

***APPENDIX B***

***Indoor and Ambient Outdoor  
Air Analytical Summary and Lab Report***





Table 1: Summary of Indoor and Ambient Outdoor Air Sampling Data - Alvarez School Project - Volatile Organic Compounds  
February 2008 - April 2011

Volatile Organic Compounds	Sample Date	CT Draft Proposed Indoor Residential Target Air Concentration (µg/m <sup>3</sup> )	Methane Storage Bin	Cellulose	Urethane	Styrene	Elevator Haulway	Room 118	Room 119	Room 120	Mason Ctr. (Rm. 16)		Room 132	Room 133	Room 134	Room 135	Amount Outdoor
											Qual	U					
Aldehydes	8-Feb-08	8.00	20.000	U	4.120	U	8.750	8.870	9.160	4.750	U	4.770	4.750	U	U	U	4.750
	7-Mar-08	13.00	17.000	U	10.000	U	15.000	14.000	15.000	17.000	U	17.000	17.000	U	U	U	17.000
	25-Apr-08	16.00	18.000	U	13.000	U	18.000	17.000	18.000	19.000	U	19.000	19.000	U	U	U	19.000
	29-May-08	18.00	19.000	U	15.000	U	20.000	19.000	20.000	21.000	U	21.000	21.000	U	U	U	21.000
	27-Jun-08	20.00	20.000	U	20.000	U	20.000	20.000	20.000	20.000	U	20.000	20.000	U	U	U	20.000
	3-Jul-08	23.00	23.000	U	23.000	U	23.000	23.000	23.000	23.000	U	23.000	23.000	U	U	U	23.000
	20-Aug-08	17.00	17.000	U	17.000	U	17.000	17.000	17.000	17.000	U	17.000	17.000	U	U	U	17.000
	20-Sep-08	10.00	10.000	U	10.000	U	10.000	10.000	10.000	10.000	U	10.000	10.000	U	U	U	10.000
	20-Oct-08	14.00	14.000	U	14.000	U	14.000	14.000	14.000	14.000	U	14.000	14.000	U	U	U	14.000
	27-Nov-08	23.00	23.000	U	23.000	U	23.000	23.000	23.000	23.000	U	23.000	23.000	U	U	U	23.000
	18-Dec-08	8.00	8.000	U	8.000	U	8.000	8.000	8.000	8.000	U	8.000	8.000	U	U	U	8.000
	22-Jan-09	3.00	3.000	U	3.000	U	3.000	3.000	3.000	3.000	U	3.000	3.000	U	U	U	3.000
	21-Feb-09	2.00	2.000	U	2.000	U	2.000	2.000	2.000	2.000	U	2.000	2.000	U	U	U	2.000
	25-Mar-09	3.00	3.000	U	3.000	U	3.000	3.000	3.000	3.000	U	3.000	3.000	U	U	U	3.000
	25-Apr-09	4.00	4.000	U	4.000	U	4.000	4.000	4.000	4.000	U	4.000	4.000	U	U	U	4.000
	25-May-09	5.00	5.000	U	5.000	U	5.000	5.000	5.000	5.000	U	5.000	5.000	U	U	U	5.000
	25-Jun-09	6.00	6.000	U	6.000	U	6.000	6.000	6.000	6.000	U	6.000	6.000	U	U	U	6.000
	25-Jul-09	7.00	7.000	U	7.000	U	7.000	7.000	7.000	7.000	U	7.000	7.000	U	U	U	7.000
	25-Aug-09	8.00	8.000	U	8.000	U	8.000	8.000	8.000	8.000	U	8.000	8.000	U	U	U	8.000
	25-Sep-09	9.00	9.000	U	9.000	U	9.000	9.000	9.000	9.000	U	9.000	9.000	U	U	U	9.000
	25-Oct-09	10.00	10.000	U	10.000	U	10.000	10.000	10.000	10.000	U	10.000	10.000	U	U	U	10.000
	25-Nov-09	11.00	11.000	U	11.000	U	11.000	11.000	11.000	11.000	U	11.000	11.000	U	U	U	11.000
	25-Dec-09	12.00	12.000	U	12.000	U	12.000	12.000	12.000	12.000	U	12.000	12.000	U	U	U	12.000
	25-Jan-10	13.00	13.000	U	13.000	U	13.000	13.000	13.000	13.000	U	13.000	13.000	U	U	U	13.000
	25-Feb-10	14.00	14.000	U	14.000	U	14.000	14.000	14.000	14.000	U	14.000	14.000	U	U	U	14.000
	25-Mar-10	15.00	15.000	U	15.000	U	15.000	15.000	15.000	15.000	U	15.000	15.000	U	U	U	15.000
	25-Apr-10	16.00	16.000	U	16.000	U	16.000	16.000	16.000	16.000	U	16.000	16.000	U	U	U	16.000
25-May-10	17.00	17.000	U	17.000	U	17.000	17.000	17.000	17.000	U	17.000	17.000	U	U	U	17.000	
25-Jun-10	18.00	18.000	U	18.000	U	18.000	18.000	18.000	18.000	U	18.000	18.000	U	U	U	18.000	
25-Jul-10	19.00	19.000	U	19.000	U	19.000	19.000	19.000	19.000	U	19.000	19.000	U	U	U	19.000	
25-Aug-10	20.00	20.000	U	20.000	U	20.000	20.000	20.000	20.000	U	20.000	20.000	U	U	U	20.000	
25-Sep-10	21.00	21.000	U	21.000	U	21.000	21.000	21.000	21.000	U	21.000	21.000	U	U	U	21.000	
25-Oct-10	22.00	22.000	U	22.000	U	22.000	22.000	22.000	22.000	U	22.000	22.000	U	U	U	22.000	
25-Nov-10	23.00	23.000	U	23.000	U	23.000	23.000	23.000	23.000	U	23.000	23.000	U	U	U	23.000	
25-Dec-10	24.00	24.000	U	24.000	U	24.000	24.000	24.000	24.000	U	24.000	24.000	U	U	U	24.000	
25-Jan-11	25.00	25.000	U	25.000	U	25.000	25.000	25.000	25.000	U	25.000	25.000	U	U	U	25.000	
25-Feb-11	26.00	26.000	U	26.000	U	26.000	26.000	26.000	26.000	U	26.000	26.000	U	U	U	26.000	
25-Mar-11	27.00	27.000	U	27.000	U	27.000	27.000	27.000	27.000	U	27.000	27.000	U	U	U	27.000	
25-Apr-11	28.00	28.000	U	28.000	U	28.000	28.000	28.000	28.000	U	28.000	28.000	U	U	U	28.000	
Acrylonitrile	8-Feb-08	1.00	1.000	U	1.000	U	1.000	1.000	1.000	1.000	U	1.000	1.000	U	U	U	1.000
	7-Mar-08	1.50	1.500	U	1.500	U	1.500	1.500	1.500	1.500	U	1.500	1.500	U	U	U	1.500
	25-Apr-08	2.00	2.000	U	2.000	U	2.000	2.000	2.000	2.000	U	2.000	2.000	U	U	U	2.000
	29-May-08	2.50	2.500	U	2.500	U	2.500	2.500	2.500	2.500	U	2.500	2.500	U	U	U	2.500
	27-Jun-08	3.00	3.000	U	3.000	U	3.000	3.000	3.000	3.000	U	3.000	3.000	U	U	U	3.000
	3-Jul-08	3.50	3.500	U	3.500	U	3.500	3.500	3.500	3.500	U	3.500	3.500	U	U	U	3.500
	20-Aug-08	4.00	4.000	U	4.000	U	4.000	4.000	4.000	4.000	U	4.000	4.000	U	U	U	4.000
	20-Sep-08	4.50	4.500	U	4.500	U	4.500	4.500	4.500	4.500	U	4.500	4.500	U	U	U	4.500
	20-Oct-08	5.00	5.000	U	5.000	U	5.000	5.000	5.000	5.000	U	5.000	5.000	U	U	U	5.000
	27-Nov-08	5.50	5.500	U	5.500	U	5.500	5.500	5.500	5.500	U	5.500	5.500	U	U	U	5.500
	18-Dec-08	6.00	6.000	U	6.000	U	6.000	6.000	6.000	6.000	U	6.000	6.000	U	U	U	6.000
	22-Jan-09	6.50	6.500	U	6.500	U	6.500	6.500	6.500	6.500	U	6.500	6.500	U	U	U	6.500
	22-Feb-09	7.00	7.000	U	7.000	U	7.000	7.000	7.000	7.000	U	7.000	7.000	U	U	U	7.000
	25-Mar-09	7.50	7.500	U	7.500	U	7.500	7.500	7.500	7.500	U	7.500	7.500	U	U	U	7.500
	25-Apr-09	8.00	8.000	U	8.000	U	8.000	8.000	8.000	8.000	U	8.000	8.000	U	U	U	8.000
	25-May-09	8.50	8.500	U	8.500	U	8.500	8.500	8.500	8.500	U	8.500	8.500	U	U	U	8.500
	25-Jun-09	9.00	9.000	U	9.000	U	9.000	9.000	9.000	9.000	U	9.000	9.000	U	U	U	9.000
	25-Jul-09	9.50	9.500	U	9.500	U	9.500	9.500	9.500	9.500	U	9.500	9.500	U	U	U	9.500
	25-Aug-09	10.00	10.000	U	10.000	U	10.000	10.000	10.000	10.000	U	10.000	10.000	U	U	U	10.000
	25-Sep-09	10.50	10.500	U	10.500	U	10.500	10.500	10.500	10.500	U	10.500	10.500	U	U	U	10.500
	25-Oct-09	11.00	11.000	U	11.000	U	11.000	11.000	11.000	11.000	U	11.000	11.000	U	U	U	11.000
	25-Nov-09	11.50	11.500	U	11.500	U	11.500	11.500	11.500	11.500	U	11.500	11.500	U	U	U	11.500
	25-Dec-09	12.00	12.000	U	12.000	U	12.000	12.000	12.000	12.000	U	12.000	12.000	U	U	U	12.000
	25-Jan-10	12.50	12.500	U	12.500	U	12.500	12.500	12.500	12.500	U	12.500	12.500	U	U	U	12.500
	25-Feb-10	13.00	13.000	U	13.000	U	13.000	13.000	13.000	13.000	U	13.000	13.000	U	U	U	13.000
	25-Mar-10	13.50	13.500	U	13.500	U	13.500	13.500	13.500	13.500	U	13.500	13.500	U	U	U	13.500
	25-Apr-10	14.00	14.000	U	14.000	U	14.000	14.000	14.000	14.000	U	14.000	14.000	U	U	U	14.000
25-May-10	14.50	14.500	U	14.500	U	14.500	14.500	14.500	14.500	U	14.500	14.500	U	U	U	14.500	
25-Jun-10	15.00	15.000	U	15.000	U	15.000	15.000	15.000	15.000	U	15.000	15.000	U	U	U	15.000	























## ANALYTICAL REPORT

Lab Number:	L1105797
Client:	EA Engineering, Science and Technology 2374 Post Road Suite 102 Warwick, RI 02886
ATTN:	Frank Postma
Phone:	(401) 736-3440
Project Name:	ALVAREZ HIGH SCHOOL
Project Number:	14687.01
Report Date:	05/04/11

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

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508-822-9300 (Fax) 508-822-3288 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)

**Project Name:** ALVAREZ HIGH SCHOOL  
**Project Number:** 14687.01

**Lab Number:** L1105797  
**Report Date:** 05/04/11

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L1105797-01	GYMNASIUM	PROVIDENCE, RI	04/27/11 08:01
L1105797-02	CAFETERIA	PROVIDENCE, RI	04/27/11 07:55
L1105797-03	KITCHEN STORAGE ROOM	PROVIDENCE, RI	04/27/11 07:56
L1105797-04	ELEVATOR HALLWAY	PROVIDENCE, RI	04/27/11 08:03
L1105797-05	ROOM 145	PROVIDENCE, RI	04/27/11 07:48
L1105797-06	ROOM 152	PROVIDENCE, RI	04/27/11 07:49
L1105797-07	ROOM 118	PROVIDENCE, RI	04/27/11 07:51
L1105797-08	ROOM 110	PROVIDENCE, RI	04/27/11 07:52
L1105797-09	AMBIENT OUTDOOR AIR	PROVIDENCE, RI	04/27/11 10:49

**Project Name:** ALVAREZ HIGH SCHOOL  
**Project Number:** 14687.01

**Lab Number:** L1105797  
**Report Date:** 05/04/11

### 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.

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#### Volatile Organics in Air (SIM)

The canister certification results are provided as an addendum.

L1105797-04 The RPD of the pre- and post-flow controller calibration check (27% RPD) was outside acceptable limits (< or = 20% RPD).

L1105797-08 The RPD of the pre- and post-flow controller calibration check (51% RPD) was outside acceptable limits (< or = 20% RPD).

L1105797-02 and -04 through -08: results for Chloromethane should be considered estimated due to co-elution with a non-target peak.

Project Name: ALVAREZ HIGH SCHOOL  
Project Number: 14687.01

Lab Number: L1105797  
Report Date: 05/04/11

Case Narrative (continued)

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: 05/04/11

**AIR**

**Project Name:** ALVAREZ HIGH SCHOOL**Lab Number:** L1105797**Project Number:** 14687.01**Report Date:** 05/04/11**SAMPLE RESULTS**

Lab ID: L1105797-01  
 Client ID: GYMNASIUM  
 Sample Location: PROVIDENCE, RI  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 04/29/11 17:52  
 Analyst: RY

Date Collected: 04/27/11 08:01  
 Date Received: 04/28/11  
 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								
Dichlorodifluoromethane	0.446	0.050	--	2.20	0.247	--		1
Chloromethane	0.681	0.500	--	1.40	1.03	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	4.75	2.00	--	11.3	4.75	--		1
Trichlorofluoromethane	0.198	0.050	--	1.11	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	0.754	0.500	--	2.22	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	0.058	0.020	--	0.364	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:** L1105797  
**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-01  
 Client ID: GYMNASIUM  
 Sample Location: PROVIDENCE, RI

Date Collected: 04/27/11 08:01  
 Date Received: 04/28/11  
 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	0.284	0.050	--	1.07	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	0.026	0.020	--	0.176	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	0.144	0.020	--	0.625	0.087	--		1
p/m-Xylene	0.469	0.040	--	2.03	0.174	--		1
Bromoform	ND	0.020	--	ND	0.206	--		1
Styrene	0.040	0.020	--	0.170	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	0.142	0.020	--	0.616	0.087	--		1
Isopropylbenzene	ND	0.500	--	ND	2.46	--		1
1,3,5-Trimethylbenzene	0.167	0.020	--	0.820	0.098	--		1
1,2,4-Trimethylbenzene	0.424	0.020	--	2.08	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:** L1105797

**Project Number:** 14687.01

**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-01  
 Client ID: GYMNASIUM  
 Sample Location: PROVIDENCE, RI

Date Collected: 04/27/11 08:01  
 Date Received: 04/28/11  
 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	96		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	97		60-140



**Project Name:** ALVAREZ HIGH SCHOOL  
**Project Number:** 14687.01

**Lab Number:** L1105797  
**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-02  
 Client ID: CAFETERIA  
 Sample Location: PROVIDENCE, RI  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 04/29/11 18:29  
 Analyst: RY

Date Collected: 04/27/11 07:55  
 Date Received: 04/28/11  
 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								
Dichlorodifluoromethane	0.461	0.050	--	2.28	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	5.38	2.00	--	12.8	4.75	--		1
Trichlorofluoromethane	0.223	0.050	--	1.25	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	0.045	0.020	--	0.220	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	0.057	0.020	--	0.358	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:** L1105797  
**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-02  
 Client ID: CAFETERIA  
 Sample Location: PROVIDENCE, RI

Date Collected: 04/27/11 07:55  
 Date Received: 04/28/11  
 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	0.227	0.050	--	0.855	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	0.026	0.020	--	0.176	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	0.032	0.020	--	0.139	0.087	--		1
p/m-Xylene	0.095	0.040	--	0.412	0.174	--		1
Bromoform	ND	0.020	--	ND	0.206	--		1
Styrene	0.039	0.020	--	0.166	0.085	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	0.031	0.020	--	0.134	0.087	--		1
Isopropylbenzene	ND	0.500	--	ND	2.46	--		1
1,3,5-Trimethylbenzene	0.026	0.020	--	0.128	0.098	--		1
1,2,4-Trimethylbenzene	0.057	0.020	--	0.280	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	0.029	0.020	--	0.174	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:** L1105797  
**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-02  
 Client ID: CAFETERIA  
 Sample Location: PROVIDENCE, RI

Date Collected: 04/27/11 07:55  
 Date Received: 04/28/11  
 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	97		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	97		60-140

**Project Name:** ALVAREZ HIGH SCHOOL**Lab Number:** L1105797**Project Number:** 14687.01**Report Date:** 05/04/11**SAMPLE RESULTS**

Lab ID: L1105797-03  
 Client ID: KITCHEN STORAGE ROOM  
 Sample Location: PROVIDENCE, RI  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 04/29/11 19:06  
 Analyst: RY

Date Collected: 04/27/11 07:56  
 Date Received: 04/28/11  
 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								
Dichlorodifluoromethane	0.419	0.050	--	2.07	0.247	--		1
Chloromethane	0.508	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	2.87	2.00	--	6.82	4.75	--		1
Trichlorofluoromethane	0.213	0.050	--	1.20	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	0.059	0.020	--	0.371	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:** L1105797  
**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-03  
 Client ID: KITCHEN STORAGE ROOM  
 Sample Location: PROVIDENCE, RI

Date Collected: 04/27/11 07:56  
 Date Received: 04/28/11  
 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	0.203	0.050	--	0.764	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	0.021	0.020	--	0.142	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	0.025	0.020	--	0.108	0.087	--		1
p/m-Xylene	0.068	0.040	--	0.295	0.174	--		1
Bromoform	ND	0.020	--	ND	0.206	--		1
Styrene	0.039	0.020	--	0.166	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	0.026	0.020	--	0.113	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	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:** L1105797

**Project Number:** 14687.01

**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-03  
 Client ID: KITCHEN STORAGE ROOM  
 Sample Location: PROVIDENCE, RI

Date Collected: 04/27/11 07:56  
 Date Received: 04/28/11  
 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	94		60-140
bromochloromethane	108		60-140
chlorobenzene-d5	96		60-140

**Project Name:** ALVAREZ HIGH SCHOOL  
**Project Number:** 14687.01

**Lab Number:** L1105797  
**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-04  
 Client ID: ELEVATOR HALLWAY  
 Sample Location: PROVIDENCE, RI  
 Matrix: Air  
 Analytical Method: 48.TO-15-SIM  
 Analytical Date: 04/29/11 19:43  
 Analyst: RY

Date Collected: 04/27/11 08:03  
 Date Received: 04/28/11  
 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								
Dichlorodifluoromethane	0.496	0.050	--	2.45	0.247	--		1
Chloromethane	1.05	0.500	--	2.16	1.03	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	6.21	2.00	--	14.7	4.75	--		1
Trichlorofluoromethane	0.221	0.050	--	1.24	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	0.029	0.020	--	0.141	0.098	--		1
1,2-Dichloroethane	0.020	0.020	--	0.081	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	0.065	0.020	--	0.408	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**Lab Number:** L1105797**Project Number:** 14687.01**Report Date:** 05/04/11**SAMPLE RESULTS**

Lab ID: L1105797-04

Date Collected: 04/27/11 08:03

Client ID: ELEVATOR HALLWAY

Date Received: 04/28/11

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	0.284	0.050	--	1.07	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	0.052	0.020	--	0.352	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	0.051	0.020	--	0.221	0.087	--		1
p/m-Xylene	0.148	0.040	--	0.642	0.174	--		1
Bromoform	ND	0.020	--	ND	0.206	--		1
Styrene	0.045	0.020	--	0.192	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	0.048	0.020	--	0.208	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	0.052	0.020	--	0.255	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	0.037	0.020	--	0.222	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:** L1105797  
**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-04  
 Client ID: ELEVATOR HALLWAY  
 Sample Location: PROVIDENCE, RI

Date Collected: 04/27/11 08:03  
 Date Received: 04/28/11  
 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	83		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	88		60-140

**Project Name:** ALVAREZ HIGH SCHOOL  
**Project Number:** 14687.01

**Lab Number:** L1105797  
**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-05  
 Client ID: ROOM 145  
 Sample Location: PROVIDENCE, RI  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 04/29/11 20:21  
 Analyst: RY

Date Collected: 04/27/11 07:48  
 Date Received: 04/28/11  
 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								
Dichlorodifluoromethane	0.450	0.050	--	2.22	0.247	--		1
Chloromethane	0.841	0.500	--	1.74	1.03	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	5.19	2.00	--	12.3	4.75	--		1
Trichlorofluoromethane	0.228	0.050	--	1.28	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.08	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	1.45	1.00	--	5.04	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	0.057	0.020	--	0.358	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:** L1105797  
**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-05  
 Client ID: ROOM 145  
 Sample Location: PROVIDENCE, RI

Date Collected: 04/27/11 07:48  
 Date Received: 04/28/11  
 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	0.208	0.050	--	0.783	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	0.022	0.020	--	0.149	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	0.046	0.020	--	0.200	0.087	--		1
p/m-Xylene	0.095	0.040	--	0.412	0.174	--		1
Bromoform	ND	0.020	--	ND	0.206	--		1
Styrene	0.034	0.020	--	0.145	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	0.035	0.020	--	0.152	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	0.035	0.020	--	0.172	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:** L1105797

**Project Number:** 14687.01

**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-05  
 Client ID: ROOM 145  
 Sample Location: PROVIDENCE, RI

Date Collected: 04/27/11 07:48  
 Date Received: 04/28/11  
 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	95		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	96		60-140



**Project Name:** ALVAREZ HIGH SCHOOL  
**Project Number:** 14687.01

**Lab Number:** L1105797  
**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-06  
 Client ID: ROOM 152  
 Sample Location: PROVIDENCE, RI  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 04/29/11 20:58  
 Analyst: RY

Date Collected: 04/27/11 07:49  
 Date Received: 04/28/11  
 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								
Dichlorodifluoromethane	0.448	0.050	--	2.21	0.247	--		1
Chloromethane	0.710	0.500	--	1.46	1.03	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	2.50	2.00	--	5.93	4.75	--		1
Trichlorofluoromethane	0.200	0.050	--	1.12	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	0.022	0.020	--	0.089	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	0.057	0.020	--	0.358	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:** L1105797  
**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-06  
 Client ID: ROOM 152  
 Sample Location: PROVIDENCE, RI

Date Collected: 04/27/11 07:49  
 Date Received: 04/28/11  
 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	0.166	0.050	--	0.625	0.188	--		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	0.044	0.040	--	0.191	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	0.023	0.020	--	0.113	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  
**Project Number:** 14687.01

**Lab Number:** L1105797  
**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-06  
 Client ID: ROOM 152  
 Sample Location: PROVIDENCE, RI

Date Collected: 04/27/11 07:49  
 Date Received: 04/28/11  
 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	94		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	96		60-140

**Project Name:** ALVAREZ HIGH SCHOOL**Lab Number:** L1105797**Project Number:** 14687.01**Report Date:** 05/04/11**SAMPLE RESULTS**

Lab ID: L1105797-07  
 Client ID: ROOM 118  
 Sample Location: PROVIDENCE, RI  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 04/29/11 21:35  
 Analyst: RY

Date Collected: 04/27/11 07:51  
 Date Received: 04/28/11  
 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								
Dichlorodifluoromethane	0.438	0.050	--	2.16	0.247	--		1
Chloromethane	0.698	0.500	--	1.44	1.03	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	6.16	2.00	--	14.6	4.75	--		1
Trichlorofluoromethane	0.192	0.050	--	1.08	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	0.023	0.020	--	0.093	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	0.056	0.020	--	0.352	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	0.715	0.500	--	2.93	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:** L1105797  
**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-07  
 Client ID: ROOM 118  
 Sample Location: PROVIDENCE, RI

Date Collected: 04/27/11 07:51  
 Date Received: 04/28/11  
 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	0.274	0.050	--	1.03	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	0.026	0.020	--	0.176	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	0.193	0.020	--	0.837	0.087	--		1
p/m-Xylene	0.695	0.040	--	3.02	0.174	--		1
Bromoform	ND	0.020	--	ND	0.206	--		1
Styrene	0.065	0.020	--	0.277	0.085	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	0.190	0.020	--	0.824	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	0.030	0.020	--	0.147	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	0.020	0.020	--	0.120	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:05041115:16

**Project Name:** ALVAREZ HIGH SCHOOL

**Lab Number:** L1105797

**Project Number:** 14687.01

**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-07  
Client ID: ROOM 118  
Sample Location: PROVIDENCE, RI

Date Collected: 04/27/11 07:51  
Date Received: 04/28/11  
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	95		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	98		60-140



**Project Name:** ALVAREZ HIGH SCHOOL  
**Project Number:** 14687.01

**Lab Number:** L1105797  
**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-08  
 Client ID: ROOM 110  
 Sample Location: PROVIDENCE, RI  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 04/29/11 22:13  
 Analyst: RY

Date Collected: 04/27/11 07:52  
 Date Received: 04/28/11  
 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								
Dichlorodifluoromethane	0.447	0.050	--	2.21	0.247	--		1
Chloromethane	0.731	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	3.18	2.00	--	7.55	4.75	--		1
Trichlorofluoromethane	0.204	0.050	--	1.14	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	0.058	0.020	--	0.364	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:** L1105797  
**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-08  
 Client ID: ROOM 110  
 Sample Location: PROVIDENCE, RI

Date Collected: 04/27/11 07:52  
 Date Received: 04/28/11  
 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	0.223	0.050	--	0.840	0.188	--		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	0.020	0.020	--	0.087	0.087	--		1
p/m-Xylene	0.060	0.040	--	0.260	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	0.021	0.020	--	0.091	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	0.023	0.020	--	0.113	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  
**Project Number:** 14687.01

**Lab Number:** L1105797  
**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-08  
 Client ID: ROOM 110  
 Sample Location: PROVIDENCE, RI

Date Collected: 04/27/11 07:52  
 Date Received: 04/28/11  
 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	93		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	94		60-140

**Project Name:** ALVAREZ HIGH SCHOOL  
**Project Number:** 14687.01

**Lab Number:** L1105797  
**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-09  
 Client ID: AMBIENT OUTDOOR AIR  
 Sample Location: PROVIDENCE, RI  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 04/29/11 17:16  
 Analyst: RY

Date Collected: 04/27/11 10:49  
 Date Received: 04/28/11  
 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								
Dichlorodifluoromethane	0.497	0.050	--	2.46	0.247	--		1
Chloromethane	0.617	0.500	--	1.27	1.03	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	2.36	2.00	--	5.60	4.75	--		1
Trichlorofluoromethane	0.223	0.050	--	1.25	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	0.069	0.020	--	0.434	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:** L1105797  
**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-09  
 Client ID: AMBIENT OUTDOOR AIR  
 Sample Location: PROVIDENCE, RI

Date Collected: 04/27/11 10:49  
 Date Received: 04/28/11  
 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	0.172	0.050	--	0.648	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	0.042	0.020	--	0.285	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	0.021	0.020	--	0.091	0.087	--		1
p/m-Xylene	0.059	0.040	--	0.256	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	0.022	0.020	--	0.095	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	0.026	0.020	--	0.128	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:** L1105797

**Project Number:** 14687.01

**Report Date:** 05/04/11

**SAMPLE RESULTS**

Lab ID: L1105797-09  
 Client ID: AMBIENT OUTDOOR AIR  
 Sample Location: PROVIDENCE, RI

Date Collected: 04/27/11 10:49  
 Date Received: 04/28/11  
 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	84		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	88		60-140

Project Name: ALVAREZ HIGH SCHOOL

Lab Number: L1105797

Project Number: 14687.01

Report Date: 05/04/11

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 48,TO-15-SIM

Analytical Date: 04/29/11 15:57

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: WG465447-4								
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

Lab Number: L1105797

Project Number: 14687.01

Report Date: 05/04/11

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 04/29/11 15:57

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: WG465447-4								
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		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:** L1105797  
**Report Date:** 05/04/11

Parameter	LCS		LCS D		%Recovery		RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual	%Recovery	Limits			
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 Batch: WG465447-3									
Dichlorodifluoromethane	102	-	-	-	70-130	-	-	25	25
Chloromethane	100	-	-	-	70-130	-	-	25	25
Vinyl chloride	110	-	-	-	70-130	-	-	25	25
Chloroethane	106	-	-	-	70-130	-	-	25	25
Acetone	92	-	-	-	70-130	-	-	25	25
Trichlorofluoromethane	100	-	-	-	70-130	-	-	25	25
Acrylonitrile	103	-	-	-	70-130	-	-	25	25
1,1-Dichloroethene	100	-	-	-	70-130	-	-	25	25
Methylene chloride	97	-	-	-	70-130	-	-	25	25
trans-1,2-Dichloroethene	93	-	-	-	70-130	-	-	25	25
1,1-Dichloroethane	98	-	-	-	70-130	-	-	25	25
Methyl tert butyl ether	87	-	-	-	70-130	-	-	25	25
2-Butanone	79	-	-	-	70-130	-	-	25	25
cis-1,2-Dichloroethene	100	-	-	-	70-130	-	-	25	25
Chloroform	106	-	-	-	70-130	-	-	25	25
1,2-Dichloroethane	98	-	-	-	70-130	-	-	25	25
1,1,1-Trichloroethane	90	-	-	-	70-130	-	-	25	25
Benzene	89	-	-	-	70-130	-	-	25	25
Carbon tetrachloride	89	-	-	-	70-130	-	-	25	25
1,2-Dichloropropane	101	-	-	-	70-130	-	-	25	25
Bromodichloromethane	92	-	-	-	70-130	-	-	25	25

**Lab Control Sample Analysis**  
Batch Quality Control

**Project Name:** ALVAREZ HIGH SCHOOL  
**Project Number:** 14687.01

**Lab Number:** L1105797  
**Report Date:** 05/04/11

Parameter	LCS		LCS D		%Recovery		RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual	%Recovery	Limits			
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 Batch: WG465447-3									
Trichloroethene	100	-	-	-	-	70-130	-	-	25
cis-1,3-Dichloropropene	102	-	-	-	-	70-130	-	-	25
4-Methyl-2-pentanone	83	-	-	-	-	70-130	-	-	25
trans-1,3-Dichloropropene	85	-	-	-	-	70-130	-	-	25
1,1,2-Trichloroethane	103	-	-	-	-	70-130	-	-	25
Toluene	97	-	-	-	-	70-130	-	-	25
Dibromochloromethane	107	-	-	-	-	70-130	-	-	25
1,2-Dibromoethane	116	-	-	-	-	70-130	-	-	25
Tetrachloroethene	109	-	-	-	-	70-130	-	-	25
1,1,1,2-Tetrachloroethane	111	-	-	-	-	70-130	-	-	25
Chlorobenzene	112	-	-	-	-	70-130	-	-	25
Ethylbenzene	111	-	-	-	-	70-130	-	-	25
p/m-Xylene	113	-	-	-	-	70-130	-	-	25
Bromoform	107	-	-	-	-	70-130	-	-	25
Styrene	118	-	-	-	-	70-130	-	-	25
1,1,2,2-Tetrachloroethane	116	-	-	-	-	70-130	-	-	25
o-Xylene	113	-	-	-	-	70-130	-	-	25
Isopropylbenzene	115	-	-	-	-	70-130	-	-	25
1,3,5-Trimethylbenzene	116	-	-	-	-	70-130	-	-	25
1,2,4-Trimethylbenzene	120	-	-	-	-	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:** L1105797  
**Report Date:** 05/04/11

Parameter	LCS		LCSD		%Recovery		RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual	%Recovery	Limits			
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 Batch: WG465447-3									
1,4-Dichlorobenzene	123	-	-	-	70-130	-	-	25	25
sec-Butylbenzene	118	-	-	-	70-130	-	-	25	25
p-Isopropyltoluene	108	-	-	-	70-130	-	-	25	25
1,2-Dichlorobenzene	123	-	-	-	70-130	-	-	25	25
n-Butylbenzene	113	-	-	-	70-130	-	-	25	25

## Lab Duplicate Analysis Batch Quality Control

**Project Name:** ALVAREZ HIGH SCHOOL  
**Project Number:** 14687.01

**Lab Number:** L1105797  
**Report Date:** 05/04/11

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
<b>Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s) 01-09 QC Batch ID: WG465447-5 QC Sample: L1105798-03 Client ID: DUP Sample</b>						
Dichlorodifluoromethane	0.458	0.455	ppbV	1		25
Chloromethane	ND	ND	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
Chloroethane	0.031	0.030	ppbV	3		25
Acetone	92.7E	92.8E	ppbV	0		25
Trichlorofluoromethane	0.578	0.570	ppbV	1		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	3.82	3.87	ppbV	1		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
Chloroform	0.024	0.025	ppbV	4		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	0.053	0.053	ppbV	0		25

**Lab Duplicate Analysis**  
Batch Quality Control

**Project Name:** ALVAREZ HIGH SCHOOL  
**Project Number:** 14687.01

**Lab Number:** L1105797  
**Report Date:** 05/04/11

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: WG465447-5 QC Sample: L1105798-03 Client ID: DUP Sample					
1,2-Dichloropropane	ND	ND	ppbV	NC	25
Bromodichloromethane	ND	ND	ppbV	NC	25
Trichloroethene	0.166	0.164	ppbV	1	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	0.333	0.342	ppbV	3	25
Dibromochloromethane	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
Tetrachloroethene	0.226	0.230	ppbV	2	25
1,1,1,2-Tetrachloroethane	ND	ND	ppbV	NC	25
Chlorobenzene	ND	ND	ppbV	NC	25
Ethylbenzene	0.066	0.068	ppbV	3	25
p/m-Xylene	0.205	0.208	ppbV	1	25
Bromoform	ND	ND	ppbV	NC	25
Styrene	0.086	0.089	ppbV	3	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
o-Xylene	0.085	0.086	ppbV	1	25



### Lab Duplicate Analysis Batch Quality Control

**Project Name:** ALVAREZ HIGH SCHOOL  
**Project Number:** 14687.01

**Lab Number:** L1105797  
**Report Date:** 05/04/11

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: WG465447-5 QC Sample: L1105798-03 Client ID: DUP					
Isopropylbenzene	ND	ND	ppbV	NC	25
1,3,5-Trimethylbenzene	0.075	0.076	ppbV	1	25
1,2,4-Trimethylbenzene	0.253	0.260	ppbV	3	25
1,3-Dichlorobenzene	0.026	0.028	ppbV	7	25
1,4-Dichlorobenzene	0.161	0.166	ppbV	3	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

Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG465447-5 QC Sample: L1105798-03 Client ID: DUP					
Sample	74.1	80.5	ppbV	8	25
Acetone					

Project Name: ALVAREZ HIGH SCHOOL

Project Number: 14687.01

Serial\_No:05041115:16

Lab Number: L1105797

Report Date: 05/04/11

### 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
L1105797-01	GYMNASIUM	0076	#90 AMB		-	-	160	159	1
L1105797-01	GYMNASIUM	742	6.0L Can	L1105342	-29.5	-3.1	-	-	-
L1105797-02	CAFETERIA	0099	#90 AMB		-	-	159	170	7
L1105797-02	CAFETERIA	1705	6.0L Can	L1105278	-29.5	-2.8	-	-	-
L1105797-03	KITCHEN STORAGE ROOM	0371	#90 AMB		-	-	156	170	9
L1105797-03	KITCHEN STORAGE ROOM	1712	6.0L Can	L1105278	-29.5	-8.5	-	-	-
L1105797-04	ELEVATOR HALLWAY	0399	#90 AMB		-	-	157	120	27
L1105797-04	ELEVATOR HALLWAY	637	6.0L Can	L1105278	-29.5	-10.3	-	-	-
L1105797-05	ROOM 145	0014	#90 AMB		-	-	155	160	3
L1105797-05	ROOM 145	904	6.0L Can	L1105278	-29.1	-4.4	-	-	-
L1105797-06	ROOM 152	0408	#90 AMB		-	-	155	160	3
L1105797-06	ROOM 152	918	6.0L Can	L1105278	-29.5	-4.5	-	-	-
L1105797-07	ROOM 118	0272	#90 AMB		-	-	160	190	17
L1105797-07	ROOM 118	1521	6.0L Can	L1105278	-29.3	-0.9	-	-	-
L1105797-08	ROOM 110	0271	#90 AMB		-	-	160	270	51
L1105797-08	ROOM 110	995	6.0L Can	L1105278	-29.5	0.8	-	-	-
L1105797-09	AMBIENT OUTDOOR AIR	0023	#90 AMB		-	-	158	166	5



Serial\_No:05041115:16

**Project Name:** ALVAREZ HIGH SCHOOL

**Lab Number:** L1105797

**Project Number:** 14687.01

**Report Date:** 05/04/11

**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
L1105797-09	AMBIENT OUTDOOR AIR	638	6.0L Can	L1105278	-29.5	-3.1	-	-	-



## **Air Volatiles Can Certification**

**Project Name:** BATCH CANISTER CERTIFICATION**Lab Number:** L1105278**Project Number:** CANISTER QC BAT**Report Date:** 05/04/11**Air Canister Certification Results**

Lab ID: L1105278-01  
 Client ID: CAN 790 SHELF 46  
 Sample Location:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 04/21/11 15:32  
 Analyst: BS

Date Collected: 04/18/11 00:00  
 Date Received: 04/18/11  
 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								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.860	--		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:** L1105278**Project Number:** CANISTER QC BAT**Report Date:** 05/04/11**Air Canister Certification Results**

Lab ID: L1105278-01  
 Client ID: CAN 790 SHELF 46  
 Sample Location:

Date Collected: 04/18/11 00:00  
 Date Received: 04/18/11  
 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
Xylenes, total	ND	0.600	--	ND	2.60	--		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

**Project Name:** BATCH CANISTER CERTIFICATION**Lab Number:** L1105278**Project Number:** CANISTER QC BAT**Report Date:** 05/04/11**Air Canister Certification Results**

Lab ID: L1105278-01  
 Client ID: CAN 790 SHELF 46  
 Sample Location:

Date Collected: 04/18/11 00:00  
 Date Received: 04/18/11  
 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								
1,4-Dioxane	ND	0.200	--	ND	0.720	--		1
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

**Project Name:** BATCH CANISTER CERTIFICATION**Lab Number:** L1105278**Project Number:** CANISTER QC BAT**Report Date:** 05/04/11**Air Canister Certification Results**

Lab ID: L1105278-01  
 Client ID: CAN 790 SHELF 46  
 Sample Location:

Date Collected: 04/18/11 00:00  
 Date Received: 04/18/11  
 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								
Isopropylbenzene	ND	0.200	--	ND	0.982	--		1
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:05041115:16

**Project Name:** BATCH CANISTER CERTIFICATION

**Lab Number:** L1105278

**Project Number:** CANISTER QC BAT

**Report Date:** 05/04/11

**Air Canister Certification Results**

Lab ID: L1105278-01  
Client ID: CAN 790 SHELF 46  
Sample Location:

Date Collected: 04/18/11 00:00  
Date Received: 04/18/11  
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								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	109		60-140
Bromochloromethane	101		60-140
chlorobenzene-d5	100		60-140



**Project Name:** BATCH CANISTER CERTIFICATION**Lab Number:** L1105278**Project Number:** CANISTER QC BAT**Report Date:** 05/04/11**Air Canister Certification Results**

Lab ID: L1105278-01  
 Client ID: CAN 790 SHELF 46  
 Sample Location:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 04/21/11 15:32  
 Analyst: BS

Date Collected: 04/18/11 00:00  
 Date Received: 04/18/11  
 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								
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:** L1105278**Project Number:** CANISTER QC BAT**Report Date:** 05/04/11**Air Canister Certification Results**

Lab ID: L1105278-01  
 Client ID: CAN 790 SHELF 46  
 Sample Location:

Date Collected: 04/18/11 00:00  
 Date Received: 04/18/11  
 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
1,4-Dioxane	ND	0.100	--	ND	0.360	--		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
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		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:** L1105278

**Project Number:** CANISTER QC BAT

**Report Date:** 05/04/11

**Air Canister Certification Results**

Lab ID: L1105278-01  
 Client ID: CAN 790 SHELF 46  
 Sample Location:

Date Collected: 04/18/11 00:00  
 Date Received: 04/18/11  
 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								
1,2,4-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:05041115:16

**Project Name:** BATCH CANISTER CERTIFICATION

**Lab Number:** L1105278

**Project Number:** CANISTER QC BAT

**Report Date:** 05/04/11

**Air Canister Certification Results**

Lab ID: L1105278-01  
Client ID: CAN 790 SHELF 46  
Sample Location:

Date Collected: 04/18/11 00:00  
Date Received: 04/18/11  
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	105		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	96		60-140



**Project Name:** BATCH CANISTER CERTIFICATION**Lab Number:** L1105342**Project Number:** CANISTER QC BAT**Report Date:** 05/04/11**Air Canister Certification Results**

Lab ID: L1105342-01  
 Client ID: CAN 601 SHELF 53  
 Sample Location:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 04/21/11 17:25  
 Analyst: BS

Date Collected: 04/19/11 00:00  
 Date Received: 04/19/11  
 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								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.860	--		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:** L1105342**Project Number:** CANISTER QC BAT**Report Date:** 05/04/11**Air Canister Certification Results**

Lab ID: L1105342-01  
 Client ID: CAN 601 SHELF 53  
 Sample Location:

Date Collected: 04/19/11 00:00  
 Date Received: 04/19/11  
 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**Lab Number:** L1105342**Project Number:** CANISTER QC BAT**Report Date:** 05/04/11**Air Canister Certification Results**

Lab ID: L1105342-01  
 Client ID: CAN 601 SHELF 53  
 Sample Location:

Date Collected: 04/19/11 00:00  
 Date Received: 04/19/11  
 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								
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**Lab Number:** L1105342**Project Number:** CANISTER QC BAT**Report Date:** 05/04/11**Air Canister Certification Results**

Lab ID: L1105342-01  
 Client ID: CAN 601 SHELF 53  
 Sample Location:

Date Collected: 04/19/11 00:00  
 Date Received: 04/19/11  
 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

**Lab Number:** L1105342

**Project Number:** CANISTER QC BAT

**Report Date:** 05/04/11

**Air Canister Certification Results**

Lab ID: L1105342-01  
 Client ID: CAN 601 SHELF 53  
 Sample Location:

Date Collected: 04/19/11 00:00  
 Date Received: 04/19/11  
 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								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	110		60-140
Bromochloromethane	101		60-140
chlorobenzene-d5	106		60-140

**Project Name:** BATCH CANISTER CERTIFICATION**Lab Number:** L1105342**Project Number:** CANISTER QC BAT**Report Date:** 05/04/11**Air Canister Certification Results**

Lab ID: L1105342-01  
 Client ID: CAN 601 SHELF 53  
 Sample Location:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 04/21/11 17:25  
 Analyst: BS

Date Collected: 04/19/11 00:00  
 Date Received: 04/19/11  
 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								
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:** L1105342**Project Number:** CANISTER QC BAT**Report Date:** 05/04/11**Air Canister Certification Results**

Lab ID: L1105342-01  
 Client ID: CAN 601 SHELF 53  
 Sample Location:

Date Collected: 04/19/11 00:00  
 Date Received: 04/19/11  
 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
1,4-Dioxane	ND	0.100	--	ND	0.360	--		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
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		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

Serial\_No:05041115:16

**Project Name:** BATCH CANISTER CERTIFICATION

**Lab Number:** L1105342

**Project Number:** CANISTER QC BAT

**Report Date:** 05/04/11

### Air Canister Certification Results

Lab ID: L1105342-01  
Client ID: CAN 601 SHELF 53  
Sample Location:

Date Collected: 04/19/11 00:00  
Date Received: 04/19/11  
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								
1,2,4-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

**Lab Number:** L1105342

**Project Number:** CANISTER QC BAT

**Report Date:** 05/04/11

**Air Canister Certification Results**

Lab ID: L1105342-01  
 Client ID: CAN 601 SHELF 53  
 Sample Location:

Date Collected: 04/19/11 00:00  
 Date Received: 04/19/11  
 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	106		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	98		60-140

# **AIR Petro Can Certification**

Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1105278

Project Number: CANISTER QC BAT

Report Date: 05/04/11

## AIR CAN CERTIFICATION RESULTS

Lab ID: L1105278-01  
 Client ID: CAN 790 SHELF 46  
 Sample Location: Not Specified  
 Matrix: Air  
 Analytical Method: 96,APH  
 Analytical Date: 04/22/11 16:12  
 Analyst: RY

Date Collected: 04/18/11 00:00  
 Date Received: 04/18/11  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Petroleum Hydrocarbons in Air - Mansfield Lab</b>						
1,3-Butadiene	ND		ug/m3	2.0	--	1
Methyl tert butyl ether	ND		ug/m3	2.0	--	1
Benzene	ND		ug/m3	2.0	--	1
Toluene	ND		ug/m3	2.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/m3	12	--	1
Ethylbenzene	ND		ug/m3	2.0	--	1
p/m-Xylene	ND		ug/m3	4.0	--	1
o-Xylene	ND		ug/m3	2.0	--	1
Naphthalene	ND		ug/m3	2.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/m3	14	--	1
C9-C10 Aromatics Total	ND		ug/m3	10	--	1

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L1105342  
**Report Date:** 05/04/11

**AIR CAN CERTIFICATION RESULTS**

**Lab ID:** L1105342-01  
**Client ID:** CAN 601 SHELF 53  
**Sample Location:** Not Specified  
**Matrix:** Air  
**Analytical Method:** 96,APH  
**Analytical Date:** 04/22/11 18:05  
**Analyst:** RY

**Date Collected:** 04/19/11 00:00  
**Date Received:** 04/19/11  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Petroleum Hydrocarbons in Air - Mansfield Lab</b>						
1,3-Butadiene	ND		ug/m3	2.0	--	1
Methyl tert butyl ether	ND		ug/m3	2.0	--	1
Benzene	ND		ug/m3	2.0	--	1
Toluene	ND		ug/m3	2.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/m3	12	--	1
Ethylbenzene	ND		ug/m3	2.0	--	1
p/m-Xylene	ND		ug/m3	4.0	--	1
o-Xylene	ND		ug/m3	2.0	--	1
Naphthalene	ND		ug/m3	2.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/m3	14	--	1
C9-C10 Aromatics Total	ND		ug/m3	10	--	1

Project Name: ALVAREZ HIGH SCHOOL

Lab Number: L1105797

Project Number: 14687.01

Report Date: 05/04/11

**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(*)
L1105797-01A	Canister - 6 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1105797-02A	Canister - 6 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1105797-03A	Canister - 6 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1105797-04A	Canister - 6 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1105797-05A	Canister - 6 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1105797-06A	Canister - 6 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1105797-07A	Canister - 6 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1105797-08A	Canister - 6 Liter	N/A	NA		NA	Present/Intact	TO15-SIM(30)
L1105797-09A	Canister - 6 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:** L1105797  
**Report Date:** 05/04/11

## 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.
- G** · The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- 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

Report Format: Data Usability Report

**Project Name:** ALVAREZ HIGH SCHOOL

**Lab Number:** L1105797

**Project Number:** 14687.01

**Report Date:** 05/04/11

*Data Qualifiers*

the sample concentrations are less than 5x the RL. (Metals only.)

**R** - Analytical results are from sample re-analysis.

**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.

**Project Name:** ALVAREZ HIGH SCHOOL  
**Project Number:** 14687.01

**Lab Number:** L1105797  
**Report Date:** 05/04/11

### 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 it's 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 March 23, 2011 – 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, SM2540D, SM2540G.)

*Solid & Chemical Materials* (Inorganic Parameters: 6020, 7470, 7471, 9045. 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 180.1, 245.7, 1631E, 3020, 6020A, 7470A, 9040, 9050A, SM2320B, 2540D, 2540G, 4500H-B, Organic Parameters: EPA 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 5030B, 8015D, 3570, 8081B, 8082A, 8260B, 8270C.)

*Solid & Chemical Materials* (Inorganic Parameters: EPA 1311, 3050, 3051A, 3060A, 6020A, 7196A, 7470A, 7471B, 7474, 9040B, 9045C, 9060. Organic Parameters: EPA 3540C, 3570B, 3580A, 3630C, 3640A, 3660, 3665A, 5035, 8015D, 8081B, 8082A, 8260B, 8270C.)

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

*Air & Emissions* (EPA TO-15.)

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

*Non-Potable Water* (Inorganic Parameters: EPA, 245.1, 245.7, 1631E, 180.1, 6020A, 7470A, 9040B, 9050A, SM2540D, 2540G, 4500H+B, 2320B. Organic Parameters: EPA 8081, 8082, 8260B, 8270C.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 1311, 1312, 3050B, 3051A, 3060A, 6020A, 7470A, 7471A, 9040B, 9045C, 7196A. Organic Parameters: SW-846 3540C, 3580, 3630C, 3640A, 3660B, 3665A, 5035, 8260B, 8270C, 8015D, 8082, 8081A.)

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

*Non-Potable Water* (Inorganic Parameters: SW-846 1312, 3010, 3020A, 3015, SM2320B, EPA 200.8, SM2540D, 2540G, EPA 120.1, SM2510B, EPA 180.1, 245.1, 1631E, SW-846 7470A, 9040B, 6020, 9010B, 9014 Organic Parameters: SW-846 3510C, 3580A, 5030B, 5035L, 5035H, 3630C, 3640C, 3660B, 3665A, 8015B, 8081A, 8082, 8260B, 8270C)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 6020, 9010B, 9014, 1311, 1312, 3050B, 3051, 3060A, 7196A, 7470A, 7471A, 9040B, 9045C, 9060. Organic Parameters: SW-846 3540C, 3570, 3580A, 5030B, 5035L, 5035H, 3630C, 3640A, 3660B, 3665A, 8081A, 8082, 8260B, 8270C, 8015B.)

*Atmospheric Organic Parameters* (EPA TO-15)

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

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

*Non-Potable Water* (Inorganic Parameters: SM2320B, SM2540D, EPA 200.8, 6020, 1631E, 245.1, 9014, 9040B, 120.1, SM2510B, 4500CN-E, 4500H-B, EPA 376.2, 180.1, 9010B. Organic Parameters: EPA 8260B, 8270C, 8081A, 8082, 3510C, 5030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 6020, 7196A, 3060A, 7471A, 7474, 9014, 9040B, 9045C, 9010B. Organic Parameters: EPA 8260B, 8270C, 8081A, DRO 8015B, 8082, 1311, 1312, 3050B, 3580, 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 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)

**Washington State Department of Ecology** Certificate/Lab ID: C954. *Non-Potable Water* (Inorganic Parameters: SM2540D, 2510B, EPA 120.1, 180.1, 1631E, 245.7.)

*Solid & Chemical Materials* (Inorganic Parameters: EPA 9040, 9060, 6020, 7470, 7471, 7474. Organic Parameters: EPA 8081, 8082, 8015 Mod, 8270, 8260.)

**U.S. Army Corps of Engineers**

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

*Non-Potable Water* (Inorganic Parameters: EPA 6020A, SM4500H-B. Organic Parameters: 3020A, 3510C, 5030B, 8260B, 8270C, 8270C-ALK-PAH, 8082, 8081A, 8015D-SHC.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1311, 1312, 3050B, 6020A, 7471A, 9045C, 9060, SM 2540G, ASTM D422-63. Organic Parameters: EPA 3580A, 3570, 3540C, 5035A, 8260B, 8270C, 8270-ALK-PAH, 8082, 8081A, 8015D-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. **TO-15**: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 2-Methylnaphthalene, 1-Methylnaphthalene.

# AIR ANALYSIS

## CHAIN OF CUSTODY

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

### Client Information

Client: EA Engineering  
 Address: 8374 Post Rd.  
 Suite 102

Phone: 401-736-3440

Fax:

Email: mack@east.com

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

PAGE 1 OF 2

### Project Information

Project Name: Alvarez High School  
 Project Location: Providence RI  
 Project #: 14687.01  
 Project Manager: Frank Postma  
 ALPHA Quote #:  
 Turn-Around Time

Standard  RUSH (only confirmed if pre-approved)

Date Due: Time:

Date Rec'd In Lab:

Report Information - Data Deliverables

FAX  
 ADEX  
 Criteria Checker:  
 (Default based on Regulatory Criteria Indicated)  
 Other Formats:  
 EMAIL (standard pdf report)  
 Additional Deliverables:  
 Report to: (if different than Project Manager)  
 mack@east.com

ALPHA Job #: L1105797

Billing Information

Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program Criteria

### ANALYSIS

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

### All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection			Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	Sample Comments (i.e. PID)		
		Date	Start Time	End Time							Initial Vacuum	Final Vacuum
5797501	Gymnasium	4/27/11	728	801	29.51	3.93	AA	NT/PT/6L	743	0076	X	450 PPB
02	Cafeteria	725	755	29.42	3.67				1705	0099		92
03	Kitchen storage Room	726	756	29.50	4.85				1712	0371		0
04	Elevator Hallway	729	803	29.86	11.71				637	0399		100
05	Room 145	717	748	29.42	5.47				904	0014		5
06	Room 152	719	749	29.66	5.74				918	0408		0
07	Room 118	721	751	29.38	1.81				1521	0272		39
08	Room 110	722	752	29.06	0.10				995	0271		6
09	Ambient Outdoor Air	1019	1049	29.83	3.94				628	0023		0

\*SAMPLE MATRIX CODES

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

Relinquished By: [Signature]

Date/Time: 4/27/11 11:00 AM

Received By: [Signature]

Date/Time: 4/28/11 15:55

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

