

April 25, 2013

Ms. Dana Kaplan
Environmental Engineer, MPA
New York State Department of Environmental Conservation
Division of Environmental Remediation
47-40 21st Street
Long Island City, NY 11101-5401

Re: Data Summary Letter Report 1095 Southern Blvd., Bronx, NY Site # C203055A

Dear Ms. Kaplan,

This Data Summary Letter Report has been prepared to summarize the March/April 2012 and March 2013 field activities and analytical results for the above referenced Site. The Site is located at 1095 Southern Blvd., Bronx, NY. The work performed during the field investigation involved the collection of air samples from several adjacent residential and commercial buildings. The work was performed by EnviroTrac Ltd. (EnviroTrac) for the New York State Department of Environmental Conservation (NYSDEC) under NYSDEC Contract #C100902.

In accordance with the NYSDEC Scope of Work (SOW), EnviroTrac was directed to perform the following tasks:

- Collect (1) one sub-slab soil gas, (1) one indoor air sample, and (1) one outdoor air sample from each of the following locations in March-April 2012: 1111 Southern Boulevard, 1110 Simpson Street, 1102 Southern Boulevard, and 1093 Southern Boulevard (Day Care Center) in accordance with the New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion document, dated October 2006. Additionally, a duplicate sample was collected from 1102 Southern Boulevard.
- Collect (1) one additional indoor air and (1) one outdoor air sample from the Day Care Center located at 1093 Southern Boulevard and (1) indoor air sample and (1) sub-slab vapor sample from the Furniture Store located on the ground level of 1093 Southern Boulevard in March 2013 in accordance with the New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion document, dated October 2006.
- Fill and patch any holes created in the slabs.
- Samples were to be analyzed for Volatile Organic Compounds (VOCs) via United States Environmental Protection Agency (USEPA) Method TO-15. Soil gas

samples were collected using batch certified six (6) liter Summa canisters equipped with an 8-hour flow regulators.

• Preparation and submittal of an electronic deliverable to the NYSDEC which documents and evaluates the findings of the investigation.

### Soil Vapor Sample Installation

On March 7, 2012, EnviroTrac was granted access to the residences and commercial properties located at 1110 Simpson Avenue and 1111 Southern Boulevard, Bronx, NY. One (1) sub-slab soil gas sample was collected from beneath the slab of each of the locations (H-1-SS-40975 and H-2-SS-40975). An indoor air sample was also collected from the basements of each of the locations (H-1-BS-40975 and H-2-BS-40975). Additionally, an ambient outdoor sample was collected from each address (H-1-AA-40975 and H-2-AA-40975).

On March 20, 2012, EnviroTrac was also granted access to 1102 Southern Boulevard. One (1) sub-slab soil gas sample was collected from beneath the slab (H-003-SS-40988) at this location. One (1) indoor air sample was collected from the basement (H-003-BA-40988). An ambient outdoor sample was collected from outside of the building (H-003-OA-40988). Additionally, a duplicate indoor sample was collected from the basement. (H-003-BA-Dup-40988).

One additional location was sampled in 2012. On April 10, 2012, EnviroTrac collected (2) two indoor air samples from 1093 Southern Boulevard, Bronx, NY. (H-4-BA-41009 and H-4-BA2-41009). Additionally, an ambient outdoor air sample was collected from outside of the building (H-4-OA-41009).

In March 2013, EnviroTrac was asked to collect additional samples from 1093 Southern Boulevard. One (1) sub-slab soil gas sample (Furniture Store-SS) was installed in the slab beneath the Furniture Store located on the ground level of the building. An indoor air sample (Furniture Store-IA) was collected from the area within the Furniture Store. An additional indoor air sample was collected from within the Day Care Center located on the second floor of the building (Day Care-IA). An outdoor air sample was collected from the Playground area located behind the building (Day Care-OA).

All soil gas samples in 2012 and 2013 with the exception of 1093 Southern Boulevard, were collected using laboratory-evacuated six (6) Liter (L) Summa canisters with 24-hour flow regulators provided by Test America Laboratories Inc. of Knoxville, TN (TAL). Samples from 1093 Southern Boulevard were collected using laboratory-evacuated six (6) Liter (L) Summa canisters with 8-hour flow regulators. In accordance with *NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006), a hole was drilled in the slab of the buildings where sub-stab soil gas samples were collected using a hammer drill. A helium tracer gas was utilized during the sampling of the sub-slab locations. The tracer gas was used to verify that the infiltration of outdoor (ambient) air was not occurring during sample collection. A two (2) quart enclosure was placed over the well head. The well tubing was run through an outlet and Sculpty Modeling Clay was used to seal the interface between the tubing and the enclosure. The enclosure was then sealed at the ground surface with a polyurethane foam gasket. A



tank containing Ultra High Purity (UHP) helium (99.999%) was connected to the side port of the enclosure and enough helium was released to displace any ambient air and to maintain a positive pressure within the enclosure.

Following the application of the tracer gas, approximately one (1) to three (3) volumes were purged from the soil gas sampling point using a Gillian GilAir-3 air sample pump. A Dielectric MGD-2002 helium detector was used to check for the presence of the tracer gas in the purged soil vapor; if less than 10% of the tracer gas was detected, a sample was collected. Following the collection of the soil gas sample, the helium detector was re-connected to the tubing to check for the presence of the tracer gas in the soil vapor; if less than 10% of the tracer gas was detected, the sample was acceptable for analyses. No elevated concentrations of helium were detected prior to or following the sample collection from any of the soil gas conduits.

Additional indoor and ambient air samples were also collected using laboratoryevacuated six (6) Liter (L) Summa canisters with flow regulators provided by Test America Laboratories Inc. of Knoxville, TN (TAL).

Copies of the completed Summa Canister Sampling Field Data Sheets from the sampling events are provided as an attachment to this letter as well as additional field notes collected by EnviroTrac.

A chain of custody form was maintained and accompanied all samples, which were picked up, via courier, and delivered to TAL. The samples were analyzed for VOCs via USEPA Method TO-15.

Summarized laboratory analytical results are provided in **Table 1**. The data was validated, and a Data Usability Summary Reports for each location are also provided. The DUSR was completed by Environmental Data Services Inc. (EDS).

If you have any questions, please contact me.

Sincerely,

EnviroTrac Ltd.

Donna Amoscato Staff Scientist

Attachments

Lab Report Field Notes DUSR Report



#### Table 1 Summary of Air Sampling Analytical Results for Detected VOCs

1095 Southern Blvd. Bronx, NY Site # C203055A

					I												
Sample ID Matrix	H-1-SS-40975 AIR	H-1-BS-40975 AIR	H-1-AA-40975 AIR	H-2-SS-40975 AIR	H-2-BS-40975 AIR	H-2-AA-40975 Air	H-003-SS-40988 Air	H-003-BA-40988 Air	H-003-OA-40988 Air	H-003-BA- Dup-40988 Air	H-4-BA-41009 Air	H-4-OA-41009 Air	H-4-BA2-41009 Air	Day Care-IA AIR	Day Care-OA AIR	Funtinure Store-IA AIR	Furniture Store-SS AIR
	1111 Southern Blvd.	1111 Southern Blvd.	1111 Southern Blvd.														1093 Southern Blvd.
Address	3/7/2012			1110 Simpson St. 3/7/2012	1110 Simpson St.	1110 Simpson St.	1102 Southern Blvd.	1102 Southern Blvd. 3/20/2012	1102 Southern Blvd.	1102 Southern Blvd. 3/20/2012	1093 Southern Blvd. 4/10/2012	1093 Southern Blvd. 4/10/2012	1093 Southern Blvd.	1093 Southern Blvd.	1093 Southern Blvd. 3/5/13	1093 Southern Blvd. 3/5/13	
Date Sampled Ethanol	3///2012	3/7/2012 130	3/7/2012 51	3///2012	3/7/2012 1300 E	3/7/2012 24	3/20/2012	3/20/2012 670 E	3/20/2012 35	3/20/2012 690 E	4/10/2012 1900 E	4/10/2012	4/10/2012 76	3/5/13			3/13/12
Ethylbenzene	10	0.58	ND ND	10	0.86	0.38	24	1.2	0.43	1.5	ND	ND	0.98	1,400 E 0.53	9.7 ND	28 ND	ND ND
Trichlorofluoromethane	1.3	1.2	1.4	1.4	1.4	1.3	3.6	1.6	1.4	1.7	ND ND	1.1	1.1	0.53	ND 1.2	1.1	
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND ND	ND	ND	1.2 ND	1.2 ND	1.1 ND	ND ND
n-Hexane	2.5	ND ND	ND ND	2.8	1.5	ND ND	6	3	0.85	3.1	ND ND	ND ND	ND ND				
2,2,4-Trimethylpentane	1.3	ND ND	ND ND	1	ND	ND ND	2	3.4	ND	2.7	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
tert-Butyl alcohol	4	ND ND	ND ND	8.1	2.7	ND ND	1.9	ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND		ND ND	
Methylene chloride	1.7	12	2.5	ND	1	0.77	1.5	0.8	0.94	0.93	ND ND	ND ND	ND ND	ND ND	ND 2.2	ND ND	ND ND
Benzene	2.3	0.66	ND ND	5.2	1	0.77	4.6	2.1	0.74	1.6	ND ND	0.48	0.55	4.8	0.60	1.0	
Benzyl chloride	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND	ND ND			ND	ND
Styrene	0.82	ND ND	ND ND	0.75	2	ND ND	1.2	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND 0.44	ND ND	ND ND	ND ND
1,1,2,2-Tetrachloroethane	ND	ND ND	ND ND	ND	ND ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	0.44 ND	ND ND	ND ND	ND ND
Tetrachloroethene	8.7	3	1.6	4.5	0.77	ND ND	4.2	1.3	ND ND	1.1	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND 52
Toluene	27	3.1	ND ND	31	26	2.6	59	7	3.4	6.8	48	0.99	29	1.4	1.2 B	1.8	5.7
1.2.4-Trichlorobenzene	ND	ND	ND ND	ND ND	ND ND	ND	ND ND	, ND	ND	ND	ND	ND	ND	1.4 ND	1.2 B ND	1.8	5.7 ND
1,1,1-Trichloroethane	ND	ND ND	4.5	ND	1.2	ND ND	ND	ND	ND ND	ND ND	ND	ND	ND ND	ND ND	ND ND	ND	ND ND
1,1,2-Trichloroethane	ND	ND ND	ND ND	ND	ND	ND	ND	ND	ND.	ND ND	ND	ND	ND	ND ND	ND ND	ND ND	ND ND
Trichloroethene	0.83	0.61	ND ND	ND	ND	ND	3.8	0.22	1.4	ND	ND	ND	ND	ND ND	ND ND	ND ND	1.4
1,2,4-Trimethylbenzene	19	0.97	ND	17	3	0.57	29	ND	0.57	2	ND	ND	1.4	1.3	1.3	ND ND	3.0
1,3,5-Trimethylbenzene	5.1	ND	ND ND	4	0.72	ND ND	6.8	ND	ND	0.55	ND	ND	0.41	ND	ND	ND ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND ND	ND ND	ND ND	ND ND
o-Xylene	15	0.68	ND	13	1.1	0.48	32	0.85	0.58	1.9	ND	ND	1.2	0.58	0.38	0.42	1.8
Methyl tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane	ND	ND	0.63	ND	ND	ND	0.63	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m-Xylene & p-Xylene	41	2	ND	40	2.6	1.3	110	3.1	1.5	5.6	ND	0.52	3.3	1.3	0.78	1.0	4.3
Bromodichloromethane	ND	0.62	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.9
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.53	ND	ND	ND
2-Butanone (MEK)	8.4	1.8	ND	6.7	2.7	1.4	16	3.5	2.3	4.3	ND	1.6	2.1	1.1	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	1.1	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	0.48	0.48	0.38	0.34	0.57	0.54	0.3	0.69	0.43	0.51	ND	1.2	0.43	0.59	0.51	0.54	2.8
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND
Chloroform	ND	7.3	ND	4.9	8.9	ND	14	2.3	ND	2.3	ND	ND	1.2	1.6	ND	ND	430 E
Chloromethane	ND	0.95	1.2	ND	1.8	1.2	ND	1.8	1.6	1.7	ND	ND	1.1	ND	1.2	ND	ND
Cyclohexane	1.2	ND	ND	1.2	ND	ND	1.9	1.4	ND	1.1	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	0.39	ND	2.3	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1.3	13	ND	0.69	0.68	ND	5.9	ND	0.54	1.4	64	ND	30	1.4	ND	ND	20
Dichlorodifluoromethane	2.7	2.3	2.6	2.4	2.3	2.6	4	2.7	2.6	2.8	ND	2.2	1.9	0.79	1.8	0.82	2.4
1,1-Dichloroethane	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	2.8	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

- 1. Concentration Units = ug/m3
- 2. B = Method Blank Contamination
  3. ND = Not detected above the method detection limit of the laboratory
  4. E = Estimated Result

Summa Canister Sampling Field Data Sheet
Site: Southern West Side 1093 Southern)
Samplers: Dong Eschrick Jacenny warmento
Date: April 10,8013

	H-4-BA-	H-4-04-		H-9-BAZ-	
Sample #	4041009	4041009		41009	
Location	4041009 1093 SOUT BRONX, NY 2nd 600	HERN BLV - DAYCARE DV	D,	Downstair	3
Summa Canister ID	6126	12439	× 8	19257	<i>(.</i>
Flow Controller ID	K183	K38Z		K495	NO/
Additional Tubing Added	YES - How much	YES - How much	NO/ YES - How much	YES - How much	NO/ YES - How much
Purge Time (Start)					
Purge Time (Stop)			10		
Total Purge Time (min)					
Purge Volume					
Initial Tracer Gas Results					
CH4 (ppm)					
O2 (%)					
H2S (ppm)					
CO2 (ppm)					
Pressure Gauge - before sampling	-30+	-30+		-29.5	
Sample Time (Start)	9:33am	9:45		10:20am	
Sample Time (Stop)	4:33pm	4:40pm		4:36 pm	
Total Sample Time (min)	,	,		,	
Pressure Gauge - after sampling	10	10		13	
Sample Volume	6L	6L		COL	
Canister Pressure Went To Ambient Pressure?	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
Final Tracer Gas Results		Careaching	,		
Weather 24 hours before and during sampling General Comments:	60° Clea	ar			

# Summa Canister Sampling Field Data Sheet

Site: 1110 SIMPSON ST BROWN NU SITE # C203055A

Samplers: DONNA FSCHRICH /LENNY DARMIENTO

Date: MARCH 7, 2012

- /\					
Sample #	H-2-SS- 40975 1110 SIMPSOI	H-2-BS.	H-2-AA- 40915		
Location	1110 SIMPSOI BRONK, NY	VST.	>		
Summa Canister ID	1136	6361	7495		
Flow Controller ID	K314	K317	Kasz		
Additional Tubing Added	NO/ (ES) - How much	YES - How much	YES - How much	NO/ YES - How much	NO/ YES - How much
Purge Time (Start)	11:56		/		
Purge Time (Stop)	12:01	19:17			
Total Purge Time (min)	5min				
Purge Volume	IL				
Initial Tracer Gas Results	Оррт				
CH4 (ppm)	PPI				
02 (%)					
H2S (ppm)					
CO2 (ppm)	/		/		
Pressure Gauge - before sampling	-30+	-30+	-30		
Sample Time (Start)	12:07	12:17	12:34		
Sample Time (Stop)	11:48	11:49	11.55		
Total Sample Time (min)			7. 00		
Pressure Gauge - after sampling	-3	-45	-4		
Sample Volume	6L	OL	6L		
Canister Pressure Went To Ambient Pressure?	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
Final Tracer Gas Results					
Veather 24 hours before and during sampling	60°, sunn	y, clear			
General Comments:				<del></del>	

# Summa Canister Sampling Field Data Sheet

Site: [[]] SOUTHERN BLVD SITE# (203055A Samplers: DONNA ESCHRICH/LENNY DARMIENTO Date: MARCH 7, 2012

Sample #		H-1-BS-	H-1-AA-		
	40975	40975	40975		
  Location	1111 SOUTHER	40975 WBLVD, BRONX	NY		
	BOILER ROOM	HALLWAY	COURTYARD		
Summa Canister ID	6120	12212	7496		
Flow Controller ID	KH72	K235	K433		
Additional Tubing Added	NO/ YES - How much	YES - How much	YES - How much	NO/ YES - How much	NO/ YES - How much
Purge Time (Start)	9:57	/			
Purge Time (Stop)	10:08	/			
Total Purge Time (min)	5 min				
Purge Volume	IL				
Initial Tracer Gas Results	Opom	7			
CH4 (ppm)	7				
02 (%)					
H2S (ppm)					
CO2 (ppm)			/		·
Pressure <b>Gauge</b> - before ´ sampling	-30	-30	-30		
Sample Time (Start)	10:10 Am	10:24AM	10:40 <sub>Am</sub>		<del></del>
Sample Time (Stop)	9.55am	9:54am	9:53am		
Total Sample Time (min)		70,11	_ r o sum		
Pressure Gauge - after campling	-4.5	-6	4		
Sample Volume	lo L	6	6		
canister Pressure Went o Ambient Pressure?	YES NO	YES (NO)	YES (NO)	YES / NO	YES / NO
inal Tracer Gas Results			_		
Veather 24 hours before nd during sampling	60° Sunny	, clear			
eneral Comments: BOHOM   EVE	MARIE AF	RICAN HAIR	BRAIDING .	-718-378-603	3or

917-582-6365

unisex Barber Shop/ 718-542-8264
Beauty Salon

Nutrition Shake Shop (NO Phone #)

# Summa Canister Sampling Field Data Sheet

Site: 109 Souther Samplers: Joe Mary	ione Lenny a	rain to			
Date: 3/5/13	· · · · · · · · · · · · · · · · · · ·				
Sample #	Paycare IA MOHILL	Ony ave Outside Phymand	Grand Lay 1 Frankup Stare	Buxpert Of Funturgions Sub slay	
Location	2044LD DIA	Southern Blug	Southern 1919		
Summa Canister ID	0077	62352	12165	93209	
Flow Controller ID	K402	KALA	U362	F2PW PERMAN	
Additional Tubing Added	YES - How much	YES - How much	YES - How much	NO/ YES - How much	NO/ YES - How mud
Purge Time (Start)	/	/	/	11:43	
Purge Time (Stop)				11:48	
Total Purge Time (min)				Smil	
Purge Volume				1 life?	
Initial Tracer Gas Results	/ '	/		Open	
CH4 (ppm)					
02 (%)					
H2S (ppm)					
CO2 (ppm)					
Pressure Gauge - before sampling	-30	28	-30,	-30+	
Sample Time (Start)	10:03	10:30	0.45	11:55	
Sample Time (Stop)	5:38	5:45	638	7:00	
otal Sample Time (min)					
Pressure Gauge - after campling	~7	-6	-8.5	10.5	
Sample Volume '	6liters	61.40	(1)	6/thy	
Canister Pressure Went To Ambient Pressure?	YES/QO	YES / NO	YES / NO	YES / NO	YES / NO
inal Tracer Gas Results					
Veather 24 hours before nd during sampling					
opp in businent	of fundure st	nottice, of	b outsldeflygions	1966 Just E	onstant truture

Sample Data Summary

# Client Sample ID: H-1-SS-40975

# GC/MS Volatiles

<b>Lot-Sample</b> # H2C120424 - 001		Work Order#	MRC191AA	Matrix: AIR
Date Sampled: 03/07/2012		Date Received:	03/10/2012	
Prep Date: 03/13/2012		Analysis Date	03/13/2012	
Prep Batch #: 2073119		Analysis Date	03/13/2012	
Dilution Factor.: 1		Method:	TO-15	
PARAMETER	RESULTS (ppb(v/v))	REPORTII LIMIT (pp		REPORTING LIMIT (ug/m3)
1.1.1 Tuighlous others	NID	0.080	ND	0.44
1,1,1-Trichloroethane	ND			0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61 0.44
1,1,2-Trichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethane	ND	0.080	ND	
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	3.9	0.080	19	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	1.0	0.080	5.1	0.39
1,4-Dichlorobenzene	0.22	0.080	1.3	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	2.8	0.32	8.4	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	0.28	0.20	1.3	0.93
Benzene	0.71	0.080	2.3	0,26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.076	0.040	0.48	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	0.35	0.20	1.2	0.69
Chloromethane	ND	0.20	ND	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.54	0.080	2.7	0.40
Ethanol	9.6	0.80	18	1.5
Ethylbenzene	2.4	0.080	10	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroeth	ND	0.080	ND	0.56
ane	0.71	0.20	2 5	0.70
n-Hexane	0.71	0.20	2.5	0.70

ND

0.85

0.080

ND

Hexachlorobutadiene

### Client Sample ID: H-1-SS-40975

Lot-Sample # H2C120424 - 001	l	Work Order # MRC19	1AA	Matrix: AIR
PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	0.26	0.20	1.1	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	0.49	0.20	1.7	0.69
Styrene	0.19	0.080	0.82	0.34
tert-Butyl alcohol	1.3	0.32	4.0	0.97
Tetrachloroethene	1.3	0.080	8.7	0.54
Toluene	7.3	0.080	27	0.30
m-Xylene & p-Xylene	9.6	0.080	41	0.35
o-Xylene	3.5	0.080	15	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	0.15	0.040	0.83	0.21
Trichlorofluoromethane	0.23	0.080	1.3	0.45
Vinyl chloride	ND	0.080	ND	0.20
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene		105		60 - 140

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding)* (Molecular \ Weight/24.45)$ 

# Client Sample ID: H-1-BS-40975

# GC/MS Volatiles

<b>Lot-Sample</b> # H2C120424 - 002		Work Order#	MRC2A1AA	Matrix: AIR
Date Sampled:       03/07/2012         Prep Date:       03/13/2012         Prep Batch #:       2073119		Date Received: Analysis Date	03/10/2012 03/13/2012	
Dilution Factor.: 1		Method:	TO-15	
PARAMETER	RESULTS (ppb(v/v))	REPORTI LIMIT (pp		REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	. 0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	0.20	0.080	0.97	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	2.1	0.080	13	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	0.62	0,32	1.8	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	0.21	0.080	0.66	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	0.092	0.080	0.62	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.076	0.040	0.48	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	1.5	0.080	7.3	0.39
Cyclohexane	ND	0.20	ND	0.69
Chloromethane	0.46	0.20	0.95	0.41
cis-1,2-Dichloroethene	0.70	0.080	2.8	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.47	0.080	2.3	0.40
Ethanol	69	0.80	130	1.5
Ethylbenzene	0.13	0.080	0.58	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroeth	ND	0.080	ND.	0.56
ane	NID	2.22	3.70	0.70
n-Hexane	ND	0.20	ND	0.70

ND

0.85

0.080

ND

Hexachlorobutadiene

### Client Sample ID: H-1-BS-40975

<b>Lot-Sample</b> # H2C120424 - 00	2	Work Order#	MRC2A1AA	Matrix: AIR
PARAMETER	RESULTS (ppb(v/v))	REPORTI LIMIT (pj		REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	3.5	0.20	12	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	0.44	0.080	3.0	0.54
Toluene	0.83	0.080	3.1	0.30
m-Xylene & p-Xylene	0.46	0.080	2.0	0.35
o-Xylene	0.16	0.080	0.68	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	0.11	0.040	0.61	0.21
Trichlorofluoromethane	0.22	0.080	1.2	0.45
Vinyl chloride	ND	0.080	ND	0.20
		PERCENT		LABORATORY CONTROL
SURROGATE		RECOVERY		LIMITS (%)
4-Bromofluorobenzene		101		60 - 140

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding)*(Molecular \ Weight/24.45)$ 

#### Client Sample ID: H-1-AA-40975

			GC/MS Vo	latiles		
Lot-Sample #	H2C120424 - 003		Work Order#	MRC2C1A	A	Matrix: AIR
Date Sampled: Prep Date: Prep Batch #: Dilution Factor.:	03/07/2012 03/13/2012 2073119 1		Date Received: Analysis Date Method:	03/10/2012 03/13/2012 TO-15		
PARAMETER		RESULTS (ppb(v/v))	REPORTI LIMIT (pp		RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroetl 1,1,2,2-Tetrachloro 1,1,2-Trichloroeth 1,1-Dichloroethan 1,1-Dichloroethen 1,2,4-Trichloroben 1,2-Dibromoethan 1,2-Dichlorobenze 1,2-Dichloroethan 1,2-Dichloroethan 1,2-Dichloroethan 1,2-Dichloroethan	oethane fluoroethane ane e e nzene nzene e (EDB)	0.82 ND 0.082 ND 0.25 ND ND ND ND ND	0.080 0.080 0.080 0.080 0.080 0.080 0.080 0.080 0.080 0.080		4.5 ND 0.63 ND 1.0 ND ND ND ND ND ND ND ND	0.44 0.55 0.61 0.44 0.32 0.32 0.59 0.39 0.61 0.48 0.32 0.37
1,3,5-Trimethylbe 1,4-Dichlorobenze 1,4-Dioxane 2-Butanone (MEK 1,3-Dichlorobenze 2,2,4-Trimethylpe Benzene Benzyl chloride Bromodichlorome Bromoform	nzene ene c) ene ntane	ND N	0.080 0.080 0.080 0.20 0.32 0.080 0.20 0.080 0.16 0.080 0.080		ND N	0.37 0.39 0.48 0.72 0.94 0.48 0.93 0.26 0.83 0.54 0.83

0.080

0.040

0.080

0.080

0.080

0.20

0.20

0.080

0.080

0.080

0.080

0.80

0.080

0.080

0.20

0.080

ND

0.38

ND

ND

ND

ND

1.2

1.7

ND

ND

2.6

51

ND

ND

ND

ND

0.31

0.25

0.37

0.21

0.39

0.69

0.41

0.32

0.36

0.68

0.40

1.5

0.35

0.56

0.70

0.85

Bromomethane

Chlorobenzene

Chloroethane

Chloroform

Cyclohexane

Ethanol

n-Hexane

ane

Ethylbenzene

Chloromethane

cis-1,2-Dichloroethene

cis-1,3-Dichloropropene

Dibromochloromethane

Hexachlorobutadiene

Dichlorodifluoromethane

1,2-Dichloro-1,1,2,2-tetrafluoroeth

Carbon tetrachloride

ND

ND

ND

ND

ND

0.60

0.42

ND

ND

0.52

27

ND

ND

ND

ND

0.060

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### Client Sample ID: H-1-AA-40975

003 W	ork Order # MRC20	CIAA	Matrix: AIR
RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
ND	0.20	ND	0.82
ND	0.16	ND	0.58
0.73	0.20	2.5	0.69
ND	0.080	ND	0.34
ND	0.32	ND	0.97
ND	0.080	ND	0.54
ND	0.080	ND	0.30
ND	0.080	ND	0.35
ND	0.080	ND	0.35
ND .	0.080	ND	0.32
ND	0.080	ND	0.36
0.30	0.040	1.6	0.21
0.26	0.080	1.4	0.45
ND	0.080	ND	0.20
	PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
	RESULTS (ppb(v/v))  ND ND 0.73 ND	RESULTS (ppb(v/v)) LIMIT (ppb(v/v))  ND 0.20  ND 0.16  0.73 0.20  ND 0.080  ND 0.080	RESULTS

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding) \# (Molecular \ Weight/24.45)$ 

# Client Sample ID: H-2-SS-40975

# GC/MS Volatiles

<b>Lot-Sample</b> # H2C120424 - 004		Work Order#	MRC2D1AA	Matrix: AIF
Date Sampled:       03/07/2012         Prep Date:       03/13/2012         Prep Batch #:       2073119		Date Received: Analysis Date	03/10/2012 03/13/2012	
Dilution Factor.:		Method:	TO-15	
PARAMETER	RESULTS (ppb(v/v))	REPORTI LIMIT (pp		REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND ND	0.59
1,2,4-Trimethylbenzene	3.5	0.080	17	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND ND	0.37
1,3,5-Trimethylbenzene	0.82	0.080	4.0	0.39
1,4-Dichlorobenzene	0.82	0.080	0.69	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	2.3	0.32	6.7	0.72
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	0.21	0.20	1.0	0.93
Benzene	1.6	0.080	5.2	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.053	0.040	0.34	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	1.0	0.080	4.9	0.39
Cyclohexane	0.34	0.20	1.2	0.69
Chloromethane	ND	0.20	ND	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.48	0.080	2.4	0.40
Ethanol	8.9	0.80	17	1.5
Ethylbenzene	2.3	0.080	10	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroeth	ND	0.080	ND	0.56
ane				
n-Hexane	0.79	0.20	2.8	0.70
Havachlarobutadiene	NID	0.080	ND	0.95

ND

0.85

0.080

ND

Hexachlorobutadiene

### Client Sample ID: H-2-SS-40975

<b>Lot-Sample</b> # H2C120424 - 00	4	Work Order # MRC2D1AA		Matrix: AIR		
PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)		
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82		
Methyl tert-butyl ether	ND	0.16	ND	0.58		
Methylene chloride	ND	0.20	ND	0.69		
Styrene	0.18	0.080	0.75	0.34		
tert-Butyl alcohol	2.7	0.32	8.1	0.97		
Tetrachloroethene	0.67	0.080	4.5	0.54		
Toluene	8.4	0.080	31	0.30		
m-Xylene & p-Xylene	9.2	0.080	40	0.35		
o-Xylene	3.0	0.080	13	0.35		
trans-1,2-Dichloroethene	ND	0.080	ND	0.32		
trans-1,3-Dichloropropene	ND	0.080	ND	0.36		
Trichloroethene	ND	0.040	ND	0.21		
Trichlorofluoromethane	0.26	0.080	1.4	0.45		
Vinyl chloride	ND	0.080	ND	0.20		
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)		
4-Bromofluorobenzene		101		60 - 140		

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding)*(Molecular \ Weight/24.45)$ 

# Client Sample ID: H-2-BS-40975

### GC/MS Volatiles

<b>Lot-Sample</b> # H2C120424 - 005	005 Work Order # MRC2E1AA		Matrix: AIR	
Date Sampled:       03/07/2012         Prep Date:       03/13/2012         Prep Batch #:       2073119		Date Received: Analysis Date	03/10/2012 03/13/2012	
Dilution Factor.: 1		Method:	TO-15	
PARAMETER	RESULTS (ppb(v/v))	REPORTI LIMIT (pp		REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	0.21	0.080	1.2	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	0.61	0.080	3.0	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	0.096	0.080	0,39	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	0.15	0.080	0.72	0.39
1,4-Dichlorobenzene	0.11	0.080	0,68	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	0.91	0.32	2.7	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	0.32	0.080	1.0	0.26
Benzyl chloride	ND	0,16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.090	0.040	0.57	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	1.8	0.080	8.9	0.39
Cyclohexane	ND	0.20	ND	0.69
Chloromethane	0.89	0.20	1.8	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.46	0.080	2.3	0.40
Ethanol	670 E	0.80	1300 E	1.5
Ethylbenzene	0.20	0.080	0.86	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroeth	ND	0.080	ND	0.56
ane	. 1.20	0.000	1,12	0.50
n-Hexane	0.42	0.20	1.5	0.70
Hexachlorobutadiene	ND	0.080	ND	0.85
4 Mathal 2 mantanana (MIDV)	MD	0.20	NID	0.82

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ND

0.82

0.20

4-Methyl-2-pentanone (MIBK)

ND

### Client Sample ID: H-2-BS-40975

#### GC/MS Volatiles

	Sample # H2C120424 - 005 Work O		c Order # MRC2E1AA		Matrix: AIR	
	RESULTS (ppb(v/v))			RESULTS (ug/m3)	REPORTING LIMIT (ug/n	_
•	ND	0.16		ND	0.58	
	0.29	0.20		1.0	0.69	
	0.48	0.080		2.0	0.34	
	0.88	0.32		2.7	0.97	
	0.11	0.080		0.77	0.54	
	6.9	0.080		26	0.30	
<b>;</b>	0.59	0.080		2.6	0.35	
	0.24	0.080		1.1	0.35	
ne	ND	0.080		ND	0.32	
oene	ND	0.080		ND	0.36	
	ND	0.040		ND	0.21	
ine	0.24	0.080		1.4	0.45	
	ND	0.080		ND	0.20	
		PERCENT			LABORATORY CONTROL	
	ene pene	(ppb(v/v))  ND 0.29 0.48 0.88 0.11 6.9 0.59 0.24 one ND ND ND ND ND ND 0.24	(ppb(v/v))  ND 0.16 0.29 0.48 0.080 0.88 0.32 0.11 0.080 6.9 0.59 0.080 0.24 0.080 0.24 0.080 0.080 0.080 0.000	(ppb(v/v))  ND 0.16 0.29 0.48 0.080 0.88 0.32 0.11 0.080 6.9 0.59 0.080 0.24 0.080 0.080 0.080 0.000	(ppb(v/v)) LIMIT (ppb(v/v)) (ug/m3)  ND 0.16 ND 0.29 0.20 1.0 0.48 0.080 2.0 0.88 0.32 2.7 0.11 0.080 0.77 6.9 0.080 26 0.59 0.080 2.6 0.24 0.080 1.1 one ND 0.080 ND one ND 0.080 ND ND 0.040 ND ND 0.040 ND ND 0.080 ND	(ppb(v/v))   LIMIT (ppb(v/v))   (ug/m3)   LIMIT (ug/m)

#### **Qualifiers**

E Estimated result. Result concentration exceeds the calibration range.

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding)*(Molecular \ Weight/24.45)$ 

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

#### Client Sample ID: H-2-BS-40975

#### GC/MS Volatiles

Lot-Sample #	H2C120424 - 005		Work Order#	MRC2E2	AA	Matrix:	AIR
Date Sampled:	03/07/2012		Date Received:	03/10/201	12		
Prep Date:	03/14/2012		Analysis Date	03/15/201	.2		
Prep Batch #:	2075019						
Dilution Factor.:	11.91		Method:	TO-15			
PARAMETER		RESULTS (ppb(v/v))	REPORT LIMIT (p		RESULTS (ug/m3)	REPORTI LIMIT (ug	
Ethanol		770 D	9.5		1500 D	18	
						LABORATORY	,
SURROGATE			PERCENT RECOVERY		<del></del>	CONTROL LIMITS (%)	·
4-Bromofluorober	nzene		102			60 - 140	

#### **Qualifiers**

D Result was obtained from the analysis of a dilution.

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding) * (Molecular \ Weight/24.45)$ 

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

# Client Sample ID: H-2-AA-40975

### GC/MS Volatiles

<b>Lot-Sample</b> # H2C120424 - 006		Work Order#	MRC2G1AA	Matrix: AIR
Date Sampled:       03/07/2012         Prep Date:       03/13/2012         Prep Batch #:       2073119		Date Received: Analysis Date	03/10/2012 03/13/2012	
Dilution Factor.: 1		Method:	TO-15	
PARAMETER	RESULTS (ppb(v/v))	REPORTII LIMIT (pp		REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene 1,2,4-Trimethylbenzene 1,2-Dibromoethane (EDB)	ND	0.080	ND	0.59
	<b>0.12</b>	<b>0.080</b>	<b>0.57</b>	<b>0.39</b>
	ND	0.080	ND	0.61
1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane	ND	0.080	ND	0.48
	ND	0.080	ND	0.32
	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK) 1,3-Dichlorobenzene 2,2,4-Trimethylpentane	0.46	<b>0.32</b>	1.4	<b>0.94</b>
	ND	0.080	ND	0.48
	ND	0.20	ND	0.93
Benzene Benzyl chloride Bromodichloromethane	0.24 ND ND	<b>0.080</b> 0.16 0.080	<b>0.77</b> ND ND	<b>0.26</b> 0.83 0.54
Bromoform Bromomethane Carbon tetrachloride	ND	0.080	ND	0.83
	ND	0.080	ND	0.31
	0.086	<b>0.040</b>	<b>0.54</b>	<b>0.25</b>
Chlorobenzene Chloroethane Chloroform	ND	0.080	ND	0.37
	ND	0.080	ND	0.21
	ND	0.080	ND	0.39
Cyclohexane Chloromethane cis-1,2-Dichloroethene	ND	0.20	ND	0.69
	0.57	0.20	1.2	0.41
	ND	0.080	ND	0.32
cis-1,3-Dichloropropene Dibromochloromethane Dichlorodifluoromethane Ethanol	ND	0.080	ND	0.36
	ND	0.080	ND	0.68
	0.53	<b>0.080</b>	2.6	<b>0.40</b>
Ethylbenzene 1,2-Dichloro-1,1,2,2-tetrafluoroeth ane	13	0.80	24	1.5
	0.088	0.080	0.38	0.35
	ND	0.080	ND	0.56
n-Hexane	ND	0.20	ND	0.70

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ND

0.85

0.080

ND

Hexachlorobutadiene

### Client Sample ID: H-2-AA-40975

<b>Lot-Sample</b> # H2C120424 - 00	6	Work Order #	MRC2G1AA	Matrix: AIR
PARAMETER	RESULTS (ppb(v/v))	REPORTI LIMIT (pj		REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	0.22	0.20	0.77	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	ND	0.080	ND	0.54
Toluene	0.69	0.080	2.6	0.30
m-Xylene & p-Xylene	0.30	0.080	1.3	0.35
o-Xylene	0.11	0.080	0.48	0.35
trans-1,2-Dichloroethene	ND	0.080	ND .	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	0.23	0.080	1.3	0.45
Vinyl chloride	ND	0.080	ND	0.20
		PERCENT		LABORATORY CONTROL
SURROGATE		RECOVERY		LIMITS (%)
4-Bromofluorobenzene		103	•	60 - 140

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding)* (Molecular \ Weight/24.45)$ 

#### Client Sample ID: INTRA-LAB BLANK

### GC/MS Volatiles

03/10/2012

03/13/2012

Lot-Sample # H2C130000 - 119B Work Order # MRD3T1AA Matrix......: AIR

Date Received..:

Analysis Date...

03/07/2012

Prep Date.....: 03/13/2012 Prep Batch #....: 2073119

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	ND	0.080	ND	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	ND	0.32	ND	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	ND	0.080	ND	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	ND	0.040	ND	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	ND	0.20	ND	0.69
Chloromethane	ND	0.20	ND	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	ND	0.080	ND	0.40
Ethanol	ND	0.80	ND	1.5
Ethylbenzene	ND	0.080	ND	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroeth	ND	0.080	ND	0.56
ane	2 120	0.000	1.2	0.00
n-Hexane	ND	0.20	ND	0.70

### Client Sample ID: INTRA-LAB BLANK

<b>Lot-Sample</b> # H2C130000 - 11	9B <b>'</b>	Work Order # MRD3T	1AA	Matrix: AIR	
PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)	
Hexachlorobutadiene	ND	0.080	ND	0.85	
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82	
Methyl tert-butyl ether	ND	0.16	ND	0.58	
Methylene chloride	ND	0.20	ND	0.69	
Styrene	ND	0.080	ND	0.34	
tert-Butyl alcohol	ND	0.32	ND	0.97	
Tetrachloroethene	ND	0.080	ND	0.54	
Foluene -	ND	0.080	ND	0.30	
n-Xylene & p-Xylene	ND	0.080	ND	0.35	
o-Xylene	ND	0.080	ND	0.35	
rans-1,2-Dichloroethene	ND	0.080	ND	0.32	
rans-1,3-Dichloropropene	ND	0.080	ND	0.36	
Crichloroethene	ND	0.040	ND	0.21	
richlorofluoromethane	ND	0.080	ND	0.45	
Vinyl chloride	ND	0.080	ND	0.20	
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)	
4-Bromofluorobenzene		108	<del></del>	60 - 140	

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding)^{*} (Molecular \ Weight/24.45)$ 

#### Client Sample ID: CHECK SAMPLE

#### GC/MS Volatiles

Lot-Sample # Work Order # MRD3T1AC Matrix....: H2C130000 - 119C AIR 03/07/2012 Date Received ..: 03/10/2012 Prep Date....: 03/13/2012 Analysis Date... 03/13/2012 Prep Batch #....: 2073119 Dilution Factor.: Method....: TO-15 SPIKE MEASURED SPIKE MEASURED AMOUNT AMOUNT AMOUNT AMOUNT PERCENT RECOVERY (ppb(v/v))(ppb(v/v))(ug/m3) (ug/m3) RECOVERY LIMITS PARAMETER 27 1,1,1-Trichloroethane 5.00 5.64 30.8 70 - 130 113 5.00 1,1,2,2-Tetrachloroethane 3.62 34 24.9 70 - 13072 1,1,2-Trichlorotrifluoroethane 5.00 4.91 38 37.7 70 - 13098 5.00 27 1,1,2-Trichloroethane 3.87 21.1 70 - 13077 1,1-Dichloroethane 5.00 4.58 20 18.5 70 - 130 92 4.29 20 70 - 130 1,1-Dichloroethene 5.00 17.0 86 1,2,4-Trichlorobenzene 5.00 4.25 37 31.5 60 - 14085 1,2,4-Trimethylbenzene 5.00 4.00 25 19.7 70 - 13080 5.00 4.28 38 32.9 70 - 130 1,2-Dibromoethane (EDB) 86 4.01 30 1,2-Dichlorobenzene 5.00 24.1 70 - 130 80 1,2-Dichloroethane 5.00 5.67 20 23.0 70 - 130113 70 - 130 1,2-Dichloropropane 5.00 3.83 23 17.7 77 1,3,5-Trimethylbenzene 3.78 25 70 - 130 5.00 18.6 76 3.95 1,4-Dichlorobenzene 5.00 30 23.8 70 - 13079 1,4-Dioxane 5.00 3.40 18 12.3 60 - 140 68 2-Butanone (MEK) 3.10 15 9.16 60 - 140 5.00 62 5.00 4.03 30 24.2 70 - 130 1,3-Dichlorobenzene 81 2,2,4-Trimethylpentane 5.00 4.20 23 19.6 70 - 13084 Benzene 5.00 4.06 16 13.0 70 - 130 81 26 70 - 130 Benzyl chloride 5.00 3.80 19.6 76 Bromodichloromethane 5.00 4.94 34 33.1 70 - 130 99 Bromoform 4.33 52 44.7 60 - 140 5.00 87 Bromomethane 5.00 5.96 19 23.1 70 - 130 119 Carbon tetrachloride 5.00 5.58 31 35.1 70 - 130 112 Chlorobenzene 5.00 3.90 23 17.9 70 - 13078 Chloroethane 5.00 5,43 13 14.3 70 - 130 109 Chloroform 5.00 5.08 24 24.8 70 - 130 102 17 Cyclohexane 5.00 4.12 14.2 70 - 130 82 Chloromethane 5.00 4.92 10 10.2 60 - 140 98 cis-1,2-Dichloroethene 5.00 4.54 20 18.0 70 - 130 91 cis-1,3-Dichloropropene 5.00 4.06 23 70 - 130 18.4 81 Dibromochloromethane 5.00 4.88 43 41.5 70 - 13098 Dichlorodifluoromethane 5.00 6.04 25 29.9 60 - 140 121 Ethanol 24.6 16.7 46 31.4 20 - 180 68 Ethylbenzene 4.05 22 70 - 1305.00 17.6 81 1,2-Dichloro-1,1,2,2-tetrafluo 5.00 5.98 35 41.8 60 - 140 120 roethane

### Client Sample ID: CHECK SAMPLE

Lot-Sample # H2C13000	00 - 119C	Work Ord	ler# MRI	O3T1AC	Matrix	: AIR
PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
n-Hexane	5.00	4.16	18	14.7	83	70 - 130
Hexachlorobutadiene	5.00	4.61	53	49.2	92	60 - 140
4-Methyl-2-pentanone (MIBK)	5.00	3.59	20	14.7	72	60 - 140
Methyl tert-butyl ether	5.00	4.09	18	14.7	82	60 - 140
Methylene chloride	5.00	4.12	17	14.3	82	70 - 130
Styrene	5.00	3.84	21	16.3	77	70 - 130
tert-Butyl alcohol	5.00	3.99	15	12.1	80	60 - 140
Tetrachloroethene	5.00	4.45	34	30.2	89	70 - 130
Toluene	5.00	3.91	19	14.7	78	70 - 130
m-Xylene & p-Xylene	10.0	8.23	43	35.7	82	70 - 130
o-Xylene	5.00	3.98	22	17.3	80	70 - 130
trans-1,2-Dichloroethene	5.00	4.32	20	17.1	86	70 - 130
trans-1,3-Dichloropropene	5.00	4.30	23	19.5	86	70 - 130
Trichloroethene	5.00	4.71	27	25.3	94	70 - 130
Trichlorofluoromethane	5.00	5.59	28	31.4	112	60 - 140
Vinyl chloride	5.00	5.30	13	13.5	106	70 - 130
SURROGATE		PERCEI RECOV			LABORA CONTRO LIMITS	OL
4-Bromofluorobenzene		110			60 - 14	0

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding)* (Molecular \ Weight/24.45)$ 

#### Client Sample ID: INTRA-LAB BLANK

Lot-Sample #	H2C150000 - 019B		Work O	rder#	MRE371A	A	Matr	ix:	AIR
Prep Date: Prep Batch #:	03/07/2012 03/14/2012 2075019		Date Rec Analysis		03/10/2012 03/14/2012				
Dilution Factor.:			Method		TO-15				
PARAMETER.		RESULTS (ppb(v/v))		REPORTII		RESULTS (ug/m3)		REPORTIN LIMIT (ug/	
Ethanol		ND		0.80		ND		1.5	
SURROGATE			PERC RECO	ENT OVERY			CO	BORATORY NTROL IITS (%)	
4-Bromofluorobe	nzene		107				60	- 140	

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding)*(Molecular \ Weight/24.45)$ 

#### Client Sample ID: CHECK SAMPLE

Lot-Sample #	H2C150000	- 019C	Work Or	der# N	ARE371AC	Matrix	: AIR
Prep Date: Prep Batch #:	03/07/2 03/14/2 207501	2012	Date Rece Analysis I	Date 0	3/10/2012 3/14/2012		
Dilution Factor.:	1		Method	: Т	CO-15		
PARAMETER		SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUN (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
Ethanol		24.6	18.5	46	34.8	75	20 - 180
SURROGATE			PERCE RECOV			LABO CONT LIMIT	
4-Bromofluorober	ızene		105			60 - 1	40

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding)*(Molecular \ Weight/24.45)$ 

Sample Data Summary

# Client Sample ID: H003-SS-40988

# GC/MS Volatiles

Lot-Sample # H2C270406 - 001 Work Order# MRLXK1AA Matrix....: AIR Date Sampled ...: 03/21/2012 Date Received ..: 03/27/2012 Prep Date....: 03/27/2012 Analysis Date... 03/28/2012 Prep Batch #....: 2087122 **Dilution Factor.:** Method....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND ND	0.44
1,1,2-Trichlorotrifluoroethane	0.083	0.080		0.55
1,1,2-Trichloroethane	ND	0.080	<b>0.63</b> ND	0.61
1,1-Dichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethene	ND	0.080		0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.32
1,2,4-Trimethylbenzene	5.9	0.080	ND	0.59
1,2-Dibromoethane (EDB)	ND	0.080	<b>29</b> ND	0.39
1,2-Dichlorobenzene	0.38	0.080		0.61
1,2-Dichloroethane	ND	0.080	<b>2.3</b> ND	0.48
1,2-Dichloropropane	ND	0.080	ND ND	0.32
1,3,5-Trimethylbenzene	1.4	0.080		0.37
1,4-Dichlorobenzene	0.97	0.080	6.8 5.9	0.39
1,4-Dioxane	ND	0.20	ND	0.48
2-Butanone (MEK)	5.3	0.32	16	0.72
1,3-Dichlorobenzene	ND	0.080	ND	0.94
2,2,4-Trimethylpentane	0.43	0.20	2.0	0.48
Benzene	1.4	0.080	4.6	0.93
Benzyl chloride	ND	0.16	ND	<b>0.26</b> 0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0,080	ND	0.31
Carbon tetrachloride	0.048	0.040	0.30	0.25
Chlorobenzene	ND	0.080	ND	0.25
Chloroethane	ND	0.080	ND	
Chloroform	2.9	0.080	14	0.21
Cyclohexane	0.55	0.20	1.9	0.39 0.69
Chloromethane	ND	0.20	ND	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	
Dibromochloromethane	ND	0.080	ND	0.36
Dichlorodifluoromethane	0.81	0.080	4.0	0.68
Ethanol	7.3	0.80	14	0.40 1.5
Ethylbenzene	5.6	0.080	24	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroeth ane	ND	0.080	ND	0.56
n-Hexane	1.7	0.20	6.0	0.70
Hexachlorobutadiene	ND	0.080	ND	0.85
4-Methyl-2-pentanone (MIBK)	0.51	0.20	2.1	0.82

TO-14\_rev5.rpt Rev 1.0.9 09/01/2011

# Client Sample ID: H003-SS-40988

Lot-Sample # H2C270406 -	001	Work Order#	MRLXK1AA	Matrix: AIR	
PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v		REPORTING LIMIT (ug/m3)	
Methyl tert-butyl ether	ND	0.16	ND	0.50	
Methylene chloride	0.44	0.20	1.5	0.58	
Styrene	0.27	0.080	1.2	0.69	
tert-Butyl alcohol	0.62	0.32	1.9	0.34	
Tetrachloroethene	0.62	0.080	4,2	0.97	
Toluene	16	0.080	59	0.54	
m-Xylene & p-Xylene	25	0.080	110	0.30 0.35	
o-Xylene	7.3	0.080	32	0.35	
trans-1,2-Dichloroethene	ND	0.080	ND	0.32	
trans-1,3-Dichloropropene	ND	0.080	ND		
Trichloroethene	0.71	0.040	3.8	0.36	
Trichlorofluoromethane	0.65	0.080	3.6	0.21	
Vinyl chloride	ND	0.080	ND	<b>0.45</b> 0.20	
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)	
4-Bromofluorobenzene	- Ti	111	<del></del>	60 - 140	

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

# Client Sample ID: H003-BA-40988

# GC/MS Volatiles

Lot-Sample # H2C270406 - 002 Work Order # MRLXM1AA Matrix......: AIR

 Date Sampled...:
 03/21/2012
 Date Received..:
 03/27/2012

 Prep Date......:
 03/27/2012
 Analysis Date...
 03/28/2012

 Prep Batch #....:
 2087122

Dilution Factor.: 1 Method...... TO-15

2 marion 1 actor.	IV				
PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)	
1,1,1-Trichloroethane	ND	0.080	ND	0.44	
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.44	
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.55	
1,1,2-Trichloroethane	ND	0.080	ND	0.61	
1,1-Dichloroethane	ND	0.080		0.44	
1,1-Dichloroethene	ND	0.080	ND	0.32	
1,2,4-Trichlorobenzene	ND	0.080	ND	0.32	
1,2,4-Trimethylbenzene	ND	0.080	ND	0.59	
1,2-Dibromoethane (EDB)	ND		ND	0.39	
1,2-Dichlorobenzene	ND	0.080	ND	0.61	
1,2-Dichloroethane	ND	0.080	ND	0.48	
1,2-Dichloropropane	ND	0.080	ND	0.32	
1,3,5-Trimethylbenzene	ND	0.080	ND	0.37	
1,4-Dichlorobenzene		0.080	ND	0.39	
1,4-Dioxane	ND	0.080	ND	0.48	
2-Butanone (MEK)	ND	0.20	ND	0.72	
1,3-Dichlorobenzene	1.2	0.32	3.5	0.94	
2,2,4-Trimethylpentane	ND	0.080	ND	0.48	
Benzene	0.73	0.20	3.4	0.93	
Benzyl chloride	0.67	0.080	2.1	0.26	
Bromodichloromethane	ND	0.16	ND	0.83	
Bromoform	ND	0.080	ND	0.54	
Bromomethane	ND	0.080	ND	0.83	
•	ND	0.080	ND	0.31	
Carbon tetrachloride Chlorobenzene	0.11	0.040	0.69	0.25	
Chloroethane	ND	0.080	ND	0.37	
	ND	0.080	ND	0.21	
Chloroform	0.47	0.080	2.3	0.39	
Cyclohexane Chloromethane	0.41	0.20	1.4	0.69	
cis-1,2-Dichloroethene	0.85	0.20	1.8	0.41	
	ND	0.080	ND	0.32	
cis-1,3-Dichloropropene	ND	0.080	ND	0.36	
Dibromochloromethane	ND	0.080	ND	0.68	
Dichlorodifluoromethane	0.55	0.080	2.7	0.40	
Ethanol Ethylbenzene	360 E	0.80	670 E	1.5	
,2-Dichloro-1,1,2,2-tetrafluoroeth	0.28	0.080	1.2	0.35	
ane	ND	0.080	ND	0.56	
n-Hexane	0.86	0.20	2.0		
Hexachlorobutadiene	ND	<b>0.20</b> 0.080	3.0	0.70	
	ND	0,080	ND	0.85	

# Client Sample ID: H003-BA-40988

#### GC/MS Volatiles

<b>Lot-Sample</b> # H2C270406 - 00	2	Work Order #		IIAA	Matrix: AIR	
PARAMETER	RESULTS (ppb(v/v))	REPORTI LIMIT (p	- · <del>-</del>	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)	
4-Methyl-2-pentanone (MIBK)	ND	0.20		ND	0.82	
Methyl tert-butyl ether	ND	0.16		ND	0.58	
Methylene chloride	0.23	0.20		0.80	0.69	
Styrene	ND	0.080		ND	0.34	
ert-Butyl alcohol	ND	0.32		ND	0.97	
Tetrachloroethene	0.20	0.080		1,3	0.54	
Toluene	1.9	0.080		7.0	0.30	
n-Xylene & p-Xylene	0.72	0.080		3.1	0.35	
0-Xylene	0.20	0.080		0.85	0,35	
rans-1,2-Dichloroethene	ND	0.080		ND	0.32	
rans-1,3-Dichloropropene	ND	0.080		ND	0.36	
<b>Frichloroethene</b>	0.042	0.040		0.22	0.21	
Crichlorofluoromethane	0.29	0.080		1.6	0.45	
Vinyl chloride	ND	0.080		ND	0.20	
SURROGATE		PERCENT RECOVERY			LABORATORY CONTROL LIMITS (%)	
4-Bromofluorobenzene	Compression Compre	111	<u> </u>	- <del></del>	60 - 140	

#### **Qualifiers**

E Estimated result. Result concentration exceeds the calibration range.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

Client Sample ID: H003-BA-40988

#### GC/MS Volatiles

Lot-Sample #	H2C270406 - 002		Work	Order#	MRLXM2	AA	Matrix	:	AIR
Date Sampled: Prep Date: Prep Batch #: Dilution Factor.:	03/21/2012 03/28/2012 2088116 10		Analys	eceived: is Date	03/27/201 03/28/201 TO-15				
PARAMETER		RESULTS (ppb(v/v))		REPORTII LIMIT (pp		RESULTS (ug/m3)		EPORTIN IMIT (ug/	-
Ethanol		380 D		8.0		720 D	15	5	
SURROGATE				CENT OVERY		_	LABOR CONTR LIMITS		
4-Bromofluoroben	zene ,		106			-	60 - 14	10	<del></del>

### **Qualifiers**

D Result was obtained from the analysis of a dilution.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

# Client Sample ID: H003-OA-40988

### GC/MS Volatiles

<b>Lot-Sample #</b> H2C270406 - 003		Work Order#	MRLXN1AA	Matrix: AIR
Date Sampled:       03/21/2012         Prep Date:       03/27/2012         Prep Batch #:       2087122		Date Received: Analysis Date	03/27/2012 03/27/2012	
Dilution Factor.:		Method:	TO-15	
	RESULTS	REPORTI	NG RESULTS	REPORTING
PARAMETER	(ppb(v/v))	LIMIT (pp	(ug/m3)	LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	0.12	0.080	0.57	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	0.090	0.080	0,54	0.48
1,4-Dioxane	ND	0,20	ND	0.72
2-Butanone (MEK)	0.78	0.32	2.3	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	0.23	0.080	0.74	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.069	0.040	0.43	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	ND	0.20	ND	0.69
Chloromethane	0.75	0.20	1.6	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.53	0.080	2.6	0.40
Ethanol	18	0.80	35	1.5
Ethylbenzene	0.099	0.080	0.43	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroeth	ND	0.080	ND	0.56
ane				
n-Hexane	0.24	0.20	0.85	0.70
Hexachlorobutadiene	ND	0.080	ND	0.85

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#### Client Sample ID: H003-OA-40988

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
A Mathed 2 montaness (A CIDIX)	ND.	2.20	) IFO	
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	0.27	0.20	0.94	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
l'etrachloroethene	ND	0.080	ND	0.54
<b>Foluene</b>	0.91	0.080	3.4	0.30
m-Xylene & p-Xylene	0.34	0.080	1.5	0.35
o-Xylene	0.13	0.080	0.58	0.35
rans-1,2-Dichloroethene	ND	0.080	ND	0.32
rans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	0.25	0.040	1.4	0.21
Trichlorofluoromethane	0.26	0.080	1.4	0.45
Vinyl chloride	ND	0.080	ND	0.20
				LABORATORY
		PERCENT		CONTROL
SURROGATE		RECOVERY		LIMITS (%)

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

## Client Sample ID: H003-BA-DUPE-40988

### GC/MS Volatiles

Lot-Sample # H2C270406 - 004 Work Order # MRLXQ1AA Matrix......: AIR

 Date Sampled...:
 03/21/2012
 Date Received..:
 03/27/2012

 Prep Date.......:
 03/27/2012
 Analysis Date...
 03/28/2012

 Prep Batch #....:
 2087122

Dilution Factor.: 1 Method...... TO-15

	RESULTS	REPORTING	RESULTS	BEDON'TO IC
PARAMETER	(ppb(v/v))	LIMIT (ppb(v/v))	(ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
,2,4-Trichlorobenzene	ND	0.080	ND	0.59
,2,4-Trimethylbenzene	0.41	0.080	2.0	0.39
,2-Dibromoethane (EDB)	· ND	0.080	ND	0.61
,2-Dichlorobenzene	0.53	0.080	3.2	0.48
,2-Dichloroethane	ND	0.080	ND	0.32
,2-Dichloropropane	ND	0.080	ND	0.37
,3,5-Trimethylbenzene	0.11	0.080	0.55	0.39
,4-Dichlorobenzene	0.24	0.080	1.4	0.48
,4-Dioxane	ND	0.20	ND	0.72
-Butanone (MEK)	1.5	0.32	4.3	0.94
,3-Dichlorobenzene	ND	0.080	ND	0.48
,2,4-Trimethylpentane	0.57	0.20	2.7	0.93
enzene	0.51	0.080	1.6	0.26
enzyl chloride	ND	0.16	ND	0.83
romodichloromethane	ND	0.080	ND	0.54
romo form	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.081	0.040	0.51	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	0.48	0.080	2.3	0.39
Cyclohexane	0.32	0,20	1.1	0.69
Chloromethane	0.82	0.20	1.7	0.41
is-1,2-Dichloroethene	ND	0.080	ND	0.32
is-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.57	0.080	2.8	0.40
thanol	370 E	0.80	690 E	1.5
thylbenzene	0.34	0.080	1.5	0.35
,2-Dichloro-1,1,2,2-tetrafluoroeth	ND	0.080	ND	0.56
ne				
i-Hexane	0.87	0.20	3.1	0.70
-lexachlorobutadiene	ND	0.080	ND	0.85
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82

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### Client Sample ID: H003-BA-DUPE-40988

### **GC/MS Volatiles**

Lot-Sample # H2C	270406 - 004	Work Order#	MRLXQ1AA	Matrix: AIR
PARAMETER	RESULTS (ppb(v/v))	- 1101 0111		REPORTING LIMIT (ug/m3)
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	0.27	0.20	0.93	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	0.16	0.080	1.1	0.54
<b>Foluene</b>	1.8	0.080	6.8	0,30
n-Xylene & p-Xylene	1.3	0.080	5.6	0.35
o-Xylene	0.43	0.080	1.9	0.35
rans-1,2-Dichloroethene	ND ND	0.080	ND	0.32
rans-1,3-Dichloroproper	ne ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Frichlorofluoromethan	e 0.30	0.080	1.7	0.45
Vinyl chloride	ND	0.080	ND	0.20
SURROGATE	·	PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene		107	Notice was	60 - 140

## **Oualifiers**

E Estimated result. Result concentration exceeds the calibration range.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

## Client Sample ID: H003-BA-DUPE-40988

### GC/MS Volatiles

Lot-Sample #	H2C270406 - 004		Work C	Order#	MRLXQ2A	λA	Matrix:	AIR
Date Sampled: Prep Date: Prep Batch #:	03/21/2012 03/28/2012 2088116			eceived: s Date	03/27/2012 03/28/2012			
Dilution Factor.:	10		Method	l:	TO-15			
PARAMETER	,	RESULTS (ppb(v/v))		REPORTI		RESULTS (ug/m3)	REPORTI LIMIT (ug	
Ethanol		310 D		8.0		580 D	15	
SURROGATE				CENT OVERY			LABORATORY CONTROL LIMITS (%)	
4-Bromofluorober	nzene		99			-	60 - 140	

## **Oualifiers**

D Result was obtained from the analysis of a dilution.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

### Client Sample ID: INTRA-LAB BLANK

#### GC/MS Volatiles

03/27/2012

Lot-Sample # H2C270000 - 122B Work Order # MRMD51AA Matrix....: AIR

03/21/2012

Date Received ..: Prep Date....: 03/27/2012 Analysis Date... 03/27/2012

Prep Batch #....: 2087122 Dilution Factor .: 1 Method....: TO-15

RESULTS REPORTING RESULTS REPORTING PARAMETER (ppb(v/v))LIMIT (ppb(v/v)) LIMIT (ug/m3) (ug/m3) 1,1,1-Trichloroethane ND ND 0.44 0.080 ND 1,1,2,2-Tetrachloroethane 0.080 ND 0.55 ND ND 1,1,2-Trichlorotrifluoroethane 0.080 0.61 ND 1,1,2-Trichloroethane 0.080 ND 0.44 1,1-Dichloroethane ND 0.080 ND 0.32 1,1-Dichloroethene ND 0.080 ND 0.32 1,2,4-Trichlorobenzene ND 0.080 ND 0.59 1,2,4-Trimethylbenzene ND 0.080 ND 0.39 1,2-Dibromoethane (EDB) ND 0.080 ND 0.61 1,2-Dichlorobenzene ND 0.080 ND 0.48 1,2-Dichloroethane ND 0.080 ND 0.32 1,2-Dichloropropane ND 0.080 ND 0.37 1,3,5-Trimethylbenzene ND0.080 ND 0.39 1,4-Dichlorobenzene ND0.080 ND 0.48 1,4-Dioxane ND 0.20 ND 0.72 ND 0.94 2-Butanone (MEK) 0.32 ND ND 0.080 ND 1,3-Dichlorobenzene 0.48 2,2,4-Trimethylpentane ND 0.20 ND 0.93 Benzene ND 0.080 ND 0.26 Benzyl chloride ND 0.16 ND 0.83 Bromodichloromethane ND 0.080 ND 0.54 Bromoform ND 0.080 ND 0.83 Bromomethane ND 0.080 ND 0.31 Carbon tetrachloride ND 0.040 ND 0.25 Chlorobenzene ND 0.080 ND0.37 Chloroethane ND 0.080 ND 0.21 Chloroform ND 0.080 ND 0.39 Cyclohexane ND 0.20 ND 0.69 Chloromethane ND ND 0.41 0.20 cis-1,2-Dichloroethene 0.32 ND 0.080 ND cis-1,3-Dichloropropene ND 0.080 ND 0.36 Dibromochloromethane ND 0.080 ND 0.68 Dichlorodifluoromethane ND 0.080 ND 0.40 Ethanol ND 0.80 ND 1.5 Ethylbenzene ND 0.080 ND 0.35 1,2-Dichloro-1,1,2,2-tetrafluoroeth ND 0.080 ND 0.56 ane ND ND 0.70 n-Hexane 0.20

# Client Sample ID: INTRA-LAB BLANK

Lot-Sample # H2C270000 - 12	2B <b>V</b>	Vork Order # MRMD:	51AA	Matrix: AIR
PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Hexachlorobutadiene	ND	0.080	ND	0.85
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	ND	0.20	ND	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0,97
Tetrachloroethene	ND	0.080	ND	0.54
Toluene	ND	0.080	ND	0.30
n-Xylene & p-Xylene	ND	0.080	ND	0.35
o-Xylene	ND	0.080	ND	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	ND	0.080	ND	0.45
Vinyl chloride	ND	0.080	ND	0.20
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	···	97	<del></del>	60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

## Client Sample ID: CHECK SAMPLE

## GC/MS Volatiles

03/27/2012

03/21/2012 Date Received..:

 Prep Date......:
 03/27/2012
 Analysis Date...
 03/27/2012

 Prep Batch #....:
 2087122

vilution Factor.: 1 Method...... TO-15

Dilution Factor.: 1		Method	TO-1	15		
PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
1,1,1-Trichloroethane	5.00	5.26	27	28.7	105	70 - 130
1,1,2,2-Tetrachloroethane	5.00	4.27	34	29.3	85	70 - 130
1,1,2-Trichlorotrifluoroethane	5.00	4.92	38	37.7		70 - 130
1,1,2 Tromorou muoroemane	5.00	7.72	50	57.7	98	70 - 150
1,1,2-Trichloroethane	5.00	4.07	27	22.2	81	70 - 130
1,1-Dichloroethane	5.00	4.48	20	18.1	90	70 - 130
1,1-Dichloroethene	5.00	4.54	20	18.0	91	70 - 130
1,2,4-Trichlorobenzene	5.00	4.79	37	35.6	96	60 - 140
1,2,4-Trimethylbenzene	5.00	4.72	25	23.2	94	70 - 130
1,2-Dibromoethane (EDB)	5.00	4.33	38	33.3	87	70 - 130
1,2-Dichlorobenzene	5.00	4.48	30	26.9	90	70 - 130
1,2-Dichloroethane	5.00	4.93	20	20.0	99	70 - 130
1,2-Dichloropropane	5.00	3.78	23	17.5	76	70 - 130
1,3,5-Trimethylbenzene	5.00	4.58	25	22.5	92	70 - 130
1,4-Dichlorobenzene	5.00	4.27	30	25.7	85	70 - 130
1,4-Dioxane	5.00	3.36	18	12.1	67	60 - 140
2-Butanone (MEK)	5.00	3.98	15	11.8	80	60 - 140
1,3-Dichlorobenzene	5.00	4.37	30	26.2	87	70 - 130
2,2,4-Trimethylpentane	5.00	3.62	23	16.9	72	70 - 130
Benzene	5.00	3.54	16	11.3	71	70 - 130
Benzyl chloride	5.00	4.61	26	23.9	92	70 - 130
Bromodichloromethane	5.00	4.62	34	30.9	92	70 - 130
Bromoform	5.00	4.70	52	48.6	94	60 - 140
Bromomethane	5.00	6.01	19	23.3	120	70 - 130
Carbon tetrachloride	5.00	4.51	31	28.4	90	70 - 130
Chlorobenzene	5.00	4.08	23	18.8	82	70 - 130
Chloroethane	5.00	6.36	13	16.8	127	70 - 130
Chloroform	5.00	4.74	24	23.1	95	70 - 130
Cyclohexane	5.00	3.69	17	12.7	74	70 - 130
Chloromethane	5.00	6.13	10	12.7	123	60 - 140
cis-1,2-Dichloroethene	5.00	4.36	20	17.3	87	70 - 130
cis-1,3-Dichloropropene	5.00	4.10	23	18.6	82	70 - 130
Dibromochloromethane	5.00	4.94	43	42.1	99	70 - 130
Dichlorodifluoromethane	5.00	5.80	25	28.7	116	60 - 140
Ethanol	24.6	30.8	46	58.1	126	20 - 180
Ethylbenzene	5.00	4.37	22	19.0	87	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluo roethane	5.00	6.12	35	42.8	122	60 - 140

# Client Sample ID: CHECK SAMPLE

Lot-Sample # H2C27000	0 - 122C	Work Ord	ler# MRN	MD51AC	Matrix	: AIR
PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
n-Hexane	5.00	4.23	18	14.9	85	70 - 130
Hexachlorobutadiene	5.00	5.48	53	58.5	110	60 - 140
4-Methyl-2-pentanone (MIBK)	5.00	3.92	20	16.0	78	60 - 140
Methyl tert-butyl ether	5.00	4.87	18	17.6	97	60 - 140
Methylene chloride	5.00	4.36	17	15.1	87	70 - 130
Styrene	5.00	4.33	21	18.5	87	70 - 130
ert-Butyl alcohol	5.00	4.62	15	14.0	92	60 - 140
Tetrachloroethene	5.00	4.28	34	29.0	86	70 - 130
l'oluene	5.00	4.05	19	15.3	81	70 - 130
n-Xylene & p-Xylene	10.0	8.92	43	38.7	89	70 - 130
o-Xylene	5.00	4.45	22	19.3	89	70 - 130
rans-1,2-Dichloroethene	5.00	4.45	20	17.6	89	70 - 130
rans-1,3-Dichloropropene	5.00	4.58	23	20.8	92	70 - 130
Trichloroethene	5.00	3.95	27	21.2	79	70 - 130
Trichlorofluoromethane	5.00	5.60	28	31.5	112	60 - 140
Vinyl chloride	5.00	5.84	13	14.9	117	70 - 130
SURROGATE		PERCE RECOV			LABOR CONTR LIMITS	OL
4-Bromofluorobenzene	Mark de la companya d	102		<del></del>	60 - 14	0

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

## Client Sample ID: INTRA-LAB BLANK

Lot-Sample #	H2C280000 - 116B		Work (	Order#	MRNDQ1A	NΑ	Matri	x:	AIR
Prep Date: Prep Batch #:	03/23/2012 03/28/2012 2088116			eceived: is Date	03/28/2012 03/28/2012				
Dilution Factor.:			Method	i:	TO-15				
PARAMETER		RESULTS (ppb(v/v))		REPORTII	. –	RESULTS (ug/m3)		REPORTIN LIMIT (ug/	
Ethanol		ND		0.80		ND		1.5	
SURROGATE				CENT COVERY	<b>8</b> , 11 <b>8</b> 411	<u>.</u>	CO	BORATORY NTROL ITS (%)	
4-Bromofluorobe	nzene		102				60	- 140	

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

### Client Sample ID: CHECK SAMPLE

Lot-Sample #	H2C280000	- 116C	Work Or	der# MR1	NDQ1AC	Matrix	: AIR
Prep Date: Prep Batch #:	03/23/2 03/28/2 208811	2012	Date Reco		8/2012 8/2012		
Dilution Factor.:	1		Method	TO-	15		
PARAMETER		SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
Ethanol		24.6	20.9	46	39.3	85	20 - 180
SURROGATE			PERCE RECO			LABOR CONTR LIMITS	OL
4-Bromofluorober	nzene		106			60 - 14	.0

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding)* (Molecular \ Weight/24.45)$ 

Sample Data Summary

#### Client Sample ID: H-4-BA-41009

#### **GC/MS Volatiles**

Lot-Sample # Work Order # MRX6V1AA Matrix....: AIR H2D120418 - 001 Date Sampled ...: 04/10/2012 04/12/2012 Date Received ..: Prep Date....: 04/12/2012 04/13/2012 Analysis Date... 2105014 Prep Batch # ....: 11.14 TO-15 **Dilution Factor.:** Method....:

RESULTS REPORTING RESULTS REPORTING **PARAMETER** LIMIT (ppb(v/v)) (ug/m3) (ppb(v/v)) LIMIT (ug/m3) 0.89 4.9 1,1,1-Trichloroethane ND ND 1,1,2,2-Tetrachloroethane ND 0.89 ND 6.1 1,1,2-Trichlorotrifluoroethane ND 0.89 ND 6.8 1,1,2-Trichloroethane ND 0.89 ND 4.9 1,1-Dichloroethane ND 0.89 ND3.6 1,1-Dichloroethene ND 0.89 ND 3.5 1,2,4-Trichlorobenzene ND 0.89 ND 6.6 1,2,4-Trimethylbenzene ND 0.89 ND 4.4 1,2-Dibromoethane (EDB) ND 0.89 ND 6.8 1.2-Dichlorobenzene ND 0.89 ND 5.4 1,2-Dichloroethane ND 0.89 ND 3.6 1,2-Dichloropropane ND 0.89 ND 4.1 1,3,5-Trimethylbenzene ND 0.89 ND 4.4 1,4-Dichlorobenzene 11 0.89 64 5.4 1,4-Dioxane ND 2,2 ND 8.0 2-Butanone (MEK) ND 3.6 ND 11 1,3-Dichlorobenzene ND 0.89 ND 5.4 2,2,4-Trimethylpentane ND 2.2 ND 10 Benzene 0.89 ND 2.8 ND Benzyl chloride ND 9.2 ND 1.8 Bromodichloromethane ND 0.89 ND 6.0 Bromoform ND 0.89 ND 9.2 Bromomethane ND 0.89 ND 3.5 Carbon tetrachloride ND 0.45 ND 2.8 Chlorobenzene ND 0.89 ND 4.1 Chloroethane 0.89 ND ND 2.4 Chloroform ND 0.89 ND 4.4 Cyclohexane ND 2.2 ND 7.7 Chloromethane ND ND 2.2 4.6 cis-1,2-Dichloroethene 0.89 ND ND 3.5 cis-1,3-Dichloropropene ND 0.89 ND 4.0 Dibromochloromethane ND 0.89 ND 7.6 Dichlorodifluoromethane ND 0.89 ND 4.4 Ethanol 980 E 8.9 1900 E 17 Ethylbenzene ND 0.89 ND 3.9 1,2-Dichloro-1,1,2,2-tetrafluoroeth ND 0.89 ND 6.2 ND n-Hexane 2.2 ND 7.9 Hexachlorobutadiene ND 0.89 ND 9.5

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## Client Sample ID: H-4-BA-41009

### **GC/MS Volatiles**

- 001 W	ork Order # MRX6V	1AA	Matrix AIR
RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
ND	2.2	ND .	9.1
ND	1.8	ND	6.4
ND	2,2	ND	7.7
ND	0.89	ND	3.8
ND	3.6	ND	11
ND	0.89	ND	6.0
13	0.89	48	3.4
ND	0.89	ND	3.9
ND	0.89	ND	3.9
ND	0.89	ND	3.5
ND	0.89	ND	4.0
ND	0.45	ND	2.4
ND	0.89	ND	5.0
ND	0.89	ND	2.3
	PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
_	ND	PERCENT	PERCENT RECOVERY

#### **Qualifiers**

E Estimated result. Result concentration exceeds the calibration range.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

## Client Sample ID: H-4-BA-41009

## GC/MS Volatiles

Lot-Sample #	H2D120418 - 001		Work Order #	MRX6V2	AA	Matrix:	AIR
Date Sampled:	04/10/2012		Date Received:	04/12/201	2		
Prep Date:	04/13/2012		Analysis Date	04/13/201	2		
Prep Batch #:	2105015		·				
Dilution Factor.:	39		Method:	TO-15			
PARAMETER		RESULTS (ppb(v/v))	REPORTI LIMIT (pp		RESULTS (ug/m3)	REPORTI LIMIT (uį	
Ethanol		900 D	31		1700 D	59	
SURROGATE			PERCENT RECOVERY			LABORATORY CONTROL LIMITS (%)	7
SURROGATE 4-Bromofluorober	77010				-		

### **Oualifiers**

D Result was obtained from the analysis of a dilution.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

## Client Sample ID: H-4-OA-41009

## GC/MS Volatiles

Lot-Sample # Work Order # H2D120418 - 002 MRX651AA Matrix....: AIR Date Sampled ...: 04/10/2012 04/12/2012 Date Received ..: Prep Date....: 04/12/2012 Analysis Date... 04/13/2012 Prep Batch #....: 2105014

Dilution Factor.: 1 Method...... TO-15

	143	VIIIOU 10-15		
PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	ND	0.080	ND	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	0.54	0.32	1.6	0.94
,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	0.15	0.080	0.48	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.066	0.040	0.42	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	ND	0.20	ND	0.69
Chloromethane	0.57	0.20	1.2	0.41
sis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.44	0.080	2.2	0.40
Ethanol	5.5	0.80	10	1.5
Bthylbenzene	ND	0.080	ND	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroeth	ND	0.080	ND	0.56
ane				
n-Hexane	ND	0.20	ND	0.70
Hexachlorobutadiene	ND	0.080	ND	0.85

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## Client Sample ID: H-4-OA-41009

(ppbd) MIBK) ND ND ND ND ND ND		REPORTING LIMIT (ppb(v/v))  0.20 0.16 0.20 0.080	RESULTS (ug/m3)  ND ND ND ND	REPORTING LIMIT (ug/m3) 0.82 0.58 0.69
ND ND ND ND		0.16 0.20	ND	0.58
ND ND ND		0.20		
ND ND			ND	0.69
ND		0.080		~.~~
		0,000	ND	0.34
		0.32	ND	0.97
ND		0.080	ND	0.54
0.26	<b>5</b>	0.080	0.99	0.30
0.12	2	0.080	0.52	0.35
ND		0.080	ND	0.35
ND		0.080	ND	0.32
e ND		0.080	ND	0.36
ND:		0.040	ND	0.21
0.20	)	0.080	1.1	0.45
ND		0.080	ND	0.20
				LABORATORY CONTROL LIMITS (%)
	ND ND e ND ND 0.20	ND ND ND ND <b>0.20</b> ND	ND 0.080 ND 0.080 e ND 0.080 ND 0.040 0.20 0.080	ND 0.080 ND ND ND 0.080 ND ND ND 0.080 ND ND ND 0.040 ND ND 0.20 0.080 1.1 ND ND 0.080 ND ND PERCENT RECOVERY

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

#### Client Sample ID: H-4-BA2-41009

#### **GC/MS Volatiles**

Lot-Sample #	H2D120418 - 003		Work Order #	MRX672	AA	Matrix: AIR
Date Sampled:	04/10/2012		Date Received:	04/12/20	12	
Prep Date:	04/16/2012		Analysis Date	04/16/20	12	
Prep Batch #:	2107155					
Dilution Factor.:	1		Method:	TO-15		
PARAMETER		RESULTS (ppb(v/v))	REPORT LIMIT (p		RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroetha		ND	0.080		ND	0.44
1,1,2,2-Tetrachloro		ND	0.080		ND	0.55
1,1,2-Trichlorotrifh	ıoroethane	ND	0.080		ND	0.61
1,1,2-Trichloroetha	ne	ND	0.080		ND	0.44
l,1-Dichloroethane		ND	0.080		ND	0.32
1,1-Dichloroethene		ND	0.080		ND	0.32
1,2,4-Trichlorobenz	zene	ND	0.080		ND	0.59
1,2,4-Trimethylber	ızene	0.29	0.080		1.4	0.39
1,2-Dibromoethane	(EDB)	ND	0.080		ND	0.61
l,2-Dichlorobenzen	ne	ND	0.080		ND	0.48
1,2-Dichloroethane	•	0.20	0.080		0.80	0.32
1,2-Dichloropropan	ie	ND	0.080		ND	0.37
1,3,5-Trimethylber	ızene	0.083	0.080		0.41	0.39
l,4-Dichlorobenzei	ne	5.0	0.080		30	0.48
1,4-Dioxane		ND	0.20		ND	0.72
2-Butanone (MEK	)	0.70	0.32		2.1	0.94

0.080

0.20

0.080

0.16

0.080

0.080

0.080

0.040

0.080

0.080

0.080

0.20

0.20

0.080

0.080

0.080

0.080

0.80

0.080

0.080

0.20

0.080

ND

ND

0.55

ND

ND

ND

ND

0.43

ND

ND

1.2

ND

1.1

ND

ND

ND

1.9

76

0.98

ND

ND

ND

0.48

0.93

0.26

0.83

0.54

0.83

0.31

0.25

0.37

0.21

0.39

0.69

0.41

0.32

0.36

0.68

0.40

1.5

0.35

0.56

0.70

0.85

1,3-Dichlorobenzene

Benzene

Bromoform

Benzyl chloride

Bromomethane

Chlorobenzene

Chloroethane

Chloroform

Cyclohexane

Ethanol

ane n-Hexane

Ethylbenzene

Chloromethane

cis-1,2-Dichloroethene

cis-1,3-Dichloropropene

Dibromochloromethane

Hexachlorobutadiene

Dichlorodifluoromethane

1,2-Dichloro-1,1,2,2-tetrafluoroeth

2,2,4-Trimethylpentane

Bromodichloromethane

Carbon tetrachloride

ND

ND

0.17

ND

ND

ND

ND

0.068

ND

ND

0.25

ND

0.55

ND

ND

ND

0.39

0.23

ND

ND

ND

40

## Client Sample ID: H-4-BA2-41009

<b>Lot-Sample</b> # H2D120418 - 0	03	Vork Order #	MRX672AA	Matrix: AIR
PARAMETER	RESULTS (ppb(v/v))	REPORTI LIMIT (pp		REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	ND	0.20	ND	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
letrachloroethene	ND	0.080	ND	0.54
<b>Foluene</b>	7.7	0.080	29	0.30
n-Xylene & p-Xylene	0.75	0.080	3.3	0.35
o-Xylene	0.28	0.080	1.2	0.35
rans-1,2-Dichloroethene	ND	0.080	ND	0.32
rans-1,3-Dichloropropene	ND	0.080	ND	0.36
l'richloroethene	ND	0.040	ND	0.21
<b>Frichlorofluoromethane</b>	0.19	0.080	1.1	0.45
Vinyl chloride	ND	0.080	ND	0.20
		PERCENT		LABORATORY CONTROL
SURROGATE		RECOVERY		LIMITS (%)
4-Bromofluorobenzene		98	· · · · · · · · · · · · · · · · · · ·	60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

## Client Sample ID: INTRA-LAB BLANK

# GC/MS Volatiles

Lot-Sample # H2D140000 - 014B Work Order # MR1JG1AA Matrix....: AIR

04/05/2012 Prep Date....:

Date Received ..:

04/12/2012

Prep Batch #....:

04/12/2012 2105014

Analysis Date... 04/12/2012

Dilution Factor.:

Method....:

TO-15

Dilution Factor.:	M			
PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	ND	0.080	ND	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	ND	0.32	ND	0,94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	ND	0.080	ND	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	ND	0.040	ND	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	ND ·	0.20	ND	0.69
Chloromethane	ND	0.20	ND	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	ND	0.080	ND	0.40
Ethanol	ND	0.80	ND	1.5
Ethylbenzene	ND	0.080	ND	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroeth	ND	0.080	ND	0.56
ane n-Hexane	ND	0.20	ND	0.70

## Client Sample ID: INTRA-LAB BLANK

<b>Lot-Sample #</b> H2D140000 - 01	4B <b>W</b>	ork Order # MR1JG	IAA	Matrix: AIR
PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Hexachlorobutadiene	ND	0.080	ND	0.85
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	ND	0.20	ND	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	ND	0.080	ND	0.54
Toluene	ND	0.080	ND	0.30
m-Xylene & p-Xylene	ND	0.080	ND	0.35
o-Xylene	ND .	0.080	ND	0.35
rans-1,2-Dichloroethene	ND	0.080	ND	0.32
rans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	ND	0.080	ND	0.45
Vinyl chloride	ND	0.080	ND	0.20
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene		92	<del>again treat</del>	60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

# Client Sample ID: CHECK SAMPLE

Lot-Sample # H2D1	40000 - 0	14C	Work Ord	ler#	MR1J0	31AC	Matrix	: AIR
Prep Date	04/05/201 04/12/201 2105014		Date Recei Analysis D		04/12/2 04/12/2			
	l		Method	:	TO-15			
PARAMETER		SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOU (ug/m3	JNT	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
1,1,1-Trichloroethane		5.00	4.92	27		26.8	98	70 - 130
1,1,2,2-Tetrachloroethane		5.00	5.64	34		38.7	113	70 - 130
1,1,2-Trichlorotrifluoroeth	nane	5.00	4.96	38		38.0	99	70 - 130
1,1,2-Trichloroethane		5.00	5.21	27		28.4	104	70 - 130
1,1-Dichloroethane		5.00	4.85	20		19.6	97	70 - 130
1,1-Dichloroethene		5.00	4.95	20		19.6	99	70 - 130
1,2,4-Trichlorobenzene		5.00	4.32	37		32.0	86	60 - 140
1,2,4-Trimethylbenzene		5.00	6.16	25		30.3	123	70 - 130
1,2-Dibromoethane (EDB)	)	5.00	5.30	38		40.8	106	70 - 130
1,2-Dichlorobenzene		5.00	5.77	30		34.7	115	70 - 130
1,2-Dichloroethane		5.00	4.79	20		19.4	96	70 - 130
1,2-Dichloropropane		5.00	4.96	23		22.9	99	70 - 130
1,3,5-Trimethylbenzene		5.00	6.19	25		30.4	124	70 - 130
1,4-Dichlorobenzene		5.00	5.72	30		34.4	114	70 - 130
1,4-Dioxane		5.00	4.60	18		16.6	92	60 - 140
2-Butanone (MEK)		5.00	4.70	15		13.9	94	60 - 140
1,3-Dichlorobenzene		5.00	5.71	30		34.3	114	70 - 130
2,2,4-Trimethylpentane		5.00	4.80	23		22.4	96	70 - 130
Benzene		5.00	4.89	16		15.6	98	70 - 130
Benzyl chloride		5.00	5.78	26		29.9	116	70 - 130
Bromodichloromethane		5.00	5.04	34		33.8	101	70 - 130
Bromoform		5.00	5.39	52		55.7	108	60 - 140
Bromomethane		5.00	4.86	19		18.9	97	70 - 130
Carbon tetrachloride		5.00	4.98	31		31.3	100	70 - 130
Chlorobenzene		5.00	5.24	23		24.1	105	70 - 130
Chloroethane		5.00	4.79	13		12.6	96	70 - 130
Chloroform		5.00	4.82	24		23.6	96	70 - 130
Cyclohexane		5.00	4.89	17		16.8	98	70 - 130
Chloromethane		5.00	4.60	10		9.50	92	60 - 140
cis-1,2-Dichloroethene		5.00	4.88	20		19.3	98	70 - 130
cis-1,3-Dichloropropene		5.00	5.06	23		23.0	101	70 - 130
Dibromochloromethane		5.00	5,42	43		46.2	108	70 - 130
Dichlorodifluoromethane		5.00	4.86	25		24.0	97	60 - 140
Ethanol		24.6	22.3	46		42.0	91	20 - 180
Ethylbenzene		5.00	5.46	22		23.7	109	70 - 130
1,2-Dichloro-1,1,2,2-tetraf	luo	5.00	5.04	35		35.3	101	60 - 140

## Client Sample ID: CHECK SAMPLE

Lot-Sample # H2D14000	0 - 014C	- 014C Work Order #		MR1JG1AC		Matrix: AIR	
PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS	
n-Hexane	5.00	4.78	18	16.9	96	70 - 130	
Hexachlorobutadiene	5.00	5.17	53	55.1	103	60 - 140	
4-Methyl-2-pentanone (MIBK)	5.00	4.73	20	19.4	95	60 - 140	
Methyl tert-butyl ether	5.00	5.26	18	19.0	105	60 - 140	
Methylene chloride	5.00	4.80	17	16.7	96	70 - 130	
Styrene	5.00	5.79	21	24.6	116	70 - 130	
tert-Butyl alcohol	5.00	4.86	15	14.7	97	60 - 140	
Tetrachloroethene	5.00	4.97	34	33.7	99	70 - 130	
Toluene	5.00	5.18	19	19.5	104	70 - 130	
m-Xylene & p-Xylene	10.0	11.0	43	48.0	110	70 - 130	
o-Xylene	5.00	5.50	22	23.9	110	70 - 130	
trans-1,2-Dichloroethene	5.00	5.01	20	19.9	100	70 - 130	
trans-1,3-Dichloropropene	5.00	5.21	23	23.6	104	70 - 130	
Trichloroethene	5.00	4.88	27	26.2	98	70 - 130	
Trichlorofluoromethane	5.00	4.80	28	27.0	96	60 - 140	
Vinyl chloride	5.00	4.91	13	12.5	98	70 - 130	
SURROGATE		PERCE RECOV			LABOR CONTR LIMITS	OL	
4-Bromofluorobenzene	the state of the s	100			60 - 14	0	

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

# Client Sample ID: INTRA-LAB BLANK

Lot-Sample #	H2D140000 - 015B		Work Orde	er#	MR1JH1AA	Λ	Matri	x:	AIR
Prep Date: Prep Batch #: Dilution Factor.:	04/05/2012 04/13/2012 2105015 1		Date Receiv Analysis Da Method	ate	04/12/2012 04/13/2012 TO-15				
PARAMETER		RESULTS (ppb(v/v))		EPORTING		RESULTS (ug/m3)		REPORTIN LIMIT (ug/i	
Ethanol		ND	0.8	80		ND		1.5	
SURROGATE			PERCEN RECOVE				CO	BORATORY NTROL IITS (%)	
4-Bromofluorober	nzene		90				60	- 140	

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

# Client Sample ID: CHECK SAMPLE

Lot-Sample #	H2D140000 ·	- 015C	Work Or	der#	MR1J	H1AC	Matrix	: AIR
Prep Date: Prep Batch #:	04/05/2 04/13/2 210501	012	Date Reco Analysis l		04/12/ 04/13/	/2012		
Dilution Factor.:	1		Method	:	TO-1.	5		
PARAMETER		SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOU (ug/m3	INT	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
Ethanol		24.6	18.2	46		34.3	74	20 - 180
SURROGATE			PERCE RECOV				LABOR CONTR LIMITS	
4-Bromofluorober	nzene		98				60 - 14	40

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

# Client Sample ID: INTRA-LAB BLANK

# GC/MS Volatiles

Lot-Sample # H2D160000 - 155B Work Order # MR16F1AA Matrix....... AIR

04/10/2012 Date Received..: 04/12/2012

 Prep Date......:
 04/16/2012
 Analysis Date...
 04/16/2012

 Prep Batch #....:
 2107155
 04/16/2012

Dilution Factor.: 1 Method...... TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	ND	0.080	ND	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	ND	0.32	ND	0.94
,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	ND	0.080	ND	0.26
Benzyl chloride	ND	0.16	ND	0.83
3romodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
3romomethane	ND	0.080	ND	0.31
Carbon tetrachloride	ND	0.040	ND	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND.	0.080	ND	0.39
Cyclohexane	ND	0.20	ND	0.69
Chloromethane	ND	0.20	ND	0.41
eis-1,2-Dichloroethene	ND	0.080	ND	0.32
is-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	ND	0.080	ND	0.40
Ethanol	ND	0.80	ND	1.5
Ethylbenzene	ND	0.080	ND	0.35
,2-Dichloro-1,1,2,2-tetrafluoroeth	ND	0.080	ND	0.56
ane	1120	0.000	1112	0.00
n-Hexane	ND	0.20	ND	0.70

# Client Sample ID: INTRA-LAB BLANK

<b>Lot-Sample</b> # H2D160000 - 15	5B	Work Order # MR16F1	AA	Matrix: AIR
PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Hexachlorobutadiene	ND	0.080	ND	0.85
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	ND	0.20	ND	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	ND	0.080	ND	0.54
Toluene	ND	0.080	ND	0.30
m-Xylene & p-Xylene	ND	0.080	ND	0.35
o-Xylene	ND	0.080	ND	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	ND	0.080	ND	0.45
Vinyl chloride	ND	0.080	ND	0.20
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	<u>.</u>	98		60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

# Client Sample ID: CHECK SAMPLE

Lot-Sample # H2D	160000 -	155C	Work Ord	ler#	MR16	F1AC	Matrix	: AIR
Prep Date: Prep Batch #:	04/10/20 04/16/20 2107155	12	Date Rece Analysis I		04/12/ 04/16/			
Dilution Factor.:	1		Method	:	TO-15	5		
PARAMETER		SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOU (ug/m3	NT	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
1,1,1-Trichloroethane	•	5.00	5.26	27		28.7	105	70 - 130
1,1,2,2-Tetrachloroethan	e	5.00	4.16	34		28.5		70 - 130
1,1,2-Trichlorotrifluoroe		5.00	5.10	38		39.1	83	70 - 130
1,1,2"1110moroumuoroc	tilaile	3.00	5.10	36		39.1	102	70 - 130
1,1,2-Trichloroethane		5.00	4.46	27		24.3	89	70 - 130
1,1-Dichloroethane		5.00	5.02	20		20.3	100	70 - 130
1,1-Dichloroethene		5.00	4.88	20		19.3	98	70 - 130
1,2,4-Trichlorobenzene		5.00	3.10	37		23.0	62	60 - 140
1,2,4-Trimethylbenzene		5.00	4.20	25		20.7	84	70 - 130
1,2-Dibromoethane (EDI	3)	5.00	4.50	38		34.6	90	70 - 130
1,2-Dichlorobenzene		5.00	3.93	30		23.6	79	70 - 130
1,2-Dichloroethane		5.00	4.82	20		19.5	96	70 - 130
1,2-Dichloropropane		5.00	4.32	23		20.0	86	70 - 130
1,3,5-Trimethylbenzene		5.00	4.05	25		19.9	81	70 - 130
1,4-Dichlorobenzene		5.00	3.88	30		23.3	78	70 - 130
1,4-Dioxane		5.00	4.14	18		14.9	83	60 - 140
2-Butanone (MEK)		5.00	4.11	15		12.1	82	60 - 140
1,3-Dichlorobenzene		5.00	3.97	30		23.9	79	70 - 130
2,2,4-Trimethylpentane		5.00	4.18	23		19.5	84	70 - 130
Benzene		5.00	3.98	16		12.7	80	70 - 130
Benzyl chloride		5.00	4.31	26		22.3	86	70 - 130
Bromodichloromethane		5.00	4.73	34		31.7	95	70 - 130
Bromoform		5.00	4.51	52		46.6	90	60 - 140
Bromomethane		5.00	4.49	19		17.4	90	70 - 130
Carbon tetrachloride		5.00	5.40	31		34.0	108	70 - 130
Chlorobenzene		5.00	4.24	23		19.5	85	70 - 130
Chloroethane		5.00	4.27	13		11.3	85	70 - 130
Chloroform		5.00	4.94	24		24.1	99	70 - 130
Cyclohexane		5.00	4.52	17		15.5	90	70 - 130
Chloromethane		5.00	5.09	10		10.5	102	60 - 140
cis-1,2-Dichloroethene		5.00	4.90	20		19.4	98	70 - 130
cis-1,3-Dichloropropene		5.00	4.38	23		19.9	88	70 - 130
Dibromochloromethane		5.00	4.93	43		42.0	99	70 - 130
Dichlorodifluoromethane	<b>)</b> -	5.00	5.06	25		25.0	101	60 - 140
Ethanol		24.6	28.4	46		53.4	115	20 - 180
Ethylbenzene		5.00	4.44	22		19.3	89	70 - 130
1,2-Dichloro-1,1,2,2-tetra	afluo	5.00	4.47	35		31.3	89	60 - 140
roethane							<del>-</del> -	

# Client Sample ID: CHECK SAMPLE

Lot-Sample # H2D16000	0 - 155C	- 155C Work Order #		MR16F1AC		Matrix AIR	
PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS	
n-Hexane	5.00	5.05	18	17.8	101	70 - 130	
Hexachlorobutadiene	5.00	3.55	53	37.8	71	60 - 140	
4-Methyl-2-pentanone (MIBK)	5.00	4.04	20	16.5	81	60 - 140	
Methyl tert-butyl ether	5.00	4.68	18	16.9	94	60 - 140	
Methylene chloride	5.00	4.69	17	16.3	94	70 - 130	
Styrene	5,00	4.48	21	19.1	90	70 - 130	
tert-Butyl alcohol	5.00	5.03	15	15.2	101	60 - 140	
Tetrachloroethene	5.00	4.36	34	29.6	87	70 - 130	
Toluene	5.00	4.21	19	15.9	84	70 - 130	
m-Xylene & p-Xylene	10.0	8.81	43	38.2	88	70 - 130	
o-Xylene	5.00	4.29	22	18.6	86	70 - 130	
trans-1,2-Dichloroethene	5.00	4.90	20	19.4	98	70 - 130	
trans-1,3-Dichloropropene	5.00	4.82	23	21.9	96	70 - 130	
Trichloroethene	5.00	4.09	27	22.0	82	70 - 130	
Trichlorofluoromethane	5.00	5.37	28	30.2	107	60 - 140	
Vinyl chloride	5.00	4.57	13	11.7	91	70 - 130	
SURROGATE		PERCE RECOV			LABOR. CONTRI LIMITS	OL	
4-Bromofluorobenzene		100		<del></del>	60 - 14	0	

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

Sample Data Summary

## Client Sample ID: DAYCARE-IA

## GC/MS Volatiles

Lot-Sample # Work Order # M0AH41AA H3C070415 - 001 Matrix....: AIR Date Sampled...: 03/05/2013 03/07/2013 Date Received ..: Prep Date....: 03/07/2013 Analysis Date... 03/07/2013 Prep Batch #....: 3067015 Dilution Factor.: Method....: TO-15

PARAMETER	RESULTS REPORTING (ppb(v/v)) LIMIT (ppb(v/v))		RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)	
1,1,1-Trichloroethane	ND	0.080	ND	0.44	
1,1,2,2-Tetrachloroethane	ND ND	0.080	ND ND	0.55	
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND ND	0.53	
	ND	0.080	ND ND	0.44	
1,1,2-Trichloroethane					
1,1-Dichloroethane	ND ND	0.080	ND ND	0.32	
1,1-Dichloroethene		0.080	ND	0.32	
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59	
1,2,4-Trimethylbenzene	0.26	0.080	1.3	0.39	
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61	
1,2-Dichlorobenzene	ND	0.080	ND	0.48	
1,2-Dichloroethane	0.13	0.080	0.53	0.32	
1,2-Dichloropropane	ND	0.080	ND	0.37	
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39	
1,4-Dichlorobenzene	<b>0.23</b> ND	0.080	1.4	<b>0.48</b> 0.72	
1,4-Dioxane		0.20	ND		
2-Butanone (MEK)	0.36 ND	<b>0.32</b> 0.080	1.1 ND	<b>0.94</b> 0.48	
1,3-Dichlorobenzene					
2,2,4-Trimethylpentane	ND	0.20	ND	0.93	
Benzene Benzyl chloride	1.5 ND	0.080 0.16	<b>4.8</b> ND	<b>0.26</b> 0.83	
Bromodichloromethane	ND ND	0.080	ND	0.63	
Bromoform	ND	0.080	ND	0.83	
Bromomethane	ND	0.080	ND	0.31	
Carbon tetrachloride Chlorobenzene	0.094	0.040	0.59	0.25	
	ND	0.080	ND	0.37	
Chloroethane	ND	0.080	ND	0.21	
Chalabarana	0.33	0.080	1.6	0.39	
Cyclohexane	ND	0.20	ND	0.69	
Chloromethane cis-1,2-Dichloroethene	<b>0.76</b> ND	<b>0.20</b> 0.080	1.6 ND	<b>0.41</b> 0.32	
	ND ND	0.080	ND ND	0.36	
cis-1,3-Dichloropropene					
Dibromochloromethane	ND	0.080	ND	0.68	
Dichlorodifluoromethane	0.16 740 E	0.080	0.79	0.40	
Ethanol Ethylbenzene	740 E 0.12	0.80 0.080	1400 E 0.53	1.5 0.35	
1,2-Dichloro-1,1,2,2-tetrafluoroeth	0.12 ND	0.080	0.53 ND	0.56	
ane	MD	0.000	ND	0.50	
n-Hexane	ND	0.20	ND	0.70	
Hexachlorobutadiene	ND	0.080	ND	0.85	
Hondoniologuation	1112	0,000	1,12	0.00	

#### Client Sample ID: DAYCARE-IA

## GC/MS Volatiles

<b>Lot-Sample</b> # H3C070415 - 001		Work Order # M0AH-	41AA	Matrix: AIR
PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	ND	0.20	ND	0.69
Styrene	0.10	0.080	0.44	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	ND	0.080	ND	0.54
Toluene	1.4	0.080	5.4	0.30
m-Xylene & p-Xylene	0.30	0.080	1.3	0.35
o-Xylene	0.13	0.080	0.58	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	0.21	0.080	1.2	0.45
Vinyl chloride	ND	0.080	ND	0.20
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene		105	<u></u>	60 - 140

### **Qualifiers**

E Estimated result. Result concentration exceeds the calibration range.

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding) \# (Molecular \ Weight/24.45)$ 

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

#### Client Sample ID: DAYCARE-IA

## GC/MS Volatiles

Lot-Sample #	H3C070415 - 001		Work Order	M0A	H42AA	Matrix:	AIR
Date Sampled:	03/05/2013		Date Received	: 03/07	7/2013		
Prep Date:	03/08/2013		Analysis Date	03/08	3/2013		
Prep Batch #:	3067050		-				
Dilution Factor.:	50		Method	: TO-1	.5		
PARAMETER		RESULTS (ppb(v/v))		RTING (ppb(v/v))	RESULTS (ug/m3)	REPORT LIMIT (u	
Ethanol		1700 D	40		3200 D	75	
			PERCENT			LABORATORY CONTROL	<i>T</i>
SURROGATE			RECOVERY			LIMITS (%)	
4-Bromofluorober	nzene		105			60 - 140	

## Qualifiers

D Result was obtained from the analysis of a dilution.

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding) * (Molecular \ Weight/24.45)$ 

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

### Client Sample ID: DAYCARE-OA

## GC/MS Volatiles

Lot-Sample # H3C070415 - 002 Work Order # M0AH51AA Matrix.....: AIR

 Date Sampled...:
 03/05/2013
 Date Received...:
 03/07/2013

 Prep Date.......:
 03/07/2013
 Analysis Date...
 03/07/2013

 Prep Batch #....:
 3067015

Dilution Factor.: 1 Method...... TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
	(FF-(/)		(4,0,1-14)	
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	0.26	0.080	1.3	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	ND	0.32	ND	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	0.19	0.080	0.60	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND .	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.081	0.040	0.51	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	ND	0.20	ND	0.69
Chloromethane	0.59	0.20	1.2	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.35	0.080	1.8	0.40
Ethanol	5.2	0.80	9.7	1.5
Ethylbenzene	ND	0.080	ND	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroeth	ND	0.080	ND	0.56
ane	NID	0.20	ND	0.70
n-Hexane	ND ND	0.20	ND ND	0.70
Hexachlorobutadiene	ND	0.080	ND	0.85

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### Client Sample ID: DAYCARE-OA

### GC/MS Volatiles

Lot-Sample # H3C0704	15 - 002 V	Vork Order # M0AH5	1AA	Matrix: AIR
PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK	) ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	0.65	0.20	2.2	0.69
Styrene	ND	0.080	ND	0.34
ert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	ND	0.080	ND	0.54
<b>Coluene</b>	0.32 B	0.080	1.2 B	0.30
n-Xylene & p-Xylene	0.18	0.080	0.78	0.35
-Xylene	0.087	0.080	0.38	0.35
rans-1,2-Dichloroethene	ND	0.080	ND	0.32
rans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
[richlorofluoromethane	0.22	0.080	1.2	0.45
Vinyl chloride	ND	0.080	ND	0.20
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)

### **Qualifiers**

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding)*(Molecular \ Weight/24.45)$ 

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

# Client Sample ID: FURNATURE STORE-IA

# GC/MS Volatiles

Lot-Sample #	H3C070415 - 003	Work Order#	M0AH61AA	Matrix: A	IR
Date Sampled: Prep Date:		Date Received: Analysis Date	03/07/2013 03/07/2013		
Prep Batch #:	05/07/2015	maryoto Date	03/07/2013		
Dilution Factor.:	1	Method:	TO-15		

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	0.18	0.080	0.88	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	ND	0.32	ND	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	0.32	0.080	1.0	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.085	0.040	0.54	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	ND	0.20	ND	0.69
Chloromethane	0.60	0.20	1.2	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.17	0.080	0.82	0.40
Ethanol	15	0.80	28	1.5
Ethylbenzene	ND	0.080	ND	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroeth	ND	0.080	ND	0.56
ane				
n-Hexane	ND	0.20	ND	0.70
Hexachlorobutadiene	ND	0.080	ND	0.85

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## Client Sample ID: FURNATURE STORE-IA

<b>Lot-Sample</b> # H3C070415 - 00	3	Work Order#	M0AH61AA	Matrix: AIR
PARAMETER	RESULTS (ppb(v/v))	REPORTI LIMIT (pj		REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	ND	0.20	ND	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	ND	0.080	ND	0.54
Toluene	0.49	0.080	1.8	0.30
m-Xylene & p-Xylene	0.24	0.080	1.0	0.35
o-Xylene	0.097	0.080	0.42	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	0.19	0.080	1.1	0.45
Vinyl chloride	ND	0.080	ND	0,20
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	· · · · · · · · · · · · · · · · · · ·	102		60 - 140

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding)*(Molecular \ Weight/24.45)$ 

## Client Sample ID: FURNATURE STORE-SS

### GC/MS Volatiles

Lot-Sample # Work Order # M0AH71AA H3C070415 - 004 Matrix....: AIR Date Sampled...: 03/05/2013 Date Received..: 03/07/2013 Prep Date....: 03/07/2013 Analysis Date... 03/07/2013 Prep Batch #....: 3067015 Dilution Factor.: **Method.....:** TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
	-		<b>1</b>	
1,1,1-Trichloroethane	ND	0.40	ND	2.2
1,1,2,2-Tetrachloroethane	ND	0.40	ND	2.7
1,1,2-Trichlorotrifluoroethane	ND	0.40	ND	3.1
1,1,2-Trichloroethane	ND	0.40	ND	2.2
1,1-Dichloroethane	ND	0.40	ND	1.6
1,1-Dichloroethene	ND	0.40	ND	1.6
1,2,4-Trichlorobenzene	ND	0.40	ND	3.0
1,2,4-Trimethylbenzene	0.61	0.40	3.0	2.0
1,2-Dibromoethane (EDB)	ND	0.40	ND	3.1
1,2-Dichlorobenzene	ND	0.40	ND	2.4
1,2-Dichloroethane	ND	0.40	ND	1.6
1,2-Dichloropropane	ND	0.40	ND	1.8
1,3,5-Trimethylbenzene	ND	0.40	ND	2.0
1,4-Dichlorobenzene	3.3	0.40	20	2.4
1,4-Dioxane	ND	1.0	ND	3.6
2-Butanone (MEK)	ND	1.6	ND	4.7
1,3-Dichlorobenzene	ND	0.40	ND	2.4
2,2,4-Trimethylpentane	ND	1.0	ND	4.7
Benzene	ND	0.40	ND	1.3
Benzyl chloride	ND	0.80	ND	4.1
Bromodichloromethane	1.3	0.40	8.9	2.7
Bromoform	ND	0.40	ND	4.1
Bromomethane	ND	0.40	ND	1.6
Carbon tetrachloride	0.45	0.20	2.8	1.3
Chlorobenzene	ND	0.40	ND	1.8
Chloroethane	ND	0.40	ND	1.1
Chloroform	88 E	0.40	430 E	2.0
Cyclohexane	ND	1.0	ND	3.4
Chloromethane	ND	1.0	ND	2.1
cis-1,2-Dichloroethene	ND	0.40	ND	1.6
cis-1,3-Dichloropropene	ND	0.40	ND	1.8
Dibromochloromethane	ND	0.40	ND	3.4
Dichlorodifluoromethane	0.49	0.40	2.4	2.0
Ethanol	ND	4.0	ND	7.5
Ethylbenzene	ND	0.40	ND	1.7
1,2-Dichloro-1,1,2,2-tetrafluoroeth	ND	0.40	ND	2.8
ane	3.175	1.0	) IID	2.5
n-Hexane	ND	1.0	ND	3.5
Hexachlorobutadiene	ND	0.40	ND	4.3

TO-14\_rev5.rpt Rev 1.0.9 09/01/2011

### Client Sample ID: FURNATURE STORE-SS

### GC/MS Volatiles

<b>Lot-Sample</b> # H3C070415 - 004		Work Order#	M0AH71AA	Matrix: AIR
PARAMETER	RESULTS (ppb(v/v))	REPORTI LIMIT (pj		REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	ND	1.0	ND	4.1
Methyl tert-butyl ether	ND	0.80	ND	2.9
Methylene chloride	ND	1.0	ND	3.5
Styrene	ND	0.40	ND	1.7
tert-Butyl alcohol	ND	1.6	ND	4.9
Tetrachloroethene	7.6	0.40	52	2.7
Toluene	1.5	0.40	5.7	1.5
m-Xylene & p-Xylene	1.1	0.40	4.7	1.7
o-Xylene	0.41	0.40	1.8	1.7
trans-1,2-Dichloroethene	ND	0.40	ND	1.6
trans-1,3-Dichloropropene	ND	0.40	ND	1.8
Trichloroethene	0.26	0.20	1.4	1.1
Trichlorofluoromethane	ND	0.40	ND	2.2
Vinyl chloride	ND	0.40	ND	1.0
		PERCENT		LABORATORY CONTROL
SURROGATE  4-Bromofluorobenzene		RECOVERY	<del> </del>	LIMITS (%)  60 - 140

### **Qualifiers**

E Estimated result. Result concentration exceeds the calibration range.

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding)*(Molecular \ Weight/24.45)$ 

 $\label{thm:conting} The 'Reporting Limit' in ug/m3 is calculated using the following equation: \qquad (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)$ 

### Client Sample ID: FURNATURE STORE-SS

### GC/MS Volatiles

Lot-Sample #	H3C070415 - 004		Work Order#	M0AH72	AA	Matrix:	AIR
Date Sampled: Prep Date: Prep Batch #:	03/05/2013 03/08/2013 3067050		Date Received: Analysis Date	03/07/201 03/08/201			
Dilution Factor.:			Method:	TO-15			
PARAMETER		RESULTS (ppb(v/v))	REPORT LIMIT (p		RESULTS (ug/m3)	REPORTI LIMIT (ug	
Chloroform		94 D	1.1		460 D	5.2	
SURROGATE			PERCENT RECOVERY		_	LABORATORY CONTROL LIMITS (%)	
4-Bromofluorobe	nzene		102			60 - 140	

### **Qualifiers**

D Result was obtained from the analysis of a dilution.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

### Client Sample ID: INTRA-LAB BLANK

### GC/MS Volatiles

03/07/2013

03/07/2013

Lot-Sample # H3C080000 - 015B Work Order # M0ANN1AA Matrix....: AIR

03/05/2013

Date Received ..: Prep Date....: 03/07/2013 Analysis Date... Prep Batch #....: 3067015

Dilution Factor.: Method....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	ND	0.080	ND	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	ND	0.32	ND	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	ND	0.080	ND	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	ND	0.040	ND	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	ND	0.20	ND	0.69
Chloromethane	ND	0.20	ND	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	ND	0.080	ND	0.40
Ethanol	ND	0.80	ND	1.5
Ethylbenzene	ND	0.080	ND	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroeth ane	ND	0.080	ND	0.56
n-Hexane	ND	0.20	ND	0.70

### Client Sample ID: INTRA-LAB BLANK

Lot-Sample # H3	C080000 - 015B	Work Order#	M0ANN1AA	Matrix: AIF
PARAMETER	RESULT (ppb(v/v)			REPORTING LIMIT (ug/m3)
Hexachlorobutadiene	ND	0.080	ND	0.85
4-Methyl-2-pentanone	(MIBK) ND	0.20	ND	0.82
Methyl tert-butyl ether		0.16	ND	0.58
Methylene chloride	ND	0.20	ND	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	ND	0.080	ND	0.54
Toluene	ND	0.080	ND	0.30
m-Xylene & p-Xylene	ND	0.080	ND	0.35
o-Xylene	ND	0.080	ND	0.35
trans-1,2-Dichloroethe	ne ND	0.080	ND	0.32
trans-1,3-Dichloroprop	oene ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethar	e ND	0.080	ND	0.45
Vinyl chloride	ND	0.080	ND	0.20
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding)*(Molecular \ Weight/24.45)$ 

### Client Sample ID: CHECK SAMPLE

Lot-Sample # H3C080000	- 015C	Work Ord	ler# M0A	NN1AC	Matrix	: AIR
03/05/2 Prep Date: 03/07/2 Prep Batch #: 306701	:013	Date Rece Analysis I		7/2013 7/2013		
Dilution Factor.: 1		Method	TO-1	.5		
PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
1,1,1-Trichloroethane	5.00	5.09	27	27.8	102	70 - 130
1,1,2,2-Tetrachloroethane	5.00	5.04	34	34.6	101	70 - 130
1,1,2-Trichlorotrifluoroethane	5.00	4.57	38	35.0	91	70 - 130
1,1,2-Trichloroethane	5.00	5.12	27	27.9	102	70 - 130
1,1-Dichloroethane	5.00	5.19	20	21.0	104	70 - 130
1,1-Dichloroethene	5.00	4.39	20	17.4	88	70 - 130
1,2,4-Trichlorobenzene	5.00	4.33	37	32.1	87	60 - 140
1,2,4-Trimethylbenzene	5.00	5.00	25	24.6	100	70 - 130
1,2-Dibromoethane (EDB)	5.00	5.15	38	39.6	103	70 - 130
1,2-Dichlorobenzene	5.00	4.76	30	28.6	95	70 - 130
1,2-Dichloroethane	5.00	5.18	20	20.9	104	70 - 130
1,2-Dichloropropane	5.00	5.23	23	24.2	105	70 - 130
1,3,5-Trimethylbenzene	5.00	4.87	25	23.9	97	70 - 130
1,4-Dichlorobenzene	5.00	4.80	30	28.9	96	70 - 130
1,4-Dioxane	5.00	4.97	18	17.9	99	60 - 140
2-Butanone (MEK)	5.00	5.02	15	14.8	100	60 - 140
1,3-Dichlorobenzene	5.00	4.77	30	28.7	95	70 - 130
2,2,4-Trimethylpentane	5.00	5.46	23	25.5	109	70 - 130
Benzene	5.00	4.93	16	15.7	99	70 - 130
Benzyl chloride	5.00	5.29	26	27.4	106	70 - 130
Bromodichloromethane	5.00	5.55	34	37.2	111	70 - 130
Bromoform	5.00	5.53	52	57.1	111	60 - 140
Bromomethane	5.00	5.36	19	20.8	107	70 - 130
Carbon tetrachloride	5.00	5.10	31	32.1	102	70 - 130
Chlorobenzene	5.00	4.79	23	22.0	96	70 - 130
Chloroethane	5.00	5.60	13	14.8	112	70 - 130
Chloroform	5.00	5.08	24	24.8	102	70 - 130
Cyclohexane	5.00	5.33	17	18.3	107	70 - 130
Chloromethane	5.00	5.50	10	11.3	110	60 - 140
cis-1,2-Dichloroethene	5.00	4.81	20	19.1	96	70 - 130
cis-1,3-Dichloropropene	5.00	5.33	23	24.2	107	70 - 130
Dibromochloromethane	5.00	5.38	43	45.9	108	70 - 130
Dichlorodifluoromethane	5.00	5.50	25	27.2	110	60 - 140
Ethanol	25.0	26.3	47	49.6	105	20 - 180
Ethylbenzene	5.00	4.82	22	21.0	96	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluo roethane	5.00	5.22	35	36.5	104	60 - 140

### Client Sample ID: CHECK SAMPLE

Lot-Sample # H3C080000	0 - 015C	015C Work Order #		M0ANN1AC		Matrix: AIR	
PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS	
n-Hexane	5.00	5.45	18	19.2	109	70 - 130	
Hexachlorobutadiene	5.00	4.21	53	44.9	84	60 - 140	
4-Methyl-2-pentanone (MIBK)	5.00	5.96	20	24.4	119	60 - 140	
Methyl tert-butyl ether	5.00	5.34	18	19.3	107	60 - 140	
Methylene chloride	5.00	4.70	17	16.3	94	70 - 130	
Styrene	5.00	5.23	21	22.3	105	70 - 130	
tert-Butyl alcohol	5.00	5.28	15	16.0	106	60 - 140	
Tetrachloroethene	5.00	4.73	34	32.1	95	70 - 130	
Toluene	5.00	4.78	19	18.0	96	70 - 130	
m-Xylene & p-Xylene	10.0	9.91	43	43.0	99	70 - 130	
o-Xylene	5.00	4.92	22	21.4	98	70 - 130	
trans-1,2-Dichloroethene	5.00	5.13	20	20.3	103	70 - 130	
trans-1,3-Dichloropropene	5.00	5.14	23	23.3	103	70 - 130	
Trichloroethene	5.00	4.90	27	26.3	98	70 - 130	
Trichlorofluoromethane	5.00	5.41	28	30.4	108	60 - 140	
Vinyl chloride	5.00	5.63	13	14.4	113	70 - 130	
SURROGATE		PERCE RECOV			LABOR CONTR LIMITS	OL	
4-Bromofluorobenzene		106			60 - 14	0	

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding) * (Molecular \ Weight/24.45)$ 

### Client Sample ID: INTRA-LAB BLANK

Lot-Sample #	H3C080000 - 050B		Work (	Order#	M0A0R1A	A	Matr	ix:	AIR
Prep Date: Prep Batch #:	03/05/2013 03/08/2013 3067050			eceived: is Date	03/07/2013 03/08/2013				
Dilution Factor.:			Metho	d:	TO-15				
PARAMETER		RESULTS (ppb(v/v))		REPORTII LIMIT (pp		RESULTS (ug/m3)		REPORTII	
Chloroform		ND		0.080		ND		0.39	
Ethanol		ND		0.80		ND		1.5	
SURROGATE				CENT		-	CO	BORATORY NTROL MITS (%)	
4-Bromofluorober	nzene		103				60	) - 140	

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding)*(Molecular \ Weight/24.45)$ 

### Client Sample ID: CHECK SAMPLE

Lot-Sample #	Н3С080000 -	· 050C	Work Ord	ler#	M0A0	R1AC	Mat	rix:	AIR
Prep Date:	03/05/2		Date Rece Analysis I		03/07/ 03/08/				
Prep Batch #:		0			mo 14	_			
Dilution Factor.:	1		Method	:	TO-15	)			
PARAMETER		SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUI (ug/m3)		MEASURED AMOUNT (ug/m3)	PERCENT RECOVER		RECOVERY LIMITS
Chloroform	,	5.00	4.80	24		23.5	96		70 - 130
Ethanol		25.0	26.0	47		48.9	104	:	20 - 180
SURROGATE			PERCE RECOV				CC	ABORATO ONTROL MITS (%)	PRY
4-Bromofluorober	nzene		107				60	0 - 140	

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding) \pm (Molecular \ Weight/24.45)$ 

Sample Data Summary

### Premier Environmental Services

DATA USABILITY SUMMARY REPORT (DUSR)

SOUTHERN BLVD. SITE

TO-15 ANALYSES IN AIR SAMPLES

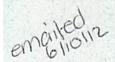
TEST AMERICA LABORATORIES, INC. KNOXVILLE, TN

REPORT NUMBER: H2C120424

June, 2012

Prepared for EnviroTrac Ltd. Yaphank, New York

Prepared by
Premier Environmental Services
2815 Covered Bridge Road
Merrick, New York 11566
(516)223-9761



### NYS DEC Data Usability Summary Report

DATA VALIDATION FOR: Volatile Organic Analyses – EPA Method TO-15

SITE: Southern Site

CONTRACT LAB: Test America Laboratories

Knoxville, TN

LABORATORY REPORT NO.: H2C120424

REVIEWER: Renee Cohen

DATE REVIEW COMPLETED: June, 2012

MATRIX: Air

The samples in this data set were analyzed in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Trace Organic Compounds in Ambient Air (January, 1999). The data validation was performed according to the guidelines in the USEPA National Functional Guidelines for Organic Data Review. Also utilized for this review is the Region II SOP document based on the USEPA CLP SOW-VCAA01.0 (December 1991). This document is for the Validation of Air Samples-Volatile Organic Analysis of Ambient Air in Canister by Method TO-15 (SOP # HW-31, Rev. 4-10/06). In addition, method and QC criteria specified in the NYSDEC ASP documents were cited. All data are considered valid and acceptable except those analytes which have been deemed unusable "R" (unreliable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material), "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All actions are detailed on the attached sheets.

Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results presented meet the specific site/project criteria for data quality and data use.

This data assessment is for six (6) ambient air samples. The samples in this data set were collected March 7, 2012 and delivered to Test America Laboratories located in Knoxville, TN on March 9, 2012. The samples were analyzed for Volatile Organic Analytes via EPA Method TO-15, as specified on the Chain of Custody (COC) documentation that accompanied the samples to the laboratory.

A cross-reference between Field Sample ID and Laboratory Sample ID is located in Table 1 of this report. A copy of definitions that may be used to qualify data results is located in Appendix A of this report. Copies of qualified data result pages are located in Appendix B of this report and a copy of Chain of Custody (COC) documentation associated with sampling event is located in Appendix C.

### 1. OVERVIEW:

Six (6) air samples were analyzed as per the Chain of Custody (COC) documentation. The samples were analyzed using EPA Method T0-15 from the Compendium of Methods for the Determination of Toxic Compounds in Ambient Air, January, 1999. Proper custody transfer of the samples was documented in the laboratory reports. Cooler temperature was within QC limits. Canister checks were performed prior to analysis. All samples in this data set were properly preserved.

Test America Laboratories generated a stand-alone report for this data set in compliance with the NYS DEC ASP Category B deliverables.

The samples in this data set were analyzed for the TO-15 volatile organic compounds listed in the method.

### 2. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. After the air sample is collected and identification tag is attached and the canister is transported to the laboratory for analysis. The canister is stored until analysis. Storage times of up to thirty (30) days have been demonstrated for many of the Volatile Organic Compounds.

The samples in this data set were collected March 7, 2012 and received at the laboratory on March 9, 2012. All initial sample analyses and dilution analyses (where necessary) were completed by March 14, 2012.

All samples in this data set were analyzed within the method recommended holding time.

### 3. SURROGATES:

Samples may be spiked with surrogate compounds prior to sample preparation to evaluate the overall laboratory performance and the efficiency of the analytical technique. If the measured surrogate concentrations are outside the QC limits, qualifiers were applied to the effected samples.

The validation guidelines associated with this method do not specify the use of surrogate compounds. Test America Laboratories fortifies each of the suma canisters with the surrogate compound 4-Bromofluorobenzene prior to sample analysis. The laboratory applied percent recovery limits of  $\pm 40\%$  (60-140%). The percent recovery of the surrogate met QC criteria in each of the samples reported in this data set.

### 4. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data. The laboratory used the in-house generated recovery criteria and RPD (precision) data for reporting purposes.

Site specific MS/MSD analysis is not associated with this data set.

### 5. BLANK SPIKE ANALYSIS:

The NY ASP protocol and the cited method require that a blank spike analysis be performed with each sample batch. The blank spike analysis is used to insure that the analytical system is in control. The laboratory applied in-house recovery limits for each analyte. The method requires the analysis of a 10 ppbv fortified sample analysis. Recovery limits of 70%-130% for each LCS target compound. Professional judgment is used to review data associated with the LCS sample results.

The laboratory prepared and analyzed two (2) Check Sample/Laboratory Control Samples with the sample batch. The LCS sample was fortified with each target analyte. The laboratory reported in-house recovery limits for each target analyte. This validator used QC recovery limits of 70-130% for each of the target analytes. The recovery of each analyte was reported on a "CLP Like" Form 3. All percent recoveries met QC criteria with the exception of that listed below:

Date of analysis	Analyte	Recovery (%)		
3/13/12	1,4-Dioxane	68		
	2-Butanone	62		
	Ethanol	68		

These target analytes have been qualified "UJ/J" estimated in the samples associated with this LCS sample analysis.

Qualified data result pages are located in Appendix B of this report.

### 6. BLANK CONTAMINATION:

Quality assurance (QA) blanks, such as the method, trip, field, or rinse blanks are prepared to identify any contamination that may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations. Samples are then qualified based on blank contamination when detected.

### A) Method Blank contamination

Two (2) method blank samples are associated with the samples reported in this data set. Each of the method blank samples was free from contamination of target analytes.

### B) Field Blank contamination

A Field Blank sample is not associated with this data set.

### C) Trip Blank contamination

A Trip Blank sample is not associated this data set.

### 7. GC/MS CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument is giving satisfactory daily performance.

The method states that the GC/MS be calibrated at a minimum of five (5) concentrations that span the range of interest. An analytical sequence includes a time frame of twenty-four (24) hours. After each 24 hour period anew analytical sequence is commenced with the analysis of an instrument performance standard and a daily calibration standard. The calculated %RSD of each target analyte must be less than 30% with at most two exceptions up to a limit of 40%. Based on the Region II validation Guidance documents any target analytes with a %RSD greater than 30% have been qualified "UJ/J" estimated.

A review of the individual relative response factor (RRF) is performed. The RRF of each target analyzed must be greater than 0.050. If the RRF is less than 0.050 the data is qualified. Positive detects are qualified "J" estimated. Non-detects are qualified "R" unusable.

One (1) initial calibration analyses are associated with these TO-15 analyses. The laboratory performed an initial multi level calibration using the standards on February, 24, 2012 (Inst. GCMS mj.i). The mean response and the %RSD were reported for each of the target compounds. The %RSD and mean response for each of the target compounds met the method criteria in each of these initial calibration curve analyses.

The samples in this data set are associated with two (2) continuing calibration standard analyses. The samples were analyzed March 13, 2012 and March 14, 2012. Percent (%) deviation of the continuing calibration standard has been calculated for each of the target compounds. The %Difference between the initial and daily standards should be within +/-30%. All target analytes met QC criteria in the continuing calibration standard with the exception of the following:

Date/File ID	Analyte	%Deviation
3/13/12/gccvd13.d	ethanol	36.0
	2-Butanone	37.9
	1,4-Dioxane	31.9

Based on the high %Deviation in the CCV standards these analytes have been qualified "UJ/J" estimated.

Qualified data result pages are located in Appendix B of this report.

### 8. GC/MS MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is Bromofluorobenzene (BFB). If the mass calibration is in error, or missing, all associated data will be classified as unusable, "R".

GC/MS instrument performance must be checked prior to sample analysis. The method specifies that the BFB Instrument Performance Check be analyzed initially and once per twenty-four (24) hour period of operation. All instrument tuning criteria were met for these sample analyses.

### 9. GC/MS INTERNAL STANDARDS PERFORMANCE:

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every run. EPA Method TO-15 recommends that the internal standard area count must not vary by more than +/- 40% from the associated continuing calibration standard. The method recommends that the retention time of the internal standard must not vary more than +20 seconds from the associated continuing calibration standard. The EPA CLP validation guidelines state that if the area count is outside the range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified estimated, "J", and all non-detects below 50% are qualified "UJ", non detects above 100% should not be qualified or "R" if there is a severe loss of sensitivity. This QC review policy has been applied to these ambient air analyses.

All samples were fortified with the internal standards Bromochloromethane, 1,4-Difluorobenzene and Chlorobenzene-d5. All internal standard area criteria were met for the samples in this data set.

### 10. COMPOUND IDENTIFICATION:

Target compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within  $\pm$  0.06 RRT units of the standard compound, and have an ion spectra which has a ratio of the primary and secondary ion intensities with 20% of that in the standard compound. Target compounds are identified on the GC by using the analytes retention time. Concentration is quantitated from the initial calibration curve.

The samples in this data set were reported in ppb (v/v) and ug/m3. Sample dilution analyses were performed when the concentration of target analytes exceeded the calibration range.

Sample H-2-BS-40975 was initially analyzed without dilution on March 13, 2012. The concentration of Ethanol exceeded the calibration range of the GC/MS. This sample was reanalyzed using a 1:11.91 dilution to report the concentration of Ethanol (770 D ppbv) detected at this sample point.

### 11. FIELD DUPLICATE ANALYSES:

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. Analytes reported above the reporting limit are listed and compared below. Data was not qualified based on the RPD of field duplicate sample analyses.

Field duplicate samples are not associated with this data set.

### 12. OVERALL ASSESSMENT:

Analytical QC criteria were met for these analyses. The data reported agrees with the raw data provided in the final report. The laboratory provided a complete data package and reported all data using acceptable protocols and laboratory qualifiers as defined in the report package. Based on this information, this data set is acceptable for use, with the noted data qualifiers.

Qualified data result pages are located in Appendix B of this report.

### TABLE 1

### CLIENT SAMPLE ID LABORATORY SAMPLE ID

H-1-SS-40975	H2C120424-001
H-1-BS-40975	H2C120424-002
H-1-AA-40975	H2C120424-003
H-2-SS-40975	H2C120424-004
H-2-BS-40975	H2C120424-005
H-2-AA-40975	H2C120424-006

### APPENDIX A

### **DATA QUALIFIER DEFINITIONS**

- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
- NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.
- K The analyte is present. The reported value may be biased high. The actual value is expected to be lower than reported.
- L The analyte is present. The reported value may be biased low. The actual value is expected to be higher than reported.
- UL The analyte was not detected, and the reported quantitation limit is probably higher than reported.

### APPENDIX B

### Client Sample ID: H-1-SS-40975

### GC/MS Volatiles

Lot-Sample # H2C120424 - 001	V	Vork Order#	MRC191AA	Matrix: AIR
Date Sampled:     03/07/2012       Prep Date:     03/13/2012       Prep Batch #:     2073119		Oate Received: Analysis Date	03/10/2012 03/13/2012	
Dilution Factor.: 1	N	Iethod:	TO-15	
PARAMETER	RESULTS (ppb(v/v))	REPORTI LIMIT (pp		REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	3.9	0.080	19	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	1.0	0.080	5.1	0.39
1,4-Dichlorobenzene	0.22	0.080	1.3	0.48
1,4-Dioxane	NDUJ	0.20	ND	0.72
2-Butanone (MEK)	2.8 丁	0.32	8.4	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	0.28	0.20	1.3	0.93
Benzene	0.71	0.080	2.3	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.076	0.040	0.48	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	0.35	0.20	1.2	0.69
Chloromethane	ND	0.20	ND	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.54	0.080	2.7	0.40
Ethanol	9.6	0.80	18	1.5
Ethylbenzene	2.4	0.080	10	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroeth	ND	0.080	ND	0.56
ane	0.71	0.00	2.5	0.70
n-Hexane	0.71	0.20	2.5	0.70
Hexachlorobutadiene	ND	0.080	ND	0.85

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### Client Sample ID: H-1-SS-40975

Lot-Sample # H2C120424 - 00	l	Work Order # MRC	CI9IAA	Matrix AIR
PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	0.26	0.20	1.1	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	0.49	0.20	1.7	0.69
Styrene	0.19	0.080	0.82	0.34
tert-Butyl alcohol	1.3	0.32	4.0	0.97
Tetrachloroethene	1.3	0.080	8.7	0.54
Toluene	7.3	0.080	27	0.30
m-Xylene & p-Xylene	9.6	0.080	41	0.35
o-Xylene	3.5	0.080	15	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	0.15	0.040	0.83	0.21
Trichlorofluoromethane	0.23	0.080	1.3	0.45
Vinyl chloride	ND	0.080	ND	0.20
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene		105		60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

### Client Sample ID: H-1-BS-40975

Lot-Sample # H2C120	0424 - 002	Work Order#	MRC2A1AA	Matrix:	AIR
Date Sampled: 03	/07/2012	Date Received:	03/10/2012		
Prep Date: 03	/13/2012	Analysis Date	03/13/2012		
Prep Batch #: 20	73119				
Dilution Factor.: 1		Method:	TO-15		
PARAMETER	RESULTS (ppb(v/v))	REPORTI LIMIT (pp		REPORTIN LIMIT (ug/s	
1,1,1-Trichloroethane	ND	0.080	ND	0.44	
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55	
1,1,2-Trichlorotrifluoroetha	ne ND	0.080	ND	0.61	
1,1,2-Trichloroethane	ND	0.080	ND	0.44	
1,1-Dichloroethane	ND	0.080	ND	0.32	
1,1-Dichloroethene	ND	0.080	ND	0.32	
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59	
1,2,4-Trimethylbenzene	0.20	0.080	0.97	0.39	
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61	
1,2-Dichlorobenzene	ND	0.080	ND	0.48	
1,2-Dichloroethane	ND	0.080	ND	0.32	
1,2-Dichloropropane	ND	0.080	ND	0.37	
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39	
1,4-Dichlorobenzene	2.1	0.080	13	0.48	
1,4-Dioxane	ND U ¬	0.20	ND	0.72	
2-Butanone (MEK)	0.62	0.32	1.8	0.94	
1,3-Dichlorobenzene	ND	0.080	ND	0.48	
2,2,4-Trimethylpentane	ND	0.20	ND	0.93	
Benzene	0.21	0.080	0.66	0.26	
Benzyl chloride	ND	0.16	ND	0.83	
Bromodichloromethane	0.092	0.080	0.62	0.54	
Bromoform	ND	0.080	ND	0.83	
Bromomethane	ND	0.080	ND	0.31	
Carbon tetrachloride	0.076	0.040	0.48	0.25	
Chlorobenzene	ND	0.080	ND	0.37	
Chloroethane	ND	0.080	ND	0.21	
Chloroform	1.5	0.080	7.3	0.39	
Cyclohexane	ND	0.20	ND	0.69	
Chloromethane	0.46	0.20	0.95	0.41	
cis-1,2-Dichloroethene	0.70	0.080	2.8	0.32	
cis-1,3-Dichloropropene	ND	0.080	ND	0.36	
Dibromochloromethane	ND	0.080	ND	0.68	
Dichlorodifluoromethane		0.080	2.3	0.40	
Ethanol	69 5	0.80	130	1.5	
Ethylbenzene	0.13	0.080	0.58	0.35 0.56	
1,2-Dichloro-1,1,2,2-tetrafi	uoroeth ND	0.080	ND	0.30	
ane n-Hexane	ND	0.20	ND	0.70	
Hexachlorobutadiene	ND	0.080	ND	0.85	
1 Total of the Control of the Contro	110	0.000	110	5.05	

### Client Sample ID: H-1-BS-40975

Lot-Sample # H2C120424	4 - 002 \	Work Order # MRC2/	\1AA	Matrix: AIR
PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING 1.IMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	3.5	0.20	12	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	0.44	0.080	3.0	0.54
Toluene	0.83	0.080	3.1	0.30
m-Xylene & p-Xylene	0.46	0.080	2.0	0.35
o-Xylene	0.16	0.080	0.68	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	0.11	0.040	0.61	0.21
Trichlorofluoromethane	0.22	0.080	1.2	0.45
Vinyl chloride	ND	0.080	ND	0.20
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene		101	<del></del>	60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

### Client Sample ID: H-1-AA-40975

### GC/MS Volatiles

Lot-Sample # H2C120424 - 003		Work Order#	MRC2C1/	\A	Matrix:	AIR
Date Sampled:         03/07/2012           Prep Date:         03/13/2012		Date Received: Analysis Date	03/10/2013 03/13/2013			
Prep Batch #: 2073119						
Dilution Factor.: 1		Method:	TO-15			
	DECLUACE	REPORTI	NG	RESULTS	REPORT	ING
PARAMETER	(ppb(v/v))	LIMIT (pp		(ug/m3)	LIMIT (u	
1,1,1-Trichloroethane	0.82	0.080		4.5	0.44	
1,1,2,2-Tetrachloroethane	ND	0.080		ND	0.55	
1,1,2-Trichlorotrifluoroethane	0.082	0.080		0.63	0.61	
1,1,2-Trichloroethane	ND	0.080		ND	0.44	
1,1-Dichloroethane	0.25	0.080		1.0	0.32	
1,1-Dichloroethene	ND	0.080		ND	0.32	
1,2,4-Trichlorobenzene	ND	0.080		ND	0.59	
1,2,4-Trimethylbenzene	ND	0.080		ND	0.39	
1,2-Dibromoethane (EDB)	ND	0.080		ND	0.61	
1,2-Dichlorobenzene	ND	0.080		ND	0.48	
1,2-Dichloroethane	ND	0.080		ND	0.32	
1,2-Dichloropropane	ND	0.080		ND	0.37	
1,3,5-Trimethylbenzene	ND	0.080		ND	0.39	
1,4-Dichlorobenzene	ND	0.080		ND	0.48	
1,4-Dioxane	NDUJ	0.20		ND	0.72	
2-Butanone (MEK)	ND UJ	0.32		ND	0.94	
1,3-Dichlorobenzene	ND	0.080		ND	0.48	
2,2,4-Trimethylpentane	ND	0.20		ND	0.93	
Benzene	ND	0.080		ND	0.26	
Benzyl chloride	ND	0.16		ND	0.83	
Bromodichloromethane	ND	0.080		ND	0.54	
Bromoform	ND	0.080		ND	0.83	
Bromomethane	ND	0.080		ND	0.31	
Carbon tetrachloride	0.060	0.040		0.38	0.25	
Chlorobenzene	ND	0.080		ND	0.37	
Chloroethane	ND	0.080		ND	0.21	
Chloroform	ND	0.080		ND	0.39	
Cyclohexane	ND	0.20		ND	0.69	
Chloromethane	0.60	0.20		1.2	0.41	
cis-1,2-Dichloroethene	0.42	0.080		1.7	0.32	
cis-1,3-Dichloropropene	ND	0.080		ND	0.36	
Dibromochloromethane	ND	0.080		ND	0.68	
Dichlorodifluoromethane	0.52	0.080		2.6	0.40	
Ethanol	27 1	0.80		51	1.5	
Ethylbenzene	ND	0.080		ND	0.35	
1,2-Dichloro-1,1,2,2-tetrafluoroeth	ND	0.080		ND	0.56	
ane				arcada (C)		
n-Hexane	ND	0.20		ND	0.70	
Hexachlorobutadiene	ND	0.080		ND	0.85	

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### Client Sample ID: H-1-AA-40975

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	0.73	0.20	2.5	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	ND	0.080	ND	0.54
Toluene	ND	0.080	ND	0.30
m-Xylene & p-Xylene	ND	0.080	ND	0.35
o-Xylene	ND	0.080	ND	0.35
trans-1,2-Dichloroethene	ND .	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	0.30	0.040	1.6	0.21
Trichlorofluoromethane	0.26	0.080	1.4	0.45
Vinyl chloride	ND	0.080	ND	0.20
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

### Client Sample ID: H-2-SS-40975

### GC/MS Volatiles

Lot-Sample # H2C120424 - 004		Work Order#	MRC2D1A	A	Matrix:	AIR
Date Sampled:       03/07/2012         Prep Date:       03/13/2012         Prep Batch #:       2073119		Date Received: Analysis Date	03/10/2012 03/13/2012			
Dilution Factor.: 1		Method:	TO-15			
	RESULTS	REPORTI	NG	RESULTS	REPORT	ING
PARAMETER	(ppb(v/v))	LIMIT (pp	b(v/v))	(ug/m3)	LIMIT (u	ig/m3)
1,1,1-Trichloroethane	ND	0.080		ND	0.44	
1,1,2,2-Tetrachloroethane	ND	0.080		ND	0.55	
1,1,2-Trichlorotrifluoroethane	ND	0.080		ND	0.61	
1,1,2-Trichloroethane	ND	0.080		ND	0.44	
1,1-Dichloroethane	ND	0.080		ND	0.32	
1,1-Dichloroethene	ND	0.080		ND	0.32	
1,2,4-Trichlorobenzene	ND	0.080		ND	0.59	
1,2,4-Trimethylbenzene	3.5	0.080		17	0.39	
1,2-Dibromoethane (EDB)	ND	0.080		ND	0.61	
1,2-Dichlorobenzene	ND	0.080		ND	0.48	
1,2-Dichloroethane	ND	0.080		ND	0.32	
1,2-Dichloropropane	ND	0.080		ND	0.37	
1,3,5-Trimethylbenzene	0.82	0.080		4.0	0.39	
1,4-Dichlorobenzene	0.11	0.080		0.69	0.48	
1,4-Dioxane	ND U I	0.20		ND	0.72	
2-Butanone (MEK)	2.3	0.32		6.7	0.94	
1,3-Dichlorobenzene	ND	0.080		ND	0.48	
2,2,4-Trimethylpentane	0.21	0.20		1.0	0.93	
Benzene	1.6	0.080		5.2	0.26	
Benzyl chloride	ND	0.16		ND	0.83	
Bromodichloromethane	ND	0.080		ND	0.54	
Bromoform	ND	0.080		ND	0.83	
Bromomethane	ND	0.080		ND	0.31	
Carbon tetrachloride	0.053	0.040		0.34	0.25	
Chlorobenzene	ND	0.080		ND	0.37	
Chloroethane	ND	0.080		ND	0.21	
Chloroform	1.0	0.080		4.9	0.39	
Cyclohexane	0.34	0.20		1.2	0.69	
Chloromethane	ND	0.20		ND	0.41	
cis-1,2-Dichloroethene	ND	0.080		ND	0.32	
cis-1,3-Dichloropropene	ND	0.080		ND	0.36	
Dibromochloromethane	ND	0.080		ND	0.68	
Dichlorodifluoromethane	0.48	0.080		2.4	0.40	
Ethanol	8.9	0.80		17	1.5	
Ethylbenzene	2.3	0.080		10	0.35	
1,2-Dichloro-1,1,2,2-tetrafluoroeth	ND	0.080		ND	0.56	
ane n-Hexane	0.79	0.20		2.8	0.70	
Hexachlorobutadiene	ND	0.080		ND	0.70	
110/100/100/100/100	110	0.000		ND	0.03	

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### Client Sample ID: H-2-SS-40975

### **GC/MS** Volatiles

Lot-Sample # Work Order# H2C120424 - 004 MRC2D1AA Matrix....: AIR RESULTS REPORTING **RESULTS** REPORTING PARAMETER (ppb(v/v))LIMIT (ppb(v/v)) (ug/m3) LIMIT (ug/m3) 4-Methyl-2-pentanone (MIBK) ND 0.20 ND 0.82 ND ND Methyl tert-butyl ether 0.16 0.58 Methylene chloride ND 0.20 ND 0.69 Styrene 0.18 0.080 0.75 0.34 tert-Butyl alcohol 2.7 0.32 8.1 0.97 Tetrachloroethene 0.67 0.080 4.5 0.54 8.4 Toluene 0.080 31 0.30 m-Xylene & p-Xylene 9.2 0.08040 0.35 o-Xylene 3.0 0.08013 0.35 trans-1,2-Dichloroethene ND 0.080 ND 0.32 ND 0.080 ND 0.36 trans-1,3-Dichloropropene Trichloroethene ND 0.040 ND 0.21 Trichlorofluoromethane 0.26 0.080 1.4 0.45 ND 0.080 ND Vinyl chloride 0.20 LABORATORY PERCENT CONTROL RECOVERY LIMITS (%) SURROGATE 101 60 - 140 4-Bromofluorobenzene

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

### Client Sample ID: H-2-BS-40975

### GC/MS Volatiles

Lot-Sample # H2C120424 - 005	Wo	ork Order#	MRC2E1	AA	Matrix: AIR
Date Sampled: 03/07/2012	Da	te Received:	03/10/201	2	
Prep Date: 03/13/2012	An	alysis Date	03/13/201	2	
Prep Batch #: 2073119		5-8 <del>5</del> 0			
Dilution Factor.: 1	Mo	ethod:	TO-15		
					0.00.000.02
PARAMETER	RESULTS (ppb(v/v))	REPORTI LIMIT (pp		RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	0.21	0.080		1.2	0.44
1,1,2,2-Tetrachloroethane	ND	0.080		ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080		ND	0.61
1,1,2-Trichloroethane	ND	0.080		ND	0.44
1,1-Dichloroethane	ND	0.080		ND	0.32
1,1-Dichloroethene	ND	0.080		ND	0.32
1,2,4-Trichlorobenzene	ND	0.080		ND	0.59
1,2,4-Trimethylbenzene	0.61	0.080		3.0	0.39
1,2-Dibromoethane (EDB)	ND	0.080		ND	0.61
1,2-Dichlorobenzene	ND	0.080		ND	0.48
1,2-Dichloroethane	0.096	0.080		0.39	0.32
1,2-Dichloropropane	ND	0.080		ND	0.37
1,3,5-Trimethylbenzene	0.15	0.080		0.72	0.39
1,4-Dichlorobenzene	0.11	0.080		0.68	0.48
1,4-Dioxane	ND U J	0.20		ND	0.72
2-Butanone (MEK)	0.7.2	0.32		2.7	0.94
1,3-Dichlorobenzene	ND	0.080		ND	0.48
2,2,4-Trimethylpentane	ND	0.20		ND	0.93
Benzene	0.32	0.080		1.0	0.26
Benzyl chloride	ND	0.16		ND	0.83
Bromodichloromethane	ND	0.080		ND	0.54
Bromoform	ND	0.080		ND	0.83
Bromomethane	ND	0.080		ND	0.31
Carbon tetrachloride	0.090	0.040		0.57	0.25
Chlorobenzene	ND	0.080		ND	0.37
Chloroethane	ND	0.080		ND	0.21
Chloroform Cyclohexane	1.8 ND	0.080		8.9	0.39
Chloromethane		0.20		ND	0.69
cis-1,2-Dichloroethene	0.89 ND	0.20		1.8 ND	0.41 0.32
cis-1,3-Dichloropropene	ND	0.080		ND	
		0.080			0.36
Dibromochloromethane	ND	0.080		ND	0.68
Dichlorodifluoromethane Ethanol	0.46 670 E	0.080 0.80		2.3 1300 E	0.40 1.5
Ethylbenzene	670 E 3 0.20	0.080		0.86	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroeth	ND	0.080		ND	0.56
anc		0.000		1110	0.50
n-Hexane	0.42	0.20		1.5	0.70
Hexachlorobutadiene	ND	0.080		ND	0.85
4-Methyl-2-pentanone (MIBK)	ND	0.20		ND	0.82

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### Client Sample ID: H-2-BS-40975

### **GC/MS Volatiles**

Lot-Sample # H2C120424 - 005			Work Order#	MRC2E1	AA	Matrix:	AIR
PARAMETER		RESULTS (ppb(v/v))	REPORT LIMIT (p		RESULTS (ug/m3)	REPORTIN	
Methyl tert-butyl	ether	ND	0.16		ND	0.58	
Methylene chlor	ide	0.29	0.20		1.0	0.69	
Styrene		0.48	0.080		2.0	0.34	
tert-Butyl alcoho	ol	0.88	0.32		2.7	0.97	
Tetrachloroethe	ne	0.11	0.080		0.77	0.54	
Toluene		6.9	0.080		26	0.30	
m-Xylene & p-X	ylene	0.59	0.080		2.6	0.35	
o-Xylene		0.24	0.080		1.1	0.35	
trans-1,2-Dichlor	oethene	ND	0.080		ND	0.32	
trans-1,3-Dichlor	opropene	ND	0.080		ND	0.36	
Trichloroethene		ND	0.040		ND	0.21	
Trichlorofluoros	nethane	0.24	0.080		1.4	0.45	
Vinyl chloride		ND	0.080		ND	0.20	
			PED CEN M			LABORATORY	
SURROGATE			PERCENT RECOVERY			CONTROL LIMITS (%)	

### **Onalifiers**

E Estimated result. Result concentration exceeds the calibration range.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24A5)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24,45)

### Client Sample ID: H-2-BS-40975

### GC/MS Volatiles

Lot-Sample # H2C120424 - 005			Work Order # M			4	Matrix:	AIR
Date Sampled:	03/07/2012		Date Receiv	ved:	03/10/2012			
Prep Date:	03/14/2012		Analysis Da	nte	03/15/2012			
Prep Batch #:	2075019		•					
Dilution Factor.:	11.91		Method	:	TO-15			
PARAMETER		RESULTS (ppb(v/v))		EPORTING MIT (ppb)	_	RESULTS (ug/m3)	REPORTI LIMIT (ug	
Ethanol		770 D	9.5	5		1500 D	18	
							LABORATORY	<b>(</b>
			PERCEN	T			CONTROL	
SURROGATE			RECOVE	ERY			LIMITS (%)	
4-Bromofluorober	ızene		102				60 - 140	

### **Qualifiers**

D Result was obtained from the analysis of a dilution.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

### Client Sample ID: H-2-AA-40975

### GC/MS Volatiles

Lot-Sample # H2C120424 - 006	,	Work Order#	MRC2G1A.	A	Matrix:	AIR
Date Sampled: 03/07/2012	1	Date Received:	03/10/2012			
Prep Date: 03/13/2012		Analysis Date	03/13/2012			
Prep Batch #: 2073119						
Dilution Factor.: 1	1	Method:	TO-15			
PARAMETER	RESULTS (ppb(v/v))	REPORTII LIMIT (pp		RESULTS (ug/m3)	REPORTI LIMIT (ug	
1,1,1-Trichloroethane	ND	0.080		ND	0.44	
1,1,2,2-Tetrachloroethane	ND	0.080		ND	0.55	
1,1,2-Trichlorotrifluoroethane	ND	0.080		ND	0.61	
1,1,2-Trichloroethane	ND	0.080		ND	0.44	
1,1-Dichlorocthane	ND	0.080		ND	0.32	
1,1-Dichloroethene	ND	0.080		ND	0.32	
1,2,4-Trichlorobenzene	ND	0.080		ND	0.59	
1,2,4-Trimethylbenzene	0.12	0.080		0.57	0.39	
1,2-Dibromoethane (EDB)	ND	0.080		ND	0.61	
1,2-Dichlorobenzene	ND	0.080		ND	0.48	
1,2-Dichloroethane	ND	0.080		ND	0.32	
1,2-Dichloropropane	ND	0.080		ND	0.37	
1,3,5-Trimethylbenzene	ND	0.080		ND	0.39	
1,4-Dichlorobenzene	ND	0.080		ND	0.48	
1,4-Dioxane	ND UJ	0.20		ND	0.72	
2-Butanone (MEK)	0.46	0.32		1.4	0.94	
1,3-Dichlorobenzene	ND	0.080		ND	0.48	
2,2,4-Trimethylpentane	ND	0.20		ND	0.93	
Benzene	0.24	0.080		0.77	0.26	
Benzyl chloride	ND	0.16		ND	0.83	
Bromodichloromethane	ND	0.080		ND	0.54	
Bromoform	ND	0.080		ND	0.83	
Bromomethane	ND	0.080		ND	0.31	
Carbon tetrachloride	0.086	0.040		0.54	0.25	
Chlorobenzene	ND	0.080		ND	0.37	
Chloroethane	ND	0.080		ND	0.21	
Chloroform	ND	0.080		ND	0.39	
Cyclohexane	ND	0.20		ND	0.69	
Chloromethane	0.57	0.20		1.2	0.41	
cis-1,2-Dichloroethene	ND	0.080		ND	0.32	
cis-1,3-Dichloropropene	ND	0.080		ND	0.36	
Dibromochloromethane	ND	0.080		ND	0.68	
Dichlorodifluoromethane	0.53	0.080		2.6	0.40	
Ethanol	13 7	0.80		24	1.5	
Ethylbenzene 1,2-Dichloro-1,1,2,2-tetrafluoroeth	0.088 ND	0.080		0.38 ND	0.35	
ane	ND	0.080		ND	0.56	
n-Hexane	ND	0.20		ND	0.70	
Hexachlorobutadiene	ND	0.080		ND	0.85	
permitted delegation and an experimental and a second of the second of t	800,000 C	(A.C.)		10 AFFE		

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### Client Sample ID: H-2-AA-40975

Lot-Sample#	H2C120424 - 006	V	Vork Order#	MRC2G1	AA	Matrix:	AJR
PARAMETER		RESULTS (ppb(v/v))	REPORTII		RESULTS (ug/m3)	REPORTI LIMIT (u	
4-Methyl-2-pentar	none (MIBK)	ND	0.20		ND	0.82	
Methyl tert-butyl	ether	ND	0.16		ND	0.58	
Methylene chlori	de	0.22	0.20		0.77	0.69	
Styrene		ND	0.080		ND	0.34	
tert-Butyl alcohol		ND	0.32		ND	0.97	
Tetrachloroethene	<b>;</b>	ND	0.080		ND	0.54	
Toluene		0.69	0.080		2.6	0.30	
m-Xylene & p-Xy	/lene	0.30	0.080		1.3	0.35	
o-Xylene		0.11	0.080		0.48	0.35	
rans-1,2-Dichlore	octhene	ND	0.080		ND .	0.32	
trans-1,3-Dichlore	ргорепе	ND	0.080		ND	0.36	
Trichloroethene		ND	0.040		ND	0.21	
Trichlorofluoron	ıethane	0.23	0.080		1.3	0.45	
Vinyl chloride		ND	0.080		ND	0.20	
						LABORATOR'	Y
SURROGATE			PERCENT RECOVERY			CONTROL LIMITS (%)	
4-Bromofluorobe	nzene	<del></del>	103	· · · · · · · · · · · · · · · · · · ·		60 - 140	

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

### APPENDIX C

# TAL Knoxville

5815 Middlebrook Pike Knoxville, TN 37921 phone 865-291-3000 fax 865-584-4315

# ખેત્ર∟ાગ્રામેત્રે⊣ Canister Samples Chain of Custody Record

TestAmerica assumes no liability with respect to the collection and shipment of these samples. THE LEADER IN ENVIRONMENTAL TESTING

Special Instructions/QC Requirements & Comments:  Canisters Shipped by: - DONNA ESCHRICH Samples-Relinquished by: - Relinquished by: - Relinquishe							Sampled by :	H-2-AA-40975	H-2-BS-H0975	H-2-35-40975	H-1-AA-40975	H-1-BS-40975	H-1-88-40975	Sample Identification	PO#	Site/location: 1045 SOUTHERN BLV)	Project Name: C 203055A	FAX: 10.31-924-5001	HANK N	Company: ENVIROTRAC	Client Contact Information
Date/Time: 3/8//a Date/Time: 3/8//2-@ H:00 pm Bate/Time: 7 0 1	Start	Interior		Stop	Start	Interior		3/7/12 12:24 11:55	3/7/12 12:17 11:49	3/7/12 12:07 11:48	3/7/12/10:40 9:53	13/7/12 10:24 9:64	3/7/12 10:10 9:55	Sample Date(ş) Time Start Time Stop	Rush (Specify)	Standard (Specify) 1	Analysis Turnaround Time		TAL Contact:	Phone: 63/- 994-300/	Project Manager: Stephe
(Canisters Re Received by Raceived by		Ambient	Pressure (inches of Hg)			Ambient	Temperature (Fahrenheit)	-30 -4	-30+ -4.5	-30+ -3	-30 -4	-30 -6	-30 -4.5	Canister Canister Vacuum in Vacuum in Field, "Hg Field, 'Hg (Start) (Stop)			ound Time			1/ ×128	Sussman
Beceived by: 3/4/70 by: 10/6/120								K257 7495	K277 6361	K314 1136	K433 7496	K235 1222	K472 6/20	Flow Controller Canister ID						Danna ESCHRICHI	Sampled By:
11/21 Jat 9	le CANS /le	3 21	7991 5188	2 boxes Fed	:	with out	2 Doxes Re	×	×	×	X	×	×	TO-15 TO-14A EPA 3C EPA 25C					ni .	LENNY DARMIEN	
thorac 445	Flows	6242	6102	X#C	Sept 3.	custody scal	Da Ambins		X			X		ASTM D-1946 Other (Please s Sample Typ Indoor Air	spec	ify in	note	95 56	action)	0	of cocs
12					le/12		Tup	X		Χ	X		X	Amblent Air Soil Gas Landfill Gas Other (Please	spec	ify in	note	es se	ection)		

## Premier Environmental Services

### DATA USABILITY SUMMARY REPORT (DUSR)

SOUTHERN BLVD. SITE

TO-15 ANALYSES IN AIR SAMPLES

TEST AMERICA LABORATORIES, INC. KNOXVILLE, TN

REPORT NUMBER: H2C270406

June, 2012

Prepared for EnviroTrac Ltd. Yaphank, New York

Prepared by
Premier Environmental Services
2815 Covered Bridge Road
Merrick, New York 11566
(516)223-9761

### **NYS DEC Data Usability Summary Report**

DATA VALIDATION FOR: Volatile Organic Analyses – EPA Method TO-15

SITE: Southern Site

CONTRACT LAB: Test America Laboratories

Knoxville, TN

LABORATORY REPORT NO.: H2C270406

REVIEWER: Renee Cohen

DATE REVIEW COMPLETED: June, 2012

MATRIX: Air

The samples in this data set were analyzed in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Trace Organic Compounds in Ambient Air (January, 1999). The data validation was performed according to the guidelines in the USEPA National Functional Guidelines for Organic Data Review. Also utilized for this review is the Region II SOP document based on the USEPA CLP SOW-VCAA01.0 (December 1991). This document is for the Validation of Air Samples-Volatile Organic Analysis of Ambient Air in Canister by Method TO-15 (SOP # HW-31, Rev. 4-10/06). In addition, method and QC criteria specified in the NYSDEC ASP documents were cited. All data are considered valid and acceptable except those analytes which have been deemed unusable "R" (unreliable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material), "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All actions are detailed on the attached sheets.

Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results presented meet the specific site/project criteria for data quality and data use.

This data assessment is for four (4) ambient air samples. The samples in this data set were collected March 21, 2012 and delivered to Test America Laboratories located in Knoxville, TN on March 27, 2012. The samples were analyzed for Volatile Organic Analytes via EPA Method TO-15, as specified on the Chain of Custody (COC) documentation that accompanied the samples to the laboratory.

A cross-reference between Field Sample ID and Laboratory Sample ID is located in Table 1 of this report. A copy of definitions that may be used to qualify data results is located in Appendix A of this report. Copies of qualified data result pages are located in Appendix B of this report and a copy of Chain of Custody (COC) documentation associated with sampling event is located in Appendix C.

### 1. OVERVIEW:

Four (4) air samples were analyzed as per the Chain of Custody (COC) documentation. The samples were analyzed using EPA Method T0-15 from the Compendium of Methods for the Determination of Toxic Compounds in Ambient Air, January, 1999. Proper custody transfer of the samples was documented in the laboratory reports. Cooler temperature was within QC limits. Canister checks were performed prior to analysis. All samples in this data set were properly preserved.

Test America Laboratories generated a stand-alone report for this data set in compliance with the NYS DEC ASP Category B deliverables.

The samples in this data set were analyzed for the TO-15 volatile organic compounds listed in the method.

### 2. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. After the air sample is collected and identification tag is attached and the canister is transported to the laboratory for analysis. The canister is stored until analysis. Storage times of up to thirty (30) days have been demonstrated for many of the Volatile Organic Compounds.

The samples in this data set were collected March 21, 2012 and received at the laboratory on March 27, 2012. All initial sample analyses and dilution analyses (where necessary) were completed by March 28, 2012.

All samples in this data set were analyzed within the method recommended holding time.

### 3. SURROGATES:

Samples may be spiked with surrogate compounds prior to sample preparation to evaluate the overall laboratory performance and the efficiency of the analytical technique. If the measured surrogate concentrations are outside the QC limits, qualifiers were applied to the effected samples.

The validation guidelines associated with this method do not specify the use of surrogate compounds. Test America Laboratories fortifies each of the suma canisters with the surrogate compound 4-Bromofluorobenzene prior to sample analysis. The laboratory applied percent recovery limits of +/- 40% (60-140%). The percent recovery of the surrogate met QC criteria in each of the samples reported in this data set.

### 4. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data. The laboratory used the in-house generated recovery criteria and RPD (precision) data for reporting purposes.

Site specific MS/MSD analysis is not associated with this data set.

### 5. BLANK SPIKE ANALYSIS:

The NY ASP protocol and the cited method require that a blank spike analysis be performed with each sample batch. The blank spike analysis is used to insure that the analytical system is in control. The laboratory applied in-house recovery limits for each analyte. The method requires the analysis of a 10 ppbv fortified sample analysis. Recovery limits of 70%-130% for each LCS target compound. Professional judgment is used to review data associated with the LCS sample results.

The laboratory prepared and analyzed one (1) Check Sample/Laboratory Control Sample with the sample batch. The LCS sample was fortified with each target analyte. The laboratory reported in-house recovery limits for each target analyte. This validator used QC recovery limits of 70-130% for each of the target analytes. The recovery of each analyte was reported on a "CLP Like" Form 3. All percent recoveries met QC criteria with the exception of that listed below:

Date of analysis Analyte Recovery (%)

3/27/12 1.4-Dioxane 67

1,4-Dioxane has been qualified "UJ/J" estimated in the samples associated with this check sample analysis.

Qualified data result pages are located in Appendix B of this report.

### 6. BLANK CONTAMINATION:

Quality assurance (QA) blanks, such as the method, trip, field, or rinse blanks are prepared to identify any contamination that may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations. Samples are then qualified based on blank contamination when detected.

### A) Method Blank contamination

One (1) method blank sample is associated with this sample set. The method blank sample was free from contamination of target analytes.

### B) Field Blank contamination

A Field Blank sample is not associated with this data set.

### C) Trip Blank contamination

A Trip Blank sample is not associated this data set.

### 7. GC/MS CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument is giving satisfactory daily performance.

The method states that the GC/MS be calibrated at a minimum of five (5) concentrations that span the range of interest. An analytical sequence includes a time frame of twenty-four (24) hours. After each 24 hour period anew analytical sequence is commenced with the analysis of an instrument performance standard and a daily calibration standard. The calculated %RSD of each target analyte must be less than 30% with at most two exceptions up to a limit of 40%. Based on the Region II validation Guidance documents any target analytes with a %RSD greater than 30% have been qualified "UJ/J" estimated.

A review of the individual relative response factor (RRF) is performed. The RRF of each target analyzed must be greater than 0.050. If the RRF is less than 0.050 the data is qualified. Positive detects are qualified "J" estimated. Non-detects are qualified "R" unusable.

One (1) initial calibration analysis is associated with these TO-15 analyses. The laboratory performed an initial multi level calibration using the standards on March 16, 2012 (Inst. GCMS mj.i). The mean response and the %RSD were reported for each of the target compounds. The %RSD and mean response for each of the target compounds met the method criteria in each of these initial calibration curve analyses.

The samples in this data set are associated with two (2) continuing calibration standard analyses. The samples were analyzed on March 27, 2012 and March 28, 2012. Percent (%) deviation of the continuing calibration standard has been calculated for each of the target compounds. The %Difference between the initial and daily standards should be within +/-30%. All target analytes met QC criteria in the continuing calibration standard with the exception of the following:

Date/File ID	Analyte	%Deviation
3/27/2012 jccvc27.d	1,4-Dioxane	32.82

Based on the high %Deviation in the CCV standard this target analyte has been qualified "UJ/J" estimated in each of the samples associated with this CCV analysis.

Qualified data result pages are located in Appendix B of this report.

### 8. GC/MS MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is Bromofluorobenzene (BFB). If the mass calibration is in error, or missing, all associated data will be classified as unusable, "R".

GC/MS instrument performance must be checked prior to sample analysis. The method specifies that the BFB Instrument Performance Check be analyzed initially and once per twenty-four (24) hour period of operation. All instrument tuning criteria were met for these sample analyses.

### 9. GC/MS INTERNAL STANDARDS PERFORMANCE:

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every run. EPA Method TO-15 recommends that the internal standard area count must not vary by more than +/- 40% from the associated continuing calibration standard. The method recommends that the retention time of the internal standard must not vary more than ±20 seconds from the associated continuing calibration standard. The EPA CLP validation guidelines state that if the area count is outside the range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified estimated, "J", and all non-detects below 50% are qualified "UJ", non detects above 100% should not be qualified or "R" if there is a severe loss of sensitivity. This QC review policy has been applied to these ambient air analyses.

All samples were fortified with the internal standards Bromochloromethane, 1,4-Difluorobenzene and Chlorobenzene-d5. All internal standard area criteria were met for the samples in this data set.

### 10. COMPOUND IDENTIFICATION:

Target compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within  $\pm$  0.06 RRT units of the standard compound, and have an ion spectra which has a ratio of the primary and secondary ion intensities with 20% of that in the standard compound. Target compounds are identified on the GC by using the analytes retention time. Concentration is quantitated from the initial calibration curve.

The samples in this data set were reported in ppb (v/v) and ug/m3. Sample dilution analyses were performed when the concentration of target analytes exceeded the calibration range.

Sample H003-BA-40988 was initially analyzed without dilution on March 28, 2012. The concentration of Ethanol exceeded the calibration range of the GC/MS. This sample was reanalyzed using a 1:10 dilution to report the concentration of Ethanol (380 D ppbv) detected at this sample point.

Sample H003-BA-DUPE-40988 was initially analyzed without dilution on March 28, 2012. The concentration of Ethanol exceeded the calibration range of the GC/MS. This sample was reanalyzed using a 1:10 dilution to report the concentration of Ethanol (310 D ppbv) detected at this sample point.

These two samples are field duplicate samples. A comparison of the field duplicate sample results I s located in Section 11 of this report.

### 11. FIELD DUPLICATE ANALYSES:

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. Analytes reported above the reporting limit are listed and compared below. Data was not qualified based on the RPD of field duplicate sample analyses.

Sample H003-BA-40988 was collected in duplicate. Below is a summary of the detected analytes in the field duplicate sample set.

Samples ID: H003-BA-40988 (H2C270406-02)/ H003-BA-DUPE-40988 (H2C270406-04):

Analyte	H003-BA-40988 ppb/v	H003-BA-DUPE-40988 ppb/v	RPD (%)
2-Butanone	1.2	1.5	22.2
2,2,4-Trimethylpentane	0.73	0.57	24.6
Benzene	0.67	0.51	27.1
Carbon tetrachloride	0.11	0.081	30.4**
Chloroform	0.47	0.48	2.10
Cyclohexane	0.41	0.32	24.7
Chloromethane	0.85	0.82	3.59
Dichlorodifluoro-			
methane (DCDFM)	0.55	0.57	3.57
Ethanol	380 D*	310 D*	20.3
Ethylbenzene	0.28	0.34	19.4
n-hexane	0.86	0.87	1.16
Methylene Chloride	0.23	0.27	16
Tetrachloroethene	0.20	0.16	22.2
Toluene	1.9	1.8	5.41
m,p-Xylene	0.72	1.3	57.4**
o-Xylene	0.20	0.43	73.0**
Trichloroethene	0.042	ND	NC
Trichlorfluoromethane	0.29	0.30	3.39
1,2,4-Trimethylbenzene	ND	0.41	NC
1,2-Dichlorobenzene	ND	0.53	NC
1,3,5-Trimethylbenzene	ND	0.11	NC
1,4-Dichlorobenzene	ND	0.24	NC

<sup>\*</sup>denotes analyte reported from a 1:10 dilution analysis

ND denotes Not Detected

NC denotes Not Calculated

A review of the RPD associated with these field duplicate analyses indicates acceptable precision for most target analytes. Based on professional judgment, this validator has applied the "J" estimated qualifier to those analytes in which the RPD was greater than 30. The qualifier has been added to the parent sample and the field duplicate sample.

Qualified data results are located in Appendix B of this report.

<sup>\*\*</sup>denotes RPD greater than 30%

### 12. OVERALL ASSESSMENT:

Analytical QC criteria were met for these analyses. The data reported agrees with the raw data provided in the final report. The laboratory provided a complete data package and reported all data using acceptable protocols and laboratory qualifiers as defined in the report package. Based on this information, this data set is acceptable for use, with the noted data qualifiers.

Qualified data result pages are located in Appendix B of this report.

### TABLE 1

### CLIENT SAMPLE ID

### LABORATORY SAMPLE ID

H003-SS-40988	H2C270406-001
H003-BA-40988	H2C270406-002
H003-OA-40988	H2C270406-003
H003-BA-DUPE-40988	H2C270406-004

### APPENDIX A

### **DATA QUALIFIER DEFINITIONS**

- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
- NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.
- K The analyte is present. The reported value may be biased high. The actual value is expected to be lower than reported.
- L The analyte is present. The reported value may be biased low. The actual value is expected to be higher than reported.
- UL The analyte was not detected, and the reported quantitation limit is probably higher than reported.

### APPENDIX B

### Client Sample ID: H003-SS-40988

### GC/MS Volatiles

Lot-Sample # H2C270406 - 001		Work Order#	MRLXKIAA	Matrix: AIR
Date Sampled:       03/21/2012         Prep Date:       03/27/2012         Prep Batch #:       2087122         Dilution Factor.:       1		Date Received: Analysis Date Method:	03/27/2012 03/28/2012 TO-15	
PARAMETER	RESULTS (ppb(v/v))	REPORTII LIMIT (pp		REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-4-Trichlorobenzene 1,2-Trichlorobenzene 1,2-Dibromoethane (EDB) 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 1,3,5-Trimethylbenzene 1,4-Dichlorobenzene 1,4-Dioxane 2-Butanone (MEK) 1,3-Dichlorobenzene 2,2,4-Trimethylpentane Benzene	ND ND 0.083 ND ND ND ND ND S.9 ND 0.38 ND ND 1.4 0.97 ND 5.3 ND 0.43 1.4	0.080 0.080 0.080 0.080 0.080 0.080 0.080 0.080 0.080 0.080 0.080 0.080 0.080 0.080 0.080 0.080 0.080	ND ND 0.63 ND ND ND ND ND ND ND 16 ND 16 ND 16 ND 2.0 4.6	0.44 0.55 0.61 0.44 0.32 0.32 0.59 0.39 0.61 0.48 0.32 0.37 0.39 0.48 0.72 0.94 0.48 0.93 0.26
Benzyl chloride Bromodichloromethane Bromoform Bromomethane Carbon tetrachloride Chlorobenzene Chloroethane Chloroform Cyclohexane Chloromethane cis-1,2-Dichloroethene	ND ND ND 0.048 ND ND 2.9 0.55 ND ND	0.16 0.080 0.080 0.080 0.040 0.080 0.080 0.20 0.20	ND ND ND 0.30 ND ND 14 1.9 ND	0.83 0.54 0.83 0.31 0.25 0.37 0.21 0.39 0.69 0.41 0.32
cis-1,3-Dichloropropene Dibromochloromethane Dichlorodifluoromethane Ethanol Ethylbenzene 1,2-Dichloro-1,1,2,2-tetrafluoroeth ane n-Hexane	ND ND 0.81 7.3 5.6 ND	0.080 0.080 0.080 0.80 0.080 0.080	ND ND 4.0 14 24 ND	0.36 0.68 0.40 1.5 0.35 0.56

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ND

2.1

0.85

0.82

0.080

0.20

ND

0.51

Hexachlorobutadiene

4-Methyl-2-pentanone (MIBK)

### Client Sample ID: H003-SS-40988

### **GC/MS Volatiles**

Lot-Sample # H	2C270406 - 001	Wo	rk Order#	MRLXK	1AA	Matrix: AIR
PARAMETER		SULTS b(v/v))	REPORT		RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Methyl tert-butyl ethe	r N	D	0.16		ND	0.58
Methylene chloride	0.4	14	0.20		1.5	
Styrene	0.3	27	0.080		1.2	0.69 0.34
ert-Butyl alcohol	0.0	52	0.32		1.9	0.97
<b>Fetrachloroethene</b>	0.0	52	0.080		4.2	0.97 0.54
<b>Foluene</b>	16		0.080		59	0.30
n-Xylene & p-Xylen	e 25		0.080		110	0.35
⊢Xylene	7.3	3	0.080		32	0.35
rans-1,2-Dichloroethe		)	0.080		ND	0.32
rans-1,3-Dichloropro	pene NI	)	0.080		ND	0.36
Trichloroethene	0.7	71	0.040		3.8	
Trichlorofluorometh:	ane 0.6	55	0.080		3.6	0.21 0.45
Vinyl chloride	NI	)	0.080		ND	0.45
GURROGATE			PERCENT RECOVERY			LABORATORY CONTROL LIMITS (%)
-Bromofluorobenzen	e	• 1	111		-	60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24,45)

### Client Sample ID: H003-BA-40988

### GC/MS Volatiles

Lot-Sample # H	2C270406 - 002	Work Order#	MRLXMIAA	Matrix: AIR
Date Sampled: Prep Date: Prep Batch #:	03/21/2012 03/27/2012 2087122	Date Received: Analysis Date	03/27/2012 03/28/2012	
Dilution Factor.:	1	Method:	TO-15	
PARAMETER	RESULTS (ppb(v/v))	REPORTI		REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	
1,1,2,2-Tetrachloroeth		11 - 12 - 12 - 12	ND	0.44
1,1,2-Trichlorotrifluor	BERTON PARTY	0.080	ND	0.55
1,1,2-Trichloroethane	CONTROL CONTRO	0.080	ND	0.61
1,1-Dichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzen		0.080	ND	0.32
1,2,4-Trimethylbenzer	377 (FZ).575k	0.080	ND	0.59
1,2-Dibromoethane (E	233 NRVE-71	0.080	ND	0.39
1,2-Dichlorobenzene	ND ND	0.080	ND	0.61
1,2-Dichloroethane	ND	0.080	ND	0.48
1,2-Dichloropropane		0.080	ND	0.32
1,3,5-Trimethylbenzer	ND ne ND	0.080	ND	0.37
1,4-Dichlorobenzene	ND ND	0.080	ND	0.39
1,4-Dioxane		0.080	ND	0.48
2-Butanone (MEK)	ND U	0.20	ND	0.72
1,3-Dichlorobenzene	1.2	0.32	3.5	0.94
2,2,4-Trimethylpenta	ND	0.080	ND	0.48
Benzene		0.20	3.4	0.93
Benzyl chloride	<b>0.67</b> ND	0.080	2.1	0.26
Bromodichloromethan		0.16	ND	0.83
Bromoform	ND ND	0.080	ND	0.54
Bromomethane	ND	0.080	ND	0.83
Carbon tetrachloride		0.080	, ND	0.31
Chlorobenzene	ND ND	0.040	0.69	0.25
Chloroethane	ND	0.080	ND	0.37
Chloroform	0.47	0.080	ND	0.21
Cyclohexane	0.41	0.080	2.3	0.39
Chloromethane	0.85	0.20 0.20	1.4	0.69
cis-1,2-Dichloroethene		0.080	1.8 ND	0.41
cis-1,3-Dichloroproper		0.080	ND	0.32
Dibromochloromethan		0.080		0.36
Dichlorodifluorometh	Incit	0.080	ND	0.68
Ethanol	360 E	0.80	2.7 670 E	0.40
Ethylbenzene	0.28	0.080	1.2	1.5 0.35
1,2-Dichloro-1,1,2,2-te		0.080	ND	0.56
one			112	0.50

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3.0

ND

0.70

0.85

0.20

0.080

0.86

ND

ane n-Hexane

Hexachlorobutadiene

### Client Sample ID: H003-BA-40988

### GC/MS Volatiles

Lot-Sample # H2C270406 - 00	2	Work Order # MRLXI	MIAA	Matrix: AIR
PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	0.23	0.20	0.80	0.69
Styrene	ND	0.080	ND	0.34
ert-Butyl alcohol	ND	0.32	ND	0.97
<b>Fetrachloroethene</b>	0.20	0.080	1.3	0.54
Foluene	1.9	0.080	7.0	0.30
m-Xylene & p-Xylene	0.72 丁	0.080	3.1	0.35
o-Xylene	0.20	0.080	0.85	0,35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	0.042	0.040	0.22	0.21
Trichlorofluoromethane	0.29	0.080	1.6	0.45
Vinyl chloride	ND	0.080	ND	0.20
		PERCENT		LABORATORY CONTROL
SURROGATE		RECOVERY		LIMITS (%)
1-Bromofluorobenzene		111		60 - 140

### **Qualifiers**

E Estimated result. Result concentration exceeds the calibration range.

 $The 'Result' in ug/m3 is calculated using the following equation: \ Amount Found (before rounding) * (Molecular Weight/24.45) is calculated using the following equation: Amount Found(before rounding) * (Molecular Weight/24.45) is calculated using the following equation: Amount Found(before rounding) * (Molecular Weight/24.45) is calculated using the following equation: Amount Found(before rounding) * (Molecular Weight/24.45) is calculated using the following equation: Amount Found(before rounding) * (Molecular Weight/24.45) is calculated using the following equation: Amount Found(before rounding) * (Molecular Weight/24.45) is calculated using the following equation: Amount Found(before rounding) * (Molecular Weight/24.45) is calculated using the following equation: Amount Found(before rounding) * (Molecular Weight/24.45) is calculated using the following equation: Amount Found(before rounding) * (Molecular Weight/24.45) is calculated using the following equation: Amount Found(before rounding) * (Molecular Weight/24.45) is calculated using the following equation: Amount Found(before rounding) * (Molecular Weight/24.45) is calculated using the following equation: Amount Found(before rounding) * (Molecular Weight/24.45) is calculated using the following equation: Amount Found(before rounding) * (Molecular Weight/24.45) is calculated using the following equation: Amount Found(before rounding) * (Molecular Weight/24.45) is calculated using the following equation: Amount Found(before rounding) * (Molecular Weight/24.45) is calculated using the following equation: Amount Found(before rounding) * (Molecular Weight/24.45) is calculated using the following equation: Amount Found(before rounding) * (Molecular Weight/24.45) is calculated using the following equation: Amount Found(before rounding) * (Molecular Weight/24.45) is calculated using the following equation: Amount Found(before rounding) * (Molecular Weight/24.45) is calculated using the following equation: Amount Found(before rounding) * (Molecular Weight/24.45)$ 

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

### Client Sample ID: H003-BA-40988

### GC/MS Volatiles

Lot-Sample #	H2C270406 - 002		Work C	)rder#	MRLXM2	<b>AA</b>	Matrix:	AIR
Date Sampled: Prep Date: Prep Batch #:	03/21/2012 03/28/2012 2088116			eceived: s Date	03/27/2012 03/28/2012			
Dilution Factor.:	10		Method	l::	TO-15			
PARAMETER		RESULTS (ppb(v/v))		REPORTI		RESULTS (ug/m3)	REPORT LIMIT (u	
Ethanol		380 D		8.0		720 D	15	
SURROGATE				CENT OVERY			LABORATOR' CONTROL LIMITS (%)	Y
4-Bromofluorober	nzene .		106			•	60 - 140	

### **Ovalifiers**

D Result was obtained from the analysis of a dilution.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

### Client Sample ID: H003-OA-40988

### GC/MS Volatiles

03/27/2012

03/27/2012

Lot-Sample # H2C270406 - 003 Work Order # MRLXN1AA Matrix....: AIR

Date Received ..:

Analysis Date...

Date Sampled ...: 03/21/2012 Prep Date ....: 03/27/2012

Prep Batch # ....: 2087122

Dilution Factor.: 1 Method..... TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
value proma property	08-055-1			
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	0.12	0.080	0.57	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	0.090	0.080	0.54	0.48
1,4-Dioxane	ND UJ	0.20	ND	0.72
2-Butanone (MEK)	0.78	0.32	2.3	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	0.23	0.080	0.74	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.069	0.040	0.43	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	ND	0.20	ND	0.69
Chloromethane	0.75	0.20	1.6	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.53	0.080	2.6	0.40
Ethanol	18	0.80	35	1.5
Ethylbenzene	0.099	0.080	0.43	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroeth ane	ND	0.080	ND	0.56
n-Hexane	0.24	0.20	0.85	0.70
Hexachlorobutadiene	ND	0.080	ND	0.85

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### Client Sample ID: H003-OA-40988

### **GC/MS Volatiles**

Lot-Sample # H2C270406 - 00	3 V	York Order# MRLXN	IIAA	Matrix: AIR
PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	ND	0,20	ND	0.82
Methyl tert-butyl ether	ND	0,16	ND	0.58
Methylene chloride	0.27	0.20	0.94	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	ND	0.080	ND	0.54
Toluene	0.91	0.080	3.4	0.30
m-Xylene & p-Xylene	0.34	0.080	1.5	0.35
o-Xylene	0.13	0.080	0.58	0.35
trans-1,2-Dichlorocthene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	0.25	0.040	1.4	0.21
Trichlorofluoromethane	0.26	0.080	1.4	0.45
Vinyl chloride	ND	0.080	ND	0.20
		PERCENT		LABORATORY CONTROL
SURROGATE		RECOVERY		LIMITS (%)
4-Bromofluorobenzene	<del></del>	108		60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

### Client Sample ID: H003-BA-DUPE-40988

### GC/MS Volatiles

Lot-Sample # H2C270406 - 004 Work Order# MRLXQ1AA Matrix....: AIR Date Sampled ...: 03/21/2012 Date Received ..: 03/27/2012 Prep Date....: 03/27/2012 Analysis Date... 03/28/2012 Prep Batch #....: 2087122 Dilution Factor.: 1 Method..... TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND .	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	0.41	0.080	2.0	
1,2-Dibromoethane (EDB)	· ND	0.080	ND	0.39 0.61
1,2-Dichlorobenzene	0.53	0.080	3.2	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	0.11	0.080	0.55	
1,4-Dichlorobenzene	0.24	0.080	1.4	0.39 0.48
1,4-Dioxane	ND U J	0.20	ND	0.72
2-Butanone (MEK)	1.5	0.32	4.3	0.72
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	0.57	0.20	2.7	
Benzene	0.51	0.080	1.6	0.93 0.26
Benzyl chloride	V 5 V 5 V 5 V 5 V 5 V 5 V 5 V 5 V 5 V 5	. 0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	
Bromomethane	ND	0.080	ND	0.83
Carbon tetrachloride	0.081	0.040		0.31
Chlorobenzene	ND	0.080	0.51 ND	0.25
Chloroethane	ND	0.080		0.37
Chloroform	0.48	0.080	ND	0.21
Cyclohexane	0.32	0.000	2.3 1.1	0.39
Chloromethane	0.82	0.20	1.7	0.69
cis-1,2-Dichloroethene	ND	0.080	ND	0.41 0.32
cis-1,3-Dichloropropene	ND	0.080	ND	
Dibromochloromethane	ND	0.080		0.36
Dichlorodifluoromethane	0.57		ND	0.68
Ethanol	370 E	0.080 0.80	2.8	0.40
Ethylbenzene	0.34	0.080	690 E	1.5
1,2-Dichloro-1,1,2,2-tetrafluoroeth	ND	0.080	1.5 ND	<b>0.35</b> 0.56
ane	1.5.74%	0.000	INL	0.50
n-Hexane	0.87	0.20	3.1	0.70
Hexachlorobutadiene	ND	0.080	ND	0.85
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82

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### Client Sample ID: H003-BA-DUPE-40988

### GC/MS Volatiles

Lot-Sample # H2C270406 -	004 V	Work Order # MRLXC	Q1AA	Matrix: AIR
PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	0.27	0.20	0.93	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	0.16	0.080	1.1	0.54
Toluene	1.8	0.080	6.8	0.30
m-Xylene & p-Xylene	1.3	0.080	5.6	0.35
o-Xylene	0.43	0.080	1.9	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	0.30	0.080	1.7	0.45
Vinyl chloride	ND	0.080	ND	0.20
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene		107	_	60 - 140

### **Qualifiers**

E Estimated result. Result concentration exceeds the calibration range.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

### Client Sample ID: H003-BA-DUPE-40988

### **GC/MS Volatiles**

Lot-Sample #	H2C270406 - 004		Work 0	order#	MRLXQ2A	A	Matrix:	AIR
Date Sampled: Prep Date:	03/21/2012 03/28/2012			ceived: s Date	03/27/2012 03/28/2012			
Prep Batch #:	2088116	•	Allaiya	a Date	03/20/2012			
Dilution Factor.:	10		Method		TO-15			
PARAMETER		RESULTS (ppb(v/v))		REPORTI		RESULTS (ug/m3)	REPORTI LIMIT (uį	
Ethanol		310 D		8.0		580 D	15	
			DED/	CENT			LABORATORY	<b>r</b>
SURROGATE			RECOVERY				CONTROL LIMITS (%)	
4-Bromofluorobenzene			99				60 - 140	

### **Ovalifiers**

D Result was obtained from the analysis of a dilution.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

### APPENDIX C

## TAL Knoxville

5815 Middlebrook Pike Knoxville, TN 37921 phone 865-291-3000 fax 865-584-4315

# Haca)શ્મી Canister Samples Chain of Custody Record

TestAmerica assumes no liability with respect to the collection and shipment of these samples.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Indoor Air Ambient Air Soil Gas	Canisters Shipped by:  Canisters Received by:	Special Instructions/QC Requirements & Comments: Spin of results and EDD to Steve Sussiman	Stop	Start Ambient HCANS/ HFLENS	Pressure (inches of Hg)	Stop   HOD XES FLAN X 4 450   30 /8 2413		Interior Ambient RECENTS AT AMB	Sampled by: Lineary Detailed to John Temperature (Fahrenheit)  OUSTIDY SEAL INTACT		1771 11011 1011	2224 5- 05- 05:6 55:6 N 886VA-	OA.	HOO3-BA-40988 1 19:52 9:50 -29 -5 MZGZ O4733 X 1 1 1 1 1 1 1 1	3.	Ambient Air	Rush (Specify)	Standard (Specify)	Project Name: Se of hard of 1000 Analysis Turnaround Time	1000:1-31	TAL Contact:	Address: 5 01D Dor K ROAD Site Contact:	act Information Project Manager: 5+TVT SUSSMANN Sampled By: LINAY MARMIN to 1 of 1	
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Retinauda, 1. A. Tan. 3/26/12@11:41

### Premier Environmental Services

DATA USABILITY SUMMARY REPORT (DUSR)

SOUTHERN BLVD. SITE

TO-15 ANALYSES IN AIR SAMPLES

TEST AMERICA LABORATORIES, INC. KNOXVILLE, TN

REPORT NUMBER: H2D120418

June, 2012

Prepared for EnviroTrac Ltd. Yaphank, New York

Prepared by
Premier Environmental Services
2815 Covered Bridge Road
Merrick, New York 11566
(516)223-9761

### NYS DEC Data Usability Summary Report

DATA VALIDATION FOR: Volatile Organic Analyses – EPA Method TO-15

SITE: Southern Site

CONTRACT LAB: Test America Laboratories

Knoxville, TN

LABORATORY REPORT NO.: H2D120418

REVIEWER: Renee Cohen

DATE REVIEW COMPLETED: June, 2012

MATRIX: Air

The samples in this data set were analyzed in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Trace Organic Compounds in Ambient Air (January, 1999). The data validation was performed according to the guidelines in the USEPA National Functional Guidelines for Organic Data Review. Also utilized for this review is the Region II SOP document based on the USEPA CLP SOW-VCAA01.0 (December 1991). This document is for the Validation of Air Samples-Volatile Organic Analysis of Ambient Air in Canister by Method TO-15 (SOP # HW-31, Rev. 4-10/06). In addition, method and QC criteria specified in the NYSDEC ASP documents were cited. All data are considered valid and acceptable except those analytes which have been deemed unusable "R" (unreliable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material), "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All actions are detailed on the attached sheets.

Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results presented meet the specific site/project criteria for data quality and data use.

This data assessment is for three (3) ambient air samples. The samples in this data set were collected April 10, 2012 and delivered to Test America Laboratories located in Knoxville, TN on April 12, 2012. The samples were analyzed for Volatile Organic Analytes via EPA Method TO-15, as specified on the Chain of Custody (COC) documentation that accompanied the samples to the laboratory.

A cross-reference between Field Sample ID and Laboratory Sample ID is located in Table 1 of this report. A copy of definitions that may be used to qualify data results is located in Appendix A of this report. Copies of qualified data result pages are located in Appendix B of this report and a copy of Chain of Custody (COC) documentation associated with sampling event is located in Appendix C.

### 1. OVERVIEW:

Three (3) air samples were analyzed as per the Chain of Custody (COC) documentation. The samples were analyzed using EPA Method T0-15 from the Compendium of Methods for the Determination of Toxic Compounds in Ambient Air, January, 1999. Proper custody transfer of the samples was documented in the laboratory reports. Cooler temperature was within QC limits. Canister checks were performed prior to analysis. All samples in this data set were properly preserved.

Test America Laboratories generated a stand-alone report for this data set in compliance with the NYS DEC ASP Category B deliverables.

The samples in this data set were analyzed for the TO-15 volatile organic compounds listed in the method.

### 2. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. After the air sample is collected and identification tag is attached and the canister is transported to the laboratory for analysis. The canister is stored until analysis. Storage times of up to thirty (30) days have been demonstrated for many of the Volatile Organic Compounds.

The samples in this data set were collected April 10, 2012 and received at the laboratory on April 12, 2012. All initial sample analyses and dilution analyses (where necessary) were completed by April 16, 2012.

All samples in this data set were analyzed within the method recommended holding time.

### 3. SURROGATES:

Samples may be spiked with surrogate compounds prior to sample preparation to evaluate the overall laboratory performance and the efficiency of the analytical technique. If the measured surrogate concentrations are outside the QC limits, qualifiers were applied to the effected samples.

The validation guidelines associated with this method do not specify the use of surrogate compounds. Test America Laboratories fortifies each of the suma canisters with the surrogate compound 4-Bromofluorobenzene prior to sample analysis. The laboratory applied percent recovery limits of +/- 40% (60-140%). The percent recovery of the surrogate met QC criteria in each of the samples reported in this data set.

### 4. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data. The laboratory used the in-house generated recovery criteria and RPD (precision) data for reporting purposes.

Site specific MS/MSD analysis is not associated with this data set.

### 5. BLANK SPIKE ANALYSIS:

The NY ASP protocol and the cited method require that a blank spike analysis be performed with each sample batch. The blank spike analysis is used to insure that the analytical system is in control. The laboratory applied in-house recovery limits for each analyte. The method requires the analysis of a 10 ppbv fortified sample analysis. Recovery limits of 70%-130% for each LCS target compound. Professional judgment is used to review data associated with the LCS sample results.

The laboratory prepared and analyzed one (1) Check Sample/Laboratory Control Sample with the sample batch. The LCS sample was fortified with each target analyte. The laboratory reported in-house recovery limits for each target analyte. This validator used QC recovery limits of 70-130% for each of the target analytes. The recovery of each analyte was reported on a "CLP Like" Form 3. All percent recoveries met QC criteria with the exception of that listed below:

Date of analysis Analyte Recovery (%)

4/16/12 1,2,4-Trichlorobenzene 62

1,2,4-Trichlorobenzene has been qualified "UJ/J" estimated.

Qualified data result pages are located in Appendix B of this report.

### 6. BLANK CONTAMINATION:

Quality assurance (QA) blanks, such as the method, trip, field, or rinse blanks are prepared to identify any contamination that may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations. Samples are then qualified based on blank contamination when detected.

### A) Method Blank contamination

One (1) method blank sample is associated with each sample batch reported in this data set. Each of the method blank samples was free from contamination of target analytes.

### B) Field Blank contamination

A Field Blank sample is not associated with this data set.

### C) Trip Blank contamination

A Trip Blank sample is not associated this data set.

### 7. GC/MS CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument is giving satisfactory daily performance.

The method states that the GC/MS be calibrated at a minimum of five (5) concentrations that span the range of interest. An analytical sequence includes a time frame of twenty-four (24) hours. After each 24 hour period anew analytical sequence is commenced with the analysis of an instrument performance standard and a daily calibration standard. The calculated %RSD of each target analyte must be less than 30% with at most two exceptions up to a limit of 40%. Based on the Region II validation Guidance documents any target analytes with a %RSD greater than 30% have been qualified "UJ/J" estimated.

A review of the individual relative response factor (RRF) is performed. The RRF of each target analyzed must be greater than 0.050. If the RRF is less than 0.050 the data is qualified. Positive detects are qualified "J" estimated. Non-detects are qualified "R" unusable.

Two (2) initial calibration analyses are associated with these TO-15 analyses. The laboratory performed an initial multi level calibration using the standards on April 10, 2012 (Inst. GCMS mg.i) and March 16, 2012 (Inst. GCMS mj.i). The mean response and the %RSD were reported for each of the target compounds. The %RSD and mean response for each of the target compounds met the method criteria in each of these initial calibration curve analyses.

The samples in this data set are associated with three (3) continuing calibration standard analyses. The samples were analyzed between April 13, 2012 and April 16, 2012. Percent (%) deviation of the continuing calibration standard has been calculated for each of the target compounds. The %Difference between the initial and daily standards should be within +/-30%. All target analytes met QC criteria in the continuing calibration standard with the exception of the following:

Date/File ID	Analyte	%Deviation			
4/13/12/gccvd13.d	ethanol	30.25			
	1,2,4-Trichlorobenzene	31.19			
4/16/12/jccvd16.d	1,2,4-Trichlorobenzene	38.02			

Based on the high %Deviation in the CCV standards these analytes have been qualified "UJ/J" estimated.

Qualified data result pages are located in Appendix B of this report.

### 8. GC/MS MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is Bromofluorobenzene (BFB). If the mass calibration is in error, or missing, all associated data will be classified as unusable, "R".

GC/MS instrument performance must be checked prior to sample analysis. The method specifies that the BFB Instrument Performance Check be analyzed initially and once per twenty-four (24) hour period of operation. All instrument tuning criteria were met for these sample analyses.

### 9. GC/MS INTERNAL STANDARDS PERFORMANCE:

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every run. EPA Method TO-15 recommends that the internal standard area count must not vary by more than +/- 40% from the associated continuing calibration standard. The method recommends that the retention time of the internal standard must not vary more than ±20 seconds from the associated continuing calibration standard. The EPA CLP validation guidelines state that if the area count is outside the range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified estimated, "J", and all non-detects below 50% are qualified "UJ", non detects above 100% should not be qualified or "R" if there is a severe loss of sensitivity. This QC review policy has been applied to these ambient air analyses.

All samples were fortified with the internal standards Bromochloromethane, 1,4-Difluorobenzene and Chlorobenzene-d5. All internal standard area criteria were met for the samples in this data set.

### 10. COMPOUND IDENTIFICATION:

Target compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within  $\pm$  0.06 RRT units of the standard compound, and have an ion spectra which has a ratio of the primary and secondary ion intensities with 20% of that in the standard compound. Target compounds are identified on the GC by using the analytes retention time. Concentration is quantitated from the initial calibration curve.

The samples in this data set were reported in ppb (v/v) and ug/m3. Sample dilution analyses were performed when the concentration of target analytes exceeded the calibration range.

Sample H-4-BA-41009 was initially analyzed without dilution on April 13, 2012. This sample was did not meet QC criteria. The sample was reanalyzed later in the sequence with a dilution factor of 11.14. The concentration of Ethanol exceeded the calibration range of the GC/MS. This sample was reanalyzed using a 1:39 dilution to report the concentration of Ethanol (900 D ppbv) detected at this sample point.

### 11. FIELD DUPLICATE ANALYSES:

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. Analytes reported above the reporting limit are listed and compared below. Data was not qualified based on the RPD of field duplicate sample analyses.

Field duplicate samples are not associated with this data set.

### 12. OVERALL ASSESSMENT:

Analytical QC criteria were met for these analyses. The data reported agrees with the raw data provided in the final report. The laboratory provided a complete data package and reported all data using acceptable protocols and laboratory qualifiers as defined in the report package. Based on this information, this data set is acceptable for use, with the noted data qualifiers.

Qualified data result pages are located in Appendix B of this report.

### TABLE 1

### CLIENT SAMPLE ID

### LABORATORY SAMPLE ID

H-4-BA-41009	· H2D120418-001
H-4-OA-41009	H2D120418-002
H-4-BAZ-41009	H2D120418-003

### APPENDIX A

### **DATA QUALIFIER DEFINITIONS**

- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
- NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.
- K The analyte is present. The reported value may be biased high. The actual value is expected to be lower than reported.
- L The analyte is present. The reported value may be biased low. The actual value is expected to be higher than reported.
- UL The analyte was not detected, and the reported quantitation limit is probably higher than reported.

### APPENDIX B

### Client Sample ID: H-4-BA-41009

### GC/MS Volatiles

Lot-Sample # Work Order # MRX6V1AA Matrix....: AIR H2D120418 - 001 Date Sampled ...: 04/10/2012 Date Received ..: 04/12/2012 Prep Date ....: 04/12/2012 04/13/2012 Analysis Date... Prep Batch # ....: 2105014 Method....: Dilution Factor.: 11.14 TO-15 RESULTS REPORTING RESULTS REPORTING PARAMETER (ppb(v/v)) LIMIT (ppb(v/v)) (ug/m3) LIMIT (ug/m3) 1,1,1-Trichloroethane ND 0.89 ND 4.9 1,1,2,2-Tetrachloroethane ND 6.1 0.89 ND 1,1,2-Trichlorotrifluoroethane ND 0.89 ND 6.8 1,1,2-Trichloroethane ND ND 4.9 0.89 1,1-Dichloroethane ND 0.89 ND 3.6 1,1-Dichloroethene ND 3.5 0.89 ND 1,2,4-Trichlorobenzene ND 0.89 ND 6.6 1,2,4-Trimethylbenzene ND 0.89 ND 4.4 1,2-Dibromoethane (EDB) ND 0.89 ND 6.8 1,2-Dichlorobenzene ND 0.89 ND 5.4 1,2-Dichloroethane ND 0.89 ND 3.6 1,2-Dichloropropane ND 0.89 ND 4.1 1,3,5-Trimethylbenzene ND 0.89 ND 4.4 1,4-Dichlorobenzene 11 0.89 64 5.4 ND 2.2 ND 8.0 1,4-Dioxane 2-Butanone (MEK) ND ND 3.6 11 1,3-Dichlorobenzene ND 0.89 ND 5.4 2,2,4-Trimethylpentane ND 10 2.2 ND Benzene ND 0.89 ND 2.8 Benzyl chloride ND 1.8 ND 9.2 Bromodichloromethane ND 0.89 ND 6.0 Bromoform ND 9.2 0.89 ND Bromomethane ND 0.89 ND 3.5 Carbon tetrachloride ND 0.45 ND 2.8 Chlorobenzene ND 0.89 ND 4.1 Chloroethane ND 0.89 2.4 ND Chloroform ND 0.89 ND 4.4 Cyclohexane ND 2.2 ND 7.7 Chloromethane ND 2.2 ND 4.6 cis-1,2-Dichloroethene ND 0.89 ND 3.5 cis-1,3-Dichloropropene ND ND 4.0 0.89 Dibromochloromethane ND 0.89 ND 7.6 Dichlorodifluoromethane ND 0.89 ND 4.4 T Ethanol 980 E 8.9 1900 E 17 Ethylbenzene ND 3.9 0.89 ND 1,2-Dichloro-1,1,2,2-tetrafluoroeth ND 0.89 ND 6.2 ane

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2.2

0.89

ND

ND

7.9

9.5

ND

ND

n-Hexane

Hexachlorobutadiene

### Client Sample ID: H-4-BA-41009

### **GC/MS Volatiles**

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	ND	2.2	ND	9.1
Methyl tert-butyl ether	ND	1.8	ND	6.4
Methylene chloride	ND	2,2	ND	7.7
Styrene	ND	0.89	ND	3.8
tert-Butyl alcohol	ND	3.6	ND	11
Tetrachloroethene	ND	0.89	ND	6.0
Toluene	13	0.89	48	3.4
m-Xylene & p-Xylene	ND	0.89	ND	3.9
o-Xylene	ND	0.89	ND	3.9
trans-1,2-Dichloroethene	ND	0.89	ND	3.5
trans-1,3-Dichloropropene	ND	0.89	ND	4.0
l'richlorocthene	ND	0.45	ND	2.4
Trichlorofluoromethane	ND	0,89	ND	5.0
Vinyl chloride	ND	0.89	ND	2.3
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)

### **Onalifiera**

E Estimated result. Result concentration exceeds the calibration range.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\* (Molecular Weight/2AAS)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

### Client Sample ID: H-4-BA-41009

### GC/MS Volatiles

Lot-Sample #	H2D120418 - 001		Work	Order#	MRX6V2	2AA	Matrix:	AIR
Date Sampled:	04/10/2012			Received:	04/12/20			
Prep Date:	04/13/2012		Analy	sis Date	04/13/20	12		
Prep Batch #: Dilution Factor.:	2105015 39		Metho	d:	TO-15			
PARAMETER		RESULTS (ppb(v/v))		REPORTI LIMIT (pp		RESULTS (ug/m3)	REPORTI LIMIT (u	78
Ethanol		900 D	J	31		1700 D	59	
SURROGATE				RCENT COVERY		_	LABORATORY CONTROL LIMITS (%)	r
4-Bromofluorober	nzene		96			_	60 - 140	

### **Qualifiers**

D Result was obtained from the analysis of a dilution.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\* (Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

### Client Sample ID: H-4-OA-41009

### GC/MS Volatiles

Lot-Sample # H2D120418 - 002		Work Order#	MRX651AA	Matrix: AIR
Date Sampled: 04/10/2012 Prep Date: 04/12/2012 Prep Batch #: 2105014		Date Received: Analysis Date	04/12/2012 04/13/2012	
Dilution Factor.: 1		Method:	TO-15	
PARAMETER	RESULTS (ppb(v/v))	REPORTI LIMIT (pp		REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND VJ	0.080	ND	0.59
1,2,4-Trimethylbenzene	ND	0.080	ND	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	0.54	0.32	1.6	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	0.15	0.080	0.48	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.066	0.040	0.42	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	ND	0.20	ND	0.69
Chloromethane	0.57	0.20	1.2	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.44	0.080	2.2	0.40
Ethanol	5.5	0.80	10	1.5
Ethylbenzene	ND	0.080	ND	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroeth ane	ND	0.080	ND	0.56
AND THE STREET OF THE STREET O		400000		

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ND

ND

0.70

0.85

0.20

0.080

ND

ND

n-Hexane

Hexachlorobutadiene

### Client Sample ID: H-4-OA-41009

### GC/MS Volatiles

RESULTS (ppb(v/v))  ND ND ND ND ND ND ND ND	0.20 0.16 0.20 0.080	RESULTS (ug/m3) ND ND ND	REPORTING LIMIT (ug/m3) 0.82 0.58
ND ND ND	0.16 0.20	ND	0.58
ND ND	0.20		
ND		ND	
	0.080		0.69
ND	0.000	ND	0.34
	0.32	ND	0.97
ND	0.080	ND	0.54
0.26	0.080	0.99	0.30
0.12	0.080	0.52	0.35
ND	0.080	ND	0.35
ND	0.080	ND	0.32
ND	0.080	ND	0.36
ND	0.040	ND	0.21
0.20	0.080	1.1	0.45
ND	0.080	ND	0.20
	PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
	0.20	0.20 0.080 ND 0.080 PERCENT	0.20 0.080 1.1 ND 0.080 ND  PERCENT RECOVERY

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

### Client Sample ID: H-4-BA2-41009

### GC/MS Volatiles

Lot-Sample # H2D120418 - 003 Work Order # MRX672AA Matrix....: AIR Date Sampled ...: 04/10/2012 Date Received ..: 04/12/2012 Prep Date....: 04/16/2012 Analysis Date... 04/16/2012 Prep Batch #....: 2107155 Dilution Factor.: 1 Method....: TO-15

1,1-Trichloroethane	PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,2,2-Tetrachlorocthane	1.1.1-Trichloroethane	ND	0.080	ND	0.44
1,1,2-Trichlorotrifluoroethane					
1,1,2-Trichloroethane         ND         0.080         ND         0.44           1,1-Dichloroethane         ND         0.080         ND         0.32           1,2-Lichloroethane         ND         0.080         ND         0.32           1,2-Lichlorobenzene         ND         0.080         ND         0.59           1,2-Lichlorobenzene         ND         0.080         ND         0.61           1,2-Dichlorobenzene         ND         0.080         ND         0.61           1,2-Dichlorobenzene         ND         0.080         ND         0.48           1,2-Dichlorobenzene         ND         0.080         ND         0.48           1,2-Dichlorobenzene         ND         0.080         ND         0.32           1,2-Dichlorobenzene         ND         0.080         ND         0.32           1,2-Dichlorobenzene         ND         0.080         ND         0.37           1,4-Dichlorobenzene         5.0         0.080         30         0.48           1,4-Dichlorobenzene         ND         0.32         2.1         0.94           1,4-Dichlorobenzene         ND         0.32         2.1         0.994           1,4-Dichlorobenzene         ND					
1,1-Dichloroethane					
1,1-Dichloroethene			100 CONTROL OF THE PARTY OF THE		
1,2,4-Trichlorobenzene         ND         0.080         ND         0.59           1,2,4-Trimethylbenzene         0.29         0.080         1.4         0.39           1,2-Dichlorobenzene         ND         0.080         ND         0.61           1,2-Dichlorobenzene         ND         0.080         ND         0.48           1,2-Dichloropropane         ND         0.080         ND         0.37           1,2-Dichloropropane         ND         0.080         ND         0.37           1,3-Frimethylbenzene         0.083         0.080         0.41         0.39           1,4-Dichlorobenzene         5.0         0.080         30         0.48           1,4-Dioxane         ND         0.20         ND         0.72           2-Butanone (MEK)         0.70         0.32         2.1         0.94           1,3-Dichlorobenzene         ND         0.080         ND         0.48           2,2,4-Trimethylpentane         ND         0.20         ND         0.93           Benzene         0.17         0.080         0.55         0.26           Benzyl chloride         ND         0.16         ND         0.83           Bromodichloromethane         ND			001.000.00	A.15-45(A)	
1,2,4-Trimethylbenzene         0.29         0.080         1.4         0.39           1,2-Dirbromoethane (EDB)         ND         0.080         ND         0.61           1,2-Dirblorobenzene         ND         0.080         ND         0.48           1,2-Dirblorobenzene         0.20         0.080         0.80         0.32           1,2-Dirbloropropane         ND         0.080         ND         0.37           1,3-Frimethylbenzene         0.083         0.080         0.41         0.39           1,4-Diokane         ND         0.020         ND         0.72           2-Butanone (MEK)         0.70         0.32         2.1         0.94           1,3-Dirblorobenzene         ND         0.080         ND         0.48           2,2,4-Trimethylpentane         ND         0.080         ND         0.48           2,2,4-Trimethylpentane         ND         0.20         ND         0.93           Benzyle chloride         ND         0.16         ND         0.93           Benzyle chloride         ND         0.16         ND         0.83           Bromodichloromethane         ND         0.080         ND         0.54           Bromomethane         ND					
1,2-Dibromoethane (EDB)       ND       0.080       ND       0.61         1,2-Dichlorobenzene       ND       0.080       ND       0.48         1,2-Dichlorocthane       0.20       0.080       0.80       0.32         1,2-Dichloropropane       ND       0.080       ND       0.37         1,3-F.Trimethylbenzene       0.083       0.080       0.41       0.39         1,4-Dichlorobenzene       5.0       0.080       30       0.48         1,4-Dicklorobenzene       ND       0.20       ND       0.72         2-Butanone (MEK)       0.70       0.32       2.1       0.94         1,3-Dichlorobenzene       ND       0.080       ND       0.48         2,2,4-Trimethylpentane       ND       0.20       ND       0.93         Benzene       0.17       0.080       0.55       0.26         Benzyl chloride       ND       0.16       ND       0.83         Bromodichloromethane       ND       0.080       ND       0.54         Bromoform       ND       0.080       ND       0.31         Carbon tetrachloride       0.068       0.040       0.43       0.25         Chlorochtane       ND       0.08					
1,2-Dichlorobenzene       ND       0.080       ND       0.48         1,2-Dichloroethane       0.20       0.080       0.80       0.32         1,2-Dichloropropane       ND       0.080       ND       0.37         1,3-5-Trimethylbenzene       0.083       0.080       0.41       0.39         1,4-Dichlorobenzene       5.0       0.080       30       0.48         1,4-Dichlorobenzene       ND       0.20       ND       0.72         2-Butanone (MEK)       0.70       0.32       2.1       0.94         1,3-Dichlorobenzene       ND       0.080       ND       0.48         2,2,4-Trimethylpentane       ND       0.20       ND       0.93         Benzene       0.17       0.080       0.55       0.26         Benzyl chloride       ND       0.16       ND       0.83         Bromodichloromethane       ND       0.080       ND       0.83         Bromoderm       ND       0.080       ND       0.31         Carbon tetrachloride       0.068       0.040       0.43       0.25         Chlorobenzene       ND       0.080       ND       0.37         Chlorochtane       ND       0.080	(5 - 5)				
1,2-Dichloroethane         0.20         0.080         0.80         0.32           1,2-Dichloropropane         ND         0.080         ND         0.37           1,3,5-Trimethylbenzene         0.083         0.080         0.41         0.39           1,4-Dichlorobenzene         5.0         0.080         30         0.48           1,4-Dickorane         ND         0.20         ND         0.72           2-Butanone (MEK)         0.70         0.32         2.1         0.94           1,3-Dichlorobenzene         ND         0.080         ND         0.48           2,2,4-Trimethylpentane         ND         0.20         ND         0.93           Benzene         0.17         0.080         ND         0.26           Benzyl chloride         ND         0.16         ND         0.83           Bromodichloromethane         ND         0.080         ND         0.83           Bromoform         ND         0.080         ND         0.83           Bromoform         ND         0.080         ND         0.31           Carbon tetrachloride         0.068         0.040         0.43         0.25           Chloroform         0.25         0.080 <t< td=""><td></td><td></td><td></td><td>ANTERIOR</td><td></td></t<>				ANTERIOR	
1,2-Dichloropropane       ND       0.080       ND       0.37         1,3,5-Trimethylbenzene       0.083       0.080       0.41       0.39         1,4-Dichlorobenzene       5.0       0.080       30       0.48         1,4-Dicklorobenzene       ND       0.20       ND       0.72         2-Butanone (MEK)       0.70       0.32       2.1       0.94         1,3-Dichlorobenzene       ND       0.080       ND       0.48         2,2,4-Trimethylpentane       ND       0.20       ND       0.93         Benzene       0.17       0.080       0.55       0.26         Benzyl chloride       ND       0.16       ND       0.83         Bromodichloromethane       ND       0.080       ND       0.83         Bromoform       ND       0.080       ND       0.83         Bromomethane       ND       0.080       ND       0.31         Carbon tetrachloride       0.068       0.040       0.43       0.25         Chlorobenzene       ND       0.080       ND       0.21         Chloroethane       ND       0.080       ND       0.21         Chloromethane       0.25       0.080       ND	6		97.000.0000		
1,3,5-Trimethylbenzene       0.083       0.080       0.41       0.39         1,4-Dichlorobenzene       5.0       0.080       30       0.48         1,4-Dicklorobenzene       ND       0.20       ND       0.72         2-Butanone (MEK)       0.70       0.32       2.1       0.94         1,3-Dichlorobenzene       ND       0.080       ND       0.48         2,2,4-Trimethylpentane       ND       0.20       ND       0.93         Benzene       0.17       0.080       0.55       0.26         Benzyl chloride       ND       0.16       ND       0.83         Bromodichloromethane       ND       0.080       ND       0.54         Bromoform       ND       0.080       ND       0.83         Bromoform       ND       0.080       ND       0.83         Bromoform       ND       0.080       ND       0.31         Carbon tetrachloride       0.068       0.040       0.43       0.25         Chlorobenzene       ND       0.080       ND       0.37         Chlorobenzene       ND       0.080       ND       0.21         Chlorobenzene       ND       0.080       ND       0.3	N. C.				
1,4-Dichlorobenzene         5.0         0.080         30         0.48           1,4-Dioxane         ND         0.20         ND         0.72           2-Butanone (MEK)         0.70         0.32         2.1         0.94           1,3-Dichlorobenzene         ND         0.080         ND         0.48           2,2,4-Trimethylpentane         ND         0.20         ND         0.93           Benzene         0.17         0.080         0.55         0.26           Benzyl chloride         ND         0.16         ND         0.83           Bromodichloromethane         ND         0.080         ND         0.54           Bromoform         ND         0.080         ND         0.83           Bromomethane         ND         0.080         ND         0.31           Carbon tetrachloride         0.068         0.040         0.43         0.25           Chlorobrazene         ND         0.080         ND         0.37           Chloroform         0.25         0.080         ND         0.21           Chloroform         0.25         0.080         ND         0.21           Chloroformethane         0.55         0.20         1.1					
1,4-Dioxane					
2-Butanone (MEK) 0.70 0.32 2.1 0.94 1,3-Dichlorobenzene ND 0.080 ND 0.48 2,2,4-Trimethylpentane ND 0.20 ND 0.93 Benzene 0.17 0.080 0.55 0.26 Benzyl chloride ND 0.16 ND 0.83 Bromodichloromethane ND 0.080 ND 0.54 Bromoform ND 0.080 ND 0.83 Bromoform ND 0.080 ND 0.83 Bromoethane ND 0.080 ND 0.31 Carbon tetrachloride 0.068 0.040 0.43 0.25 Chlorobenzene ND 0.080 ND 0.37 Chloroethane ND 0.080 ND 0.21 Chloroform 0.25 0.080 1.2 0.39 Cyclohexane ND 0.20 ND 0.69 Chloromethane 0.55 0.20 1.1 0.41 cis-1,2-Dichloroethene ND 0.080 ND 0.32 cis-1,3-Dichloropropene ND 0.080 ND 0.32 cis-1,3-Dichloropropene ND 0.080 ND 0.36 Dibromochloromethane ND 0.080 ND 0.68 Dichlorodifluoromethane ND 0.080 ND 0.55 Ethylbenzene 0.23 0.080 0.98 0.35 1,2-Dichloro-1,1,2,2-tetrafluoroeth ND 0.080 ND 0.56 ane n-Hexane ND 0.20 ND 0.70					
1,3-Dichlorobenzene       ND       0.080       ND       0.48         2,2,4-Trimethylpentane       ND       0.20       ND       0.93         Benzene       0.17       0.080       0.55       0.26         Benzyl chloride       ND       0.16       ND       0.83         Bromodichloromethane       ND       0.080       ND       0.54         Bromoform       ND       0.080       ND       0.83         Bromoform       ND       0.080       ND       0.83         Bromoform       ND       0.080       ND       0.31         Carbon tetrachloride       0.068       0.040       0.43       0.25         Chlorobenzene       ND       0.080       ND       0.37         Chlorobenzene       ND       0.080       ND       0.21         Chloroform       0.25       0.080       ND       0.21         Chloroform       0.25       0.080       1.2       0.39         Cyclohexane       ND       0.20       ND       0.69         Chloromethane       0.55       0.20       1.1       0.41         cis-1,3-Dichloropropene       ND       0.080       ND       0.36 <t< td=""><td></td><td></td><td></td><td>San San San San San San San San San San</td><td></td></t<>				San	
2,2,4-Trimethylpentane         ND         0,20         ND         0,93           Benzene         0.17         0,080         0.55         0,26           Benzyl chloride         ND         0.16         ND         0,83           Bromodichloromethane         ND         0.080         ND         0.54           Bromoform         ND         0.080         ND         0.83           Bromoform         ND         0.080         ND         0.83           Bromomethane         ND         0.080         ND         0.31           Carbon tetrachloride         0.068         0.040         0.43         0.25           Chlorobenzene         ND         0.080         ND         0.37           Chlorobethane         ND         0.080         ND         0.21           Chloroform         0.25         0.080         1.2         0.39           Cyclohexane         ND         0.20         ND         0.69           Chloromethane         0.55         0.20         1.1         0.41           cis-1,2-Dichloroethene         ND         0.080         ND         0.36           Dibromochloromethane         ND         0.080         ND         0.68 <td>,</td> <td></td> <td></td> <td></td> <td></td>	,				
Benzene   0.17   0.080   0.55   0.26					
Benzyl chloride					
Bromodichloromethane         ND         0.080         ND         0.54           Bromoform         ND         0.080         ND         0.83           Bromomethane         ND         0.080         ND         0.31           Carbon tetrachloride         0.068         0.040         0.43         0.25           Chlorobenzene         ND         0.080         ND         0.37           Chloroethane         ND         0.080         ND         0.21           Chloroform         0.25         0.080         1.2         0.39           Cyclohexane         ND         0.20         ND         0.69           Chloromethane         0.55         0.20         1.1         0.41           cis-1,2-Dichloroethene         ND         0.080         ND         0.32           cis-1,3-Dichloropropene         ND         0.080         ND         0.36           Dibromochloromethane         ND         0.080         ND         0.68           Dichlorodifluoromethane         0.39         0.080         ND         0.40           Ethanol         40         0.80         76         1.5           Ethylbenzene         0.23         0.080         ND					
Bromoform   ND   0.080   ND   0.83					
Bromomethane					
Carbon tetrachloride         0.068         0.040         0.43         0.25           Chlorobenzene         ND         0.080         ND         0.37           Chloroethane         ND         0.080         ND         0.21           Chloroform         0.25         0.080         1.2         0.39           Cyclohexane         ND         0.20         ND         0.69           Chloromethane         0.55         0.20         1.1         0.41           cis-1,2-Dichloroethene         ND         0.080         ND         0.32           cis-1,3-Dichloropropene         ND         0.080         ND         0.36           Dibromochloromethane         ND         0.080         ND         0.68           Dichlorodifluoromethane         0.39         0.080         ND         0.40           Ethanol         40         0.80         76         1.5           Ethylbenzene         0.23         0.080         ND         0.35           1,2-Dichloro-1,1,2,2-tetrafluoroeth         ND         0.080         ND         0.56           ane         ND         0.20         ND         0.70					
Chlorobenzene         ND         0.080         ND         0.37           Chloroethane         ND         0.080         ND         0.21           Chloroform         0.25         0.080         1.2         0.39           Cyclohexane         ND         0.20         ND         0.69           Chloromethane         0.55         0.20         1.1         0.41           cis-1,2-Dichloroethene         ND         0.080         ND         0.32           cis-1,3-Dichloropropene         ND         0.080         ND         0.36           Dibromochloromethane         ND         0.080         ND         0.68           Dichlorodifluoromethane         0.39         0.080         1.9         0.40           Ethanol         40         0.80         76         1.5           Ethylbenzene         0.23         0.080         0.98         0.35           1,2-Dichloro-1,1,2,2-tetrafluoroeth         ND         0.080         ND         0.56           ane         ND         0.20         ND         0.70		50.000 ASS	SATE A TO SATE A SA		
Chloroethane         ND         0.080         ND         0.21           Chloroform         0.25         0.080         1.2         0.39           Cyclohexane         ND         0.20         ND         0.69           Chloromethane         0.55         0.20         1.1         0.41           cis-1,2-Dichloroethene         ND         0.080         ND         0.32           cis-1,3-Dichloropropene         ND         0.080         ND         0.36           Dibromochloromethane         ND         0.080         ND         0.68           Dichlorodifluoromethane         0.39         0.080         1.9         0.40           Ethanol         40         0.80         76         1.5           Ethylbenzene         0.23         0.080         0.98         0.35           1,2-Dichloro-1,1,2,2-tetrafluoroeth         ND         0.080         ND         0.56           ane         ND         0.20         ND         0.70		7. Table 100 Table 1			
Chloroform         0.25         0.080         1.2         0.39           Cyclohexane         ND         0.20         ND         0.69           Chloromethane         0.55         0.20         1.1         0.41           cis-1,2-Dichloroethene         ND         0.080         ND         0.32           cis-1,3-Dichloropropene         ND         0.080         ND         0.36           Dibromochloromethane         ND         0.080         ND         0.68           Dichlorodifluoromethane         0.39         0.080         1.9         0.40           Ethanol         40         0.80         76         1.5           Ethylbenzene         0.23         0.080         0.98         0.35           1,2-Dichloro-1,1,2,2-tetrafluoroeth         ND         0.080         ND         0.56           ane         ND         0.20         ND         0.70		- Contract			
Cyclohexane         ND         0.20         ND         0.69           Chloromethane         0.55         0.20         1.1         0.41           cis-1,2-Dichloroethene         ND         0.080         ND         0.32           cis-1,3-Dichloropropene         ND         0.080         ND         0.36           Dibromochloromethane         ND         0.080         ND         0.68           Dichlorodifluoromethane         0.39         0.080         1.9         0.40           Ethanol         40         0.80         76         1.5           Ethylbenzene         0.23         0.080         0.98         0.35           1,2-Dichloro-1,1,2,2-tetrafluoroeth         ND         0.080         ND         0.56           ane         ND         0.20         ND         0.70					
Chloromethane         0.55         0.20         1.1         0.41           cis-1,2-Dichloroethene         ND         0.080         ND         0.32           cis-1,3-Dichloropropene         ND         0.080         ND         0.36           Dibromochloromethane         ND         0.080         ND         0.68           Dichlorodifluoromethane         0.39         0.080         1.9         0.40           Ethanol         40         0.80         76         1.5           Ethylbenzene         0.23         0.080         0.98         0.35           1,2-Dichloro-1,1,2,2-tetrafluoroeth         ND         0.080         ND         0.56           ane         ND         0.20         ND         0.70					
cis-1,2-Dichloroethene         ND         0.080         ND         0.32           cis-1,3-Dichloropropene         ND         0.080         ND         0.36           Dibromochloromethane         ND         0.080         ND         0.68           Dichlorodifluoromethane         0.39         0.080         1.9         0.40           Ethanol         40         0.80         76         1.5           Ethylbenzene         0.23         0.080         0.98         0.35           1,2-Dichloro-1,1,2,2-tetrafluoroeth         ND         0.080         ND         0.56           ane         n-Hexane         ND         0.20         ND         0.70	CHECKO MOTION IN SECREDO V. L.P.				
cis-1,3-Dichloropropene         ND         0.080         ND         0.36           Dibromochloromethane         ND         0.080         ND         0.68           Dichlorodifluoromethane         0.39         0.080         1.9         0.40           Ethanol         40         0.80         76         1.5           Ethylbenzene         0.23         0.080         0.98         0.35           1,2-Dichloro-1,1,2,2-tetrafluoroeth         ND         0.080         ND         0.56           ane         n-Hexane         ND         0.20         ND         0.70					
Dibromochloromethane         ND         0.080         ND         0.68           Dichlorodifluoromethane         0.39         0.080         1.9         0.40           Ethanol         40         0.80         76         1.5           Ethylbenzene         0.23         0.080         0.98         0.35           1,2-Dichloro-1,1,2,2-tetrafluoroeth         ND         0.080         ND         0.56           ane         n-Hexane         ND         0.20         ND         0.70			94 (PC) (PC) (PC) (PC) (PC) (PC) (PC) (PC)		
Dichlorodifluoromethane         0.39         0.080         1.9         0.40           Ethanol         40         0.80         76         1.5           Ethylbenzene         0.23         0.080         0.98         0.35           1,2-Dichloro-1,1,2,2-tetrafluoroeth         ND         0.080         ND         0.56           ane         n-Hexane         ND         0.20         ND         0.70	X				
Ethanol 40 0.80 76 1.5  Ethylbenzene 0.23 0.080 0.98 0.35  1,2-Dichloro-1,1,2,2-tetrafluoroeth ND 0.080 ND 0.56  ane n-Hexane ND 0.20 ND 0.70	79 C M V R V C V V V V V V V V V V V V V V V V				
Ethylbenzene         0.23         0.080         0.98         0.35           1,2-Dichloro-1,1,2,2-tetrafluoroeth         ND         0.080         ND         0.56           ane         n-Hexane         ND         0.20         ND         0.70					
1,2-Dichloro-1,1,2,2-tetrafluoroeth ND 0.080 ND 0.56 ane n-Hexane ND 0.20 ND 0.70			0.0000000000000000000000000000000000000		
ane n-Hexane ND 0.20 ND 0.70					
n-Hexane ND 0.20 ND 0.70		ND	0.080	מא	0.56
V. 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		ND	0.20	ND	0.70
	Hexachlorobutadiene	ND	0.080	ND	0.85

TO-14\_rev5.rpt Rev 1.0.9 09/01/2011

### Client Sample ID: H-4-BA2-41009

### **GC/MS Volatiles**

Lot-Sample # H2D120418 - 04	)3	Work Order # MRX67	2AA	Matrix: AIR
PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	ND	0.20	ND	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	ND	0.080	ND	0.54
Toluene	7.7	0.080	29	0.30
m-Xylene & p-Xylene	0.75	0.080	3.3	0.35
o-Xylene	0.28	0.080	1.2	0.35
rans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	0.19	0.080	1.1	0,45
Vinyl chloride	ND	0.080	ND	0.20
SURROGATE		PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene		98		60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\* (Molecular Weight/24.45)

# APPENDIX C

# TAL Knoxville

Knoxville, TN 37921 5815 Middlebrook Pike

phone 865-291-3000 fax 865-584-4315

SIMPLOREY

# Canister Samples Chain of Custody Record

Test<del>A</del>merica

TestAmerica assumes no liability with respect to the collection and shipment of these samples.

THE LEADER IN ENVIRONMENTAL TESTING

Project Manager: STEVE &USSTHAN   Sampled By: DOLLYA ESCHEAM   of   cocs &	Relinquished by:	Samples Relinquished by:	Coffish Shipped Dr. Calvect	apecial instructions accomments.	Control Instructions (Or Brazilla Participants & Community							Sampled by: LENNY DAMMING to	NOT USED	NOT USED	NOT SOLD	60014-2WD-1-H	: \	4.04	U- 4 BA-Hina	Sample Identification	PO#	Site/location:	Project Name: SOUTHERN	1	Phone: (031-1934-3001 × 144	Address: 5 OLD DCCK RD City/State/Zip UQPhQnK, NY	Company: ENVIKOTRAC LTD.	Client Contact Information
Sampled By:   DOLY   ESCHED	Date/Time:	Date/Time:	Date/Time:	-	Stop	Start			Stop	Start				1		*	+	17011	41/1 17	Sample Date(s)		60				Site Conta	Phone: (O,	Project Ma
Sampled By DOLLA ESCHERAL  TOURN Time  Tourned Time  Tourn	7	12/2	10.1				Interior				Interior					10:20	11/2	4:42	9122	Time Start	Rush (Speci	Standard (Sp	Analysis			2 2	31-924	ınager: S7
Canister   Controller   Contr		0000	g					_								_	_	4:40	23.17	Time Stop	fy)	ecify) 1	Turnarou				0	
Sampled By: DOXX ESCHEDY  If in Flow Controller  If in Flow Controll			3				mbient	ressure (inc			Ambient	Temperaturo				-77.5	70	107-	30+				nd Time					ussm
Sampled By: DOWN ESCHOOL  Flow Controller  Confidence in  TO-15  TO-15  TO-14A  EPA 3C  EPA 25C  ASTM D-1946  Other (Please specify in notes section)  Sample in the section in the sectio	Responded b	Received b	Canisters R					hes of Hg)				(Fahrenheit)	$\bigvee$	V	V	13	10	10	>	Canister Vacuum in Field, 'Hg (Stop)								1910
TO-15  TO-15  TO-15  TO-14A  EPA 3C  EPA 25C  ASTM D-1946  Other (Please specify in notes section)  Sample by page  Indoor Air  Ambient Air  Soil Gas  Landfill Gas	X	SOLA	eceived by:										Kası	7373	K424	441	1100	11185	Kicz	Flow Controller		•	. See .		• •	c	MNOT	Sampled By:
TO-15  TO-14A  EPA 3C  EPA 25C  ASTM D-1946  Other (Please specify in notes section)  Simple trype  Indoor Air  Ambient Air  Soil Gas  Landfill Gas			Y										4300	10600	49014	45271	1017	17424	1121								MARCIL	DOW
EPA 3C  EPA 25C  ASTM D-1946  Other (Please specify in notes section)  Samplestype  Indoor Air  Ambient Air  Soil Gas  Landfill Gas	1							12			ويزيا	150		Ι.	1					TO-15							1621	32
ASTM D-1946 Other (Please specify in notes section)  Sampleshype Indoor Air Ambient Air Soil Gas Landfill Gas					3			80	26		0		4		П					TO-14A							0	100
ASTM D-1946 Other (Please specify in notes section)  Sample flype Indoor Air Ambient Air Soll Gas Landfill Gas		9	1		1	-			W		P	cit			Ц.					EPA 3C								8
Other (Flease specify in notes section)  Sample Type  Indoor Air  Ambient Air  Soil Gas  Landfill Gas	X				0			B	:	,	3	9	Ц	$\sqcup$	Ц	1	-		Į.	EPA 25C								1
Ambient Air  Soil Gas  Landfill Gas	0			\	Sont				#	R	100	Au	$\vdash \vdash$	$\coprod$	1	+		_	-#								-	
Ambient Air  Soil Gas  Landfill Gas					12:	†		672		10	7	a CI	2534.00	168434	Sept.	30 500	T4 65	ana are		and the latest and th		fy in	note	S SE	ctlor	n)	ŀ	으
Ambient Air  Soil Gas  Landfill Gas			1		hor	+		10		14	1	7								The state of the s								`
R Soll Gas Landfill Gas				^	1			25			9	4	H	+	H	+	+	-	-#		_			_				) ) ) )
Landfill Gas	- 1							ı					H	$\parallel$	+	+	+	-	-#-			_						
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# 27

# TAL Knoxville

phone 865-291-3000 fax 865-584-4315 5815 Middlebrook Pike Knoxville, TN 37921

# Canister Samples Chain of Custody Record

TestAmerica assumes no liability with respect to the collection and shipment of these samples.

THE LEADER IN ENVIRONMENTAL TESTING **TestAmerico** 

Ofhor (Please specify in notes section) Landfill Gas Soll Gas Ambient Air 2 cocs 1A 100bn Sample Type 16 of Ofher (Please specify in notes section) 9461-G MT27 DONNA ESCHEJA EPA 26C EPA 3C A41-OT 31-OT Canister ID Sampled By: Flow Controller Canisters Received by: -Received by: Besthred by: Vacuum in Field, 'Hg Temperature (Fahrenheit) Pressure (inches of Hg) Canister Canister Vacuum in Field, "Hg (Start) Analysis Turnaround Time Ambient Ambient Time Start | Time Stop 20.00 11:00,00 Standard (Specify) Rush (Specify) Interior Interior Project Manager: Phone: (03) Site Confact: TAL Contact: Date/Time: Date/Time: Sample Date(s) Stop Start Start Stop Special Instructions/QC Requirements & Comments: Project Name: 14- SOUTHORN Sample Identification Client Contact Information Samples Relinguished by. Refinquished by: Sampled by: Site/location: Company tv/State/Zip Phone: (05 # Od



## DATA USABILITY SUMMARY REPORT 1095 SOUTHERN BOULEVARD, BRONX, NEW YORK

Client: EnviroTrac Ltd., Yaphank, New York

SDG: H3C070415

Laboratory: Test America, Knoxville, Tennessee

Site: 1095 Southern Boulevard, Bronx, New York

Date: March 26, 2013

EDS ID	Client ID	Laboratory ID	Matrix
1	1 DAYCARE-IA H3C070		Air
2	DAYCARE-OA	H3C070415-002	Air
3	FURNATURE STORE-IA	H3C070415-003	Air
4	FURNATURE STORE-SS	H3C070415-004	Air

A Data Usability Summary Review was performed on the analytical data for four air samples collected March 5, 2013 by EnviroTrac at the 1095 Southern Boulevard site in Bronx, New York. The samples were analyzed under "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition January 1999, EPA/625/R-96/010B", Compendium Method TO-15, "Determination Of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters And Analyzed By Gas Chromatography/Mass Spectrometry (GC/MS)".

The data have been evaluated according to the protocols and quality control (QC) requirements of the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-31, Revision 4, October 2006: Validating Volatile Organics of Ambient Air on Canisters by Method TO-15, and the reviewer's professional judgment.

# Organics

The following items/criteria were reviewed for this report:

- Data Completeness
- Cover letter, Narrative, and Data Reporting Forms
- Canister Certification Blanks
- Canister Certification Pressures Differences
- Chains-of-Custody and Traffic Reports
- Holding Times and sample preservation
- Laboratory Control Sample (LCS) recoveries
- Surrogate Compound Recoveries
- GC/MS Tuning
- Method Blank Contamination
- Initial and Continuing Calibration Summaries

- Compound Quantitation
- Internal Standard (IS) Area Performance
- Field Duplicate Sample Precision

The items listed above were technically and contractually in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

### Overall Evaluation of Data and Potential Usability Issues

There were no rejections of data.

Overall the data is acceptable for the intended purposes. Data were not qualified.

### **Data Completeness**

 The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

# Cover letter, Narrative, and Data Reporting Forms

• All criteria were met

### **Canister Certification Blanks**

• The batch blank checks were non-detect or < RL except the following.

Blank ID	Compound	Conc.	Action Level	Qualifier	Affected Samples
H3C070415 Can #2	Toluene	0.086	0.430	U	2

### **Canister Certification Pressures Differences**

• All criteria were met.

### **Chains-of-Custody and Traffic Reports**

• All criteria were met

### **Holding Times**

• All samples were analyzed within 30 days for air samples.

### **Laboratory Control Samples**

• The LCS samples exhibited acceptable %R values.

### **Surrogate Compound Recoveries**

All samples exhibited acceptable surrogate recoveries.

### **GC/MS Tuning**

• All criteria were met.

### **Method Blank**

• The method blanks were free of contamination.

### **Initial Calibration**

• The initial calibrations exhibited acceptable %RSD and mean RRF values.

### **Continuing Calibration**

The continuing calibrations exhibited acceptable %D and/or RRF values.

### **Compound Quantitation**

• EDS Sample IDs # 1 and 4 exhibited ethanol and chloroform over the linear range of the instrument, respectively, and were flagged (E) by the laboratory. The samples were diluted and reanalyzed and the dilution results for these compounds should be used for reporting purposes.

### Internal Standard (IS) Area Performance

All internal standards met response and retention time (RT) criteria.

# Field Duplicate Sample Precision

• Field duplicate samples were not analyzed.

All data are valid and usable with qualifications as noted in this review.

Signed:

Nancy Weaver Senior Chemist Dated: 3/24/1

# **Data Qualifiers**

- J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ = The analyte was not detected above the sample reporting limit; and the reporting limit is approximate.
- U = The analyte was analyzed for, but was not detected above the sample reporting limit.
- R = The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified.

# Client Sample ID: DAYCARE-IA

### GC/MS Volatiles

Lot-Sample #

H3C070415 - 001

Work Order #

M0AH41AA

Matrix....:

AIR

Date Sampled...:

03/05/2013

Date Received ..:

03/07/2013

Prep Date....:

03/07/2013

Prep Batch #....:

3067015

Analysis Date...

03/07/2013

Dilution Factor.: 1	•	Metho	dт	O-15	
PARAMETER	RESULTS (ppb(v/v))		REPORTING LIMIT (ppb(v/	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND		0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND		0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND		0.080	ND	0.61
1,1,2-Trichloroethane	ND		0.080	ND	0.44
1,1-Dichloroethane	ND		0.080	ND	0.32
1,1-Dichloroethene	ND		0.080	ND	0.32
1,2,4-Trichlorobenzene	ND		0.080	ND	0.59
1,2,4-Trimethylbenzene	0.26		0.080	1.3	0.39
1,2-Dibromoethane (EDB)	ND		0.080	ND	0.61
1,2-Dichlorobenzene	ND		0.080	ND	0.48
1,2-Dichloroethane	0.13		0.080	0.53	0.32
1,2-Dichloropropane	ND		0.080	ND	0.37
1,3,5-Trimethylbenzene	ND		0.080	ND	0.39
1,4-Dichlorobenzene	0.23		0.080	1.4	0.48
1,4-Dioxane	ND		0.20	ND	0.72
2-Butanone (MEK)	0.36		0.32	1.1	0.94
1,3-Dichlorobenzene	ND		0.080	ND	0.48
2,2,4-Trimethylpentane	ND		0.20	ND	0.93
Benzene	1.5		0.080	4.8	0.26
Benzyl chloride	ND		0.16	ND	0.83
Bromodichloromethane	ND		0.080	ND	0.54
Bromoform	ND		0.080	ND	0.83
Bromomethane	ND		0.080	ND	0.31
Carbon tetrachloride	0.094		0.040	0.59	0.25
Chlorobenzene	ND		0.080	ND	0.23
Chloroethane	ND		0.080	ND	0.21
Chloroform	0.33		0.080	1.6	0.39
Cyclohexane	ND		0.20	ND	0.69
Chloromethane	0.76		0.20	1.6	0.41
cis-1,2-Dichloroethene	ND		0.080	ND	0.32
cis-1,3-Dichloropropene	ND		0.080	ND	0.36
Dibromochloromethane	ND		0.080	ND	0.68
Dichlorodifluoromethane	0.16		0.080	0.79	0.40
Ethanol 1700	740 E	40		3200 14 <del>00 E</del>	75 <del>15</del>
Ethylbenzene	0.12	70	0.080	0.53	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroeth	ND		0.080	ND	0.56
ane				- 120	5.5 5
n-Hexane	ND		0.20	ND	0.70
Hexachlorobutadiene	ND		0.080	ND	0.85

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### Client Sample ID: DAYCARE-IA

### GC/MS Volatiles

Lot-Sample # H3C070415 - 00	1 W	ork Order # M0AH4	1AA	Matrix: AIR
PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	ND	0.20	ND	0.69
Styrene	0.10	0.080	0.44	0.34
ert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	ND	0.080	ND	0.54
<b>Foluene</b>	1.4	0.080	5.4	0.30
m-Xylene & p-Xylene	0.30	0.080	1.3	0.35
o-Xylene	0.13	0.080	0.58	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
<b>Frichlorofluoromethane</b>	0.21	0.080	1.2	0.45
Vinyl chloride	ND	0.080	ND	0.20
				LABORATORY
		PERCENT		CONTROL
SURROGATE		RECOVERY		LIMITS (%)

105

60 - 140

### **Qualifiers**

4-Bromofluorobenzene

E Estimated result. Result concentration exceeds the calibration range.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

### **GC/MS Volatiles** WagiNal original results Work Order # Lot-Sample # H3C070415 - 001 M0AH42AA Matrix....: Date Sampled...: 03/05/2013 Date Received ..: 03/07/2013 Prep Date....: 03/08/2013 Analysis Date... 03/08/2013 Prep Batch #....: 3067050 Dilution Factor .: 50 TO-15 Method....: REPORTING RESULTS REPORTING RESULTS PARAMETER LIMIT (ug/m3) (ppb(v/v)) LIMIT (ppb(v/v)) (ug/m3) (15) Ethanol LABORATORY CONTROL PERCENT LIMITS (%) RECOVERY SURROGATE 4-Bromofluorobenzene 105 60 - 140

New York State D.E.C.

Client Sample ID: DAYCARE-IA

### **Qualifiers**

D Result was obtained from the analysis of a dilution.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

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### Client Sample ID: DAYCARE-OA

### **GC/MS Volatiles**

Lot-Sample # H3

H3C070415 - 002

Work Order#

M0AH51AA

Matrix....:

AIR

Date Sampled...:

03/05/2013

Date Received..:
Analysis Date...

03/07/2013

Prep Date.....:
Prep Batch #....:

03/07/2013

03/07/2013

Dilution Factor.:

3067015

1

Method....:

TO-15

	143	10-13		
PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	0.26	0.080	1.3	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	ND	0.32	ND	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	0.19	0.080	0.60	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND .	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.081	0.040	0.51	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	ND	0.20	ND	0.69
Chloromethane	0.59	0.20	1.2	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.35	0.080	1.8	0.40
Ethanol	5.2	0.80	9.7	1.5
Ethylbenzene	ND	0.080	ND	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroeth	ND	0.080	ND	0.56
ane	ND	0.00		
n-Hexane	ND	0.20	ND	0.70
Hexachlorobutadiene	ND	0.080	ND	0.85

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### Client Sample ID: DAYCARE-OA

### GC/MS Volatiles

Lot-Sample # Work Order # H3C070415 - 002 M0AH51AA Matrix....: AIR RESULTS REPORTING RESULTS REPORTING PARAMETER LIMIT (ppb(v/v))(ppb(v/v)) LIMIT (ug/m3) (ug/m3) 4-Methyl-2-pentanone (MIBK) ND 0.20 ND 0.82 Methyl tert-butyl ether ND 0.16 ND 0.58 Methylene chloride 0.65 0.20 2.2 0.69 Styrene ND ND 0.080 0.34 tert-Butyl alcohol ND 0.32 ND 0.97 Tetrachloroethene ND 0.080 ND 0.54 Toluene 0.32 JE W 0.080 1.2 B W 0.30 m-Xylene & p-Xylene 0.18 0.080 0.78 0.35 o-Xylene 0.087 0.080 0.38 0.35 trans-1,2-Dichloroethene ND 0.080 ND 0.32 trans-1,3-Dichloropropene ND 0.080 ND 0.36 Trichloroethene ND 0.040 ND 0.21 Trichlorofluoromethane 0.22 0.080 1.2 0.45 Vinyl chloride ND 0.080 ND 0.20 LABORATORY PERCENT CONTROL SURROGATE RECOVERY LIMITS (%)

103

60 - 140

### **Qualifiers**

4-Bromofluorobenzene

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

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# Client Sample ID: FURNATURE STORE-IA

### GC/MS Volatiles

Lot-Sample #

H3C070415 - 003

Work Order #

M0AH61AA

Matrix....:

AIR

Date Sampled...: Prep Date....:

03/05/2013

Date Received ..:

03/07/2013

03/07/2013

Analysis Date...

03/07/2013

Prep Batch #....:

3067015

Dilution Factor.: 1 TO-15 Method....:

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	0.18	0.080	0.88	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	ND	0.32	ND	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	0.32	0.080	1.0	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.085	0.040	0.54	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	ND	0.20	ND	0.69
Chloromethane	0.60	0.20	1.2	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.17	0.080	0.82	0.40
Ethanol	15	0.80	28	1.5
Ethylbenzene	ND	0.080	ND	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroeth	ND	0.080	ND	0.56
ane n-Hexane	ND	0.20	ND	0.70
Hexachlorobutadiene	ND ND	0.080		0.70
Tievaciiiotonnamene	מאו	0.060	ND	0.85

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NW 3/26/13

### Client Sample ID: FURNATURE STORE-IA

### GC/MS Volatiles

Lot-Sample # H3C070415 - 00	03	Work Order #		AA	Matrix:	
PARAMETER	RESULTS (ppb(v/v))	REPORTI LIMIT (p			REPORTI LIMIT (ug	
4-Methyl-2-pentanone (MIBK)	ND	0.20		ND	0.82	
Methyl tert-butyl ether	ND	0.16		ND	0.58	
Methylene chloride	ND	0.20		ND	0.69	
Styrene	ND	0.080		ND	0.34	
tert-Butyl alcohol	ND	0.32		ND	0.97	
Tetrachloroethene	ND	0.080		ND	0.54	
Гoluene	0.49	0.080		1.8	0.30	
n-Xylene & p-Xylene	0.24	0.080		1.0	0.35	
o-Xylene	0.097	0.080		0.42	0.35	
rans-1,2-Dichloroethene	ND	0.080		ND	0.32	
rans-1,3-Dichloropropene	ND	0.080		ND	0.36	
richloroethene	ND	0.040	ND	ND	0.21	
<b>Trichlorofluoromethane</b>	0.19	0.080		1.1	0.45	
Vinyl chloride	ND	0.080		ND	0.20	
					LABORATORY	7
		PERCENT			CONTROL	
SURROGATE		RECOVERY			LIMITS (%)	
4-Bromofluorobenzene		102			60 - 140	

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

# Client Sample ID: FURNATURE STORE-SS

### **GC/MS Volatiles**

**Lot-Sample #** H3C070415 - 004

Work Order #

M0AH71AA

Matrix....:

AIR

Date Sampled...:
Prep Date....:

03/05/2013

Date Received..:

03/07/2013

Prep Batch #....:

03/07/2013

Analysis Date...

03/07/2013

Dilution Factor.:

3067015

5

Method..... TO-15

PARAMETER		RESULTS (ppb(v/v))		REPORTI		RESULTS (ug/m3)		REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane		ND		0.40		ND		2.2
1,1,2,2-Tetrachloroethane		ND		0.40		ND		2.7
1,1,2-Trichlorotrifluoroethane		ND		0.40		ND		3.1
1,1,2-Trichloroethane		ND		0.40		ND		2.2
1,1-Dichloroethane		ND		0.40		ND		1.6
1,1-Dichloroethene		ND		0.40		ND .		1.6
1,2,4-Trichlorobenzene		ND		0.40		ND		3.0
1,2,4-Trimethylbenzene		0.61		0.40		3.0		2.0
1,2-Dibromoethane (EDB)		ND		0.40		ND		3.1
1,2-Dichlorobenzene		ND		0.40		ND		2.4
1,2-Dichloroethane		ND		0.40		ND		1.6
1,2-Dichloropropane		ND		0.40		ND		1.8
1,3,5-Trimethylbenzene		ND		0.40		ND		2.0
1,4-Dichlorobenzene		3.3		0.40		20		2.4
1,4-Dioxane		ND		1.0		ND		3.6
2-Butanone (MEK)		ND		1.6		ND		4.7
1,3-Dichlorobenzene		ND		0.40		ND		2.4
2,2,4-Trimethylpentane		ND		1.0		ND		4.7
Benzene		ND		0.40		ND		1.3
Benzyl chloride		ND		0.80		ND		4.1
Bromodichloromethane		1.3		0.40		8.9		2.7
Bromoform		ND		0.40		ND		4.1
Bromomethane		ND		0.40		ND		1.6
Carbon tetrachloride		0.45		0.20		2.8		1.3
Chlorobenzene		ND		0.40		ND		1.8
Chloroethane		ND		0.40		ND		1.1
Chloroform	94	88-E-	1: [	<b>D40</b>	460	430-E	5.2	2.0
Cyclohexane	• •	ND		1.0	, •	ND		3.4
Chloromethane		ND		1.0		ND		2.1
cis-1,2-Dichloroethene		ND		0.40		ND		1.6
cis-1,3-Dichloropropene		ND		0.40		ND		1.8
Dibromochloromethane		ND		0.40		ND		3.4
Dichlorodifluoromethane		0.49		0.40		2.4		2.0
Ethanol		ND		4.0		ND		7.5
Ethylbenzene		ND		0.40		ND		1.7
1,2-Dichloro-1,1,2,2-tetrafluoroet	h ,	ND		0.40		ND		2.8
ane		NID.		1.0				
n-Hexane		ND		1.0		ND		3.5
Hexachlorobutadiene		ND		0.40		ND		4.3

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### Client Sample ID: FURNATURE STORE-SS

### GC/MS Volatiles

Lot-Sample #	H3C070415 - 004		Work Order#	M0AH7	IAA	Matrix: AIR	
PARAMETER		RESULTS (ppb(v/v))	REPORT LIMIT (p		RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)	
4-Methyl-2-pentar	none (MIBK)	ND	1.0		ND	4.1	
Methyl tert-butyl		ND	0.80		ND	2.9	
Methylene chlorid	le	ND	1.0		ND	3.5	
Styrene		ND	0.40		ND	1.7	
tert-Butyl alcohol		ND	1.6		ND	4.9	
Tetrachloroethen	ie	7.6	0.40		52	2.7	
Toluene		1.5	0.40		5.7	1.5	
m-Xylene & p-Xy	lene	1.1	0.40		4.7	1.7	
o-Xylene		0.41	0.40		1.8	1.7	
trans-1,2-Dichloro	oethene	ND	0.40		ND	1.6	
trans-1,3-Dichloro	propene	ND	0.40		ND	1.8	
Trichloroethene		0.26	0.20		1.4	1.1	
Trichlorofluorome	ethane	ND	0.40		ND	2.2	
Vinyl chloride		ND	0.40		ND	1.0	
	-					LABORATORY	
SURROGATE			PERCENT RECOVERY			CONTROL LIMITS (%)	
4-Bromofluorober	nzene		101			60 - 140	

### **Qualifiers**

E Estimated result. Result concentration exceeds the calibration range.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)\*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

### Client Sample ID: FURNATURE STORE-SS

### **GC/MS Volatiles**

Lot-Sample #	H3C070415 - 004		Work Order#	M0AH72AA		Matrix:	AIR
Date Sampled: Prep Date: Prep Batch #:	03/08/2013		Date Received: Analysis Date	03/07/2013 03/08/2013			Worgin resul
Dilution Factor.:			Method:	TO-15			Orgul
PARAMETER		RESULTS (ppb(v/v))	REPORTI LIMIT (pp		ESULTS 1g/m3)	REPORTIN LIMIT (ug/i	G '
Chloroform		94	1.1	40	60 1	5.2	
SURROGATE			PERCENT RECOVERY	$\angle$		LABORATORY CONTROL LIMITS (%)	
4-Bromofluorobe	nzene		102			60 - 140	

### **Qualifiers**

D Result was obtained from the analysis of a dilution.

 $The \ 'Result' \ in \ ug/m3 \ is \ calculated \ using \ the \ following \ equation: \ Amount \ Found (before \ rounding) * (Molecular \ Weight/24.45)$ 

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) \* Dilution Factor) \* (Molecular Weight/24.45)

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