS was within overall method allowances, therefore the analysis proceeded.

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: *Kathleen O'Brien* Kathleen O'Brien

Title: Technical Director/Representative

Date: 07/26/10

AIR



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-01	Date Collected:	07/16/10 11:46
Client ID:	IMP-2	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/22/10 23:53		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3			Qualifier	Dilution Factor
		RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.665	0.050	—	3.29	0.247	—		1
Chloromethane	ND	0.500	—	ND	1.03	—		1
Vinyl chloride	ND	0.020	—	ND	0.051	—		1
Chloroethane	0.033	0.020	—	0.087	0.053	—		1
Acetone	8.88	2.00	—	21.1	4.75	—		1
Trichlorofluoromethane	3.53	0.050	—	19.8	0.281	—		1
Acrylonitrile	ND	0.500	—	ND	1.08	—		1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—		1
Methylene chloride	7.64	1.00	—	26.5	3.47	—		1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—		1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—		1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—		1
2-Butanone	0.949	0.500	—	2.80	1.47	—		1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—		1
Chloroform	0.071	0.020	—	0.346	0.098	—		1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—		1
1,1,1-Trichloroethane	0.103	0.020	—	0.562	0.109	—		1
Benzene	ND	0.100	—	ND	0.319	—		1
Carbon tetrachloride	0.081	0.020	—	0.509	0.126	—		1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—		1
Bromodichloromethane	ND	0.020	—	ND	0.134	—		1
Trichloroethene	5.19	0.020	—	27.8	0.107	—		1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—		1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-01	Date Collected:	07/16/10 11:46
Client ID:	IMP-2	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Toluene	1.55	0.020	—	5.85	0.075	—	1
Dibromochloromethane	ND	0.020	—	ND	0.170	—	1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—	1
Tetrachloroethene	2.83	0.020	—	19.2	0.136	—	1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	1
Chlorobenzene	ND	0.020	—	ND	0.092	—	1
Ethylbenzene	0.327	0.020	—	1.42	0.087	—	1
p/m-Xylene	1.13	0.040	—	4.91	0.174	—	1
Bromoform	ND	0.020	—	ND	0.206	—	1
Styrene	0.203	0.020	—	0.864	0.085	—	1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	1
o-Xylene	0.473	0.020	—	2.05	0.087	—	1
Isopropylbenzene	ND	0.500	—	ND	2.46	—	1
1,3,5-Trimethylbenzene	0.255	0.020	—	1.25	0.098	—	1
1,2,4-Trimethylbenzene	1.03	0.020	—	5.05	0.098	—	1
1,3-Dichlorobenzene	0.027	0.020	—	0.162	0.120	—	1
1,4-Dichlorobenzene	0.840	0.020	—	5.05	0.120	—	1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—	1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—	1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—	1
n-Butylbenzene	ND	0.500	—	ND	2.74	—	1



Project Name: ALVAREZ HIGH SCHOOL**Project Number:** 14687.01**Lab Number:** L1010920**Report Date:** 07/26/10**SAMPLE RESULTS**

Lab ID:	L1010920-01	Date Collected:	07/16/10 11:46
Client ID:	IMP-2	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	103		60-140
bromochloromethane	81		60-140
chlorobenzene-d5	101		60-140

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-02	Date Collected:	07/16/10 11:08
Client ID:	IMP-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/23/10 00:32		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3			Qualifier	Dilution Factor
		RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.638	0.050	—	3.15	0.247	—		1
Chloromethane	ND	0.500	—	ND	1.03	—		1
Vinyl chloride	ND	0.020	—	ND	0.051	—		1
Chloroethane	0.020	0.020	—	0.053	0.053	—		1
Acetone	3.52	2.00	—	8.34	4.75	—		1
Trichlorofluoromethane	0.398	0.050	—	2.23	0.281	—		1
Acrylonitrile	ND	0.500	—	ND	1.08	—		1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—		1
Methylene chloride	7.82	1.00	—	27.1	3.47	—		1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—		1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—		1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—		1
2-Butanone	0.523	0.500	—	1.54	1.47	—		1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—		1
Chloroform	0.042	0.020	—	0.205	0.098	—		1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—		1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—		1
Benzene	ND	0.100	—	ND	0.319	—		1
Carbon tetrachloride	0.089	0.020	—	0.559	0.126	—		1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—		1
Bromodichloromethane	ND	0.020	—	ND	0.134	—		1
Trichloroethene	ND	0.020	—	ND	0.107	—		1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—		1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-02	Date Collected:	07/16/10 11:08
Client ID:	IMP-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,1,2-Trichloroethane	ND	0.020	-	ND	0.109	-		1
Toluene	1.53	0.020	-	5.77	0.075	-		1
Dibromochloromethane	ND	0.020	-	ND	0.170	-		1
1,2-Dibromoethane	ND	0.020	-	ND	0.154	-		1
Tetrachloroethene	2.27	0.020	-	15.4	0.136	-		1
1,1,1,2-Tetrachloroethane	ND	0.020	-	ND	0.137	-		1
Chlorobenzene	ND	0.020	-	ND	0.092	-		1
Ethylbenzene	0.349	0.020	-	1.51	0.087	-		1
p/m-Xylene	1.14	0.040	-	4.95	0.174	-		1
Bromoform	ND	0.020	-	ND	0.206	-		1
Styrene	0.080	0.020	-	0.340	0.085	-		1
1,1,2,2-Tetrachloroethane	ND	0.020	-	ND	0.137	-		1
o-Xylene	0.433	0.020	-	1.88	0.087	-		1
Isopropylbenzene	ND	0.500	-	ND	2.46	-		1
1,3,5-Trimethylbenzene	0.219	0.020	-	1.08	0.098	-		1
1,2,4-Trimethylbenzene	0.872	0.020	-	4.28	0.098	-		1
1,3-Dichlorobenzene	0.022	0.020	-	0.132	0.120	-		1
1,4-Dichlorobenzene	0.272	0.020	-	1.63	0.120	-		1
sec-Butylbenzene	ND	0.500	-	ND	2.74	-		1
p-Isopropyltoluene	ND	0.500	-	ND	2.74	-		1
1,2-Dichlorobenzene	ND	0.020	-	ND	0.120	-		1
n-Butylbenzene	ND	0.500	-	ND	2.74	-		1



Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL**Lab Number:** L1010920**Project Number:** 14687.01**Report Date:** 07/26/10**SAMPLE RESULTS**

Lab ID:	L1010920-02	Date Collected:	07/16/10 11:08
Client ID:	IMP-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	85		60-140
chlorobenzene-d5	95		60-140

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-03	Date Collected:	07/16/10 12:09
Client ID:	MP-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/23/10 01:10		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3			Qualifier	Dilution Factor
		RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.681	0.050	—	3.36	0.247	—		1
Chloromethane	0.638	0.500	—	1.32	1.03	—		1
Vinyl chloride	ND	0.020	—	ND	0.051	—		1
Chloroethane	0.038	0.020	—	0.100	0.053	—		1
Acetone	275	2.00	—	654	4.75	—	E	1
Trichlorofluoromethane	0.464	0.050	—	2.60	0.281	—		1
Acrylonitrile	ND	0.500	—	ND	1.08	—		1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—		1
Methylene chloride	6.91	1.00	—	24.0	3.47	—		1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—		1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—		1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—		1
2-Butanone	1800	0.500	—	5320	1.47	—	E	1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—		1
Chloroform	0.074	0.020	—	0.361	0.098	—		1
1,2-Dichloroethane	0.025	0.020	—	0.101	0.081	—		1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—		1
Benzene	0.104	0.100	—	0.332	0.319	—		1
Carbon tetrachloride	0.073	0.020	—	0.459	0.126	—		1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—		1
Bromodichloromethane	ND	0.020	—	ND	0.134	—		1
Trichloroethene	0.062	0.020	—	0.333	0.107	—		1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—		1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-03	Date Collected:	07/16/10 12:09
Client ID:	MP-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Toluene	5.89	0.020	—	22.2	0.075	—	1
Dibromochloromethane	ND	0.020	—	ND	0.170	—	1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—	1
Tetrachloroethene	1.83	0.020	—	12.4	0.136	—	1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	1
Chlorobenzene	ND	0.020	—	ND	0.092	—	1
Ethylbenzene	1.90	0.020	—	8.23	0.087	—	1
p/m-Xylene	5.04	0.040	—	21.8	0.174	—	1
Bromoform	ND	0.020	—	ND	0.206	—	1
Styrene	0.134	0.020	—	0.570	0.085	—	1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	1
o-Xylene	1.17	0.020	—	5.07	0.087	—	1
Isopropylbenzene	ND	0.500	—	ND	2.46	—	1
1,3,5-Trimethylbenzene	0.562	0.020	—	2.76	0.098	—	1
1,2,4-Trimethylbenzene	1.69	0.020	—	8.30	0.098	—	1
1,3-Dichlorobenzene	0.099	0.020	—	0.595	0.120	—	1
1,4-Dichlorobenzene	0.297	0.020	—	1.78	0.120	—	1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—	1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—	1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—	1
n-Butylbenzene	ND	0.500	—	ND	2.74	—	1



Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL

Lab Number: L1010920

Project Number: 14687.01

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-03	Date Collected:	07/16/10 12:09
Client ID:	MP-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	109		60-140
bromochloromethane	81		60-140
chlorobenzene-d5	105		60-140

Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL**Project Number:** 14687.01**Lab Number:** L1010920**Report Date:** 07/26/10**SAMPLE RESULTS**

Lab ID:	L1010920-03 D	Date Collected:	07/16/10 12:09
Client ID:	MP-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/24/10 16:18		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3			Qualifier	Dilution Factor
		RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Acetone	250	100	—	594	238	—		50.1
2-Butanone	2100	25.0	—	6180	73.8	—		50.1



Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-03 D	Date Collected:	07/16/10 12:09
Client ID:	MP-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	88		60-140
bromochloromethane	76		60-140
chlorobenzene-d5	88		60-140

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-04	Date Collected:	07/16/10 12:36
Client ID:	MP-3	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/23/10 01:49		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3			Qualifier	Dilution Factor
		RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.529	0.050	—	2.61	0.247	—		1
Chloromethane	30.4	0.500	—	62.8	1.03	—		1
Vinyl chloride	0.777	0.020	—	1.98	0.051	—		1
Chloroethane	0.967	0.020	—	2.55	0.053	—		1
Acetone	2020	2.00	—	4800	4.75	—	E	1
Trichlorofluoromethane	0.328	0.050	—	1.84	0.281	—		1
Acrylonitrile	ND	0.500	—	ND	1.08	—		1
1,1-Dichloroethene	0.052	0.020	—	0.206	0.079	—		1
Methylene chloride	6.21	1.00	—	21.5	3.47	—		1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—		1
1,1-Dichloroethane	0.612	0.020	—	2.48	0.081	—		1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—		1
2-Butanone	7140	0.500	—	21000	1.47	—	E	1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—		1
Chloroform	ND	0.020	—	ND	0.098	—		1
1,2-Dichloroethane	0.357	0.020	—	1.44	0.081	—		1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—		1
Benzene	0.480	0.100	—	1.53	0.319	—		1
Carbon tetrachloride	0.076	0.020	—	0.478	0.126	—		1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—		1
Bromodichloromethane	ND	0.020	—	ND	0.134	—		1
Trichloroethene	0.062	0.020	—	0.333	0.107	—		1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—		1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-04	Date Collected:	07/16/10 12:36
Client ID:	MP-3	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—	—	1
Toluene	4.75	0.020	—	17.9	0.075	—	—	1
Dibromochloromethane	ND	0.020	—	ND	0.170	—	—	1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—	—	1
Tetrachloroethene	1.88	0.020	—	12.7	0.136	—	—	1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	—	1
Chlorobenzene	ND	0.020	—	ND	0.092	—	—	1
Ethylbenzene	0.552	0.020	—	2.40	0.087	—	—	1
p/m-Xylene	1.62	0.040	—	7.01	0.174	—	—	1
Bromoform	ND	0.020	—	ND	0.206	—	—	1
Styrene	0.214	0.020	—	0.911	0.085	—	—	1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	—	1
o-Xylene	0.655	0.020	—	2.84	0.087	—	—	1
Isopropylbenzene	0.541	0.500	—	2.66	2.46	—	—	1
1,3,5-Trimethylbenzene	0.383	0.020	—	1.88	0.098	—	—	1
1,2,4-Trimethylbenzene	1.68	0.020	—	8.23	0.098	—	—	1
1,3-Dichlorobenzene	0.114	0.020	—	0.685	0.120	—	—	1
1,4-Dichlorobenzene	0.383	0.020	—	2.30	0.120	—	—	1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—	—	1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—	—	1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—	—	1
n-Butylbenzene	ND	0.500	—	ND	2.74	—	—	1



Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-04	Date Collected:	07/16/10 12:36
Client ID:	MP-3	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	116		60-140
bromochloromethane	111		60-140
chlorobenzene-d5	114		60-140

Project Name: ALVAREZ HIGH SCHOOL**Project Number:** 14687.01**Lab Number:** L1010920**Report Date:** 07/26/10**SAMPLE RESULTS**

Lab ID:	L1010920-04	D	Date Collected:	07/16/10 12:36
Client ID:	MP-3		Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI		Field Prep:	Not Specified
Matrix:	Soil_Vapor			
Anaytical Method:	48,TO-15-SIM			
Analytical Date:	07/23/10 12:33			
Analyst:	RY			

Parameter	Results	ppbV		ug/m3			Qualifier	Dilution Factor
		RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Acetone	1380	506	—	3280	1200	—		253
2-Butanone	9280	126	—	27400	373	—		253

Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-04 D	Date Collected:	07/16/10 12:36
Client ID:	MP-3	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	105		60-140
chlorobenzene-d5	89		60-140

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-05	Date Collected:	07/16/10 12:29
Client ID:	MP-4	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/23/10 02:27		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3			Qualifier	Dilution Factor
		RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.516	0.050	—	2.55	0.247	—		1
Chloromethane	0.718	0.500	—	1.48	1.03	—		1
Vinyl chloride	ND	0.020	—	ND	0.051	—		1
Chloroethane	0.063	0.020	—	0.166	0.053	—		1
Acetone	85.3	2.00	—	202	4.75	—	E	1
Trichlorofluoromethane	2.92	0.050	—	16.4	0.281	—		1
Acrylonitrile	ND	0.500	—	ND	1.08	—		1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—		1
Methylene chloride	5.63	1.00	—	19.5	3.47	—		1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—		1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—		1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—		1
2-Butanone	150	0.500	—	441	1.47	—	E	1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—		1
Chloroform	0.044	0.020	—	0.215	0.098	—		1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—		1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—		1
Benzene	0.216	0.100	—	0.689	0.319	—		1
Carbon tetrachloride	0.082	0.020	—	0.515	0.126	—		1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—		1
Bromodichloromethane	ND	0.020	—	ND	0.134	—		1
Trichloroethene	1.52	0.020	—	8.14	0.107	—		1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—		1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-05	Date Collected:	07/16/10 12:29
Client ID:	MP-4	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Toluene	1.59	0.020	—	5.98	0.075	—	1
Dibromochloromethane	ND	0.020	—	ND	0.170	—	1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—	1
Tetrachloroethene	1.60	0.020	—	10.9	0.136	—	1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	1
Chlorobenzene	0.046	0.020	—	0.212	0.092	—	1
Ethylbenzene	0.416	0.020	—	1.80	0.087	—	1
p/m-Xylene	1.46	0.040	—	6.36	0.174	—	1
Bromoform	ND	0.020	—	ND	0.206	—	1
Styrene	0.155	0.020	—	0.660	0.085	—	1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	1
o-Xylene	0.606	0.020	—	2.63	0.087	—	1
Isopropylbenzene	ND	0.500	—	ND	2.46	—	1
1,3,5-Trimethylbenzene	0.369	0.020	—	1.81	0.098	—	1
1,2,4-Trimethylbenzene	1.65	0.020	—	8.09	0.098	—	1
1,3-Dichlorobenzene	0.331	0.020	—	1.99	0.120	—	1
1,4-Dichlorobenzene	0.477	0.020	—	2.86	0.120	—	1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—	1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—	1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—	1
n-Butylbenzene	ND	0.500	—	ND	2.74	—	1



Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-05	Date Collected:	07/16/10 12:29
Client ID:	MP-4	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	100		60-140
bromochloromethane	113		60-140
chlorobenzene-d5	104		60-140

Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL**Project Number:** 14687.01**Lab Number:** L1010920**Report Date:** 07/26/10**SAMPLE RESULTS**

Lab ID:	L1010920-05	D	Date Collected:	07/16/10 12:29
Client ID:	MP-4		Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI		Field Prep:	Not Specified
Matrix:	Soil_Vapor			
Anaytical Method:	48,TO-15-SIM			
Analytical Date:	07/23/10 13:11			
Analyst:	RY			

Parameter	Results	ppbV		ug/m3		Qualiflier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Acetone	78.2	5.00	—	186	11.9	—	2.5



Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-05 D	Date Collected:	07/16/10 12:29
Client ID:	MP-4	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	108		60-140
bromochloromethane	118		60-140
chlorobenzene-d5	108		60-140

Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-05 D2	Date Collected:	07/16/10 12:29
Client ID:	MP-4	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/24/10 16:55		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3			Qualifier	Dilution Factor
		RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
2-Butanone	131	2.50	—	386	7.37	—		5



Project Name: ALVAREZ HIGH SCHOOL**Project Number:** 14687.01**Lab Number:** L1010920**Report Date:** 07/26/10**SAMPLE RESULTS**

Lab ID:	L1010920-05 D2	Date Collected:	07/16/10 12:29
Client ID:	MP-4	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	90		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	94		60-140

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-06	D	Date Collected:	07/16/10 12:51
Client ID:	MP-6		Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI		Field Prep:	Not Specified
Matrix:	Soil_Vapor			
Anaytical Method:	48,TO-15-SIM			
Analytical Date:	07/24/10 17:46			
Analyst:	RY			

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.604	0.378	—	2.98	1.87	—		7.553
Chloromethane	ND	3.78	—	ND	7.79	—		7.553
Vinyl chloride	ND	0.151	—	ND	0.386	—		7.553
Chloroethane	ND	0.151	—	ND	0.398	—		7.553
Acetone	4780	15.1	—	11400	35.8	—	E	7.553
Trichlorofluoromethane	ND	0.378	—	ND	2.12	—		7.553
Acrylonitrile	ND	3.78	—	ND	8.19	—		7.553
1,1-Dichloroethene	ND	0.151	—	ND	0.598	—		7.553
Methylene chloride	ND	7.55	—	ND	26.2	—		7.553
trans-1,2-Dichloroethene	ND	0.151	—	ND	0.598	—		7.553
1,1-Dichloroethane	ND	0.151	—	ND	0.611	—		7.553
Methyl tert butyl ether	ND	0.151	—	ND	0.544	—		7.553
2-Butanone	3510	3.78	—	10400	11.1	—	E	7.553
cis-1,2-Dichloroethene	ND	0.151	—	ND	0.598	—		7.553
Chloroform	ND	0.151	—	ND	0.737	—		7.553
1,2-Dichloroethane	ND	0.151	—	ND	0.611	—		7.553
1,1,1-Trichloroethane	ND	0.151	—	ND	0.824	—		7.553
Benzene	ND	0.755	—	ND	2.41	—		7.553
Carbon tetrachloride	ND	0.151	—	ND	0.950	—		7.553
1,2-Dichloropropane	ND	0.151	—	ND	0.698	—		7.553
Bromodichloromethane	ND	0.151	—	ND	1.01	—		7.553
Trichloroethene	ND	0.151	—	ND	0.811	—		7.553
cis-1,3-Dichloropropene	ND	0.151	—	ND	0.685	—		7.553
4-Methyl-2-pentanone	ND	3.78	—	ND	15.4	—		7.553
trans-1,3-Dichloropropene	ND	0.151	—	ND	0.685	—		7.553



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-06	D	Date Collected:	07/16/10 12:51
Client ID:	MP-6		Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI		Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,1,2-Trichloroethane	ND	0.151	—	ND	0.824	—		7.553
Toluene	1.47	0.151	—	5.54	0.569	—		7.553
Dibromochloromethane	ND	0.151	—	ND	1.28	—		7.553
1,2-Dibromoethane	ND	0.151	—	ND	1.16	—		7.553
Tetrachloroethene	1.48	0.151	—	10.0	1.02	—		7.553
1,1,1,2-Tetrachloroethane	ND	0.151	—	ND	1.04	—		7.553
Chlorobenzene	ND	0.151	—	ND	0.695	—		7.553
Ethylbenzene	0.332	0.151	—	1.44	0.655	—		7.553
p/m-Xylene	1.11	0.302	—	4.82	1.31	—		7.553
Bromoform	ND	0.151	—	ND	1.56	—		7.553
Styrene	ND	0.151	—	ND	0.643	—		7.553
1,1,2,2-Tetrachloroethane	ND	0.151	—	ND	1.04	—		7.553
o-Xylene	0.483	0.151	—	2.10	0.655	—		7.553
Isopropylbenzene	ND	3.78	—	ND	18.5	—		7.553
1,3,5-Trimethylbenzene	0.340	0.151	—	1.67	0.742	—		7.553
1,2,4-Trimethylbenzene	1.28	0.151	—	6.27	0.742	—		7.553
1,3-Dichlorobenzene	ND	0.151	—	ND	0.907	—		7.553
1,4-Dichlorobenzene	0.226	0.151	—	1.36	0.907	—		7.553
sec-Butylbenzene	ND	3.78	—	ND	20.7	—		7.553
p-Isopropyltoluene	ND	3.78	—	ND	20.7	—		7.553
1,2-Dichlorobenzene	ND	0.151	—	ND	0.907	—		7.553
n-Butylbenzene	ND	3.78	—	ND	20.7	—		7.553



Project Name: ALVAREZ HIGH SCHOOL

Lab Number: L1010920

Project Number: 14687.01

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-06	D	Date Collected:	07/16/10 12:51
Client ID:	MP-6		Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI		Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	82		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	87		60-140

Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL**Project Number:** 14687.01**Lab Number:** L1010920**Report Date:** 07/26/10**SAMPLE RESULTS**

Lab ID:	L1010920-06 D2	Date Collected:	07/16/10 12:51
Client ID:	MP-6	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/23/10 13:49		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3			Qualifier	Dilution Factor
		RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Acetone	4930	504	—	11700	1200	—		251.8
2-Butanone	4090	126	—	12000	371	—		251.8



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-06	D2	Date Collected:	07/16/10 12:51
Client ID:	MP-6		Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI		Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	84		60-140
bromochloromethane	102		60-140
chlorobenzene-d5	92		60-140

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-07	Date Collected:	07/16/10 13:15
Client ID:	RT-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/23/10 09:49		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3			Qualifier	Dilution Factor
		RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.777	0.050	—	3.84	0.247	—	—	1
Chloromethane	0.634	0.500	—	1.31	1.03	—	—	1
Vinyl chloride	ND	0.020	—	ND	0.051	—	—	1
Chloroethane	0.025	0.020	—	0.066	0.053	—	—	1
Acetone	26.1	2.00	—	62.0	4.75	—	—	1
Trichlorofluoromethane	14.0	0.050	—	78.4	0.281	—	—	1
Acrylonitrile	ND	0.500	—	ND	1.08	—	—	1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—	—	1
Methylene chloride	5.28	1.00	—	18.3	3.47	—	—	1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	—	1
1,1-Dichloroethane	0.027	0.020	—	0.109	0.081	—	—	1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—	—	1
2-Butanone	3.40	0.500	—	10.0	1.47	—	—	1
cis-1,2-Dichloroethene	0.033	0.020	—	0.131	0.079	—	—	1
Chloroform	0.079	0.020	—	0.385	0.098	—	—	1
1,2-Dichloroethane	0.027	0.020	—	0.109	0.081	—	—	1
1,1,1-Trichloroethane	0.527	0.020	—	2.87	0.109	—	—	1
Benzene	0.116	0.100	—	0.370	0.319	—	—	1
Carbon tetrachloride	0.095	0.020	—	0.597	0.126	—	—	1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—	—	1
Bromodichloromethane	ND	0.020	—	ND	0.134	—	—	1
Trichloroethene	20.8	0.020	—	112	0.107	—	—	1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	—	1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—	—	1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	—	1



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-07	Date Collected:	07/16/10 13:15
Client ID:	RT-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—		1
Toluene	0.482	0.020	—	1.81	0.075	—		1
Dibromochloromethane	ND	0.020	—	ND	0.170	—		1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—		1
Tetrachloroethene	5.13	0.020	—	34.8	0.136	—		1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—		1
Chlorobenzene	ND	0.020	—	ND	0.092	—		1
Ethylbenzene	0.126	0.020	—	0.547	0.087	—		1
p/m-Xylene	0.377	0.040	—	1.64	0.174	—		1
Bromoform	ND	0.020	—	ND	0.206	—		1
Styrene	0.078	0.020	—	0.332	0.085	—		1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—		1
o-Xylene	0.161	0.020	—	0.698	0.087	—		1
Isopropylbenzene	ND	0.500	—	ND	2.46	—		1
1,3,5-Trimethylbenzene	0.148	0.020	—	0.727	0.098	—		1
1,2,4-Trimethylbenzene	0.542	0.020	—	2.66	0.098	—		1
1,3-Dichlorobenzene	ND	0.020	—	ND	0.120	—		1
1,4-Dichlorobenzene	0.197	0.020	—	1.18	0.120	—		1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—		1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—		1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—		1
n-Butylbenzene	ND	0.500	—	ND	2.74	—		1



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-07	Date Collected:	07/16/10 13:15
Client ID:	RT-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	86		60-140
chlorobenzene-d5	98		60-140

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID: L1010920-08 Date Collected: 07/16/10 13:51
 Client ID: RT-2 Date Received: 07/19/10
 Sample Location: PROVIDENCE, RI Field Prep: Not Specified
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 07/23/10 10:27
 Analyst: RY

Parameter	Results	ppbV		ug/m3			Qualifier	Dilution Factor
		RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.497	0.050	—	2.46	0.247	—		1
Chloromethane	ND	0.500	—	ND	1.03	—		1
Vinyl chloride	ND	0.020	—	ND	0.051	—		1
Chloroethane	0.057	0.020	—	0.150	0.053	—		1
Acetone	17.6	2.00	—	41.6	4.75	—		1
Trichlorofluoromethane	23.4	0.050	—	131	0.281	—		1
Acrylonitrile	ND	0.500	—	ND	1.08	—		1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—		1
Methylene chloride	4.88	1.00	—	16.9	3.47	—		1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—		1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—		1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—		1
2-Butanone	1.69	0.500	—	4.99	1.47	—		1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—		1
Chloroform	0.093	0.020	—	0.454	0.098	—		1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—		1
1,1,1-Trichloroethane	0.283	0.020	—	1.54	0.109	—		1
Benzene	ND	0.100	—	ND	0.319	—		1
Carbon tetrachloride	0.073	0.020	—	0.459	0.126	—		1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—		1
Bromodichloromethane	ND	0.020	—	ND	0.134	—		1
Trichloroethene	16.9	0.020	—	90.6	0.107	—		1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—		1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1



Project Name: ALVAREZ HIGH SCHOOL

Lab Number: L1010920

Project Number: 14687.01

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-08	Date Collected:	07/16/10 13:51
Client ID:	RT-2	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—	—	1
Toluene	0.301	0.020	—	1.13	0.075	—	—	1
Dibromochloromethane	ND	0.020	—	ND	0.170	—	—	1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—	—	1
Tetrachloroethene	2.44	0.020	—	16.5	0.136	—	—	1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	—	1
Chlorobenzene	ND	0.020	—	ND	0.092	—	—	1
Ethylbenzene	0.098	0.020	—	0.425	0.087	—	—	1
p/m-Xylene	0.347	0.040	—	1.50	0.174	—	—	1
Bromoform	ND	0.020	—	ND	0.206	—	—	1
Styrene	0.068	0.020	—	0.289	0.085	—	—	1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	—	1
o-Xylene	0.135	0.020	—	0.586	0.087	—	—	1
Isopropylbenzene	ND	0.500	—	ND	2.46	—	—	1
1,3,5-Trimethylbenzene	0.137	0.020	—	0.673	0.098	—	—	1
1,2,4-Trimethylbenzene	0.536	0.020	—	2.63	0.098	—	—	1
1,3-Dichlorobenzene	ND	0.020	—	ND	0.120	—	—	1
1,4-Dichlorobenzene	0.220	0.020	—	1.32	0.120	—	—	1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—	—	1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—	—	1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—	—	1
n-Butylbenzene	ND	0.500	—	ND	2.74	—	—	1



Project Name: ALVAREZ HIGH SCHOOL**Project Number:** 14687.01**Lab Number:** L1010920**Report Date:** 07/26/10**SAMPLE RESULTS**

Lab ID:	L1010920-08	Date Collected:	07/16/10 13:51
Client ID:	RT-2	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	116		60-140
bromochloromethane	111		60-140
chlorobenzene-d5	114		60-140

Project Name: ALVAREZ HIGH SCHOOL

Lab Number: L1010920

Project Number: 14687.01

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-09	Date Collected:	07/16/10 13:46
Client ID:	RT-3	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/23/10 11:06		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	0.455	0.050	—	2.25	0.247	—	1
Chloromethane	ND	0.500	—	ND	1.03	—	1
Vinyl chloride	ND	0.020	—	ND	0.051	—	1
Chloroethane	ND	0.020	—	ND	0.053	—	1
Acetone	6.38	2.00	—	15.1	4.75	—	1
Trichlorofluoromethane	2.55	0.050	—	14.3	0.281	—	1
Acrylonitrile	ND	0.500	—	ND	1.08	—	1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Methylene chloride	5.10	1.00	—	17.7	3.47	—	1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—	1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—	1
2-Butanone	0.579	0.500	—	1.71	1.47	—	1
cis-1,2-Dichloroethene	0.021	0.020	—	0.083	0.079	—	1
Chloroform	0.109	0.020	—	0.532	0.098	—	1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—	1
1,1,1-Trichloroethane	0.174	0.020	—	0.949	0.109	—	1
Benzene	ND	0.100	—	ND	0.319	—	1
Carbon tetrachloride	0.075	0.020	—	0.471	0.126	—	1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—	1
Bromodichloromethane	ND	0.020	—	ND	0.134	—	1
Trichloroethene	5.95	0.020	—	32.0	0.107	—	1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—	1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-09	Date Collected:	07/16/10 13:46
Client ID:	RT-3	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—	—	1
Toluene	0.376	0.020	—	1.42	0.075	—	—	1
Dibromochloromethane	ND	0.020	—	ND	0.170	—	—	1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—	—	1
Tetrachloroethene	11.8	0.020	—	80.2	0.136	—	—	1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	—	1
Chlorobenzene	ND	0.020	—	ND	0.092	—	—	1
Ethylbenzene	0.124	0.020	—	0.538	0.087	—	—	1
p/m-Xylene	0.343	0.040	—	1.49	0.174	—	—	1
Bromoform	ND	0.020	—	ND	0.206	—	—	1
Styrene	0.028	0.020	—	0.119	0.085	—	—	1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	—	1
o-Xylene	0.111	0.020	—	0.482	0.087	—	—	1
Isopropylbenzene	ND	0.500	—	ND	2.46	—	—	1
1,3,5-Trimethylbenzene	0.113	0.020	—	0.555	0.098	—	—	1
1,2,4-Trimethylbenzene	0.398	0.020	—	1.96	0.098	—	—	1
1,3-Dichlorobenzene	ND	0.020	—	ND	0.120	—	—	1
1,4-Dichlorobenzene	0.120	0.020	—	0.721	0.120	—	—	1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—	—	1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—	—	1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—	—	1
n-Butylbenzene	ND	0.500	—	ND	2.74	—	—	1



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-09	Date Collected:	07/16/10 13:46
Client ID:	RT-3	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	114		60-140
bromochloromethane	122		60-140
chlorobenzene-d5	112		60-140

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 07/22/10 19:23

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-09 Batch: WG424047-4								
Dichlorodifluoromethane	ND	0.050	—	ND	0.247	—		1
Chloromethane	ND	0.500	—	ND	1.03	—		1
Vinyl chloride	ND	0.020	—	ND	0.051	—		1
Chloroethane	ND	0.020	—	ND	0.053	—		1
Acetone	ND	2.00	—	ND	4.75	—		1
Trichlorofluoromethane	ND	0.050	—	ND	0.281	—		1
Acrylonitrile	ND	0.500	—	ND	1.08	—		1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—		1
Methylene chloride	ND	1.00	—	ND	3.47	—		1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—		1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—		1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—		1
2-Butanone	ND	0.500	—	ND	1.47	—		1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—		1
Chloroform	ND	0.020	—	ND	0.098	—		1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—		1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—		1
Benzene	ND	0.100	—	ND	0.319	—		1
Carbon tetrachloride	ND	0.020	—	ND	0.126	—		1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—		1
Bromodichloromethane	ND	0.020	—	ND	0.134	—		1
Trichloroethene	ND	0.020	—	ND	0.107	—		1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—		1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 07/22/10 19:23

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-09 Batch: WG424047-4								
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—		1
Toluene	ND	0.020	—	ND	0.075	—		1
Dibromochloromethane	ND	0.020	—	ND	0.170	—		1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—		1
Tetrachloroethene	ND	0.020	—	ND	0.136	—		1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—		1
Chlorobenzene	ND	0.020	—	ND	0.092	—		1
Ethylbenzene	ND	0.020	—	ND	0.087	—		1
p/m-Xylene	ND	0.040	—	ND	0.174	—		1
Bromoform	ND	0.020	—	ND	0.206	—		1
Styrene	ND	0.020	—	ND	0.085	—		1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—		1
o-Xylene	ND	0.020	—	ND	0.087	—		1
Isopropylbenzene	ND	0.500	—	ND	2.46	—		1
1,3,5-Trimethylbenzene	ND	0.020	—	ND	0.098	—		1
1,2,4-Trimethylbenzene	ND	0.020	—	ND	0.098	—		1
1,3-Dichlorobenzene	ND	0.020	—	ND	0.120	—		1
1,4-Dichlorobenzene	ND	0.020	—	ND	0.120	—		1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—		1
p-isopropyltoluene	ND	0.500	—	ND	2.74	—		1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—		1
n-Butylbenzene	ND	0.500	—	ND	2.74	—		1



Project Name: ALVAREZ HIGH SCHOOL

Lab Number: L1010920

Project Number: 14687.01

Report Date: 07/26/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 07/24/10 15:21

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 03,05-06 Batch: WG424047-9								
Dichlorodifluoromethane	ND	0.050	—	ND	0.247	—		1
Chloromethane	ND	0.500	—	ND	1.03	—		1
Vinyl chloride	ND	0.020	—	ND	0.051	—		1
Chloroethane	ND	0.020	—	ND	0.053	—		1
Acetone	ND	2.00	—	ND	4.75	—		1
Trichlorofluoromethane	ND	0.050	—	ND	0.281	—		1
Acrylonitrile	ND	0.500	—	ND	1.08	—		1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—		1
Methylene chloride	ND	1.00	—	ND	3.47	—		1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—		1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—		1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—		1
2-Butanone	ND	0.500	—	ND	1.47	—		1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—		1
Chloroform	ND	0.020	—	ND	0.098	—		1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—		1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—		1
Benzene	ND	0.100	—	ND	0.319	—		1
Carbon tetrachloride	ND	0.020	—	ND	0.126	—		1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—		1
Bromodichloromethane	ND	0.020	—	ND	0.134	—		1
Trichloroethene	ND	0.020	—	ND	0.107	—		1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—		1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 07/24/10 15:21

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 03,05-06 Batch: WG424047-9							
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Toluene	ND	0.020	—	ND	0.075	—	1
Dibromochloromethane	ND	0.020	—	ND	0.170	—	1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—	1
Tetrachloroethene	ND	0.020	—	ND	0.136	—	1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	1
Chlorobenzene	ND	0.020	—	ND	0.092	—	1
Ethylbenzene	ND	0.020	—	ND	0.087	—	1
p/m-Xylene	ND	0.040	—	ND	0.174	—	1
Bromoform	ND	0.020	—	ND	0.206	—	1
Styrene	ND	0.020	—	ND	0.085	—	1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	1
o-Xylene	ND	0.020	—	ND	0.087	—	1
Isopropylbenzene	ND	0.500	—	ND	2.46	—	1
1,3,5-Trimethylbenzene	ND	0.020	—	ND	0.098	—	1
1,2,4-Trimethylbenzene	ND	0.020	—	ND	0.098	—	1
1,3-Dichlorobenzene	ND	0.020	—	ND	0.120	—	1
1,4-Dichlorobenzene	ND	0.020	—	ND	0.120	—	1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—	1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—	1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—	1
n-Butylbenzene	ND	0.500	—	ND	2.74	—	1



Lab Control Sample Analysis

Batch Quality Control

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

Parameter	LCS	%Recovery	Qual	LCSD	%Recovery	Qual	%Recovery	Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 Batch: WG424047-3											
Dichlorodifluoromethane	122	-	-	70-130	-	-	-	-	-	-	25
Chloromethane	128	-	-	70-130	-	-	-	-	-	-	25
Vinyl chloride	111	-	-	70-130	-	-	-	-	-	-	25
Chloroethane	113	-	-	70-130	-	-	-	-	-	-	25
Acetone	126	-	-	70-130	-	-	-	-	-	-	25
Trichlorofluoromethane	118	-	-	70-130	-	-	-	-	-	-	25
Acrylonitrile	114	-	-	70-130	-	-	-	-	-	-	25
1,1-Dichloroethene	121	-	-	70-130	-	-	-	-	-	-	25
Methylene chloride	134	Q	-	70-130	-	-	-	-	-	-	25
trans-1,2-Dichloroethene	119	-	-	70-130	-	-	-	-	-	-	25
1,1-Dichloroethane	108	-	-	70-130	-	-	-	-	-	-	25
Methyl tert butyl ether	132	Q	-	70-130	-	-	-	-	-	-	25
2-Butanone	116	-	-	70-130	-	-	-	-	-	-	25
cis-1,2-Dichloroethene	110	-	-	70-130	-	-	-	-	-	-	25
Chloroform	112	-	-	70-130	-	-	-	-	-	-	25
1,2-Dichloroethane	114	-	-	70-130	-	-	-	-	-	-	25
1,1,1-Trichloroethane	103	-	-	70-130	-	-	-	-	-	-	25
Benzene	91	-	-	70-130	-	-	-	-	-	-	25
Carbon tetrachloride	109	-	-	70-130	-	-	-	-	-	-	25
1,2-Dichloropropane	96	-	-	70-130	-	-	-	-	-	-	25
Bromodichloromethane	101	-	-	70-130	-	-	-	-	-	-	25

Lab Control Sample Analysis

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

Parameter	LCS	%Recovery	Qual	%Recovery	LCSD	Qual	%Recovery	Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 Batch: WG424047-3											
Trichloroethene	102	-	-	-	-	-	70-130	-	-	-	25
cis-1,3-Dichloropropene	107	-	-	-	-	-	70-130	-	-	-	25
4-Methyl-2-pentanone	106	-	-	-	-	-	70-130	-	-	-	25
trans-1,3-Dichloropropene	97	-	-	-	-	-	70-130	-	-	-	25
1,1,2-Trichloroethane	106	-	-	-	-	-	70-130	-	-	-	25
Toluene	96	-	-	-	-	-	70-130	-	-	-	25
Dibromochloromethane	111	-	-	-	-	-	70-130	-	-	-	25
1,2-Dibromoethane	109	-	-	-	-	-	70-130	-	-	-	25
Tetrachloroethene	104	-	-	-	-	-	70-130	-	-	-	25
1,1,2-Tetrachloroethane	108	-	-	-	-	-	70-130	-	-	-	25
Chlorobenzene	107	-	-	-	-	-	70-130	-	-	-	25
Ethylbenzene	113	-	-	-	-	-	70-130	-	-	-	25
p/m-Xylene	118	-	-	-	-	-	70-130	-	-	-	25
Bromoform	124	-	-	-	-	-	70-130	-	-	-	25
Styrene	122	-	-	-	-	-	70-130	-	-	-	25
1,1,2,2-Tetrachloroethane	116	-	-	-	-	-	70-130	-	-	-	25
o-Xylene	119	-	-	-	-	-	70-130	-	-	-	25
Isopropylbenzene	115	-	-	-	-	-	70-130	-	-	-	25
1,3,5-Trimethylbenzene	128	-	-	-	-	-	70-130	-	-	-	25
1,2,4-Trimethylbenzene	133	Q	-	-	-	-	70-130	-	-	-	25
1,3-Dichlorobenzene	125	-	-	-	-	-	70-130	-	-	-	25

Lab Control Sample Analysis

Batch Quality Control

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

Parameter	LCS	%Recovery	LCSD	%Recovery	Qual	%Recovery	LCSD	%Recovery	Qual	RPD	%Recovery	Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 Batch: WG424047-3															
1,4-Dichlorobenzene	123	-	-	-	-	-	70-130	-	-	25	-	-	-	-	-
sec-Butylbenzene	119	-	-	-	-	-	70-130	-	-	25	-	-	-	-	-
p-Isopropyltoluene	119	-	-	-	-	-	70-130	-	-	25	-	-	-	-	-
1,2-Dichlorobenzene	124	-	-	-	-	-	70-130	-	-	25	-	-	-	-	-
n-Butylbenzene	127	-	-	-	-	-	70-130	-	-	25	-	-	-	-	-

Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 03-05-06 Batch: WG424047-8	Dichlorodifluoromethane	120	-	-	-	-	70-130	-	-	25	-	-	-	-	-
	Chloromethane	121	-	-	-	-	70-130	-	-	25	-	-	-	-	-
	Vinyl chloride	101	-	-	-	-	70-130	-	-	25	-	-	-	-	-
	Chloroethane	103	-	-	-	-	70-130	-	-	25	-	-	-	-	-
	Acetone	114	-	-	-	-	70-130	-	-	25	-	-	-	-	-
	Trichlorofluoromethane	109	-	-	-	-	70-130	-	-	25	-	-	-	-	-
	Acrylonitrile	99	-	-	-	-	70-130	-	-	25	-	-	-	-	-
	1,1-Dichloroethene	110	-	-	-	-	70-130	-	-	25	-	-	-	-	-
	Methylene chloride	114	-	-	-	-	70-130	-	-	25	-	-	-	-	-

Lab Control Sample Analysis

Batch Quality Control

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

Parameter	LCS	%Recovery	Qual	LCSD	%Recovery	Qual	%Recovery	Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 03,05-06 Batch: WG424047-8											
trans-1,2-Dichloroethene	133	Q	-	-	-	-	-	70-130	-	-	25
1,1-Dichloroethane	128	-	-	-	-	-	-	70-130	-	-	25
Methyl tert butyl ether	149	Q	-	-	-	-	-	70-130	-	-	25
2-Butanone	103	-	-	-	-	-	-	70-130	-	-	25
cis-1,2-Dichloroethene	97	-	-	-	-	-	-	70-130	-	-	25
Chloroform	100	-	-	-	-	-	-	70-130	-	-	25
1,2-Dichloroethane	101	-	-	-	-	-	-	70-130	-	-	25
1,1,1-Trichloroethane	69	-	-	-	-	-	-	70-130	-	-	25
Benzene	78	-	-	-	-	-	-	70-130	-	-	25
Carbon tetrachloride	95	-	-	-	-	-	-	70-130	-	-	25
1,2-Dichloropropane	82	-	-	-	-	-	-	70-130	-	-	25
Bromodichloromethane	86	-	-	-	-	-	-	70-130	-	-	25
Trichloroethene	89	-	-	-	-	-	-	70-130	-	-	25
cis-1,3-Dichloropropene	91	-	-	-	-	-	-	70-130	-	-	25
4-Methyl-2-pentanone	91	-	-	-	-	-	-	70-130	-	-	25
trans-1,3-Dichloropropene	81	-	-	-	-	-	-	70-130	-	-	25
1,1,2-Trichloroethane	91	-	-	-	-	-	-	70-130	-	-	25
Toluene	85	-	-	-	-	-	-	70-130	-	-	25
Dibromochloromethane	100	-	-	-	-	-	-	70-130	-	-	25
1,2-Dibromoethane	97	-	-	-	-	-	-	70-130	-	-	25
Tetrachloroethylene	96	-	-	-	-	-	-	70-130	-	-	25

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Control Sample Analysis

Batch Quality Control

Lab Number: L1010920
 Report Date: 07/26/10

Parameter	LCS	%Recovery	Qual	LCSD	%Recovery	Qual	%Recovery	Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 03,05-06 Batch: WG424047-8											
1,1,1,2-Tetrachloroethane	97	-	-	-	-	-	-	70-130	-	-	25
Chlorobenzene	96	-	-	-	-	-	-	70-130	-	-	25
Ethylbenzene	101	-	-	-	-	-	-	70-130	-	-	25
p/m-Xylene	106	-	-	-	-	-	-	70-130	-	-	25
Bromoform	111	-	-	-	-	-	-	70-130	-	-	25
Styrene	108	-	-	-	-	-	-	70-130	-	-	25
1,1,2,2-Tetrachloroethane	105	-	-	-	-	-	-	70-130	-	-	25
o-Xylene	107	-	-	-	-	-	-	70-130	-	-	25
Isopropylbenzene	103	-	-	-	-	-	-	70-130	-	-	25
1,3,5-Trimethylbenzene	115	-	-	-	-	-	-	70-130	-	-	25
1,2,4-Trimethylbenzene	118	-	-	-	-	-	-	70-130	-	-	25
1,3-Dichlorobenzene	112	-	-	-	-	-	-	70-130	-	-	25
1,4-Dichlorobenzene	111	-	-	-	-	-	-	70-130	-	-	25
sec-Butylbenzene	107	-	-	-	-	-	-	70-130	-	-	25
p-Isopropyltoluene	107	-	-	-	-	-	-	70-130	-	-	25
1,2-Dichlorobenzene	112	-	-	-	-	-	-	70-130	-	-	25
n-Butylbenzene	114	-	-	-	-	-	-	70-130	-	-	25



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687-01

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L1010920
 Report Date: 07/26/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG424047-5 QC Sample: L1010920-06 Client ID: MP-6						
Acalone	4930	4430	ppbV	11	11	25
2-Bulanone	4090	3560	ppbV	14	14	25

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Duplicate Analysis

Lab Number: L1010920
 Report Date: 07/26/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG424047-5 QC Sample: L1010920-06 Client ID: MP-6					
Dichlorodifluoromethane	0.604	0.702	ppbV	15	25
Chloromethane	ND	ND	ppbV	NC	25
Vinyl chloride	ND	ND	ppbV	NC	25
Chloroethane	ND	0.196	ppbV	NC	25
Acetone	4780E	5610	ppbV	16	E
Trichlorofluoromethane	ND	0.378	ppbV	NC	25
Acrylonitrile	ND	ND	ppbV	NC	25
1,1-Dichloroethene	ND	ND	ppbV	NC	25
Methylene chloride	ND	ND	ppbV	NC	25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC	25
1,1-Dichloroethane	ND	ND	ppbV	NC	25
Methyl tert butyl ether	3510E	3810	ppbV	8	E
2-Butanone	ND	ND	ppbV	NC	25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC	25
Chloroform	ND	ND	ppbV	NC	25
1,2-Dichloroethane	ND	ND	ppbV	NC	25
Benzene	ND	ND	ppbV	NC	25
Carbon tetrachloride	ND	ND	ppbV	NC	25

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687-01

Lab Duplicate Analysis

Lab Number: L1010920
 Report Date: 07/26/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG424047-5 QC Sample: L1010920-06 Client ID: MP-6					
1,2-Dichloropropane	ND	ppbV	NC	25	
Bromodichloromethane	ND	ppbV	NC	25	
Trichloroethane	ND	ppbV	NC	25	
cis-1,3-Dichloropropene	ND	ppbV	NC	25	
4-Methyl-2-pentanone	ND	ppbV	NC	25	
trans-1,3-Dichloropropene	ND	ppbV	NC	25	
1,1,2-Trichloroethane	ND	ppbV	NC	25	
Toluene	1.47	ppbV	4	25	
Dibromoacromethane	ND	ppbV	NC	25	
1,2-Dibromoethane	ND	ppbV	NC	25	
Tetrachloroethane	1.48	ppbV	5	25	
1,1,1,2-Tetrachloroethane	ND	ppbV	NC	25	
Chlorobenzene	ND	ppbV	NC	25	
Ethylbenzene	0.332	ppbV	7	25	
p/m-Xylene	1.11	ppbV	8	25	
Bromoform	ND	ppbV	NC	25	
Styrene	ND	ppbV	NC	25	
1,1,2,2-Tetrachloroethane	ND	ppbV	10	25	
o-Xylene	0.483	ppbV			

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Duplicate Analysis

Batch Quality Control
 Lab Number: L1010920
 Report Date: 07/26/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG424047-5 QC Sample: L1010920-06 Client ID: MP-6					
Isopropylbenzene	ND	ppbV	NC	25	
1,3,5-Trimethylbenzene	0.340	0.408	ppbV	18	25
1,2,4-Trimethylbenzene	1.28	1.62	ppbV	23	25
1,3-Dichlorobenzene	ND	0.159	ppbV	NC	25
1,4-Dichlorobenzene	0.226	0.272	ppbV	18	25
sec-Butylbenzene	ND	ND	ppbV	NC	25
p-Isopropyltoluene	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
n-Butylbenzene	ND	ND	ppbV	NC	25

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Serial_No:07261016:23

Lab Number: L1010920

Report Date: 07/26/10

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Cleaning Batch ID	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Out mL/min	Flow In mL/min	% RSD
L1010920-01	IMP-2	0446	#90 SV		-	-	71	73	3
L1010920-01	IMP-2	376	2.7L Can	I1010362	-29.3	-8.7	-	-	-
L1010920-02	IMP-1	0001	#90 SV		-	-	67	71	6
L1010920-02	IMP-1	463	2.7L Can	I1010362	-28.8	-4.8	-	-	-
L1010920-03	MP-1	0435	#90 SV		-	-	71	75	5
L1010920-03	MP-1	1743	2.7L Can	I1010362	-29.4	-6.4	-	-	-
L1010920-04	MP-3	0268	#90 SV		-	-	71	75	5
L1010920-04	MP-3	118	2.7L Can	I1010362	-28.9	-7.2	-	-	-
L1010920-05	MP-4	0150	#90 SV		-	-	67	69	3
L1010920-05	MP-4	395	2.7L Can	I1010362	-29.0	-7.7	-	-	-
L1010920-06	MP-6	0152	#90 SV		-	-	69	78	12
L1010920-06	MP-6	388	2.7L Can	I1010362	-28.8	-10.1	-	-	-
L1010920-07	RT-1	518	2.7L Can	I1010362	-29.6	-2.9	-	-	-
L1010920-08	RT-2	455	2.7L Can	I1010362	-29.3	-3.6	-	-	-
L1010920-09	RT-3	460	2.7L Can	I1010362	-28.8	-1.7	-	-	-



Project Name: BATCH CANISTER CERTIFICATION**Project Number:** CANISTER QC BAT**Lab Number:** L1010362**Report Date:** 07/26/10**Air Canister Certification Results**

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	07/09/10 19:35		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3			Qualifier	Dilution Factor
		RL	MDL	Results	RL	MDL		
Volatile Organics in Air (Low Level) - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	—	ND	0.707	—		1
Propylene	ND	0.200	—	ND	0.344	—		1
Propane	ND	0.200	—	ND	0.606	—		1
Dichlorodifluoromethane	ND	0.200	—	ND	0.988	—		1
Chloromethane	ND	0.200	—	ND	0.413	—		1
Freon-114	ND	0.200	—	ND	1.40	—		1
Methanol	ND	5.00	—	ND	6.55	—		1
Vinyl chloride	ND	0.200	—	ND	0.511	—		1
1,3-Butadiene	ND	0.200	—	ND	0.442	—		1
Butane	ND	0.200	—	ND	0.475	—		1
Bromomethane	ND	0.200	—	ND	0.776	—		1
Chloroethane	ND	0.200	—	ND	0.527	—		1
Ethanol	ND	2.50	—	ND	4.71	—		1
Dichlorofluoromethane	ND	0.200	—	ND	0.841	—		1
Vinyl bromide	ND	0.200	—	ND	0.874	—		1
Acrolein	ND	0.500	—	ND	1.14	—		1
Acetone	ND	1.00	—	ND	2.37	—		1
Acetonitrile	ND	0.200	—	ND	0.336	—		1
Trichlorofluoromethane	ND	0.200	—	ND	1.12	—		1
Isopropanol	ND	0.500	—	ND	1.23	—		1
Acrylonitrile	ND	0.200	—	ND	0.434	—		1
Pentane	ND	0.200	—	ND	0.590	—		1
Ethyl ether	ND	0.200	—	ND	0.606	—		1
1,1-Dichloroethene	ND	0.200	—	ND	0.792	—		1
Tertiary butyl Alcohol	ND	0.500	—	ND	1.52	—		1



Project Name: BATCH CANISTER CERTIFICATION

Project Number: CANISTER QC BAT

Lab Number: L1010362

Report Date: 07/26/10

Air Canister Certification Results

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air (Low Level) - Mansfield Lab								
Methylene chloride	ND	1.00	—	ND	3.47	—		1
3-Chloropropene	ND	0.200	—	ND	0.826	—		1
Carbon disulfide	ND	0.200	—	ND	0.622	—		1
Freon-113	ND	0.200	—	ND	1.53	—		1
trans-1,2-Dichloroethene	ND	0.200	—	ND	0.792	—		1
1,1-Dichloroethane	ND	0.200	—	ND	0.809	—		1
Methyl tert butyl ether	ND	0.200	—	ND	0.720	—		1
Vinyl acetate	ND	0.200	—	ND	0.704	—		1
2-Butanone	ND	0.200	—	ND	0.589	—		1
cis-1,2-Dichloroethene	ND	0.200	—	ND	0.792	—		1
Ethyl Acetate	ND	0.500	—	ND	1.80	—		1
Chloroform	ND	0.200	—	ND	0.976	—		1
Tetrahydrofuran	ND	0.200	—	ND	0.589	—		1
2,2-Dichloropropane	ND	0.200	—	ND	0.923	—		1
1,2-Dichloroethane	ND	0.200	—	ND	0.809	—		1
n-Hexane	ND	0.200	—	ND	0.704	—		1
Diisopropyl ether	ND	0.200	—	ND	0.835	—		1
tert-Butyl Ethyl Ether	ND	0.200	—	ND	0.835	—		1
1,1,1-Trichloroethane	ND	0.200	—	ND	1.09	—		1
1,1-Dichloropropene	ND	0.200	—	ND	0.907	—		1
Benzene	ND	0.200	—	ND	0.638	—		1
Carbon tetrachloride	ND	0.200	—	ND	1.26	—		1
Cyclohexane	ND	0.200	—	ND	0.688	—		1
tert-Amyl Methyl Ether	ND	0.200	—	ND	0.835	—		1
Dibromomethane	ND	0.200	—	ND	1.42	—		1
1,2-Dichloropropane	ND	0.200	—	ND	0.924	—		1
Bromodichloromethane	ND	0.200	—	ND	1.34	—		1
1,4-Dioxane	ND	0.200	—	ND	0.720	—		1



Project Name: BATCH CANISTER CERTIFICATION

Project Number: CANISTER QC BAT

Lab Number: L1010362

Report Date: 07/26/10

Air Canister Certification Results

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
Volatile Organics in Air (Low Level) - Mansfield Lab							
Trichloroethene	ND	0.200	—	ND	1.07	—	1
2,2,4-Trimethylpentane	ND	0.200	—	ND	0.934	—	1
Heptane	ND	0.200	—	ND	0.819	—	1
2,4,4-trimethyl-1-pentene	ND	0.500	—	ND	2.29	—	1
cis-1,3-Dichloropropene	ND	0.200	—	ND	0.907	—	1
4-Methyl-2-pentanone	ND	0.200	—	ND	0.819	—	1
2,4,4-trimethyl-2-pentene	ND	0.500	—	ND	2.29	—	1
trans-1,3-Dichloropropene	ND	0.200	—	ND	0.907	—	1
1,1,2-Trichloroethane	ND	0.200	—	ND	1.09	—	1
Toluene	ND	0.200	—	ND	0.753	—	1
1,3-Dichloropropane	ND	0.200	—	ND	0.923	—	1
2-Hexanone	ND	0.200	—	ND	0.819	—	1
Dibromochloromethane	ND	0.200	—	ND	1.70	—	1
1,2-Dibromoethane	ND	0.200	—	ND	1.54	—	1
Butyl acetate	ND	0.500	—	ND	2.37	—	1
Octane	ND	0.200	—	ND	0.934	—	1
Tetrachloroethene	ND	0.200	—	ND	1.36	—	1
1,1,1,2-Tetrachloroethane	ND	0.200	—	ND	1.37	—	1
Chlorobenzene	ND	0.200	—	ND	0.920	—	1
Ethylbenzene	ND	0.200	—	ND	0.868	—	1
p/m-Xylene	ND	0.400	—	ND	1.74	—	1
Bromoform	ND	0.200	—	ND	2.06	—	1
Styrene	ND	0.200	—	ND	0.851	—	1
1,1,2,2-Tetrachloroethane	ND	0.200	—	ND	1.37	—	1
o-Xylene	ND	0.200	—	ND	0.868	—	1
1,2,3-Trichloropropane	ND	0.200	—	ND	1.20	—	1
Nonane	ND	0.200	—	ND	1.05	—	1
Isopropylbenzene	ND	0.200	—	ND	0.982	—	1



Project Name: BATCH CANISTER CERTIFICATION

Project Number: CANISTER QC BAT

Lab Number: L1010362

Report Date: 07/26/10

Air Canister Certification Results

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
Volatile Organics in Air (Low Level) - Mansfield Lab							
Bromobenzene	ND	0.200	—	ND	1.28	—	1
2-Chlorotoluene	ND	0.200	—	ND	1.03	—	1
n-Propylbenzene	ND	0.200	—	ND	0.982	—	1
4-Chlorotoluene	ND	0.200	—	ND	1.03	—	1
4-Ethyltoluene	ND	0.200	—	ND	0.982	—	1
1,3,5-Trimethylbenzene	ND	0.200	—	ND	0.982	—	1
tert-Butylbenzene	ND	0.200	—	ND	1.10	—	1
1,2,4-Trimethylbenzene	ND	0.200	—	ND	0.982	—	1
Decane	ND	0.200	—	ND	1.16	—	1
Benzyl chloride	ND	0.200	—	ND	1.03	—	1
1,3-Dichlorobenzene	ND	0.200	—	ND	1.20	—	1
1,4-Dichlorobenzene	ND	0.200	—	ND	1.20	—	1
sec-Butylbenzene	ND	0.200	—	ND	1.10	—	1
p-Isopropyltoluene	ND	0.200	—	ND	1.10	—	1
1,2-Dichlorobenzene	ND	0.200	—	ND	1.20	—	1
n-Butylbenzene	ND	0.200	—	ND	1.10	—	1
1,2-Dibromo-3-chloropropane	ND	0.200	—	ND	1.93	—	1
Undecane	ND	0.200	—	ND	1.28	—	1
Dodecane	ND	0.200	—	ND	1.39	—	1
1,2,4-Trichlorobenzene	ND	0.200	—	ND	1.48	—	1
Naphthalene	ND	0.200	—	ND	1.05	—	1
1,2,3-Trichlorobenzene	ND	0.200	—	ND	1.48	—	1
Hexachlorobutadiene	ND	0.200	—	ND	2.13	—	1



Serial_No:07261016:23

Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1010362**Project Number:** CANISTER QC BAT**Report Date:** 07/26/10**Air Canister Certification Results**

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	

Volatile Organics in Air (Low Level) - Mansfield Lab

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	87		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	89		60-140

Project Name: BATCH CANISTER CERTIFICATION

Project Number: CANISTER QC BAT

Lab Number: L1010362

Report Date: 07/26/10

Air Canister Certification Results

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/09/10 19:35		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	ND	0.050	—	ND	0.247	—	1
Chloromethane	ND	0.500	—	ND	1.03	—	1
Freon-114	ND	0.050	—	ND	0.349	—	1
Vinyl chloride	ND	0.020	—	ND	0.051	—	1
1,3-Butadiene	ND	0.020	—	ND	0.044	—	1
Bromomethane	ND	0.020	—	ND	0.078	—	1
Chloroethane	ND	0.020	—	ND	0.053	—	1
Acetone	ND	2.00	—	ND	4.75	—	1
Trichlorofluoromethane	ND	0.050	—	ND	0.281	—	1
Acrylonitrile	ND	0.500	—	ND	1.08	—	1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Methylene chloride	ND	1.00	—	ND	3.47	—	1
Freon-113	ND	0.050	—	ND	0.383	—	1
Halothane	ND	0.050	—	ND	0.403	—	1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—	1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—	1
2-Butanone	ND	0.500	—	ND	1.47	—	1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Chloroform	ND	0.020	—	ND	0.098	—	1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—	1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Benzene	ND	0.100	—	ND	0.319	—	1
Carbon tetrachloride	ND	0.020	—	ND	0.126	—	1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—	1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1010362

Project Number: CANISTER QC BAT

Report Date: 07/26/10

Air Canister Certification Results

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	—	ND	0.134	—	—	1
Trichloroethene	ND	0.020	—	ND	0.107	—	—	1
1,4-Dioxane	ND	0.100	—	ND	0.360	—	—	1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	—	1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—	—	1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	—	1
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—	—	1
Toluene	ND	0.020	—	ND	0.075	—	—	1
Dibromochloromethane	ND	0.020	—	ND	0.170	—	—	1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—	—	1
Tetrachloroethene	ND	0.020	—	ND	0.136	—	—	1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	—	1
Chlorobenzene	ND	0.020	—	ND	0.092	—	—	1
Ethylbenzene	ND	0.020	—	ND	0.087	—	—	1
p/m-Xylene	ND	0.040	—	ND	0.174	—	—	1
Bromoform	ND	0.020	—	ND	0.206	—	—	1
Styrene	ND	0.020	—	ND	0.085	—	—	1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	—	1
o-Xylene	ND	0.020	—	ND	0.087	—	—	1
Isopropylbenzene	ND	0.500	—	ND	2.46	—	—	1
1,3,5-Trimethylbenzene	ND	0.020	—	ND	0.098	—	—	1
1,2,4-Trimethylbenzene	ND	0.020	—	ND	0.098	—	—	1
1,3-Dichlorobenzene	ND	0.020	—	ND	0.120	—	—	1
1,4-Dichlorobenzene	ND	0.020	—	ND	0.120	—	—	1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—	—	1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—	—	1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—	—	1
n-Butylbenzene	ND	0.500	—	ND	2.74	—	—	1



Project Name: BATCH CANISTER CERTIFICATION**Project Number:** CANISTER QC BAT**Lab Number:** L1010362**Report Date:** 07/26/10**Air Canister Certification Results**

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2,4-Trichlorobenzene	ND	0.050	—	ND	0.371	—		1
Naphthalene	ND	0.050	—	ND	0.262	—		1
1,2,3-Trichlorobenzene	ND	0.050	—	ND	0.371	—		1
Hexachlorobutadiene	ND	0.050	—	ND	0.533	—		1



Serial_No:07261016:23

Project Name: BATCH CANISTER CERTIFICATION**Project Number:** CANISTER QC BAT**Lab Number:** L1010362**Report Date:** 07/26/10**Air Canister Certification Results**

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	83		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	89		60-140

Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

N/A Present/Intact

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1010920-01A	Canister - 2.7 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1010920-02A	Canister - 2.7 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1010920-03A	Canlster - 2.7 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1010920-04A	Canister - 2.7 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1010920-05A	Canister - 2.7 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1010920-06A	Canister - 2.7 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1010920-07A	Canister - 2.7 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1010920-08A	Canister - 2.7 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1010920-09A	Canister - 2.7 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)

*Values in parentheses indicate holding time in days

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

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.
- MDL · Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
- 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.
- 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.
- NI · Not Ignitable.
- RL · Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL 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

- 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 at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- D · Concentration of analyte was quantified from diluted analysis. Flag only applies to 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.
- H · The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I · The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
- P · The RPD between the results for the two columns exceeds the method-specified criteria.
- Q · The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R · Analytical results are from sample re-analysis.

Report Format: Data Usability Report



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

Data Qualifiers

RE · Analytical results are from sample re-extraction.

J · Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND · Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report



Project Name: ALVAREZ HIGH SCHOOL

Lab Number: L1010920

Project Number: 14687.01

Report Date: 07/26/10

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 Analytical 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 Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical 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 Analytical.

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.



Certificate/Approval Program Summary

Last revised July 19, 2010 – Mansfield Facility

The following list includes only those analytes/methods for which certification/approval is currently held. For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0141.

Wastewater/Non-Potable Water (Inorganic Parameters: pH, Turbidity, Conductivity, Alkalinity, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Vanadium, Zinc, Total Residue (Solids), Total Suspended Solids (non-filterable), Total Cyanide. **Organic Parameters:** PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables, Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, PAHs, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)

Solid Waste/Soil (Inorganic Parameters: pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Organic Carbon, Total Cyanide, Corrosivity, TCLP 1311. **Organic Parameters:** PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Volatile Organics, Acid Extractables, Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Florida Department of Health Certificate/Lab ID: E87814. NELAP Accredited.

Non-Potable Water (Inorganic Parameters: SM2320B, EPA 120.1, SM2510B, EPA 245.1, EPA 150.1, EPA 160.2, SM2540D, EPA 335.2, SM2540G, EPA 180.1. **Organic Parameters:** EPA 625, 608.)

Solid & Chemical Materials (Inorganic Parameters: 6020, 7470, 7471, 9045, 9014. **Organic Parameters:** EPA 8260, 8270, 8082, 8081.)

Air & Emissions (EPA TO-15.)

Louisiana Department of Environmental Quality Certificate/Lab ID: 03090. NELAP Accredited.

Non-Potable Water (Inorganic Parameters: EPA 120.1, 150.1, 160.2, 180.1, 200.8, 245.1, 310.1, 335.2, 608, 625, 1631, 3010, 3015, 3020, 6020, 9010, 9014, 9040, SM2320B, 2510B, 2540D, 2540G, 4500CN-E, 4500H-B. **Organic Parameters:** EPA 3510, 3580, 3630, 3640, 3660, 3665, 5030, 8015 (mod), 3570, 8081, 8082, 8260, 8270,)

Solid & Chemical Materials (Inorganic Parameters: 6020, 7196, 7470, 7471, 7474, 9010, 9014, 9040, 9045, 9060. **Organic Parameters:** EPA 8015 (mod), EPA 3570, 1311, 3050, 3051, 3060, 3580, 3630, 3640, 3660, 3665, 5035, 8081, 8082, 8260, 8270.)

Biological Tissue (Inorganic Parameters: EPA 6020. **Organic Parameters:** EPA 3570, 3510, 3610, 3630, 3640, 8270.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA030.

Non-Potable Water (Inorganic Parameters: SM4500H+B. **Organic Parameters:** EPA 624.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 2206. NELAP Accredited.

Non-Potable Water (Inorganic Parameters: EPA 200.8, 245.1, 1631E, 120.1, 150.1, 180.1, 310.1, 335.2, 160.2, SM2540D, 2540G, 4500CN-E, 4500H+B, 2320B, 2510B. **Organic Parameters:** EPA 625, 608.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA015. NELAP Accredited.

Non-Potable Water (Inorganic Parameters: SW-846 1312, 3010, 3020A, 3015, 6020, SM2320B, EPA 200.8, SM2540C, 2540D, 2540G, EPA 120.1, SM2510B, EPA 180.1, 245.1, 1631E, SW-846 9040B, 6020, 9010B, 9014 **Organic Parameters:** EPA 608, 625, SW-846 3510C, 3580A, 5030B, 3035L, 5035H, 3630C, 3640A, 3660B, 3665A, 8081A, 8082 8260B, 8270C)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6020, 9010B, 9014, 1311, 1312, 3050B, 3051, 3060A, 7196A, 7470A, 7471A, 9045C, 9060. Organic Parameters: SW-846 3580A, 5030B, 3035L, 5035H, 3630C, 3640A, 3660B, 3665A, 8081A, 8082, 8260B, 8270C, 3570, 8015B.)

Atmospheric Organic Parameters (EPA TO-15)

Biological Tissue (Inorganic Parameters: SW-846 6020 Organic Parameters: SW-846 8270C, 3510C, 3570, 3610B, 3630C, 3640A)

New York Department of Health Certificate/Lab ID: 11627. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 310.1, SM2320B, EPA 365.2, 160.1, EPA 160.2, SM2540D, EPA 200.8, 6020, 1631E, 245.1, 335.2, 9014, 150.1, 9040B, 120.1, SM2510B, EPA 376.2, 180.1, 9010B. Organic Parameters: EPA 624, 8260B, 8270C, 608, 8081A, 625, 8082, 3510C, 3511, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 9040B, 9045C, SW-846 Ch7 Sec 7.3, EPA 6020, 7196A, 7471A, 7474, 9014, 9040B, 9045C, 9010B. Organic Parameters: EPA 8260B, 8270C, 8081A, DRO 8015B, 8082, 1311, 3050B, 3580, 3050B, 3035, 3570, 3051, 5035, 5030B.)

Air & Emissions (EPA TO-15.)

Rhode Island Department of Health Certificate/Lab ID: LAO00299. **NELAP Accredited via LA-DEQ.**

Refer to MA-DEP Certificate for Non-Potable Water.

Refer to LA-DEQ Certificate for Non-Potable Water.

Texas Commission of Environmental Quality Certificate/Lab ID: T104704419-08-TX. **NELAP Accredited.**

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 1311, 7196, 9014, 9040, 9045, 9060. Organic Parameters: EPA 8015, 8270, 8260, 8081, 8082.)

Air (Organic Parameters): EPA TO-15)

U.S. Army Corps of Engineers

Department of Defense Certificate/Lab ID: L2217.01.

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 3051, 6020, 747A, 7474, 9045C, 9060, SM 2540G, ASTM D422-63. Organic Parameters: EPA 3580, 3570, 3540C, 5035, 8260B, 8270C, 8270 Alk-PAH, 8082, 8081A, 8015 (SHC), 8015 (DRO).

Air & Emissions (EPA TO-15.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **8270C: Biphenyl.**



AIR ANALYSIS

PAGE / OF /

ALPHA Job #: L1010920

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Project Name: Alvarez School
Project Location: Providence, RI
Project #: 14682.01
Project Manager: E-Cash Lestina
ALPHA Quote #:
Phone: (401) 236-3440
Fax:
Email: Frank.Presko
Date Due:

Report to: (different than Project Manager)
Ken Mack
Ken Mack Presko

CT Target Concentrations
ANALYSIS

Report Information - Data Deliverables

Sample Comments (i.e. PID)

Report Information - Data Deliverables
 Billing Information
 Same as Client Info PO #:

FAX
 ADEX
 Criteria Checker: _____
(Default based on Regulatory Criteria Indicated)

EMAIL (standard pdf report)
 Additional Deliverables:

TO-14A by TO-15
 TO-15
 TO-15 SIM
 APH
 FIXED GASES
 TO-13A
 TO-4/T0-10

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	Date	Collection		Final Sample Metric*	Sampler's Initials	Can Size	ID Can	ID Flow Controller	Sample Comments (i.e. PID)
			Start Time	End Time						
10920.1	IMP-2	7/16	1130	1146	-304	-10	SV	PT/b4	376	0.446
2	IMP-2		1039	1109	-304	-6			463	0.001
3	MP-1		1140	1204	-30	-10			1743	0.435
4	MP-3		1205	1236	-30	-9			118	0.268
5	MP-4		1201	1224	-24	-6			345	0.50
6	MP-6		1226	1251	-304	-11			388	0.152
7	RT-1		1315	1414	-24	-3			518	-
8	RT-2		1351	1425	-25	-4			455	-
9	RT-3		1346	1603	-14	-3	✓	✓	460	-
										503

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil/Vapor/Landfill/Gas/SVE
Other = Please Specify

Relinquished By: John D. Lestina

Date/Time: 11/16/14 12:19 PM EST

Received By: John D. Lestina

Date/Time: 11/16/14 12:19 PM EST

Please print clearly, legibly and completely. Samples can not be logged in grid if turnaround time clock will not start until all ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions.

See reverse side.

Appendix D

Rooftop Effluent Analytical Summary

Ahazier School - Sub Slab Depressurization System Emissions Calculations
Sample Date - 16 July 2010

Volatiles Organic Compounds	ROOFTOP FAN 1 (Measured air flow = 100 cubic feet per minute)				ROOFTOP FAN 2 (Measured air flow = 190 cubic feet per minute)				CUMULATIVE EMISSIONS (2 fans combined)			
	Concentration (ug/m ³)	Hourly Emissions (lbs/day)	Yearly Emissions (lbs/year)	Daily Emissions (lbs/day)	Concentration (ug/m ³)	Hourly Emissions (lbs/day)	Yearly Emissions (lbs/year)	Daily Emissions (lbs/day)	Concentration (ug/m ³)	Hourly Emissions (lbs/day)	Yearly Emissions (lbs/year)	Daily Emissions (lbs/day)
1,1,1-Trichloroethane	0.137	U	5.76E-06	1.26E-05	4.61E-04	0.137	U	5.13E-08	1.21E-06	4.59E-04	0.137	U
1,1,1-Trichloroethane	2.870	U	1.10E-06	2.65E-05	9.66E-05	1.54	U	5.13E-05	1.23E-05	5.03E-03	0.940	U
1,1,2-Trichloroethane	0.137	U	5.76E-06	1.26E-05	4.61E-04	0.137	U	5.13E-08	1.23E-05	4.59E-04	0.137	U
1,1,1-Trichloroethane	0.109	U	4.19E-06	1.01E-05	3.67E-04	0.109	U	4.08E-08	9.98E-07	3.58E-04	0.109	U
1,1-Dichloroethane	0.109	U	4.19E-06	1.01E-05	3.67E-04	0.108	U	3.01E-08	7.29E-07	2.66E-04	0.108	U
1,1-Dichloroethane	0.079	U	3.04E-06	7.29E-05	2.79E-04	0.079	U	2.96E-08	7.10E-07	2.59E-04	0.079	U
1,2,4-Timethylbenzene	2.660	U	1.02E-06	2.45E-05	8.94E-03	2.65	U	2.96E-08	6.10E-07	2.38E-04	0.079	U
2,2-Dimercaptane	0.154	U	5.22E-06	1.21E-05	5.18E-04	0.154	U	5.13E-08	1.21E-05	5.12E-03	0.154	U
1,2-Dibromoethane	0.120	U	4.61E-06	1.11E-05	4.04E-04	0.120	U	4.08E-08	1.08E-07	3.94E-04	0.120	U
1,2-Dibromoethane	0.109	U	4.19E-06	1.01E-05	3.67E-04	0.108	U	3.01E-08	7.28E-07	2.66E-04	0.108	U
1,2-Dibromoethane	0.092	U	3.54E-06	8.94E-05	3.04E-04	0.092	U	3.01E-08	7.27E-07	2.59E-04	0.092	U
1,3,5-Triphenylbenzene	0.727	U	2.79E-06	6.71E-05	2.45E-03	0.573	U	2.52E-08	6.63E-05	2.21E-03	0.555	U
1,4-Dibromoethane	0.120	U	4.61E-06	1.11E-05	4.04E-04	0.120	U	4.08E-08	1.08E-07	3.94E-04	0.120	U
1,4-Dichloroethane	1.180	U	4.31E-06	1.09E-05	3.97E-03	1.12	U	4.08E-08	1.09E-07	3.78E-03	0.120	U
Biphenol A	10.000	U	3.84E-06	9.23E-05	3.17E-02	4.99	U	3.87E-06	4.49E-05	1.64E-02	1.12E-02	U
1-Chloro-2,2-butanone	2.050	U	1.11E-05	2.80E-04	6.90E-03	2.05	U	1.04E-05	2.80E-04	6.90E-03	1.04E-05	U
Acetone	62.000	U	2.18E-05	5.72E-04	2.09E-01	41.6	U	1.03E-04	2.28E-04	5.72E-01	1.03E-04	U
Acrylonitrile	1.080	U	4.15E-07	1.09E-06	3.64E-03	1.08	U	4.05E-07	9.71E-07	3.02E-04	1.08	U
Benzene	0.120	U	1.42E-07	3.41E-06	1.25E-03	0.110	U	1.19E-07	3.05E-06	1.05E-03	0.110	U
Bromodichloromethane	0.134	U	5.15E-06	1.24E-05	4.51E-04	0.134	U	5.02E-08	1.20E-05	4.40E-04	0.134	U
Butanoflame	0.206	U	7.92E-06	1.94E-05	6.93E-04	0.206	U	7.80E-06	1.85E-05	6.76E-04	0.206	U
Citronellol	0.597	U	2.39E-07	5.51E-06	2.01E-03	0.459	U	1.72E-07	4.13E-05	1.51E-03	0.421	U
Chlorobenzene	0.092	U	1.54E-08	3.77E-07	8.72E-03	0.092	U	1.44E-07	3.72E-07	8.27E-03	0.092	U
Chloroform	0.066	U	2.54E-08	6.09E-07	2.22E-03	0.15	U	5.63E-08	1.34E-05	4.22E-03	0.053	U
Chloroform	0.385	U	1.48E-07	3.55E-06	1.30E-03	0.345	U	1.40E-07	3.45E-05	1.30E-03	0.332	U
Chloroform	1.210	U	5.01E-07	1.21E-06	4.41E-03	1.03	U	4.70E-07	1.05E-05	7.01E-03	1.01	U
1,1,2-Dichloroethane	0.111	U	5.03E-06	1.21E-05	4.41E-04	0.079	U	2.96E-06	7.10E-07	2.99E-04	0.093	U
1,1-Dichloroethane	0.091	U	3.50E-06	8.19E-05	3.04E-03	0.091	U	3.41E-06	8.11E-07	2.99E-03	0.091	U
1,2-Dibromoethane	0.170	U	6.53E-08	1.57E-06	3.72E-04	0.17	U	6.34E-08	1.51E-06	3.53E-04	0.17	U
1,2-Dibromoethane	0.340	U	1.48E-06	3.54E-05	8.99E-03	0.340	U	1.45E-06	3.54E-05	8.73E-03	0.340	U
Ethylbenzene	0.547	U	2.10E-07	5.04E-06	1.14E-03	0.245	U	1.95E-07	4.95E-06	1.12E-03	0.172	U
Isopropylbenzene	2.460	U	9.45E-07	2.27E-05	5.01E-03	2.27E-05	U	9.07E-03	2.21E-05	5.01E-03	9.07E-03	U
Methyl tert-Butyl ether	0.072	U	2.71E-03	6.64E-02	2.42E-04	0.072	U	2.70E-03	6.56E-02	2.36E-04	0.072	U
Methylene chloride	18.310	U	7.01E-05	1.69E-04	3.10E-02	1.69	U	6.31E-06	1.52E-04	5.55E-02	1.50E-04	U
p-Biphenyl	2.740	U	1.05E-06	2.53E-05	9.25E-03	2.74	U	1.01E-06	2.48E-05	9.19E-03	2.74	U
o-Xylene	0.698	U	2.64E-07	6.44E-06	1.57E-03	0.698	U	2.51E-07	6.10E-05	5.53E-03	0.698	U
p-Xylenol	1.240	U	1.05E-06	2.53E-05	9.22E-03	2.74	U	1.01E-06	2.48E-05	9.17E-03	2.74	U
Styrene	1.540	U	6.39E-07	1.51E-05	3.61E-03	1.54	U	5.62E-07	1.42E-05	3.52E-03	1.54	U
Toluene	1.810	U	1.34E-05	3.21E-04	1.17E-01	1.17	U	1.17E-05	3.02E-04	1.07E-01	1.17	U
trans-1,2-Dichloroethene	0.079	U	1.04E-06	2.53E-05	9.21E-03	0.079	U	1.01E-06	2.48E-05	9.16E-03	0.079	U
trans-1,3-Dichloroepoxide	0.091	U	3.50E-08	8.39E-07	3.06E-04	0.091	U	3.41E-08	8.18E-07	2.98E-04	0.091	U
Trichloroethene	112.000	U	4.30E-05	1.03E-03	3.77E-01	92.6	U	4.14E-05	2.97E-01	3.24E-01	12	U
Trichloroethane	78.400	U	3.01E-05	7.23E-04	1.72E-01	131	U	4.91E-05	1.88E-03	4.30E-01	14.3	U
Vinyl chloride	0.051	U	1.96E-05	4.70E-07	1.72E-01	0.051	U	1.91E-05	4.58E-07	1.67E-01	0.051	U
Total VOCs	3.51E+02	Not Applicable	Not Applicable	Not Applicable	1.24E+02	3.12E+02	Not Applicable	Not Applicable	2.07E+00	7.91E+02	Not Applicable	7.93E+01
RIDEM Air Pollution Control Permit Applicability Thresholds (lbs.)	10	100	VOCs	50,000 (Total VOCs)	Not Applicable	10	100	20,000 (Individual VOCs)	50,000 (Total VOCs)	Not Applicable	10	100
											20,000 (Individual VOCs)	50,000 (Total VOCs)

1

U indicates that chemical was not detected by the laboratory.

To be conservative the reporting limit shown in the concentration column was used in the emissions calculations.

Hourly Emissions (lbs/day) = VOC concentration (ug/m³) x measured flow rate (cfm) x 0.01 m³/cfm x 1 hour/day

Daily Emissions (lbs/day) = Hourly Emissions x 365 days/year

* RIDEM Air Pollution Control Regulation No. 9 (August 1971; Amended April 2004)



ANALYTICAL REPORT

Lab Number: L1010920
Client: EA Engineering, Science and Tech
2350 Post Road
Warwick, RI 02886

ATTN: Frank Postma
Phone: (401) 736-3440
Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01
Report Date: 07/26/10

Certifications & Approvals: MA (M-MA030), NY (11627), CT (PH-0141), NH (2206), NJ (MA015), RI (LA000289), 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



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1010920-01	IMP-2	PROVIDENCE, RI	07/16/10 11:46
L1010920-02	IMP-1	PROVIDENCE, RI	07/16/10 11:08
L1010920-03	MP-1	PROVIDENCE, RI	07/16/10 12:09
L1010920-04	MP-3	PROVIDENCE, RI	07/16/10 12:36
L1010920-05	MP-4	PROVIDENCE, RI	07/16/10 12:29
L1010920-06	MP-6	PROVIDENCE, RI	07/16/10 12:51
L1010920-07	RT-1	PROVIDENCE, RI	07/16/10 13:15
L1010920-08	RT-2	PROVIDENCE, RI	07/16/10 13:51
L1010920-09	RT-3	PROVIDENCE, RI	07/16/10 13:46



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (I.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

The canister certification results are provided as an addendum.

The internal standards were within method criteria.

Volatile Organics in Air (SIM)

L1010920-01, -03, -05, and -07 through -09: results for Chloromethane should be considered estimated due to co-elution with a non-target peak.

L1010920-03 through -06 and WG424047-5 Duplicate were re-analyzed on dilution in order to quantitate the sample within the calibration range. The result should be considered estimated, and is qualified with an E flag, for any compound that exceeded the calibration on the initial analysis. The re-analysis was performed only for the compound that exceeded the calibration range.

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

Case Narrative (continued)

L1010920-06 and WG424047-5 have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

The WG424047-3 LCS recoveries for Methylene chloride (134%), Methyl tert butyl ether (132%), and 1,2,4-Trimethylbenzene (133%) are outside the 70%-130% acceptance limit. The LCS was within overall method allowances, therefore the analysis proceeded.

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: *Kathleen M. O'Brien* Kathleen O'Brien

Title: Technical Director/Representative

Date: 07/26/10

AIR



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-01	Date Collected:	07/16/10 11:46
Client ID:	IMP-2	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/22/10 23:53		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	0.665	0.050	—	3.29	0.247	—	1
Chloromethane	ND	0.500	—	ND	1.03	—	1
Vinyl chloride	ND	0.020	—	ND	0.051	—	1
Chloroethane	0.033	0.020	—	0.087	0.053	—	1
Acetone	8.88	2.00	—	21.1	4.75	—	1
Trichlorofluoromethane	3.53	0.050	—	19.8	0.281	—	1
Acrylonitrile	ND	0.500	—	ND	1.08	—	1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Methylene chloride	7.64	1.00	—	26.5	3.47	—	1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—	1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—	1
2-Butanone	0.949	0.500	—	2.80	1.47	—	1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Chloroform	0.071	0.020	—	0.346	0.098	—	1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—	1
1,1,1-Trichloroethane	0.103	0.020	—	0.562	0.109	—	1
Benzene	ND	0.100	—	ND	0.319	—	1
Carbon tetrachloride	0.081	0.020	—	0.509	0.126	—	1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—	1
Bromodichloromethane	ND	0.020	—	ND	0.134	—	1
Trichloroethene	5.19	0.020	—	27.8	0.107	—	1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—	1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-01	Date Collected:	07/16/10 11:46
Client ID:	IMP-2	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—		1
Toluene	1.55	0.020	—	5.85	0.075	—		1
Dibromochloromethane	ND	0.020	—	ND	0.170	—		1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—		1
Tetrachloroethene	2.83	0.020	—	19.2	0.136	—		1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—		1
Chlorobenzene	ND	0.020	—	ND	0.092	—		1
Ethylbenzene	0.327	0.020	—	1.42	0.087	—		1
p/m-Xylene	1.13	0.040	—	4.91	0.174	—		1
Bromoform	ND	0.020	—	ND	0.206	—		1
Styrene	0.203	0.020	—	0.864	0.085	—		1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—		1
o-Xylene	0.473	0.020	—	2.05	0.087	—		1
Isopropylbenzene	ND	0.500	—	ND	2.46	—		1
1,3,5-Trimethylbenzene	0.255	0.020	—	1.25	0.098	—		1
1,2,4-Trimethylbenzene	1.03	0.020	—	5.05	0.098	—		1
1,3-Dichlorobenzene	0.027	0.020	—	0.162	0.120	—		1
1,4-Dichlorobenzene	0.840	0.020	—	5.05	0.120	—		1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—		1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—		1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—		1
n-Butylbenzene	ND	0.500	—	ND	2.74	—		1



Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-01	Date Collected:	07/16/10 11:46
Client ID:	IMP-2	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	103		60-140
bromochloromethane	81		60-140
chlorobenzene-d5	101		60-140

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-02	Date Collected:	07/16/10 11:08
Client ID:	IMP-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/23/10 00:32		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualfier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	0.638	0.050	—	3.15	0.247	—	1
Chloromethane	ND	0.500	—	ND	1.03	—	1
Vinyl chloride	ND	0.020	—	ND	0.051	—	1
Chloroethane	0.020	0.020	—	0.053	0.053	—	1
Acetone	3.52	2.00	—	8.34	4.75	—	1
Trichlorofluoromethane	0.398	0.050	—	2.23	0.281	—	1
Acrylonitrile	ND	0.500	—	ND	1.08	—	1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Methylene chloride	7.82	1.00	—	27.1	3.47	—	1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—	1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—	1
2-Butanone	0.523	0.500	—	1.54	1.47	—	1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Chloroform	0.042	0.020	—	0.205	0.098	—	1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—	1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Benzene	ND	0.100	—	ND	0.319	—	1
Carbon tetrachloride	0.089	0.020	—	0.559	0.126	—	1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—	1
Bromodichloromethane	ND	0.020	—	ND	0.134	—	1
Trichloroethene	ND	0.020	—	ND	0.107	—	1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—	1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-02	Date Collected:	07/16/10 11:08
Client ID:	IMP-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—	—	1
Toluene	1.53	0.020	—	5.77	0.075	—	—	1
Dibromochloromethane	ND	0.020	—	ND	0.170	—	—	1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—	—	1
Tetrachloroethene	2.27	0.020	—	15.4	0.136	—	—	1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	—	1
Chlorobenzene	ND	0.020	—	ND	0.092	—	—	1
Ethylbenzene	0.349	0.020	—	1.51	0.087	—	—	1
p/m-Xylene	1.14	0.040	—	4.95	0.174	—	—	1
Bromoform	ND	0.020	—	ND	0.206	—	—	1
Styrene	0.080	0.020	—	0.340	0.085	—	—	1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	—	1
o-Xylene	0.433	0.020	—	1.88	0.087	—	—	1
Isopropylbenzene	ND	0.500	—	ND	2.46	—	—	1
1,3,5-Trimethylbenzene	0.219	0.020	—	1.08	0.098	—	—	1
1,2,4-Trimethylbenzene	0.872	0.020	—	4.28	0.098	—	—	1
1,3-Dichlorobenzene	0.022	0.020	—	0.132	0.120	—	—	1
1,4-Dichlorobenzene	0.272	0.020	—	1.63	0.120	—	—	1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—	—	1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—	—	1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—	—	1
n-Butylbenzene	ND	0.500	—	ND	2.74	—	—	1



Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL**Project Number:** 14687.01**Lab Number:** L1010920**Report Date:** 07/26/10**SAMPLE RESULTS**

Lab ID:	L1010920-02	Date Collected:	07/16/10 11:08
Client ID:	IMP-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	85		60-140
chlorobenzene-d5	95		60-140

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-03	Date Collected:	07/16/10 12:09
Client ID:	MP-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/23/10 01:10		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualifler	Dilution Factor
		RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	0.681	0.050	—	3.36	0.247	—	1
Chloromethane	0.638	0.500	—	1.32	1.03	—	1
Vinyl chloride	ND	0.020	—	ND	0.051	—	1
Chloroethane	0.038	0.020	—	0.100	0.053	—	1
Acetone	275	2.00	—	654	4.75	—	E 1
Trichlorofluoromethane	0.464	0.050	—	2.60	0.281	—	1
Acrylonitrile	ND	0.500	—	ND	1.08	—	1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Methylene chloride	6.91	1.00	—	24.0	3.47	—	1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—	1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—	1
2-Butanone	1800	0.500	—	5320	1.47	—	E 1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Chloroform	0.074	0.020	—	0.361	0.098	—	1
1,2-Dichloroethane	0.025	0.020	—	0.101	0.081	—	1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Benzene	0.104	0.100	—	0.332	0.319	—	1
Carbon tetrachloride	0.073	0.020	—	0.459	0.126	—	1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—	1
Bromodichloromethane	ND	0.020	—	ND	0.134	—	1
Trichloroethene	0.062	0.020	—	0.333	0.107	—	1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—	1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-03	Date Collected:	07/16/10 12:09
Client ID:	MP-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		ug/m3		Dilution Factor
		RL	MDL	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab						
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—
Toluene	5.89	0.020	—	22.2	0.075	—
Dibromochloromethane	ND	0.020	—	ND	0.170	—
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—
Tetrachloroethene	1.83	0.020	—	12.4	0.136	—
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—
Chlorobenzene	ND	0.020	—	ND	0.092	—
Ethylbenzene	1.90	0.020	—	8.23	0.087	—
p/m-Xylene	5.04	0.040	—	21.8	0.174	—
Bromoform	ND	0.020	—	ND	0.206	—
Styrene	0.134	0.020	—	0.570	0.085	—
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—
o-Xylene	1.17	0.020	—	5.07	0.087	—
Isopropylbenzene	ND	0.500	—	ND	2.46	—
1,3,5-Trimethylbenzene	0.562	0.020	—	2.76	0.098	—
1,2,4-Trimethylbenzene	1.69	0.020	—	8.30	0.098	—
1,3-Dichlorobenzene	0.099	0.020	—	0.595	0.120	—
1,4-Dichlorobenzene	0.297	0.020	—	1.78	0.120	—
sec-Butylbenzene	ND	0.500	—	ND	2.74	—
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—
n-Butylbenzene	ND	0.500	—	ND	2.74	—



Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-03	Date Collected:	07/16/10 12:09
Client ID:	MP-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifler	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								

Internal Standard	% Recovery	Qualifler	Acceptance Criteria
1,4-difluorobenzene	109		60-140
bromochloromethane	81		60-140
chlorobenzene-d5	105		60-140

Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL**Project Number:** 14687.01**Lab Number:** L1010920**Report Date:** 07/26/10**SAMPLE RESULTS**

Lab ID:	L1010920-03 D	Date Collected:	07/16/10 12:09
Client ID:	MP-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/24/10 16:18		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Acetone	250	100	—	594	238	—	50.1
2-Butanone	2100	25.0	—	6180	73.8	—	50.1

Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-03	D	Date Collected:	07/16/10 12:09
Client ID:	MP-1		Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI		Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Dilution Factor
		RL	MDL		RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	88		60-140
bromochloromethane	76		60-140
chlorobenzene-d5	88		60-140

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-04	Date Collected:	07/16/10 12:36
Client ID:	MP-3	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/23/10 01:49		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualifler	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	0.529	0.050	—	2.61	0.247	—	1
Chloromethane	30.4	0.500	—	62.8	1.03	—	1
Vinyl chloride	0.777	0.020	—	1.98	0.051	—	1
Chloroethane	0.967	0.020	—	2.55	0.053	—	1
Acetone	2020	2.00	—	4800	4.75	—	E 1
Trichlorofluoromethane	0.328	0.050	—	1.84	0.281	—	1
Acrylonitrile	ND	0.500	—	ND	1.08	—	1
1,1-Dichloroethene	0.052	0.020	—	0.206	0.079	—	1
Methylene chloride	6.21	1.00	—	21.5	3.47	—	1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
1,1-Dichloroethane	0.612	0.020	—	2.48	0.081	—	1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—	1
2-Butanone	7140	0.500	—	21000	1.47	—	E 1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Chloroform	ND	0.020	—	ND	0.098	—	1
1,2-Dichloroethane	0.357	0.020	—	1.44	0.081	—	1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Benzene	0.480	0.100	—	1.53	0.319	—	1
Carbon tetrachloride	0.076	0.020	—	0.478	0.126	—	1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—	1
Bromodichloromethane	ND	0.020	—	ND	0.134	—	1
Trichloroethene	0.062	0.020	—	0.333	0.107	—	1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—	1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1



Project Name: ALVAREZ HIGH SCHOOL

Lab Number: L1010920

Project Number: 14687.01

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-04	Date Collected:	07/16/10 12:36
Client ID:	MP-3	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		ug/m3		Qualifler	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Toluene	4.75	0.020	—	17.9	0.075	—	1
Dibromochloromethane	ND	0.020	—	ND	0.170	—	1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—	1
Tetrachloroethene	1.88	0.020	—	12.7	0.136	—	1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	1
Chlorobenzene	ND	0.020	—	ND	0.092	—	1
Ethylbenzene	0.552	0.020	—	2.40	0.087	—	1
p/m-Xylene	1.62	0.040	—	7.01	0.174	—	1
Bromoform	ND	0.020	—	ND	0.206	—	1
Styrene	0.214	0.020	—	0.911	0.085	—	1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	1
o-Xylene	0.655	0.020	—	2.84	0.087	—	1
Isopropylbenzene	0.541	0.500	—	2.66	2.46	—	1
1,3,5-Trimethylbenzene	0.383	0.020	—	1.88	0.098	—	1
1,2,4-Trimethylbenzene	1.68	0.020	—	8.23	0.098	—	1
1,3-Dichlorobenzene	0.114	0.020	—	0.685	0.120	—	1
1,4-Dichlorobenzene	0.383	0.020	—	2.30	0.120	—	1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—	1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—	1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—	1
n-Butylbenzene	ND	0.500	—	ND	2.74	—	1



Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL**Project Number:** 14687.01**Lab Number:** L1010920**Report Date:** 07/26/10**SAMPLE RESULTS**

Lab ID:	L1010920-04	Date Collected:	07/16/10 12:36
Client ID:	MP-3	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	116		60-140
bromochloromethane	111		60-140
chlorobenzene-d5	114		60-140

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-04 D	Date Collected:	07/16/10 12:36
Client ID:	MP-3	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/23/10 12:33		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Acetone	1380	506	—	3280	1200	—	253
2-Butanone	9280	126	—	27400	373	—	253



Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL

Lab Number: L1010920

Project Number: 14687.01

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-04 D	Date Collected:	07/16/10 12:36
Client ID:	MP-3	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	105		60-140
chlorobenzene-d5	89		60-140

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-05	Date Collected:	07/16/10 12:29
Client ID:	MP-4	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/23/10 02:27		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualifler	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	0.516	0.050	—	2.55	0.247	—	1
Chloromethane	0.718	0.500	—	1.48	1.03	—	1
Vinyl chloride	ND	0.020	—	ND	0.051	—	1
Chloroethane	0.063	0.020	—	0.166	0.053	—	1
Acetone	85.3	2.00	—	202	4.75	—	E 1
Trichlorofluoromethane	2.92	0.050	—	16.4	0.281	—	1
Acrylonitrile	ND	0.500	—	ND	1.08	—	1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Methylene chloride	5.63	1.00	—	19.5	3.47	—	1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—	1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—	1
2-Butanone	150	0.500	—	441	1.47	—	E 1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Chloroform	0.044	0.020	—	0.215	0.098	—	1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—	1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Benzene	0.216	0.100	—	0.689	0.319	—	1
Carbon tetrachloride	0.082	0.020	—	0.515	0.126	—	1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—	1
Bromodichloromethane	ND	0.020	—	ND	0.134	—	1
Trichloroethene	1.52	0.020	—	8.14	0.107	—	1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—	1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1



Project Name: ALVAREZ HIGH SCHOOL

Lab Number: L1010920

Project Number: 14687.01

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-05	Date Collected:	07/16/10 12:29
Client ID:	MP-4	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Toluene	1.59	0.020	—	5.98	0.075	—	1
Dibromochloromethane	ND	0.020	—	ND	0.170	—	1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—	1
Tetrachloroethene	1.60	0.020	—	10.9	0.136	—	1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	1
Chlorobenzene	0.046	0.020	—	0.212	0.092	—	1
Ethylbenzene	0.416	0.020	—	1.80	0.087	—	1
p/m-Xylene	1.46	0.040	—	6.36	0.174	—	1
Bromoform	ND	0.020	—	ND	0.206	—	1
Styrene	0.155	0.020	—	0.660	0.085	—	1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	1
o-Xylene	0.606	0.020	—	2.63	0.087	—	1
Isopropylbenzene	ND	0.500	—	ND	2.46	—	1
1,3,5-Trimethylbenzene	0.369	0.020	—	1.81	0.098	—	1
1,2,4-Trimethylbenzene	1.65	0.020	—	8.09	0.098	—	1
1,3-Dichlorobenzene	0.331	0.020	—	1.99	0.120	—	1
1,4-Dichlorobenzene	0.477	0.020	—	2.86	0.120	—	1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—	1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—	1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—	1
n-Butylbenzene	ND	0.500	—	ND	2.74	—	1



Project Name: ALVAREZ HIGH SCHOOL**Lab Number:** L1010920**Project Number:** 14687.01**Report Date:** 07/26/10**SAMPLE RESULTS**

Lab ID:	L1010920-05	Date Collected:	07/16/10 12:29
Client ID:	MP-4	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	100		60-140
bromochloromethane	113		60-140
chlorobenzene-d5	104		60-140

Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL**Project Number:** 14687.01**Lab Number:** L1010920**Report Date:** 07/26/10**SAMPLE RESULTS**

Lab ID:	L1010920-05	D	Date Collected:	07/16/10 12:29
Client ID:	MP-4		Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI		Field Prep:	Not Specified
Matrix:	Soil_Vapor			
Anaytical Method:	48,TO-15-SIM			
Analytical Date:	07/23/10 13:11			
Analyst:	RY			

Parameter	Results	ppbV		ug/m3			Qualifier	Dilution Factor
		RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Acetone	78.2	5.00	—	186	11.9	—		2.5



Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-05	D	Date Collected:	07/16/10 12:29
Client ID:	MP-4		Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI		Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	108		60-140
bromochloromethane	118		60-140
chlorobenzene-d5	108		60-140

Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-05	D2	Date Collected:	07/16/10 12:29
Client ID:	MP-4		Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI		Field Prep:	Not Specified
Matrix:	Soil_Vapor			
Anaytical Method:	48,TO-15-SIM			
Analytical Date:	07/24/10 16:55			
Analyst:	RY			

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
2-Butanone	131	2.50	-	386	7.37	-	5



Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID: L1010920-05 D2 Date Collected: 07/16/10 12:29
Client ID: MP-4 Date Received: 07/19/10
Sample Location: PROVIDENCE, RI Field Prep: Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	90		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	94		60-140

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID: L1010920-06 D Date Collected: 07/16/10 12:51
 Client ID: MP-6 Date Received: 07/19/10
 Sample Location: PROVIDENCE, RI Field Prep: Not Specified
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 07/24/10 17:46
 Analyst: RY

Parameter	Results	ppbV			Results	ug/m3			Dilution Factor
		RL	MDL	Qualifer		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab									
Dichlorodifluoromethane	0.604	0.378	—		2.98	1.87	—		7.553
Chloromethane	ND	3.78	—		ND	7.79	—		7.553
Vinyl chloride	ND	0.151	—		ND	0.386	—		7.553
Chloroethane	ND	0.151	—		ND	0.398	—		7.553
Acetone	4780	15.1	—	E	11400	35.8	—	E	7.553
Trichlorofluoromethane	ND	0.378	—		ND	2.12	—		7.553
Acrylonitrile	ND	3.78	—		ND	8.19	—		7.553
1,1-Dichloroethene	ND	0.151	—		ND	0.598	—		7.553
Methylene chloride	ND	7.55	—		ND	26.2	—		7.553
trans-1,2-Dichloroethene	ND	0.151	—		ND	0.598	—		7.553
1,1-Dichloroethane	ND	0.151	—		ND	0.611	—		7.553
Methyl tert butyl ether	ND	0.151	—		ND	0.544	—		7.553
2-Butanone	3510	3.78	—	E	10400	11.1	—	E	7.553
cis-1,2-Dichloroethene	ND	0.151	—		ND	0.598	—		7.553
Chloroform	ND	0.151	—		ND	0.737	—		7.553
1,2-Dichloroethane	ND	0.151	—		ND	0.611	—		7.553
1,1,1-Trichloroethane	ND	0.151	—		ND	0.824	—		7.553
Benzene	ND	0.755	—		ND	2.41	—		7.553
Carbon tetrachloride	ND	0.151	—		ND	0.950	—		7.553
1,2-Dichloropropane	ND	0.151	—		ND	0.698	—		7.553
Bromodichloromethane	ND	0.151	—		ND	1.01	—		7.553
Trichloroethene	ND	0.151	—		ND	0.811	—		7.553
cis-1,3-Dichloropropene	ND	0.151	—		ND	0.685	—		7.553
4-Methyl-2-pentanone	ND	3.78	—		ND	15.4	—		7.553
trans-1,3-Dichloropropene	ND	0.151	—		ND	0.685	—		7.553



Project Name: ALVAREZ HIGH SCHOOL

Lab Number: L1010920

Project Number: 14687.01

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-06	D	Date Collected:	07/16/10 12:51
Client ID:	MP-6		Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI		Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,1,2-Trichloroethane	ND	0.151	—	ND	0.824	—		7.553
Toluene	1.47	0.151	—	5.54	0.569	—		7.553
Dibromochloromethane	ND	0.151	—	ND	1.28	—		7.553
1,2-Dibromoethane	ND	0.151	—	ND	1.16	—		7.553
Tetrachloroethene	1.48	0.151	—	10.0	1.02	—		7.553
1,1,1,2-Tetrachloroethane	ND	0.151	—	ND	1.04	—		7.553
Chlorobenzene	ND	0.151	—	ND	0.695	—		7.553
Ethylbenzene	0.332	0.151	—	1.44	0.655	—		7.553
p/m-Xylene	1.11	0.302	—	4.82	1.31	—		7.553
Bromoform	ND	0.151	—	ND	1.56	—		7.553
Styrene	ND	0.151	—	ND	0.643	—		7.553
1,1,2,2-Tetrachloroethane	ND	0.151	—	ND	1.04	—		7.553
o-Xylene	0.483	0.151	—	2.10	0.655	—		7.553
Isopropylbenzene	ND	3.78	—	ND	18.5	—		7.553
1,3,5-Trimethylbenzene	0.340	0.151	—	1.67	0.742	—		7.553
1,2,4-Trimethylbenzene	1.28	0.151	—	6.27	0.742	—		7.553
1,3-Dichlorobenzene	ND	0.151	—	ND	0.907	—		7.553
1,4-Dichlorobenzene	0.226	0.151	—	1.36	0.907	—		7.553
sec-Butylbenzene	ND	3.78	—	ND	20.7	—		7.553
p-Isopropyltoluene	ND	3.78	—	ND	20.7	—		7.553
1,2-Dichlorobenzene	ND	0.151	—	ND	0.907	—		7.553
n-Butylbenzene	ND	3.78	—	ND	20.7	—		7.553



Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL

Lab Number: L1010920

Project Number: 14687.01

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-06	D	Date Collected:	07/16/10 12:51
Client ID:	MP-6		Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI		Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	82		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	87		60-140

Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL**Lab Number:** L1010920**Project Number:** 14687.01**Report Date:** 07/26/10**SAMPLE RESULTS**

Lab ID:	L1010920-06	D2	Date Collected:	07/16/10 12:51
Client ID:	MP-6		Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI		Field Prep:	Not Specified
Matrix:	Soil_Vapor			
Anaytical Method:	48,TO-15-SIM			
Analytical Date:	07/23/10 13:49			
Analyst:	RY			

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Acetone	4930	504	—	11700	1200	—	251.8
2-Butanone	4090	126	—	12000	371	—	251.8



Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL

Lab Number: L1010920

Project Number: 14687.01

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-06	D2	Date Collected:	07/16/10 12:51
Client ID:	MP-6		Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI		Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	84		60-140
bromochloromethane	102		60-140
chlorobenzene-d5	92		60-140

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-07	Date Collected:	07/16/10 13:15
Client ID:	RT-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/23/10 09:49		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualfier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	0.777	0.050	—	3.84	0.247	—	1
Chloromethane	0.634	0.500	—	1.31	1.03	—	1
Vinyl chloride	ND	0.020	—	ND	0.051	—	1
Chloroethane	0.025	0.020	—	0.066	0.053	—	1
Acelone	26.1	2.00	—	62.0	4.75	—	1
Trichlorofluoromethane	14.0	0.050	—	78.4	0.281	—	1
Acrylonitrile	ND	0.500	—	ND	1.08	—	1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Methylene chloride	5.28	1.00	—	18.3	3.47	—	1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
1,1-Dichloroethane	0.027	0.020	—	0.109	0.081	—	1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—	1
2-Butanone	3.40	0.500	—	10.0	1.47	—	1
cis-1,2-Dichloroethene	0.033	0.020	—	0.131	0.079	—	1
Chloroform	0.079	0.020	—	0.385	0.098	—	1
1,2-Dichloroethane	0.027	0.020	—	0.109	0.081	—	1
1,1,1-Trichloroethane	0.527	0.020	—	2.87	0.109	—	1
Benzene	0.116	0.100	—	0.370	0.319	—	1
Carbon tetrachloride	0.095	0.020	—	0.597	0.126	—	1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—	1
Bromodichloromethane	ND	0.020	—	ND	0.134	—	1
Trichloroethene	20.8	0.020	—	112	0.107	—	1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—	1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-07	Date Collected:	07/16/10 13:15
Client ID:	RT-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—	—	1
Toluene	0.482	0.020	—	1.81	0.075	—	—	1
Dibromochloromethane	ND	0.020	—	ND	0.170	—	—	1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—	—	1
Tetrachloroethene	5.13	0.020	—	34.8	0.136	—	—	1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	—	1
Chlorobenzene	ND	0.020	—	ND	0.092	—	—	1
Ethylbenzene	0.126	0.020	—	0.547	0.087	—	—	1
p/m-Xylene	0.377	0.040	—	1.64	0.174	—	—	1
Bromoform	ND	0.020	—	ND	0.206	—	—	1
Styrene	0.078	0.020	—	0.332	0.085	—	—	1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	—	1
o-Xylene	0.161	0.020	—	0.698	0.087	—	—	1
Isopropylbenzene	ND	0.500	—	ND	2.46	—	—	1
1,3,5-Trimethylbenzene	0.148	0.020	—	0.727	0.098	—	—	1
1,2,4-Trimethylbenzene	0.542	0.020	—	2.66	0.098	—	—	1
1,3-Dichlorobenzene	ND	0.020	—	ND	0.120	—	—	1
1,4-Dichlorobenzene	0.197	0.020	—	1.18	0.120	—	—	1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—	—	1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—	—	1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—	—	1
n-Butylbenzene	ND	0.500	—	ND	2.74	—	—	1



Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-07	Date Collected:	07/16/10 13:15
Client ID:	RT-1	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	86		60-140
chlorobenzene-d5	98		60-140

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-08	Date Collected:	07/16/10 13:51
Client ID:	RT-2	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/23/10 10:27		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualfler	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	0.497	0.050	—	2.46	0.247	—	1
Chloromethane	ND	0.500	—	ND	1.03	—	1
Vinyl chloride	ND	0.020	—	ND	0.051	—	1
Chloroethane	0.057	0.020	—	0.150	0.053	—	1
Acetone	17.6	2.00	—	41.6	4.75	—	1
Trichlorofluoromethane	23.4	0.050	—	131	0.281	—	1
Acrylonitrile	ND	0.500	—	ND	1.08	—	1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Methylene chloride	4.88	1.00	—	16.9	3.47	—	1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—	1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—	1
2-Butanone	1.69	0.500	—	4.99	1.47	—	1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Chloroform	0.093	0.020	—	0.454	0.098	—	1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—	1
1,1,1-Trichloroethane	0.283	0.020	—	1.54	0.109	—	1
Benzene	ND	0.100	—	ND	0.319	—	1
Carbon tetrachloride	0.073	0.020	—	0.459	0.126	—	1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—	1
Bromodichloromethane	ND	0.020	—	ND	0.134	—	1
Trichloroethene	16.9	0.020	—	90.6	0.107	—	1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—	1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1



Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-08	Date Collected:	07/16/10 13:51
Client ID:	RT-2	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—	—	1
Toluene	0.301	0.020	—	1.13	0.075	—	—	1
Dibromochloromethane	ND	0.020	—	ND	0.170	—	—	1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—	—	1
Tetrachloroethene	2.44	0.020	—	16.5	0.136	—	—	1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	—	1
Chlorobenzene	ND	0.020	—	ND	0.092	—	—	1
Ethylbenzene	0.098	0.020	—	0.425	0.087	—	—	1
p/m-Xylene	0.347	0.040	—	1.50	0.174	—	—	1
Bromoform	ND	0.020	—	ND	0.206	—	—	1
Styrene	0.068	0.020	—	0.289	0.085	—	—	1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	—	1
o-Xylene	0.135	0.020	—	0.586	0.087	—	—	1
Isopropylbenzene	ND	0.500	—	ND	2.46	—	—	1
1,3,5-Trimethylbenzene	0.137	0.020	—	0.673	0.098	—	—	1
1,2,4-Trimethylbenzene	0.536	0.020	—	2.63	0.098	—	—	1
1,3-Dichlorobenzene	ND	0.020	—	ND	0.120	—	—	1
1,4-Dichlorobenzene	0.220	0.020	—	1.32	0.120	—	—	1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—	—	1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—	—	1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—	—	1
n-Butylbenzene	ND	0.500	—	ND	2.74	—	—	1



Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL

Lab Number: L1010920

Project Number: 14687.01

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-08	Date Collected:	07/16/10 13:51
Client ID:	RT-2	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	116		60-140
bromochloromethane	111		60-140
chlorobenzene-d5	114		60-140

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-09	Date Collected:	07/16/10 13:46
Client ID:	RT-3	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/23/10 11:06		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	0.455	0.050	—	2.25	0.247	—	1
Chloromethane	ND	0.500	—	ND	1.03	—	1
Vinyl chloride	ND	0.020	—	ND	0.051	—	1
Chloroethane	ND	0.020	—	ND	0.053	—	1
Acetone	6.38	2.00	—	15.1	4.75	—	1
Trichlorofluoromethane	2.55	0.050	—	14.3	0.281	—	1
Acrylonitrile	ND	0.500	—	ND	1.08	—	1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—	1
Methylene chloride	5.10	1.00	—	17.7	3.47	—	1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—	1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—	1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—	1
2-Butanone	0.579	0.500	—	1.71	1.47	—	1
cis-1,2-Dichloroethene	0.021	0.020	—	0.083	0.079	—	1
Chloroform	0.109	0.020	—	0.532	0.098	—	1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—	1
1,1,1-Trichloroethane	0.174	0.020	—	0.949	0.109	—	1
Benzene	ND	0.100	—	ND	0.319	—	1
Carbon tetrachloride	0.075	0.020	—	0.471	0.126	—	1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—	1
Bromodichloromethane	ND	0.020	—	ND	0.134	—	1
Trichloroethene	5.95	0.020	—	32.0	0.107	—	1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—	1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1



Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-09	Date Collected:	07/16/10 13:46
Client ID:	RT-3	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—	—	1
Toluene	0.376	0.020	—	1.42	0.075	—	—	1
Dibromochloromethane	ND	0.020	—	ND	0.170	—	—	1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—	—	1
Tetrachloroethene	11.8	0.020	—	80.2	0.136	—	—	1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	—	1
Chlorobenzene	ND	0.020	—	ND	0.092	—	—	1
Ethylbenzene	0.124	0.020	—	0.538	0.087	—	—	1
p/m-Xylene	0.343	0.040	—	1.49	0.174	—	—	1
Bromoform	ND	0.020	—	ND	0.206	—	—	1
Styrene	0.028	0.020	—	0.119	0.085	—	—	1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	—	1
o-Xylene	0.111	0.020	—	0.482	0.087	—	—	1
Isopropylbenzene	ND	0.500	—	ND	2.46	—	—	1
1,3,5-Trimethylbenzene	0.113	0.020	—	0.555	0.098	—	—	1
1,2,4-Trimethylbenzene	0.398	0.020	—	1.96	0.098	—	—	1
1,3-Dichlorobenzene	ND	0.020	—	ND	0.120	—	—	1
1,4-Dichlorobenzene	0.120	0.020	—	0.721	0.120	—	—	1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—	—	1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—	—	1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—	—	1
n-Butylbenzene	ND	0.500	—	ND	2.74	—	—	1



Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

SAMPLE RESULTS

Lab ID:	L1010920-09	Date Collected:	07/16/10 13:46
Client ID:	RT-3	Date Received:	07/19/10
Sample Location:	PROVIDENCE, RI	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	

Volatile Organics in Air by SIM - Mansfield Lab

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	114		60-140
bromochloromethane	122		60-140
chlorobenzene-d5	112		60-140

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
 Analytical Date: 07/22/10 19:23

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-09 Batch: WG424047-4								
Dichlorodifluoromethane	ND	0.050	—	ND	0.247	—		1
Chloromethane	ND	0.500	—	ND	1.03	—		1
Vinyl chloride	ND	0.020	—	ND	0.051	—		1
Chloroethane	ND	0.020	—	ND	0.053	—		1
Acetone	ND	2.00	—	ND	4.75	—		1
Trichlorofluoromethane	ND	0.050	—	ND	0.281	—		1
Acrylonitrile	ND	0.500	—	ND	1.08	—		1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—		1
Methylene chloride	ND	1.00	—	ND	3.47	—		1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—		1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—		1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—		1
2-Butanone	ND	0.500	—	ND	1.47	—		1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—		1
Chloroform	ND	0.020	—	ND	0.098	—		1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—		1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—		1
Benzene	ND	0.100	—	ND	0.319	—		1
Carbon tetrachloride	ND	0.020	—	ND	0.126	—		1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—		1
Bromodichloromethane	ND	0.020	—	ND	0.134	—		1
Trichloroethene	ND	0.020	—	ND	0.107	—		1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—		1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 07/22/10 19:23

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-09 Batch: WG424047-4								
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—		1
Toluene	ND	0.020	—	ND	0.075	—		1
Dibromochloromethane	ND	0.020	—	ND	0.170	—		1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—		1
Tetrachloroethene	ND	0.020	—	ND	0.136	—		1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—		1
Chlorobenzene	ND	0.020	—	ND	0.092	—		1
Ethylbenzene	ND	0.020	—	ND	0.087	—		1
p/m-Xylene	ND	0.040	—	ND	0.174	—		1
Bromoform	ND	0.020	—	ND	0.206	—		1
Styrene	ND	0.020	—	ND	0.085	—		1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—		1
o-Xylene	ND	0.020	—	ND	0.087	—		1
Isopropylbenzene	ND	0.500	—	ND	2.46	—		1
1,3,5-Trimethylbenzene	ND	0.020	—	ND	0.098	—		1
1,2,4-Trimethylbenzene	ND	0.020	—	ND	0.098	—		1
1,3-Dichlorobenzene	ND	0.020	—	ND	0.120	—		1
1,4-Dichlorobenzene	ND	0.020	—	ND	0.120	—		1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—		1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—		1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—		1
n-Butylbenzene	ND	0.500	—	ND	2.74	—		1



Project Name: ALVAREZ HIGH SCHOOL

Lab Number: L1010920

Project Number: 14687.01

Report Date: 07/26/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 07/24/10 15:21

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 03,05-06 Batch: WG424047-9								
Dichlorodifluoromethane	ND	0.050	—	ND	0.247	—		1
Chloromethane	ND	0.500	—	ND	1.03	—		1
Vinyl chloride	ND	0.020	—	ND	0.051	—		1
Chloroethane	ND	0.020	—	ND	0.053	—		1
Acetone	ND	2.00	—	ND	4.75	—		1
Trichlorofluoromethane	ND	0.050	—	ND	0.281	—		1
Acrylonitrile	ND	0.500	—	ND	1.08	—		1
1,1-Dichloroethene	ND	0.020	—	ND	0.079	—		1
Methylene chloride	ND	1.00	—	ND	3.47	—		1
trans-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—		1
1,1-Dichloroethane	ND	0.020	—	ND	0.081	—		1
Methyl tert butyl ether	ND	0.020	—	ND	0.072	—		1
2-Butanone	ND	0.500	—	ND	1.47	—		1
cis-1,2-Dichloroethene	ND	0.020	—	ND	0.079	—		1
Chloroform	ND	0.020	—	ND	0.098	—		1
1,2-Dichloroethane	ND	0.020	—	ND	0.081	—		1
1,1,1-Trichloroethane	ND	0.020	—	ND	0.109	—		1
Benzene	ND	0.100	—	ND	0.319	—		1
Carbon tetrachloride	ND	0.020	—	ND	0.126	—		1
1,2-Dichloropropane	ND	0.020	—	ND	0.092	—		1
Bromodichloromethane	ND	0.020	—	ND	0.134	—		1
Trichloroethene	ND	0.020	—	ND	0.107	—		1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—		1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—		1



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 07/24/10 15:21

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 03,05-06 Batch: WG424047-9							
1,1,2-Trichloroethane	ND	0.020	-	ND	0.109	-	1
Toluene	ND	0.020	-	ND	0.075	-	1
Dibromochloromethane	ND	0.020	-	ND	0.170	-	1
1,2-Dibromoethane	ND	0.020	-	ND	0.154	-	1
Tetrachloroethene	ND	0.020	-	ND	0.136	-	1
1,1,1,2-Tetrachloroethane	ND	0.020	-	ND	0.137	-	1
Chlorobenzene	ND	0.020	-	ND	0.092	-	1
Ethylbenzene	ND	0.020	-	ND	0.087	-	1
p/m-Xylene	ND	0.040	-	ND	0.174	-	1
Bromoform	ND	0.020	-	ND	0.206	-	1
Styrene	ND	0.020	-	ND	0.085	-	1
1,1,2,2-Tetrachloroethane	ND	0.020	-	ND	0.137	-	1
o-Xylene	ND	0.020	-	ND	0.087	-	1
Isopropylbenzene	ND	0.500	-	ND	2.46	-	1
1,3,5-Trimethylbenzene	ND	0.020	-	ND	0.098	-	1
1,2,4-Trimethylbenzene	ND	0.020	-	ND	0.098	-	1
1,3-Dichlorobenzene	ND	0.020	-	ND	0.120	-	1
1,4-Dichlorobenzene	ND	0.020	-	ND	0.120	-	1
sec-Butylbenzene	ND	0.500	-	ND	2.74	-	1
p-Isopropyltoluene	ND	0.500	-	ND	2.74	-	1
1,2-Dichlorobenzene	ND	0.020	-	ND	0.120	-	1
n-Butylbenzene	ND	0.500	-	ND	2.74	-	1



Lab Control Sample Analysis

Batch Quality Control

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

Parameter	LCS	%Recovery	Qual	%Recovery	LCSD	Qual	%Recovery	Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 Batch: WG424047-3											
Dichlorodifluoromethane	122	-	-	-	70-130	-	-	-	25	-	-
Chloromethane	128	-	-	-	70-130	-	-	-	25	-	-
Vinyl chloride	111	-	-	-	70-130	-	-	-	25	-	-
Chloroethane	113	-	-	-	70-130	-	-	-	25	-	-
Acetone	125	-	-	-	70-130	-	-	-	25	-	-
Trichlorofluoromethane	118	-	-	-	70-130	-	-	-	25	-	-
Acrylonitrile	114	-	-	-	70-130	-	-	-	25	-	-
1,1-Dichloroethene	121	-	-	-	70-130	-	-	-	25	-	-
Methylene chloride	134	Q	-	-	70-130	-	-	-	25	-	-
trans-1,2-Dichloroethene	119	-	-	-	70-130	-	-	-	25	-	-
1,1-Dichloroethane	109	-	-	-	70-130	-	-	-	25	-	-
Methyl tert butyl ether	132	Q	-	-	70-130	-	-	-	25	-	-
2-Butanone	116	-	-	-	70-130	-	-	-	25	-	-
cis-1,2-Dichloroethene	110	-	-	-	70-130	-	-	-	25	-	-
Chloroform	112	-	-	-	70-130	-	-	-	25	-	-
1,2-Dichloroethane	114	-	-	-	70-130	-	-	-	25	-	-
1,1,1-Trichloroethane	103	-	-	-	70-130	-	-	-	25	-	-
Benzene	91	-	-	-	70-130	-	-	-	25	-	-
Carbon tetrachloride	109	-	-	-	70-130	-	-	-	25	-	-
1,2-Dichloropropane	96	-	-	-	70-130	-	-	-	25	-	-
Bromodichloromethane	101	-	-	-	70-130	-	-	-	25	-	-

Lab Control Sample Analysis

Batch Quality Control

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

Parameter	LCS %Recovery	LCSD %Recovery	Qual	%Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 Batch: WG424047-3								
Trichloroethene	102	-	-	-	70-130	-	-	25
cis-1,3-Dichloropropene	107	-	-	-	70-130	-	-	25
4-Methyl-2-pentanone	106	-	-	-	70-130	-	-	25
trans-1,3-Dichloropropene	97	-	-	-	70-130	-	-	25
1,1,2-Trichloroethane	106	-	-	-	70-130	-	-	25
Toluene	98	-	-	-	70-130	-	-	25
Dibromoethane	111	-	-	-	70-130	-	-	25
1,2-Dibromoethane	109	-	-	-	70-130	-	-	25
Tetrachloroethene	104	-	-	-	70-130	-	-	25
1,1,1,2-Tetrachloroethane	108	-	-	-	70-130	-	-	25
Chlorobenzene	107	-	-	-	70-130	-	-	25
Ethylbenzene	113	-	-	-	70-130	-	-	25
p/m-Xylene	118	-	-	-	70-130	-	-	25
Bromoform	124	-	-	-	70-130	-	-	25
Styrene	122	-	-	-	70-130	-	-	25
1,1,2,2-Tetrachloroethane	116	-	-	-	70-130	-	-	25
o-Xylene	119	-	-	-	70-130	-	-	25
Isopropylbenzene	115	-	-	-	70-130	-	-	25
1,3,5-Trimethylbenzene	128	-	-	-	70-130	-	-	25
1,2,4-Trimethylbenzene	133	Q	-	-	70-130	-	-	25
1,3-Dichlorobenzene	125	-	-	-	70-130	-	-	25

Lab Control Sample Analysis

Batch Quality Control

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

Parameter	LCS	%Recovery	LCSD	%Recovery	Qual	%Recovery	Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 Batch: WG424047-3										
1,4-Dichlorobenzene	123	-	-	-	-	70-130	-	-	-	25
sec-Butylbenzene	119	-	-	-	-	70-130	-	-	-	25
p-Isopropyltoluene	119	-	-	-	-	70-130	-	-	-	25
1,2-Dichlorobenzene	124	-	-	-	-	70-130	-	-	-	25
n-Butylbenzene	127	-	-	-	-	70-130	-	-	-	25

Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 03-05-06 Batch: WG424047-8										
Dichlorodifluoromethane	120	-	-	-	-	70-130	-	-	-	25
Chloromethane	121	-	-	-	-	70-130	-	-	-	25
Vinyl chloride	101	-	-	-	-	70-130	-	-	-	25
Chloroethane	103	-	-	-	-	70-130	-	-	-	25
Acetone	114	-	-	-	-	70-130	-	-	-	25
Trichlorofluoromethane	109	-	-	-	-	70-130	-	-	-	25
Acrylonitrile	99	-	-	-	-	70-130	-	-	-	25
1,1-Dichloroethene	110	-	-	-	-	70-130	-	-	-	25
Methylene chloride	114	-	-	-	-	70-130	-	-	-	25

Lab Control Sample Analysis

Batch Quality Control

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

Parameter	LCS	%Recovery	Qual	LCSD	%Recovery	Qual	%Recovery	Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 03,05-06 Batch: WG424047-8											
trans-1,2-Dichloroethene	133	Q	-	-	-	-	-	70-130	-	-	25
1,1-Dichloroethane	128	-	-	-	-	-	-	70-130	-	-	25
Methyl tert butyl ether	149	Q	-	-	-	-	-	70-130	-	-	25
2-Butanone	103	-	-	-	-	-	-	70-130	-	-	25
cis-1,2-Dichloroethene	97	-	-	-	-	-	-	70-130	-	-	25
Chloroform	100	-	-	-	-	-	-	70-130	-	-	25
1,2-Dichloroethane	101	-	-	-	-	-	-	70-130	-	-	25
1,1,1-Trichloroethane	89	-	-	-	-	-	-	70-130	-	-	25
Benzene	78	-	-	-	-	-	-	70-130	-	-	25
Carbon tetrachloride	95	-	-	-	-	-	-	70-130	-	-	25
1,2-Dichloropropane	82	-	-	-	-	-	-	70-130	-	-	25
Bromodichloromethane	86	-	-	-	-	-	-	70-130	-	-	25
Trichloroethene	88	-	-	-	-	-	-	70-130	-	-	25
cis-1,3-Dichloropropene	91	-	-	-	-	-	-	70-130	-	-	25
4-Methyl-2-pentanone	91	-	-	-	-	-	-	70-130	-	-	25
trans-1,3-Dichloropropene	81	-	-	-	-	-	-	70-130	-	-	25
1,1,2-Trichloroethane	91	-	-	-	-	-	-	70-130	-	-	25
Toluene	85	-	-	-	-	-	-	70-130	-	-	25
Dibromochloromethane	100	-	-	-	-	-	-	70-130	-	-	25
1,2-Dibromoethane	97	-	-	-	-	-	-	70-130	-	-	25
Tetrachloroethene	96	-	-	-	-	-	-	70-130	-	-	25

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Control Sample Analysis

Batch Quality Control

Lab Number: L1010920
 Report Date: 07/26/10

Parameter	LCS	%Recovery	Qual	LCSD	%Recovery	Qual	%Recovery	Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 03,05-06 Batch: WG424047-8											
1,1,1,2-Tetrachloroethane	97	-	-	-	70-130	-	-	-	25	-	-
Chlorobenzene	96	-	-	-	70-130	-	-	-	25	-	-
Ethylbenzene	101	-	-	-	70-130	-	-	-	25	-	-
p/m-Xylene	106	-	-	-	70-130	-	-	-	25	-	-
Bromoform	111	-	-	-	70-130	-	-	-	25	-	-
Styrene	108	-	-	-	70-130	-	-	-	25	-	-
1,1,2,2-Tetrachloroethane	105	-	-	-	70-130	-	-	-	25	-	-
o-Xylene	107	-	-	-	70-130	-	-	-	25	-	-
Isopropylbenzene	103	-	-	-	70-130	-	-	-	25	-	-
1,3,5-Trimethylbenzene	115	-	-	-	70-130	-	-	-	25	-	-
1,2,4-Trimethylbenzene	119	-	-	-	70-130	-	-	-	25	-	-
1,3-Dichlorobenzene	112	-	-	-	70-130	-	-	-	25	-	-
1,4-Dichlorobenzene	111	-	-	-	70-130	-	-	-	25	-	-
sec-Butylbenzenes	107	-	-	-	70-130	-	-	-	25	-	-
p-Isopropyltoluene	107	-	-	-	70-130	-	-	-	25	-	-
1,2-Dichlorobenzene	112	-	-	-	70-130	-	-	-	25	-	-
n-Butylbenzene	114	-	-	-	70-130	-	-	-	25	-	-

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Duplicate Analysis		Batch Quality Control		Lab Number:	L1010920	
Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG424047-5 QC Sample: L1010920-06 Client ID: MP-6						
Acetone	4930	4430	ppbV	11	11	25
2-Butanone	4090	3560	ppbV	14	14	25

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L1010920
Report Date: 07/26/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG424047-5 QC Sample: L1010920-06 Client ID: MP-6					
Dichlorodifluoromethane	0.604	0.702	ppbV	15	25
Chloromethane	ND	ND	ppbV	NC	25
Vinyl chloride	ND	ND	ppbV	NC	25
Chloroethane	ND	0.196	ppbV	NC	25
Acetone	4780E	5610	ppbV	16	E
Trichlorofluoromethane	ND	0.378	ppbV	NC	25
Acrylonitrile	ND	ND	ppbV	NC	25
1,1-Dichloroethene	ND	ND	ppbV	NC	25
Methylene chloride	ND	ND	ppbV	NC	25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC	25
1,1-Dichloroethane	ND	ND	ppbV	NC	25
Methyl tert butyl ether	ND	ND	ppbV	NC	25
2-Butanone	3510E	3810	ppbV	8	E
cis-1,2-Dichloroethene	ND	ND	ppbV	NC	25
Chloroform	ND	ND	ppbV	NC	25
1,2-Dichloroethane	ND	ND	ppbV	NC	25
1,1,1-Trichloroethane	ND	ND	ppbV	NC	25
Benzene	ND	ND	ppbV	NC	25
Carbon tetrachloride	ND	ND	ppbV	NC	25



Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Duplicate Analysis

Lab Number: L1010920
 Report Date: 07/26/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09	QC Sample: L1010920-06	QC Batch ID: WG424047-5			Client ID: MP-6
1,2-Dichloropropane	ND	ND	ppbV	NC	25
Bromodichloromethane	ND	ND	ppbV	NC	25
Trichloroethene	ND	ND	ppbV	NC	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
4-Methyl-2-pentanone	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
Toluene	1.47	1.53	ppbV	4	25
Dibromochloromethane	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
Tetrachloroethene	1.48	1.55	ppbV	5	25
1,1,1,2-Tetrachloroethane	ND	ND	ppbV	NC	25
Chlorobenzene	ND	ND	ppbV	NC	25
Ethylbenzene	0.332	0.355	ppbV	7	25
p/m-Xylene	1.11	1.20	ppbV	8	25
Bromoform	ND	ND	ppbV	NC	25
Styrene	ND	ND	ppbV	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	10	25
o-Xylene	0.483	0.536	ppbV		

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Duplicate Analysis

Lab Number: L1010920
Report Date: 07/26/10

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG424047-5 QC Sample: L1010920-06 Client ID: MP-6					
Isopropylbenzene	ND	ND	ppbV	NC	25
1,3,5-Trimethylbenzene	0.340	0.408	ppbV	18	25
1,2,4-Trimethylbenzene	1.28	1.62	ppbV	23	25
1,3-Dichlorobenzene	ND	0.159	ppbV	NC	25
1,4-Dichlorobenzene	0.226	0.272	ppbV	18	25
sec-Butylbenzene	ND	ND	ppbV	NC	25
p-Isopropyltoluene	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
n-Butylbenzene	ND	ND	ppbV	NC	25

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Serial_No:07261016:23

Lab Number: L1010920

Report Date: 07/26/10

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Cleaning Batch ID	Initial Pressure (In. Hg)	Pressure on Receipt (In. Hg)	Flow Out mL/min	Flow In mL/min	% RSD
L1010920-01	IMP-2	0446	#90 SV		-	-	71	73	3
L1010920-01	IMP-2	376	2.7L Can	I1010362	-29.3	-8.7	-	-	-
L1010920-02	IMP-1	0001	#90 SV		-	-	67	71	6
L1010920-02	IMP-1	463	2.7L Can	I1010362	-28.8	-4.8	-	-	-
L1010920-03	MP-1	0435	#90 SV		-	-	71	75	5
L1010920-03	MP-1	1743	2.7L Can	I1010362	-29.4	-6.4	-	-	-
L1010920-04	MP-3	0268	#90 SV		-	-	71	75	5
L1010920-04	MP-3	118	2.7L Can	I1010362	-28.9	-7.2	-	-	-
L1010920-05	MP-4	0150	#90 SV		-	-	67	69	3
L1010920-05	MP-4	395	2.7L Can	I1010362	-29.0	-7.7	-	-	-
L1010920-06	MP-6	0152	#90 SV		-	-	69	78	12
L1010920-06	MP-6	388	2.7L Can	I1010362	-28.8	-10.1	-	-	-
L1010920-07	RT-1	518	2.7L Can	I1010362	-29.6	-2.9	-	-	-
L1010920-08	RT-2	455	2.7L Can	I1010362	-29.3	-3.6	-	-	-
L1010920-09	RT-3	460	2.7L Can	I1010362	-28.8	-1.7	-	-	-



Serial_No:07261016:23

Project Name: BATCH CANISTER CERTIFICATION

Project Number: CANISTER QC BAT

Lab Number: L1010362

Report Date: 07/26/10

Air Canister Certification Results

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	07/09/10 19:35		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air (Low Level) - Mansfield Lab							
Chlorodifluoromethane	ND	0.200	—	ND	0.707	—	1
Propylene	ND	0.200	—	ND	0.344	—	1
Propane	ND	0.200	—	ND	0.606	—	1
Dichlorodifluoromethane	ND	0.200	—	ND	0.988	—	1
Chloromethane	ND	0.200	—	ND	0.413	—	1
Freon-114	ND	0.200	—	ND	1.40	—	1
Methanol	ND	5.00	—	ND	6.55	—	1
Vinyl chloride	ND	0.200	—	ND	0.511	—	1
1,3-Butadiene	ND	0.200	—	ND	0.442	—	1
Butane	ND	0.200	—	ND	0.475	—	1
Bromomethane	ND	0.200	—	ND	0.776	—	1
Chloroethane	ND	0.200	—	ND	0.527	—	1
Ethanol	ND	2.50	—	ND	4.71	—	1
Dichlorofluoromethane	ND	0.200	—	ND	0.841	—	1
Vinyl bromide	ND	0.200	—	ND	0.874	—	1
Acrolein	ND	0.500	—	ND	1.14	—	1
Acetone	ND	1.00	—	ND	2.37	—	1
Acetonitrile	ND	0.200	—	ND	0.336	—	1
Trichlorofluoromethane	ND	0.200	—	ND	1.12	—	1
Isopropanol	ND	0.500	—	ND	1.23	—	1
Acrylonitrile	ND	0.200	—	ND	0.434	—	1
Pentane	ND	0.200	—	ND	0.590	—	1
Ethyl ether	ND	0.200	—	ND	0.606	—	1
1,1-Dichloroethene	ND	0.200	—	ND	0.792	—	1
Tertiary butyl Alcohol	ND	0.500	—	ND	1.52	—	1



Project Name: BATCH CANISTER CERTIFICATION

Project Number: CANISTER QC BAT

Lab Number: L1010362

Report Date: 07/26/10

Air Canister Certification Results

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
Volatile Organics in Air (Low Level) - Mansfield Lab							
Methylene chloride	ND	1.00	—	ND	3.47	—	1
3-Chloropropene	ND	0.200	—	ND	0.626	—	1
Carbon disulfide	ND	0.200	—	ND	0.622	—	1
Freon-113	ND	0.200	—	ND	1.53	—	1
trans-1,2-Dichloroethene	ND	0.200	—	ND	0.792	—	1
1,1-Dichloroethane	ND	0.200	—	ND	0.809	—	1
Methyl tert butyl ether	ND	0.200	—	ND	0.720	—	1
Vinyl acetate	ND	0.200	—	ND	0.704	—	1
2-Butanone	ND	0.200	—	ND	0.589	—	1
cis-1,2-Dichloroethene	ND	0.200	—	ND	0.792	—	1
Ethyl Acetate	ND	0.500	—	ND	1.80	—	1
Chloroform	ND	0.200	—	ND	0.976	—	1
Tetrahydrofuran	ND	0.200	—	ND	0.589	—	1
2,2-Dichloropropane	ND	0.200	—	ND	0.923	—	1
1,2-Dichloroethane	ND	0.200	—	ND	0.809	—	1
n-Hexane	ND	0.200	—	ND	0.704	—	1
Diisopropyl ether	ND	0.200	—	ND	0.835	—	1
tert-Butyl Ethyl Ether	ND	0.200	—	ND	0.835	—	1
1,1,1-Trichloroethane	ND	0.200	—	ND	1.09	—	1
1,1-Dichloropropene	ND	0.200	—	ND	0.907	—	1
Benzene	ND	0.200	—	ND	0.638	—	1
Carbon tetrachloride	ND	0.200	—	ND	1.26	—	1
Cyclohexane	ND	0.200	—	ND	0.688	—	1
tert-Amyl Methyl Ether	ND	0.200	—	ND	0.835	—	1
Dibromomethane	ND	0.200	—	ND	1.42	—	1
1,2-Dichloropropane	ND	0.200	—	ND	0.924	—	1
Bromodichloromethane	ND	0.200	—	ND	1.34	—	1
1,4-Dioxane	ND	0.200	—	ND	0.720	—	1



Project Name: BATCH CANISTER CERTIFICATION

Project Number: CANISTER QC BAT

Lab Number: L1010362

Report Date: 07/26/10

Air Canister Certification Results

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air (Low Level) - Mansfield Lab								
Trichloroethene	ND	0.200	—	ND	1.07	—		1
2,2,4-Trimethylpentane	ND	0.200	—	ND	0.934	—		1
Heptane	ND	0.200	—	ND	0.819	—		1
2,4,4-trimethyl-1-pentene	ND	0.500	—	ND	2.29	—		1
cis-1,3-Dichloropropene	ND	0.200	—	ND	0.907	—		1
4-Methyl-2-pantanone	ND	0.200	—	ND	0.819	—		1
2,4,4-trimethyl-2-pentene	ND	0.500	—	ND	2.29	—		1
trans-1,3-Dichloropropene	ND	0.200	—	ND	0.907	—		1
1,1,2-Trichloroethane	ND	0.200	—	ND	1.09	—		1
Toluene	ND	0.200	—	ND	0.753	—		1
1,3-Dichloropropane	ND	0.200	—	ND	0.923	—		1
2-Hexanone	ND	0.200	—	ND	0.819	—		1
Dibromochloromethane	ND	0.200	—	ND	1.70	—		1
1,2-Dibromoethane	ND	0.200	—	ND	1.54	—		1
Butyl acetate	ND	0.500	—	ND	2.37	—		1
Octane	ND	0.200	—	ND	0.934	—		1
Tetrachloroethene	ND	0.200	—	ND	1.36	—		1
1,1,1,2-Tetrachloroethane	ND	0.200	—	ND	1.37	—		1
Chlorobenzene	ND	0.200	—	ND	0.920	—		1
Ethylbenzene	ND	0.200	—	ND	0.868	—		1
p/m-Xylene	ND	0.400	—	ND	1.74	—		1
Bromoform	ND	0.200	—	ND	2.06	—		1
Styrene	ND	0.200	—	ND	0.851	—		1
1,1,2,2-Tetrachloroethane	ND	0.200	—	ND	1.37	—		1
o-Xylene	ND	0.200	—	ND	0.868	—		1
1,2,3-Trichloropropane	ND	0.200	—	ND	1.20	—		1
Nonane	ND	0.200	—	ND	1.05	—		1
Isopropylbenzene	ND	0.200	—	ND	0.982	—		1



Project Name: BATCH CANISTER CERTIFICATION

Project Number: CANISTER QC BAT

Lab Number: L1010362

Report Date: 07/26/10

Air Canister Certification Results

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
Volatile Organics in Air (Low Level) - Mansfield Lab							
Bromobenzene	ND	0.200	—	ND	1.28	—	1
2-Chlorotoluene	ND	0.200	—	ND	1.03	—	1
n-Propylbenzene	ND	0.200	—	ND	0.982	—	1
4-Chlorotoluene	ND	0.200	—	ND	1.03	—	1
4-Ethyltoluene	ND	0.200	—	ND	0.982	—	1
1,3,5-Trimethylbenzene	ND	0.200	—	ND	0.982	—	1
tert-Butylbenzene	ND	0.200	—	ND	1.10	—	1
1,2,4-Trimethylbenzene	ND	0.200	—	ND	0.982	—	1
Decane	ND	0.200	—	ND	1.16	—	1
Benzyl chloride	ND	0.200	—	ND	1.03	—	1
1,3-Dichlorobenzene	ND	0.200	—	ND	1.20	—	1
1,4-Dichlorobenzene	ND	0.200	—	ND	1.20	—	1
sec-Butylbenzene	ND	0.200	—	ND	1.10	—	1
p-Isopropyltoluene	ND	0.200	—	ND	1.10	—	1
1,2-Dichlorobenzene	ND	0.200	—	ND	1.20	—	1
n-Butylbenzene	ND	0.200	—	ND	1.10	—	1
1,2-Dibromo-3-chloropropane	ND	0.200	—	ND	1.93	—	1
Undecane	ND	0.200	—	ND	1.28	—	1
Dodecane	ND	0.200	—	ND	1.39	—	1
1,2,4-Trichlorobenzene	ND	0.200	—	ND	1.48	—	1
Naphthalene	ND	0.200	—	ND	1.05	—	1
1,2,3-Trichlorobenzene	ND	0.200	—	ND	1.48	—	1
Hexachlorobutadiene	ND	0.200	—	ND	2.13	—	1



Serial_No:07261016:23

Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1010362**Project Number:** CANISTER QC BAT**Report Date:** 07/26/10**Air Canister Certification Results**

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air (Low Level) - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	87		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	89		60-140

Project Name: BATCH CANISTER CERTIFICATION

Project Number: CANISTER QC BAT

Lab Number: L1010362

Report Date: 07/26/10

Air Canister Certification Results

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/09/10 19:35		
Analyst:	RY		

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	ND	0.050	-	ND	0.247	-	1
Chloromethane	ND	0.500	-	ND	1.03	-	1
Freon-114	ND	0.050	-	ND	0.349	-	1
Vinyl chloride	ND	0.020	-	ND	0.051	-	1
1,3-Butadiene	ND	0.020	-	ND	0.044	-	1
Bromomethane	ND	0.020	-	ND	0.078	-	1
Chloroethane	ND	0.020	-	ND	0.053	-	1
Acetone	ND	2.00	-	ND	4.75	-	1
Trichlorofluoromethane	ND	0.050	-	ND	0.281	-	1
Acrylonitrile	ND	0.500	-	ND	1.08	-	1
1,1-Dichloroethene	ND	0.020	-	ND	0.079	-	1
Methylene chloride	ND	1.00	-	ND	3.47	-	1
Freon-113	ND	0.050	-	ND	0.383	-	1
Halothane	ND	0.050	-	ND	0.403	-	1
trans-1,2-Dichloroethene	ND	0.020	-	ND	0.079	-	1
1,1-Dichloroethane	ND	0.020	-	ND	0.081	-	1
Methyl tert butyl ether	ND	0.020	-	ND	0.072	-	1
2-Butanone	ND	0.500	-	ND	1.47	-	1
cis-1,2-Dichloroethene	ND	0.020	-	ND	0.079	-	1
Chloroform	ND	0.020	-	ND	0.098	-	1
1,2-Dichloroethane	ND	0.020	-	ND	0.081	-	1
1,1,1-Trichloroethane	ND	0.020	-	ND	0.109	-	1
Benzene	ND	0.100	-	ND	0.319	-	1
Carbon tetrachloride	ND	0.020	-	ND	0.126	-	1
1,2-Dichloropropane	ND	0.020	-	ND	0.092	-	1



Project Name: BATCH CANISTER CERTIFICATION

Project Number: CANISTER QC BAT

Lab Number: L1010362

Report Date: 07/26/10

Air Canister Certification Results

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
Volatile Organics in Air by SIM - Mansfield Lab							
Bromodichloromethane	ND	0.020	—	ND	0.134	—	1
Trichloroethene	ND	0.020	—	ND	0.107	—	1
1,4-Dioxane	ND	0.100	—	ND	0.360	—	1
cis-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1
4-Methyl-2-pentanone	ND	0.500	—	ND	2.05	—	1
trans-1,3-Dichloropropene	ND	0.020	—	ND	0.091	—	1
1,1,2-Trichloroethane	ND	0.020	—	ND	0.109	—	1
Toluene	ND	0.020	—	ND	0.075	—	1
Dibromochloromethane	ND	0.020	—	ND	0.170	—	1
1,2-Dibromoethane	ND	0.020	—	ND	0.154	—	1
Tetrachloroethene	ND	0.020	—	ND	0.136	—	1
1,1,1,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	1
Chlorobenzene	ND	0.020	—	ND	0.092	—	1
Ethylbenzene	ND	0.020	—	ND	0.087	—	1
p/m-Xylene	ND	0.040	—	ND	0.174	—	1
Bromoform	ND	0.020	—	ND	0.206	—	1
Styrene	ND	0.020	—	ND	0.085	—	1
1,1,2,2-Tetrachloroethane	ND	0.020	—	ND	0.137	—	1
o-Xylene	ND	0.020	—	ND	0.087	—	1
Isopropylbenzene	ND	0.500	—	ND	2.46	—	1
1,3,5-Trimethylbenzene	ND	0.020	—	ND	0.098	—	1
1,2,4-Trimethylbenzene	ND	0.020	—	ND	0.098	—	1
1,3-Dichlorobenzene	ND	0.020	—	ND	0.120	—	1
1,4-Dichlorobenzene	ND	0.020	—	ND	0.120	—	1
sec-Butylbenzene	ND	0.500	—	ND	2.74	—	1
p-Isopropyltoluene	ND	0.500	—	ND	2.74	—	1
1,2-Dichlorobenzene	ND	0.020	—	ND	0.120	—	1
n-Butylbenzene	ND	0.500	—	ND	2.74	—	1



Project Name: BATCH CANISTER CERTIFICATION

Project Number: CANISTER QC BAT

Lab Number: L1010362

Report Date: 07/26/10

Air Canister Certification Results

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	Results	ppbV		Results	ug/m3		Qualifier	Dilution Factor
		RL	MDL		RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2,4-Trichlorobenzene	ND	0.050	—	ND	0.371	—	—	1
Naphthalene	ND	0.050	—	ND	0.262	—	—	1
1,2,3-Trichlorobenzene	ND	0.050	—	ND	0.371	—	—	1
Hexachlorobutadiene	ND	0.050	—	ND	0.533	—	—	1



Serial_No:07261016:23

Project Name: BATCH CANISTER CERTIFICATION**Project Number:** CANISTER QC BAT**Lab Number:** L1010362**Report Date:** 07/26/10**Air Canister Certification Results**

Lab ID:	L1010362-01	Date Collected:	07/08/10 00:00
Client ID:	CAN 395 SHELF 7	Date Received:	07/08/10
Sample Location:		Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
Volatile Organics in Air by SIM - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	83		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	89		60-140

Serial_No:07261016:23

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

N/A Present/Intact

Container Information

Container ID	Container Type	Cooler	pH	Temp		Analysis(*)
				deg C	Pres	
L1010920-01A	Canister - 2.7 Liter	N/A	NA	NA	Present/Intact	TO15-SIM(30)
L1010920-02A	Canister - 2.7 Liter	N/A	NA	NA	Present/Intact	TO15-SIM(30)
L1010920-03A	Canister - 2.7 Liter	N/A	NA	NA	Present/Intact	TO15-SIM(30)
L1010920-04A	Canisler - 2.7 Liter	N/A	NA	NA	Present/Intact	TO15-SIM(30)
L1010920-05A	Canister - 2.7 Liter	N/A	NA	NA	Present/Intact	TO15-SIM(30)
L1010920-06A	Canister - 2.7 Liter	N/A	NA	NA	Present/Intact	TO15-SIM(30)
L1010920-07A	Canister - 2.7 Liter	N/A	NA	NA	Present/Intact	TO15-SIM(30)
L1010920-08A	Canister - 2.7 Liter	N/A	NA	NA	Present/Intact	TO15-SIM(30)
L1010920-09A	Canister - 2.7 Liter	N/A	NA	NA	Present/Intact	TO15-SIM(30)

*Values in parentheses indicate holding time in days

Project Name: ALVAREZ HIGH SCHOOL
Project Number: 14687.01

Lab Number: L1010920
Report Date: 07/26/10

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.
- MDL · Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
- 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.
- 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.
- NI · Not Ignitable.
- RL · Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL 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

- 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 at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- D · Concentration of analyte was quantified from diluted analysis. Flag only applies to 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.
- H · The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I · The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
- P · The RPD between the results for the two columns exceeds the method-specified criteria.
- Q · The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R · Analytical results are from sample re-analysis.

Report Format: Data Usability Report



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

Data Qualifiers

RE - Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report



Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Lab Number: L1010920

Report Date: 07/26/10

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 Analytical 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 Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical 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 Analytical.

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.



Certificate/Approval Program Summary

Last revised July 19, 2010 – Mansfield Facility

The following list includes only those analytes/methods for which certification/approval is currently held. For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0141.

Wastewater/Non-Potable Water (Inorganic Parameters: pH, Turbidity, Conductivity, Alkalinity, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Vanadium, Zinc, Total Residue (Solids), Total Suspended Solids (non-filterable), Total Cyanide. **Organic Parameters:** PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables, Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, PAHs, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)

Solid Waste/Soil (Inorganic Parameters: pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Organic Carbon, Total Cyanide, Corrosivity, TCLP 1311. **Organic Parameters:** PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Volatile Organics, Acid Extractables, Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Florida Department of Health Certificate/Lab ID: E87814. NELAP Accredited.

Non-Potable Water (Inorganic Parameters: SM2320B, EPA 120.1, SM2510B, EPA 245.1, EPA 150.1, EPA 160.2, SM2540D, EPA 335.2, SM2540G, EPA 180.1. **Organic Parameters:** EPA 625, 608.)

Solid & Chemical Materials (Inorganic Parameters: 6020, 7470, 7471, 9045, 9014. **Organic Parameters:** EPA 8260, 8270, 8082, 8081.)

Air & Emissions (EPA TO-15.)

Louisiana Department of Environmental Quality Certificate/Lab ID: 03090. NELAP Accredited.

Non-Potable Water (Inorganic Parameters: EPA 120.1, 150.1, 160.2, 180.1, 200.8, 245.1, 310.1, 335.2, 608, 625, 1631, 3010, 3015, 3020, 6020, 9010, 9014, 9040, SM2320B, 2510B, 2540D, 2540G, 4500CN-E, 4500H-B, **Organic Parameters:** EPA 3510, 3580, 3630, 3640, 3660, 3665, 5030, 8015 (mod), 3570, 8081, 8082, 8260, 8270,)

Solid & Chemical Materials (Inorganic Parameters: 6020, 7196, 7470, 7471, 7474, 9010, 9014, 9040, 9045, 9060. **Organic Parameters:** EPA 8015 (mod), EPA 3570, 1311, 3050, 3051, 3060, 3580, 3630, 3640, 3660, 3665, 5035, 8081, 8082, 8260, 8270.)

Biological Tissue (Inorganic Parameters: EPA 6020. **Organic Parameters:** EPA 3570, 3510, 3610, 3630, 3640, 8270.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA030.

Non-Potable Water (Inorganic Parameters: SM4500H+B. **Organic Parameters:** EPA 624.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 2206. NELAP Accredited.

Non-Potable Water (Inorganic Parameters: EPA 200.8, 245.1, 1631E, 120.1, 150.1, 180.1, 310.1, 335.2, 160.2, SM2540D, 2540G, 4500CN-E, 4500H+B, 2320B, 2510B. **Organic Parameters:** EPA 625, 608.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA015. NELAP Accredited.

Non-Potable Water (Inorganic Parameters: SW-846 1312, 3010, 3020A, 3015, 6020, SM2320B, EPA 200.8, SM2540C, 2540D, 2540G, EPA 120.1, SM2510B, EPA 180.1, 245.1, 1631E, SW-846 9040B, 6020, 9010B, 9014 **Organic Parameters:** EPA 608, 625, SW-846 3510C, 3580A, 5030B, 3035L, 5035H, 3630C, 3640A, 3660B, 3665A, 8081A, 8082 8260B, 8270C)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6020, 9010B, 9014, 1311, 1312, 3050B, 3051, 3060A, 7196A, 7470A, 7471A, 9045C, 9060. Organic Parameters: SW-846 3580A, 5030B, 3035L, 5035H, 3630C, 3640A, 3660B, 3665A, 8081A, 8082, 8260B, 8270C, 3570, 8015B.)

Air & Emissions (EPA TO-15)

Biological Tissue (Inorganic Parameters: SW-846 6020 Organic Parameters: SW-846 8270C, 3510C, 3570, 3610B, 3630C, 3640A)

New York Department of Health Certificate/Lab ID: 11627. NELAP Accredited.

Non-Potable Water (Inorganic Parameters: EPA 310.1, SM2320B, EPA 365.2, 160.1, EPA 160.2, SM2540D, EPA 200.8, 6020, 1631E, 245.1, 335.2, 9014, 150.1, 9040B, 120.1, SM2510B, EPA 376.2, 180.1, 9010B. Organic Parameters: EPA 624, 8260B, 8270C, 608, 8081A, 625, 8082, 3510C, 3511, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 9040B, 9045C, SW-846 Ch7 Sec 7.3, EPA 6020, 7196A, 7471A, 7474, 9014, 9040B, 9045C, 9010B. Organic Parameters: EPA 8260B, 8270C, 8081A, DRO 8015B, 8082, 1311, 3050B, 3580, 3050B, 3035, 3570, 3051, 5035, 5030B.)

Air & Emissions (EPA TO-15.)

Rhode Island Department of Health Certificate/Lab ID: LA000299. NELAP Accredited via LA-DEQ.

Refer to MA-DEP Certificate for Non-Potable Water.

Refer to LA-DEQ Certificate for Non-Potable Water.

Texas Commission of Environmental Quality Certificate/Lab ID: T104704419-08-TX. NELAP Accredited.

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 1311, 7196, 9014, 9040, 9045, 9060. Organic Parameters: EPA 8015, 8270, 8260, 8081, 8082.)

Air (Organic Parameters: EPA TO-15)

U.S. Army Corps of Engineers

Department of Defense Certificate/Lab ID: L2217.01.

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 3051, 6020, 747A, 7474, 9045C, 9060, SM 2540G, ASTM D422-63. Organic Parameters: EPA 3580, 3570, 3540C, 5035, 8260B, 8270C, 8270 Alk-PAH, 8082, 8081A, 8015 (SHC), 8015 (DRO).

Air & Emissions (EPA TO-15.)

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **8270C: Biphenyl**.

Appendix E

Laboratory Reporting Limits Correspondence



July 26, 2010

To: Ron Mack
EA Engineering, Science, & Technology
2350 Post Road
Warwick, RI 02886

From: Katie O'Brien
Alpha Analytical
320 Forbes Blvd
Mansfield, MA 01581

Re: TO15 SIM Reporting Limits

Dear Ron,

As we communicated prior to the TO-15 SIM analyses completed for the Alvarez High School air samples collected on July 16th; the SIM Reporting Limits achieved for the following compounds are the lowest that we can currently achieve at Alpha. Please note that these reporting limits are above the Draft Proposed CT RSR (Residential) Criteria for these compounds:

1,2-Dichloroethane SIM RL = 0.08 ug/m³
Ethylene Dibromide (a.k.a. 1,2-Dibromoethane) SIM RL = 0.15 ug/m³
1,1,1,2-Tetrachloroethane SIM RL = 0.14 ug/m³
1,1,2,2-Tetrachloroethane SIM RL = 0.14 ug/m³
Bromodichloromethane SIM RL = 0.13 ug/m³

Please don't hesitate to contact me at 508-844-4156 if you have any questions.

Best Regards,

Katie O'Brien

