RTI Laboratories, Inc.

Date: *23-Oct.-12*

CLIENT: Shaw Environmental & Infrastructure, Inc.

Project: Kirtland AFB
CO#: 501
Tracking #: 140705-036A
Project No.: 140705
Prime Contract: W912DY-10-D0014
Task Order: 02
Work Order: 1209B05

CASE NARRATIVE

SAMPLE RECEIPT:
Samples were received at the RTI Laboratory, Livonia, MI via commercial delivery on 9/26/2012. The sample set consisted of 50 air samples.

Some comments on the air samples include:

- Sample VA1705 (RTI Sample ID 1209B05-033) tedlar bag for fixed gases was not received. Client notified 9/28/2012.
- Sample VA1693 (RTI Sample ID 1209B05-021) tedlar bag was received but did not maintain air pressure for sample to be analyzed.
- Sample VA6102-TB (RTI Sample ID 1209B05-040A): Sample was received with a vacuum check of -9: Hg. The combination of this received pressure and the positive results indicate that the sample does not reflect the behavior of a true Trip Blank.

SAMPLE ANALYSIS:
Samples were analyzed at the RTI Livonia Laboratory for:
Volatile Organic Compounds – EPA Method TO15
Air-Phase Petroleum Hydrocarbons – MA_APH (Massachusetts DEP APH Method)
Fixed Gases (Noncondensable Gases/Light Hydrocarbons) – ASTM D2504

QUALITY CONTROL:

Volatile Organic Compounds Analyses:

All sample analyses included a Method Blank, CCV, RLVS (CRQL) and Duplicate. All QC parameters were within established control limits except where noted on the QC forms or below. Initial and continuing calibration results were within method specifications. MS tuning parameters were within the acceptable ranges for the method.

Surrogate recoveries were within established control limits.

Analytical Sequence ID 52817:

- RTI Sample IDs 1209B05-041A and 1209B05-042A are Field Dups. Sample concentrations required different dilutions to be performed.

Analytical Sequence ID 52727:

- Sample ID 1209B05-001A DUP: The % RPD for Ethylbenzene (200%) was outside the acceptance criteria due to results at our below the PQL.
- Sample ID 1209B05-001A DUP: The % RPD for Acetone (47.4%) was outside the acceptance criteria.

Volatile Organic Compounds Analyses (cont'd):

Analytical Sequence ID 52862:

- Analytical Run ID R52862, Sample ID 1209B05-010A DUP: The % RPD for Acetone (200%) was outside the acceptance criteria due to results at our below the PQL.

Air-Phase Petroleum Hydrocarbons Analyses:

All sample analyses included a Method Blank, LCS, LCSD and Duplicate, where applicable. All QC parameters were within established control limits except where noted on the QC summary forms or below. Initial and continuing calibration results were within method specifications.

Surrogate recoveries were within established control limits.

Fixed Gases (Noncondensable Gases/Light Hydrocarbons) Analyses:

Samples collected in Tedlar bags have a limited holding time as specified by the manufacturer for the collection of volatile organic compounds. There is no known stability data for the analytes of interest for this project collected in Tedlar bags. The standard holding time is 48 hours for Tedlar bags. Due to the nature of the project sample analysis within 48 hours was not feasible

No other problems were noted during the analytical events associated with this project.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Signed:__ _____for_____ Date:___10/23/2012_____
Charles O'Bryan, Director, Quality Management

RTI Laboratories - Definitions and Acronyms

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

DEFINITIONS:

DF: Dilution factor; the dilution factor applied to the prepared sample.

DL: Detection Limit; The lowest concentration of analyte that can be detected by the method in the applicable matrix.

DUP: Duplicate; aliquots of a sample taken from the same container under laboratory conditions and processed and analyzed independently, used to calculate Precision (%RPD).

LCS: Laboratory Control Sample; prepared by adding a known amount of target analytes to a specified amount of clean matrix and prepared with the batch of samples, used to calculate Accuracy (%REC).

LCSD: A duplicate LCS sample, used to calculate both Accuracy (%REC) and Precision (%RPD)

LOD: Limit of Detection; a laboratory verified concentration that can be detected at three times greater than the noise level. This concentration is equal to or greater than the DL.

LOQ: Limit of Quantitation; The lowest verified limit to which data is quantified without qualifications. Analyte concentrations below the LOQ are reported with a "J" qualifier.

MBLK: Method Blank; a sample of similar matrix that does not contain target analytes or interference that may impact the analytical results and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedure, used to assess and verify that the analytical process is free of contamination.

Mg/Kg or mg/L: Units of part per million (PPM) – milligram per Kilogram (W/W) or milligram per Liter (W/V).

MS: Matrix Spike; prepared by adding a known amount of target analytes to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available, used to calculate Accuracy (%REC)

MSD: A duplicate MS sample, used to calculate both Accuracy (%REC) and Precision (%RPD)

% REC: Percent Recovery of a known spike (SPK); a measure of accuracy expressed as a percentage of a measured (recovered) concentration compared to the known concentration (SPK) added to the sample. This is compared to the Low Limit and High Limit.

% RPD: Relative Percent Difference; a measure of precision expressed as a percentage of the difference between two duplicates relative to the average concentration. This is compared to the RPD Limit.

Qual: Qualifier that applies to the analyte reported

SPK: Spike; used in the QC section for both SPK Value and SPK Ref Val

Ug/Kg or ug/L: Units of part per billion (PPB) – microgram per Kilogram (W/W) or microgram per Liter (W/V).

QUALIFIERS:

*/X: Reported value exceeds the maximum allowed concentration by regulation or permit.

B: Analyte detected in the associated Method Blank at a concentration greater than 1/2 the LOQ

E: Analyte concentration reported that exceeds the upper calibration standard. Greater uncertainty is associated with this result and data should be considered estimated.

G: CCB result is greater than the MDL

H: Holding time for preparation or analysis has been exceeded

J: Analyte concentrations are equal to or greater than the DL and less than the LOQ. Greater uncertainty is associated with this result and data reported is estimated. These analytes are not routinely reviewed nor narrated as to their potential for being laboratory artifacts.

M: Manual Integration used to determine area response

P: Second column RPD exceeds 40%

Q/S: % REC exceeds control limits

R: % RPD exceeds control limits

T: MBLK result is greater than 1/2 of the LOQ

U: The analyte concentration is less than the DL. The result is reported as less than the LOD

1209B05

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV102

Project Number: 140705
Project Name: Kirtland AFB
Sample Coordinator: Mark Lyon
Turnaround Time:

Samples Shipment Date: 20 SEP 2012
Lab Destination: RTI Laboratories
Lab Contact: Mike Truchan
Project Contact: Pamela Moss
Carrier/Waybill No.: UPS/2323121496

Bill To: Shaw Environmental, Inc. - Accounts P
PO Box 98519
Baton Rouge LA 70884

Report To: Pamela Moss
7604 Technology Way, Suite 300
Denver CO 80237

Special Instructions:

Possible Hazard Indentification: Non-hazard ☐ Flammable ☑ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological ☐

Sample Disposal: Return to Client ☐ Disposal by Lab ☑ Archive ☐ (mos.)

1. Relinquished By (Signature/Affiliation) Shaw Date: 9-20-12 Time: 14:30
2. Relinquished By (Signature/Affiliation) Date: Time:
3. Relinquished By (Signature/Affiliation) Date: Time:

1. Received By (Signature/Affiliation) RTI Labs Date: 9/26/12 Time: 11:06
2. Received By (Signature/Affiliation) Date: Time:
3. Received By (Signature/Affiliation) Date: Time:

Comments:

	Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
1	VA1635	SVMW-02-050-GS-VA1635-REG	17 SEP 2012	11:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4"		N	0661	
	VA1635	SVMW-02-050-GS-VA1635-REG	17 SEP 2012	11:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
2	VA1636	SVMW-02-100-GS-VA1636-REG	17 SEP 2012	12:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	0754	
	VA1636	SVMW-02-100-GS-VA1636-REG	17 SEP 2012	12:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
3	VA1637	SVMW-02-150-GS-VA1637-REG	17 SEP 2012	13:14	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	1215	
	VA1637	SVMW-02-150-GS-VA1637-REG	17 SEP 2012	13:14	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
4	VA1652	SVMW-06-100-GS-VA1652-REG	17 SEP 2012	9:15	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by	-6"		N	0700	

1209 BOS

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV102

	Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
								MA DEP, VOCs / TPH by TO-15					
	VA1652	SVMW-06-100-GS-VA1652-REG	17 SEP 2012	9:15	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
5	VA1653	SVMW-06-100-GS-VA1653-FD	17 SEP 2012	9:15	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	0594	
	VA1653	SVMW-06-100-GS-VA1653-FD	17 SEP 2012	9:15	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
6	VA1654	SVMW-06-252-GS-VA1654-REG	17 SEP 2012	9:59	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	1155	
	VA1654	SVMW-06-252-GS-VA1654-REG	17 SEP 2012	9:59	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
7	VA1655	SVMW-06-302-GS-VA1655-REG	17 SEP 2012	10:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	1170	
	VA1655	SVMW-06-302-GS-VA1655-REG	17 SEP 2012	10:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
8	VA1656	SVMW-07-050-GS-VA1656-REG	17 SEP 2012	14:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	1146	
	VA1656	SVMW-07-050-GS-VA1656-REG	17 SEP 2012	14:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
9	VA1657	SVMW-07-100-GS-VA1657-REG	17 SEP 2012	14:54	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	0808	
	VA1657	SVMW-07-100-GS-VA1657-REG	17 SEP 2012	14:54	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
10	VA1658	SVMW-07-150-GS-VA1658-REG	17 SEP 2012	15:27	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-7"		N	0581	
	VA1658	SVMW-07-150-GS-VA1658-REG	17 SEP 2012	15:27	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
	VA1659	SVMW-08-050-GS-VA1659-REG	18 SEP 2012	13:19	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
11	VA1659	SVMW-08-050-GS-VA1659-REG	18 SEP 2012	13:19	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-7"		N	1211	
12	VA1660	SVMW-08-100-GS-VA1660-REG	18 SEP 2012	14:04	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-8"		N	1229	
	VA1660	SVMW-08-100-GS-VA1660-REG	18 SEP 2012	14:04	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
13	VA1661	SVMW-08-250-GS-VA1661-REG	18 SEP 2012	15:00	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	0703	
	VA1661	SVMW-08-250-GS-VA1661-REG	18 SEP 2012	15:00	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
14	VA1686	SVMW-14-150-GS-VA1686-REG	17 SEP 2012	11:11	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-8"		N	1168	
	VA1686	SVMW-14-150-GS-VA1686-REG	17 SEP 2012	11:11	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
15	VA1687	SVMW-14-250-GS-VA1687-REG	17 SEP 2012	11:49	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	0800	
	VA1687	SVMW-14-250-GS-VA1687-REG	17 SEP 2012	11:49	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
	VA1688	SVMW-14-350-GS-VA1688-REG	17 SEP 2012	12:31	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
16	VA1688	SVMW-14-350-GS-VA1688-REG	17 SEP 2012	12:31	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	1169	
17	VA1689	SVMW-14-450-GS-VA1689-REG	18 SEP 2012	13:16	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-7"		N	1177	
	VA1689	SVMW-14-450-GS-VA1689-REG	18 SEP 2012	13:16	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		

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1209 BOS

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV102

	Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
18	VA1690	SVMW-15-150-GS-VA1690-REG	17 SEP 2012	15:23	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	~7"		N	1166	
	VA1690	SVMW-15-150-GS-VA1690-REG	17 SEP 2012	15:23	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
19	VA1691	SVMW-15-250-GS-VA1691-REG	17 SEP 2012	16:06	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	~5"		N	552	
	VA1691	SVMW-15-250-GS-VA1691-REG	17 SEP 2012	16:06	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
20	VA1692	SVMW-15-350-GS-VA1692-REG	18 SEP 2012	08:59	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	~5"		N	1163	
	VA1692	SVMW-15-350-GS-VA1692-REG	18 SEP 2012	08:59	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
	VA1693	SVMW-15-450-GS-VA1693-REG	18 SEP 2012	09:42	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
21	VA1693	SVMW-15-450-GS-VA1693-REG	18 SEP 2012	09:42	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	~5"		N	1165	
22	VA1694	KAFB-106028-150-GS-VA1694-REG	18 SEP 2012	9:02	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	~5"		N	1206	
	VA1694	KAFB-106028-150-GS-VA1694-REG	18 SEP 2012	9:02	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
23	VA1695	KAFB-106028-250-GS-VA1695-REG	18 SEP 2012	9:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	~5"		N	1100	
	VA1695	KAFB-106028-250-GS-VA1695-REG	18 SEP 2012	9:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
24	VA1696	KAFB-106028-250-GS-VA1696-FD	18 SEP 2012	9:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	~6"		N	533	
	VA1696	KAFB-106028-250-GS-VA1696-FD	18 SEP 2012	9:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
25	VA1697	KAFB-106028-350-GS-VA1697-REG	18 SEP 2012	10:41	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	~6"		N	1216	
	VA1697	KAFB-106028-350-GS-VA1697-REG	18 SEP 2012	10:41	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
	VA1698	KAFB-106028-450-GS-VA1698-REG	18 SEP 2012	11:33	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
26	VA1698	KAFB-106028-450-GS-VA1698-REG	18 SEP 2012	11:33	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	~6"		N	1202	
27	VA1699	SVEW-01-260-GS-VA1699-REG	19 SEP 2012	10:33	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	~6"		N	1144	
	VA1699	SVEW-01-260-GS-VA1699-REG	19 SEP 2012	10:33	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
28	VA1700	SVEW-01-260-GS-VA1700-FD	19 SEP 2012	10:33	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	~6"		N	0832	
	VA1700	SVEW-01-260-GS-VA1700-FD	19 SEP 2012	10:33	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
29	VA1701	SVEW-02-060-GS-VA1701-REG	19 SEP 2012	09:49	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	~6"		N	1167	
	VA1701	SVEW-02-060-GS-VA1701-REG	19 SEP 2012	09:49	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
30	VA1702	SVEW-03-160-GS-VA1702-REG	19 SEP 2012	08:34	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	~5"		N	0709	
	VA1702	SVEW-03-160-GS-VA1702-REG	19 SEP 2012	08:34	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
	VA1703	SVEW-04-313-GS-VA1703-REG	19 SEP 2012	11:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
31	VA1703	SVEW-04-313-GS-VA1703-REG	19 SEP 2012	11:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	~6"		N	562	

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV102

	Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
18	VA1690	SVMW-15-150-GS-VA1690-REG	17 SEP 2012	15:23	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-7"		N	1166	
	VA1690	SVMW-15-150-GS-VA1690-REG	17 SEP 2012	15:23	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
19	VA1691	SVMW-15-250-GS-VA1691-REG	17 SEP 2012	16:06	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5"		N	552	
	VA1691	SVMW-15-250-GS-VA1691-REG	17 SEP 2012	16:06	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
20	VA1692	SVMW-15-350-GS-VA1692-REG	18 SEP 2012	08:59	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5"		N	1163	
	VA1692	SVMW-15-350-GS-VA1692-REG	18 SEP 2012	08:59	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
	VA1693	SVMW-15-450-GS-VA1693-REG	18 SEP 2012	09:42	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	*	
21	VA1693	SVMW-15-450-GS-VA1693-REG	18 SEP 2012	09:42	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5"		N	1165	
22	VA1694	KAFB-106028-150-GS-VA1694-REG	18 SEP 2012	9:02	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5"		N	1206	
	VA1694	KAFB-106028-150-GS-VA1694-REG	18 SEP 2012	9:02	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
23	VA1695	KAFB-106028-250-GS-VA1695-REG	18 SEP 2012	9:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5"		N	1100	
	VA1695	KAFB-106028-250-GS-VA1695-REG	18 SEP 2012	9:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
24	VA1696	KAFB-106028-250-GS-VA1696-FD	18 SEP 2012	9:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	533	
	VA1696	KAFB-106028-250-GS-VA1696-FD	18 SEP 2012	9:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
25	VA1697	KAFB-106028-350-GS-VA1697-REG	18 SEP 2012	10:41	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	1216	
	VA1697	KAFB-106028-350-GS-VA1697-REG	18 SEP 2012	10:41	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
	VA1698	KAFB-106028-450-GS-VA1698-REG	18 SEP 2012	11:33	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
26	VA1698	KAFB-106028-450-GS-VA1698-REG	18 SEP 2012	11:33	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	1202	
27	VA1699	SVEW-01-260-GS-VA1699-REG	19 SEP 2012	10:33	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	1144	
	VA1699	SVEW-01-260-GS-VA1699-REG	19 SEP 2012	10:33	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
28	VA1700	SVEW-01-260-GS-VA1700-FD	19 SEP 2012	10:33	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	0832	
	VA1700	SVEW-01-260-GS-VA1700-FD	19 SEP 2012	10:33	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
29	VA1701	SVEW-02-060-GS-VA1701-REG	19 SEP 2012	09:49	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	1167	
	VA1701	SVEW-02-060-GS-VA1701-REG	19 SEP 2012	09:49	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
30	VA1702	SVEW-03-160-GS-VA1702-REG	19 SEP 2012	08:34	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5"		N	0709	
	VA1702	SVEW-03-160-GS-VA1702-REG	19 SEP 2012	08:34	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
	VA1703	SVEW-04-313-GS-VA1703-REG	19 SEP 2012	11:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
31	VA1703	SVEW-04-313-GS-VA1703-REG	19 SEP 2012	11:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	562	

* Unable to analyze insufficient sample retained RLGriffin 10/17/2012

1209 B05

Shaw™
Shaw E & I, Inc.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV102

	Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
32	VA1704	SVEW-05-460-GS-VA1704-REG	19 SEP 2012	11:37	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	1149	
	VA1704	SVEW-05-460-GS-VA1704-REG	19 SEP 2012	11:37	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
33	VA1705	SVEW-06-060-GS-VA1705-REG	19 SEP 2012	8:45	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5"		N	0621	
	☆VA1705☆	SVEW-06-060-GS-VA1705-REG	19 SEP 2012	8:45	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N	☆	Did not arrive. cm☆
34	VA1706	SVEW-07-160-GS-VA1706-REG	19 SEP 2012	9:24	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5"		N	1159	
	VA1706	SVEW-07-160-GS-VA1706-REG	19 SEP 2012	9:24	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
35	VA1707	SVEW-08-260-GS-VA1707-REG	19 SEP 2012	10:15	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	0727	
	VA1707	SVEW-08-260-GS-VA1707-REG	19 SEP 2012	10:15	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
	VA1708	SVEW-08-260-GS-VA1708-FD	19 SEP 2012	10:15	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
36	VA1708	SVEW-08-260-GS-VA1708-FD	19 SEP 2012	10:15	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	0655	
37	VA1709	SVEW-09-460-GS-VA1709-REG	19 SEP 2012	11:00	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	0831	
	VA1709	SVEW-09-460-GS-VA1709-REG	19 SEP 2012	11:00	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
38	VA1712	SVEW-12-410-GS-VA1712-REG	17 SEP 2012	14:07	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	1207	
	VA1712	SVEW-12-410-GS-VA1712-REG	17 SEP 2012	14:07	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
39	VA1713	SVEW-13-410-GS-VA1713-REG	18 SEP 2012	10:29	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6"		N	1178	
	VA1713	SVEW-13-410-GS-VA1713-REG	18 SEP 2012	10:29	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
40	VA8102-TB	FIELDQC-AQ-VA8102-TB-TB	17 SEP 2012	08:00	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15	-9"		N	1224	
41	VA9070	ST106-IN-GS-VA9070-REG	19 SEP 2012	12:47	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15	-6"		N	1096	
	VA9070	ST106-IN-GS-VA9070-REG	19 SEP 2012	12:47	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
42	VA9071	ST106-IN-GS-VA9071-FD	19 SEP 2012	12:47	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15	-7"		N	0748	
	VA9071	ST106-IN-GS-VA9071-FD	19 SEP 2012	12:47	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
43	VA9072	ST106-POSTC1-GS-VA9072-REG	19 SEP 2012	13:36	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15	-7"		N	515	
	VA9072	ST106-POSTC1-GS-VA9072-REG	19 SEP 2012	13:36	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
44	VA9074	KAFB106149-IN-GS-VA9074-REG	20 SEP 2012	10:27	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15	-1"		N	0663	
	VA9074	KAFB106149-IN-GS-VA9074-REG	20 SEP 2012	10:27	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
45	VA9075	KAFB106149-POSTC1-GS-VA9075-REG	20 SEP 2012	11:16	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15	-6"		N	0759	
	VA9075	KAFB106149-POSTC1-GS-VA9075-REG	20 SEP 2012	11:16	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
46	VA9077	KAFB106160-IN-GS-VA9077-REG	19 SEP 2012	14:58	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15	-6"		N	0690	
	VA9077	KAFB106160-IN-GS-VA9077-REG	19 SEP 2012	14:58	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
47	VA9078	KAFB106160-POSTC1-GS-VA9078-REG	19 SEP 2012	15:53	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15	-9"		N	1164	
	VA9078	KAFB106160-POSTC1-GS-VA9078-REG	19 SEP 2012	15:53	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		

1209B05

Shaw™
Shaw E & I, Inc.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV102

	Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
	VA9079	KAFB106160-POSTC1-GS-VA9079-FD	19 SEP 2012	15:53	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
48	VA9079	KAFB106160-POSTC1-GS-VA9079-FD	19 SEP 2012	15:53	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15	-8"		N	0628	
49	VA9081	KAFB106161-IN-GS-VA9081-REG	20 SEP 2012	08:57	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15	-5"		N	1117	
	VA9081	KAFB106161-IN-GS-VA9081-REG	20 SEP 2012	08:57	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
50	VA9083	KAFB106161-POSTC2-GS-VA9083-REG	20 SEP 2012	09:43	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15	-6"		N	0603	
	VA9083	KAFB106161-POSTC2-GS-VA9083-REG	20 SEP 2012	09:43	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		

FROM:
DIANE OSHLO
(505) 259-5669
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

20 LBS **1 OF 11**
DWT: 20,14,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4223 1760

SHIP TO:
MICHAEL TRUCHAN
(734) 422-8000
RTI LABORATORIES
31628 GLENDALE ST.
LIVONIA MI 48150

1209 BOS

REF 1:140705
REF 2:RR010030

BILLING: P/P
HAZARDOUS MATERIALS - GROUND ONLY
HAZ#: 176

CUSTODY SEAL
DATE 9/20/12
SIGNATURE J. Vogel

QEC
Quality Environmental Containers
800-255-3950 • 304-255-3900

WS 15.0.16 HP LaserJet 4 30.0A 07/2012

Fold here and place in label pouch

Bottle Vacs

Bottle #	sample ID
562	1703
0709	1702
0690	9077
1224	8102-TB
0748	9071
1096	9070
0727	1707
1159	1706
0621	1705
0831	1709

Bottle #	Sample ID
0655	1708
515	9072

FROM:
DIANE OSHLO
(505) 259-5669
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

20 LBS **2 OF 11**
DWT: 20,14,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4170 4975

SHIP TO:
MICHAEL TRUCHAN
(734) 422-8000
RTI LABORATORIES
31628 GLENDALE ST.
LIVONIA MI 48150

1209 BOS

REF 1:140705
REF 2:BB010

BILLING: P/P
HAZARDOUS MATERIALS - GROUND ONLY
HAZ#: 176

CUSTODY SEAL
DATE 9/20/12
SIGNATURE

QEC
Quality Environmental Containers
800-255-3950 • 304-255-3900

WS 15.0.16 HP LaserJet 4 30.0A 07/2012

Fold here and place in label pouch

Bottle Vao ID	Sample ID
1144	1699
0832	1700
1167	1701
1211	1659
1155	1654
1164	9078
1216	1697
1202	1698
533	1696
1206	1694
1100	1695
0628	9079

FROM:
DIANE OSHLO
(505) 259-5669
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

20 LBS **3 OF 11**
DWT: 20,14,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4190 4786

SHIP TO:
MICHAEL TRUCHAN
(734) 422-8000
RTI LABORATORIES
31628 GLENDALE ST.
LIVONIA MI 48150

1209 B05

REF 1:140705
REF 2:BB010030

BILLING: P/P
HAZARDOUS MATERIALS - GROUND ONLY
HAZ#: 176

CUSTODY SEAL
DATE 9/20/12
SIGNATURE T Nagy

QEC
Quality Environmental Containers
800-255-3950 • 304-255-3900

Fold here and place in label pouch

Bottle Vac's #	Sample I.D
1149	1704
0754	1636
1215	1637
1147	9081
0653	9074
0581	1658
0661	1635
0808	1657
1146	1656
1170	1655
0594	1653
0700	1652

FROM:
DIANE OSHLO
(505) 259-5669
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

5 LBS **4 OF 11**
DWT: 18,18,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4106 7191

SHIP TO:
MICHAEL TRUCHAN
(734) 422-8000
RTI LABORATORIES
31628 GLENDALE ST.
LIVONIA MI 48150

1209 BOS

REF 1:140705
REF 2:BB010030

BILLING: P/P
HAZARDOUS MATERIALS - GROUND ONLY
HAZ#: 176

CUSTODY SEAL
DATE 9/20/12
SIGNATURE T Roger

WS 15.0.16 HP LaserJet 4 30.0A 07/2012

Tedlar
Bags

FROM:
DIANE OSHLO
(505) 259-5669
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

2 LBS **5 OF 11**
DWT: 12,12,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4198 8204

SHIP TO:
MICHAEL TRUCHAN
(734) 422-8000
RTI LABORATORIES
31628 GLENDALE ST.
LIVONIA MI 48150

1209 B05

REF 1:140705
REF 2:BB010030

BILLING: P/P
HAZARDOUS MATERIALS - GROUND ONLY
HAZ#: 176

0.16 HP LaserJet 4 30.0A 07/2012

CUSTODY SEAL
DATE 9/20/12
SIGNATURE T Dover

Tedlar
Bags

FROM:
DIANE OSHLO
(505) 259-5669
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

15 LBS **6 OF 11**
DWT: 20,14,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4062 3813

SHIP TO:
MICHAEL TRUCHAN
(734) 422-8000
RTI LABORATORIES
31628 GLENDALE ST.
LIVONIA MI 48150

1209B05

REF 1:140705
REF 2:BB010030

BILLING: P/P
HAZARDOUS MATERIALS - GROUND ONLY
HAZ#: 176

CUSTODY SEAL
DATE 9/20/12
SIGNATURE T Nagy

QEC
Quality Environmental Containers
800-255-3950 • 304-255-3900
7/2012

Fold here and place in label pouch

Bottle Vac ID	Sample ID
552	1691
1163	1692
1165	1693
1177	1689
1207	1712
1166	1690
1168	1686
0802	1687
1169	1688

FROM:
DIANE OSHLO
(505) 259-5669
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

20 LBS **7 OF 11**
DWT: 20,14,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4169 0025

SHIP TO:
MICHAEL TRUCHAN
(734) 422-8000
RTI LABORATORIES
31628 GLENDALE ST.
LIVONIA MI 48150

1209 BOS

REF 1:140705
REF 2:BB010030

BILLING: P/P

CUSTODY SEAL
DATE 9/20/12
SIGNATURE Nagel

QEC
Quality Environmental Containers
800-255-3950 • 304-255-3900

Fold here and place in label pouch

Bottle Vac #
1178 - VA 1713
1229 VA 1660
0759 VA 9075
0603 VA 9083
0703 VA 1661

Unused - Duds
796
1208
524
558
609
704
834

FROM:
DIANE OSHLO
(505) 259-5669
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

26 LBS **8 OF 11**
DWT: 18,18,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4126 2836

SHIP TO:
MICHAEL TRUCHAN
(734) 422-8000
RTI LABORATORIES
31628 GLENDALE ST.
LIVONIA MI 48150

1209 BOS

REF 1:140705
REF 2:BB010030

BILLING: P/P

CUSTODY SEAL
DATE 9/20/12
SIGNATURE T Nagy

WS 15.0.16 HP LaserJet 4 30.0A 07/2012

Fold here and place in label pouch

~~Both Vac ID's~~ ~~8~~

~~Sample ID's~~ ~~10~~

Unused/Duds
847
769
534
696
757
1151
614
606

839
787
843
1101
1179
758
626
1145

FROM:
DIANE OSHLO
(505) 259-5669
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

20 LBS **9 OF 11**
DWT: 20,14,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4237 8246

SHIP TO:
MICHAEL TRUCHAN
(734) 422-8000
RTI LABORATORIES
31628 GLENDALE ST.
LIVONIA MI 48150

1209B05

REF 1:140705
REF 2:BB010030

BILLING: P/P

WS 15.0.16 HP LaserJet 4 30.0A 07/2012

Fold here and place in label pouch

Unused 616
555
1162
722
615
1203
1099
1201
1175
756
633
718

FROM:
DIANE OSHLO
(505) 259-5669
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

20 LBS **10 OF 11**
DWT: 20,14,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4063 2250

SHIP TO:
MICHAEL TRUCHAN
(734) 422-8000
RTI LABORATORIES
31628 GLENDALE ST.
LIVONIA MI 48150

1209B05

REF 1:140705
REF 2:BB010030

BILLING: P/P

WS 15.0.16 HP LaserJet 4 30.0A 07/2012

Fold here and place in label pouch

Unused Bottle Vacs

597
1204
1194
805
747
592
1212
725
1171
1095
678
527

FROM:
DIANE OSHLO
(505) 259-5669
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

14 LBS **11 OF 11**
DWT: 16,8,5

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4278 0864

SHIP TO:
MICHAEL TRUCHAN
(734) 422-8000
RTI LABORATORIES
31628 GLENDALE ST.
LIVONIA MI 48150

1209 B05

REF 1:140705
REF 2:BB010030

BILLING: P/P

Regulatory

WS 15.0.16 HP LaserJet 4 30.0A 07/2012

Fold here and place in label pouch

RTI LABORATORIES, INC.

RTI Laboratories
31628 Glendale St.
Livonia, MI 48150
TEL: (734) 422-8000
Website: www.rtilab.com

Sample Receipt Checklist

Client Name:	**SHA04**			Work Order Number:	**1209B05**
RCPNo:	**1**	Date and Time Received:	**9/26/2012 11:06:00 AM**	Received by:	**Armando Flores**
Completed By:		Reviewed By:	Kathryn Griffin		
Completed Date:	**9/28/2012 10:15:21 AM**	Reviewed Date:	**10/12/2012 11:47 AM**		

Carrier Name: UPS

1.	Chain of custody present?	Yes [x]	No [ ]	
2.	Chain of custody signed when relinquished and received?	Yes [x]	No [ ]	
3.	Chain of custody agrees with sample labels?	Yes [x]	No [ ]	Not Present [ ]
4.	Are matrices correctly identified on Chain of custody?	Yes [x]	No [ ]	
5.	Is it clear what analyses were requested?	Yes [x]	No [ ]	
6.	Custody seals intact on sample bottles?	Yes [ ]	No [ ]	Not Present [x]
7.	Samples in proper container/bottle?	Yes [x]	No [ ]	
8.	Were correct preservatives used and noted?	Yes [ ]	No [ ]	NA [x]
9.	Sample containers intact?	Yes [x]	No [ ]	
10.	Sufficient sample volume for indicated test?	Yes [x]	No [ ]	
11.	Were container lables complete (ID, Pres, Date)?	Yes [x]	No [ ]	
12.	All samples received within holding time?	Yes [x]	No [ ]	
13.	Was an attempt made to cool the samples?	Yes [ ]	No [ ]	NA [x]
14.	All samples received at a temp. of > 0° C to 6.0° C?	Yes [ ]	No [ ]	NA [x]
15.	Sample Temp. taken and recorded upon receipt?	Yes [ ]	No [x]	To ºC
16.	Water - Were bubbles absent in VOC vials?	Yes [ ]	No [ ]	No Vials [x]
17.	Water - Was there Chlorine Present?	Yes [ ]	No [ ]	NA [x]
18.	Water - pH acceptable upon receipt?	Yes [ ]	No [ ]	No Water [x]
19.	Are Samples considered acceptable?	Yes [x]	No [ ]	
20.	Custody Seals present?	Yes [x]	No [ ]	
21.	Traffic Report or Packing Lists present?	Yes [ ]	No [x]	
22.	Airbill or Sticker?	Air Bill [x]	Sticker [ ]	Not Present [ ]
23.	Airbill No:	See Comments		
24.	Sample Tags Present?	Yes [ ]	No [x]	
25.	Sample Tags Listed on COC?	Yes [ ]	No [x]	
26.	Tag Numbers:			
27.	Sample Condition?	Intact [x]	Broken [ ]	Leaking [ ]
28.	Response when temperature is outside of range:			
29.	Preservative added to bottles:			

Case Number: SDG: SAS:

Adjusted? _____ Checked by _____

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client Name: **SHA04** Work Order Number: **1209B05**

Comment: The tedlar bag for sample VA1705 did not arrive. CM

1 of 11: 1Z10335E0342231760
2 of 11: 1Z10335E0341704975
3 of 11: 1Z10335E0341904786
4 of 11: 1Z10335E0341067191
5 of 11: 1Z10335E0341988204
6 of 11: 1Z10335E0340623813
7 of 11: 1Z10335E0341690025
8 of 11: 1Z10335E0341262836
9 of 11: 1Z10335E0342378246
10 of 11: 1Z10335E0340632250
11 of 11: 1Z10335E0342780864

Client Contacted: Yes [x] No [ ] NA [ ] Person Contacted: Diane Oshlo and Pamela Moss

Contact Mode: Phone [ ] Fax: [ ] Email: [x] In Person: [ ]

Date Contacted: **9/28/2012 9:52:00 AM** Contacted By: **Katherine Griffin**

Regarding: Revised CoC

Client Instructions:

CorrectiveAction:

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By
1 of 11	N/A	Good	Yes		9/20/2012 12:00:00 AM	See CoC
10 of 11	N/A	Good	Not Present			
11 of 11	N/A	Good	Not Present			
2 of 11	N/A	Good	Yes		9/20/2012 12:00:00 AM	See CoC
3 of 11	N/A	Good	Yes		9/20/2012 12:00:00 AM	See CoC
4 of 11	N/A	Good	Yes		9/20/2012 12:00:00 AM	See CoC
5 of 11	N/A	Good	Yes		9/20/2012 12:00:00 AM	See CoC
6 of 11	N/A	Good	Yes		9/20/2012 12:00:00 AM	See CoC
7 of 11	N/A	Good	Yes		9/20/2012 12:00:00 AM	See CoC
8 of 11	N/A	Good	Yes		9/20/2012 12:00:00 AM	See CoC
9 of 11	N/A	Good	Not Present			

SampleID	ContainerID	Type	Vacuum Read (inch Hg)	Orig pH	Adj pH	Req Min pH	Req Max pH
1209B05-001A	0661	Canister	-4" Hg				
1209B05-001B	Container-01 of 01	Bottle					
1209B05-002A	0754	Canister	-6" Hg				
1209B05-002B	Container-01 of 01	Bottle					
1209B05-003A	1215	Canister	-6" Hg				
1209B05-003B	Container-01 of 01	Bottle					
1209B05-004A	0700	Canister	-6" Hg				
1209B05-004B	Container-01 of 01	Bottle					
1209B05-005A	0594	Canister	-6" Hg				
1209B05-005B	Container-01 of 01	Bottle					
1209B05-006A	1155	Canister	-6" Hg				

1209B05-006B	Container-01 of 01	Bottle					
1209B05-007A	1170	Canister	-6" Hg				
1209B05-007B	Container-01 of 01	Bottle					
1209B05-008A	1146	Canister	-6" Hg				
1209B05-008B	Container-01 of 01	Bottle					
1209B05-009A	0808	Canister	-6" Hg				
1209B05-009B	Container-01 of 01	Bottle					
1209B05-010A	0581	Canister	-7" Hg				
1209B05-010B	Container-01 of 01	Bottle					
1209B05-011A	1211	Canister	-7" Hg				
1209B05-011B	Container-01 of 01	Bottle					
1209B05-012A	1229	Canister	-6" Hg				
1209B05-012B	Container-01 of 01	Bottle					
1209B05-013A	0703	Canister	-6" Hg				
1209B05-013B	Container-01 of 01	Bottle					
1209B05-014A	1168	Canister	-8" Hg				
1209B05-014B	Container-01 of 01	Bottle					
1209B05-015A	0800	Canister	-6" Hg				
1209B05-015B	Container-01 of 01	Bottle					
1209B05-016A	1169	Canister	-6" Hg				
1209B05-016B	Container-01 of 01	Bottle					
1209B05-017A	1177	Canister	-7" Hg				
1209B05-017B	Container-01 of 01	Bottle					
1209B05-018A	1166	Canister	-7" Hg				
1209B05-018B	Container-01 of 01	Bottle					
1209B05-019A	552	Canister	-5" Hg				
1209B05-019B	Container-01 of 01	Bottle					
1209B05-020A	1163	Canister	-5" Hg				
1209B05-020B	Container-01 of 01	Bottle					
1209B05-021A	1165	Canister	-5" Hg				
1209B05-022A	1206	Canister	-5" Hg				
1209B05-022B	Container-01 of 01	Bottle					
1209B05-023A	1100	Canister	-5" Hg				
1209B05-023B	Container-01 of 01	Bottle					
1209B05-024A	533	Canister	-6" Hg				
1209B05-024B	Container-01 of 01	Bottle					
1209B05-025A	1216	Canister	-6" Hg				
1209B05-025B	Container-01 of 01	Bottle					
1209B05-026A	1202	Canister	-6" Hg				
1209B05-026B	Container-01 of 01	Bottle					
1209B05-027A	1144	Canister	-6" Hg				
1209B05-027B	Container-01 of 01	Bottle					
1209B05-028A	0832	Canister	-6" Hg				
1209B05-028B	Container-01 of 01	Bottle					
1209B05-029A	1167	Canister	-6" Hg				
1209B05-029B	Container-01 of 01	Bottle					
1209B05-030A	0709	Canister	-5" Hg				
1209B05-030B	Container-01 of 01	Bottle					
1209B05-031A	562	Canister	-6" Hg				

1209B05-031B	Container-01 of 01	Bottle					
1209B05-032A	1149	Canister	-6" Hg				
1209B05-032B	Container-01 of 01	Bottle					
1209B05-033A	0621	Canister	-5" Hg				
1209B05-034A	1159	Canister	-5" Hg				
1209B05-034B	Container-01 of 01	Bottle					
1209B05-035A	0727	Canister	-6" Hg				
1209B05-035B	Container-01 of 01	Bottle					
1209B05-036A	0655	Canister	-6" Hg				
1209B05-036B	Container-01 of 01	Bottle					
1209B05-037A	0831	Canister	-6" Hg				
1209B05-037B	Container-01 of 01	Bottle					
1209B05-038A	1207	Canister	-6" Hg				
1209B05-038B	Container-01 of 01	Bottle					
1209B05-039A	1178	Canister	-6" Hg				
1209B05-039B	Container-01 of 01	Bottle					
1209B05-040A	1224	Canister	-9" Hg				
1209B05-041A	1096	Canister	-6" Hg				
1209B05-041B	Container-01 of 01	Bottle					
1209B05-042A	0748	Canister	-7" Hg				
1209B05-042B	Container-01 of 01	Bottle					
1209B05-043A	515	Canister	-7" Hg				
1209B05-043B	Container-01 of 01	Bottle					
1209B05-044A	0653	Canister	-1" Hg				
1209B05-044B	Container-01 of 01	Bottle					
1209B05-045A	0759	Canister	-6" Hg				
1209B05-045B	Container-01 of 01	Bottle					
1209B05-046A	0690	Canister	-6" Hg				
1209B05-046B	Container-01 of 01	Bottle					
1209B05-047A	1164	Canister	-9" Hg				
1209B05-047B	Container-01 of 01	Bottle					
1209B05-048A	0628	Canister	-8" Hg				
1209B05-048B	Container-01 of 01	Bottle					
1209B05-049A	1147	Canister	-5" Hg				
1209B05-049B	Container-01 of 01	Bottle					
1209B05-050A	0603	Canister	-6" Hg				
1209B05-050B	Container-01 of 01	Bottle					

RTI Laboratories - Workorder Sample Summary

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1209B05-001A	VA1635	0661	9/17/2012 11:46 AM	9/26/2012 11:06 AM	Air
1209B05-001B	VA1635		9/17/2012 11:46 AM	9/26/2012 11:06 AM	Air
1209B05-002A	VA1636	0754	9/17/2012 12:30 PM	9/26/2012 11:06 AM	Air
1209B05-002B	VA1636		9/17/2012 12:30 PM	9/26/2012 11:06 AM	Air
1209B05-003A	VA1637	1215	9/17/2012 1:14 PM	9/26/2012 11:06 AM	Air
1209B05-003B	VA1637		9/17/2012 1:14 PM	9/26/2012 11:06 AM	Air
1209B05-004A	VA1652	0700	9/17/2012 9:15 AM	9/26/2012 11:06 AM	Air
1209B05-004B	VA1652		9/17/2012 9:15 AM	9/26/2012 11:06 AM	Air
1209B05-005A	VA1653	0594	9/17/2012 9:15 AM	9/26/2012 11:06 AM	Air
1209B05-005B	VA1653		9/17/2012 9:15 AM	9/26/2012 11:06 AM	Air
1209B05-006A	VA1654	1155	9/17/2012 9:59 AM	9/26/2012 11:06 AM	Air
1209B05-006B	VA1654		9/17/2012 9:59 AM	9/26/2012 11:06 AM	Air
1209B05-007A	VA1655	1170	9/17/2012 10:46 AM	9/26/2012 11:06 AM	Air
1209B05-007B	VA1655		9/17/2012 10:46 AM	9/26/2012 11:06 AM	Air
1209B05-008A	VA1656	1146	9/17/2012 2:22 PM	9/26/2012 11:06 AM	Air
1209B05-008B	VA1656		9/17/2012 2:22 PM	9/26/2012 11:06 AM	Air
1209B05-009A	VA1657	0808	9/17/2012 3:54 PM	9/26/2012 11:06 AM	Air
1209B05-009B	VA1657		9/17/2012 3:54 PM	9/26/2012 11:06 AM	Air
1209B05-010A	VA1658	0581	9/17/2012 3:27 PM	9/26/2012 11:06 AM	Air
1209B05-010B	VA1658		9/17/2012 3:27 PM	9/26/2012 11:06 AM	Air
1209B05-011A	VA1659	1211	9/18/2012 1:19 PM	9/26/2012 11:06 AM	Air
1209B05-011B	VA1659		9/18/2012 1:19 PM	9/26/2012 11:06 AM	Air
1209B05-012A	VA1660	1229	9/18/2012 2:04 PM	9/26/2012 11:06 AM	Air
1209B05-012B	VA1660		9/18/2012 2:04 PM	9/26/2012 11:06 AM	Air
1209B05-013A	VA1661	0703	9/18/2012 3:00 PM	9/26/2012 11:06 AM	Air
1209B05-013B	VA1661		9/18/2012 3:00 PM	9/26/2012 11:06 AM	Air
1209B05-014A	VA1686	1168	9/17/2012 11:11 AM	9/26/2012 11:06 AM	Air
1209B05-014B	VA1686		9/17/2012 11:11 AM	9/26/2012 11:06 AM	Air
1209B05-015A	VA1687	0800	9/17/2012 11:49 AM	9/26/2012 11:06 AM	Air
1209B05-015B	VA1687		9/17/2012 11:49 AM	9/26/2012 11:06 AM	Air
1209B05-016A	VA1688	1169	9/17/2012 12:31 PM	9/26/2012 11:06 AM	Air
1209B05-016B	VA1688		9/17/2012 12:31 PM	9/26/2012 11:06 AM	Air
1209B05-017A	VA1689	1177	9/17/2012 1:16 PM	9/26/2012 11:06 AM	Air
1209B05-017B	VA1689		9/17/2012 1:16 PM	9/26/2012 11:06 AM	Air
1209B05-018A	VA1690	1166	9/17/2012 3:23 PM	9/26/2012 11:06 AM	Air
1209B05-018B	VA1690		9/17/2012 3:23 PM	9/26/2012 11:06 AM	Air
1209B05-019A	VA1691	552	9/17/2012 4:06 PM	9/26/2012 11:06 AM	Air
1209B05-019B	VA1691		9/17/2012 4:06 PM	9/26/2012 11:06 AM	Air
1209B05-020A	VA1692	1163	9/18/2012 8:59 AM	9/26/2012 11:06 AM	Air
1209B05-020B	VA1692		9/18/2012 8:59 AM	9/26/2012 11:06 AM	Air
1209B05-021A	VA1693	1165	9/18/2012 9:42 AM	9/26/2012 11:06 AM	Air
1209B05-021B	VA1693		9/18/2012 9:42 AM	9/26/2012 11:06 AM	Air
1209B05-022A	VA1694	1206	9/18/2012 9:02 AM	9/26/2012 11:06 AM	Air
1209B05-022B	VA1694		9/18/2012 9:02 AM	9/26/2012 11:06 AM	Air
1209B05-023A	VA1695	1100	9/18/2012 9:46 AM	9/26/2012 11:06 AM	Air

RTI Laboratories - Workorder Sample Summary

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1209B05-023B	VA1695		9/18/2012 9:46 AM	9/26/2012 11:06 AM	Air
1209B05-024A	VA1696	533	9/18/2012 9:46 AM	9/26/2012 11:06 AM	Air
1209B05-024B	VA1696		9/18/2012 9:46 AM	9/26/2012 11:06 AM	Air
1209B05-025A	VA1697	1216	9/18/2012 10:41 AM	9/26/2012 11:06 AM	Air
1209B05-025B	VA1697		9/18/2012 10:41 AM	9/26/2012 11:06 AM	Air
1209B05-026A	VA1698	1202	9/18/2012 11:33 AM	9/26/2012 11:06 AM	Air
1209B05-026B	VA1698		9/18/2012 11:33 AM	9/26/2012 11:06 AM	Air
1209B05-027A	VA1699	1144	9/19/2012 10:33 AM	9/26/2012 11:06 AM	Air
1209B05-027B	VA1699		9/19/2012 10:33 AM	9/26/2012 11:06 AM	Air
1209B05-028A	VA1700	0832	9/19/2012 10:33 AM	9/26/2012 11:06 AM	Air
1209B05-028B	VA1700		9/19/2012 10:33 AM	9/26/2012 11:06 AM	Air
1209B05-029A	VA1701	1167	9/19/2012 9:49 AM	9/26/2012 11:06 AM	Air
1209B05-029B	VA1701		9/19/2012 9:49 AM	9/26/2012 11:06 AM	Air
1209B05-030A	VA1702	0709	9/19/2012 8:34 AM	9/26/2012 11:06 AM	Air
1209B05-030B	VA1702		9/19/2012 8:34 AM	9/26/2012 11:06 AM	Air
1209B05-031A	VA1703	562	9/19/2012 11:46 AM	9/26/2012 11:06 AM	Air
1209B05-031B	VA1703		9/19/2012 11:46 AM	9/26/2012 11:06 AM	Air
1209B05-032A	VA1704	1149	9/19/2012 11:37 AM	9/26/2012 11:06 AM	Air
1209B05-032B	VA1704		9/19/2012 11:37 AM	9/26/2012 11:06 AM	Air
1209B05-033A	VA1705	0621	9/19/2012 8:45 AM	9/26/2012 11:06 AM	Air
1209B05-034A	VA1706	1159	9/19/2012 9:24 AM	9/26/2012 11:06 AM	Air
1209B05-034B	VA1706		9/19/2012 9:24 AM	9/26/2012 11:06 AM	Air
1209B05-035A	VA1707	0727	9/19/2012 10:15 AM	9/26/2012 11:06 AM	Air
1209B05-035B	VA1707		9/19/2012 10:15 AM	9/26/2012 11:06 AM	Air
1209B05-036A	VA1708	0655	9/19/2012 10:15 AM	9/26/2012 11:06 AM	Air
1209B05-036B	VA1708		9/19/2012 10:15 AM	9/26/2012 11:06 AM	Air
1209B05-037A	VA1709	0831	9/19/2012 11:00 AM	9/26/2012 11:06 AM	Air
1209B05-037B	VA1709		9/19/2012 11:00 AM	9/26/2012 11:06 AM	Air
1209B05-038A	VA1712	1207	9/17/2012 2:07 PM	9/26/2012 11:06 AM	Air
1209B05-038B	VA1712		9/17/2012 2:07 PM	9/26/2012 11:06 AM	Air
1209B05-039A	VA1713	1178	9/18/2012 10:29 AM	9/26/2012 11:06 AM	Air
1209B05-039B	VA1713		9/18/2012 10:29 AM	9/26/2012 11:06 AM	Air
1209B05-040A	VA8102-TB	1224	9/17/2012 8:00 AM	9/26/2012 11:06 AM	Air
1209B05-041A	VA9070	1096	9/19/2012 12:47 PM	9/26/2012 11:06 AM	Air
1209B05-041B	VA9070		9/19/2012 12:47 PM	9/26/2012 11:06 AM	Air
1209B05-042A	VA9071	0748	9/19/2012 12:47 PM	9/26/2012 11:06 AM	Air
1209B05-042B	VA9071		9/19/2012 12:47 PM	9/26/2012 11:06 AM	Air
1209B05-043A	VA9072	515	9/19/2012 1:36 PM	9/26/2012 11:06 AM	Air
1209B05-043B	VA9072		9/19/2012 1:36 PM	9/26/2012 11:06 AM	Air
1209B05-044A	VA9074	0653	9/20/2012 10:27 AM	9/26/2012 11:06 AM	Air
1209B05-044B	VA9074		9/20/2012 10:27 AM	9/26/2012 11:06 AM	Air
1209B05-045A	VA9075	0759	9/20/2012 11:16 AM	9/26/2012 11:06 AM	Air
1209B05-045B	VA9075		9/20/2012 11:16 AM	9/26/2012 11:06 AM	Air
1209B05-046A	VA9077	0690	9/19/2012 2:58 PM	9/26/2012 11:06 AM	Air
1209B05-046B	VA9077		9/19/2012 2:58 PM	9/26/2012 11:06 AM	Air

RTI Laboratories - Workorder Sample Summary

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1209B05-047A	VA9078	1164	9/19/2012 3:53 PM	9/26/2012 11:06 AM	Air
1209B05-047B	VA9078		9/19/2012 3:53 PM	9/26/2012 11:06 AM	Air
1209B05-048A	VA9079	0628	9/19/2012 3:53 PM	9/26/2012 11:06 AM	Air
1209B05-048B	VA9079		9/19/2012 3:53 PM	9/26/2012 11:06 AM	Air
1209B05-049A	VA9081	1147	9/20/2012 8:57 AM	9/26/2012 11:06 AM	Air
1209B05-049B	VA9081		9/20/2012 8:57 AM	9/26/2012 11:06 AM	Air
1209B05-050A	VA9083	0603	9/20/2012 9:43 AM	9/26/2012 11:06 AM	Air
1209B05-050B	VA9083		9/20/2012 9:43 AM	9/26/2012 11:06 AM	Air

RTI Laboratories - DATES REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1209B05-001A	VA1635	9/17/2012 11:46 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/10/2012 4:34 PM
				EPA_TO15-Volatile Organic Compounds			10/5/2012 6:32 PM
1209B05-001B	VA1635	9/17/2012 11:46 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/10/2012 11:48 AM
1209B05-002A	VA1636	9/17/2012 12:30 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/10/2012 6:06 PM
				EPA_TO15-Volatile Organic Compounds			10/5/2012 7:58 PM
				EPA_TO15-Volatile Organic Compounds			10/8/2012 3:42 PM
1209B05-002B	VA1636	9/17/2012 12:30 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/10/2012 12:06 PM
1209B05-003A	VA1637	9/17/2012 1:14 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/10/2012 6:51 PM
				EPA_TO15-Volatile Organic Compounds			10/5/2012 8:39 PM
1209B05-003B	VA1637	9/17/2012 1:14 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/10/2012 12:20 PM
1209B05-004A	VA1652	9/17/2012 9:15 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/10/2012 7:41 PM
				EPA_TO15-Volatile Organic Compounds			10/5/2012 9:27 PM
1209B05-004B	VA1652	9/17/2012 9:15 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/10/2012 12:51 PM
1209B05-005A	VA1653	9/17/2012 9:15 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/10/2012 8:30 PM
				EPA_TO15-Volatile Organic Compounds			10/8/2012 4:30 PM
1209B05-005B	VA1653	9/17/2012 9:15 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/10/2012 1:05 PM
1209B05-006A	VA1654	9/17/2012 9:59 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/10/2012 9:15 PM
				EPA_TO15-Volatile Organic Compounds			10/5/2012 11:03 PM

RTI Laboratories - DATES REPORT

WO#: 1209B05

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Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1209B05-006B	VA1654	9/17/2012 9:59 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/10/2012 1:20 PM
1209B05-007A	VA1655	9/17/2012 10:46 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/10/2012 10:01 PM
				EPA_TO15-Volatile Organic Compounds			10/5/2012 11:44 PM
1209B05-007B	VA1655	9/17/2012 10:46 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/10/2012 1:43 PM
1209B05-008A	VA1656	9/17/2012 2:22 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/10/2012 10:47 PM
				EPA_TO15-Volatile Organic Compounds			10/6/2012 12:29 AM
1209B05-008B	VA1656	9/17/2012 2:22 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/10/2012 1:59 PM
1209B05-009A	VA1657	9/17/2012 3:54 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/10/2012 3:48 PM
				EPA_TO15-Volatile Organic Compounds			10/6/2012 1:14 AM
				EPA_TO15-Volatile Organic Compounds			10/8/2012 5:12 PM
1209B05-009B	VA1657	9/17/2012 3:54 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/10/2012 2:15 PM
1209B05-010A	VA1658	9/17/2012 3:27 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/10/2012 11:32 PM
				EPA_TO15-Volatile Organic Compounds			10/10/2012 3:43 PM
1209B05-010B	VA1658	9/17/2012 3:27 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/10/2012 3:32 PM
1209B05-011A	VA1659	9/18/2012 1:19 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/11/2012 12:16 AM
				EPA_TO15-Volatile Organic Compounds			10/10/2012 6:32 PM
1209B05-011B	VA1659	9/18/2012 1:19 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/16/2012 1:37 PM

RTI Laboratories - DATES REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1209B05-012A	VA1660	9/18/2012 2:04 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/11/2012 1:46 AM
				EPA_TO15-Volatile Organic Compounds			10/10/2012 7:14 PM
1209B05-012B	VA1660	9/18/2012 2:04 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/16/2012 1:54 PM
1209B05-013A	VA1661	9/18/2012 3:00 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/11/2012 2:30 AM
				EPA_TO15-Volatile Organic Compounds			10/10/2012 7:58 PM
1209B05-013B	VA1661	9/18/2012 3:00 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/17/2012 11:18 AM
1209B05-014A	VA1686	9/17/2012 11:11 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/11/2012 3:16 AM
				EPA_TO15-Volatile Organic Compounds			10/10/2012 5:09 PM
1209B05-014B	VA1686	9/17/2012 11:11 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/16/2012 11:38 AM
1209B05-015A	VA1687	9/17/2012 11:49 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/11/2012 3:59 AM
				EPA_TO15-Volatile Organic Compounds			10/10/2012 5:50 PM
1209B05-015B	VA1687	9/17/2012 11:49 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/16/2012 11:53 AM
1209B05-016A	VA1688	9/17/2012 12:31 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/11/2012 4:45 AM
				EPA_TO15-Volatile Organic Compounds			10/6/2012 1:55 AM
1209B05-016B	VA1688	9/17/2012 12:31 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/16/2012 12:08 PM
1209B05-017A	VA1689	9/17/2012 1:16 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/11/2012 6:16 AM
				EPA_TO15-Volatile Organic Compounds			10/6/2012 2:36 AM

RTI Laboratories - DATES REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1209B05-017B	VA1689	9/17/2012 1:16 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/16/2012 12:22 PM
1209B05-018A	VA1690	9/17/2012 3:23 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/11/2012 7:01 AM
				EPA_TO15-Volatile Organic Compounds			10/6/2012 3:17 AM
1209B05-018B	VA1690	9/17/2012 3:23 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/16/2012 12:50 PM
1209B05-019A	VA1691	9/17/2012 4:06 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/11/2012 7:50 AM
				EPA_TO15-Volatile Organic Compounds			10/6/2012 4:05 AM
1209B05-019B	VA1691	9/17/2012 4:06 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/16/2012 1:08 PM
1209B05-020A	VA1692	9/18/2012 8:59 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/11/2012 1:17 PM
				EPA_TO15-Volatile Organic Compounds			10/10/2012 8:40 PM
1209B05-020B	VA1692	9/18/2012 8:59 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/17/2012 11:38 AM
1209B05-021A	VA1693	9/18/2012 9:42 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/11/2012 2:02 PM
				EPA_TO15-Volatile Organic Compounds			10/6/2012 4:48 AM
1209B05-022A	VA1694	9/18/2012 9:02 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/11/2012 3:40 PM
				EPA_TO15-Volatile Organic Compounds			10/6/2012 5:29 AM
1209B05-022B	VA1694	9/18/2012 9:02 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/17/2012 11:54 AM
1209B05-023A	VA1695	9/18/2012 9:46 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/11/2012 4:29 PM
				EPA_TO15-Volatile Organic Compounds			10/8/2012 6:00 PM

RTI Laboratories - DATES REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1209B05-023B	VA1695	9/18/2012 9:46 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/17/2012 12:13 PM
1209B05-024A	VA1696	9/18/2012 9:46 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/11/2012 5:19 PM
				EPA_TO15-Volatile Organic Compounds			10/8/2012 6:54 PM
1209B05-024B	VA1696	9/18/2012 9:46 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/17/2012 12:33 PM
1209B05-025A	VA1697	9/18/2012 10:41 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/11/2012 6:03 PM
				EPA_TO15-Volatile Organic Compounds			10/8/2012 7:36 PM
1209B05-025B	VA1697	9/18/2012 10:41 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/17/2012 12:48 PM
1209B05-026A	VA1698	9/18/2012 11:33 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/11/2012 7:34 PM
				EPA_TO15-Volatile Organic Compounds			10/8/2012 8:18 PM
1209B05-026B	VA1698	9/18/2012 11:33 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/17/2012 1:14 PM
1209B05-027A	VA1699	9/19/2012 10:33 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/11/2012 9:01 PM
				EPA_TO15-Volatile Organic Compounds			10/8/2012 1:02 PM
1209B05-027B	VA1699	9/19/2012 10:33 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/17/2012 1:29 PM
1209B05-028A	VA1700	9/19/2012 10:33 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/11/2012 9:47 PM
				EPA_TO15-Volatile Organic Compounds			10/8/2012 1:43 PM
1209B05-028B	VA1700	9/19/2012 10:33 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/17/2012 1:49 PM

RTI Laboratories - DATES REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1209B05-029A	VA1701	9/19/2012 9:49 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/11/2012 10:31 PM
				EPA_TO15-Volatile Organic Compounds			10/8/2012 8:59 PM
1209B05-029B	VA1701	9/19/2012 9:49 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/17/2012 3:25 PM
1209B05-030A	VA1702	9/19/2012 8:34 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/11/2012 11:14 PM
				EPA_TO15-Volatile Organic Compounds			10/8/2012 9:41 PM
1209B05-030B	VA1702	9/19/2012 8:34 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/17/2012 3:40 PM
1209B05-031A	VA1703	9/19/2012 11:46 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/13/2012 3:22 AM
				EPA_TO15-Volatile Organic Compounds			10/12/2012 4:33 PM
				EPA_TO15-Volatile Organic Compounds			10/12/2012 6:03 PM
1209B05-031B	VA1703	9/19/2012 11:46 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/17/2012 3:57 PM
1209B05-032A	VA1704	9/19/2012 11:37 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/12/2012 1:04 AM
				EPA_TO15-Volatile Organic Compounds			10/8/2012 11:45 PM
1209B05-032B	VA1704	9/19/2012 11:37 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/17/2012 4:14 PM
1209B05-033A	VA1705	9/19/2012 8:45 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/12/2012 1:50 AM
				EPA_TO15-Volatile Organic Compounds			10/9/2012 12:26 AM
1209B05-034A	VA1706	9/19/2012 9:24 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/12/2012 3:21 AM
				EPA_TO15-Volatile Organic Compounds			10/9/2012 4:32 PM
1209B05-034B	VA1706	9/19/2012 9:24 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/17/2012 4:30 PM

RTI Laboratories - DATES REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1209B05-035A	VA1707	9/19/2012 10:15 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/12/2012 4:07 AM
				EPA_TO15-Volatile Organic Compounds			10/9/2012 5:55 PM
1209B05-035B	VA1707	9/19/2012 10:15 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/18/2012 11:13 AM
1209B05-036A	VA1708	9/19/2012 10:15 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/12/2012 4:52 AM
				EPA_TO15-Volatile Organic Compounds			10/9/2012 6:37 PM
1209B05-036B	VA1708	9/19/2012 10:15 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/18/2012 11:28 AM
1209B05-037A	VA1709	9/19/2012 11:00 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/13/2012 4:11 AM
				EPA_TO15-Volatile Organic Compounds			10/10/2012 5:47 AM
1209B05-037B	VA1709	9/19/2012 11:00 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/18/2012 11:42 AM
1209B05-038A	VA1712	9/17/2012 2:07 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/12/2012 6:24 AM
				EPA_TO15-Volatile Organic Compounds			10/9/2012 8:04 PM
1209B05-038B	VA1712	9/17/2012 2:07 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/16/2012 1:23 PM
1209B05-039A	VA1713	9/18/2012 10:29 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/12/2012 7:14 AM
				EPA_TO15-Volatile Organic Compounds			10/10/2012 1:29 PM
1209B05-039B	VA1713	9/18/2012 10:29 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/17/2012 2:05 PM
1209B05-040A	VA8102-TB	9/17/2012 8:00 AM	Air				
				EPA_TO15-Volatile Organic Compounds			10/10/2012 5:06 AM
1209B05-041A	VA9070	9/19/2012 12:47 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/13/2012 7:15 AM

RTI Laboratories - DATES REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1209B05-041A	VA9070	9/19/2012 12:47 PM	Air				
				EPA_TO15-Volatile Organic Compounds			10/10/2012 12:41 PM
1209B05-041B	VA9070	9/19/2012 12:47 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/18/2012 11:57 AM
1209B05-042A	VA9071	9/19/2012 12:47 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/12/2012 6:16 PM
				EPA_TO15-Volatile Organic Compounds			10/9/2012 10:50 PM
1209B05-042B	VA9071	9/19/2012 12:47 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/18/2012 1:02 PM
1209B05-043A	VA9072	9/19/2012 1:36 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/12/2012 7:00 PM
				EPA_TO15-Volatile Organic Compounds			10/9/2012 11:32 PM
				EPA_TO15-Volatile Organic Compounds			10/10/2012 2:13 PM
1209B05-043B	VA9072	9/19/2012 1:36 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/18/2012 1:19 PM
1209B05-044A	VA9074	9/20/2012 10:27 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/12/2012 8:30 PM
				EPA_TO15-Volatile Organic Compounds			10/10/2012 12:13 AM
1209B05-044B	VA9074	9/20/2012 10:27 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/19/2012 11:40 AM
1209B05-045A	VA9075	9/20/2012 11:16 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/12/2012 9:15 PM
				EPA_TO15-Volatile Organic Compounds			10/10/2012 12:55 AM
				EPA_TO15-Volatile Organic Compounds			10/10/2012 9:21 PM
1209B05-045B	VA9075	9/20/2012 11:16 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/19/2012 12:16 PM
1209B05-046A	VA9077	9/19/2012 2:58 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/12/2012 9:58 PM
				EPA_TO15-Volatile Organic Compounds			10/10/2012 1:37 AM

RTI Laboratories - DATES REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1209B05-046B	VA9077	9/19/2012 2:58 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/18/2012 1:34 PM
1209B05-047A	VA9078	9/19/2012 3:53 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/12/2012 11:24 PM
				EPA_TO15-Volatile Organic Compounds			10/10/2012 2:18 AM
				EPA_TO15-Volatile Organic Compounds			10/10/2012 10:03 PM
1209B05-047B	VA9078	9/19/2012 3:53 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/18/2012 1:50 PM
1209B05-048A	VA9079	9/19/2012 3:53 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/13/2012 12:08 AM
				EPA_TO15-Volatile Organic Compounds			10/10/2012 3:00 AM
				EPA_TO15-Volatile Organic Compounds			10/10/2012 10:44 PM
1209B05-048B	VA9079	9/19/2012 3:53 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/18/2012 2:06 PM
1209B05-049A	VA9081	9/20/2012 8:57 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/13/2012 8:05 AM
				EPA_TO15-Volatile Organic Compounds			10/10/2012 2:58 PM
1209B05-049B	VA9081	9/20/2012 8:57 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/18/2012 2:22 PM
1209B05-050A	VA9083	9/20/2012 9:43 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/13/2012 1:51 AM
				EPA_TO15-Volatile Organic Compounds			10/10/2012 4:23 AM
1209B05-050B	VA9083	9/20/2012 9:43 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/19/2012 12:31 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 11:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-001	**Matrix:**	Air
Client Sample ID:	VA1635		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	1.0	0.10		% v/v	1	10/10/2012 11:48 AM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/10/2012 11:48 AM
Methane	ND	0.50	U	% v/v	1	10/10/2012 11:48 AM
Nitrogen	78	0.10		% v/v	1	10/10/2012 11:48 AM
Oxygen	20	0.10		% v/v	1	10/10/2012 11:48 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	10/5/2012 6:32 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	10/5/2012 6:32 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	10/5/2012 6:32 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	10/5/2012 6:32 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	10/5/2012 6:32 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	10/5/2012 6:32 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	10/5/2012 6:32 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	10/5/2012 6:32 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	10/5/2012 6:32 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	10/5/2012 6:32 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	10/5/2012 6:32 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	10/5/2012 6:32 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	10/5/2012 6:32 PM
1,3-Butadiene	ND	800	U	ppbv	800	10/5/2012 6:32 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	10/5/2012 6:32 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	10/5/2012 6:32 PM
2-Butanone	ND	800	U	ppbv	800	10/5/2012 6:32 PM
2-Hexanone	ND	800	U	ppbv	800	10/5/2012 6:32 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Acetone	1,100	800		ppbv	800	10/5/2012 6:32 PM
Benzene	6,900	800		ppbv	800	10/5/2012 6:32 PM
Benzyl chloride	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Bromodichloromethane	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Bromoform	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Bromomethane	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Carbon disulfide	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Carbon tetrachloride	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Chlorobenzene	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Chlorodibromomethane	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Chloroethane	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Chloroform	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Chloromethane	ND	800	U	ppbv	800	10/5/2012 6:32 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	10/5/2012 6:32 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	10/5/2012 6:32 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 11:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-001	**Matrix:**	Air
Client Sample ID:	VA1635		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	6,500	1,600		ppbv	800	10/5/2012 6:32 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Ethyl acetate	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Ethylbenzene	ND	1,600	U	ppbv	800	10/5/2012 6:32 PM
Heptane	5,400	800		ppbv	800	10/5/2012 6:32 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	10/5/2012 6:32 PM
m,p-Xylene	2,000	1,600		ppbv	800	10/5/2012 6:32 PM
Methylene chloride	ND	4,000	U	ppbv	800	10/5/2012 6:32 PM
n-Hexane	4,100	1,600		ppbv	800	10/5/2012 6:32 PM
Naphthalene	ND	800	U	ppbv	800	10/5/2012 6:32 PM
o-Xylene	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Propylene	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Styrene	ND	800	U	ppbv	800	10/5/2012 6:32 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Tetrachloroethene	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Tetrahydrofuran	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Toluene	13,000	800		ppbv	800	10/5/2012 6:32 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	10/5/2012 6:32 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Trichloroethene	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Vinyl acetate	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Vinyl chloride	ND	800	U	ppbv	800	10/5/2012 6:32 PM
Xylenes, Total	2,000	2,400	J	ppbv	800	10/5/2012 6:32 PM
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	800	10/5/2012 6:32 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	370,000	94,000		µg/m³	800	10/10/2012 4:34 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	10/10/2012 4:34 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	10/10/2012 4:34 PM
Surr: 4-Bromofluorobenzene	96.5	70-130		%REC	800	10/10/2012 4:34 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 12:30:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-002	**Matrix:**	Air
Client Sample ID:	VA1636		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	6.9	0.10		% v/v	1	10/10/2012 12:06 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/10/2012 12:06 PM
Methane	ND	0.50	U	% v/v	1	10/10/2012 12:06 PM
Nitrogen	82	0.10		% v/v	1	10/10/2012 12:06 PM
Oxygen	10	0.10		% v/v	1	10/10/2012 12:06 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
2-Butanone	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
2-Hexanone	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Acetone	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Benzene	200,000	8,000		ppbv	8000	10/5/2012 7:58 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Bromoform	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Bromomethane	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Chloroethane	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Chloroform	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Chloromethane	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 12:30:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-002	**Matrix:**	Air
Client Sample ID:	VA1636		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	550,000	40,000		ppbv	20000	10/8/2012 3:42 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	10/5/2012 7:58 PM
Heptane	110,000	8,000		ppbv	8000	10/5/2012 7:58 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	10/5/2012 7:58 PM
m,p-Xylene	17,000	16,000		ppbv	8000	10/5/2012 7:58 PM
Methylene chloride	ND	40,000	U	ppbv	8000	10/5/2012 7:58 PM
n-Hexane	270,000	16,000		ppbv	8000	10/5/2012 7:58 PM
Naphthalene	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
o-Xylene	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Propylene	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Styrene	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Toluene	310,000	8,000		ppbv	8000	10/5/2012 7:58 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Trichloroethene	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	10/5/2012 7:58 PM
Xylenes, Total	17,000	24,000	J	ppbv	8000	10/5/2012 7:58 PM
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	8000	10/5/2012 7:58 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	19,000,000	2,300,000		µg/m³	20000	10/10/2012 6:06 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	10/10/2012 6:06 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	10/10/2012 6:06 PM
Surr: 4-Bromofluorobenzene	93.5	70-130		%REC	20000	10/10/2012 6:06 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 1:14:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-003	**Matrix:**	Air
Client Sample ID:	VA1637		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	1.2	0.10		% v/v	1	10/10/2012 12:20 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/10/2012 12:20 PM
Methane	ND	0.50	U	% v/v	1	10/10/2012 12:20 PM
Nitrogen	80	0.10		% v/v	1	10/10/2012 12:20 PM
Oxygen	18	0.10		% v/v	1	10/10/2012 12:20 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
2-Butanone	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
2-Hexanone	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Acetone	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Benzene	110,000	8,000		ppbv	8000	10/5/2012 8:39 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Bromoform	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Bromomethane	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Chloroethane	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Chloroform	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Chloromethane	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 1:14:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-003	**Matrix:**	Air
Client Sample ID:	VA1637		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	250,000	16,000		ppbv	8000	10/5/2012 8:39 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	10/5/2012 8:39 PM
Heptane	99,000	8,000		ppbv	8000	10/5/2012 8:39 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	10/5/2012 8:39 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	10/5/2012 8:39 PM
Methylene chloride	ND	40,000	U	ppbv	8000	10/5/2012 8:39 PM
n-Hexane	240,000	16,000		ppbv	8000	10/5/2012 8:39 PM
Naphthalene	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
o-Xylene	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Propylene	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Styrene	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Toluene	100,000	8,000		ppbv	8000	10/5/2012 8:39 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Trichloroethene	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	10/5/2012 8:39 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	10/5/2012 8:39 PM
Surr: 4-Bromofluorobenzene	98.1	70-130		%REC	8000	10/5/2012 8:39 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	16,000,000	2,300,000		µg/m³	20000	10/10/2012 6:51 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	10/10/2012 6:51 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	10/10/2012 6:51 PM
Surr: 4-Bromofluorobenzene	93.4	70-130		%REC	20000	10/10/2012 6:51 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 9:15:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-004	**Matrix:**	Air
Client Sample ID:	VA1652		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	3.5	0.10		% v/v	1	10/10/2012 12:51 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/10/2012 12:51 PM
Methane	ND	0.50	U	% v/v	1	10/10/2012 12:51 PM
Nitrogen	81	0.10		% v/v	1	10/10/2012 12:51 PM
Oxygen	16	0.10		% v/v	1	10/10/2012 12:51 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	10/5/2012 9:27 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	10/5/2012 9:27 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	10/5/2012 9:27 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	10/5/2012 9:27 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	10/5/2012 9:27 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	10/5/2012 9:27 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	10/5/2012 9:27 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	10/5/2012 9:27 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	10/5/2012 9:27 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	10/5/2012 9:27 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	10/5/2012 9:27 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	10/5/2012 9:27 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	10/5/2012 9:27 PM
1,3-Butadiene	ND	400	U	ppbv	400	10/5/2012 9:27 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	10/5/2012 9:27 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	10/5/2012 9:27 PM
2-Butanone	ND	400	U	ppbv	400	10/5/2012 9:27 PM
2-Hexanone	ND	400	U	ppbv	400	10/5/2012 9:27 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Acetone	2,400	400		ppbv	400	10/5/2012 9:27 PM
Benzene	1,600	400		ppbv	400	10/5/2012 9:27 PM
Benzyl chloride	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Bromodichloromethane	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Bromoform	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Bromomethane	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Carbon disulfide	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Carbon tetrachloride	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Chlorobenzene	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Chlorodibromomethane	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Chloroethane	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Chloroform	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Chloromethane	ND	400	U	ppbv	400	10/5/2012 9:27 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	10/5/2012 9:27 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	10/5/2012 9:27 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 9:15:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-004	**Matrix:**	Air
Client Sample ID:	VA1652		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	4,300	800		ppbv	400	10/5/2012 9:27 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Ethyl acetate	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Ethylbenzene	ND	800	U	ppbv	400	10/5/2012 9:27 PM
Heptane	4,500	400		ppbv	400	10/5/2012 9:27 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	10/5/2012 9:27 PM
m,p-Xylene	1,100	800		ppbv	400	10/5/2012 9:27 PM
Methylene chloride	2,000	2,000	J	ppbv	400	10/5/2012 9:27 PM
n-Hexane	3,200	800		ppbv	400	10/5/2012 9:27 PM
Naphthalene	ND	400	U	ppbv	400	10/5/2012 9:27 PM
o-Xylene	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Propylene	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Styrene	ND	400	U	ppbv	400	10/5/2012 9:27 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Tetrachloroethene	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Tetrahydrofuran	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Toluene	6,600	400		ppbv	400	10/5/2012 9:27 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	10/5/2012 9:27 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Trichloroethene	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Vinyl acetate	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Vinyl chloride	ND	400	U	ppbv	400	10/5/2012 9:27 PM
Xylenes, Total	1,100	1,200	J	ppbv	400	10/5/2012 9:27 PM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	400	10/5/2012 9:27 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	290,000	47,000		µg/m³	400	10/10/2012 7:41 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	10/10/2012 7:41 PM
C9-C12 Aliphatic Hydrocarbons	43,000	76,000	J	µg/m³	400	10/10/2012 7:41 PM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	400	10/10/2012 7:41 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 9:15:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-005	**Matrix:**	Air
Client Sample ID:	VA1653		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	3.7	0.10		% v/v	1	10/10/2012 1:05 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/10/2012 1:05 PM
Methane	ND	0.50	U	% v/v	1	10/10/2012 1:05 PM
Nitrogen	80	0.10		% v/v	1	10/10/2012 1:05 PM
Oxygen	16	0.10		% v/v	1	10/10/2012 1:05 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	10/8/2012 4:30 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	10/8/2012 4:30 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	10/8/2012 4:30 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	10/8/2012 4:30 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	10/8/2012 4:30 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	10/8/2012 4:30 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	10/8/2012 4:30 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	10/8/2012 4:30 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	10/8/2012 4:30 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	10/8/2012 4:30 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	10/8/2012 4:30 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	10/8/2012 4:30 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	10/8/2012 4:30 PM
1,3-Butadiene	ND	400	U	ppbv	400	10/8/2012 4:30 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	10/8/2012 4:30 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	10/8/2012 4:30 PM
2-Butanone	440	400		ppbv	400	10/8/2012 4:30 PM
2-Hexanone	ND	400	U	ppbv	400	10/8/2012 4:30 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Acetone	1,500	400		ppbv	400	10/8/2012 4:30 PM
Benzene	2,400	400		ppbv	400	10/8/2012 4:30 PM
Benzyl chloride	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Bromodichloromethane	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Bromoform	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Bromomethane	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Carbon disulfide	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Carbon tetrachloride	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Chlorobenzene	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Chlorodibromomethane	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Chloroethane	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Chloroform	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Chloromethane	ND	400	U	ppbv	400	10/8/2012 4:30 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	10/8/2012 4:30 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	10/8/2012 4:30 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 9:15:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-005	**Matrix:**	Air
Client Sample ID:	VA1653		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	6,700	800		ppbv	400	10/8/2012 4:30 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Ethyl acetate	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Ethylbenzene	700	800	J	ppbv	400	10/8/2012 4:30 PM
Heptane	6,500	400		ppbv	400	10/8/2012 4:30 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	10/8/2012 4:30 PM
m,p-Xylene	1,900	800		ppbv	400	10/8/2012 4:30 PM
Methylene chloride	ND	2,000	U	ppbv	400	10/8/2012 4:30 PM
n-Hexane	3,400	800		ppbv	400	10/8/2012 4:30 PM
Naphthalene	ND	400	U	ppbv	400	10/8/2012 4:30 PM
o-Xylene	590	400		ppbv	400	10/8/2012 4:30 PM
Propylene	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Styrene	ND	400	U	ppbv	400	10/8/2012 4:30 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Tetrachloroethene	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Tetrahydrofuran	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Toluene	11,000	400		ppbv	400	10/8/2012 4:30 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	10/8/2012 4:30 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Trichloroethene	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Vinyl acetate	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Vinyl chloride	ND	400	U	ppbv	400	10/8/2012 4:30 PM
Xylenes, Total	2,500	1,200		ppbv	400	10/8/2012 4:30 PM
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	400	10/8/2012 4:30 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	260,000	47,000		µg/m³	400	10/10/2012 8:30 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	10/10/2012 8:30 PM
C9-C12 Aliphatic Hydrocarbons	39,000	76,000	J	µg/m³	400	10/10/2012 8:30 PM
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	400	10/10/2012 8:30 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 9:59:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-006	**Matrix:**	Air
Client Sample ID:	VA1654		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.14	0.10		% v/v	1	10/10/2012 1:20 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/10/2012 1:20 PM
Methane	ND	0.50	U	% v/v	1	10/10/2012 1:20 PM
Nitrogen	79	0.10		% v/v	1	10/10/2012 1:20 PM
Oxygen	21	0.10		% v/v	1	10/10/2012 1:20 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
2-Butanone	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
2-Hexanone	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Acetone	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Benzene	100,000	8,000		ppbv	8000	10/5/2012 11:03 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Bromoform	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Bromomethane	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Chloroethane	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Chloroform	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Chloromethane	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 9:59:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-006	**Matrix:**	Air
Client Sample ID:	VA1654		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	160,000	16,000		ppbv	8000	10/5/2012 11:03 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	10/5/2012 11:03 PM
Heptane	24,000	8,000		ppbv	8000	10/5/2012 11:03 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	10/5/2012 11:03 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	10/5/2012 11:03 PM
Methylene chloride	ND	40,000	U	ppbv	8000	10/5/2012 11:03 PM
n-Hexane	120,000	16,000		ppbv	8000	10/5/2012 11:03 PM
Naphthalene	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
o-Xylene	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Propylene	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Styrene	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Toluene	16,000	8,000		ppbv	8000	10/5/2012 11:03 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Trichloroethene	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	10/5/2012 11:03 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	10/5/2012 11:03 PM
Surr: 4-Bromofluorobenzene	97.0	70-130		%REC	8000	10/5/2012 11:03 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	7,200,000	940,000		µg/m³	8000	10/10/2012 9:15 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	10/10/2012 9:15 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	10/10/2012 9:15 PM
Surr: 4-Bromofluorobenzene	93.9	70-130		%REC	8000	10/10/2012 9:15 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 10:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-007	**Matrix:**	Air
Client Sample ID:	VA1655		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.91	0.10		% v/v	1	10/10/2012 1:43 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/10/2012 1:43 PM
Methane	ND	0.50	U	% v/v	1	10/10/2012 1:43 PM
Nitrogen	82	0.10		% v/v	1	10/10/2012 1:43 PM
Oxygen	18	0.10		% v/v	1	10/10/2012 1:43 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
2-Butanone	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
2-Hexanone	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Acetone	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Benzene	120,000	8,000		ppbv	8000	10/5/2012 11:44 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Bromoform	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Bromomethane	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Chloroethane	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Chloroform	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Chloromethane	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 10:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-007	**Matrix:**	Air
Client Sample ID:	VA1655		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	89,000	16,000		ppbv	8000	10/5/2012 11:44 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	10/5/2012 11:44 PM
Heptane	33,000	8,000		ppbv	8000	10/5/2012 11:44 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	10/5/2012 11:44 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	10/5/2012 11:44 PM
Methylene chloride	ND	40,000	U	ppbv	8000	10/5/2012 11:44 PM
n-Hexane	78,000	16,000		ppbv	8000	10/5/2012 11:44 PM
Naphthalene	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
o-Xylene	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Propylene	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Styrene	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Toluene	130,000	8,000		ppbv	8000	10/5/2012 11:44 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Trichloroethene	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	10/5/2012 11:44 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	10/5/2012 11:44 PM
Surr: 4-Bromofluorobenzene	98.3	70-130		%REC	8000	10/5/2012 11:44 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	4,500,000	940,000		µg/m³	8000	10/10/2012 10:01 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	10/10/2012 10:01 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	10/10/2012 10:01 PM
Surr: 4-Bromofluorobenzene	93.7	70-130		%REC	8000	10/10/2012 10:01 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 2:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-008	**Matrix:**	Air
Client Sample ID:	VA1656		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.66	0.10		% v/v	1	10/10/2012 1:59 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/10/2012 1:59 PM
Methane	ND	0.50	U	% v/v	1	10/10/2012 1:59 PM
Nitrogen	81	0.10		% v/v	1	10/10/2012 1:59 PM
Oxygen	18	0.10		% v/v	1	10/10/2012 1:59 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	10/6/2012 12:29 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	10/6/2012 12:29 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	10/6/2012 12:29 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	10/6/2012 12:29 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	10/6/2012 12:29 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	10/6/2012 12:29 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	10/6/2012 12:29 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	10/6/2012 12:29 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	10/6/2012 12:29 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	10/6/2012 12:29 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	10/6/2012 12:29 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	10/6/2012 12:29 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	10/6/2012 12:29 AM
1,3-Butadiene	ND	800	U	ppbv	800	10/6/2012 12:29 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	10/6/2012 12:29 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	10/6/2012 12:29 AM
2-Butanone	ND	800	U	ppbv	800	10/6/2012 12:29 AM
2-Hexanone	ND	800	U	ppbv	800	10/6/2012 12:29 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Acetone	1,600	800		ppbv	800	10/6/2012 12:29 AM
Benzene	12,000	800		ppbv	800	10/6/2012 12:29 AM
Benzyl chloride	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Bromodichloromethane	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Bromoform	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Bromomethane	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Carbon disulfide	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Carbon tetrachloride	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Chlorobenzene	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Chlorodibromomethane	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Chloroethane	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Chloroform	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Chloromethane	ND	800	U	ppbv	800	10/6/2012 12:29 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	10/6/2012 12:29 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	10/6/2012 12:29 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 2:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-008	**Matrix:**	Air
Client Sample ID:	VA1656		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	15,000	1,600		ppbv	800	10/6/2012 12:29 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Ethyl acetate	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Ethylbenzene	1,300	1,600	J	ppbv	800	10/6/2012 12:29 AM
Heptane	9,900	800		ppbv	800	10/6/2012 12:29 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	10/6/2012 12:29 AM
m,p-Xylene	4,000	1,600		ppbv	800	10/6/2012 12:29 AM
Methylene chloride	ND	4,000	U	ppbv	800	10/6/2012 12:29 AM
n-Hexane	7,000	1,600		ppbv	800	10/6/2012 12:29 AM
Naphthalene	ND	800	U	ppbv	800	10/6/2012 12:29 AM
o-Xylene	1,300	800		ppbv	800	10/6/2012 12:29 AM
Propylene	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Styrene	ND	800	U	ppbv	800	10/6/2012 12:29 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Tetrachloroethene	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Tetrahydrofuran	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Toluene	25,000	800		ppbv	800	10/6/2012 12:29 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	10/6/2012 12:29 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Trichloroethene	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Vinyl acetate	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Vinyl chloride	ND	800	U	ppbv	800	10/6/2012 12:29 AM
Xylenes, Total	5,400	2,400		ppbv	800	10/6/2012 12:29 AM
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	800	10/6/2012 12:29 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	850,000	94,000		µg/m³	800	10/10/2012 10:47 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	10/10/2012 10:47 PM
C9-C12 Aliphatic Hydrocarbons	75,000	150,000	J	µg/m³	800	10/10/2012 10:47 PM
Surr: 4-Bromofluorobenzene	94.4	70-130		%REC	800	10/10/2012 10:47 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 3:54:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-009	**Matrix:**	Air
Client Sample ID:	VA1657		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	4.3	0.10		% v/v	1	10/10/2012 2:15 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/10/2012 2:15 PM
Methane	ND	0.50	U	% v/v	1	10/10/2012 2:15 PM
Nitrogen	80	0.10		% v/v	1	10/10/2012 2:15 PM
Oxygen	15	0.10		% v/v	1	10/10/2012 2:15 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	10/6/2012 1:14 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	10/6/2012 1:14 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	10/6/2012 1:14 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	10/6/2012 1:14 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	10/6/2012 1:14 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	10/6/2012 1:14 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	10/6/2012 1:14 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	10/6/2012 1:14 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	10/6/2012 1:14 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	10/6/2012 1:14 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	10/6/2012 1:14 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	10/6/2012 1:14 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	10/6/2012 1:14 AM
1,3-Butadiene	ND	800	U	ppbv	800	10/6/2012 1:14 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	10/6/2012 1:14 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	10/6/2012 1:14 AM
2-Butanone	ND	800	U	ppbv	800	10/6/2012 1:14 AM
2-Hexanone	ND	800	U	ppbv	800	10/6/2012 1:14 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Acetone	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Benzene	31,000	800		ppbv	800	10/6/2012 1:14 AM
Benzyl chloride	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Bromodichloromethane	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Bromoform	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Bromomethane	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Carbon disulfide	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Carbon tetrachloride	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Chlorobenzene	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Chlorodibromomethane	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Chloroethane	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Chloroform	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Chloromethane	ND	800	U	ppbv	800	10/6/2012 1:14 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	10/6/2012 1:14 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	10/6/2012 1:14 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 3:54:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-009	**Matrix:**	Air
Client Sample ID:	VA1657		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	100,000	16,000		ppbv	8000	10/8/2012 5:12 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Ethyl acetate	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Ethylbenzene	1,100	1,600	J	ppbv	800	10/6/2012 1:14 AM
Heptane	17,000	800		ppbv	800	10/6/2012 1:14 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	10/6/2012 1:14 AM
m,p-Xylene	4,700	1,600		ppbv	800	10/6/2012 1:14 AM
Methylene chloride	ND	4,000	U	ppbv	800	10/6/2012 1:14 AM
n-Hexane	69,000	16,000		ppbv	8000	10/8/2012 5:12 PM
Naphthalene	ND	800	U	ppbv	800	10/6/2012 1:14 AM
o-Xylene	1,400	800		ppbv	800	10/6/2012 1:14 AM
Propylene	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Styrene	ND	800	U	ppbv	800	10/6/2012 1:14 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Tetrachloroethene	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Tetrahydrofuran	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Toluene	83,000	8,000		ppbv	8000	10/8/2012 5:12 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	10/6/2012 1:14 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Trichloroethene	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Vinyl acetate	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Vinyl chloride	ND	800	U	ppbv	800	10/6/2012 1:14 AM
Xylenes, Total	6,100	2,400		ppbv	800	10/6/2012 1:14 AM
Surr: 4-Bromofluorobenzene	99.2	70-130		%REC	800	10/6/2012 1:14 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	4,700,000	940,000		µg/m³	8000	10/10/2012 3:48 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	10/10/2012 3:48 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	10/10/2012 3:48 PM
Surr: 4-Bromofluorobenzene	95.1	70-130		%REC	8000	10/10/2012 3:48 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 3:27:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-010	**Matrix:**	Air
Client Sample ID:	VA1658		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	3.6	0.10		% v/v	1	10/10/2012 3:32 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/10/2012 3:32 PM
Methane	ND	0.50	U	% v/v	1	10/10/2012 3:32 PM
Nitrogen	81	0.10		% v/v	1	10/10/2012 3:32 PM
Oxygen	17	0.10		% v/v	1	10/10/2012 3:32 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	10/10/2012 3:43 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	10/10/2012 3:43 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	10/10/2012 3:43 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	10/10/2012 3:43 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	10/10/2012 3:43 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	10/10/2012 3:43 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	10/10/2012 3:43 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	10/10/2012 3:43 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	10/10/2012 3:43 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	10/10/2012 3:43 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	10/10/2012 3:43 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	10/10/2012 3:43 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	10/10/2012 3:43 PM
1,3-Butadiene	ND	800	U	ppbv	800	10/10/2012 3:43 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	10/10/2012 3:43 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	10/10/2012 3:43 PM
2-Butanone	ND	800	U	ppbv	800	10/10/2012 3:43 PM
2-Hexanone	ND	800	U	ppbv	800	10/10/2012 3:43 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Acetone	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Benzene	7,300	800		ppbv	800	10/10/2012 3:43 PM
Benzyl chloride	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Bromodichloromethane	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Bromoform	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Bromomethane	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Carbon disulfide	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Carbon tetrachloride	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Chlorobenzene	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Chlorodibromomethane	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Chloroethane	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Chloroform	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Chloromethane	ND	800	U	ppbv	800	10/10/2012 3:43 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	10/10/2012 3:43 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	10/10/2012 3:43 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 3:27:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-010	**Matrix:**	Air
Client Sample ID:	VA1658		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	11,000	1,600		ppbv	800	10/10/2012 3:43 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Ethyl acetate	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Ethylbenzene	1,200	1,600	J	ppbv	800	10/10/2012 3:43 PM
Heptane	7,300	800		ppbv	800	10/10/2012 3:43 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	10/10/2012 3:43 PM
m,p-Xylene	4,000	1,600		ppbv	800	10/10/2012 3:43 PM
Methylene chloride	ND	4,000	U	ppbv	800	10/10/2012 3:43 PM
n-Hexane	5,200	1,600		ppbv	800	10/10/2012 3:43 PM
Naphthalene	ND	800	U	ppbv	800	10/10/2012 3:43 PM
o-Xylene	1,200	800		ppbv	800	10/10/2012 3:43 PM
Propylene	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Styrene	ND	800	U	ppbv	800	10/10/2012 3:43 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Tetrachloroethene	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Tetrahydrofuran	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Toluene	22,000	800		ppbv	800	10/10/2012 3:43 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	10/10/2012 3:43 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Trichloroethene	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Vinyl acetate	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Vinyl chloride	ND	800	U	ppbv	800	10/10/2012 3:43 PM
Xylenes, Total	5,200	2,400		ppbv	800	10/10/2012 3:43 PM
Surr: 4-Bromofluorobenzene	99.1	70-130		%REC	800	10/10/2012 3:43 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	700,000	94,000		µg/m³	800	10/10/2012 11:32 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	10/10/2012 11:32 PM
C9-C12 Aliphatic Hydrocarbons	80,000	150,000	J	µg/m³	800	10/10/2012 11:32 PM
Surr: 4-Bromofluorobenzene	92.8	70-130		%REC	800	10/10/2012 11:32 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 1:19:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-011	**Matrix:**	Air
Client Sample ID:	VA1659		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	9.2	0.10		% v/v	1	10/16/2012 1:37 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/16/2012 1:37 PM
Methane	ND	0.50	U	% v/v	1	10/16/2012 1:37 PM
Nitrogen	85	0.10		% v/v	1	10/16/2012 1:37 PM
Oxygen	3.3	0.10		% v/v	1	10/16/2012 1:37 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
1,1,2,2-Tetrachloroethane	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
1,1,2-Trichloroethane	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
1,1-Dichloroethane	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
1,1-Dichloroethene	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
1,2,4-Trichlorobenzene	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
1,2,4-Trimethylbenzene	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
1,2-Dibromoethane	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
1,2-Dichlorobenzene	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
1,2-Dichloroethane	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
1,2-Dichloropropane	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
1,3,5-Trimethylbenzene	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
1,3-Butadiene	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
1,3-Dichlorobenzene	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
1,4-Dichlorobenzene	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
2-Butanone	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
2-Hexanone	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
4-Methyl-2-pentanone	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Acetone	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Benzene	360,000	40,000		ppbv	40000	10/10/2012 6:32 PM
Benzyl chloride	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Bromodichloromethane	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Bromoform	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Bromomethane	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Carbon disulfide	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Carbon tetrachloride	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Chlorobenzene	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Chlorodibromomethane	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Chloroethane	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Chloroform	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Chloromethane	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
cis-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
cis-1,3-dichloropropene	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 1:19:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-011	**Matrix:**	Air
Client Sample ID:	VA1659		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,200,000	80,000		ppbv	40000	10/10/2012 6:32 PM
Dichlorodifluoromethane	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Ethyl acetate	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Ethylbenzene	ND	80,000	U	ppbv	40000	10/10/2012 6:32 PM
Heptane	340,000	40,000		ppbv	40000	10/10/2012 6:32 PM
Hexachlorobutadiene	ND	80,000	U	ppbv	40000	10/10/2012 6:32 PM
m,p-Xylene	ND	80,000	U	ppbv	40000	10/10/2012 6:32 PM
Methylene chloride	ND	200,000	U	ppbv	40000	10/10/2012 6:32 PM
n-Hexane	990,000	80,000		ppbv	40000	10/10/2012 6:32 PM
Naphthalene	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
o-Xylene	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Propylene	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Styrene	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
tert-Butyl Methyl Ether	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Tetrachloroethene	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Tetrahydrofuran	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Toluene	250,000	40,000		ppbv	40000	10/10/2012 6:32 PM
trans-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
trans-1,3-dichloropropene	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Trichloroethene	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Trichlorofluoromethane	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Vinyl acetate	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Vinyl chloride	ND	40,000	U	ppbv	40000	10/10/2012 6:32 PM
Xylenes, Total	ND	120,000	U	ppbv	40000	10/10/2012 6:32 PM
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	40000	10/10/2012 6:32 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	33,000,000	4,700,000		µg/m³	40000	10/11/2012 12:16 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300,000	U	µg/m³	40000	10/11/2012 12:16 AM
C9-C12 Aliphatic Hydrocarbons	ND	7,600,000	U	µg/m³	40000	10/11/2012 12:16 AM
Surr: 4-Bromofluorobenzene	92.7	70-130		%REC	40000	10/11/2012 12:16 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 2:04:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-012	**Matrix:**	Air
Client Sample ID:	VA1660		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	7.4	0.10		% v/v	1	10/16/2012 1:54 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/16/2012 1:54 PM
Methane	ND	0.50	U	% v/v	1	10/16/2012 1:54 PM
Nitrogen	82	0.10		% v/v	1	10/16/2012 1:54 PM
Oxygen	9.7	0.10		% v/v	1	10/16/2012 1:54 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
2-Butanone	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
2-Hexanone	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Acetone	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Benzene	39,000	8,000		ppbv	8000	10/10/2012 7:14 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Bromoform	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Bromomethane	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Chloroethane	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Chloroform	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Chloromethane	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 2:04:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-012	**Matrix:**	Air
Client Sample ID:	VA1660		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	75,000	16,000		ppbv	8000	10/10/2012 7:14 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	10/10/2012 7:14 PM
Heptane	39,000	8,000		ppbv	8000	10/10/2012 7:14 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	10/10/2012 7:14 PM
m,p-Xylene	13,000	16,000	J	ppbv	8000	10/10/2012 7:14 PM
Methylene chloride	ND	40,000	U	ppbv	8000	10/10/2012 7:14 PM
n-Hexane	46,000	16,000		ppbv	8000	10/10/2012 7:14 PM
Naphthalene	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
o-Xylene	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Propylene	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Styrene	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Toluene	70,000	8,000		ppbv	8000	10/10/2012 7:14 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Trichloroethene	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	10/10/2012 7:14 PM
Xylenes, Total	13,000	24,000	J	ppbv	8000	10/10/2012 7:14 PM
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	8000	10/10/2012 7:14 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,000,000	940,000		µg/m³	8000	10/11/2012 1:46 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	10/11/2012 1:46 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	10/11/2012 1:46 AM
Surr: 4-Bromofluorobenzene	94.0	70-130		%REC	8000	10/11/2012 1:46 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 3:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-013	**Matrix:**	Air
Client Sample ID:	VA1661		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.71	0.10		% v/v	1	10/17/2012 11:18 AM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/17/2012 11:18 AM
Methane	ND	0.50	U	% v/v	1	10/17/2012 11:18 AM
Nitrogen	79	0.10		% v/v	1	10/17/2012 11:18 AM
Oxygen	19	0.10		% v/v	1	10/17/2012 11:18 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	10/10/2012 7:58 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	10/10/2012 7:58 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	10/10/2012 7:58 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	10/10/2012 7:58 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	10/10/2012 7:58 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	10/10/2012 7:58 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	10/10/2012 7:58 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	10/10/2012 7:58 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	10/10/2012 7:58 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	10/10/2012 7:58 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	10/10/2012 7:58 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	10/10/2012 7:58 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	10/10/2012 7:58 PM
1,3-Butadiene	ND	800	U	ppbv	800	10/10/2012 7:58 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	10/10/2012 7:58 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	10/10/2012 7:58 PM
2-Butanone	ND	800	U	ppbv	800	10/10/2012 7:58 PM
2-Hexanone	ND	800	U	ppbv	800	10/10/2012 7:58 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Acetone	860	800		ppbv	800	10/10/2012 7:58 PM
Benzene	20,000	800		ppbv	800	10/10/2012 7:58 PM
Benzyl chloride	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Bromodichloromethane	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Bromoform	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Bromomethane	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Carbon disulfide	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Carbon tetrachloride	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Chlorobenzene	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Chlorodibromomethane	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Chloroethane	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Chloroform	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Chloromethane	ND	800	U	ppbv	800	10/10/2012 7:58 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	10/10/2012 7:58 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	10/10/2012 7:58 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 3:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-013	**Matrix:**	Air
Client Sample ID:	VA1661		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	37,000	1,600		ppbv	800	10/10/2012 7:58 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Ethyl acetate	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Ethylbenzene	1,800	1,600		ppbv	800	10/10/2012 7:58 PM
Heptane	19,000	800		ppbv	800	10/10/2012 7:58 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	10/10/2012 7:58 PM
m,p-Xylene	4,600	1,600		ppbv	800	10/10/2012 7:58 PM
Methylene chloride	ND	4,000	U	ppbv	800	10/10/2012 7:58 PM
n-Hexane	24,000	1,600		ppbv	800	10/10/2012 7:58 PM
Naphthalene	ND	800	U	ppbv	800	10/10/2012 7:58 PM
o-Xylene	1,500	800		ppbv	800	10/10/2012 7:58 PM
Propylene	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Styrene	ND	800	U	ppbv	800	10/10/2012 7:58 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Tetrachloroethene	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Tetrahydrofuran	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Toluene	25,000	800		ppbv	800	10/10/2012 7:58 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	10/10/2012 7:58 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Trichloroethene	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Vinyl acetate	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Vinyl chloride	ND	800	U	ppbv	800	10/10/2012 7:58 PM
Xylenes, Total	6,100	2,400		ppbv	800	10/10/2012 7:58 PM
Surr: 4-Bromofluorobenzene	99.8	70-130		%REC	800	10/10/2012 7:58 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,400,000	190,000		µg/m³	1600	10/11/2012 2:30 AM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	10/11/2012 2:30 AM
C9-C12 Aliphatic Hydrocarbons	81,000	300,000	J	µg/m³	1600	10/11/2012 2:30 AM
Surr: 4-Bromofluorobenzene	95.2	70-130		%REC	1600	10/11/2012 2:30 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 11:11:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-014	**Matrix:**	Air
Client Sample ID:	VA1686		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.17	0.10		% v/v	1	10/16/2012 11:38 AM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/16/2012 11:38 AM
Methane	ND	0.50	U	% v/v	1	10/16/2012 11:38 AM
Nitrogen	80	0.10		% v/v	1	10/16/2012 11:38 AM
Oxygen	20	0.10		% v/v	1	10/16/2012 11:38 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/10/2012 5:09 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/10/2012 5:09 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	76	40		ppbv	40	10/10/2012 5:09 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/10/2012 5:09 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/10/2012 5:09 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/10/2012 5:09 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/10/2012 5:09 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	10/10/2012 5:09 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/10/2012 5:09 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/10/2012 5:09 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/10/2012 5:09 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/10/2012 5:09 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	10/10/2012 5:09 PM
1,3-Butadiene	ND	40	U	ppbv	40	10/10/2012 5:09 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/10/2012 5:09 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/10/2012 5:09 PM
2-Butanone	ND	40	U	ppbv	40	10/10/2012 5:09 PM
2-Hexanone	ND	40	U	ppbv	40	10/10/2012 5:09 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Acetone	44	40		ppbv	40	10/10/2012 5:09 PM
Benzene	510	40		ppbv	40	10/10/2012 5:09 PM
Benzyl chloride	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Bromodichloromethane	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Bromoform	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Bromomethane	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Carbon disulfide	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Carbon tetrachloride	84	40		ppbv	40	10/10/2012 5:09 PM
Chlorobenzene	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Chlorodibromomethane	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Chloroethane	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Chloroform	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Chloromethane	ND	40	U	ppbv	40	10/10/2012 5:09 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/10/2012 5:09 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/10/2012 5:09 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 11:11:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-014	**Matrix:**	Air
Client Sample ID:	VA1686		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,000	80		ppbv	40	10/10/2012 5:09 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Ethyl acetate	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Ethylbenzene	75	80	J	ppbv	40	10/10/2012 5:09 PM
Heptane	820	40		ppbv	40	10/10/2012 5:09 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/10/2012 5:09 PM
m,p-Xylene	250	80		ppbv	40	10/10/2012 5:09 PM
Methylene chloride	ND	200	U	ppbv	40	10/10/2012 5:09 PM
n-Hexane	850	80		ppbv	40	10/10/2012 5:09 PM
Naphthalene	ND	40	U	ppbv	40	10/10/2012 5:09 PM
o-Xylene	79	40		ppbv	40	10/10/2012 5:09 PM
Propylene	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Styrene	ND	40	U	ppbv	40	10/10/2012 5:09 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Tetrachloroethene	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Tetrahydrofuran	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Toluene	1,400	40		ppbv	40	10/10/2012 5:09 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/10/2012 5:09 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Trichloroethene	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Vinyl acetate	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Vinyl chloride	ND	40	U	ppbv	40	10/10/2012 5:09 PM
Xylenes, Total	330	120		ppbv	40	10/10/2012 5:09 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	40	10/10/2012 5:09 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	36,000	4,700		µg/m³	40	10/11/2012 3:16 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	10/11/2012 3:16 AM
C9-C12 Aliphatic Hydrocarbons	3,900	7,600	J	µg/m³	40	10/11/2012 3:16 AM
Surr: 4-Bromofluorobenzene	96.2	70-130		%REC	40	10/11/2012 3:16 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 11:49:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-015	**Matrix:**	Air
Client Sample ID:	VA1687		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.16	0.10		% v/v	1	10/16/2012 11:53 AM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/16/2012 11:53 AM
Methane	ND	0.50	U	% v/v	1	10/16/2012 11:53 AM
Nitrogen	79	0.10		% v/v	1	10/16/2012 11:53 AM
Oxygen	20	0.10		% v/v	1	10/16/2012 11:53 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/10/2012 5:50 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/10/2012 5:50 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	64	40		ppbv	40	10/10/2012 5:50 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/10/2012 5:50 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/10/2012 5:50 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/10/2012 5:50 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/10/2012 5:50 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	10/10/2012 5:50 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/10/2012 5:50 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/10/2012 5:50 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/10/2012 5:50 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/10/2012 5:50 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	10/10/2012 5:50 PM
1,3-Butadiene	ND	40	U	ppbv	40	10/10/2012 5:50 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/10/2012 5:50 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/10/2012 5:50 PM
2-Butanone	ND	40	U	ppbv	40	10/10/2012 5:50 PM
2-Hexanone	ND	40	U	ppbv	40	10/10/2012 5:50 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Acetone	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Benzene	840	40		ppbv	40	10/10/2012 5:50 PM
Benzyl chloride	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Bromodichloromethane	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Bromoform	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Bromomethane	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Carbon disulfide	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Carbon tetrachloride	120	40		ppbv	40	10/10/2012 5:50 PM
Chlorobenzene	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Chlorodibromomethane	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Chloroethane	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Chloroform	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Chloromethane	ND	40	U	ppbv	40	10/10/2012 5:50 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/10/2012 5:50 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/10/2012 5:50 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 11:49:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-015	**Matrix:**	Air
Client Sample ID:	VA1687		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,000	80		ppbv	40	10/10/2012 5:50 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Ethyl acetate	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Ethylbenzene	70	80	J	ppbv	40	10/10/2012 5:50 PM
Heptane	800	40		ppbv	40	10/10/2012 5:50 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/10/2012 5:50 PM
m,p-Xylene	230	80		ppbv	40	10/10/2012 5:50 PM
Methylene chloride	ND	200	U	ppbv	40	10/10/2012 5:50 PM
n-Hexane	750	80		ppbv	40	10/10/2012 5:50 PM
Naphthalene	ND	40	U	ppbv	40	10/10/2012 5:50 PM
o-Xylene	75	40		ppbv	40	10/10/2012 5:50 PM
Propylene	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Styrene	ND	40	U	ppbv	40	10/10/2012 5:50 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Tetrachloroethene	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Tetrahydrofuran	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Toluene	1,500	40		ppbv	40	10/10/2012 5:50 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/10/2012 5:50 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Trichloroethene	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Vinyl acetate	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Vinyl chloride	ND	40	U	ppbv	40	10/10/2012 5:50 PM
Xylenes, Total	310	120		ppbv	40	10/10/2012 5:50 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	40	10/10/2012 5:50 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	39,000	4,700		µg/m³	40	10/11/2012 3:59 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	10/11/2012 3:59 AM
C9-C12 Aliphatic Hydrocarbons	3,400	7,600	J	µg/m³	40	10/11/2012 3:59 AM
Surr: 4-Bromofluorobenzene	95.5	70-130		%REC	40	10/11/2012 3:59 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 12:31:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-016	**Matrix:**	Air
Client Sample ID:	VA1688		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.097	0.10	J	% v/v	1	10/16/2012 12:08 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/16/2012 12:08 PM
Methane	ND	0.50	U	% v/v	1	10/16/2012 12:08 PM
Nitrogen	78	0.10		% v/v	1	10/16/2012 12:08 PM
Oxygen	21	0.10		% v/v	1	10/16/2012 12:08 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/6/2012 1:55 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/6/2012 1:55 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	10/6/2012 1:55 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/6/2012 1:55 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/6/2012 1:55 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/6/2012 1:55 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/6/2012 1:55 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	10/6/2012 1:55 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/6/2012 1:55 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/6/2012 1:55 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/6/2012 1:55 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/6/2012 1:55 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	10/6/2012 1:55 AM
1,3-Butadiene	ND	40	U	ppbv	40	10/6/2012 1:55 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/6/2012 1:55 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/6/2012 1:55 AM
2-Butanone	ND	40	U	ppbv	40	10/6/2012 1:55 AM
2-Hexanone	ND	40	U	ppbv	40	10/6/2012 1:55 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Acetone	44	40		ppbv	40	10/6/2012 1:55 AM
Benzene	420	40		ppbv	40	10/6/2012 1:55 AM
Benzyl chloride	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Bromodichloromethane	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Bromoform	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Bromomethane	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Carbon disulfide	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Carbon tetrachloride	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Chlorobenzene	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Chlorodibromomethane	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Chloroethane	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Chloroform	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Chloromethane	ND	40	U	ppbv	40	10/6/2012 1:55 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/6/2012 1:55 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/6/2012 1:55 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 12:31:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-016	**Matrix:**	Air
Client Sample ID:	VA1688		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	900	80		ppbv	40	10/6/2012 1:55 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Ethyl acetate	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Ethylbenzene	60	80	J	ppbv	40	10/6/2012 1:55 AM
Heptane	760	40		ppbv	40	10/6/2012 1:55 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/6/2012 1:55 AM
m,p-Xylene	200	80		ppbv	40	10/6/2012 1:55 AM
Methylene chloride	ND	200	U	ppbv	40	10/6/2012 1:55 AM
n-Hexane	630	80		ppbv	40	10/6/2012 1:55 AM
Naphthalene	ND	40	U	ppbv	40	10/6/2012 1:55 AM
o-Xylene	62	40		ppbv	40	10/6/2012 1:55 AM
Propylene	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Styrene	ND	40	U	ppbv	40	10/6/2012 1:55 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Tetrachloroethene	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Tetrahydrofuran	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Toluene	1,300	40		ppbv	40	10/6/2012 1:55 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/6/2012 1:55 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Trichloroethene	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Vinyl acetate	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Vinyl chloride	ND	40	U	ppbv	40	10/6/2012 1:55 AM
Xylenes, Total	260	120		ppbv	40	10/6/2012 1:55 AM
Surr: 4-Bromofluorobenzene	99.4	70-130		%REC	40	10/6/2012 1:55 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	37,000	4,700		µg/m³	40	10/11/2012 4:45 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	10/11/2012 4:45 AM
C9-C12 Aliphatic Hydrocarbons	2,700	7,600	J	µg/m³	40	10/11/2012 4:45 AM
Surr: 4-Bromofluorobenzene	95.6	70-130		%REC	40	10/11/2012 4:45 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 1:16:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-017	**Matrix:**	Air
Client Sample ID:	VA1689		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.80	0.10		% v/v	1	10/16/2012 12:22 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/16/2012 12:22 PM
Methane	ND	0.50	U	% v/v	1	10/16/2012 12:22 PM
Nitrogen	81	0.10		% v/v	1	10/16/2012 12:22 PM
Oxygen	16	0.10		% v/v	1	10/16/2012 12:22 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/6/2012 2:36 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/6/2012 2:36 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	10/6/2012 2:36 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/6/2012 2:36 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/6/2012 2:36 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/6/2012 2:36 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/6/2012 2:36 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	10/6/2012 2:36 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/6/2012 2:36 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/6/2012 2:36 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/6/2012 2:36 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/6/2012 2:36 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	10/6/2012 2:36 AM
1,3-Butadiene	ND	40	U	ppbv	40	10/6/2012 2:36 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/6/2012 2:36 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/6/2012 2:36 AM
2-Butanone	ND	40	U	ppbv	40	10/6/2012 2:36 AM
2-Hexanone	ND	40	U	ppbv	40	10/6/2012 2:36 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Acetone	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Benzene	200	40		ppbv	40	10/6/2012 2:36 AM
Benzyl chloride	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Bromodichloromethane	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Bromoform	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Bromomethane	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Carbon disulfide	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Carbon tetrachloride	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Chlorobenzene	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Chlorodibromomethane	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Chloroethane	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Chloroform	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Chloromethane	ND	40	U	ppbv	40	10/6/2012 2:36 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/6/2012 2:36 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/6/2012 2:36 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 1:16:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-017	**Matrix:**	Air
Client Sample ID:	VA1689		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	440	80		ppbv	40	10/6/2012 2:36 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Ethyl acetate	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Ethylbenzene	ND	80	U	ppbv	40	10/6/2012 2:36 AM
Heptane	330	40		ppbv	40	10/6/2012 2:36 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/6/2012 2:36 AM
m,p-Xylene	94	80		ppbv	40	10/6/2012 2:36 AM
Methylene chloride	ND	200	U	ppbv	40	10/6/2012 2:36 AM
n-Hexane	320	80		ppbv	40	10/6/2012 2:36 AM
Naphthalene	ND	40	U	ppbv	40	10/6/2012 2:36 AM
o-Xylene	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Propylene	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Styrene	ND	40	U	ppbv	40	10/6/2012 2:36 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Tetrachloroethene	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Tetrahydrofuran	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Toluene	520	40		ppbv	40	10/6/2012 2:36 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/6/2012 2:36 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Trichloroethene	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Vinyl acetate	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Vinyl chloride	ND	40	U	ppbv	40	10/6/2012 2:36 AM
Xylenes, Total	94	120	J	ppbv	40	10/6/2012 2:36 AM
Surr: 4-Bromofluorobenzene	98.1	70-130		%REC	40	10/6/2012 2:36 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	24,000	4,700		µg/m³	40	10/11/2012 6:16 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	10/11/2012 6:16 AM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	10/11/2012 6:16 AM
Surr: 4-Bromofluorobenzene	94.8	70-130		%REC	40	10/11/2012 6:16 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 3:23:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-018	**Matrix:**	Air
Client Sample ID:	VA1690		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.25	0.10		% v/v	1	10/16/2012 12:50 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/16/2012 12:50 PM
Methane	ND	0.50	U	% v/v	1	10/16/2012 12:50 PM
Nitrogen	81	0.10		% v/v	1	10/16/2012 12:50 PM
Oxygen	19	0.10		% v/v	1	10/16/2012 12:50 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/6/2012 3:17 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/6/2012 3:17 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	10/6/2012 3:17 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/6/2012 3:17 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/6/2012 3:17 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/6/2012 3:17 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/6/2012 3:17 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	10/6/2012 3:17 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/6/2012 3:17 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/6/2012 3:17 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/6/2012 3:17 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/6/2012 3:17 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	10/6/2012 3:17 AM
1,3-Butadiene	ND	40	U	ppbv	40	10/6/2012 3:17 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/6/2012 3:17 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/6/2012 3:17 AM
2-Butanone	ND	40	U	ppbv	40	10/6/2012 3:17 AM
2-Hexanone	ND	40	U	ppbv	40	10/6/2012 3:17 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Acetone	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Benzene	240	40		ppbv	40	10/6/2012 3:17 AM
Benzyl chloride	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Bromodichloromethane	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Bromoform	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Bromomethane	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Carbon disulfide	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Carbon tetrachloride	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Chlorobenzene	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Chlorodibromomethane	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Chloroethane	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Chloroform	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Chloromethane	ND	40	U	ppbv	40	10/6/2012 3:17 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/6/2012 3:17 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/6/2012 3:17 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 3:23:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-018	**Matrix:**	Air
Client Sample ID:	VA1690		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	560	80		ppbv	40	10/6/2012 3:17 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Ethyl acetate	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Ethylbenzene	ND	80	U	ppbv	40	10/6/2012 3:17 AM
Heptane	390	40		ppbv	40	10/6/2012 3:17 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/6/2012 3:17 AM
m,p-Xylene	94	80		ppbv	40	10/6/2012 3:17 AM
Methylene chloride	ND	200	U	ppbv	40	10/6/2012 3:17 AM
n-Hexane	410	80		ppbv	40	10/6/2012 3:17 AM
Naphthalene	ND	40	U	ppbv	40	10/6/2012 3:17 AM
o-Xylene	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Propylene	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Styrene	ND	40	U	ppbv	40	10/6/2012 3:17 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Tetrachloroethene	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Tetrahydrofuran	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Toluene	580	40		ppbv	40	10/6/2012 3:17 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/6/2012 3:17 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Trichloroethene	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Vinyl acetate	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Vinyl chloride	ND	40	U	ppbv	40	10/6/2012 3:17 AM
Xylenes, Total	94	120	J	ppbv	40	10/6/2012 3:17 AM
Surr: 4-Bromofluorobenzene	97.0	70-130		%REC	40	10/6/2012 3:17 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	29,000	4,700		µg/m³	40	10/11/2012 7:01 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	10/11/2012 7:01 AM
C9-C12 Aliphatic Hydrocarbons	2,100	7,600	J	µg/m³	40	10/11/2012 7:01 AM
Surr: 4-Bromofluorobenzene	95.1	70-130		%REC	40	10/11/2012 7:01 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 4:06:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-019	**Matrix:**	Air
Client Sample ID:	VA1691		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.35	0.10		% v/v	1	10/16/2012 1:08 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/16/2012 1:08 PM
Methane	ND	0.50	U	% v/v	1	10/16/2012 1:08 PM
Nitrogen	80	0.10		% v/v	1	10/16/2012 1:08 PM
Oxygen	19	0.10		% v/v	1	10/16/2012 1:08 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	10/6/2012 4:05 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	10/6/2012 4:05 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	10/6/2012 4:05 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	10/6/2012 4:05 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	10/6/2012 4:05 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	10/6/2012 4:05 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	10/6/2012 4:05 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	10/6/2012 4:05 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	10/6/2012 4:05 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	10/6/2012 4:05 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	10/6/2012 4:05 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	10/6/2012 4:05 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	10/6/2012 4:05 AM
1,3-Butadiene	ND	400	U	ppbv	400	10/6/2012 4:05 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	10/6/2012 4:05 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	10/6/2012 4:05 AM
2-Butanone	ND	400	U	ppbv	400	10/6/2012 4:05 AM
2-Hexanone	ND	400	U	ppbv	400	10/6/2012 4:05 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Acetone	450	400		ppbv	400	10/6/2012 4:05 AM
Benzene	1,300	400		ppbv	400	10/6/2012 4:05 AM
Benzyl chloride	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Bromodichloromethane	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Bromoform	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Bromomethane	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Carbon disulfide	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Carbon tetrachloride	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Chlorobenzene	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Chlorodibromomethane	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Chloroethane	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Chloroform	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Chloromethane	ND	400	U	ppbv	400	10/6/2012 4:05 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	10/6/2012 4:05 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	10/6/2012 4:05 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 4:06:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-019	**Matrix:**	Air
Client Sample ID:	VA1691		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,800	800		ppbv	400	10/6/2012 4:05 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Ethyl acetate	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Ethylbenzene	ND	800	U	ppbv	400	10/6/2012 4:05 AM
Heptane	700	400		ppbv	400	10/6/2012 4:05 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	10/6/2012 4:05 AM
m,p-Xylene	ND	800	U	ppbv	400	10/6/2012 4:05 AM
Methylene chloride	ND	2,000	U	ppbv	400	10/6/2012 4:05 AM
n-Hexane	2,000	800		ppbv	400	10/6/2012 4:05 AM
Naphthalene	ND	400	U	ppbv	400	10/6/2012 4:05 AM
o-Xylene	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Propylene	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Styrene	ND	400	U	ppbv	400	10/6/2012 4:05 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Tetrachloroethene	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Tetrahydrofuran	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Toluene	1,600	400		ppbv	400	10/6/2012 4:05 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	10/6/2012 4:05 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Trichloroethene	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Vinyl acetate	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Vinyl chloride	ND	400	U	ppbv	400	10/6/2012 4:05 AM
Xylenes, Total	ND	1,200	U	ppbv	400	10/6/2012 4:05 AM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	400	10/6/2012 4:05 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	210,000	47,000		µg/m³	400	10/11/2012 7:50 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	10/11/2012 7:50 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	10/11/2012 7:50 AM
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	400	10/11/2012 7:50 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 8:59:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-020	**Matrix:**	Air
Client Sample ID:	VA1692		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.45	0.10		% v/v	1	10/17/2012 11:38 AM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/17/2012 11:38 AM
Methane	ND	0.50	U	% v/v	1	10/17/2012 11:38 AM
Nitrogen	81	0.10		% v/v	1	10/17/2012 11:38 AM
Oxygen	17	0.10		% v/v	1	10/17/2012 11:38 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
2-Butanone	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
2-Hexanone	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Acetone	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Benzene	120,000	20,000		ppbv	20000	10/10/2012 8:40 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Bromoform	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Bromomethane	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Chloroethane	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Chloroform	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Chloromethane	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 8:59:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-020	**Matrix:**	Air
Client Sample ID:	VA1692		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	140,000	40,000		ppbv	20000	10/10/2012 8:40 PM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Ethylbenzene	ND	40,000	U	ppbv	20000	10/10/2012 8:40 PM
Heptane	49,000	20,000		ppbv	20000	10/10/2012 8:40 PM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	10/10/2012 8:40 PM
m,p-Xylene	ND	40,000	U	ppbv	20000	10/10/2012 8:40 PM
Methylene chloride	ND	100,000	U	ppbv	20000	10/10/2012 8:40 PM
n-Hexane	130,000	40,000		ppbv	20000	10/10/2012 8:40 PM
Naphthalene	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
o-Xylene	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Propylene	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Styrene	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Toluene	140,000	20,000		ppbv	20000	10/10/2012 8:40 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Trichloroethene	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	10/10/2012 8:40 PM
Xylenes, Total	ND	60,000	U	ppbv	20000	10/10/2012 8:40 PM
Surr: 4-Bromofluorobenzene	97.2	70-130		%REC	20000	10/10/2012 8:40 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	8,100,000	2,300,000		µg/m³	20000	10/11/2012 1:17 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	10/11/2012 1:17 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	10/11/2012 1:17 PM
Surr: 4-Bromofluorobenzene	93.4	70-130		%REC	20000	10/11/2012 1:17 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 9:42:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-021	**Matrix:**	Air
Client Sample ID:	VA1693		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
1,1,2,2-Tetrachloroethane	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
1,1,2-Trichloroethane	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
1,1-Dichloroethane	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
1,1-Dichloroethene	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
1,2,4-Trichlorobenzene	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
1,2,4-Trimethylbenzene	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
1,2-Dibromoethane	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
1,2-Dichlorobenzene	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
1,2-Dichloroethane	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
1,2-Dichloropropane	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
1,3,5-Trimethylbenzene	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
1,3-Butadiene	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
1,3-Dichlorobenzene	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
1,4-Dichlorobenzene	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
2-Butanone	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
2-Hexanone	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
4-Methyl-2-pentanone	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Acetone	4,300	1,600		ppbv	1600	10/6/2012 4:48 AM
Benzene	21,000	1,600		ppbv	1600	10/6/2012 4:48 AM
Benzyl chloride	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Bromodichloromethane	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Bromoform	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Bromomethane	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Carbon disulfide	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Carbon tetrachloride	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Chlorobenzene	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Chlorodibromomethane	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Chloroethane	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Chloroform	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Chloromethane	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
cis-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
cis-1,3-dichloropropene	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Cyclohexane	11,000	3,200		ppbv	1600	10/6/2012 4:48 AM
Dichlorodifluoromethane	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Ethyl acetate	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Ethylbenzene	ND	3,200	U	ppbv	1600	10/6/2012 4:48 AM
Heptane	7,700	1,600		ppbv	1600	10/6/2012 4:48 AM
Hexachlorobutadiene	ND	3,200	U	ppbv	1600	10/6/2012 4:48 AM
m,p-Xylene	ND	3,200	U	ppbv	1600	10/6/2012 4:48 AM
Methylene chloride	27,000	8,000		ppbv	1600	10/6/2012 4:48 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 9:42:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-021	**Matrix:**	Air
Client Sample ID:	VA1693		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
n-Hexane	22,000	3,200		ppbv	1600	10/6/2012 4:48 AM
Naphthalene	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
o-Xylene	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Propylene	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Styrene	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
tert-Butyl Methyl Ether	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Tetrachloroethene	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Tetrahydrofuran	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Toluene	22,000	1,600		ppbv	1600	10/6/2012 4:48 AM
trans-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
trans-1,3-dichloropropene	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Trichloroethene	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Trichlorofluoromethane	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Vinyl acetate	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Vinyl chloride	ND	1,600	U	ppbv	1600	10/6/2012 4:48 AM
Xylenes, Total	ND	4,800	U	ppbv	1600	10/6/2012 4:48 AM
Surr: 4-Bromofluorobenzene	97.9	70-130		%REC	1600	10/6/2012 4:48 AM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	840,000	190,000		µg/m³	1600	10/11/2012 2:02 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	10/11/2012 2:02 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	10/11/2012 2:02 PM
Surr: 4-Bromofluorobenzene	93.4	70-130		%REC	1600	10/11/2012 2:02 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 9:02:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-022	**Matrix:**	Air
Client Sample ID:	VA1694		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.098	0.10	J	% v/v	1	10/17/2012 11:54 AM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/17/2012 11:54 AM
Methane	ND	0.50	U	% v/v	1	10/17/2012 11:54 AM
Nitrogen	78	0.10		% v/v	1	10/17/2012 11:54 AM
Oxygen	21	0.10		% v/v	1	10/17/2012 11:54 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/6/2012 5:29 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/6/2012 5:29 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	10/6/2012 5:29 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/6/2012 5:29 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/6/2012 5:29 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/6/2012 5:29 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/6/2012 5:29 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	10/6/2012 5:29 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/6/2012 5:29 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/6/2012 5:29 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/6/2012 5:29 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/6/2012 5:29 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	10/6/2012 5:29 AM
1,3-Butadiene	ND	40	U	ppbv	40	10/6/2012 5:29 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/6/2012 5:29 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/6/2012 5:29 AM
2-Butanone	ND	40	U	ppbv	40	10/6/2012 5:29 AM
2-Hexanone	ND	40	U	ppbv	40	10/6/2012 5:29 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Acetone	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Benzene	85	40		ppbv	40	10/6/2012 5:29 AM
Benzyl chloride	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Bromodichloromethane	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Bromoform	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Bromomethane	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Carbon disulfide	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Carbon tetrachloride	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Chlorobenzene	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Chlorodibromomethane	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Chloroethane	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Chloroform	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Chloromethane	ND	40	U	ppbv	40	10/6/2012 5:29 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/6/2012 5:29 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/6/2012 5:29 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 9:02:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-022	**Matrix:**	Air
Client Sample ID:	VA1694		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	170	80		ppbv	40	10/6/2012 5:29 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Ethyl acetate	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Ethylbenzene	ND	80	U	ppbv	40	10/6/2012 5:29 AM
Heptane	96	40		ppbv	40	10/6/2012 5:29 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/6/2012 5:29 AM
m,p-Xylene	90	80		ppbv	40	10/6/2012 5:29 AM
Methylene chloride	ND	200	U	ppbv	40	10/6/2012 5:29 AM
n-Hexane	98	80		ppbv	40	10/6/2012 5:29 AM
Naphthalene	ND	40	U	ppbv	40	10/6/2012 5:29 AM
o-Xylene	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Propylene	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Styrene	ND	40	U	ppbv	40	10/6/2012 5:29 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Tetrachloroethene	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Tetrahydrofuran	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Toluene	300	40		ppbv	40	10/6/2012 5:29 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/6/2012 5:29 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Trichloroethene	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Vinyl acetate	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Vinyl chloride	ND	40	U	ppbv	40	10/6/2012 5:29 AM
Xylenes, Total	90	120	J	ppbv	40	10/6/2012 5:29 AM
Surr: 4-Bromofluorobenzene	96.4	70-130		%REC	40	10/6/2012 5:29 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	14,000	4,700		µg/m³	40	10/11/2012 3:40 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	10/11/2012 3:40 PM
C9-C12 Aliphatic Hydrocarbons	1,900	7,600	J	µg/m³	40	10/11/2012 3:40 PM
Surr: 4-Bromofluorobenzene	94.4	70-130		%REC	40	10/11/2012 3:40 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 9:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-023	**Matrix:**	Air
Client Sample ID:	VA1695		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.046	0.10	J	% v/v	1	10/17/2012 12:13 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/17/2012 12:13 PM
Methane	ND	0.50	U	% v/v	1	10/17/2012 12:13 PM
Nitrogen	78	0.10		% v/v	1	10/17/2012 12:13 PM
Oxygen	21	0.10		% v/v	1	10/17/2012 12:13 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	200	U	ppbv	200	10/8/2012 6:00 PM
1,1,2,2-Tetrachloroethane	ND	200	U	ppbv	200	10/8/2012 6:00 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	200	U	ppbv	200	10/8/2012 6:00 PM
1,1,2-Trichloroethane	ND	200	U	ppbv	200	10/8/2012 6:00 PM
1,1-Dichloroethane	ND	200	U	ppbv	200	10/8/2012 6:00 PM
1,1-Dichloroethene	ND	200	U	ppbv	200	10/8/2012 6:00 PM
1,2,4-Trichlorobenzene	ND	200	U	ppbv	200	10/8/2012 6:00 PM
1,2,4-Trimethylbenzene	ND	200	U	ppbv	200	10/8/2012 6:00 PM
1,2-Dibromoethane	ND	200	U	ppbv	200	10/8/2012 6:00 PM
1,2-Dichlorobenzene	ND	200	U	ppbv	200	10/8/2012 6:00 PM
1,2-Dichloroethane	ND	200	U	ppbv	200	10/8/2012 6:00 PM
1,2-Dichloropropane	ND	200	U	ppbv	200	10/8/2012 6:00 PM
1,3,5-Trimethylbenzene	ND	200	U	ppbv	200	10/8/2012 6:00 PM
1,3-Butadiene	ND	200	U	ppbv	200	10/8/2012 6:00 PM
1,3-Dichlorobenzene	ND	200	U	ppbv	200	10/8/2012 6:00 PM
1,4-Dichlorobenzene	ND	200	U	ppbv	200	10/8/2012 6:00 PM
2-Butanone	ND	200	U	ppbv	200	10/8/2012 6:00 PM
2-Hexanone	ND	200	U	ppbv	200	10/8/2012 6:00 PM
4-Methyl-2-pentanone	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Acetone	250	200		ppbv	200	10/8/2012 6:00 PM
Benzene	4,700	200		ppbv	200	10/8/2012 6:00 PM
Benzyl chloride	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Bromodichloromethane	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Bromoform	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Bromomethane	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Carbon disulfide	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Carbon tetrachloride	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Chlorobenzene	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Chlorodibromomethane	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Chloroethane	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Chloroform	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Chloromethane	ND	200	U	ppbv	200	10/8/2012 6:00 PM
cis-1,2-Dichloroethene	ND	200	U	ppbv	200	10/8/2012 6:00 PM
cis-1,3-dichloropropene	ND	200	U	ppbv	200	10/8/2012 6:00 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 9:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-023	**Matrix:**	Air
Client Sample ID:	VA1695		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	8,900	400		ppbv	200	10/8/2012 6:00 PM
Dichlorodifluoromethane	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Ethyl acetate	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Ethylbenzene	230	400	J	ppbv	200	10/8/2012 6:00 PM
Heptane	3,100	200		ppbv	200	10/8/2012 6:00 PM
Hexachlorobutadiene	ND	400	U	ppbv	200	10/8/2012 6:00 PM
m,p-Xylene	840	400		ppbv	200	10/8/2012 6:00 PM
Methylene chloride	ND	1,000	U	ppbv	200	10/8/2012 6:00 PM
n-Hexane	6,200	400		ppbv	200	10/8/2012 6:00 PM
Naphthalene	ND	200	U	ppbv	200	10/8/2012 6:00 PM
o-Xylene	260	200		ppbv	200	10/8/2012 6:00 PM
Propylene	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Styrene	ND	200	U	ppbv	200	10/8/2012 6:00 PM
tert-Butyl Methyl Ether	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Tetrachloroethene	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Tetrahydrofuran	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Toluene	7,800	200		ppbv	200	10/8/2012 6:00 PM
trans-1,2-Dichloroethene	ND	200	U	ppbv	200	10/8/2012 6:00 PM
trans-1,3-dichloropropene	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Trichloroethene	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Trichlorofluoromethane	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Vinyl acetate	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Vinyl chloride	ND	200	U	ppbv	200	10/8/2012 6:00 PM
Xylenes, Total	1,100	600		ppbv	200	10/8/2012 6:00 PM
Surr: 4-Bromofluorobenzene	98.0	70-130		%REC	200	10/8/2012 6:00 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	73,000	23,000		µg/m³	200	10/11/2012 4:29 PM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	10/11/2012 4:29 PM
C9-C12 Aliphatic Hydrocarbons	6,600	38,000	J	µg/m³	200	10/11/2012 4:29 PM
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	200	10/11/2012 4:29 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 9:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-024	**Matrix:**	Air
Client Sample ID:	VA1696		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.13	0.10		% v/v	1	10/17/2012 12:33 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/17/2012 12:33 PM
Methane	ND	0.50	U	% v/v	1	10/17/2012 12:33 PM
Nitrogen	78	0.10		% v/v	1	10/17/2012 12:33 PM
Oxygen	21	0.10		% v/v	1	10/17/2012 12:33 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	200	U	ppbv	200	10/8/2012 6:54 PM
1,1,2,2-Tetrachloroethane	ND	200	U	ppbv	200	10/8/2012 6:54 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	200	U	ppbv	200	10/8/2012 6:54 PM
1,1,2-Trichloroethane	ND	200	U	ppbv	200	10/8/2012 6:54 PM
1,1-Dichloroethane	ND	200	U	ppbv	200	10/8/2012 6:54 PM
1,1-Dichloroethene	ND	200	U	ppbv	200	10/8/2012 6:54 PM
1,2,4-Trichlorobenzene	ND	200	U	ppbv	200	10/8/2012 6:54 PM
1,2,4-Trimethylbenzene	ND	200	U	ppbv	200	10/8/2012 6:54 PM
1,2-Dibromoethane	ND	200	U	ppbv	200	10/8/2012 6:54 PM
1,2-Dichlorobenzene	ND	200	U	ppbv	200	10/8/2012 6:54 PM
1,2-Dichloroethane	ND	200	U	ppbv	200	10/8/2012 6:54 PM
1,2-Dichloropropane	ND	200	U	ppbv	200	10/8/2012 6:54 PM
1,3,5-Trimethylbenzene	ND	200	U	ppbv	200	10/8/2012 6:54 PM
1,3-Butadiene	ND	200	U	ppbv	200	10/8/2012 6:54 PM
1,3-Dichlorobenzene	ND	200	U	ppbv	200	10/8/2012 6:54 PM
1,4-Dichlorobenzene	ND	200	U	ppbv	200	10/8/2012 6:54 PM
2-Butanone	ND	200	U	ppbv	200	10/8/2012 6:54 PM
2-Hexanone	ND	200	U	ppbv	200	10/8/2012 6:54 PM
4-Methyl-2-pentanone	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Acetone	750	200		ppbv	200	10/8/2012 6:54 PM
Benzene	1,300	200		ppbv	200	10/8/2012 6:54 PM
Benzyl chloride	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Bromodichloromethane	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Bromoform	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Bromomethane	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Carbon disulfide	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Carbon tetrachloride	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Chlorobenzene	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Chlorodibromomethane	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Chloroethane	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Chloroform	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Chloromethane	ND	200	U	ppbv	200	10/8/2012 6:54 PM
cis-1,2-Dichloroethene	ND	200	U	ppbv	200	10/8/2012 6:54 PM
cis-1,3-dichloropropene	ND	200	U	ppbv	200	10/8/2012 6:54 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 9:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-024	**Matrix:**	Air
Client Sample ID:	VA1696		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,200	400		ppbv	200	10/8/2012 6:54 PM
Dichlorodifluoromethane	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Ethyl acetate	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Ethylbenzene	260	400	J	ppbv	200	10/8/2012 6:54 PM
Heptane	1,900	200		ppbv	200	10/8/2012 6:54 PM
Hexachlorobutadiene	ND	400	U	ppbv	200	10/8/2012 6:54 PM
m,p-Xylene	780	400		ppbv	200	10/8/2012 6:54 PM
Methylene chloride	440	1,000	J	ppbv	200	10/8/2012 6:54 PM
n-Hexane	1,000	400		ppbv	200	10/8/2012 6:54 PM
Naphthalene	ND	200	U	ppbv	200	10/8/2012 6:54 PM
o-Xylene	240	200		ppbv	200	10/8/2012 6:54 PM
Propylene	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Styrene	ND	200	U	ppbv	200	10/8/2012 6:54 PM
tert-Butyl Methyl Ether	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Tetrachloroethene	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Tetrahydrofuran	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Toluene	4,600	200		ppbv	200	10/8/2012 6:54 PM
trans-1,2-Dichloroethene	ND	200	U	ppbv	200	10/8/2012 6:54 PM
trans-1,3-dichloropropene	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Trichloroethene	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Trichlorofluoromethane	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Vinyl acetate	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Vinyl chloride	ND	200	U	ppbv	200	10/8/2012 6:54 PM
Xylenes, Total	1,000	600		ppbv	200	10/8/2012 6:54 PM
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	200	10/8/2012 6:54 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	110,000	23,000		µg/m³	200	10/11/2012 5:19 PM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	10/11/2012 5:19 PM
C9-C12 Aliphatic Hydrocarbons	24,000	38,000	J	µg/m³	200	10/11/2012 5:19 PM
Surr: 4-Bromofluorobenzene	97.5	70-130		%REC	200	10/11/2012 5:19 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 10:41:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-025	**Matrix:**	Air
Client Sample ID:	VA1697		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.079	0.10	J	% v/v	1	10/17/2012 12:48 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/17/2012 12:48 PM
Methane	ND	0.50	U	% v/v	1	10/17/2012 12:48 PM
Nitrogen	78	0.10		% v/v	1	10/17/2012 12:48 PM
Oxygen	21	0.10		% v/v	1	10/17/2012 12:48 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/8/2012 7:36 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/8/2012 7:36 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	10/8/2012 7:36 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/8/2012 7:36 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/8/2012 7:36 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/8/2012 7:36 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/8/2012 7:36 PM
1,2,4-Trimethylbenzene	40	40		ppbv	40	10/8/2012 7:36 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/8/2012 7:36 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/8/2012 7:36 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/8/2012 7:36 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/8/2012 7:36 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	10/8/2012 7:36 PM
1,3-Butadiene	ND	40	U	ppbv	40	10/8/2012 7:36 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/8/2012 7:36 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/8/2012 7:36 PM
2-Butanone	ND	40	U	ppbv	40	10/8/2012 7:36 PM
2-Hexanone	ND	40	U	ppbv	40	10/8/2012 7:36 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Acetone	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Benzene	170	40		ppbv	40	10/8/2012 7:36 PM
Benzyl chloride	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Bromodichloromethane	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Bromoform	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Bromomethane	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Carbon disulfide	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Carbon tetrachloride	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Chlorobenzene	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Chlorodibromomethane	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Chloroethane	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Chloroform	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Chloromethane	ND	40	U	ppbv	40	10/8/2012 7:36 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/8/2012 7:36 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/8/2012 7:36 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 10:41:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-025	**Matrix:**	Air
Client Sample ID:	VA1697		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	260	80		ppbv	40	10/8/2012 7:36 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Ethyl acetate	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Ethylbenzene	92	80		ppbv	40	10/8/2012 7:36 PM
Heptane	200	40		ppbv	40	10/8/2012 7:36 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/8/2012 7:36 PM
m,p-Xylene	310	80		ppbv	40	10/8/2012 7:36 PM
Methylene chloride	ND	200	U	ppbv	40	10/8/2012 7:36 PM
n-Hexane	90	80		ppbv	40	10/8/2012 7:36 PM
Naphthalene	ND	40	U	ppbv	40	10/8/2012 7:36 PM
o-Xylene	110	40		ppbv	40	10/8/2012 7:36 PM
Propylene	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Styrene	ND	40	U	ppbv	40	10/8/2012 7:36 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Tetrachloroethene	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Tetrahydrofuran	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Toluene	840	40		ppbv	40	10/8/2012 7:36 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/8/2012 7:36 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Trichloroethene	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Vinyl acetate	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Vinyl chloride	ND	40	U	ppbv	40	10/8/2012 7:36 PM
Xylenes, Total	420	120		ppbv	40	10/8/2012 7:36 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	40	10/8/2012 7:36 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	12,000	4,700		µg/m³	40	10/11/2012 6:03 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	10/11/2012 6:03 PM
C9-C12 Aliphatic Hydrocarbons	5,200	7,600	J	µg/m³	40	10/11/2012 6:03 PM
Surr: 4-Bromofluorobenzene	95.3	70-130		%REC	40	10/11/2012 6:03 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 11:33:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-026	**Matrix:**	Air
Client Sample ID:	VA1698		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.41	0.10		% v/v	1	10/17/2012 1:14 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/17/2012 1:14 PM
Methane	ND	0.50	U	% v/v	1	10/17/2012 1:14 PM
Nitrogen	79	0.10		% v/v	1	10/17/2012 1:14 PM
Oxygen	20	0.10		% v/v	1	10/17/2012 1:14 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/8/2012 8:18 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/8/2012 8:18 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	10/8/2012 8:18 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/8/2012 8:18 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/8/2012 8:18 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/8/2012 8:18 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/8/2012 8:18 PM
1,2,4-Trimethylbenzene	50	40		ppbv	40	10/8/2012 8:18 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/8/2012 8:18 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/8/2012 8:18 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/8/2012 8:18 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/8/2012 8:18 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	10/8/2012 8:18 PM
1,3-Butadiene	ND	40	U	ppbv	40	10/8/2012 8:18 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/8/2012 8:18 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/8/2012 8:18 PM
2-Butanone	ND	40	U	ppbv	40	10/8/2012 8:18 PM
2-Hexanone	ND	40	U	ppbv	40	10/8/2012 8:18 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Acetone	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Benzene	230	40		ppbv	40	10/8/2012 8:18 PM
Benzyl chloride	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Bromodichloromethane	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Bromoform	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Bromomethane	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Carbon disulfide	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Carbon tetrachloride	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Chlorobenzene	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Chlorodibromomethane	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Chloroethane	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Chloroform	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Chloromethane	ND	40	U	ppbv	40	10/8/2012 8:18 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/8/2012 8:18 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/8/2012 8:18 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 11:33:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-026	**Matrix:**	Air
Client Sample ID:	VA1698		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	370	80		ppbv	40	10/8/2012 8:18 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Ethyl acetate	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Ethylbenzene	160	80		ppbv	40	10/8/2012 8:18 PM
Heptane	330	40		ppbv	40	10/8/2012 8:18 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/8/2012 8:18 PM
m,p-Xylene	490	80		ppbv	40	10/8/2012 8:18 PM
Methylene chloride	ND	200	U	ppbv	40	10/8/2012 8:18 PM
n-Hexane	130	80		ppbv	40	10/8/2012 8:18 PM
Naphthalene	ND	40	U	ppbv	40	10/8/2012 8:18 PM
o-Xylene	170	40		ppbv	40	10/8/2012 8:18 PM
Propylene	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Styrene	ND	40	U	ppbv	40	10/8/2012 8:18 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Tetrachloroethene	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Tetrahydrofuran	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Toluene	1,200	40		ppbv	40	10/8/2012 8:18 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/8/2012 8:18 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Trichloroethene	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Vinyl acetate	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Vinyl chloride	ND	40	U	ppbv	40	10/8/2012 8:18 PM
Xylenes, Total	660	120		ppbv	40	10/8/2012 8:18 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	40	10/8/2012 8:18 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	14,000	4,700		µg/m³	40	10/11/2012 7:34 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	10/11/2012 7:34 PM
C9-C12 Aliphatic Hydrocarbons	3,000	7,600	J	µg/m³	40	10/11/2012 7:34 PM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	40	10/11/2012 7:34 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 10:33:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-027	**Matrix:**	Air
Client Sample ID:	VA1699		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.68	0.10		% v/v	1	10/17/2012 1:29 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/17/2012 1:29 PM
Methane	ND	0.50	U	% v/v	1	10/17/2012 1:29 PM
Nitrogen	78	0.10		% v/v	1	10/17/2012 1:29 PM
Oxygen	19	0.10		% v/v	1	10/17/2012 1:29 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
1,1,2,2-Tetrachloroethane	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
1,1,2-Trichloroethane	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
1,1-Dichloroethane	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
1,1-Dichloroethene	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
1,2,4-Trichlorobenzene	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
1,2,4-Trimethylbenzene	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
1,2-Dibromoethane	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
1,2-Dichlorobenzene	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
1,2-Dichloroethane	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
1,2-Dichloropropane	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
1,3,5-Trimethylbenzene	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
1,3-Butadiene	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
1,3-Dichlorobenzene	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
1,4-Dichlorobenzene	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
2-Butanone	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
2-Hexanone	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
4-Methyl-2-pentanone	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Acetone	190,000	40,000		ppbv	40000	10/8/2012 1:02 PM
Benzene	81,000	40,000		ppbv	40000	10/8/2012 1:02 PM
Benzyl chloride	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Bromodichloromethane	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Bromoform	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Bromomethane	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Carbon disulfide	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Carbon tetrachloride	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Chlorobenzene	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Chlorodibromomethane	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Chloroethane	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Chloroform	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Chloromethane	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
cis-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
cis-1,3-dichloropropene	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 10:33:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-027	**Matrix:**	Air
Client Sample ID:	VA1699		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	280,000	80,000		ppbv	40000	10/8/2012 1:02 PM
Dichlorodifluoromethane	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Ethyl acetate	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Ethylbenzene	ND	80,000	U	ppbv	40000	10/8/2012 1:02 PM
Heptane	450,000	40,000		ppbv	40000	10/8/2012 1:02 PM
Hexachlorobutadiene	ND	80,000	U	ppbv	40000	10/8/2012 1:02 PM
m,p-Xylene	ND	80,000	U	ppbv	40000	10/8/2012 1:02 PM
Methylene chloride	ND	200,000	U	ppbv	40000	10/8/2012 1:02 PM
n-Hexane	150,000	80,000		ppbv	40000	10/8/2012 1:02 PM
Naphthalene	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
o-Xylene	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Propylene	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Styrene	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
tert-Butyl Methyl Ether	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Tetrachloroethene	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Tetrahydrofuran	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Toluene	300,000	40,000		ppbv	40000	10/8/2012 1:02 PM
trans-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
trans-1,3-dichloropropene	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Trichloroethene	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Trichlorofluoromethane	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Vinyl acetate	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Vinyl chloride	ND	40,000	U	ppbv	40000	10/8/2012 1:02 PM
Xylenes, Total	ND	120,000	U	ppbv	40000	10/8/2012 1:02 PM
Surr: 4-Bromofluorobenzene	96.8	70-130		%REC	40000	10/8/2012 1:02 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	20,000,000	4,700,000		µg/m³	40000	10/11/2012 9:01 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300,000	U	µg/m³	40000	10/11/2012 9:01 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600,000	U	µg/m³	40000	10/11/2012 9:01 PM
Surr: 4-Bromofluorobenzene	94.3	70-130		%REC	40000	10/11/2012 9:01 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 10:33:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-028	**Matrix:**	Air
Client Sample ID:	VA1700		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.48	0.10		% v/v	1	10/17/2012 1:49 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/17/2012 1:49 PM
Methane	ND	0.50	U	% v/v	1	10/17/2012 1:49 PM
Nitrogen	78	0.10		% v/v	1	10/17/2012 1:49 PM
Oxygen	20	0.10		% v/v	1	10/17/2012 1:49 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
1,1,2,2-Tetrachloroethane	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
1,1,2-Trichloroethane	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
1,1-Dichloroethane	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
1,1-Dichloroethene	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
1,2,4-Trichlorobenzene	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
1,2,4-Trimethylbenzene	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
1,2-Dibromoethane	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
1,2-Dichlorobenzene	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
1,2-Dichloroethane	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
1,2-Dichloropropane	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
1,3,5-Trimethylbenzene	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
1,3-Butadiene	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
1,3-Dichlorobenzene	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
1,4-Dichlorobenzene	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
2-Butanone	71,000	40,000		ppbv	40000	10/8/2012 1:43 PM
2-Hexanone	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
4-Methyl-2-pentanone	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Acetone	480,000	40,000		ppbv	40000	10/8/2012 1:43 PM
Benzene	160,000	40,000		ppbv	40000	10/8/2012 1:43 PM
Benzyl chloride	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Bromodichloromethane	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Bromoform	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Bromomethane	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Carbon disulfide	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Carbon tetrachloride	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Chlorobenzene	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Chlorodibromomethane	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Chloroethane	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Chloroform	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Chloromethane	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
cis-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
cis-1,3-dichloropropene	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 10:33:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-028	**Matrix:**	Air
Client Sample ID:	VA1700		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	690,000	80,000		ppbv	40000	10/8/2012 1:43 PM
Dichlorodifluoromethane	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Ethyl acetate	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Ethylbenzene	ND	80,000	U	ppbv	40000	10/8/2012 1:43 PM
Heptane	810,000	40,000		ppbv	40000	10/8/2012 1:43 PM
Hexachlorobutadiene	ND	80,000	U	ppbv	40000	10/8/2012 1:43 PM
m,p-Xylene	42,000	80,000	J	ppbv	40000	10/8/2012 1:43 PM
Methylene chloride	ND	200,000	U	ppbv	40000	10/8/2012 1:43 PM
n-Hexane	440,000	80,000		ppbv	40000	10/8/2012 1:43 PM
Naphthalene	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
o-Xylene	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Propylene	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Styrene	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
tert-Butyl Methyl Ether	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Tetrachloroethene	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Tetrahydrofuran	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Toluene	420,000	40,000		ppbv	40000	10/8/2012 1:43 PM
trans-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
trans-1,3-dichloropropene	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Trichloroethene	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Trichlorofluoromethane	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Vinyl acetate	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Vinyl chloride	ND	40,000	U	ppbv	40000	10/8/2012 1:43 PM
Xylenes, Total	42,000	120,000	J	ppbv	40000	10/8/2012 1:43 PM
Surr: 4-Bromofluorobenzene	96.0	70-130		%REC	40000	10/8/2012 1:43 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	16,000,000	4,700,000		µg/m³	40000	10/11/2012 9:47 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300,000	U	µg/m³	40000	10/11/2012 9:47 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600,000	U	µg/m³	40000	10/11/2012 9:47 PM
Surr: 4-Bromofluorobenzene	93.3	70-130		%REC	40000	10/11/2012 9:47 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 9:49:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-029	**Matrix:**	Air
Client Sample ID:	VA1701		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	7.8	0.10		% v/v	1	10/17/2012 3:25 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/17/2012 3:25 PM
Methane	ND	0.50	U	% v/v	1	10/17/2012 3:25 PM
Nitrogen	81	0.10		% v/v	1	10/17/2012 3:25 PM
Oxygen	9.2	0.10		% v/v	1	10/17/2012 3:25 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
1,1,2,2-Tetrachloroethane	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
1,1,2-Trichloroethane	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
1,1-Dichloroethane	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
1,1-Dichloroethene	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
1,2,4-Trichlorobenzene	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
1,2,4-Trimethylbenzene	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
1,2-Dibromoethane	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
1,2-Dichlorobenzene	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
1,2-Dichloroethane	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
1,2-Dichloropropane	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
1,3,5-Trimethylbenzene	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
1,3-Butadiene	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
1,3-Dichlorobenzene	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
1,4-Dichlorobenzene	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
2-Butanone	110,000	40,000		ppbv	40000	10/8/2012 8:59 PM
2-Hexanone	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
4-Methyl-2-pentanone	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Acetone	940,000	40,000		ppbv	40000	10/8/2012 8:59 PM
Benzene	270,000	40,000		ppbv	40000	10/8/2012 8:59 PM
Benzyl chloride	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Bromodichloromethane	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Bromoform	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Bromomethane	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Carbon disulfide	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Carbon tetrachloride	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Chlorobenzene	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Chlorodibromomethane	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Chloroethane	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Chloroform	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Chloromethane	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
cis-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
cis-1,3-dichloropropene	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 9:49:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-029	**Matrix:**	Air
Client Sample ID:	VA1701		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,300,000	80,000		ppbv	40000	10/8/2012 8:59 PM
Dichlorodifluoromethane	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Ethyl acetate	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Ethylbenzene	ND	80,000	U	ppbv	40000	10/8/2012 8:59 PM
Heptane	1,100,000	40,000		ppbv	40000	10/8/2012 8:59 PM
Hexachlorobutadiene	ND	80,000	U	ppbv	40000	10/8/2012 8:59 PM
m,p-Xylene	50,000	80,000	J	ppbv	40000	10/8/2012 8:59 PM
Methylene chloride	ND	200,000	U	ppbv	40000	10/8/2012 8:59 PM
n-Hexane	1,000,000	80,000		ppbv	40000	10/8/2012 8:59 PM
Naphthalene	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
o-Xylene	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Propylene	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Styrene	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
tert-Butyl Methyl Ether	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Tetrachloroethene	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Tetrahydrofuran	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Toluene	460,000	40,000		ppbv	40000	10/8/2012 8:59 PM
trans-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
trans-1,3-dichloropropene	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Trichloroethene	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Trichlorofluoromethane	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Vinyl acetate	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Vinyl chloride	ND	40,000	U	ppbv	40000	10/8/2012 8:59 PM
Xylenes, Total	50,000	120,000	J	ppbv	40000	10/8/2012 8:59 PM
Surr: 4-Bromofluorobenzene	99.7	70-130		%REC	40000	10/8/2012 8:59 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	38,000,000	9,400,000		µg/m³	80000	10/11/2012 10:31 PM
C9-C10 Aromatic Hydrocarbons	ND	11,000,000	U	µg/m³	80000	10/11/2012 10:31 PM
C9-C12 Aliphatic Hydrocarbons	ND	15,000,000	U	µg/m³	80000	10/11/2012 10:31 PM
Surr: 4-Bromofluorobenzene	93.1	70-130		%REC	80000	10/11/2012 10:31 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 8:34:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-030	**Matrix:**	Air
Client Sample ID:	VA1702		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	6.0	0.10		% v/v	1	10/17/2012 3:40 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/17/2012 3:40 PM
Methane	ND	0.50	U	% v/v	1	10/17/2012 3:40 PM
Nitrogen	82	0.10		% v/v	1	10/17/2012 3:40 PM
Oxygen	9.3	0.10		% v/v	1	10/17/2012 3:40 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
1,1,2,2-Tetrachloroethane	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
1,1,2-Trichloroethane	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
1,1-Dichloroethane	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
1,1-Dichloroethene	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
1,2,4-Trichlorobenzene	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
1,2,4-Trimethylbenzene	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
1,2-Dibromoethane	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
1,2-Dichlorobenzene	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
1,2-Dichloroethane	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
1,2-Dichloropropane	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
1,3,5-Trimethylbenzene	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
1,3-Butadiene	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
1,3-Dichlorobenzene	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
1,4-Dichlorobenzene	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
2-Butanone	42,000	40,000		ppbv	40000	10/8/2012 9:41 PM
2-Hexanone	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
4-Methyl-2-pentanone	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Acetone	360,000	40,000		ppbv	40000	10/8/2012 9:41 PM
Benzene	110,000	40,000		ppbv	40000	10/8/2012 9:41 PM
Benzyl chloride	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Bromodichloromethane	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Bromoform	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Bromomethane	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Carbon disulfide	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Carbon tetrachloride	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Chlorobenzene	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Chlorodibromomethane	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Chloroethane	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Chloroform	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Chloromethane	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
cis-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
cis-1,3-dichloropropene	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 8:34:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-030	**Matrix:**	Air
Client Sample ID:	VA1702		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	430,000	80,000		ppbv	40000	10/8/2012 9:41 PM
Dichlorodifluoromethane	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Ethyl acetate	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Ethylbenzene	ND	80,000	U	ppbv	40000	10/8/2012 9:41 PM
Heptane	190,000	40,000		ppbv	40000	10/8/2012 9:41 PM
Hexachlorobutadiene	ND	80,000	U	ppbv	40000	10/8/2012 9:41 PM
m,p-Xylene	ND	80,000	U	ppbv	40000	10/8/2012 9:41 PM
Methylene chloride	ND	200,000	U	ppbv	40000	10/8/2012 9:41 PM
n-Hexane	660,000	80,000		ppbv	40000	10/8/2012 9:41 PM
Naphthalene	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
o-Xylene	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Propylene	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Styrene	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
tert-Butyl Methyl Ether	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Tetrachloroethene	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Tetrahydrofuran	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Toluene	66,000	40,000		ppbv	40000	10/8/2012 9:41 PM
trans-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
trans-1,3-dichloropropene	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Trichloroethene	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Trichlorofluoromethane	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Vinyl acetate	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Vinyl chloride	ND	40,000	U	ppbv	40000	10/8/2012 9:41 PM
Xylenes, Total	ND	120,000	U	ppbv	40000	10/8/2012 9:41 PM
Surr: 4-Bromofluorobenzene	98.0	70-130		%REC	40000	10/8/2012 9:41 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	24,000,000	9,400,000		µg/m³	80000	10/11/2012 11:14 PM
C9-C10 Aromatic Hydrocarbons	ND	11,000,000	U	µg/m³	80000	10/11/2012 11:14 PM
C9-C12 Aliphatic Hydrocarbons	ND	15,000,000	U	µg/m³	80000	10/11/2012 11:14 PM
Surr: 4-Bromofluorobenzene	92.0	70-130		%REC	80000	10/11/2012 11:14 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 11:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-031	**Matrix:**	Air
Client Sample ID:	VA1703		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.76	0.10		% v/v	1	10/17/2012 3:57 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/17/2012 3:57 PM
Methane	ND	0.50	U	% v/v	1	10/17/2012 3:57 PM
Nitrogen	79	0.10		% v/v	1	10/17/2012 3:57 PM
Oxygen	19	0.10		% v/v	1	10/17/2012 3:57 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/12/2012 4:33 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/12/2012 4:33 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	10/12/2012 4:33 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/12/2012 4:33 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/12/2012 4:33 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/12/2012 4:33 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/12/2012 4:33 PM
1,2,4-Trimethylbenzene	140	40		ppbv	40	10/12/2012 4:33 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/12/2012 4:33 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/12/2012 4:33 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/12/2012 4:33 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/12/2012 4:33 PM
1,3,5-Trimethylbenzene	64	40		ppbv	40	10/12/2012 4:33 PM
1,3-Butadiene	ND	40	U	ppbv	40	10/12/2012 4:33 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/12/2012 4:33 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/12/2012 4:33 PM
2-Butanone	ND	40	U	ppbv	40	10/12/2012 4:33 PM
2-Hexanone	ND	40	U	ppbv	40	10/12/2012 4:33 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Acetone	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Benzene	450	40		ppbv	40	10/12/2012 4:33 PM
Benzyl chloride	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Bromodichloromethane	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Bromoform	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Bromomethane	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Carbon disulfide	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Carbon tetrachloride	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Chlorobenzene	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Chlorodibromomethane	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Chloroethane	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Chloroform	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Chloromethane	ND	40	U	ppbv	40	10/12/2012 4:33 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/12/2012 4:33 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/12/2012 4:33 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 11:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-031	**Matrix:**	Air
Client Sample ID:	VA1703		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	710	80		ppbv	40	10/12/2012 4:33 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Ethyl acetate	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Ethylbenzene	290	80		ppbv	40	10/12/2012 4:33 PM
Heptane	970	40		ppbv	40	10/12/2012 4:33 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/12/2012 4:33 PM
m,p-Xylene	940	80		ppbv	40	10/12/2012 4:33 PM
Methylene chloride	ND	200	U	ppbv	40	10/12/2012 4:33 PM
n-Hexane	280	80		ppbv	40	10/12/2012 4:33 PM
Naphthalene	ND	40	U	ppbv	40	10/12/2012 4:33 PM
o-Xylene	330	40		ppbv	40	10/12/2012 4:33 PM
Propylene	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Styrene	ND	40	U	ppbv	40	10/12/2012 4:33 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Tetrachloroethene	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Tetrahydrofuran	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Toluene	3,000	400		ppbv	400	10/12/2012 6:03 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/12/2012 4:33 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Trichloroethene	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Vinyl acetate	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Vinyl chloride	ND	40	U	ppbv	40	10/12/2012 4:33 PM
Xylenes, Total	1,300	120		ppbv	40	10/12/2012 4:33 PM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	40	10/12/2012 4:33 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	44,000	4,700		µg/m³	40	10/13/2012 3:22 AM
C9-C10 Aromatic Hydrocarbons	2,700	5,300	J	µg/m³	40	10/13/2012 3:22 AM
C9-C12 Aliphatic Hydrocarbons	19,000	7,600		µg/m³	40	10/13/2012 3:22 AM
Surr: 4-Bromofluorobenzene	97.7	70-130		%REC	40	10/13/2012 3:22 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 11:37:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-032	**Matrix:**	Air
Client Sample ID:	VA1704		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	1.0	0.10		% v/v	1	10/17/2012 4:14 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/17/2012 4:14 PM
Methane	ND	0.50	U	% v/v	1	10/17/2012 4:14 PM
Nitrogen	78	0.10		% v/v	1	10/17/2012 4:14 PM
Oxygen	19	0.10		% v/v	1	10/17/2012 4:14 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
2-Butanone	9,800	8,000		ppbv	8000	10/8/2012 11:45 PM
2-Hexanone	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Acetone	38,000	8,000		ppbv	8000	10/8/2012 11:45 PM
Benzene	48,000	8,000		ppbv	8000	10/8/2012 11:45 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Bromoform	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Bromomethane	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Chloroethane	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Chloroform	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Chloromethane	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 11:37:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-032	**Matrix:**	Air
Client Sample ID:	VA1704		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	160,000	16,000		ppbv	8000	10/8/2012 11:45 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	10/8/2012 11:45 PM
Heptane	200,000	8,000		ppbv	8000	10/8/2012 11:45 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	10/8/2012 11:45 PM
m,p-Xylene	19,000	16,000		ppbv	8000	10/8/2012 11:45 PM
Methylene chloride	ND	40,000	U	ppbv	8000	10/8/2012 11:45 PM
n-Hexane	90,000	16,000		ppbv	8000	10/8/2012 11:45 PM
Naphthalene	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
o-Xylene	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Propylene	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Styrene	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Toluene	150,000	8,000		ppbv	8000	10/8/2012 11:45 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Trichloroethene	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	10/8/2012 11:45 PM
Xylenes, Total	19,000	24,000	J	ppbv	8000	10/8/2012 11:45 PM
Surr: 4-Bromofluorobenzene	99.0	70-130		%REC	8000	10/8/2012 11:45 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	6,500,000	940,000		µg/m³	8000	10/12/2012 1:04 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	10/12/2012 1:04 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	10/12/2012 1:04 AM
Surr: 4-Bromofluorobenzene	91.9	70-130		%REC	8000	10/12/2012 1:04 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 8:45:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-033	**Matrix:**	Air
Client Sample ID:	VA1705		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
2-Butanone	8,500	8,000		ppbv	8000	10/9/2012 12:26 AM
2-Hexanone	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Acetone	38,000	8,000		ppbv	8000	10/9/2012 12:26 AM
Benzene	31,000	8,000		ppbv	8000	10/9/2012 12:26 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Bromoform	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Bromomethane	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Chloroethane	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Chloroform	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Chloromethane	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Cyclohexane	140,000	16,000		ppbv	8000	10/9/2012 12:26 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	10/9/2012 12:26 AM
Heptane	85,000	8,000		ppbv	8000	10/9/2012 12:26 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	10/9/2012 12:26 AM
m,p-Xylene	9,900	16,000	J	ppbv	8000	10/9/2012 12:26 AM
Methylene chloride	ND	40,000	U	ppbv	8000	10/9/2012 12:26 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 8:45:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-033	**Matrix:**	Air
Client Sample ID:	VA1705		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
n-Hexane	140,000	16,000		ppbv	8000	10/9/2012 12:26 AM
Naphthalene	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
o-Xylene	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Propylene	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Styrene	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Toluene	47,000	8,000		ppbv	8000	10/9/2012 12:26 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Trichloroethene	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	10/9/2012 12:26 AM
Xylenes, Total	9,900	24,000	J	ppbv	8000	10/9/2012 12:26 AM
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	8000	10/9/2012 12:26 AM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	4,200,000	940,000		µg/m³	8000	10/12/2012 1:50 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	10/12/2012 1:50 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	10/12/2012 1:50 AM
Surr: 4-Bromofluorobenzene	92.2	70-130		%REC	8000	10/12/2012 1:50 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 9:24:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-034	**Matrix:**	Air
Client Sample ID:	VA1706		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.73	0.10		% v/v	1	10/17/2012 4:30 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/17/2012 4:30 PM
Methane	ND	0.50	U	% v/v	1	10/17/2012 4:30 PM
Nitrogen	78	0.10		% v/v	1	10/17/2012 4:30 PM
Oxygen	19	0.10		% v/v	1	10/17/2012 4:30 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/9/2012 4:32 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/9/2012 4:32 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	10/9/2012 4:32 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/9/2012 4:32 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/9/2012 4:32 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/9/2012 4:32 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/9/2012 4:32 PM
1,2,4-Trimethylbenzene	230	40		ppbv	40	10/9/2012 4:32 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/9/2012 4:32 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/9/2012 4:32 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/9/2012 4:32 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/9/2012 4:32 PM
1,3,5-Trimethylbenzene	76	40		ppbv	40	10/9/2012 4:32 PM
1,3-Butadiene	ND	40	U	ppbv	40	10/9/2012 4:32 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/9/2012 4:32 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/9/2012 4:32 PM
2-Butanone	ND	40	U	ppbv	40	10/9/2012 4:32 PM
2-Hexanone	ND	40	U	ppbv	40	10/9/2012 4:32 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Acetone	60	40		ppbv	40	10/9/2012 4:32 PM
Benzene	320	40		ppbv	40	10/9/2012 4:32 PM
Benzyl chloride	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Bromodichloromethane	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Bromoform	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Bromomethane	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Carbon disulfide	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Carbon tetrachloride	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Chlorobenzene	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Chlorodibromomethane	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Chloroethane	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Chloroform	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Chloromethane	ND	40	U	ppbv	40	10/9/2012 4:32 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/9/2012 4:32 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/9/2012 4:32 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 9:24:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-034	**Matrix:**	Air
Client Sample ID:	VA1706		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	810	80		ppbv	40	10/9/2012 4:32 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Ethyl acetate	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Ethylbenzene	270	80		ppbv	40	10/9/2012 4:32 PM
Heptane	650	40		ppbv	40	10/9/2012 4:32 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/9/2012 4:32 PM
m,p-Xylene	570	80		ppbv	40	10/9/2012 4:32 PM
Methylene chloride	ND	200	U	ppbv	40	10/9/2012 4:32 PM
n-Hexane	660	80		ppbv	40	10/9/2012 4:32 PM
Naphthalene	ND	40	U	ppbv	40	10/9/2012 4:32 PM
o-Xylene	210	40		ppbv	40	10/9/2012 4:32 PM
Propylene	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Styrene	ND	40	U	ppbv	40	10/9/2012 4:32 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Tetrachloroethene	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Tetrahydrofuran	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Toluene	1,000	40		ppbv	40	10/9/2012 4:32 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/9/2012 4:32 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Trichloroethene	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Vinyl acetate	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Vinyl chloride	ND	40	U	ppbv	40	10/9/2012 4:32 PM
Xylenes, Total	790	120		ppbv	40	10/9/2012 4:32 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	40	10/9/2012 4:32 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	39,000	4,700		µg/m³	40	10/12/2012 3:21 AM
C9-C10 Aromatic Hydrocarbons	6,100	5,300		µg/m³	40	10/12/2012 3:21 AM
C9-C12 Aliphatic Hydrocarbons	35,000	7,600		µg/m³	40	10/12/2012 3:21 AM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	40	10/12/2012 3:21 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 10:15:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-035	**Matrix:**	Air
Client Sample ID:	VA1707		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.87	0.10		% v/v	1	10/18/2012 11:13 AM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/18/2012 11:13 AM
Methane	ND	0.50	U	% v/v	1	10/18/2012 11:13 AM
Nitrogen	78	0.10		% v/v	1	10/18/2012 11:13 AM
Oxygen	18	0.10		% v/v	1	10/18/2012 11:13 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/9/2012 5:55 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/9/2012 5:55 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	10/9/2012 5:55 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/9/2012 5:55 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/9/2012 5:55 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/9/2012 5:55 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/9/2012 5:55 PM
1,2,4-Trimethylbenzene	120	40		ppbv	40	10/9/2012 5:55 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/9/2012 5:55 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/9/2012 5:55 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/9/2012 5:55 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/9/2012 5:55 PM
1,3,5-Trimethylbenzene	41	40		ppbv	40	10/9/2012 5:55 PM
1,3-Butadiene	ND	40	U	ppbv	40	10/9/2012 5:55 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/9/2012 5:55 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/9/2012 5:55 PM
2-Butanone	ND	40	U	ppbv	40	10/9/2012 5:55 PM
2-Hexanone	ND	40	U	ppbv	40	10/9/2012 5:55 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Acetone	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Benzene	170	40		ppbv	40	10/9/2012 5:55 PM
Benzyl chloride	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Bromodichloromethane	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Bromoform	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Bromomethane	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Carbon disulfide	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Carbon tetrachloride	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Chlorobenzene	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Chlorodibromomethane	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Chloroethane	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Chloroform	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Chloromethane	ND	40	U	ppbv	40	10/9/2012 5:55 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/9/2012 5:55 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/9/2012 5:55 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 10:15:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-035	**Matrix:**	Air
Client Sample ID:	VA1707		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	450	80		ppbv	40	10/9/2012 5:55 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Ethyl acetate	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Ethylbenzene	120	80		ppbv	40	10/9/2012 5:55 PM
Heptane	290	40		ppbv	40	10/9/2012 5:55 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/9/2012 5:55 PM
m,p-Xylene	290	80		ppbv	40	10/9/2012 5:55 PM
Methylene chloride	ND	200	U	ppbv	40	10/9/2012 5:55 PM
n-Hexane	180	80		ppbv	40	10/9/2012 5:55 PM
Naphthalene	ND	40	U	ppbv	40	10/9/2012 5:55 PM
o-Xylene	110	40		ppbv	40	10/9/2012 5:55 PM
Propylene	50	40		ppbv	40	10/9/2012 5:55 PM
Styrene	ND	40	U	ppbv	40	10/9/2012 5:55 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Tetrachloroethene	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Tetrahydrofuran	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Toluene	570	40		ppbv	40	10/9/2012 5:55 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/9/2012 5:55 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Trichloroethene	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Vinyl acetate	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Vinyl chloride	ND	40	U	ppbv	40	10/9/2012 5:55 PM
Xylenes, Total	410	120		ppbv	40	10/9/2012 5:55 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	40	10/9/2012 5:55 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	30,000	4,700		µg/m³	40	10/12/2012 4:07 AM
C9-C10 Aromatic Hydrocarbons	3,400	5,300	J	µg/m³	40	10/12/2012 4:07 AM
C9-C12 Aliphatic Hydrocarbons	24,000	7,600		µg/m³	40	10/12/2012 4:07 AM
Surr: 4-Bromofluorobenzene	97.2	70-130		%REC	40	10/12/2012 4:07 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 10:15:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-036	**Matrix:**	Air
Client Sample ID:	VA1708		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.15	0.10		% v/v	1	10/18/2012 11:28 AM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/18/2012 11:28 AM
Methane	ND	0.50	U	% v/v	1	10/18/2012 11:28 AM
Nitrogen	77	0.10		% v/v	1	10/18/2012 11:28 AM
Oxygen	20	0.10		% v/v	1	10/18/2012 11:28 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/9/2012 6:37 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/9/2012 6:37 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	10/9/2012 6:37 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/9/2012 6:37 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/9/2012 6:37 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/9/2012 6:37 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/9/2012 6:37 PM
1,2,4-Trimethylbenzene	48	40		ppbv	40	10/9/2012 6:37 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/9/2012 6:37 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/9/2012 6:37 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/9/2012 6:37 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/9/2012 6:37 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	10/9/2012 6:37 PM
1,3-Butadiene	ND	40	U	ppbv	40	10/9/2012 6:37 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/9/2012 6:37 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/9/2012 6:37 PM
2-Butanone	ND	40	U	ppbv	40	10/9/2012 6:37 PM
2-Hexanone	ND	40	U	ppbv	40	10/9/2012 6:37 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Acetone	44	40		ppbv	40	10/9/2012 6:37 PM
Benzene	91	40		ppbv	40	10/9/2012 6:37 PM
Benzyl chloride	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Bromodichloromethane	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Bromoform	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Bromomethane	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Carbon disulfide	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Carbon tetrachloride	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Chlorobenzene	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Chlorodibromomethane	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Chloroethane	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Chloroform	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Chloromethane	ND	40	U	ppbv	40	10/9/2012 6:37 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/9/2012 6:37 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/9/2012 6:37 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 10:15:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-036	**Matrix:**	Air
Client Sample ID:	VA1708		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	190	80		ppbv	40	10/9/2012 6:37 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Ethyl acetate	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Ethylbenzene	57	80	J	ppbv	40	10/9/2012 6:37 PM
Heptane	130	40		ppbv	40	10/9/2012 6:37 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/9/2012 6:37 PM
m,p-Xylene	140	80		ppbv	40	10/9/2012 6:37 PM
Methylene chloride	ND	200	U	ppbv	40	10/9/2012 6:37 PM
n-Hexane	110	80		ppbv	40	10/9/2012 6:37 PM
Naphthalene	ND	40	U	ppbv	40	10/9/2012 6:37 PM
o-Xylene	51	40		ppbv	40	10/9/2012 6:37 PM
Propylene	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Styrene	ND	40	U	ppbv	40	10/9/2012 6:37 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Tetrachloroethene	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Tetrahydrofuran	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Toluene	310	40		ppbv	40	10/9/2012 6:37 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/9/2012 6:37 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Trichloroethene	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Vinyl acetate	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Vinyl chloride	ND	40	U	ppbv	40	10/9/2012 6:37 PM
Xylenes, Total	190	120		ppbv	40	10/9/2012 6:37 PM
Surr: 4-Bromofluorobenzene	98.6	70-130		%REC	40	10/9/2012 6:37 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	14,000	4,700		µg/m³	40	10/12/2012 4:52 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	10/12/2012 4:52 AM
C9-C12 Aliphatic Hydrocarbons	7,800	7,600		µg/m³	40	10/12/2012 4:52 AM
Surr: 4-Bromofluorobenzene	95.7	70-130		%REC	40	10/12/2012 4:52 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 11:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-037	**Matrix:**	Air
Client Sample ID:	VA1709		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.96	0.10		% v/v	1	10/18/2012 11:42 AM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/18/2012 11:42 AM
Methane	ND	0.50	U	% v/v	1	10/18/2012 11:42 AM
Nitrogen	78	0.10		% v/v	1	10/18/2012 11:42 AM
Oxygen	18	0.10		% v/v	1	10/18/2012 11:42 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/10/2012 5:47 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/10/2012 5:47 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	10/10/2012 5:47 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/10/2012 5:47 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/10/2012 5:47 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/10/2012 5:47 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/10/2012 5:47 AM
1,2,4-Trimethylbenzene	72	40		ppbv	40	10/10/2012 5:47 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/10/2012 5:47 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/10/2012 5:47 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/10/2012 5:47 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/10/2012 5:47 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	10/10/2012 5:47 AM
1,3-Butadiene	ND	40	U	ppbv	40	10/10/2012 5:47 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/10/2012 5:47 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/10/2012 5:47 AM
2-Butanone	ND	40	U	ppbv	40	10/10/2012 5:47 AM
2-Hexanone	ND	40	U	ppbv	40	10/10/2012 5:47 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Acetone	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Benzene	340	40		ppbv	40	10/10/2012 5:47 AM
Benzyl chloride	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Bromodichloromethane	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Bromoform	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Bromomethane	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Carbon disulfide	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Carbon tetrachloride	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Chlorobenzene	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Chlorodibromomethane	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Chloroethane	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Chloroform	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Chloromethane	ND	40	U	ppbv	40	10/10/2012 5:47 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/10/2012 5:47 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/10/2012 5:47 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 11:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-037	**Matrix:**	Air
Client Sample ID:	VA1709		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,300	80		ppbv	40	10/10/2012 5:47 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Ethyl acetate	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Ethylbenzene	96	80		ppbv	40	10/10/2012 5:47 AM
Heptane	540	40		ppbv	40	10/10/2012 5:47 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/10/2012 5:47 AM
m,p-Xylene	240	80		ppbv	40	10/10/2012 5:47 AM
Methylene chloride	ND	200	U	ppbv	40	10/10/2012 5:47 AM
n-Hexane	600	80		ppbv	40	10/10/2012 5:47 AM
Naphthalene	ND	40	U	ppbv	40	10/10/2012 5:47 AM
o-Xylene	92	40		ppbv	40	10/10/2012 5:47 AM
Propylene	67	40		ppbv	40	10/10/2012 5:47 AM
Styrene	ND	40	U	ppbv	40	10/10/2012 5:47 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Tetrachloroethene	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Tetrahydrofuran	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Toluene	730	40		ppbv	40	10/10/2012 5:47 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/10/2012 5:47 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Trichloroethene	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Vinyl acetate	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Vinyl chloride	ND	40	U	ppbv	40	10/10/2012 5:47 AM
Xylenes, Total	330	120		ppbv	40	10/10/2012 5:47 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	40	10/10/2012 5:47 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	79,000	23,000		µg/m³	200	10/13/2012 4:11 AM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	10/13/2012 4:11 AM
C9-C12 Aliphatic Hydrocarbons	13,000	38,000	J	µg/m³	200	10/13/2012 4:11 AM
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	200	10/13/2012 4:11 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 2:07:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-038	**Matrix:**	Air
Client Sample ID:	VA1712		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.096	0.10	J	% v/v	1	10/16/2012 1:23 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/16/2012 1:23 PM
Methane	ND	0.50	U	% v/v	1	10/16/2012 1:23 PM
Nitrogen	79	0.10		% v/v	1	10/16/2012 1:23 PM
Oxygen	20	0.10		% v/v	1	10/16/2012 1:23 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/9/2012 8:04 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/9/2012 8:04 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	10/9/2012 8:04 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/9/2012 8:04 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/9/2012 8:04 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/9/2012 8:04 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/9/2012 8:04 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	10/9/2012 8:04 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/9/2012 8:04 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/9/2012 8:04 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/9/2012 8:04 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/9/2012 8:04 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	10/9/2012 8:04 PM
1,3-Butadiene	ND	40	U	ppbv	40	10/9/2012 8:04 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/9/2012 8:04 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/9/2012 8:04 PM
2-Butanone	ND	40	U	ppbv	40	10/9/2012 8:04 PM
2-Hexanone	ND	40	U	ppbv	40	10/9/2012 8:04 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Acetone	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Benzene	79	40		ppbv	40	10/9/2012 8:04 PM
Benzyl chloride	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Bromodichloromethane	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Bromoform	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Bromomethane	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Carbon disulfide	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Carbon tetrachloride	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Chlorobenzene	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Chlorodibromomethane	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Chloroethane	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Chloroform	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Chloromethane	ND	40	U	ppbv	40	10/9/2012 8:04 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/9/2012 8:04 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/9/2012 8:04 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 2:07:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-038	**Matrix:**	Air
Client Sample ID:	VA1712		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	230	80		ppbv	40	10/9/2012 8:04 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Ethyl acetate	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Ethylbenzene	ND	80	U	ppbv	40	10/9/2012 8:04 PM
Heptane	130	40		ppbv	40	10/9/2012 8:04 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/9/2012 8:04 PM
m,p-Xylene	46	80	J	ppbv	40	10/9/2012 8:04 PM
Methylene chloride	ND	200	U	ppbv	40	10/9/2012 8:04 PM
n-Hexane	200	80		ppbv	40	10/9/2012 8:04 PM
Naphthalene	ND	40	U	ppbv	40	10/9/2012 8:04 PM
o-Xylene	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Propylene	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Styrene	ND	40	U	ppbv	40	10/9/2012 8:04 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Tetrachloroethene	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Tetrahydrofuran	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Toluene	190	40		ppbv	40	10/9/2012 8:04 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/9/2012 8:04 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Trichloroethene	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Vinyl acetate	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Vinyl chloride	ND	40	U	ppbv	40	10/9/2012 8:04 PM
Xylenes, Total	46	120	J	ppbv	40	10/9/2012 8:04 PM
Surr: 4-Bromofluorobenzene	97.9	70-130		%REC	40	10/9/2012 8:04 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	21,000	4,700		µg/m³	40	10/12/2012 6:24 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	10/12/2012 6:24 AM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	10/12/2012 6:24 AM
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	40	10/12/2012 6:24 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 10:29:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-039	**Matrix:**	Air
Client Sample ID:	VA1713		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.26	0.10		% v/v	1	10/17/2012 2:05 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/17/2012 2:05 PM
Methane	ND	0.50	U	% v/v	1	10/17/2012 2:05 PM
Nitrogen	79	0.10		% v/v	1	10/17/2012 2:05 PM
Oxygen	19	0.10		% v/v	1	10/17/2012 2:05 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	10/10/2012 1:29 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	10/10/2012 1:29 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	10/10/2012 1:29 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	10/10/2012 1:29 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	10/10/2012 1:29 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	10/10/2012 1:29 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	10/10/2012 1:29 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	10/10/2012 1:29 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	10/10/2012 1:29 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	10/10/2012 1:29 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	10/10/2012 1:29 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	10/10/2012 1:29 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	10/10/2012 1:29 PM
1,3-Butadiene	ND	400	U	ppbv	400	10/10/2012 1:29 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	10/10/2012 1:29 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	10/10/2012 1:29 PM
2-Butanone	ND	400	U	ppbv	400	10/10/2012 1:29 PM
2-Hexanone	ND	400	U	ppbv	400	10/10/2012 1:29 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Acetone	2,900	400		ppbv	400	10/10/2012 1:29 PM
Benzene	4,500	400		ppbv	400	10/10/2012 1:29 PM
Benzyl chloride	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Bromodichloromethane	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Bromoform	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Bromomethane	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Carbon disulfide	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Carbon tetrachloride	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Chlorobenzene	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Chlorodibromomethane	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Chloroethane	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Chloroform	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Chloromethane	ND	400	U	ppbv	400	10/10/2012 1:29 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	10/10/2012 1:29 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	10/10/2012 1:29 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/18/2012 10:29:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-039	**Matrix:**	Air
Client Sample ID:	VA1713		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,800	800		ppbv	400	10/10/2012 1:29 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Ethyl acetate	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Ethylbenzene	ND	800	U	ppbv	400	10/10/2012 1:29 PM
Heptane	1,400	400		ppbv	400	10/10/2012 1:29 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	10/10/2012 1:29 PM
m,p-Xylene	660	800	J	ppbv	400	10/10/2012 1:29 PM
Methylene chloride	6,100	2,000		ppbv	400	10/10/2012 1:29 PM
n-Hexane	3,600	800		ppbv	400	10/10/2012 1:29 PM
Naphthalene	ND	400	U	ppbv	400	10/10/2012 1:29 PM
o-Xylene	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Propylene	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Styrene	ND	400	U	ppbv	400	10/10/2012 1:29 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Tetrachloroethene	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Tetrahydrofuran	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Toluene	7,400	400		ppbv	400	10/10/2012 1:29 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	10/10/2012 1:29 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Trichloroethene	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Vinyl acetate	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Vinyl chloride	ND	400	U	ppbv	400	10/10/2012 1:29 PM
Xylenes, Total	660	1,200	J	ppbv	400	10/10/2012 1:29 PM
Surr: 4-Bromofluorobenzene	99.8	70-130		%REC	400	10/10/2012 1:29 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	22,000	4,700		µg/m³	40	10/12/2012 7:14 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	10/12/2012 7:14 AM
C9-C12 Aliphatic Hydrocarbons	1,200	7,600	J	µg/m³	40	10/12/2012 7:14 AM
Surr: 4-Bromofluorobenzene	94.7	70-130		%REC	40	10/12/2012 7:14 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-040	**Matrix:**	Air
Client Sample ID:	VA8102-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RD2**
1,1,1-Trichloroethane	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
1,1,2,2-Tetrachloroethane	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
1,1,2-Trichloroethane	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
1,1-Dichloroethane	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
1,1-Dichloroethene	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
1,2,4-Trichlorobenzene	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
1,2,4-Trimethylbenzene	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
1,2-Dibromoethane	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
1,2-Dichlorobenzene	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
1,2-Dichloroethane	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
1,2-Dichloropropane	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
1,3,5-Trimethylbenzene	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
1,3-Butadiene	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
1,3-Dichlorobenzene	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
1,4-Dichlorobenzene	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
2-Butanone	21	4.0		ppbv	4	10/10/2012 5:06 AM
2-Hexanone	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
4-Methyl-2-pentanone	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Acetone	41	4.0		ppbv	4	10/10/2012 5:06 AM
Benzene	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Benzyl chloride	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Bromodichloromethane	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Bromoform	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Bromomethane	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Carbon disulfide	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Carbon tetrachloride	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Chlorobenzene	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Chlorodibromomethane	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Chloroethane	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Chloroform	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Chloromethane	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
cis-1,2-Dichloroethene	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
cis-1,3-dichloropropene	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Cyclohexane	6.4	8.0	J	ppbv	4	10/10/2012 5:06 AM
Dichlorodifluoromethane	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Ethyl acetate	6.4	4.0		ppbv	4	10/10/2012 5:06 AM
Ethylbenzene	ND	8.0	U	ppbv	4	10/10/2012 5:06 AM
Heptane	4.2	4.0		ppbv	4	10/10/2012 5:06 AM
Hexachlorobutadiene	ND	8.0	U	ppbv	4	10/10/2012 5:06 AM
m,p-Xylene	7.3	8.0	J	ppbv	4	10/10/2012 5:06 AM
Methylene chloride	42	20		ppbv	4	10/10/2012 5:06 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/17/2012 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-040	**Matrix:**	Air
Client Sample ID:	VA8102-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
n-Hexane	31	8.0		ppbv	4	10/10/2012 5:06 AM
Naphthalene	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
o-Xylene	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Propylene	7.4	4.0		ppbv	4	10/10/2012 5:06 AM
Styrene	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
tert-Butyl Methyl Ether	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Tetrachloroethene	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Tetrahydrofuran	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Toluene	21	4.0		ppbv	4	10/10/2012 5:06 AM
trans-1,2-Dichloroethene	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
trans-1,3-dichloropropene	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Trichloroethene	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Trichlorofluoromethane	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Vinyl acetate	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Vinyl chloride	ND	4.0	U	ppbv	4	10/10/2012 5:06 AM
Xylenes, Total	7.3	12	J	ppbv	4	10/10/2012 5:06 AM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	4	10/10/2012 5:06 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 12:47:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-041	**Matrix:**	Air
Client Sample ID:	VA9070		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	1.7	0.10		% v/v	1	10/18/2012 11:57 AM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/18/2012 11:57 AM
Methane	ND	0.50	U	% v/v	1	10/18/2012 11:57 AM
Nitrogen	78	0.10		% v/v	1	10/18/2012 11:57 AM
Oxygen	17	0.10		% v/v	1	10/18/2012 11:57 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	10/10/2012 12:41 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	10/10/2012 12:41 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	10/10/2012 12:41 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	10/10/2012 12:41 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	10/10/2012 12:41 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	10/10/2012 12:41 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	10/10/2012 12:41 PM
1,2,4-Trimethylbenzene	1,400	800		ppbv	800	10/10/2012 12:41 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	10/10/2012 12:41 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	10/10/2012 12:41 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	10/10/2012 12:41 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	10/10/2012 12:41 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	10/10/2012 12:41 PM
1,3-Butadiene	ND	800	U	ppbv	800	10/10/2012 12:41 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	10/10/2012 12:41 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	10/10/2012 12:41 PM
2-Butanone	ND	800	U	ppbv	800	10/10/2012 12:41 PM
2-Hexanone	ND	800	U	ppbv	800	10/10/2012 12:41 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Acetone	3,900	800		ppbv	800	10/10/2012 12:41 PM
Benzene	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Benzyl chloride	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Bromodichloromethane	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Bromoform	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Bromomethane	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Carbon disulfide	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Carbon tetrachloride	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Chlorobenzene	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Chlorodibromomethane	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Chloroethane	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Chloroform	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Chloromethane	ND	800	U	ppbv	800	10/10/2012 12:41 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	10/10/2012 12:41 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	10/10/2012 12:41 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 12:47:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-041	**Matrix:**	Air
Client Sample ID:	VA9070		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,700	1,600		ppbv	800	10/10/2012 12:41 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Ethyl acetate	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Ethylbenzene	1,300	1,600	J	ppbv	800	10/10/2012 12:41 PM
Heptane	3,000	800		ppbv	800	10/10/2012 12:41 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	10/10/2012 12:41 PM
m,p-Xylene	4,300	1,600		ppbv	800	10/10/2012 12:41 PM
Methylene chloride	7,000	4,000		ppbv	800	10/10/2012 12:41 PM
n-Hexane	2,000	1,600		ppbv	800	10/10/2012 12:41 PM
Naphthalene	ND	800	U	ppbv	800	10/10/2012 12:41 PM
o-Xylene	1,400	800		ppbv	800	10/10/2012 12:41 PM
Propylene	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Styrene	ND	800	U	ppbv	800	10/10/2012 12:41 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Tetrachloroethene	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Tetrahydrofuran	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Toluene	6,900	800		ppbv	800	10/10/2012 12:41 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	10/10/2012 12:41 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Trichloroethene	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Vinyl acetate	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Vinyl chloride	ND	800	U	ppbv	800	10/10/2012 12:41 PM
Xylenes, Total	5,700	2,400		ppbv	800	10/10/2012 12:41 PM
Surr: 4-Bromofluorobenzene	99.3	70-130		%REC	800	10/10/2012 12:41 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	180,000	47,000		µg/m³	400	10/13/2012 7:15 AM
C9-C10 Aromatic Hydrocarbons	29,000	53,000	J	µg/m³	400	10/13/2012 7:15 AM
C9-C12 Aliphatic Hydrocarbons	130,000	76,000		µg/m³	400	10/13/2012 7:15 AM
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	400	10/13/2012 7:15 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 12:47:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-042	**Matrix:**	Air
Client Sample ID:	VA9071		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	1.5	0.10		% v/v	1	10/18/2012 1:02 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/18/2012 1:02 PM
Methane	ND	0.50	U	% v/v	1	10/18/2012 1:02 PM
Nitrogen	80	0.10		% v/v	1	10/18/2012 1:02 PM
Oxygen	17	0.10		% v/v	1	10/18/2012 1:02 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
1,3-Butadiene	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
2-Butanone	72,000	20,000		ppbv	20000	10/9/2012 10:50 PM
2-Hexanone	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Acetone	560,000	20,000		ppbv	20000	10/9/2012 10:50 PM
Benzene	110,000	20,000		ppbv	20000	10/9/2012 10:50 PM
Benzyl chloride	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Bromodichloromethane	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Bromoform	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Bromomethane	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Carbon disulfide	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Chlorobenzene	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Chloroethane	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Chloroform	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Chloromethane	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 12:47:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-042	**Matrix:**	Air
Client Sample ID:	VA9071		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	550,000	40,000		ppbv	20000	10/9/2012 10:50 PM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Ethyl acetate	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Ethylbenzene	ND	40,000	U	ppbv	20000	10/9/2012 10:50 PM
Heptane	460,000	20,000		ppbv	20000	10/9/2012 10:50 PM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	10/9/2012 10:50 PM
m,p-Xylene	28,000	40,000	J	ppbv	20000	10/9/2012 10:50 PM
Methylene chloride	ND	100,000	U	ppbv	20000	10/9/2012 10:50 PM
n-Hexane	390,000	40,000		ppbv	20000	10/9/2012 10:50 PM
Naphthalene	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
o-Xylene	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Propylene	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Styrene	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Tetrachloroethene	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Toluene	150,000	20,000		ppbv	20000	10/9/2012 10:50 PM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Trichloroethene	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Vinyl acetate	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Vinyl chloride	ND	20,000	U	ppbv	20000	10/9/2012 10:50 PM
Xylenes, Total	28,000	60,000	J	ppbv	20000	10/9/2012 10:50 PM
Surr: 4-Bromofluorobenzene	98.0	70-130		%REC	20000	10/9/2012 10:50 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	17,000,000	2,300,000		µg/m³	20000	10/12/2012 6:16 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	10/12/2012 6:16 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	10/12/2012 6:16 PM
Surr: 4-Bromofluorobenzene	93.4	70-130		%REC	20000	10/12/2012 6:16 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 1:36:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-043	**Matrix:**	Air
Client Sample ID:	VA9072		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	7.9	0.10		% v/v	1	10/18/2012 1:19 PM
Carbon Monoxide	0.47	0.10		% v/v	1	10/18/2012 1:19 PM
Methane	ND	0.50	Um	% v/v	1	10/18/2012 1:19 PM
Nitrogen	82	0.10		% v/v	1	10/18/2012 1:19 PM
Oxygen	3.9	0.10		% v/v	1	10/18/2012 1:19 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	10/10/2012 2:13 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	10/10/2012 2:13 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	10/10/2012 2:13 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	10/10/2012 2:13 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	10/10/2012 2:13 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	10/10/2012 2:13 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	10/10/2012 2:13 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	10/10/2012 2:13 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	10/10/2012 2:13 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	10/10/2012 2:13 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	10/10/2012 2:13 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	10/10/2012 2:13 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	10/10/2012 2:13 PM
1,3-Butadiene	ND	800	U	ppbv	800	10/10/2012 2:13 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	10/10/2012 2:13 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	10/10/2012 2:13 PM
2-Butanone	ND	800	U	ppbv	800	10/10/2012 2:13 PM
2-Hexanone	ND	800	U	ppbv	800	10/10/2012 2:13 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Acetone	3,800	800		ppbv	800	10/10/2012 2:13 PM
Benzene	6,500	800		ppbv	800	10/10/2012 2:13 PM
Benzyl chloride	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Bromodichloromethane	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Bromoform	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Bromomethane	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Carbon disulfide	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Carbon tetrachloride	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Chlorobenzene	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Chlorodibromomethane	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Chloroethane	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Chloroform	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Chloromethane	ND	800	U	ppbv	800	10/10/2012 2:13 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	10/10/2012 2:13 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	10/10/2012 2:13 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 1:36:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-043	**Matrix:**	Air
Client Sample ID:	VA9072		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	9,600	1,600		ppbv	800	10/10/2012 2:13 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Ethyl acetate	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Ethylbenzene	1,900	1,600		ppbv	800	10/10/2012 2:13 PM
Heptane	7,200	800		ppbv	800	10/10/2012 2:13 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	10/10/2012 2:13 PM
m,p-Xylene	5,000	1,600		ppbv	800	10/10/2012 2:13 PM
Methylene chloride	5,200	4,000		ppbv	800	10/10/2012 2:13 PM
n-Hexane	5,600	1,600		ppbv	800	10/10/2012 2:13 PM
Naphthalene	ND	800	U	ppbv	800	10/10/2012 2:13 PM
o-Xylene	1,700	800		ppbv	800	10/10/2012 2:13 PM
Propylene	130,000	8,000		ppbv	8000	10/9/2012 11:32 PM
Styrene	ND	800	U	ppbv	800	10/10/2012 2:13 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Tetrachloroethene	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Tetrahydrofuran	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Toluene	18,000	800		ppbv	800	10/10/2012 2:13 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	10/10/2012 2:13 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Trichloroethene	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Vinyl acetate	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Vinyl chloride	ND	800	U	ppbv	800	10/10/2012 2:13 PM
Xylenes, Total	6,700	2,400		ppbv	800	10/10/2012 2:13 PM
Surr: 4-Bromofluorobenzene	99.2	70-130		%REC	800	10/10/2012 2:13 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	580,000	190,000		µg/m³	1600	10/12/2012 7:00 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	10/12/2012 7:00 PM
C9-C12 Aliphatic Hydrocarbons	110,000	300,000	J	µg/m³	1600	10/12/2012 7:00 PM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	1600	10/12/2012 7:00 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/20/2012 10:27:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-044	**Matrix:**	Air
Client Sample ID:	VA9074		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.040	0.10	J	% v/v	1	10/19/2012 11:40 AM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/19/2012 11:40 AM
Methane	ND	0.50	U	% v/v	1	10/19/2012 11:40 AM
Nitrogen	77	0.10		% v/v	1	10/19/2012 11:40 AM
Oxygen	21	0.10		% v/v	1	10/19/2012 11:40 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
1,3-Butadiene	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
2-Butanone	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
2-Hexanone	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Acetone	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Benzene	140,000	20,000		ppbv	20000	10/10/2012 12:13 AM
Benzyl chloride	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Bromodichloromethane	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Bromoform	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Bromomethane	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Carbon disulfide	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Chlorobenzene	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Chloroethane	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Chloroform	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Chloromethane	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/20/2012 10:27:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-044	**Matrix:**	Air
Client Sample ID:	VA9074		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	490,000	40,000		ppbv	20000	10/10/2012 12:13 AM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Ethyl acetate	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Ethylbenzene	ND	40,000	U	ppbv	20000	10/10/2012 12:13 AM
Heptane	340,000	20,000		ppbv	20000	10/10/2012 12:13 AM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	10/10/2012 12:13 AM
m,p-Xylene	23,000	40,000	J	ppbv	20000	10/10/2012 12:13 AM
Methylene chloride	ND	100,000	U	ppbv	20000	10/10/2012 12:13 AM
n-Hexane	380,000	40,000		ppbv	20000	10/10/2012 12:13 AM
Naphthalene	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
o-Xylene	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Propylene	23,000	20,000		ppbv	20000	10/10/2012 12:13 AM
Styrene	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Tetrachloroethene	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Toluene	230,000	20,000		ppbv	20000	10/10/2012 12:13 AM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Trichloroethene	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Vinyl acetate	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Vinyl chloride	ND	20,000	U	ppbv	20000	10/10/2012 12:13 AM
Xylenes, Total	23,000	60,000	J	ppbv	20000	10/10/2012 12:13 AM
Surr: 4-Bromofluorobenzene	97.7	70-130		%REC	20000	10/10/2012 12:13 AM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	9,100,000	2,300,000		µg/m³	20000	10/12/2012 8:30 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	10/12/2012 8:30 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	10/12/2012 8:30 PM
Surr: 4-Bromofluorobenzene	91.4	70-130		%REC	20000	10/12/2012 8:30 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/20/2012 11:16:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-045	**Matrix:**	Air
Client Sample ID:	VA9075		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	3.4	0.10		% v/v	1	10/19/2012 12:16 PM
Carbon Monoxide	0.58	0.10		% v/v	1	10/19/2012 12:16 PM
Methane	ND	0.50	U	% v/v	1	10/19/2012 12:16 PM
Nitrogen	79	0.10		% v/v	1	10/19/2012 12:16 PM
Oxygen	13	0.10		% v/v	1	10/19/2012 12:16 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
1,3-Butadiene	54,000	8,000		ppbv	8000	10/10/2012 12:55 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
2-Butanone	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
2-Hexanone	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Acetone	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Benzene	77,000	8,000		ppbv	8000	10/10/2012 12:55 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Bromoform	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Bromomethane	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Chloroethane	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Chloroform	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Chloromethane	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/20/2012 11:16:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-045	**Matrix:**	Air
Client Sample ID:	VA9075		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	160,000	16,000		ppbv	8000	10/10/2012 12:55 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	10/10/2012 12:55 AM
Heptane	120,000	8,000		ppbv	8000	10/10/2012 12:55 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	10/10/2012 12:55 AM
m,p-Xylene	13,000	16,000	J	ppbv	8000	10/10/2012 12:55 AM
Methylene chloride	ND	40,000	U	ppbv	8000	10/10/2012 12:55 AM
n-Hexane	120,000	16,000		ppbv	8000	10/10/2012 12:55 AM
Naphthalene	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
o-Xylene	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Propylene	630,000	20,000		ppbv	20000	10/10/2012 9:21 PM
Styrene	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Toluene	100,000	8,000		ppbv	8000	10/10/2012 12:55 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Trichloroethene	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	10/10/2012 12:55 AM
Xylenes, Total	13,000	24,000	J	ppbv	8000	10/10/2012 12:55 AM
Surr: 4-Bromofluorobenzene	98.3	70-130		%REC	8000	10/10/2012 12:55 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	5,300,000	940,000		µg/m³	8000	10/12/2012 9:15 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	10/12/2012 9:15 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	10/12/2012 9:15 PM
Surr: 4-Bromofluorobenzene	91.9	70-130		%REC	8000	10/12/2012 9:15 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 2:58:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-046	**Matrix:**	Air
Client Sample ID:	VA9077		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	0.58	0.10		% v/v	1	10/18/2012 1:34 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/18/2012 1:34 PM
Methane	ND	0.50	U	% v/v	1	10/18/2012 1:34 PM
Nitrogen	78	0.10		% v/v	1	10/18/2012 1:34 PM
Oxygen	18	0.10		% v/v	1	10/18/2012 1:34 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
1,3-Butadiene	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
2-Butanone	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
2-Hexanone	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Acetone	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Benzene	200,000	20,000		ppbv	20000	10/10/2012 1:37 AM
Benzyl chloride	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Bromodichloromethane	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Bromoform	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Bromomethane	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Carbon disulfide	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Chlorobenzene	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Chloroethane	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Chloroform	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Chloromethane	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 2:58:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-046	**Matrix:**	Air
Client Sample ID:	VA9077		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	510,000	40,000		ppbv	20000	10/10/2012 1:37 AM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Ethyl acetate	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Ethylbenzene	ND	40,000	U	ppbv	20000	10/10/2012 1:37 AM
Heptane	360,000	20,000		ppbv	20000	10/10/2012 1:37 AM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	10/10/2012 1:37 AM
m,p-Xylene	23,000	40,000	J	ppbv	20000	10/10/2012 1:37 AM
Methylene chloride	ND	100,000	U	ppbv	20000	10/10/2012 1:37 AM
n-Hexane	460,000	40,000		ppbv	20000	10/10/2012 1:37 AM
Naphthalene	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
o-Xylene	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Propylene	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Styrene	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Tetrachloroethene	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Toluene	280,000	20,000		ppbv	20000	10/10/2012 1:37 AM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Trichloroethene	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Vinyl acetate	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Vinyl chloride	ND	20,000	U	ppbv	20000	10/10/2012 1:37 AM
Xylenes, Total	23,000	60,000	J	ppbv	20000	10/10/2012 1:37 AM
Surr: 4-Bromofluorobenzene	98.1	70-130		%REC	20000	10/10/2012 1:37 AM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	15,000,000	2,300,000		µg/m³	20000	10/12/2012 9:58 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	10/12/2012 9:58 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	10/12/2012 9:58 PM
Surr: 4-Bromofluorobenzene	94.0	70-130		%REC	20000	10/12/2012 9:58 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 3:53:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-047	**Matrix:**	Air
Client Sample ID:	VA9078		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	6.3	0.10		% v/v	1	10/18/2012 1:50 PM
Carbon Monoxide	1.1	0.10		% v/v	1	10/18/2012 1:50 PM
Methane	0.047	0.50	J	% v/v	1	10/18/2012 1:50 PM
Nitrogen	82	0.10		% v/v	1	10/18/2012 1:50 PM
Oxygen	4.1	0.10		% v/v	1	10/18/2012 1:50 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
1,3-Butadiene	59,000	8,000		ppbv	8000	10/10/2012 2:18 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
2-Butanone	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
2-Hexanone	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Acetone	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Benzene	120,000	8,000		ppbv	8000	10/10/2012 2:18 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Bromoform	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Bromomethane	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Chloroethane	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Chloroform	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Chloromethane	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 3:53:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-047	**Matrix:**	Air
Client Sample ID:	VA9078		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	130,000	16,000		ppbv	8000	10/10/2012 2:18 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	10/10/2012 2:18 AM
Heptane	100,000	8,000		ppbv	8000	10/10/2012 2:18 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	10/10/2012 2:18 AM
m,p-Xylene	14,000	16,000	J	ppbv	8000	10/10/2012 2:18 AM
Methylene chloride	ND	40,000	U	ppbv	8000	10/10/2012 2:18 AM
n-Hexane	110,000	16,000		ppbv	8000	10/10/2012 2:18 AM
Naphthalene	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
o-Xylene	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Propylene	520,000	20,000		ppbv	20000	10/10/2012 10:03 PM
Styrene	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Toluene	96,000	8,000		ppbv	8000	10/10/2012 2:18 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Trichloroethene	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	10/10/2012 2:18 AM
Xylenes, Total	14,000	24,000	J	ppbv	8000	10/10/2012 2:18 AM
Surr: 4-Bromofluorobenzene	96.5	70-130		%REC	8000	10/10/2012 2:18 AM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	4,400,000	940,000		µg/m³	8000	10/12/2012 11:24 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	10/12/2012 11:24 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	10/12/2012 11:24 PM
Surr: 4-Bromofluorobenzene	93.3	70-130		%REC	8000	10/12/2012 11:24 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 3:53:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-048	**Matrix:**	Air
Client Sample ID:	VA9079		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	6.0	0.10		% v/v	1	10/18/2012 2:06 PM
Carbon Monoxide	1.1	0.10		% v/v	1	10/18/2012 2:06 PM
Methane	0.048	0.50	J	% v/v	1	10/18/2012 2:06 PM
Nitrogen	83	0.10		% v/v	1	10/18/2012 2:06 PM
Oxygen	4.5	0.10		% v/v	1	10/18/2012 2:06 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
1,3-Butadiene	63,000	8,000		ppbv	8000	10/10/2012 3:00 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
2-Butanone	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
2-Hexanone	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Acetone	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Benzene	120,000	8,000		ppbv	8000	10/10/2012 3:00 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Bromoform	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Bromomethane	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Chloroethane	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Chloroform	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Chloromethane	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/19/2012 3:53:00 PM
Project:	Kirtland AFB		
Lab ID:	1209B05-048	**Matrix:**	Air
Client Sample ID:	VA9079		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	98,000	16,000		ppbv	8000	10/10/2012 3:00 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	10/10/2012 3:00 AM
Heptane	82,000	8,000		ppbv	8000	10/10/2012 3:00 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	10/10/2012 3:00 AM
m,p-Xylene	16,000	16,000		ppbv	8000	10/10/2012 3:00 AM
Methylene chloride	ND	40,000	U	ppbv	8000	10/10/2012 3:00 AM
n-Hexane	86,000	16,000		ppbv	8000	10/10/2012 3:00 AM
Naphthalene	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
o-Xylene	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Propylene	560,000	20,000		ppbv	20000	10/10/2012 10:44 PM
Styrene	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Toluene	93,000	8,000		ppbv	8000	10/10/2012 3:00 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Trichloroethene	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	10/10/2012 3:00 AM
Xylenes, Total	16,000	24,000	J	ppbv	8000	10/10/2012 3:00 AM
Surr: 4-Bromofluorobenzene	97.6	70-130		%REC	8000	10/10/2012 3:00 AM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,800,000	940,000		µg/m³	8000	10/13/2012 12:08 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	10/13/2012 12:08 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	10/13/2012 12:08 AM
Surr: 4-Bromofluorobenzene	93.7	70-130		%REC	8000	10/13/2012 12:08 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/20/2012 8:57:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-049	**Matrix:**	Air
Client Sample ID:	VA9081		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	1.1	0.10		% v/v	1	10/18/2012 2:22 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/18/2012 2:22 PM
Methane	ND	0.50	U	% v/v	1	10/18/2012 2:22 PM
Nitrogen	79	0.10		% v/v	1	10/18/2012 2:22 PM
Oxygen	17	0.10		% v/v	1	10/18/2012 2:22 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	10/10/2012 2:58 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	10/10/2012 2:58 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	10/10/2012 2:58 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	10/10/2012 2:58 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	10/10/2012 2:58 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	10/10/2012 2:58 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	10/10/2012 2:58 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	10/10/2012 2:58 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	10/10/2012 2:58 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	10/10/2012 2:58 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	10/10/2012 2:58 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	10/10/2012 2:58 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	10/10/2012 2:58 PM
1,3-Butadiene	ND	800	U	ppbv	800	10/10/2012 2:58 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	10/10/2012 2:58 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	10/10/2012 2:58 PM
2-Butanone	ND	800	U	ppbv	800	10/10/2012 2:58 PM
2-Hexanone	ND	800	U	ppbv	800	10/10/2012 2:58 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Acetone	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Benzene	1,700	800		ppbv	800	10/10/2012 2:58 PM
Benzyl chloride	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Bromodichloromethane	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Bromoform	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Bromomethane	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Carbon disulfide	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Carbon tetrachloride	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Chlorobenzene	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Chlorodibromomethane	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Chloroethane	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Chloroform	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Chloromethane	ND	800	U	ppbv	800	10/10/2012 2:58 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	10/10/2012 2:58 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	10/10/2012 2:58 PM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/20/2012 8:57:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-049	**Matrix:**	Air
Client Sample ID:	VA9081		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,000	1,600		ppbv	800	10/10/2012 2:58 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Ethyl acetate	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Ethylbenzene	ND	1,600	U	ppbv	800	10/10/2012 2:58 PM
Heptane	3,100	800		ppbv	800	10/10/2012 2:58 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	10/10/2012 2:58 PM
m,p-Xylene	1,500	1,600	J	ppbv	800	10/10/2012 2:58 PM
Methylene chloride	ND	4,000	U	ppbv	800	10/10/2012 2:58 PM
n-Hexane	1,700	1,600		ppbv	800	10/10/2012 2:58 PM
Naphthalene	ND	800	U	ppbv	800	10/10/2012 2:58 PM
o-Xylene	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Propylene	1,200	800		ppbv	800	10/10/2012 2:58 PM
Styrene	ND	800	U	ppbv	800	10/10/2012 2:58 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Tetrachloroethene	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Tetrahydrofuran	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Toluene	6,700	800		ppbv	800	10/10/2012 2:58 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	10/10/2012 2:58 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Trichloroethene	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Vinyl acetate	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Vinyl chloride	ND	800	U	ppbv	800	10/10/2012 2:58 PM
Xylenes, Total	1,500	2,400	J	ppbv	800	10/10/2012 2:58 PM
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	800	10/10/2012 2:58 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	180,000	47,000		µg/m³	400	10/13/2012 8:05 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	10/13/2012 8:05 AM
C9-C12 Aliphatic Hydrocarbons	44,000	76,000	J	µg/m³	400	10/13/2012 8:05 AM
Surr: 4-Bromofluorobenzene	95.6	70-130		%REC	400	10/13/2012 8:05 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/20/2012 9:43:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-050	**Matrix:**	Air
Client Sample ID:	VA9083		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: MB**
Carbon dioxide	6.9	0.10		% v/v	1	10/19/2012 12:31 PM
Carbon Monoxide	0.42	0.10		% v/v	1	10/19/2012 12:31 PM
Methane	ND	0.50	Um	% v/v	1	10/19/2012 12:31 PM
Nitrogen	84	0.10		% v/v	1	10/19/2012 12:31 PM
Oxygen	3.6	0.10		% v/v	1	10/19/2012 12:31 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
1,3-Butadiene	12,000	8,000		ppbv	8000	10/10/2012 4:23 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
2-Butanone	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
2-Hexanone	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Acetone	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Benzene	36,000	8,000		ppbv	8000	10/10/2012 4:23 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Bromoform	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Bromomethane	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Chloroethane	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Chloroform	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Chloromethane	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM

RTI Laboratories - Analytical Report

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/20/2012 9:43:00 AM
Project:	Kirtland AFB		
Lab ID:	1209B05-050	**Matrix:**	Air
Client Sample ID:	VA9083		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	45,000	16,000		ppbv	8000	10/10/2012 4:23 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	10/10/2012 4:23 AM
Heptane	39,000	8,000		ppbv	8000	10/10/2012 4:23 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	10/10/2012 4:23 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	10/10/2012 4:23 AM
Methylene chloride	ND	40,000	U	ppbv	8000	10/10/2012 4:23 AM
n-Hexane	38,000	16,000		ppbv	8000	10/10/2012 4:23 AM
Naphthalene	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
o-Xylene	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Propylene	100,000	8,000		ppbv	8000	10/10/2012 4:23 AM
Styrene	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Toluene	37,000	8,000		ppbv	8000	10/10/2012 4:23 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Trichloroethene	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	10/10/2012 4:23 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	10/10/2012 4:23 AM
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	8000	10/10/2012 4:23 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,300,000	190,000		µg/m³	1600	10/13/2012 1:51 AM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	10/13/2012 1:51 AM
C9-C12 Aliphatic Hydrocarbons	140,000	300,000	J	µg/m³	1600	10/13/2012 1:51 AM
Surr: 4-Bromofluorobenzene	94.8	70-130		%REC	1600	10/13/2012 1:51 AM

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52727**

Sample ID:	**MBLK/CC_31 VOA1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52727**
Client ID:	**PBW**	Batch ID:	**R52727**	TestNo:	**TO-15**			Analysis Date:	**10/5/2012**	SeqNo:	**1035361**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	1.0									U
1,1,2,2-Tetrachloroethane	ND	1.0									U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0									U
1,1,2-Trichloroethane	ND	1.0									U
1,1-Dichloroethane	ND	1.0									U
1,1-Dichloroethene	ND	1.0									U
1,2,4-Trichlorobenzene	ND	1.0									U
1,2,4-Trimethylbenzene	ND	1.0									U
1,2-Dibromoethane	ND	1.0									U
1,2-Dichlorobenzene	ND	1.0									U
1,2-Dichloroethane	ND	1.0									U
1,2-Dichloropropane	ND	1.0									U
1,3,5-Trimethylbenzene	ND	1.0									U
1,3-Butadiene	ND	1.0									U
1,3-Dichlorobenzene	ND	1.0									U
1,4-Dichlorobenzene	ND	1.0									U
2-Butanone	ND	1.0									U
2-Hexanone	ND	1.0									U
4-Methyl-2-pentanone	ND	1.0									U
Acetone	ND	1.0									U
Benzene	ND	1.0									U
Benzyl chloride	ND	1.0									U
Bromodichloromethane	ND	1.0									U
Bromoform	ND	1.0									U
Bromomethane	ND	1.0									U
Carbon disulfide	ND	1.0									U
Carbon tetrachloride	ND	1.0									U
Chlorobenzene	ND	1.0									U
Chlorodibromomethane	ND	1.0									U
Chloroethane	ND	1.0									U
Chloroform	ND	1.0									U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52727**

Sample ID:	**MBLK/CC_31 VOA1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52727**
Client ID:	**PBW**	Batch ID:	**R52727**	TestNo:	**TO-15**			Analysis Date:	**10/5/2012**	SeqNo:	**1035361**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	ND	1.0									U
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	12		12.50		95.4	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52727**

Sample ID:	**1209B05-001Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52727**
Client ID:	**VA1635**	Batch ID:	**R52727**	TestNo:	**TO-15**			Analysis Date:	**10/5/2012**	SeqNo:	**1035363**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	800						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	800						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800						0	0	25	U
1,1,2-Trichloroethane	ND	800						0	0	25	U
1,1-Dichloroethane	ND	800						0	0	25	U
1,1-Dichloroethene	ND	800						0	0	25	U
1,2,4-Trichlorobenzene	ND	800						0	0	25	U
1,2,4-Trimethylbenzene	ND	800						0	0	25	U
1,2-Dibromoethane	ND	800						0	0	25	U
1,2-Dichlorobenzene	ND	800						0	0	25	U
1,2-Dichloroethane	ND	800						0	0	25	U
1,2-Dichloropropane	ND	800						0	0	25	U
1,3,5-Trimethylbenzene	ND	800						0	0	25	U
1,3-Butadiene	ND	800						0	0	25	U
1,3-Dichlorobenzene	ND	800						0	0	25	U
1,4-Dichlorobenzene	ND	800						0	0	25	U
2-Butanone	ND	800						0	0	25	U
2-Hexanone	ND	800						0	0	25	U
4-Methyl-2-pentanone	ND	800						0	0	25	U
Acetone	1,800	800						1,096	47.4	25	R
Benzene	7,500	800						6,872	8.37	25	
Benzyl chloride	ND	800						0	0	25	U
Bromodichloromethane	ND	800						0	0	25	U
Bromoform	ND	800						0	0	25	U
Bromomethane	ND	800						0	0	25	U
Carbon disulfide	ND	800						0	0	25	U
Carbon tetrachloride	ND	800						0	0	25	U
Chlorobenzene	ND	800						0	0	25	U
Chlorodibromomethane	ND	800						0	0	25	U
Chloroethane	ND	800						0	0	25	U
Chloroform	ND	800						0	0	25	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52727**

Sample ID:	**1209B05-001Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52727**
Client ID:	**VA1635**	Batch ID:	**R52727**	TestNo:	**TO-15**			Analysis Date:	**10/5/2012**	SeqNo:	**1035363**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	800						0	0	25	U
cis-1,2-Dichloroethene	ND	800						0	0	25	U
cis-1,3-dichloropropene	ND	800						0	0	25	U
Cyclohexane	7,300	1,600						6,520	11.0	25	
Dichlorodifluoromethane	ND	800						0	0	25	U
Ethyl acetate	ND	800						0	0	25	U
Ethylbenzene	840	1,600						0	200	25	JR
Heptane	6,200	800						5,376	14.5	25	
Hexachlorobutadiene	ND	1,600						0	0	25	U
m,p-Xylene	2,300	1,600						1,960	15.4	25	
Methylene chloride	ND	4,000						0	0	25	U
n-Hexane	4,500	1,600						4,064	10.3	25	
Naphthalene	ND	800						0	0	25	U
o-Xylene	ND	800						0	0	25	U
Propylene	ND	800						0	0	25	U
Styrene	ND	800						0	0	25	U
tert-Butyl Methyl Ether	ND	800						0	0	25	U
Tetrachloroethene	ND	800						0	0	25	U
Tetrahydrofuran	ND	800						0	0	25	U
Toluene	15,000	800						12,790	15.3	25	
trans-1,2-Dichloroethene	ND	800						0	0	25	U
trans-1,3-dichloropropene	ND	800						0	0	25	U
Trichloroethene	ND	800						0	0	25	U
Trichlorofluoromethane	ND	800						0	0	25	U
Vinyl acetate	ND	800						0	0	25	U
Vinyl chloride	ND	800						0	0	25	U
Xylenes, Total	2,300	2,400						1,960	15.4	25	J
Surr: 4-Bromofluorobenzene	9,600		10,000		96.4	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52776**

Sample ID:	**MBLK VOA1 100812**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52776**
Client ID:	**PBW**	Batch ID:	**R52776**	TestNo:	**TO-15**			Analysis Date:	**10/8/2012**	SeqNo:	**1036538**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	1.0									U
1,1,2,2-Tetrachloroethane	ND	1.0									U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0									U
1,1,2-Trichloroethane	ND	1.0									U
1,1-Dichloroethane	ND	1.0									U
1,1-Dichloroethene	ND	1.0									U
1,2,4-Trichlorobenzene	ND	1.0									U
1,2,4-Trimethylbenzene	ND	1.0									U
1,2-Dibromoethane	ND	1.0									U
1,2-Dichlorobenzene	ND	1.0									U
1,2-Dichloroethane	ND	1.0									U
1,2-Dichloropropane	ND	1.0									U
1,3,5-Trimethylbenzene	ND	1.0									U
1,3-Butadiene	ND	1.0									U
1,3-Dichlorobenzene	ND	1.0									U
1,4-Dichlorobenzene	ND	1.0									U
2-Butanone	ND	1.0									U
2-Hexanone	ND	1.0									U
4-Methyl-2-pentanone	ND	1.0									U
Acetone	ND	1.0									U
Benzene	ND	1.0									U
Benzyl chloride	ND	1.0									U
Bromodichloromethane	ND	1.0									U
Bromoform	ND	1.0									U
Bromomethane	ND	1.0									U
Carbon disulfide	ND	1.0									U
Carbon tetrachloride	ND	1.0									U
Chlorobenzene	ND	1.0									U
Chlorodibromomethane	ND	1.0									U
Chloroethane	ND	1.0									U
Chloroform	ND	1.0									U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52776**

Sample ID:	**MBLK VOA1 100812**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52776**
Client ID:	**PBW**	Batch ID:	**R52776**	TestNo:	**TO-15**			Analysis Date:	**10/8/2012**	SeqNo:	**1036538**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	ND	1.0									U
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	12		12.50		93.1	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52776**

Sample ID:	**1209B05-030ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52776**
Client ID:	**VA1702**	Batch ID:	**R52776**	TestNo:	**TO-15**			Analysis Date:	**10/8/2012**	SeqNo:	**1036561**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	40,000						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	40,000						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40,000						0	0	25	U
1,1,2-Trichloroethane	ND	40,000						0	0	25	U
1,1-Dichloroethane	ND	40,000						0	0	25	U
1,1-Dichloroethene	ND	40,000						0	0	25	U
1,2,4-Trichlorobenzene	ND	40,000						0	0	25	U
1,2,4-Trimethylbenzene	ND	40,000						0	0	25	U
1,2-Dibromoethane	ND	40,000						0	0	25	U
1,2-Dichlorobenzene	ND	40,000						0	0	25	U
1,2-Dichloroethane	ND	40,000						0	0	25	U
1,2-Dichloropropane	ND	40,000						0	0	25	U
1,3,5-Trimethylbenzene	ND	40,000						0	0	25	U
1,3-Butadiene	ND	40,000						0	0	25	U
1,3-Dichlorobenzene	ND	40,000						0	0	25	U
1,4-Dichlorobenzene	ND	40,000						0	0	25	U
2-Butanone	41,000	40,000						42,000	1.92	25	
2-Hexanone	ND	40,000						0	0	25	U
4-Methyl-2-pentanone	ND	40,000						0	0	25	U
Acetone	350,000	40,000						357,200	1.92	25	
Benzene	110,000	40,000						112,400	2.89	25	
Benzyl chloride	ND	40,000						0	0	25	U
Bromodichloromethane	ND	40,000						0	0	25	U
Bromoform	ND	40,000						0	0	25	U
Bromomethane	ND	40,000						0	0	25	U
Carbon disulfide	ND	40,000						0	0	25	U
Carbon tetrachloride	ND	40,000						0	0	25	U
Chlorobenzene	ND	40,000						0	0	25	U
Chlorodibromomethane	ND	40,000						0	0	25	U
Chloroethane	ND	40,000						0	0	25	U
Chloroform	ND	40,000						0	0	25	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52776**

Sample ID:	**1209B05-030ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52776**
Client ID:	**VA1702**	Batch ID:	**R52776**	TestNo:	**TO-15**			Analysis Date:	**10/8/2012**	SeqNo:	**1036561**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	40,000						0	0	25	U
cis-1,2-Dichloroethene	ND	40,000						0	0	25	U
cis-1,3-dichloropropene	ND	40,000						0	0	25	U
Cyclohexane	410,000	80,000						427,200	3.14	25	
Dichlorodifluoromethane	ND	40,000						0	0	25	U
Ethyl acetate	ND	40,000						0	0	25	U
Ethylbenzene	ND	80,000						0	0	25	U
Heptane	190,000	40,000						192,800	2.95	25	
Hexachlorobutadiene	ND	80,000						0	0	25	U
m,p-Xylene	ND	80,000						0	0	25	U
Methylene chloride	ND	200,000						0	0	25	U
n-Hexane	650,000	80,000						662,800	2.51	25	
Naphthalene	ND	40,000						0	0	25	U
o-Xylene	ND	40,000						0	0	25	U
Propylene	ND	40,000						0	0	25	U
Styrene	ND	40,000						0	0	25	U
tert-Butyl Methyl Ether	ND	40,000						0	0	25	U
Tetrachloroethene	ND	40,000						0	0	25	U
Tetrahydrofuran	ND	40,000						0	0	25	U
Toluene	63,000	40,000						66,000	4.97	25	
trans-1,2-Dichloroethene	ND	40,000						0	0	25	U
trans-1,3-dichloropropene	ND	40,000						0	0	25	U
Trichloroethene	ND	40,000						0	0	25	U
Trichlorofluoromethane	ND	40,000						0	0	25	U
Vinyl acetate	ND	40,000						0	0	25	U
Vinyl chloride	ND	40,000						0	0	25	U
Xylenes, Total	ND	120,000						0	0	25	U
Surr: 4-Bromofluorobenzene	490,000		500,000		98.2	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52817**

Sample ID:	**MBLK/CC_78 VOA1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52817**
Client ID:	**PBW**	Batch ID:	**R52817**	TestNo:	**TO-15**			Analysis Date:	**10/9/2012**	SeqNo:	**1037332**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	1.0									U
1,1,2,2-Tetrachloroethane	ND	1.0									U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0									U
1,1,2-Trichloroethane	ND	1.0									U
1,1-Dichloroethane	ND	1.0									U
1,1-Dichloroethene	ND	1.0									U
1,2,4-Trichlorobenzene	ND	1.0									U
1,2,4-Trimethylbenzene	ND	1.0									U
1,2-Dibromoethane	ND	1.0									U
1,2-Dichlorobenzene	ND	1.0									U
1,2-Dichloroethane	ND	1.0									U
1,2-Dichloropropane	ND	1.0									U
1,3,5-Trimethylbenzene	ND	1.0									U
1,3-Butadiene	ND	1.0									U
1,3-Dichlorobenzene	ND	1.0									U
1,4-Dichlorobenzene	ND	1.0									U
2-Butanone	ND	1.0									U
2-Hexanone	ND	1.0									U
4-Methyl-2-pentanone	ND	1.0									U
Acetone	ND	1.0									U
Benzene	ND	1.0									U
Benzyl chloride	ND	1.0									U
Bromodichloromethane	ND	1.0									U
Bromoform	ND	1.0									U
Bromomethane	ND	1.0									U
Carbon disulfide	ND	1.0									U
Carbon tetrachloride	ND	1.0									U
Chlorobenzene	ND	1.0									U
Chlorodibromomethane	ND	1.0									U
Chloroethane	ND	1.0									U
Chloroform	ND	1.0									U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52817**

Sample ID:	**MBLK/CC_78 VOA1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52817**
Client ID:	**PBW**	Batch ID:	**R52817**	TestNo:	**TO-15**			Analysis Date:	**10/9/2012**	SeqNo:	**1037332**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	ND	1.0									U
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	12		12.50		93.4	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52817**

Sample ID:	**1209B05-034Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52817**
Client ID:	**VA1706**	Batch ID:	**R52817**	TestNo:	**TO-15**			Analysis Date:	**10/9/2012**	SeqNo:	**1037334**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	40						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	40						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40						0	0	25	U
1,1,2-Trichloroethane	ND	40						0	0	25	U
1,1-Dichloroethane	ND	40						0	0	25	U
1,1-Dichloroethene	ND	40						0	0	25	U
1,2,4-Trichlorobenzene	ND	40						0	0	25	U
1,2,4-Trimethylbenzene	240	40						230.0	4.59	25	
1,2-Dibromoethane	ND	40						0	0	25	U
1,2-Dichlorobenzene	ND	40						0	0	25	U
1,2-Dichloroethane	ND	40						0	0	25	U
1,2-Dichloropropane	ND	40						0	0	25	U
1,3,5-Trimethylbenzene	79	40						75.60	4.15	25	
1,3-Butadiene	ND	40						0	0	25	U
1,3-Dichlorobenzene	ND	40						0	0	25	U
1,4-Dichlorobenzene	ND	40						0	0	25	U
2-Butanone	ND	40						0	0	25	U
2-Hexanone	ND	40						0	0	25	U
4-Methyl-2-pentanone	ND	40						0	0	25	U
Acetone	56	40						60.00	7.61	25	
Benzene	320	40						319.6	0.251	25	
Benzyl chloride	ND	40						0	0	25	U
Bromodichloromethane	ND	40						0	0	25	U
Bromoform	ND	40						0	0	25	U
Bromomethane	ND	40						0	0	25	U
Carbon disulfide	ND	40						0	0	25	U
Carbon tetrachloride	ND	40						0	0	25	U
Chlorobenzene	ND	40						0	0	25	U
Chlorodibromomethane	ND	40						0	0	25	U
Chloroethane	ND	40						0	0	25	U
Chloroform	ND	40						0	0	25	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52817**

Sample ID:	**1209B05-034Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52817**
Client ID:	**VA1706**	Batch ID:	**R52817**	TestNo:	**TO-15**			Analysis Date:	**10/9/2012**	SeqNo:	**1037334**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	40						0	0	25	U
cis-1,2-Dichloroethene	ND	40						0	0	25	U
cis-1,3-dichloropropene	ND	40						0	0	25	U
Cyclohexane	800	80						811.2	0.842	25	
Dichlorodifluoromethane	ND	40						0	0	25	U
Ethyl acetate	ND	40						0	0	25	U
Ethylbenzene	280	80						267.6	3.81	25	
Heptane	640	40						647.2	1.62	25	
Hexachlorobutadiene	ND	80						0	0	25	U
m,p-Xylene	600	80						573.2	3.77	25	
Methylene chloride	ND	200						0	0	25	U
n-Hexane	660	80						664.4	0.0602	25	
Naphthalene	ND	40						0	0	25	U
o-Xylene	220	40						213.2	3.14	25	
Propylene	ND	40						0	0	25	U
Styrene	ND	40						0	0	25	U
tert-Butyl Methyl Ether	ND	40						0	0	25	U
Tetrachloroethene	ND	40						0	0	25	U
Tetrahydrofuran	ND	40						0	0	25	U
Toluene	1,000	40						998.0	0.798	25	
trans-1,2-Dichloroethene	ND	40						0	0	25	U
trans-1,3-dichloropropene	ND	40						0	0	25	U
Trichloroethene	ND	40						0	0	25	U
Trichlorofluoromethane	ND	40						0	0	25	U
Vinyl acetate	ND	40						0	0	25	U
Vinyl chloride	ND	40						0	0	25	U
Xylenes, Total	820	120						786.4	3.60	25	
Surr: 4-Bromofluorobenzene	530		500.0		106	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52862**

Sample ID:	**MBLK/CC_51 VOA1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52862**
Client ID:	**PBW**	Batch ID:	**R52862**	TestNo:	**TO-15**			Analysis Date:	**10/10/2012**	SeqNo:	**1038074**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	1.0									U
1,1,2,2-Tetrachloroethane	ND	1.0									U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0									U
1,1,2-Trichloroethane	ND	1.0									U
1,1-Dichloroethane	ND	1.0									U
1,1-Dichloroethene	ND	1.0									U
1,2,4-Trichlorobenzene	ND	1.0									U
1,2,4-Trimethylbenzene	ND	1.0									U
1,2-Dibromoethane	ND	1.0									U
1,2-Dichlorobenzene	ND	1.0									U
1,2-Dichloroethane	ND	1.0									U
1,2-Dichloropropane	ND	1.0									U
1,3,5-Trimethylbenzene	ND	1.0									U
1,3-Butadiene	ND	1.0									U
1,3-Dichlorobenzene	ND	1.0									U
1,4-Dichlorobenzene	ND	1.0									U
2-Butanone	ND	1.0									U
2-Hexanone	ND	1.0									U
4-Methyl-2-pentanone	ND	1.0									U
Acetone	ND	1.0									U
Benzene	ND	1.0									U
Benzyl chloride	ND	1.0									U
Bromodichloromethane	ND	1.0									U
Bromoform	ND	1.0									U
Bromomethane	ND	1.0									U
Carbon disulfide	ND	1.0									U
Carbon tetrachloride	ND	1.0									U
Chlorobenzene	ND	1.0									U
Chlorodibromomethane	ND	1.0									U
Chloroethane	ND	1.0									U
Chloroform	ND	1.0									U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52862**

Sample ID:	**MBLK/CC_51 VOA1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52862**
Client ID:	**PBW**	Batch ID:	**R52862**	TestNo:	**TO-15**			Analysis Date:	**10/10/2012**	SeqNo:	**1038074**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	ND	1.0									U
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	12		12.50		93.8	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52862**

Sample ID:	**1209B05-010Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52862**
Client ID:	**VA1658**	Batch ID:	**R52862**	TestNo:	**TO-15**			Analysis Date:	**10/10/2012**	SeqNo:	**1038080**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	800						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	800						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800						0	0	25	U
1,1,2-Trichloroethane	ND	800						0	0	25	U
1,1-Dichloroethane	ND	800						0	0	25	U
1,1-Dichloroethene	ND	800						0	0	25	U
1,2,4-Trichlorobenzene	ND	800						0	0	25	U
1,2,4-Trimethylbenzene	ND	800						0	0	25	U
1,2-Dibromoethane	ND	800						0	0	25	U
1,2-Dichlorobenzene	ND	800						0	0	25	U
1,2-Dichloroethane	ND	800						0	0	25	U
1,2-Dichloropropane	ND	800						0	0	25	U
1,3,5-Trimethylbenzene	ND	800						0	0	25	U
1,3-Butadiene	ND	800						0	0	25	U
1,3-Dichlorobenzene	ND	800						0	0	25	U
1,4-Dichlorobenzene	ND	800						0	0	25	U
2-Butanone	ND	800						0	0	25	U
2-Hexanone	ND	800						0	0	25	U
4-Methyl-2-pentanone	ND	800						0	0	25	U
Acetone	800	800						0	200	25	R
Benzene	8,200	800						7,304	11.8	25	
Benzyl chloride	ND	800						0	0	25	U
Bromodichloromethane	ND	800						0	0	25	U
Bromoform	ND	800						0	0	25	U
Bromomethane	ND	800						0	0	25	U
Carbon disulfide	ND	800						0	0	25	U
Carbon tetrachloride	ND	800						0	0	25	U
Chlorobenzene	ND	800						0	0	25	U
Chlorodibromomethane	ND	800						0	0	25	U
Chloroethane	ND	800						0	0	25	U
Chloroform	ND	800						0	0	25	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52862**

Sample ID:	**1209B05-010Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52862**
Client ID:	**VA1658**	Batch ID:	**R52862**	TestNo:	**TO-15**			Analysis Date:	**10/10/2012**	SeqNo:	**1038080**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	800						0	0	25	U
cis-1,2-Dichloroethene	ND	800						0	0	25	U
cis-1,3-dichloropropene	ND	800						0	0	25	U
Cyclohexane	12,000	1,600						11,170	8.18	25	
Dichlorodifluoromethane	ND	800						0	0	25	U
Ethyl acetate	ND	800						0	0	25	U
Ethylbenzene	1,300	1,600						1,200	9.52	25	J
Heptane	7,700	800						7,320	5.01	25	
Hexachlorobutadiene	ND	1,600						0	0	25	U
m,p-Xylene	4,400	1,600						3,968	9.23	25	
Methylene chloride	ND	4,000						0	0	25	U
n-Hexane	5,600	1,600						5,160	8.32	25	
Naphthalene	ND	800						0	0	25	U
o-Xylene	1,400	800						1,248	10.9	25	
Propylene	ND	800						0	0	25	U
Styrene	ND	800						0	0	25	U
tert-Butyl Methyl Ether	ND	800						0	0	25	U
Tetrachloroethene	ND	800						0	0	25	U
Tetrahydrofuran	ND	800						0	0	25	U
Toluene	25,000	800						22,390	9.85	25	
trans-1,2-Dichloroethene	ND	800						0	0	25	U
trans-1,3-dichloropropene	ND	800						0	0	25	U
Trichloroethene	ND	800						0	0	25	U
Trichlorofluoromethane	ND	800						0	0	25	U
Vinyl acetate	ND	800						0	0	25	U
Vinyl chloride	ND	800						0	0	25	U
Xylenes, Total	5,700	2,400						5,216	9.64	25	
Surr: 4-Bromofluorobenzene	9,700		10,000		96.8	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52864**

Sample ID:	**MBLK VOA9 101012**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52864**
Client ID:	**PBW**	Batch ID:	**R52864**	TestNo:	**MA_APH**			Analysis Date:	**10/10/2012**	SeqNo:	**1038122**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	ND	120									U
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	83		89.50		92.7	70	130				

Sample ID:	**1209B05-016Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52864**
Client ID:	**VA1688**	Batch ID:	**R52864**	TestNo:	**MA_APH**			Analysis Date:	**10/11/2012**	SeqNo:	**1038139**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	36,000	4,700						36,620	1.14	30	
C9-C10 Aromatic Hydrocarbons	ND	5,300						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	2,800	7,600						2,695	3.74	30	J
Surr: 4-Bromofluorobenzene	3,400		3,580		95.7	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52889**

Sample ID:	**MBLK VOA9 101112**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52889**
Client ID:	**PBW**	Batch ID:	**R52889**	TestNo:	**MA_APH**			Analysis Date:	**10/11/2012**	SeqNo:	**1038774**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	ND	120									U
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	83		89.50		93.2	70	130				

Sample ID:	**1209B05-033Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52889**
Client ID:	**VA1705**	Batch ID:	**R52889**	TestNo:	**MA_APH**			Analysis Date:	**10/12/2012**	SeqNo:	**1038788**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	4,200,000	940,000						4,241,000	1.40	30	
C9-C10 Aromatic Hydrocarbons	ND	1,100,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000						0	0	30	U
Surr: 4-Bromofluorobenzene	660,000		716,000		91.9	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52936**

Sample ID:	**MBLK/CC_4 VOA1 1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52936**
Client ID:	**PBW**	Batch ID:	**R52936**	TestNo:	**TO-15**			Analysis Date:	**10/12/2012**	SeqNo:	**1039639**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	1.0									U
1,1,2,2-Tetrachloroethane	ND	1.0									U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0									U
1,1,2-Trichloroethane	ND	1.0									U
1,1-Dichloroethane	ND	1.0									U
1,1-Dichloroethene	ND	1.0									U
1,2,4-Trichlorobenzene	ND	1.0									U
1,2,4-Trimethylbenzene	ND	1.0									U
1,2-Dibromoethane	ND	1.0									U
1,2-Dichlorobenzene	ND	1.0									U
1,2-Dichloroethane	ND	1.0									U
1,2-Dichloropropane	ND	1.0									U
1,3,5-Trimethylbenzene	ND	1.0									U
1,3-Butadiene	ND	1.0									U
1,3-Dichlorobenzene	ND	1.0									U
1,4-Dichlorobenzene	ND	1.0									U
2-Butanone	ND	1.0									U
2-Hexanone	ND	1.0									U
4-Methyl-2-pentanone	ND	1.0									U
Acetone	ND	1.0									U
Benzene	ND	1.0									U
Benzyl chloride	ND	1.0									U
Bromodichloromethane	ND	1.0									U
Bromoform	ND	1.0									U
Bromomethane	ND	1.0									U
Carbon disulfide	ND	1.0									U
Carbon tetrachloride	ND	1.0									U
Chlorobenzene	ND	1.0									U
Chlorodibromomethane	ND	1.0									U
Chloroethane	ND	1.0									U
Chloroform	ND	1.0									U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52936**

Sample ID:	**MBLK/CC_4 VOA1 1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52936**
Client ID:	**PBW**	Batch ID:	**R52936**	TestNo:	**TO-15**			Analysis Date:	**10/12/2012**	SeqNo:	**1039639**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Cyclohexane	ND	2.0									U
Dichlorodifluoromethane	ND	1.0									U
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Heptane	ND	1.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									U
n-Hexane	ND	2.0									U
Naphthalene	ND	1.0									U
o-Xylene	ND	1.0									U
Propylene	ND	1.0									U
Styrene	ND	1.0									U
tert-Butyl Methyl Ether	ND	1.0									U
Tetrachloroethene	ND	1.0									U
Tetrahydrofuran	ND	1.0									U
Toluene	ND	1.0									U
trans-1,2-Dichloroethene	ND	1.0									U
trans-1,3-dichloropropene	ND	1.0									U
Trichloroethene	ND	1.0									U
Trichlorofluoromethane	ND	1.0									U
Vinyl acetate	ND	1.0									U
Vinyl chloride	ND	1.0									U
Xylenes, Total	ND	3.0									U
Surr: 4-Bromofluorobenzene	11		12.50		90.6	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52936**

Sample ID:	**1209B05-031Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52936**
Client ID:	**VA1703**	Batch ID:	**R52936**	TestNo:	**TO-15**			Analysis Date:	**10/12/2012**	SeqNo:	**1039642**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	40						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	40						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40						0	0	25	U
1,1,2-Trichloroethane	ND	40						0	0	25	U
1,1-Dichloroethane	ND	40						0	0	25	U
1,1-Dichloroethene	ND	40						0	0	25	U
1,2,4-Trichlorobenzene	ND	40						0	0	25	U
1,2,4-Trimethylbenzene	140	40						143.2	0.279	25	
1,2-Dibromoethane	ND	40						0	0	25	U
1,2-Dichlorobenzene	ND	40						0	0	25	U
1,2-Dichloroethane	ND	40						0	0	25	U
1,2-Dichloropropane	ND	40						0	0	25	U
1,3,5-Trimethylbenzene	64	40						63.60	0	25	
1,3-Butadiene	ND	40						0	0	25	U
1,3-Dichlorobenzene	ND	40						0	0	25	U
1,4-Dichlorobenzene	ND	40						0	0	25	U
2-Butanone	ND	40						0	0	25	U
2-Hexanone	ND	40						0	0	25	U
4-Methyl-2-pentanone	ND	40						0	0	25	U
Acetone	ND	40						0	0	25	U
Benzene	440	40						445.6	1.08	25	
Benzyl chloride	ND	40						0	0	25	U
Bromodichloromethane	ND	40						0	0	25	U
Bromoform	ND	40						0	0	25	U
Bromomethane	ND	40						0	0	25	U
Carbon disulfide	ND	40						0	0	25	U
Carbon tetrachloride	ND	40						0	0	25	U
Chlorobenzene	ND	40						0	0	25	U
Chlorodibromomethane	ND	40						0	0	25	U
Chloroethane	ND	40						0	0	25	U
Chloroform	ND	40						0	0	25	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52936**

Sample ID:	**1209B05-031Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52936**
Client ID:	**VA1703**	Batch ID:	**R52936**	TestNo:	**TO-15**			Analysis Date:	**10/12/2012**	SeqNo:	**1039642**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	40						0	0	25	U
cis-1,2-Dichloroethene	ND	40						0	0	25	U
cis-1,3-dichloropropene	ND	40						0	0	25	U
Cyclohexane	700	80						712.4	2.04	25	
Dichlorodifluoromethane	ND	40						0	0	25	U
Ethyl acetate	ND	40						0	0	25	U
Ethylbenzene	290	80						292.4	0.824	25	
Heptane	940	40						965.6	2.90	25	
Hexachlorobutadiene	ND	80						0	0	25	U
m,p-Xylene	950	80						936.4	0.935	25	
Methylene chloride	ND	200						0	0	25	U
n-Hexane	270	80						277.6	1.16	25	
Naphthalene	ND	40						0	0	25	U
o-Xylene	330	40						325.6	0.734	25	
Propylene	ND	40						0	0	25	U
Styrene	ND	40						0	0	25	U
tert-Butyl Methyl Ether	ND	40						0	0	25	U
Tetrachloroethene	ND	40						0	0	25	U
Tetrahydrofuran	ND	40						0	0	25	U
Toluene	2,000	40						2,061	1.90	25	E
trans-1,2-Dichloroethene	ND	40						0	0	25	U
trans-1,3-dichloropropene	ND	40						0	0	25	U
Trichloroethene	ND	40						0	0	25	U
Trichlorofluoromethane	ND	40						0	0	25	U
Vinyl acetate	ND	40						0	0	25	U
Vinyl chloride	ND	40						0	0	25	U
Xylenes, Total	1,300	120						1,262	0.884	25	
Surr: 4-Bromofluorobenzene	530		500.0		105	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52943**

Sample ID:	**MBLK VOA9 101212**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52943**
Client ID:	**PBW**	Batch ID:	**R52943**	TestNo:	**MA_APH**			Analysis Date:	**10/12/2012**	SeqNo:	**1039712**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	ND	120									U
C9-C10 Aromatic Hydrocarbons	ND	130									U
C9-C12 Aliphatic Hydrocarbons	ND	190									U
Surr: 4-Bromofluorobenzene	83		89.50		92.9	70	130				

Sample ID:	**1209B05-043Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52943**
Client ID:	**VA9072**	Batch ID:	**R52943**	TestNo:	**MA_APH**			Analysis Date:	**10/12/2012**	SeqNo:	**1039715**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	640,000	190,000						577,900	10.2	30	
C9-C10 Aromatic Hydrocarbons	ND	210,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	140,000	300,000						107,500	25.0	30	J
Surr: 4-Bromofluorobenzene	140,000		143,200		94.3	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52991**

Sample ID:	**MBLK-101012 TCD-A**	Samp Type:	**MBLK**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**52991**
Client ID:	**PBW**	Batch ID:	**R52991**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/10/2012**	SeqNo:	**1040796**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	ND	0.10									U
Carbon Monoxide	ND	0.10									U
Methane	ND	0.50									U
Nitrogen	ND	0.10									U
Oxygen	ND	0.10									U

Sample ID:	**LCS-101012 TCD-A**	Samp Type:	**LCS**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**52991**
Client ID:	**LCSW**	Batch ID:	**R52991**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/10/2012**	SeqNo:	**1040798**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.5	0.10	2.500	0	99.2	70	130	2.482	0.0806	20	
Carbon Monoxide	2.6	0.10	2.500	0	104	70	130	2.612	0.0766	20	
Methane	2.0	0.50	2.000	0	98.0	70	130	1.957	0.153	20	
Nitrogen	2.6	0.10	2.500	0	105	70	130	2.673	1.85	20	
Oxygen	2.5	0.10	2.500	0	101	70	130	2.521	0.278	20	

Sample ID:	**1209B05-010BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**52991**
Client ID:	**VA1658**	Batch ID:	**R52991**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/10/2012**	SeqNo:	**1040810**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	3.6	0.10						3.625	0.0827	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	81	0.10						80.86	0.297	20	
Oxygen	17	0.10						16.73	0.323	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R53030**

Sample ID: **MBLK-101612 TCD-A** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **53030**
Client ID: **PBW** Batch ID: **R53030** TestNo: **ASTM-D2504** Analysis Date: **10/16/2012** SeqNo: **1041733**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	ND	0.10									U
Carbon Monoxide	ND	0.10									U
Methane	ND	0.50									U
Nitrogen	ND	0.10									U
Oxygen	ND	0.10									U

Sample ID: **LCS-101612 TCD-A** Samp Type: **LCS** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **53030**
Client ID: **LCSW** Batch ID: **R53030** TestNo: **ASTM-D2504** Analysis Date: **10/16/2012** SeqNo: **1041737**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.5	0.10	2.500	0	99.1	70	130	2.467	0.405	20	
Carbon Monoxide	2.6	0.10	2.500	0	104	70	130	2.599	0.461	20	
Methane	2.0	0.50	2.000	0	97.8	70	130	1.913	2.22	20	
Nitrogen	2.6	0.10	2.500	0	106	70	130	2.673	1.09	20	
Oxygen	2.5	0.10	2.500	0	101	70	130	2.522	0.0396	20	

Sample ID: **1209B05-012BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **53030**
Client ID: **VA1660** Batch ID: **R53030** TestNo: **ASTM-D2504** Analysis Date: **10/16/2012** SeqNo: **1041748**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	7.5	0.10						7.397	1.16	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	83	0.10						81.54	1.26	20	
Oxygen	9.8	0.10						9.733	0.961	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R53074**

Sample ID: **MBLK-101712 TCD-A** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **53074**
Client ID: **PBW** Batch ID: **R53074** TestNo: **ASTM-D2504** Analysis Date: **10/17/2012** SeqNo: **1042490**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	ND	0.10									U
Carbon Monoxide	ND	0.10									U
Methane	ND	0.50									U
Nitrogen	ND	0.10									U
Oxygen	ND	0.10									U

Sample ID: **LCS-101712 TCD-A** Samp Type: **LCS** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **53074**
Client ID: **LCSW** Batch ID: **R53074** TestNo: **ASTM-D2504** Analysis Date: **10/17/2012** SeqNo: **1042492**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.5	0.10	2.500	0	98.5	70	130	2.509	1.89	20	
Carbon Monoxide	2.6	0.10	2.500	0	104	70	130	2.587	0.116	20	
Methane	2.0	0.50	2.000	0	102	70	130	2.051	0.980	20	
Nitrogen	2.6	0.10	2.500	0	105	70	130	2.638	0.799	20	
Oxygen	2.5	0.10	2.500	0	100	70	130	2.506	0.120	20	

Sample ID: **1209B05-039BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **53074**
Client ID: **VA1713** Batch ID: **R53074** TestNo: **ASTM-D2504** Analysis Date: **10/17/2012** SeqNo: **1042504**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.26	0.10						0.2630	2.31	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	79	0.10						78.72	0.0292	20	
Oxygen	19	0.10						19.42	3.06	20	

Sample ID: **1209B05-034BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **53074**
Client ID: **VA1706** Batch ID: **R53074** TestNo: **ASTM-D2504** Analysis Date: **10/17/2012** SeqNo: **1042512**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.74	0.10						0.7310	0.817	20	
Carbon Monoxide	ND	0.10						0	0	20	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R53074**

Sample ID:	**1209B05-034BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**53074**
Client ID:	**VA1706**	Batch ID:	**R53074**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/17/2012**	SeqNo:	**1042512**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Methane	ND	0.50						0	0	20	U
Nitrogen	79	0.10						78.48	0.619	20	
Oxygen	19	0.10						19.28	0.564	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R53139**

Sample ID:	**MBLK-101912 TCD-A**	Samp Type:	**MBLK**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**53139**
Client ID:	**PBW**	Batch ID:	**R53139**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/19/2012**	SeqNo:	**1044157**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	ND	0.10									U
Carbon Monoxide	ND	0.10									U
Methane	ND	0.50									U
Nitrogen	ND	0.10									U
Oxygen	ND	0.10									U

Sample ID:	**LCS-101912 TCD-A**	Samp Type:	**LCS**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**53139**
Client ID:	**LCSW**	Batch ID:	**R53139**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/19/2012**	SeqNo:	**1044159**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.6	0.10	2.500	0	102	70	130	2.459	3.83	20	
Carbon Monoxide	2.6	0.10	2.500	0	103	70	130	2.582	0.700	20	
Methane	2.0	0.50	2.000	0	100	70	130	1.996	0.150	20	
Nitrogen	2.6	0.10	2.500	0	105	70	130	2.757	5.21	20	
Oxygen	2.5	0.10	2.500	0	99.4	70	130	2.536	1.99	20	

Sample ID:	**1209B05-050BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**53139**
Client ID:	**VA9083**	Batch ID:	**R53139**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/19/2012**	SeqNo:	**1044164**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	6.9	0.10						6.943	0.0432	20	
Carbon Monoxide	0.42	0.10						0.4180	0	20	
Methane	ND	0.50						0	0	20	Um
Nitrogen	84	0.10						83.71	0.0227	20	
Oxygen	3.6	0.10						3.628	0.719	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209B05

Date Reported: 10/22/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R53140**

Sample ID: **MBLK-101812 TCD-A** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **53140**
Client ID: **PBW** Batch ID: **R53140** TestNo: **ASTM-D2504** Analysis Date: **10/18/2012** SeqNo: **1044073**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	ND	0.10									U
Carbon Monoxide	ND	0.10									U
Methane	ND	0.50									U
Nitrogen	ND	0.10									U
Oxygen	ND	0.10									U

Sample ID: **LCS-101812 TCD-A** Samp Type: **LCS** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **53140**
Client ID: **LCSW** Batch ID: **R53140** TestNo: **ASTM-D2504** Analysis Date: **10/18/2012** SeqNo: **1044075**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.5	0.10	2.500	0	98.7	70	130	2.454	0.528	20	
Carbon Monoxide	2.6	0.10	2.500	0	104	70	130	2.582	0.309	20	
Methane	2.0	0.50	2.000	0	101	70	130	1.999	1.09	20	
Nitrogen	2.6	0.10	2.500	0	105	70	130	2.757	4.91	20	
Oxygen	2.5	0.10	2.500	0	100	70	130	2.537	1.27	20	

Sample ID: **1209B05-049BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **53140**
Client ID: **VA9081** Batch ID: **R53140** TestNo: **ASTM-D2504** Analysis Date: **10/18/2012** SeqNo: **1044087**

Analyte	Result	LOQ	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	1.1	0.10						1.056	0.661	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	80	0.10						79.04	1.43	20	
Oxygen	17	0.10						16.62	2.30	20	

RTI Laboratories

Run ID: **VOA1_121005A** **Run No.:** 52727

Analytical Run Date: 10/5/2012 **InstrumentID:** VOA1

Analyst: Rachel Dear **Column:**

Calibration ID: 52291 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 10/10/12/PR AW 10.9.12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 100512	BFB_TUNE	TUNE	R52727	10/5/2012 10:01:00 AM	Celeste Hoitash		
CCV VOA1 100512	EPA_TO15	CCV	R52727	10/5/2012 3:43:00 PM	Celeste Hoitash		
RLVS VOA1 100512	EPA_TO15	RLVS	R52727	10/5/2012 4:53:00 PM	Celeste Hoitash		
MBLK/CC_31 VOA1	EPA_TO15	MBLK	R52727	10/5/2012 5:47:00 PM	Celeste Hoitash		
1209B05-001A	EPA_TO15	SAMP	R52727	10/5/2012 6:32:00 PM	Celeste Hoitash		
1209B05-001Adup	EPA_TO15	DUP	R52727	10/5/2012 7:16:00 PM	Celeste Hoitash		
1209B05-002A	EPA_TO15	SAMP	R52727	10/5/2012 7:58:00 PM	Celeste Hoitash		
1209B05-003A	EPA_TO15	SAMP	R52727	10/5/2012 8:39:00 PM	Celeste Hoitash		
1209B05-004A	EPA_TO15	SAMP	R52727	10/5/2012 9:27:00 PM	Celeste Hoitash		
1209B05-006A	EPA_TO15	SAMP	R52727	10/5/2012 11:03:00 PM	Celeste Hoitash		
1209B05-007A	EPA_TO15	SAMP	R52727	10/5/2012 11:44:00 PM	Celeste Hoitash		
1209B05-008A	EPA_TO15	SAMP	R52727	10/6/2012 12:29:00 AM	Celeste Hoitash		
1209B05-009A	EPA_TO15	SAMP	R52727	10/6/2012 1:14:00 AM	Celeste Hoitash		
1209B05-016A	EPA_TO15	SAMP	R52727	10/6/2012 1:55:00 AM	Celeste Hoitash		
1209B05-017A	EPA_TO15	SAMP	R52727	10/6/2012 2:36:00 AM	Celeste Hoitash		
1209B05-018A	EPA_TO15	SAMP	R52727	10/6/2012 3:17:00 AM	Celeste Hoitash		
1209B05-019A	EPA_TO15	SAMP	R52727	10/6/2012 4:05:00 AM	Celeste Hoitash		
1209B05-021A	EPA_TO15	SAMP	R52727	10/6/2012 4:48:00 AM	Celeste Hoitash		
1209B05-022A	EPA_TO15	SAMP	R52727	10/6/2012 5:29:00 AM	Celeste Hoitash		
RLVS VOA1 100512	EPA_TO15	RLVS	R52727	10/6/2012 6:12:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

22-Oct-12

RunNo 52727

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1035358	BFB VOA1 100512	BFB_TUNE	TUNE	.\1\DATA\100512\	10/5/2012 10:01:	1	R52727		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0.7	0.7		100	0	0	0	0	0	1%	0	2	0%	
174	M		74.4	74.4		100	0	0	0	0	0	74%	50	120	0%	
175	M		7.2	7.2		100	0	0	0	0	0	7%	4	9	0%	
176	M		95.1	95.1		100	0	0	0	0	0	95%	93	101	0%	
177	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	
50	M		23.5	23.5		100	0	0	0	0	0	24%	8	40	0%	
75	M		48.9	48.9		100	0	0	0	0	0	49%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1035359	CCV VOA1 100512	EPA_TO15	CCV	.\1\DATA\100512\	10/5/2012 3:43:0	1	R52727		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	8.91	8.91		9.6	0	0	0.107	1	50	93%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	9.02	9.02		10	0	0	0.211	1	50	90%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.22	10.22		9.8	0	0	0.108	1	50	104%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	8.5	8.5		9.8	0	0	0.2	1	50	87%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.13	9.13		9.7	0	0	0.111	1	50	94%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.27	10.27		9.9	0	0	0.097	1	50	104%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	8.33	8.33		9.1	0	0	0.271	1	50	92%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	8.92	8.92		9.8	0	0	0.245	1	50	91%	70	130	0%	
1,2-Dibromoethane	A	ppbv	8.51	8.51		9.6	0	0	0.186	1	50	89%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	8.55	8.55		9.7	0	0	0.208	1	50	88%	70	130	0%	
1,2-Dichloroethane	A	ppbv	8.53	8.53		9.7	0	0	0.196	1	50	88%	70	130	0%	
1,2-Dichloropropane	A	ppbv	8.62	8.62		9.8	0	0	0.224	1	50	88%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	8.79	8.79		9.7	0	0	0.24	1	50	91%	70	130	0%	
1,3-Butadiene	A	ppbv	8.12	8.12		9.8	0	0	0.152	1	50	83%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	8.61	8.61		9.7	0	0	0.202	1	50	89%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1035359	CCV VOA1 100512	EPA_TO15	CCV	\1\DATA\100512\	10/5/2012 3:43:0	1	R52727		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	8.6	8.6		9.6	0	0	0.194	1	50	90%	70	130	0%	
1,4-Dioxane	A	ppbv	8.78	8.78		9.6	0	0	0.128	1	50	91%	70	130	0%	
2-Butanone	A	ppbv	9.35	9.35		9.9	0	0	0.287	1	50	94%	70	130	0%	
2-Hexanone	A	ppbv	9.69	9.69		9.8	0	0	0.135	1	50	99%	70	130	0%	
2-Propanol	A	ppbv	10.03	10.03		10.1	0	0	0.329	1	50	99%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	9.26	9.26		10	0	0	0.157	1	50	93%	70	130	0%	
Acetone	A	ppbv	9.72	9.72		10	0	0	0.43	1	50	97%	70	130	0%	
Benzene	A	ppbv	8.5	8.5		9.6	0	0	0.126	1	50	89%	70	130	0%	
Benzyl chloride	A	ppbv	8.86	8.86		9.7	0	0	0.155	1	50	91%	70	130	0%	
Bromodichloromethane	A	ppbv	8.85	8.85		9.6	0	0	0.156	1	50	92%	70	130	0%	
Bromoform	A	ppbv	8.64	8.64		9.6	0	0	0.197	1	50	90%	70	130	0%	
Bromomethane	A	ppbv	9.1	9.1		9.3	0	0	0.075	1	50	98%	70	130	0%	
Carbon disulfide	A	ppbv	10.89	10.89		9.7	0	0	0.093	1	50	112%	70	130	0%	
Carbon tetrachloride	A	ppbv	8.62	8.62		9.5	0	0	0.114	1	50	91%	70	130	0%	
Chlorobenzene	A	ppbv	8.89	8.89		9.9	0	0	0.275	1	50	90%	70	130	0%	
Chlorodibromomethane	A	ppbv	8.71	8.71		9.2	0	0	0.165	1	50	95%	70	130	0%	
Chloroethane	A	ppbv	9	9		9.8	0	0	0.063	1	50	92%	70	130	0%	
Chloroform	A	ppbv	9.29	9.29		9.4	0	0	0.126	1	50	99%	70	130	0%	
Chloromethane	A	ppbv	10.22	10.22		9.8	0	0	0.104	1	50	104%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.25	9.25		9.8	0	0	0.107	1	50	94%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	7.82	7.82		9.5	0	0	0.166	1	50	82%	70	130	0%	
Cyclohexane	A	ppbv	10.39	10.39		9.8	0	0	0.684	2	50	106%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.25	9.25		9.2	0	0	0.086	1	50	101%	70	130	0%	
Ethanol	A	ppbv	8.49	8.49		9.2	0	0	1.962	5	50	92%	70	130	0%	
Ethyl acetate	A	ppbv	9.62	9.62		9.8	0	0	0.157	1	50	98%	70	130	0%	
Ethylbenzene	A	ppbv	8.93	8.93		9.8	0	0	0.737	2	50	91%	70	130	0%	
Heptane	A	ppbv	10.24	10.24		9.9	0	0	0.249	1	50	103%	70	130	0%	
Hexachlorobutadiene	A	ppbv	7.94	7.94		9.4	0	0	0.374	2	50	84%	70	130	0%	
m,p-Xylene	A	ppbv	19.04	19.04		19.2	0	0	0.524	2	100	99%	70	130	0%	
Methylene chloride	A	ppbv	10.32	10.32		10	0	0	2.077	5	50	103%	70	130	0%	
n-Hexane	A	ppbv	10.36	10.36		10.1	0	0	0.692	2	50	103%	70	130	0%	
Naphthalene	A	ppbv	8.31	8.31		9.2	0	0	0.247	1	50	90%	70	130	0%	
o-Xylene	A	ppbv	9.34	9.34		10	0	0	0.258	1	50	93%	70	130	0%	
Propylene	A	ppbv	10.38	10.38		10.2	0	0	0.075	1	50	102%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1035359	CCV VOA1 100512	EPA_TO15	CCV	\1\DATA\100512\	10/5/2012 3:43:0	1	R52727		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	9.27	9.27		9.8	0	0	0.263	1	50	95%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	8.21	8.21		9.9	0	0	0.228	1	50	83%	70	130	0%	
Tetrachloroethene	A	ppbv	8.9	8.9		9.6	0	0	0.148	1	50	93%	70	130	0%	
Tetrahydrofuran	A	ppbv	9.67	9.67		10	0	0	0.201	1	50	97%	70	130	0%	
Toluene	A	ppbv	9.45	9.45		9.8	0	0	0.158	1	50	96%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.18	10.18		9.8	0	0	0.117	1	50	104%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	8.44	8.44		9.1	0	0	0.171	1	50	93%	70	130	0%	
Trichloroethene	A	ppbv	8.83	8.83		9.6	0	0	0.119	1	50	92%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.25	9.25		9.6	0	0	0.148	1	50	96%	70	130	0%	
Vinyl acetate	A	ppbv	9.17	9.17		9.9	0	0	0.266	1	50	93%	70	130	0%	
Vinyl chloride	A	ppbv	8.86	8.86		9.4	0	0	0.072	1	50	94%	70	130	0%	
Xylenes, Total	C	ppbv	28.38	28.38		29.2	0	0	0.782	3	150	97%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.33	12.33		12.5	0	0	0	0	0	99%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1035360	RLVS VOA1 100512	EPA_TO15	RLVS	\1\DATA\100512\	10/5/2012 4:53:0	1	R52727		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	1.01	1.01		0.996	0	0	0.107	1	50	101%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.04	1.04		1	0	0	0.211	1	50	104%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1.01	1.01		0.98	0	0	0.108	1	50	103%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	1.01	1.01		0.98	0	0	0.2	1	50	103%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.03	1.03		0.97	0	0	0.111	1	50	106%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.99	0.99		0.99	0	0	0.097	1	50	100%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	0.78	0.78		0.91	0	0	0.271	1	50	86%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	0.95	0.95		0.98	0	0	0.245	1	50	97%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.95	0.95		0.96	0	0	0.186	1	50	99%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	0.89	0.89		0.97	0	0	0.208	1	50	92%	70	130	0%	
1,2-Dichloroethane	A	ppbv	1.07	1.07		0.97	0	0	0.196	1	50	110%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1.05	1.05		0.98	0	0	0.224	1	50	107%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\100512\10051203.D Vial: 3
Acq On : 5 Oct 2012 3:43 pm Operator: RACHEL HILL
Sample : CCV VOA1 100512 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	81	0.00
2	T	Propylene	1.204	1.226	-1.8	80	0.00
3	T	Dichlorodifluoromethane	3.520	3.539	-0.5	80	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.215	2.186	1.3	79	0.00
5	T	Chloromethane	1.450	1.560	-7.6	85	0.00
6	T	Vinyl chloride	1.437	1.355	5.7	71	0.00
7	T	1,3-Butadiene	0.924	0.766	17.1	61	0.00
8	T	Bromomethane	1.358	1.328	2.2	80	0.00
9	T	Chloroethane	0.879	0.860	2.2	79	0.00
10	T	Trichlorofluoromethane	3.226	3.107	3.7	79	0.00
11	T	Ethanol	0.411	0.379	7.8	73	0.00
12	T	Freon113	2.247	2.343	-4.3	80	0.00
13	T	1,1-Dichloroethene	2.155	2.237	-3.8	81	0.00
14	T	Acetone	1.838	1.787	2.8	72	0.00
15	T	Carbon disulfide	3.135	3.519	-12.2	90	0.00
16	T	2-Propanol	1.910	1.897	0.7	74	0.00
17	T	Methylene chloride	1.590	1.640	-3.1	81	0.00
18	T	tert-Butyl Methyl Ether	2.752	2.283	17.0	63	0.00
19	T	trans-1,2-Dichloroethene	1.938	2.013	-3.9	80	0.00
20	T	n-Hexane	2.289	2.347	-2.5	78	0.00
21	T	1,1-Dichloroethane	2.399	2.258	5.9	73	0.00
22	T	Vinyl acetate	2.903	2.690	7.3	66	0.00
23	T	cis-1,2-Dichloroethene	1.195	1.127	5.7	73	0.00
24	T	2-Butanone	1.940	1.833	5.5	65	0.00
25	T	Ethyl acetate	2.518	2.473	1.8	71	0.00
26	T	Tetrahydrofuran	1.172	1.134	3.2	68	0.00
27	T	Chloroform	2.145	2.034	5.2	71	0.00
28	T	1,1,1-Trichloroethane	2.189	2.032	7.2	70	0.00
29	T	Cyclohexane	2.231	2.365	-6.0	76	0.00
30	T	Carbon tetrachloride	2.281	2.071	9.2	70	0.00
31	T	Benzene	3.318	2.938	11.5	67	0.00
32	T	1,2-Dichloroethane	1.518	1.335	12.1	66	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	83	0.00
34	T	Heptane	0.541	0.560	-3.5	72	0.00
35	T	Trichloroethene	0.377	0.347	8.0	69	0.00
36	T	1,2-Dichloropropane	0.374	0.329	12.0	65	0.00
37	T	1,4-Dioxane	0.171	0.157	8.2	68	0.00
38	T	Bromodichloromethane	0.581	0.536	7.7	69	0.00
39	T	cis-1,3-Dichloropropene	0.503	0.414	17.7	62	0.00
40	T	4-Methyl-2-pentanone	0.296	0.275	7.1	67	0.00
41	T	Toluene	0.980	0.944	3.7	71	0.00
42	T	trans-1,3-Dichloropropene	0.456	0.423	7.2	70	0.00
43	T	1,1,2-Trichloroethane	0.341	0.295	13.5	65	0.00
44	T	Tetrachloroethene	0.454	0.421	7.3	69	0.00
45	T	2-Hexanone	0.536	0.530	1.1	67	0.00
46	T	Chlorodibromomethane	0.531	0.472	11.1	65	0.00
47	T	1,2-Dibromoethane	0.494	0.438	11.3	65	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	82	0.00
49	T	Chlorobenzene	0.842	0.756	10.2	65	0.00
50	T	Ethylbenzene	1.405	1.281	8.8	65	0.00
51	T	m,p-Xylene	1.026	1.018	0.8	67	0.00
52	T	o-Xylene	1.092	1.020	6.6	66	0.00
53	T	Styrene	0.794	0.751	5.4	66	0.00
54	T	Bromoform	0.544	0.489	10.1	66	0.00
55	S	4-Bromofluorobenzene	0.618	0.610	1.3	81	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\100512\10051203.D Vial: 3
Acq On : 5 Oct 2012 3:43 pm Operator: RACHEL HILL
Sample : CCV VOA1 100512 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.758	0.684	9.8	65	0.00
57	T	4-Ethyltoluene	1.348	1.228	8.9	65	0.00
58	T	1,3,5-Trimethylbenzene	1.144	1.036	9.4	65	0.00
59	T	1,2,4-Trimethylbenzene	1.063	0.968	8.9	65	0.00
60	T	1,3-Dichlorobenzene	0.576	0.511	11.3	66	0.00
61	T	1,4-Dichlorobenzene	0.544	0.488	10.3	66	0.00
62	T	Benzyl chloride	0.715	0.653	8.7	66	0.00
63	T	1,2-Dichlorobenzene	0.490	0.432	11.8	66	0.00
64	T	1,2,4-Trichlorobenzene	0.127	0.117	7.9	72	0.00
65	T	Hexachlorobutadiene	0.244	0.206	15.6	66	0.00
66		Naphthalene	0.245	0.221	9.8	71	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100512\10051203.D Vial: 3
Acq On : 5 Oct 2012 3:43 pm Operator: RACHEL HILL
Sample : CCV VOA1 100512 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 5 16:08 2012 Quant Results File: 092412V1.RES

Quant Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration
DataAcq Meth : 092412V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.51	130	254930	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.61	114	984559	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.46	117	802490	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.11	95	489488	12.33	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 98.64%

Target Compounds						Qvalue
2) Propylene	5.43	41	254980	10.38	ppbv	98
3) Dichlorodifluoromethane	5.51	85	664078	9.25	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.77	135	423449	9.37	ppbv #	60
5) Chloromethane	5.92	50	302308	10.22	ppbv	98
6) Vinyl chloride	6.13	62	259680	8.86	ppbv	96
7) 1,3-Butadiene	6.19	39	153077	8.12	ppbv #	61
8) Bromomethane	6.77	94	251894	9.10	ppbv	98
9) Chloroethane	6.92	64	161340	9.00	ppbv	97
10) Trichlorofluoromethane	7.25	101	608354	9.25	ppbv	98
11) Ethanol	7.49	45	71157	8.49	ppbv	98
12) Freon113	7.91	101	468286	10.22	ppbv #	83
13) 1,1-Dichloroethene	8.02	61	451625	10.27	ppbv #	86
14) Acetone	8.11	43	364351	9.72	ppbv	96
15) Carbon disulfide	8.38	76	696051	10.89	ppbv #	100
16) 2-Propanol	8.16	45	390649	10.03	ppbv #	1
17) Methylene chloride	8.68	49	334483	10.32	ppbv #	79
18) tert-Butyl Methyl Ether	8.87	73	460964	8.21	ppbv #	88
19) trans-1,2-Dichloroethene	8.96	61	402411	10.18	ppbv #	81
20) n-Hexane	9.14	57	483532	10.36	ppbv #	87
21) 1,1-Dichloroethane	9.52	63	446703	9.13	ppbv #	95
22) Vinyl acetate	9.45	43	543142	9.17	ppbv	97
23) cis-1,2-Dichloroethene	10.21	96	225285	9.25	ppbv #	79
24) 2-Butanone	10.17	43	370144	9.35	ppbv	92
25) Ethyl acetate	10.12	43	494259	9.62	ppbv #	100
26) Tetrahydrofuran	10.51	42	231196	9.67	ppbv	93
27) Chloroform	10.53	83	406443	9.29	ppbv	99
28) 1,1,1-Trichloroethane	10.78	97	397806	8.91	ppbv #	92
29) Cyclohexane	10.78	56	472665	10.39	ppbv #	78
30) Carbon tetrachloride	10.94	117	401157	8.62	ppbv	97
31) Benzene	11.22	78	575184	8.50	ppbv	93
32) 1,2-Dichloroethane	11.30	62	264109	8.53	ppbv #	96
34) Heptane	11.27	43	436709	10.24	ppbv #	89
35) Trichloroethene	11.95	130	262449	8.83	ppbv	93
36) 1,2-Dichloropropane	12.31	63	254282	8.62	ppbv #	93
37) 1,4-Dioxane	12.38	88	118355	8.78	ppbv #	80
38) Bromodichloromethane	12.59	83	404935	8.85	ppbv	99
39) cis-1,3-Dichloropropene	13.15	75	309732	7.82	ppbv	97
40) 4-Methyl-2-pentanone	13.26	58	216219	9.26	ppbv #	88
41) Toluene	13.55	91	728984	9.45	ppbv	98
42) trans-1,3-Dichloropropene	13.86	75	303536	8.44	ppbv	97
43) 1,1,2-Trichloroethane	14.12	97	228085	8.50	ppbv	96
44) Tetrachloroethene	14.25	166	318382	8.90	ppbv	97
45) 2-Hexanone	14.33	43	409275	9.69	ppbv	90
46) Chlorodibromomethane	14.67	129	364328	8.71	ppbv	98
47) 1,2-Dibromoethane	14.91	107	331241	8.51	ppbv	99
49) Chlorobenzene	15.51	112	480332	8.89	ppbv #	90
50) Ethylbenzene	15.55	91	805779	8.93	ppbv	92
51) m,p-Xylene	15.70	91	1254575	19.04	ppbv	92
52) o-Xylene	16.29	91	654851	9.34	ppbv #	88

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100512\10051203.D Vial: 3
Acq On : 5 Oct 2012 3:43 pm Operator: RACHEL HILL
Sample : CCV VOA1 100512 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 5 16:08 2012 Quant Results File: 092412V1.RES

Quant Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration
DataAcq Meth : 092412V1

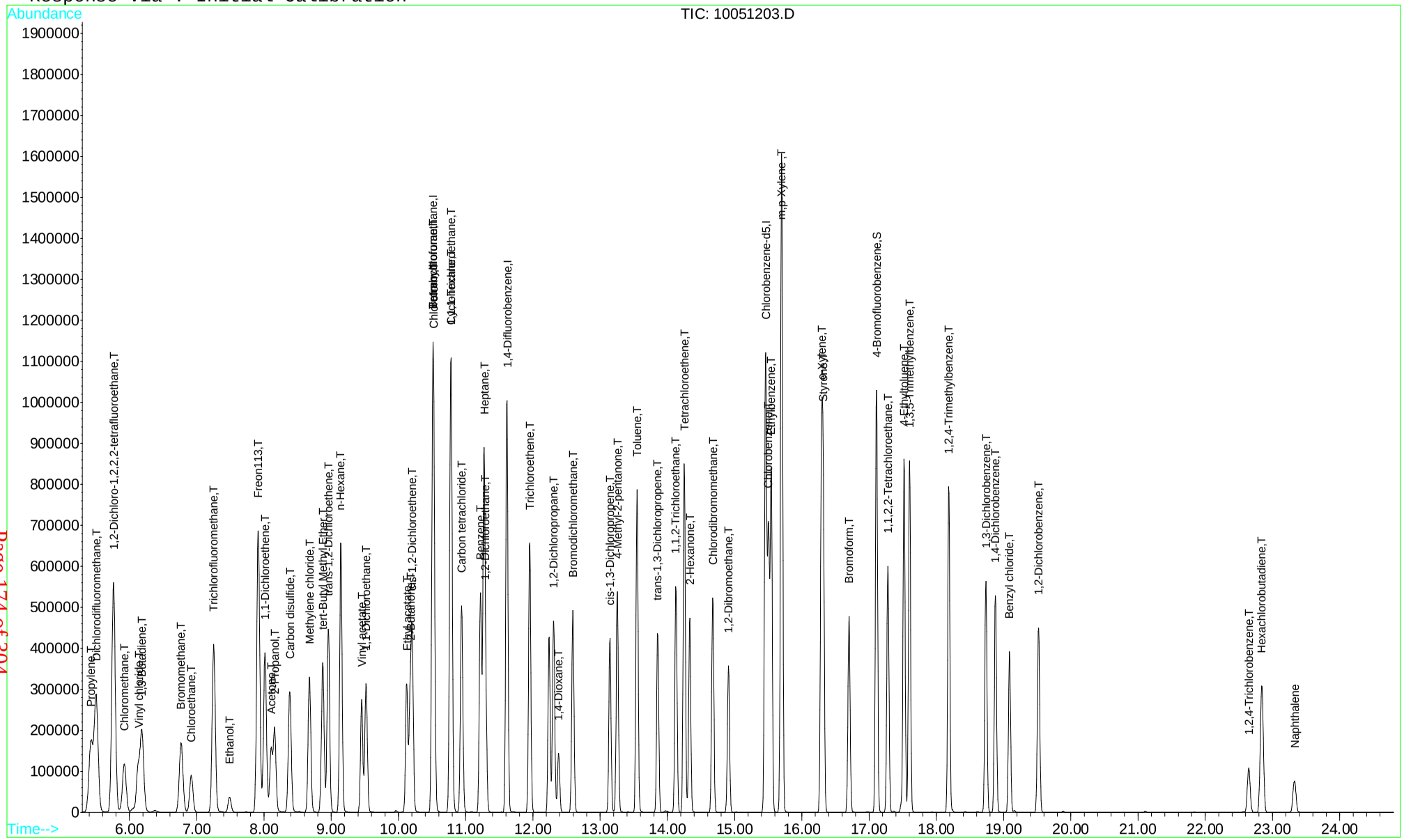
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.32	104	472694	9.27	ppbv		97
54)	Bromoform	16.70	173	301548	8.64	ppbv	#	97
56)	1,1,2,2-Tetrachloroethane	17.28	83	439122	9.02	ppbv	#	99
57)	4-Ethyltoluene	17.52	105	772660	8.93	ppbv		95
58)	1,3,5-Trimethylbenzene	17.60	105	645454	8.79	ppbv		95
59)	1,2,4-Trimethylbenzene	18.18	105	608874	8.92	ppbv		96
60)	1,3-Dichlorobenzene	18.74	146	318015	8.61	ppbv		96
61)	1,4-Dichlorobenzene	18.88	146	300603	8.60	ppbv		95
62)	Benzyl chloride	19.09	91	406905	8.86	ppbv		97
63)	1,2-Dichlorobenzene	19.52	146	269159	8.55	ppbv		95
64)	1,2,4-Trichlorobenzene	22.65	180	68188	8.33	ppbv		97
65)	Hexachlorobutadiene	22.84	225	124507	7.94	ppbv		99
66)	Naphthalene	23.33	128	130631	8.31	ppbv		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\100512\10051203.D Vial: 3
Acq On : 5 Oct 2012 3:43 pm Operator: RACHEL HILL
Sample : CCV VOA1 100512 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 5 16:08 2012 Quant Results File: 092412V1.RES

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA1_121008A** **Run No.:** 52776

Analytical Run Date: 10/8/2012 **InstrumentID:** VOA1

Analyst: Rachel Dear **Column:**

Calibration ID: 52291 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 10/12/12/PR AW 10.9.12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 100812	BFB_TUNE	TUNE	R52776	10/8/2012 10:02:00 AM	Celeste Hoitash		
CCV VOA1 100812	EPA_TO15	CCV	R52776	10/8/2012 10:44:00 AM	Celeste Hoitash		
RLVS VOA1 100812	EPA_TO15	RLVS	R52776	10/8/2012 11:28:00 AM	Celeste Hoitash		
MBLK VOA1 100812	EPA_TO15	MBLK	R52776	10/8/2012 12:20:00 PM	Celeste Hoitash		
1209B05-027A	EPA_TO15	SAMP	R52776	10/8/2012 1:02:00 PM	Celeste Hoitash		
1209B05-028A	EPA_TO15	SAMP	R52776	10/8/2012 1:43:00 PM	Celeste Hoitash		
1209B05-002A	EPA_TO15	SAMP	R52776	10/8/2012 3:42:00 PM	Celeste Hoitash		
1209B05-005A	EPA_TO15	SAMP	R52776	10/8/2012 4:30:00 PM	Celeste Hoitash		
1209B05-009A	EPA_TO15	SAMP	R52776	10/8/2012 5:12:00 PM	Celeste Hoitash		
1209B05-023A	EPA_TO15	SAMP	R52776	10/8/2012 6:00:00 PM	Celeste Hoitash		
1209B05-024A	EPA_TO15	SAMP	R52776	10/8/2012 6:54:00 PM	Celeste Hoitash		
1209B05-025A	EPA_TO15	SAMP	R52776	10/8/2012 7:36:00 PM	Celeste Hoitash		
1209B05-026A	EPA_TO15	SAMP	R52776	10/8/2012 8:18:00 PM	Celeste Hoitash		
1209B05-029A	EPA_TO15	SAMP	R52776	10/8/2012 8:59:00 PM	Celeste Hoitash		
1209B05-030A	EPA_TO15	SAMP	R52776	10/8/2012 9:41:00 PM	Celeste Hoitash		
1209B05-030ADUP	EPA_TO15	DUP	R52776	10/8/2012 10:22:00 PM	Celeste Hoitash		
1209B05-032A	EPA_TO15	SAMP	R52776	10/8/2012 11:45:00 PM	Celeste Hoitash		
1209B05-033A	EPA_TO15	SAMP	R52776	10/9/2012 12:26:00 AM	Celeste Hoitash		
RLVS2 VOA1 10081	EPA_TO15	RLVS	R52776	10/9/2012 4:39:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

22-Oct-12

RunNo 52776

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1036530	BFB VOA1 100812	BFB_TUNE	TUNE	.\1\DATA\100812\	10/8/2012 10:02:	1	R52776		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0.6	0.6		100	0	0	0	0	0	1%	0	2	0%	
174	M		74.2	74.2		100	0	0	0	0	0	74%	50	120	0%	
175	M		7.2	7.2		100	0	0	0	0	0	7%	4	9	0%	
176	M		98.2	98.2		100	0	0	0	0	0	98%	93	101	0%	
177	M		6.4	6.4		100	0	0	0	0	0	6%	5	9	0%	
50	M		22.3	22.3		100	0	0	0	0	0	22%	8	40	0%	
75	M		48.6	48.6		100	0	0	0	0	0	49%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1036535	CCV VOA1 100812	EPA_TO15	CCV	.\1\DATA\100812\	10/8/2012 10:44:	1	R52776		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	9.34	9.34		9.6	0	0	0.107	1	50	97%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	9.84	9.84		10	0	0	0.211	1	50	98%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.03	10.03		9.8	0	0	0.108	1	50	102%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.17	9.17		9.8	0	0	0.2	1	50	94%	70	130	0%	
1,1-Dichloroethane	A	ppbv	8.92	8.92		9.7	0	0	0.111	1	50	92%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.15	10.15		9.9	0	0	0.097	1	50	103%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	8.63	8.63		9.1	0	0	0.271	1	50	95%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	9.88	9.88		9.8	0	0	0.245	1	50	101%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.24	9.24		9.6	0	0	0.186	1	50	96%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.24	9.24		9.7	0	0	0.208	1	50	95%	70	130	0%	
1,2-Dichloroethane	A	ppbv	9.07	9.07		9.7	0	0	0.196	1	50	94%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.21	9.21		9.8	0	0	0.224	1	50	94%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.66	9.66		9.7	0	0	0.24	1	50	100%	70	130	0%	
1,3-Butadiene	A	ppbv	8.82	8.82		9.8	0	0	0.152	1	50	90%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.38	9.38		9.7	0	0	0.202	1	50	97%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1036535	CCV VOA1 100812	EPA_TO15	CCV	\1\DATA\100812\	10/8/2012 10:44:	1	R52776		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.42	9.42		9.6	0	0	0.194	1	50	98%	70	130	0%	
1,4-Dioxane	A	ppbv	9.64	9.64		9.6	0	0	0.128	1	50	100%	70	130	0%	
2-Butanone	A	ppbv	9.65	9.65		9.9	0	0	0.287	1	50	97%	70	130	0%	
2-Hexanone	A	ppbv	10.7	10.7		9.8	0	0	0.135	1	50	109%	70	130	0%	
2-Propanol	A	ppbv	10.34	10.34		10.1	0	0	0.329	1	50	102%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.11	10.11		10	0	0	0.157	1	50	101%	70	130	0%	
Acetone	A	ppbv	9.81	9.81		10	0	0	0.43	1	50	98%	70	130	0%	
Benzene	A	ppbv	8.68	8.68		9.6	0	0	0.126	1	50	90%	70	130	0%	
Benzyl chloride	A	ppbv	9.92	9.92		9.7	0	0	0.155	1	50	102%	70	130	0%	
Bromodichloromethane	A	ppbv	9.5	9.5		9.6	0	0	0.156	1	50	99%	70	130	0%	
Bromoform	A	ppbv	9.49	9.49		9.6	0	0	0.197	1	50	99%	70	130	0%	
Bromomethane	A	ppbv	8.86	8.86		9.3	0	0	0.075	1	50	95%	70	130	0%	
Carbon disulfide	A	ppbv	10.72	10.72		9.7	0	0	0.093	1	50	111%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.04	9.04		9.5	0	0	0.114	1	50	95%	70	130	0%	
Chlorobenzene	A	ppbv	9.56	9.56		9.9	0	0	0.275	1	50	97%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.67	9.67		9.2	0	0	0.165	1	50	105%	70	130	0%	
Chloroethane	A	ppbv	8.68	8.68		9.8	0	0	0.063	1	50	89%	70	130	0%	
Chloroform	A	ppbv	9.48	9.48		9.4	0	0	0.126	1	50	101%	70	130	0%	
Chloromethane	A	ppbv	9.95	9.95		9.8	0	0	0.104	1	50	102%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.18	9.18		9.8	0	0	0.107	1	50	94%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	8.52	8.52		9.5	0	0	0.166	1	50	90%	70	130	0%	
Cyclohexane	A	ppbv	10.44	10.44		9.8	0	0	0.684	2	50	107%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	8.98	8.98		9.2	0	0	0.086	1	50	98%	70	130	0%	
Ethanol	A	ppbv	8.31	8.31		9.2	0	0	1.962	5	50	90%	70	130	0%	
Ethyl acetate	A	ppbv	10.03	10.03		9.8	0	0	0.157	1	50	102%	70	130	0%	
Ethylbenzene	A	ppbv	9.6	9.6		9.8	0	0	0.737	2	50	98%	70	130	0%	
Heptane	A	ppbv	10.88	10.88		9.9	0	0	0.249	1	50	110%	70	130	0%	
Hexachlorobutadiene	A	ppbv	8.27	8.27		9.4	0	0	0.374	2	50	88%	70	130	0%	
m,p-Xylene	A	ppbv	20.51	20.51		19.2	0	0	0.524	2	100	107%	70	130	0%	
Methylene chloride	A	ppbv	9.94	9.94		10	0	0	2.077	5	50	99%	70	130	0%	
n-Hexane	A	ppbv	9.97	9.97		10.1	0	0	0.692	2	50	99%	70	130	0%	
Naphthalene	A	ppbv	8.51	8.51		9.2	0	0	0.247	1	50	93%	70	130	0%	
o-Xylene	A	ppbv	10.18	10.18		10	0	0	0.258	1	50	102%	70	130	0%	
Propylene	A	ppbv	9.87	9.87		10.2	0	0	0.075	1	50	97%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1036535	CCV VOA1 100812	EPA_TO15	CCV	\1\DATA\100812\	10/8/2012 10:44:	1	R52776		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	10.12	10.12		9.8	0	0	0.263	1	50	103%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	8.66	8.66		9.9	0	0	0.228	1	50	87%	70	130	0%	
Tetrachloroethene	A	ppbv	9.6	9.6		9.6	0	0	0.148	1	50	100%	70	130	0%	
Tetrahydrofuran	A	ppbv	10.34	10.34		10	0	0	0.201	1	50	103%	70	130	0%	
Toluene	A	ppbv	10.22	10.22		9.8	0	0	0.158	1	50	104%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	9.95	9.95		9.8	0	0	0.117	1	50	102%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.29	9.29		9.1	0	0	0.171	1	50	102%	70	130	0%	
Trichloroethene	A	ppbv	9.34	9.34		9.6	0	0	0.119	1	50	97%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.25	9.25		9.6	0	0	0.148	1	50	96%	70	130	0%	
Vinyl acetate	A	ppbv	9.52	9.52		9.9	0	0	0.266	1	50	96%	70	130	0%	
Vinyl chloride	A	ppbv	8.75	8.75		9.4	0	0	0.072	1	50	93%	70	130	0%	
Xylenes, Total	C	ppbv	30.69	30.69		29.2	0	0	0.782	3	150	105%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.37	12.37		12.5	0	0	0	0	0	99%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1036537	RLVS VOA1 100812	EPA_TO15	RLVS	\1\DATA\100812\	10/8/2012 11:28:	1	R52776		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	1.03	1.03		0.996	0	0	0.107	1	50	103%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.06	1.06		1	0	0	0.211	1	50	106%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1	1		0.98	0	0	0.108	1	50	102%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	1.04	1.04		0.98	0	0	0.2	1	50	106%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1	1		0.97	0	0	0.111	1	50	103%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.96	0.96		0.99	0	0	0.097	1	50	97%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	0.79	0.79		0.91	0	0	0.271	1	50	87%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	1	1		0.98	0	0	0.245	1	50	102%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.99	0.99		0.96	0	0	0.186	1	50	103%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	0.95	0.95		0.97	0	0	0.208	1	50	98%	70	130	0%	
1,2-Dichloroethane	A	ppbv	1.1	1.1		0.97	0	0	0.196	1	50	113%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1.05	1.05		0.98	0	0	0.224	1	50	107%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\100812\10081202.D Vial: 2
Acq On : 8 Oct 2012 10:44 am Operator: RACHEL HILL
Sample : CCV VOA1 100812 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	85	0.00
2	T	Propylene	1.204	1.166	3.2	80	0.00
3	T	Dichlorodifluoromethane	3.520	3.437	2.4	81	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.215	2.157	2.6	82	0.00
5	T	Chloromethane	1.450	1.519	-4.8	87	0.00
6	T	Vinyl chloride	1.437	1.337	7.0	74	0.00
7	T	1,3-Butadiene	0.924	0.831	10.1	69	0.00
8	T	Bromomethane	1.358	1.294	4.7	82	0.00
9	T	Chloroethane	0.879	0.829	5.7	80	0.00
10	T	Trichlorofluoromethane	3.226	3.108	3.7	82	0.00
11	T	Ethanol	0.411	0.371	9.7	75	0.00
12	T	Freon113	2.247	2.300	-2.4	82	0.00
13	T	1,1-Dichloroethene	2.155	2.210	-2.6	84	0.00
14	T	Acetone	1.838	1.803	1.9	76	0.00
15	T	Carbon disulfide	3.135	3.464	-10.5	93	0.00
16	T	2-Propanol	1.910	1.956	-2.4	80	0.00
17	T	Methylene chloride	1.590	1.581	0.6	82	0.00
18	T	tert-Butyl Methyl Ether	2.752	2.407	12.5	70	0.00
19	T	trans-1,2-Dichloroethene	1.938	1.968	-1.5	82	0.00
20	T	n-Hexane	2.289	2.261	1.2	79	0.00
21	T	1,1-Dichloroethane	2.399	2.205	8.1	74	0.00
22	T	Vinyl acetate	2.903	2.792	3.8	72	0.00
23	T	cis-1,2-Dichloroethene	1.195	1.119	6.4	76	0.00
24	T	2-Butanone	1.940	1.892	2.5	71	0.00
25	T	Ethyl acetate	2.518	2.576	-2.3	77	0.00
26	T	Tetrahydrofuran	1.172	1.211	-3.3	76	0.00
27	T	Chloroform	2.145	2.076	3.2	76	0.00
28	T	1,1,1-Trichloroethane	2.189	2.129	2.7	77	0.00
29	T	Cyclohexane	2.231	2.376	-6.5	80	0.00
30	T	Carbon tetrachloride	2.281	2.170	4.9	77	0.00
31	T	Benzene	3.318	2.998	9.6	72	0.00
32	T	1,2-Dichloroethane	1.518	1.419	6.5	73	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	86	0.00
34	T	Heptane	0.541	0.595	-10.0	79	0.00
35	T	Trichloroethene	0.377	0.367	2.7	76	0.00
36	T	1,2-Dichloropropane	0.374	0.352	5.9	72	0.00
37	T	1,4-Dioxane	0.171	0.172	-0.6	77	0.00
38	T	Bromodichloromethane	0.581	0.575	1.0	76	0.00
39	T	cis-1,3-Dichloropropene	0.503	0.451	10.3	69	0.00
40	T	4-Methyl-2-pentanone	0.296	0.300	-1.4	76	0.00
41	T	Toluene	0.980	1.022	-4.3	80	0.00
42	T	trans-1,3-Dichloropropene	0.456	0.466	-2.2	79	0.00
43	T	1,1,2-Trichloroethane	0.341	0.319	6.5	72	0.00
44	T	Tetrachloroethene	0.454	0.454	0.0	77	0.00
45	T	2-Hexanone	0.536	0.586	-9.3	76	0.00
46	T	Chlorodibromomethane	0.531	0.524	1.3	75	0.00
47	T	1,2-Dibromoethane	0.494	0.476	3.6	73	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	86	0.00
49	T	Chlorobenzene	0.842	0.813	3.4	74	0.00
50	T	Ethylbenzene	1.405	1.376	2.1	74	0.00
51	T	m,p-Xylene	1.026	1.096	-6.8	76	0.00
52	T	o-Xylene	1.092	1.112	-1.8	76	0.00
53	T	Styrene	0.794	0.820	-3.3	76	0.00
54	T	Bromoform	0.544	0.537	1.3	76	0.00
55	S	4-Bromofluorobenzene	0.618	0.612	1.0	85	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\100812\10081202.D Vial: 2
Acq On : 8 Oct 2012 10:44 am Operator: RACHEL HILL
Sample : CCV VOA1 100812 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.758	0.746	1.6	75	0.00
57	T	4-Ethyltoluene	1.348	1.346	0.1	75	0.00
58	T	1,3,5-Trimethylbenzene	1.144	1.139	0.4	75	0.00
59	T	1,2,4-Trimethylbenzene	1.063	1.072	-0.8	76	0.00
60	T	1,3-Dichlorobenzene	0.576	0.557	3.3	76	0.00
61	T	1,4-Dichlorobenzene	0.544	0.534	1.8	76	0.00
62	T	Benzyl chloride	0.715	0.732	-2.4	78	0.00
63	T	1,2-Dichlorobenzene	0.490	0.467	4.7	75	0.00
64	T	1,2,4-Trichlorobenzene	0.127	0.121	4.7	78	0.00
65	T	Hexachlorobutadiene	0.244	0.215	11.9	72	0.00
66		Naphthalene	0.245	0.227	7.3	77	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100812\10081202.D Vial: 2
Acq On : 8 Oct 2012 10:44 am Operator: RACHEL HILL
Sample : CCV VOA1 100812 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 8 11:09 2012 Quant Results File: 092412V1.RES

Quant Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration
DataAcq Meth : 092412V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.51	130	266939	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.62	114	1016609	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.46	117	842484	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.11	95	515485	12.37	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 98.96%

Target Compounds						Qvalue
2) Propylene	5.44	41	253900	9.87	ppbv	99
3) Dichlorodifluoromethane	5.51	85	675251	8.98	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.77	135	437615	9.25	ppbv #	62
5) Chloromethane	5.93	50	308070	9.95	ppbv	98
6) Vinyl chloride	6.13	62	268426	8.75	ppbv	95
7) 1,3-Butadiene	6.19	39	173950	8.82	ppbv #	63
8) Bromomethane	6.77	94	256894	8.86	ppbv	98
9) Chloroethane	6.92	64	162944	8.68	ppbv	98
10) Trichlorofluoromethane	7.26	101	637218	9.25	ppbv	98
11) Ethanol	7.49	45	72920	8.31	ppbv	99
12) Freon113	7.92	101	481347	10.03	ppbv #	84
13) 1,1-Dichloroethene	8.02	61	467284	10.15	ppbv #	85
14) Acetone	8.11	43	385104	9.81	ppbv #	93
15) Carbon disulfide	8.39	76	717534	10.72	ppbv #	100
16) 2-Propanol	8.16	45	421795	10.34	ppbv #	1
17) Methylene chloride	8.68	49	337618	9.94	ppbv #	79
18) tert-Butyl Methyl Ether	8.88	73	508890	8.66	ppbv #	89
19) trans-1,2-Dichloroethene	8.96	61	411860	9.95	ppbv #	80
20) n-Hexane	9.15	57	487644	9.97	ppbv #	88
21) 1,1-Dichloroethane	9.52	63	456698	8.92	ppbv #	95
22) Vinyl acetate	9.46	43	590238	9.52	ppbv	97
23) cis-1,2-Dichloroethene	10.21	96	234260	9.18	ppbv #	78
24) 2-Butanone	10.17	43	399915	9.65	ppbv	93
25) Ethyl acetate	10.13	43	539086	10.03	ppbv #	100
26) Tetrahydrofuran	10.51	42	258709	10.34	ppbv	94
27) Chloroform	10.53	83	434447	9.48	ppbv	99
28) 1,1,1-Trichloroethane	10.78	97	436474	9.34	ppbv #	92
29) Cyclohexane	10.79	56	497203	10.44	ppbv #	78
30) Carbon tetrachloride	10.94	117	440208	9.04	ppbv	98
31) Benzene	11.22	78	614712	8.68	ppbv	93
32) 1,2-Dichloroethane	11.30	62	293851	9.07	ppbv #	96
34) Heptane	11.27	43	479153	10.88	ppbv #	89
35) Trichloroethene	11.96	130	286585	9.34	ppbv	93
36) 1,2-Dichloropropane	12.31	63	280526	9.21	ppbv #	94
37) 1,4-Dioxane	12.39	88	134120	9.64	ppbv #	81
38) Bromodichloromethane	12.60	83	448639	9.50	ppbv	99
39) cis-1,3-Dichloropropene	13.15	75	348335	8.52	ppbv	97
40) 4-Methyl-2-pentanone	13.26	58	243811	10.11	ppbv #	88
41) Toluene	13.55	91	814519	10.22	ppbv	98
42) trans-1,3-Dichloropropene	13.86	75	344899	9.29	ppbv	98
43) 1,1,2-Trichloroethane	14.13	97	254272	9.17	ppbv	96
44) Tetrachloroethene	14.25	166	354820	9.60	ppbv	97
45) 2-Hexanone	14.34	43	466844	10.70	ppbv	90
46) Chlorodibromomethane	14.68	129	417663	9.67	ppbv	98
47) 1,2-Dibromoethane	14.91	107	371280	9.24	ppbv	100
49) Chlorobenzene	15.51	112	542149	9.56	ppbv #	90
50) Ethylbenzene	15.55	91	909020	9.60	ppbv	93
51) m,p-Xylene	15.70	91	1418622	20.51	ppbv	92
52) o-Xylene	16.29	91	749154	10.18	ppbv #	89

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100812\10081202.D Vial: 2
Acq On : 8 Oct 2012 10:44 am Operator: RACHEL HILL
Sample : CCV VOA1 100812 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 8 11:09 2012 Quant Results File: 092412V1.RES

Quant Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration
DataAcq Meth : 092412V1

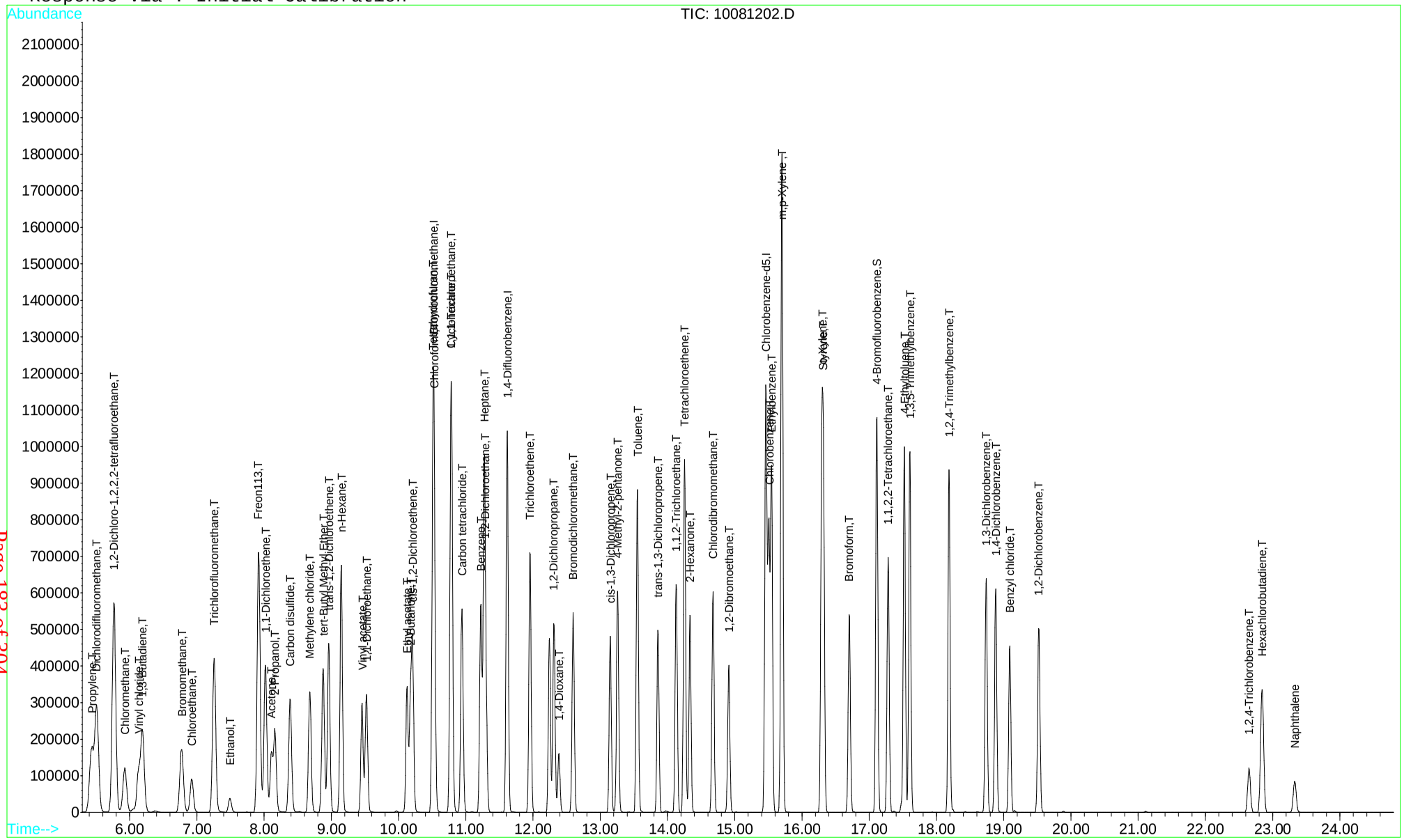
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.32	104	541674	10.12	ppbv		97
54)	Bromoform	16.70	173	347773	9.49	ppbv	#	98
56)	1,1,2,2-Tetrachloroethane	17.28	83	502840	9.84	ppbv	#	99
57)	4-Ethyltoluene	17.52	105	889193	9.79	ppbv		95
58)	1,3,5-Trimethylbenzene	17.61	105	744447	9.66	ppbv		95
59)	1,2,4-Trimethylbenzene	18.19	105	708012	9.88	ppbv		96
60)	1,3-Dichlorobenzene	18.74	146	364024	9.38	ppbv		96
61)	1,4-Dichlorobenzene	18.88	146	345411	9.42	ppbv		95
62)	Benzyl chloride	19.09	91	478354	9.92	ppbv		97
63)	1,2-Dichlorobenzene	19.53	146	305147	9.24	ppbv		95
64)	1,2,4-Trichlorobenzene	22.65	180	74141	8.63	ppbv		97
65)	Hexachlorobutadiene	22.85	225	136151	8.27	ppbv		99
66)	Naphthalene	23.33	128	140456	8.51	ppbv		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\100812\10081202.D Vial: 2
Acq On : 8 Oct 2012 10:44 am Operator: RACHEL HILL
Sample : CCV VOA1 100812 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 8 11:09 2012 Quant Results File: 092412V1.RES

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA1_121009A **Run No.:** 52817

Analytical Run Date: 10/9/2012 **InstrumentID:** VOA1

Analyst: Rachel Dear **Column:**

Calibration ID: 52291 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 10/10/12/PR AW 10.10.12 ***1209B05-040A is a trip blank***1209B05-042A is a field dup which does not match corresponding sample -041A***

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 100912	BFB_TUNE	TUNE	R52817	10/9/2012 8:59:00 AM	Celeste Hoitash		
CCV VOA1 100912	EPA_TO15	CCV	R52817	10/9/2012 11:17:00 AM	Celeste Hoitash		
RLVS VOA1 100912	EPA_TO15	RLVS	R52817	10/9/2012 12:09:00 PM	Celeste Hoitash		
MBLK/CC_78 VOA1	EPA_TO15	MBLK	R52817	10/9/2012 1:24:00 PM	Celeste Hoitash		
1209B05-034A	EPA_TO15	SAMP	R52817	10/9/2012 4:32:00 PM	Celeste Hoitash		
1209B05-034Adup	EPA_TO15	DUP	R52817	10/9/2012 5:14:00 PM	Celeste Hoitash		
1209B05-035A	EPA_TO15	SAMP	R52817	10/9/2012 5:55:00 PM	Celeste Hoitash		
1209B05-036A	EPA_TO15	SAMP	R52817	10/9/2012 6:37:00 PM	Celeste Hoitash		
1209B05-038A	EPA_TO15	SAMP	R52817	10/9/2012 8:04:00 PM	Celeste Hoitash		
1209B05-042A	EPA_TO15	SAMP	R52817	10/9/2012 10:50:00 PM	Celeste Hoitash		
1209B05-043A	EPA_TO15	SAMP	R52817	10/9/2012 11:32:00 PM	Celeste Hoitash		
1209B05-044A	EPA_TO15	SAMP	R52817	10/10/2012 12:13:00 AM	Celeste Hoitash		
1209B05-045A	EPA_TO15	SAMP	R52817	10/10/2012 12:55:00 AM	Celeste Hoitash		
1209B05-046A	EPA_TO15	SAMP	R52817	10/10/2012 1:37:00 AM	Celeste Hoitash		
1209B05-047A	EPA_TO15	SAMP	R52817	10/10/2012 2:18:00 AM	Celeste Hoitash		
1209B05-048A	EPA_TO15	SAMP	R52817	10/10/2012 3:00:00 AM	Celeste Hoitash		
1209B05-050A	EPA_TO15	SAMP	R52817	10/10/2012 4:23:00 AM	Celeste Hoitash		
1209B05-040A	EPA_TO15	SAMP	R52817	10/10/2012 5:06:00 AM	Celeste Hoitash		
1209B05-037A	EPA_TO15	SAMP	R52817	10/10/2012 5:47:00 AM	Celeste Hoitash		
RLVS2 VOA1 10091	EPA_TO15	RLVS	R52817	10/10/2012 7:12:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

22-Oct-12

RunNo 52817

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1037329	BFB VOA1 100912	BFB_TUNE	TUNE	.\1\DATA\100912`10/9/2012 8:59:		1	R52817		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0.5	0.5		100	0	0	0	0	0	1%	0	2	0%	
174	M		74.3	74.3		100	0	0	0	0	0	74%	50	120	0%	
175	M		7.2	7.2		100	0	0	0	0	0	7%	4	9	0%	
176	M		97.9	97.9		100	0	0	0	0	0	98%	93	101	0%	
177	M		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	
50	M		22.4	22.4		100	0	0	0	0	0	22%	8	40	0%	
75	M		47.9	47.9		100	0	0	0	0	0	48%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1037330	CCV VOA1 100912	EPA_TO15	CCV	.\1\DATA\100912`10/9/2012 11:17		1	R52817		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	7.85	7.85		9.6	0	0	0.107	1	50	82%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	7.82	7.82		10	0	0	0.211	1	50	78%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	8.18	8.18		9.8	0	0	0.108	1	50	83%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	7.58	7.58		9.8	0	0	0.2	1	50	77%	70	130	0%	
1,1-Dichloroethane	A	ppbv	7.44	7.44		9.7	0	0	0.111	1	50	77%	70	130	0%	
1,1-Dichloroethene	A	ppbv	8.19	8.19		9.9	0	0	0.097	1	50	83%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	7.24	7.24		9.1	0	0	0.271	1	50	80%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	7.95	7.95		9.8	0	0	0.245	1	50	81%	70	130	0%	
1,2-Dibromoethane	A	ppbv	7.54	7.54		9.6	0	0	0.186	1	50	79%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	7.62	7.62		9.7	0	0	0.208	1	50	79%	70	130	0%	
1,2-Dichloroethane	A	ppbv	7.76	7.76		9.7	0	0	0.196	1	50	80%	70	130	0%	
1,2-Dichloropropane	A	ppbv	7.55	7.55		9.8	0	0	0.224	1	50	77%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	7.78	7.78		9.7	0	0	0.24	1	50	80%	70	130	0%	
1,3-Butadiene	A	ppbv	9.06	9.06		9.8	0	0	0.152	1	50	92%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	7.74	7.74		9.7	0	0	0.202	1	50	80%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1037330	CCV VOA1 100912	EPA_TO15	CCV	\1\DATA\100912	10/9/2012 11:17	1	R52817		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	7.67	7.67		9.6	0	0	0.194	1	50	80%	70	130	0%	
1,4-Dioxane	A	ppbv	7.75	7.75		9.6	0	0	0.128	1	50	81%	70	130	0%	
2-Butanone	A	ppbv	8.21	8.21		9.9	0	0	0.287	1	50	83%	70	130	0%	
2-Hexanone	A	ppbv	8.21	8.21		9.8	0	0	0.135	1	50	84%	70	130	0%	
2-Propanol	A	ppbv	8.57	8.57		10.1	0	0	0.329	1	50	85%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	8.11	8.11		10	0	0	0.157	1	50	81%	70	130	0%	
Acetone	A	ppbv	8.19	8.19		10	0	0	0.43	1	50	82%	70	130	0%	
Benzene	A	ppbv	7.53	7.53		9.6	0	0	0.126	1	50	78%	70	130	0%	
Benzyl chloride	A	ppbv	7.78	7.78		9.7	0	0	0.155	1	50	80%	70	130	0%	
Bromodichloromethane	A	ppbv	7.65	7.65		9.6	0	0	0.156	1	50	80%	70	130	0%	
Bromoform	A	ppbv	7.7	7.7		9.6	0	0	0.197	1	50	80%	70	130	0%	
Bromomethane	A	ppbv	7.67	7.67		9.3	0	0	0.075	1	50	82%	70	130	0%	
Carbon disulfide	A	ppbv	9.03	9.03		9.7	0	0	0.093	1	50	93%	70	130	0%	
Carbon tetrachloride	A	ppbv	7.75	7.75		9.5	0	0	0.114	1	50	82%	70	130	0%	
Chlorobenzene	A	ppbv	7.81	7.81		9.9	0	0	0.275	1	50	79%	70	130	0%	
Chlorodibromomethane	A	ppbv	7.82	7.82		9.2	0	0	0.165	1	50	85%	70	130	0%	
Chloroethane	A	ppbv	7.41	7.41		9.8	0	0	0.063	1	50	76%	70	130	0%	
Chloroform	A	ppbv	7.93	7.93		9.4	0	0	0.126	1	50	84%	70	130	0%	
Chloromethane	A	ppbv	8.13	8.13		9.8	0	0	0.104	1	50	83%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	7.84	7.84		9.8	0	0	0.107	1	50	80%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	6.95	6.95		9.5	0	0	0.166	1	50	73%	70	130	0%	
Cyclohexane	A	ppbv	8.7	8.7		9.8	0	0	0.684	2	50	89%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	7.68	7.68		9.2	0	0	0.086	1	50	83%	70	130	0%	
Ethanol	A	ppbv	6.9	6.9		9.2	0	0	1.962	5	50	75%	70	130	0%	
Ethyl acetate	A	ppbv	8	8		9.8	0	0	0.157	1	50	82%	70	130	0%	
Ethylbenzene	A	ppbv	7.8	7.8		9.8	0	0	0.737	2	50	80%	70	130	0%	
Heptane	A	ppbv	8.58	8.58		9.9	0	0	0.249	1	50	87%	70	130	0%	
Hexachlorobutadiene	A	ppbv	6.82	6.82		9.4	0	0	0.374	2	50	73%	70	130	0%	
m,p-Xylene	A	ppbv	16.58	16.58		19.2	0	0	0.524	2	100	86%	70	130	0%	
Methylene chloride	A	ppbv	7.96	7.96		10	0	0	2.077	5	50	80%	70	130	0%	
n-Hexane	A	ppbv	8.39	8.39		10.1	0	0	0.692	2	50	83%	70	130	0%	
Naphthalene	A	ppbv	7.34	7.34		9.2	0	0	0.247	1	50	80%	70	130	0%	
o-Xylene	A	ppbv	8.2	8.2		10	0	0	0.258	1	50	82%	70	130	0%	
Propylene	A	ppbv	8.26	8.26		10.2	0	0	0.075	1	50	81%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1037330	CCV VOA1 100912	EPA_TO15	CCV	\1\DATA\100912\	10/9/2012 11:17	1	R52817		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	8.17	8.17		9.8	0	0	0.263	1	50	83%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	7.56	7.56		9.9	0	0	0.228	1	50	76%	70	130	0%	
Tetrachloroethene	A	ppbv	7.9	7.9		9.6	0	0	0.148	1	50	82%	70	130	0%	
Tetrahydrofuran	A	ppbv	8.71	8.71		10	0	0	0.201	1	50	87%	70	130	0%	
Toluene	A	ppbv	8.42	8.42		9.8	0	0	0.158	1	50	86%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	8.2	8.2		9.8	0	0	0.117	1	50	84%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	7.46	7.46		9.1	0	0	0.171	1	50	82%	70	130	0%	
Trichloroethene	A	ppbv	7.64	7.64		9.6	0	0	0.119	1	50	80%	70	130	0%	
Trichlorofluoromethane	A	ppbv	7.76	7.76		9.6	0	0	0.148	1	50	81%	70	130	0%	
Vinyl acetate	A	ppbv	8.03	8.03		9.9	0	0	0.266	1	50	81%	70	130	0%	
Vinyl chloride	A	ppbv	9.74	9.74		9.4	0	0	0.072	1	50	104%	70	130	0%	
Xylenes, Total	C	ppbv	24.78	24.78		29.2	0	0	0.782	3	150	85%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.29	12.29		12.5	0	0	0	0	0	98%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1037331	RLVS VOA1 100912	EPA_TO15	RLVS	\1\DATA\100912\	10/9/2012 12:09	1	R52817		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	1.03	1.03		0.996	0	0	0.107	1	50	103%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.07	1.07		1	0	0	0.211	1	50	107%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1.01	1.01		0.98	0	0	0.108	1	50	103%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	1.08	1.08		0.98	0	0	0.2	1	50	110%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.04	1.04		0.97	0	0	0.111	1	50	107%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.98	0.98		0.99	0	0	0.097	1	50	99%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	0.99	0.99		0.91	0	0	0.271	1	50	109%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	1.01	1.01		0.98	0	0	0.245	1	50	103%	70	130	0%	
1,2-Dibromoethane	A	ppbv	1.02	1.02		0.96	0	0	0.186	1	50	106%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	0.96	0.96		0.97	0	0	0.208	1	50	99%	70	130	0%	
1,2-Dichloroethane	A	ppbv	1.1	1.1		0.97	0	0	0.196	1	50	113%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1.09	1.09		0.98	0	0	0.224	1	50	111%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\100912\10091203.D Vial: 3
Acq On : 9 Oct 2012 11:17 am Operator: RACHEL HILL
Sample : CCV VOA1 100912 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	97	0.00
2	T	Propylene	1.204	0.975	19.0	76	0.00
3	T	Dichlorodifluoromethane	3.520	2.937	16.6	80	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.215	1.894	14.5	82	0.00
5	T	Chloromethane	1.450	1.242	14.3	81	0.02
6	T	Vinyl chloride	1.437	1.488	-3.5	93	0.01
7	T	1,3-Butadiene	0.924	0.854	7.6	81	0.02
8	T	Bromomethane	1.358	1.121	17.5	81	0.00
9	T	Chloroethane	0.879	0.708	19.5	78	0.01
10	T	Trichlorofluoromethane	3.226	2.609	19.1	79	0.00
11	T	Ethanol	0.411	0.308	25.1	71	0.01
12	T	Freon113	2.247	1.875	16.6	76	0.00
13	T	1,1-Dichloroethene	2.155	1.784	17.2	77	0.00
14	T	Acetone	1.838	1.504	18.2	73	0.00
15	T	Carbon disulfide	3.135	2.918	6.9	89	0.01
16	T	2-Propanol	1.910	1.620	15.2	76	0.01
17	T	Methylene chloride	1.590	1.266	20.4	75	0.00
18	T	tert-Butyl Methyl Ether	2.752	2.101	23.7	70	0.00
19	T	trans-1,2-Dichloroethene	1.938	1.621	16.4	77	0.00
20	T	n-Hexane	2.289	1.901	17.0	76	0.00
21	T	1,1-Dichloroethane	2.399	1.839	23.3	71	0.00
22	T	Vinyl acetate	2.903	2.355	18.9	69	0.01
23	T	cis-1,2-Dichloroethene	1.195	0.955	20.1	74	0.00
24	T	2-Butanone	1.940	1.608	17.1	69	0.00
25	T	Ethyl acetate	2.518	2.055	18.4	70	0.01
26	T	Tetrahydrofuran	1.172	1.021	12.9	73	0.00
27	T	Chloroform	2.145	1.737	19.0	73	0.00
28	T	1,1,1-Trichloroethane	2.189	1.790	18.2	74	0.00
29	T	Cyclohexane	2.231	1.981	11.2	76	0.00
30	T	Carbon tetrachloride	2.281	1.860	18.5	75	0.00
31	T	Benzene	3.318	2.601	21.6	71	0.00
32	T	1,2-Dichloroethane	1.518	1.215	20.0	72	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	104	0.00
34	T	Heptane	0.541	0.469	13.3	75	0.00
35	T	Trichloroethene	0.377	0.300	20.4	75	0.00
36	T	1,2-Dichloropropane	0.374	0.288	23.0	72	0.00
37	T	1,4-Dioxane	0.171	0.138	19.3	75	0.00
38	T	Bromodichloromethane	0.581	0.463	20.3	75	0.00
39	T	cis-1,3-Dichloropropene	0.503	0.368	26.8	69	0.00
40	T	4-Methyl-2-pentanone	0.296	0.240	18.9	74	0.00
41	T	Toluene	0.980	0.842	14.1	80	0.00
42	T	trans-1,3-Dichloropropene	0.456	0.374	18.0	77	0.00
43	T	1,1,2-Trichloroethane	0.341	0.264	22.6	73	0.00
44	T	Tetrachloroethene	0.454	0.374	17.6	77	0.00
45	T	2-Hexanone	0.536	0.450	16.0	71	0.00
46	T	Chlorodibromomethane	0.531	0.424	20.2	74	0.00
47	T	1,2-Dibromoethane	0.494	0.388	21.5	73	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	106	0.00
49	T	Chlorobenzene	0.842	0.663	21.3	74	0.00
50	T	Ethylbenzene	1.405	1.119	20.4	74	0.00
51	T	m,p-Xylene	1.026	0.886	13.6	76	0.00
52	T	o-Xylene	1.092	0.895	18.0	75	0.00
53	T	Styrene	0.794	0.662	16.6	75	0.00
54	T	Bromoform	0.544	0.436	19.9	75	0.00
55	S	4-Bromofluorobenzene	0.618	0.608	1.6	104	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\100912\10091203.D Vial: 3
Acq On : 9 Oct 2012 11:17 am Operator: RACHEL HILL
Sample : CCV VOA1 100912 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.758	0.593	21.8	73	0.00
57	T	4-Ethyltoluene	1.348	1.089	19.2	74	0.00
58	T	1,3,5-Trimethylbenzene	1.144	0.917	19.8	74	0.00
59	T	1,2,4-Trimethylbenzene	1.063	0.862	18.9	75	0.00
60	T	1,3-Dichlorobenzene	0.576	0.459	20.3	77	0.00
61	T	1,4-Dichlorobenzene	0.544	0.435	20.0	76	0.00
62	T	Benzyl chloride	0.715	0.574	19.7	75	0.00
63	T	1,2-Dichlorobenzene	0.490	0.385	21.4	76	0.00
64	T	1,2,4-Trichlorobenzene	0.127	0.101	20.5	81	0.00
65	T	Hexachlorobutadiene	0.244	0.177	27.5	73	0.00
66		Naphthalene	0.245	0.195	20.4	81	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100912\10091203.D Vial: 3
Acq On : 9 Oct 2012 11:17 am Operator: RACHEL HILL
Sample : CCV VOA1 100912 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 9 11:42 2012 Quant Results File: 092412V1.RES

Quant Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration
DataAcq Meth : 092412V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.52	130	304790	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.62	114	1235876	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.47	117	1033973	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.12	95	628717	12.29	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 98.32%

Target Compounds						Qvalue
2) Propylene	5.44	41	242432	8.26	ppbv	99
3) Dichlorodifluoromethane	5.52	85	658754	7.68	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.77	135	438754	8.12	ppbv #	65
5) Chloromethane	5.94	50	287631	8.13	ppbv	99
6) Vinyl chloride	6.15	62	341059	9.74	ppbv	96
7) 1,3-Butadiene	6.21	39	204041	9.06	ppbv #	67
8) Bromomethane	6.78	94	254094	7.67	ppbv	99
9) Chloroethane	6.93	64	158872	7.41	ppbv	98
10) Trichlorofluoromethane	7.26	101	610712	7.76	ppbv	98
11) Ethanol	7.50	45	69177	6.90	ppbv	98
12) Freon113	7.92	101	447999	8.18	ppbv #	85
13) 1,1-Dichloroethene	8.03	61	430573	8.19	ppbv #	86
14) Acetone	8.11	43	366819	8.19	ppbv #	92
15) Carbon disulfide	8.40	76	690195	9.03	ppbv #	100
16) 2-Propanol	8.17	45	399070	8.57	ppbv #	1
17) Methylene chloride	8.69	49	308626	7.96	ppbv #	81
18) tert-Butyl Methyl Ether	8.88	73	507241	7.56	ppbv #	89
19) trans-1,2-Dichloroethene	8.97	61	387321	8.20	ppbv #	81
20) n-Hexane	9.15	57	468123	8.39	ppbv #	86
21) 1,1-Dichloroethane	9.53	63	434848	7.44	ppbv #	96
22) Vinyl acetate	9.46	43	568364	8.03	ppbv	98
23) cis-1,2-Dichloroethene	10.21	96	228271	7.84	ppbv #	80
24) 2-Butanone	10.18	43	388266	8.21	ppbv	94
25) Ethyl acetate	10.13	43	491168	8.00	ppbv #	99
26) Tetrahydrofuran	10.52	42	248932	8.71	ppbv	96
27) Chloroform	10.54	83	414956	7.93	ppbv	99
28) 1,1,1-Trichloroethane	10.78	97	418960	7.85	ppbv #	93
29) Cyclohexane	10.79	56	473275	8.70	ppbv #	78
30) Carbon tetrachloride	10.94	117	430804	7.75	ppbv	98
31) Benzene	11.23	78	608930	7.53	ppbv	94
32) 1,2-Dichloroethane	11.31	62	287331	7.76	ppbv #	96
34) Heptane	11.28	43	459262	8.58	ppbv	90
35) Trichloroethene	11.96	130	284866	7.64	ppbv	94
36) 1,2-Dichloropropane	12.31	63	279508	7.55	ppbv #	94
37) 1,4-Dioxane	12.39	88	131098	7.75	ppbv #	83
38) Bromodichloromethane	12.60	83	439485	7.65	ppbv	100
39) cis-1,3-Dichloropropene	13.15	75	345543	6.95	ppbv	98
40) 4-Methyl-2-pentanone	13.26	58	237697	8.11	ppbv #	88
41) Toluene	13.55	91	815384	8.42	ppbv	98
42) trans-1,3-Dichloropropene	13.86	75	336718	7.46	ppbv	97
43) 1,1,2-Trichloroethane	14.13	97	255442	7.58	ppbv	97
44) Tetrachloroethene	14.26	166	354864	7.90	ppbv	97
45) 2-Hexanone	14.34	43	435597	8.21	ppbv	88
46) Chlorodibromomethane	14.68	129	410698	7.82	ppbv	99
47) 1,2-Dibromoethane	14.91	107	368354	7.54	ppbv	99
49) Chlorobenzene	15.51	112	543317	7.81	ppbv #	91
50) Ethylbenzene	15.55	91	907277	7.80	ppbv	93
51) m,p-Xylene	15.70	91	1407339	16.58	ppbv	93
52) o-Xylene	16.30	91	740666	8.20	ppbv #	90

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100912\10091203.D Vial: 3
Acq On : 9 Oct 2012 11:17 am Operator: RACHEL HILL
Sample : CCV VOA1 100912 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 9 11:42 2012 Quant Results File: 092412V1.RES

Quant Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration
DataAcq Meth : 092412V1

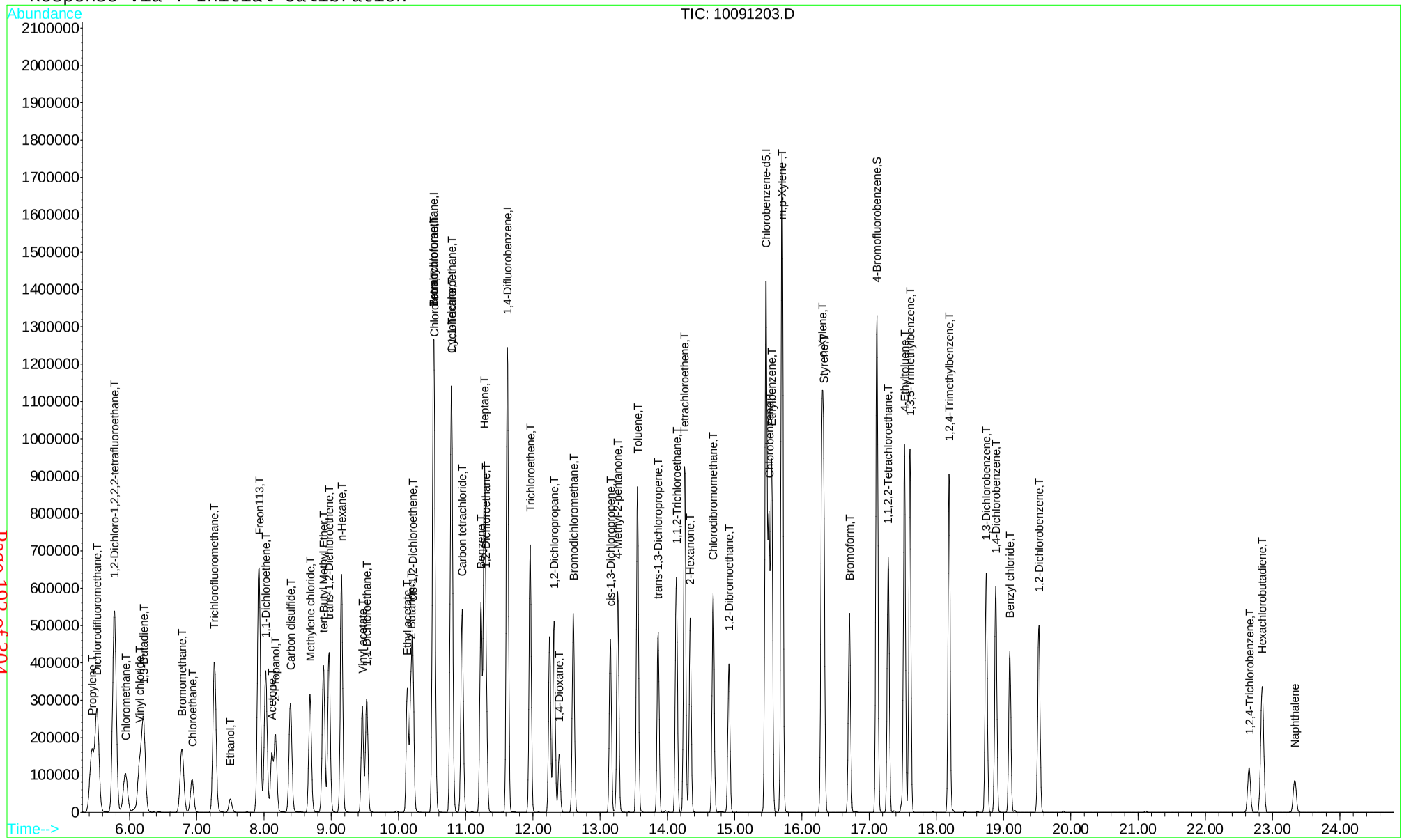
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.33	104	536825	8.17	ppbv		98
54)	Bromoform	16.71	173	346088	7.70	ppbv	#	98
56)	1,1,2,2-Tetrachloroethane	17.28	83	490802	7.82	ppbv	#	99
57)	4-Ethyltoluene	17.52	105	883030	7.92	ppbv		96
58)	1,3,5-Trimethylbenzene	17.61	105	735639	7.78	ppbv		96
59)	1,2,4-Trimethylbenzene	18.19	105	698574	7.95	ppbv		96
60)	1,3-Dichlorobenzene	18.74	146	368516	7.74	ppbv		96
61)	1,4-Dichlorobenzene	18.88	146	345131	7.67	ppbv		95
62)	Benzyl chloride	19.09	91	460249	7.78	ppbv		97
63)	1,2-Dichlorobenzene	19.53	146	308954	7.62	ppbv		96
64)	1,2,4-Trichlorobenzene	22.65	180	76313	7.24	ppbv		97
65)	Hexachlorobutadiene	22.85	225	137905	6.82	ppbv		98
66)	Naphthalene	23.33	128	148688	7.34	ppbv		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\100912\10091203.D Vial: 3
Acq On : 9 Oct 2012 11:17 am Operator: RACHEL HILL
Sample : CCV VOA1 100912 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 9 11:42 2012 Quant Results File: 092412V1.RES

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA1_121010A **Run No.:** 52862

Analytical Run Date: 10/10/2012 **InstrumentID:** VOA1

Analyst: Rachel Dear **Column:**

Calibration ID: 52291 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 10/12/12/PR AW 10.11.12 ***Field dup to 1209B05-042A (run:52817 10/09/12); data does not match ***

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 101012	BFB_TUNE	TUNE	R52862	10/10/2012 9:11:00 AM	Celeste Hoitash		
CCV VOA1 101012	EPA_TO15	CCV	R52862	10/10/2012 10:02:00 AM	Celeste Hoitash		
RLVS VOA1 101012	EPA_TO15	RLVS	R52862	10/10/2012 10:50:00 AM	Celeste Hoitash		
MBLK/CC_51 VOA1	EPA_TO15	MBLK	R52862	10/10/2012 11:50:00 AM	Celeste Hoitash		
1209B05-041A	EPA_TO15	SAMP	R52862	10/10/2012 12:41:00 PM	Celeste Hoitash		Field dup to 1209B05-042A; data does not match
1209B05-039A	EPA_TO15	SAMP	R52862	10/10/2012 1:29:00 PM	Celeste Hoitash		
1209B05-043A	EPA_TO15	SAMP	R52862	10/10/2012 2:13:00 PM	Celeste Hoitash		
1209B05-049A	EPA_TO15	SAMP	R52862	10/10/2012 2:58:00 PM	Celeste Hoitash		
1209B05-010A	EPA_TO15	SAMP	R52862	10/10/2012 3:43:00 PM	Celeste Hoitash		
1209B05-010Adup	EPA_TO15	DUP	R52862	10/10/2012 4:27:00 PM	Celeste Hoitash		
1209B05-014A	EPA_TO15	SAMP	R52862	10/10/2012 5:09:00 PM	Celeste Hoitash		
1209B05-015A	EPA_TO15	SAMP	R52862	10/10/2012 5:50:00 PM	Celeste Hoitash		
1209B05-011A	EPA_TO15	SAMP	R52862	10/10/2012 6:32:00 PM	Celeste Hoitash		
1209B05-012A	EPA_TO15	SAMP	R52862	10/10/2012 7:14:00 PM	Celeste Hoitash		
1209B05-013A	EPA_TO15	SAMP	R52862	10/10/2012 7:58:00 PM	Celeste Hoitash		
1209B05-020A	EPA_TO15	SAMP	R52862	10/10/2012 8:40:00 PM	Celeste Hoitash		
1209B05-045A	EPA_TO15	SAMP	R52862	10/10/2012 9:21:00 PM	Celeste Hoitash		
1209B05-047A	EPA_TO15	SAMP	R52862	10/10/2012 10:03:00 PM	Celeste Hoitash		
1209B05-048A	EPA_TO15	SAMP	R52862	10/10/2012 10:44:00 PM	Celeste Hoitash		
RLVS2 VOA1 10101	EPA_TO15	RLVS	R52862	10/10/2012 11:26:00 PM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

22-Oct-12

RunNo 52862

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1038071	BFB VOA1 101012	BFB_TUNE	TUNE	.\1\DATA\101012`	10/10/2012 9:11	1	R52862		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0.6	0.6		100	0	0	0	0	0	1%	0	2	0%	
174	M		76.6	76.6		100	0	0	0	0	0	77%	50	120	0%	
175	M		7.1	7.1		100	0	0	0	0	0	7%	4	9	0%	
176	M		96.8	96.8		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	
50	M		21.7	21.7		100	0	0	0	0	0	22%	8	40	0%	
75	M		47.7	47.7		100	0	0	0	0	0	48%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1038072	CCV VOA1 101012	EPA_TO15	CCV	.\1\DATA\101012`	10/10/2012 10:0	1	R52862		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	10.33	10.33		9.6	0	0	0.107	1	50	108%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.63	10.63		10	0	0	0.211	1	50	106%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.5	10.5		9.8	0	0	0.108	1	50	107%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	10.23	10.23		9.8	0	0	0.2	1	50	104%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.92	9.92		9.7	0	0	0.111	1	50	102%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.41	10.41		9.9	0	0	0.097	1	50	105%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	10.19	10.19		9.1	0	0	0.271	1	50	112%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.91	10.91		9.8	0	0	0.245	1	50	111%	70	130	0%	
1,2-Dibromoethane	A	ppbv	10.37	10.37		9.6	0	0	0.186	1	50	108%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.47	10.47		9.7	0	0	0.208	1	50	108%	70	130	0%	
1,2-Dichloroethane	A	ppbv	10.6	10.6		9.7	0	0	0.196	1	50	109%	70	130	0%	
1,2-Dichloropropane	A	ppbv	10.32	10.32		9.8	0	0	0.224	1	50	105%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	10.62	10.62		9.7	0	0	0.24	1	50	109%	70	130	0%	
1,3-Butadiene	A	ppbv	10.96	10.96		9.8	0	0	0.152	1	50	112%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	10.68	10.68		9.7	0	0	0.202	1	50	110%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1038072	CCV VOA1 101012	EPA_TO15	CCV	\1\DATA\101012	10/10/2012 10:0	1	R52862		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	10.67	10.67		9.6	0	0	0.194	1	50	111%	70	130	0%	
1,4-Dioxane	A	ppbv	10.58	10.58		9.6	0	0	0.128	1	50	110%	70	130	0%	
2-Butanone	A	ppbv	10.62	10.62		9.9	0	0	0.287	1	50	107%	70	130	0%	
2-Hexanone	A	ppbv	11.48	11.48		9.8	0	0	0.135	1	50	117%	70	130	0%	
2-Propanol	A	ppbv	11.01	11.01		10.1	0	0	0.329	1	50	109%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	11.05	11.05		10	0	0	0.157	1	50	111%	70	130	0%	
Acetone	A	ppbv	11.25	11.25		10	0	0	0.43	1	50	113%	70	130	0%	
Benzene	A	ppbv	10.06	10.06		9.6	0	0	0.126	1	50	105%	70	130	0%	
Benzyl chloride	A	ppbv	10.91	10.91		9.7	0	0	0.155	1	50	112%	70	130	0%	
Bromodichloromethane	A	ppbv	10.57	10.57		9.6	0	0	0.156	1	50	110%	70	130	0%	
Bromoform	A	ppbv	10.74	10.74		9.6	0	0	0.197	1	50	112%	70	130	0%	
Bromomethane	A	ppbv	9.31	9.31		9.3	0	0	0.075	1	50	100%	70	130	0%	
Carbon disulfide	A	ppbv	11.07	11.07		9.7	0	0	0.093	1	50	114%	70	130	0%	
Carbon tetrachloride	A	ppbv	10.19	10.19		9.5	0	0	0.114	1	50	107%	70	130	0%	
Chlorobenzene	A	ppbv	10.68	10.68		9.9	0	0	0.275	1	50	108%	70	130	0%	
Chlorodibromomethane	A	ppbv	10.81	10.81		9.2	0	0	0.165	1	50	118%	70	130	0%	
Chloroethane	A	ppbv	9.04	9.04		9.8	0	0	0.063	1	50	92%	70	130	0%	
Chloroform	A	ppbv	10.57	10.57		9.4	0	0	0.126	1	50	112%	70	130	0%	
Chloromethane	A	ppbv	9.71	9.71		9.8	0	0	0.104	1	50	99%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	10.17	10.17		9.8	0	0	0.107	1	50	104%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	9.52	9.52		9.5	0	0	0.166	1	50	100%	70	130	0%	
Cyclohexane	A	ppbv	11.2	11.2		9.8	0	0	0.684	2	50	114%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.44	9.44		9.2	0	0	0.086	1	50	103%	70	130	0%	
Ethanol	A	ppbv	8.67	8.67		9.2	0	0	1.962	5	50	94%	70	130	0%	
Ethyl acetate	A	ppbv	11.12	11.12		9.8	0	0	0.157	1	50	113%	70	130	0%	
Ethylbenzene	A	ppbv	10.75	10.75		9.8	0	0	0.737	2	50	110%	70	130	0%	
Heptane	A	ppbv	11.45	11.45		9.9	0	0	0.249	1	50	116%	70	130	0%	
Hexachlorobutadiene	A	ppbv	9.37	9.37		9.4	0	0	0.374	2	50	100%	70	130	0%	
m,p-Xylene	A	ppbv	22.96	22.96		19.2	0	0	0.524	2	100	120%	70	130	0%	
Methylene chloride	A	ppbv	10.27	10.27		10	0	0	2.077	5	50	103%	70	130	0%	
n-Hexane	A	ppbv	10.73	10.73		10.1	0	0	0.692	2	50	106%	70	130	0%	
Naphthalene	A	ppbv	9.93	9.93		9.2	0	0	0.247	1	50	108%	70	130	0%	
o-Xylene	A	ppbv	11.37	11.37		10	0	0	0.258	1	50	114%	70	130	0%	
Propylene	A	ppbv	9.99	9.99		10.2	0	0	0.075	1	50	98%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1038072	CCV VOA1 101012	EPA_TO15	CCV	.\1\DATA\101012`	10/10/2012 10:0	1	R52862		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	11.31	11.31		9.8	0	0	0.263	1	50	115%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	10.38	10.38		9.9	0	0	0.228	1	50	105%	70	130	0%	
Tetrachloroethene	A	ppbv	10.58	10.58		9.6	0	0	0.148	1	50	110%	70	130	0%	
Tetrahydrofuran	A	ppbv	11.56	11.56		10	0	0	0.201	1	50	116%	70	130	0%	
Toluene	A	ppbv	11.52	11.52		9.8	0	0	0.158	1	50	118%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.61	10.61		9.8	0	0	0.117	1	50	108%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	10.38	10.38		9.1	0	0	0.171	1	50	114%	70	130	0%	
Trichloroethene	A	ppbv	10.11	10.11		9.6	0	0	0.119	1	50	105%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.81	9.81		9.6	0	0	0.148	1	50	102%	70	130	0%	
Vinyl acetate	A	ppbv	11.03	11.03		9.9	0	0	0.266	1	50	111%	70	130	0%	
Vinyl chloride	A	ppbv	11.78	11.78		9.4	0	0	0.072	1	50	125%	70	130	0%	
Xylenes, Total	C	ppbv	34.33	34.33		29.2	0	0	0.782	3	150	118%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.45	12.45		12.5	0	0	0	0	0	100%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1038073	RLVS VOA1 101012	EPA_TO15	RLVS	.\1\DATA\101012`	10/10/2012 10:5	1	R52862		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	1.04	1.04		0.996	0	0	0.107	1	50	104%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.02	1.02		1	0	0	0.211	1	50	102%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1.02	1.02		0.98	0	0	0.108	1	50	104%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	1.03	1.03		0.98	0	0	0.2	1	50	105%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.02	1.02		0.97	0	0	0.111	1	50	105%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.96	0.96		0.99	0	0	0.097	1	50	97%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	0.8	0.8		0.91	0	0	0.271	1	50	88%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	1.03	1.03		0.98	0	0	0.245	1	50	105%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.98	0.98		0.96	0	0	0.186	1	50	102%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	0.93	0.93		0.97	0	0	0.208	1	50	96%	70	130	0%	
1,2-Dichloroethane	A	ppbv	1.11	1.11		0.97	0	0	0.196	1	50	114%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1.05	1.05		0.98	0	0	0.224	1	50	107%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\101012\10101202.D Vial: 2
Acq On : 10 Oct 2012 10:02 am Operator: RACHEL HILL
Sample : CCV VOA1 101012 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	82	0.00
2	T	Propylene	1.204	1.180	2.0	78	0.00
3	T	Dichlorodifluoromethane	3.520	3.612	-2.6	82	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.215	2.257	-1.9	82	0.00
5	T	Chloromethane	1.450	1.483	-2.3	81	0.00
6	T	Vinyl chloride	1.437	1.801	-25.3	95	0.01
7	T	1,3-Butadiene	0.924	1.034	-11.9	83	0.02
8	T	Bromomethane	1.358	1.360	-0.1	82	0.00
9	T	Chloroethane	0.879	0.863	1.8	80	0.00
10	T	Trichlorofluoromethane	3.226	3.297	-2.2	84	0.00
11	T	Ethanol	0.411	0.387	5.8	75	0.00
12	T	Freon113	2.247	2.407	-7.1	82	0.00
13	T	1,1-Dichloroethene	2.155	2.267	-5.2	83	0.00
14	T	Acetone	1.838	2.067	-12.5	84	0.00
15	T	Carbon disulfide	3.135	3.576	-14.1	92	0.00
16	T	2-Propanol	1.910	2.083	-9.1	82	0.00
17	T	Methylene chloride	1.590	1.634	-2.8	81	0.00
18	T	tert-Butyl Methyl Ether	2.752	2.886	-4.9	80	0.00
19	T	trans-1,2-Dichloroethene	1.938	2.098	-8.3	84	0.00
20	T	n-Hexane	2.289	2.433	-6.3	82	0.00
21	T	1,1-Dichloroethane	2.399	2.454	-2.3	79	0.00
22	T	Vinyl acetate	2.903	3.233	-11.4	80	0.00
23	T	cis-1,2-Dichloroethene	1.195	1.240	-3.8	81	0.00
24	T	2-Butanone	1.940	2.082	-7.3	75	0.00
25	T	Ethyl acetate	2.518	2.857	-13.5	82	0.00
26	T	Tetrahydrofuran	1.172	1.355	-15.6	81	0.00
27	T	Chloroform	2.145	2.313	-7.8	81	0.00
28	T	1,1,1-Trichloroethane	2.189	2.356	-7.6	81	0.00
29	T	Cyclohexane	2.231	2.549	-14.3	82	0.00
30	T	Carbon tetrachloride	2.281	2.447	-7.3	83	0.00
31	T	Benzene	3.318	3.476	-4.8	80	0.00
32	T	1,2-Dichloroethane	1.518	1.659	-9.3	82	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	84	0.00
34	T	Heptane	0.541	0.626	-15.7	81	0.00
35	T	Trichloroethene	0.377	0.398	-5.6	80	0.00
36	T	1,2-Dichloropropane	0.374	0.394	-5.3	79	0.00
37	T	1,4-Dioxane	0.171	0.189	-10.5	83	0.00
38	T	Bromodichloromethane	0.581	0.640	-10.2	83	0.00
39	T	cis-1,3-Dichloropropene	0.503	0.504	-0.2	76	0.00
40	T	4-Methyl-2-pentanone	0.296	0.328	-10.8	81	0.00
41	T	Toluene	0.980	1.152	-17.6	88	0.00
42	T	trans-1,3-Dichloropropene	0.456	0.521	-14.3	87	0.00
43	T	1,1,2-Trichloroethane	0.341	0.356	-4.4	79	0.00
44	T	Tetrachloroethene	0.454	0.501	-10.4	83	0.00
45	T	2-Hexanone	0.536	0.629	-17.4	80	0.00
46	T	Chlorodibromomethane	0.531	0.586	-10.4	82	0.00
47	T	1,2-Dibromoethane	0.494	0.534	-8.1	80	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	84	0.00
49	T	Chlorobenzene	0.842	0.908	-7.8	80	0.00
50	T	Ethylbenzene	1.405	1.542	-9.8	81	0.00
51	T	m,p-Xylene	1.026	1.227	-19.6	83	0.00
52	T	o-Xylene	1.092	1.242	-13.7	83	0.00
53	T	Styrene	0.794	0.917	-15.5	83	0.00
54	T	Bromoform	0.544	0.608	-11.8	84	0.00
55	S	4-Bromofluorobenzene	0.618	0.616	0.3	84	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\101012\10101202.D Vial: 2
Acq On : 10 Oct 2012 10:02 am Operator: RACHEL HILL
Sample : CCV VOA1 101012 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.758	0.806	-6.3	79	0.00
57	T	4-Ethyltoluene	1.348	1.489	-10.5	81	0.00
58	T	1,3,5-Trimethylbenzene	1.144	1.252	-9.4	80	0.00
59	T	1,2,4-Trimethylbenzene	1.063	1.183	-11.3	82	0.00
60	T	1,3-Dichlorobenzene	0.576	0.634	-10.1	84	0.00
61	T	1,4-Dichlorobenzene	0.544	0.605	-11.2	84	0.00
62	T	Benzyl chloride	0.715	0.805	-12.6	83	0.00
63	T	1,2-Dichlorobenzene	0.490	0.529	-8.0	83	0.00
64	T	1,2,4-Trichlorobenzene	0.127	0.143	-12.6	90	0.00
65	T	Hexachlorobutadiene	0.244	0.244	0.0	80	0.00
66		Naphthalene	0.245	0.264	-7.8	87	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101012\10101202.D Vial: 2
Acq On : 10 Oct 2012 10:02 am Operator: RACHEL HILL
Sample : CCV VOA1 101012 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 10 10:27 2012 Quant Results File: 092412V1.RES

Quant Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration
DataAcq Meth : 092412V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.52	130	255820	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.62	114	994992	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.47	117	821309	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.11	95	505731	12.45	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 99.60%

Target Compounds						Qvalue
2) Propylene	5.44	41	246296	9.99	ppbv	99
3) Dichlorodifluoromethane	5.51	85	680050	9.44	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.77	135	438902	9.68	ppbv #	63
5) Chloromethane	5.93	50	288276	9.71	ppbv #	96
6) Vinyl chloride	6.15	62	346413	11.78	ppbv	96
7) 1,3-Butadiene	6.21	39	207283	10.96	ppbv #	68
8) Bromomethane	6.78	94	258819	9.31	ppbv #	98
9) Chloroethane	6.92	64	162518	9.04	ppbv	98
10) Trichlorofluoromethane	7.26	101	647760	9.81	ppbv	98
11) Ethanol	7.50	45	72939	8.67	ppbv	99
12) Freon113	7.92	101	482809	10.50	ppbv #	84
13) 1,1-Dichloroethene	8.02	61	459244	10.41	ppbv #	86
14) Acetone	8.12	43	423009	11.25	ppbv #	92
15) Carbon disulfide	8.39	76	709951	11.07	ppbv #	100
16) 2-Propanol	8.17	45	430510	11.01	ppbv #	1
17) Methylene chloride	8.68	49	334319	10.27	ppbv #	81
18) tert-Butyl Methyl Ether	8.89	73	584738	10.38	ppbv #	90
19) trans-1,2-Dichloroethene	8.96	61	420744	10.61	ppbv #	81
20) n-Hexane	9.15	57	502886	10.73	ppbv #	86
21) 1,1-Dichloroethane	9.52	63	487163	9.92	ppbv #	95
22) Vinyl acetate	9.46	43	655085	11.03	ppbv	98
23) cis-1,2-Dichloroethene	10.21	96	248727	10.17	ppbv #	79
24) 2-Butanone	10.18	43	421827	10.62	ppbv	95
25) Ethyl acetate	10.13	43	573074	11.12	ppbv #	100
26) Tetrahydrofuran	10.52	42	277325	11.56	ppbv	95
27) Chloroform	10.54	83	463831	10.57	ppbv	100
28) 1,1,1-Trichloroethane	10.78	97	462843	10.33	ppbv #	92
29) Cyclohexane	10.79	56	511209	11.20	ppbv #	78
30) Carbon tetrachloride	10.95	117	475749	10.19	ppbv	98
31) Benzene	11.23	78	682857	10.06	ppbv	94
32) 1,2-Dichloroethane	11.31	62	329258	10.60	ppbv #	96
34) Heptane	11.28	43	493611	11.45	ppbv	89
35) Trichloroethene	11.96	130	303752	10.11	ppbv	94
36) 1,2-Dichloropropane	12.32	63	307520	10.32	ppbv	94
37) 1,4-Dioxane	12.39	88	144117	10.58	ppbv #	82
38) Bromodichloromethane	12.60	83	488778	10.57	ppbv	100
39) cis-1,3-Dichloropropene	13.15	75	381180	9.52	ppbv	97
40) 4-Methyl-2-pentanone	13.26	58	260715	11.05	ppbv #	89
41) Toluene	13.56	91	898697	11.52	ppbv	98
42) trans-1,3-Dichloropropene	13.87	75	377073	10.38	ppbv	97
43) 1,1,2-Trichloroethane	14.13	97	277618	10.23	ppbv	97
44) Tetrachloroethene	14.26	166	382552	10.58	ppbv	97
45) 2-Hexanone	14.34	43	490388	11.48	ppbv	88
46) Chlorodibromomethane	14.68	129	456984	10.81	ppbv	98
47) 1,2-Dibromoethane	14.92	107	407935	10.37	ppbv	100
49) Chlorobenzene	15.51	112	590433	10.68	ppbv #	91
50) Ethylbenzene	15.55	91	992720	10.75	ppbv	93
51) m,p-Xylene	15.71	91	1548045	22.96	ppbv	93
52) o-Xylene	16.30	91	815866	11.37	ppbv #	90

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101012\10101202.D Vial: 2
Acq On : 10 Oct 2012 10:02 am Operator: RACHEL HILL
Sample : CCV VOA1 101012 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 10 10:27 2012 Quant Results File: 092412V1.RES

Quant Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration
DataAcq Meth : 092412V1

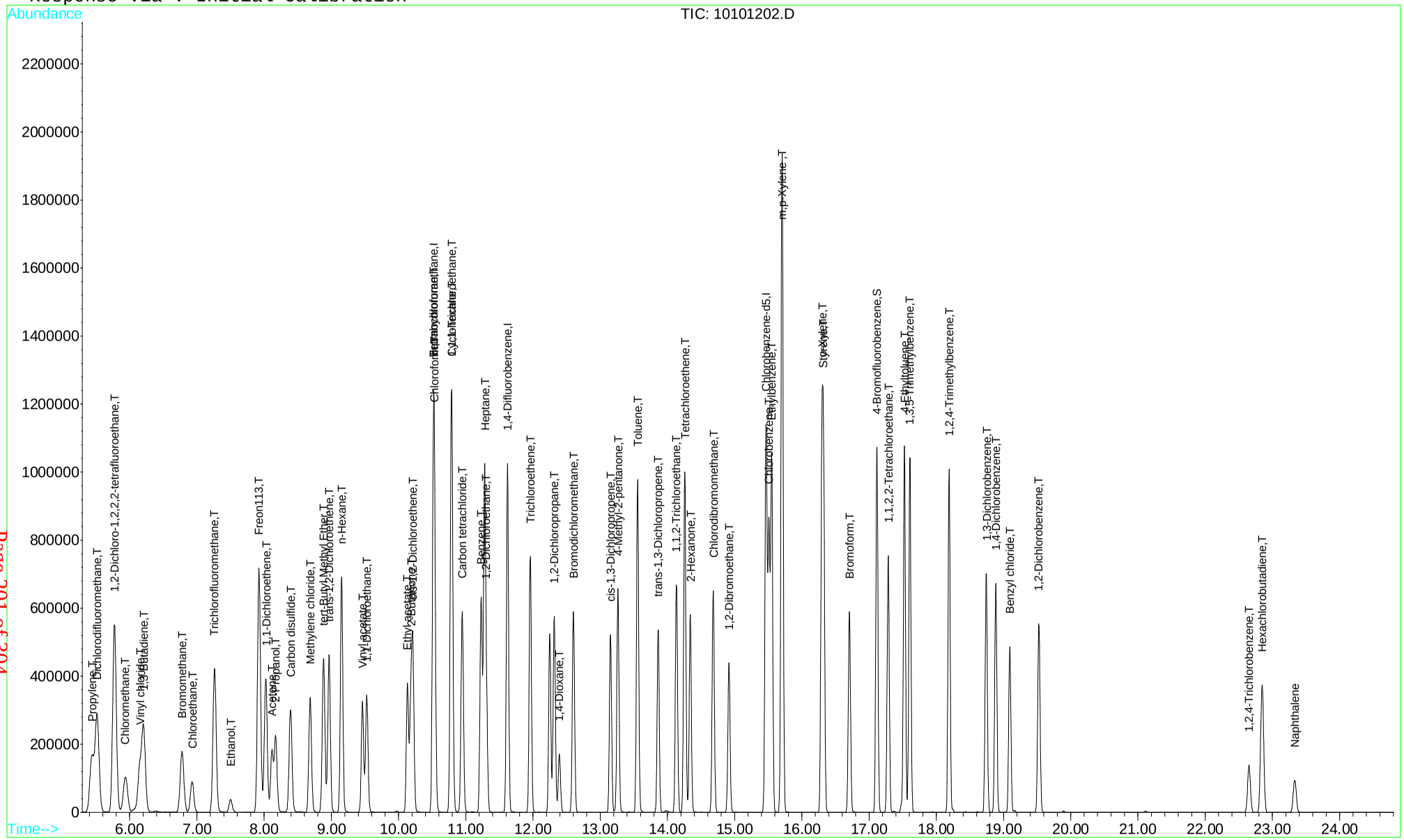
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.32	104	590345	11.31	ppbv		97
54)	Bromoform	16.70	173	383437	10.74	ppbv	#	97
56)	1,1,2,2-Tetrachloroethane	17.29	83	529660	10.63	ppbv	#	99
57)	4-Ethyltoluene	17.53	105	958837	10.82	ppbv		96
58)	1,3,5-Trimethylbenzene	17.60	105	798201	10.62	ppbv		96
59)	1,2,4-Trimethylbenzene	18.19	105	761576	10.91	ppbv		96
60)	1,3-Dichlorobenzene	18.74	146	403857	10.68	ppbv		95
61)	1,4-Dichlorobenzene	18.89	146	381475	10.67	ppbv		95
62)	Benzyl chloride	19.10	91	512785	10.91	ppbv		97
63)	1,2-Dichlorobenzene	19.52	146	337275	10.47	ppbv		96
64)	1,2,4-Trichlorobenzene	22.65	180	85386	10.19	ppbv		97
65)	Hexachlorobutadiene	22.85	225	150420	9.37	ppbv		99
66)	Naphthalene	23.33	128	159815	9.93	ppbv		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101012\10101202.D Vial: 2
Acq On : 10 Oct 2012 10:02 am Operator: RACHEL HILL
Sample : CCV VOA1 101012 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 10 10:27 2012 Quant Results File: 092412V1.RES

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA1_121012A** **Run No.:** 52936

Analytical Run Date: 10/12/2012 **InstrumentID:** VOA1

Analyst: Rachel Dear **Column:**

Calibration ID: 52291 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 10/18/12/PR AW 10.15.12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 101212	BFB_TUNE	TUNE	R52936	10/12/2012 10:12:00 AM	Celeste Hoitash		
CCV VOA1 101212	EPA_TO15	CCV	R52936	10/12/2012 11:22:00 AM	Celeste Hoitash		
RLVS VOA1 101212	EPA_TO15	RLVS	R52936	10/12/2012 12:05:00 PM	Celeste Hoitash		
MBLK/CC_4 VOA1 1	EPA_TO15	MBLK	R52936	10/12/2012 1:38:00 PM	Celeste Hoitash		
1209B05-031A	EPA_TO15	SAMP	R52936	10/12/2012 4:33:00 PM	Celeste Hoitash		
1209B05-031Adup	EPA_TO15	DUP	R52936	10/12/2012 5:15:00 PM	Celeste Hoitash		
1209B05-031A	EPA_TO15	SAMP	R52936	10/12/2012 6:03:00 PM	Celeste Hoitash		
RLVS2 VOA1 10121	EPA_TO15	RLVS	R52936	10/12/2012 6:45:00 PM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

22-Oct-12

RunNo 52936

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1039634	BFB VOA1 101212	BFB_TUNE	TUNE	.\1\DATA\101212\	10/12/2012 10:1	1	R52936		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0.6	0.6		100	0	0	0	0	0	1%	0	2	0%	
174	M		75.9	75.9		100	0	0	0	0	0	76%	50	120	0%	
175	M		7	7		100	0	0	0	0	0	7%	4	9	0%	
176	M		97.4	97.4		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	
50	M		20.7	20.7		100	0	0	0	0	0	21%	8	40	0%	
75	M		47.1	47.1		100	0	0	0	0	0	47%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1039636	CCV VOA1 101212	EPA_TO15	CCV	.\1\DATA\101212\	10/12/2012 11:2	1	R52936		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	9.93	9.93		9.6	0	0	0.107	1	50	103%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.88	10.88		10	0	0	0.211	1	50	109%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	9.83	9.83		9.8	0	0	0.108	1	50	100%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	10.54	10.54		9.8	0	0	0.2	1	50	108%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.58	9.58		9.7	0	0	0.111	1	50	99%	70	130	0%	
1,1-Dichloroethene	A	ppbv	9.63	9.63		9.9	0	0	0.097	1	50	97%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	11.31	11.31		9.1	0	0	0.271	1	50	124%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	11.14	11.14		9.8	0	0	0.245	1	50	114%	70	130	0%	
1,2-Dibromoethane	A	ppbv	10.76	10.76		9.6	0	0	0.186	1	50	112%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.87	10.87		9.7	0	0	0.208	1	50	112%	70	130	0%	
1,2-Dichloroethane	A	ppbv	10.32	10.32		9.7	0	0	0.196	1	50	106%	70	130	0%	
1,2-Dichloropropane	A	ppbv	10.74	10.74		9.8	0	0	0.224	1	50	110%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	10.99	10.99		9.7	0	0	0.24	1	50	113%	70	130	0%	
1,3-Butadiene	A	ppbv	9.9	9.9		9.8	0	0	0.152	1	50	101%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	11.03	11.03		9.7	0	0	0.202	1	50	114%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1039636	CCV VOA1 101212	EPA_TO15	CCV	\1\DATA\101212\	10/12/2012 11:2	1	R52936		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	11.09	11.09		9.6	0	0	0.194	1	50	116%	70	130	0%	
1,4-Dioxane	A	ppbv	10.96	10.96		9.6	0	0	0.128	1	50	114%	70	130	0%	
2-Butanone	A	ppbv	11.38	11.38		9.9	0	0	0.287	1	50	115%	70	130	0%	
2-Hexanone	A	ppbv	12.02	12.02		9.8	0	0	0.135	1	50	123%	70	130	0%	
2-Propanol	A	ppbv	10.81	10.81		10.1	0	0	0.329	1	50	107%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	11.42	11.42		10	0	0	0.157	1	50	114%	70	130	0%	
Acetone	A	ppbv	11.19	11.19		10	0	0	0.43	1	50	112%	70	130	0%	
Benzene	A	ppbv	9.83	9.83		9.6	0	0	0.126	1	50	102%	70	130	0%	
Benzyl chloride	A	ppbv	11.55	11.55		9.7	0	0	0.155	1	50	119%	70	130	0%	
Bromodichloromethane	A	ppbv	10.84	10.84		9.6	0	0	0.156	1	50	113%	70	130	0%	
Bromoform	A	ppbv	11.19	11.19		9.6	0	0	0.197	1	50	117%	70	130	0%	
Bromomethane	A	ppbv	8.22	8.22		9.3	0	0	0.075	1	50	88%	70	130	0%	
Carbon disulfide	A	ppbv	10.38	10.38		9.7	0	0	0.093	1	50	107%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.79	9.79		9.5	0	0	0.114	1	50	103%	70	130	0%	
Chlorobenzene	A	ppbv	11.09	11.09		9.9	0	0	0.275	1	50	112%	70	130	0%	
Chlorodibromomethane	A	ppbv	11.16	11.16		9.2	0	0	0.165	1	50	121%	70	130	0%	
Chloroethane	A	ppbv	7.82	7.82		9.8	0	0	0.063	1	50	80%	70	130	0%	
Chloroform	A	ppbv	10.18	10.18		9.4	0	0	0.126	1	50	108%	70	130	0%	
Chloromethane	A	ppbv	8.8	8.8		9.8	0	0	0.104	1	50	90%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.76	9.76		9.8	0	0	0.107	1	50	100%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	9.94	9.94		9.5	0	0	0.166	1	50	105%	70	130	0%	
Cyclohexane	A	ppbv	10.57	10.57		9.8	0	0	0.684	2	50	108%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	8.65	8.65		9.2	0	0	0.086	1	50	94%	70	130	0%	
Ethanol	A	ppbv	9.15	9.15		9.2	0	0	1.962	5	50	99%	70	130	0%	
Ethyl acetate	A	ppbv	11.11	11.11		9.8	0	0	0.157	1	50	113%	70	130	0%	
Ethylbenzene	A	ppbv	11.06	11.06		9.8	0	0	0.737	2	50	113%	70	130	0%	
Heptane	A	ppbv	11.31	11.31		9.9	0	0	0.249	1	50	114%	70	130	0%	
Hexachlorobutadiene	A	ppbv	9.71	9.71		9.4	0	0	0.374	2	50	103%	70	130	0%	
m,p-Xylene	A	ppbv	23.44	23.44		19.2	0	0	0.524	2	100	122%	70	130	0%	
Methylene chloride	A	ppbv	9.72	9.72		10	0	0	2.077	5	50	97%	70	130	0%	
n-Hexane	A	ppbv	10.16	10.16		10.1	0	0	0.692	2	50	101%	70	130	0%	
Naphthalene	A	ppbv	10.81	10.81		9.2	0	0	0.247	1	50	118%	70	130	0%	
o-Xylene	A	ppbv	11.53	11.53		10	0	0	0.258	1	50	115%	70	130	0%	
Propylene	A	ppbv	9.09	9.09		10.2	0	0	0.075	1	50	89%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1039636	CCV VOA1 101212	EPA_TO15	CCV	\1\DATA\101212\	10/12/2012 11:2	1	R52936		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	11.61	11.61		9.8	0	0	0.263	1	50	118%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	10.64	10.64		9.9	0	0	0.228	1	50	107%	70	130	0%	
Tetrachloroethene	A	ppbv	10.58	10.58		9.6	0	0	0.148	1	50	110%	70	130	0%	
Tetrahydrofuran	A	ppbv	11.38	11.38		10	0	0	0.201	1	50	114%	70	130	0%	
Toluene	A	ppbv	11.82	11.82		9.8	0	0	0.158	1	50	121%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	9.93	9.93		9.8	0	0	0.117	1	50	101%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	10.75	10.75		9.1	0	0	0.171	1	50	118%	70	130	0%	
Trichloroethene	A	ppbv	10.08	10.08		9.6	0	0	0.119	1	50	105%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.05	9.05		9.6	0	0	0.148	1	50	94%	70	130	0%	
Vinyl acetate	A	ppbv	11.07	11.07		9.9	0	0	0.266	1	50	112%	70	130	0%	
Vinyl chloride	A	ppbv	10.68	10.68		9.4	0	0	0.072	1	50	114%	70	130	0%	
Xylenes, Total	C	ppbv	34.97	34.97		29.2	0	0	0.782	3	150	120%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.46	12.46		12.5	0	0	0	0	0	100%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1039638	RLVS VOA1 101212	EPA_TO15	RLVS	\1\DATA\101212\	10/12/2012 12:0	1	R52936		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	1.07	1.07		0.996	0	0	0.107	1	50	107%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.09	1.09		1	0	0	0.211	1	50	109%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1.03	1.03		0.98	0	0	0.108	1	50	105%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	1.09	1.09		0.98	0	0	0.2	1	50	111%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.06	1.06		0.97	0	0	0.111	1	50	109%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.99	0.99		0.99	0	0	0.097	1	50	100%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	0.98	0.98		0.91	0	0	0.271	1	50	108%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	1.06	1.06		0.98	0	0	0.245	1	50	108%	70	130	0%	
1,2-Dibromoethane	A	ppbv	1.05	1.05		0.96	0	0	0.186	1	50	109%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.02	1.02		0.97	0	0	0.208	1	50	105%	70	130	0%	
1,2-Dichloroethane	A	ppbv	1.2	1.2		0.97	0	0	0.196	1	50	124%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1.13	1.13		0.98	0	0	0.224	1	50	115%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\101212\10121202.D Vial: 2
Acq On : 12 Oct 2012 11:22 am Operator: RACHEL HILL
Sample : CCV VOA1 101212 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	86	0.00
2	T	Propylene	1.204	1.073	10.9	74	0.00
3	T	Dichlorodifluoromethane	3.520	3.308	6.0	79	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.215	2.084	5.9	80	0.00
5	T	Chloromethane	1.450	1.343	7.4	77	0.00
6	T	Vinyl chloride	1.437	1.633	-13.6	91	0.00
7	T	1,3-Butadiene	0.924	0.933	-1.0	79	0.01
8	T	Bromomethane	1.358	1.200	11.6	76	0.00
9	T	Chloroethane	0.879	0.747	15.0	73	0.00
10	T	Trichlorofluoromethane	3.226	3.041	5.7	81	0.00
11	T	Ethanol	0.411	0.409	0.5	83	0.00
12	T	Freon113	2.247	2.253	-0.3	81	0.00
13	T	1,1-Dichloroethene	2.155	2.096	2.7	80	0.00
14	T	Acetone	1.838	2.057	-11.9	88	0.00
15	T	Carbon disulfide	3.135	3.355	-7.0	90	0.00
16	T	2-Propanol	1.910	2.045	-7.1	84	0.01
17	T	Methylene chloride	1.590	1.546	2.8	81	0.00
18	T	tert-Butyl Methyl Ether	2.752	2.958	-7.5	87	0.00
19	T	trans-1,2-Dichloroethene	1.938	1.963	-1.3	83	0.00
20	T	n-Hexane	2.289	2.303	-0.6	81	0.00
21	T	1,1-Dichloroethane	2.399	2.370	1.2	80	0.00
22	T	Vinyl acetate	2.903	3.246	-11.8	84	0.00
23	T	cis-1,2-Dichloroethene	1.195	1.190	0.4	81	0.00
24	T	2-Butanone	1.940	2.231	-15.0	84	0.00
25	T	Ethyl acetate	2.518	2.855	-13.4	86	0.00
26	T	Tetrahydrofuran	1.172	1.334	-13.8	84	0.00
27	T	Chloroform	2.145	2.228	-3.9	83	0.00
28	T	1,1,1-Trichloroethane	2.189	2.263	-3.4	82	0.00
29	T	Cyclohexane	2.231	2.406	-7.8	82	0.00
30	T	Carbon tetrachloride	2.281	2.350	-3.0	84	0.00
31	T	Benzene	3.318	3.399	-2.4	82	0.00
32	T	1,2-Dichloroethane	1.518	1.614	-6.3	84	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	84	0.00
34	T	Heptane	0.541	0.618	-14.2	80	0.00
35	T	Trichloroethene	0.377	0.396	-5.0	80	0.00
36	T	1,2-Dichloropropane	0.374	0.410	-9.6	82	0.00
37	T	1,4-Dioxane	0.171	0.195	-14.0	86	0.00
38	T	Bromodichloromethane	0.581	0.656	-12.9	86	0.00
39	T	cis-1,3-Dichloropropene	0.503	0.526	-4.6	79	0.00
40	T	4-Methyl-2-pentanone	0.296	0.339	-14.5	84	0.00
41	T	Toluene	0.980	1.182	-20.6	90	0.00
42	T	trans-1,3-Dichloropropene	0.456	0.539	-18.2	90	0.00
43	T	1,1,2-Trichloroethane	0.341	0.367	-7.6	82	0.00
44	T	Tetrachloroethene	0.454	0.501	-10.4	84	0.00
45	T	2-Hexanone	0.536	0.658	-22.8	84	0.00
46	T	Chlorodibromomethane	0.531	0.605	-13.9	85	0.00
47	T	1,2-Dibromoethane	0.494	0.554	-12.1	84	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	84	0.00
49	T	Chlorobenzene	0.842	0.942	-11.9	83	0.00
50	T	Ethylbenzene	1.405	1.587	-13.0	83	0.00
51	T	m,p-Xylene	1.026	1.253	-22.1	85	0.00
52	T	o-Xylene	1.092	1.259	-15.3	84	0.00
53	T	Styrene	0.794	0.941	-18.5	85	0.00
54	T	Bromoform	0.544	0.634	-16.5	87	0.00
55	S	4-Bromofluorobenzene	0.618	0.616	0.3	84	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\101212\10121202.D Vial: 2
Acq On : 12 Oct 2012 11:22 am Operator: RACHEL HILL
Sample : CCV VOA1 101212 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.758	0.825	-8.8	80	0.00
57	T	4-Ethyltoluene	1.348	1.527	-13.3	83	0.00
58	T	1,3,5-Trimethylbenzene	1.144	1.296	-13.3	83	0.00
59	T	1,2,4-Trimethylbenzene	1.063	1.208	-13.6	83	0.00
60	T	1,3-Dichlorobenzene	0.576	0.655	-13.7	87	0.00
61	T	1,4-Dichlorobenzene	0.544	0.628	-15.4	87	0.00
62	T	Benzyl chloride	0.715	0.852	-19.2	88	0.00
63	T	1,2-Dichlorobenzene	0.490	0.549	-12.0	86	0.00
64	T	1,2,4-Trichlorobenzene	0.127	0.158	-24.4	100	0.00
65	T	Hexachlorobutadiene	0.244	0.253	-3.7	83	0.00
66		Naphthalene	0.245	0.288	-17.6	95	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101212\10121202.D Vial: 2
Acq On : 12 Oct 2012 11:22 am Operator: RACHEL HILL
Sample : CCV VOA1 101212 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 12 11:47 2012 Quant Results File: 092412V1.RES

Quant Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration
DataAcq Meth : 092412V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.52	130	269208	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.62	114	998093	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.47	117	820141	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.11	95	505437	12.46	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 99.68%

Target Compounds						Qvalue
2) Propylene	5.44	41	235641	9.09	ppbv	99
3) Dichlorodifluoromethane	5.51	85	655417	8.65	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.77	135	426403	8.94	ppbv #	64
5) Chloromethane	5.93	50	274800	8.80	ppbv	98
6) Vinyl chloride	6.15	62	330504	10.68	ppbv	95
7) 1,3-Butadiene	6.20	39	196962	9.90	ppbv #	66
8) Bromomethane	6.78	94	240357	8.22	ppbv #	97
9) Chloroethane	6.92	64	148044	7.82	ppbv	97
10) Trichlorofluoromethane	7.26	101	628821	9.05	ppbv	98
11) Ethanol	7.50	45	80999	9.15	ppbv	99
12) Freon113	7.92	101	475539	9.83	ppbv #	85
13) 1,1-Dichloroethene	8.02	61	446794	9.63	ppbv #	86
14) Acetone	8.11	43	442986	11.19	ppbv #	91
15) Carbon disulfide	8.39	76	700841	10.38	ppbv #	100
16) 2-Propanol	8.17	45	444934	10.81	ppbv #	1
17) Methylene chloride	8.68	49	332974	9.72	ppbv #	81
18) tert-Butyl Methyl Ether	8.88	73	630690	10.64	ppbv #	91
19) trans-1,2-Dichloroethene	8.96	61	414411	9.93	ppbv #	82
20) n-Hexane	9.15	57	500884	10.16	ppbv #	86
21) 1,1-Dichloroethane	9.52	63	495088	9.58	ppbv #	95
22) Vinyl acetate	9.46	43	691983	11.07	ppbv	98
23) cis-1,2-Dichloroethene	10.21	96	251145	9.76	ppbv #	79
24) 2-Butanone	10.18	43	475617	11.38	ppbv	93
25) Ethyl acetate	10.13	43	602508	11.11	ppbv #	99
26) Tetrahydrofuran	10.52	42	287280	11.38	ppbv	95
27) Chloroform	10.53	83	470265	10.18	ppbv	100
28) 1,1,1-Trichloroethane	10.78	97	467962	9.93	ppbv #	92
29) Cyclohexane	10.79	56	507717	10.57	ppbv #	78
30) Carbon tetrachloride	10.95	117	480760	9.79	ppbv	98
31) Benzene	11.23	78	702771	9.83	ppbv	94
32) 1,2-Dichloroethane	11.31	62	337276	10.32	ppbv #	96
34) Heptane	11.28	43	488881	11.31	ppbv	90
35) Trichloroethene	11.96	130	303683	10.08	ppbv	94
36) 1,2-Dichloropropane	12.31	63	320975	10.74	ppbv #	94
37) 1,4-Dioxane	12.40	88	149739	10.96	ppbv #	83
38) Bromodichloromethane	12.60	83	502579	10.84	ppbv	99
39) cis-1,3-Dichloropropene	13.15	75	399045	9.94	ppbv	97
40) 4-Methyl-2-pentanone	13.26	58	270332	11.42	ppbv #	89
41) Toluene	13.56	91	924683	11.82	ppbv	98
42) trans-1,3-Dichloropropene	13.86	75	391987	10.75	ppbv	98
43) 1,1,2-Trichloroethane	14.13	97	286818	10.54	ppbv	97
44) Tetrachloroethene	14.26	166	383853	10.58	ppbv	97
45) 2-Hexanone	14.34	43	514796	12.02	ppbv	87
46) Chlorodibromomethane	14.68	129	473311	11.16	ppbv	99
47) 1,2-Dibromoethane	14.92	107	424655	10.76	ppbv	100
49) Chlorobenzene	15.51	112	612117	11.09	ppbv #	92
50) Ethylbenzene	15.55	91	1020145	11.06	ppbv	95
51) m,p-Xylene	15.71	91	1578391	23.44	ppbv	93
52) o-Xylene	16.30	91	826226	11.53	ppbv #	90

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101212\10121202.D Vial: 2
Acq On : 12 Oct 2012 11:22 am Operator: RACHEL HILL
Sample : CCV VOA1 101212 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 12 11:47 2012 Quant Results File: 092412V1.RES

Quant Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration
DataAcq Meth : 092412V1

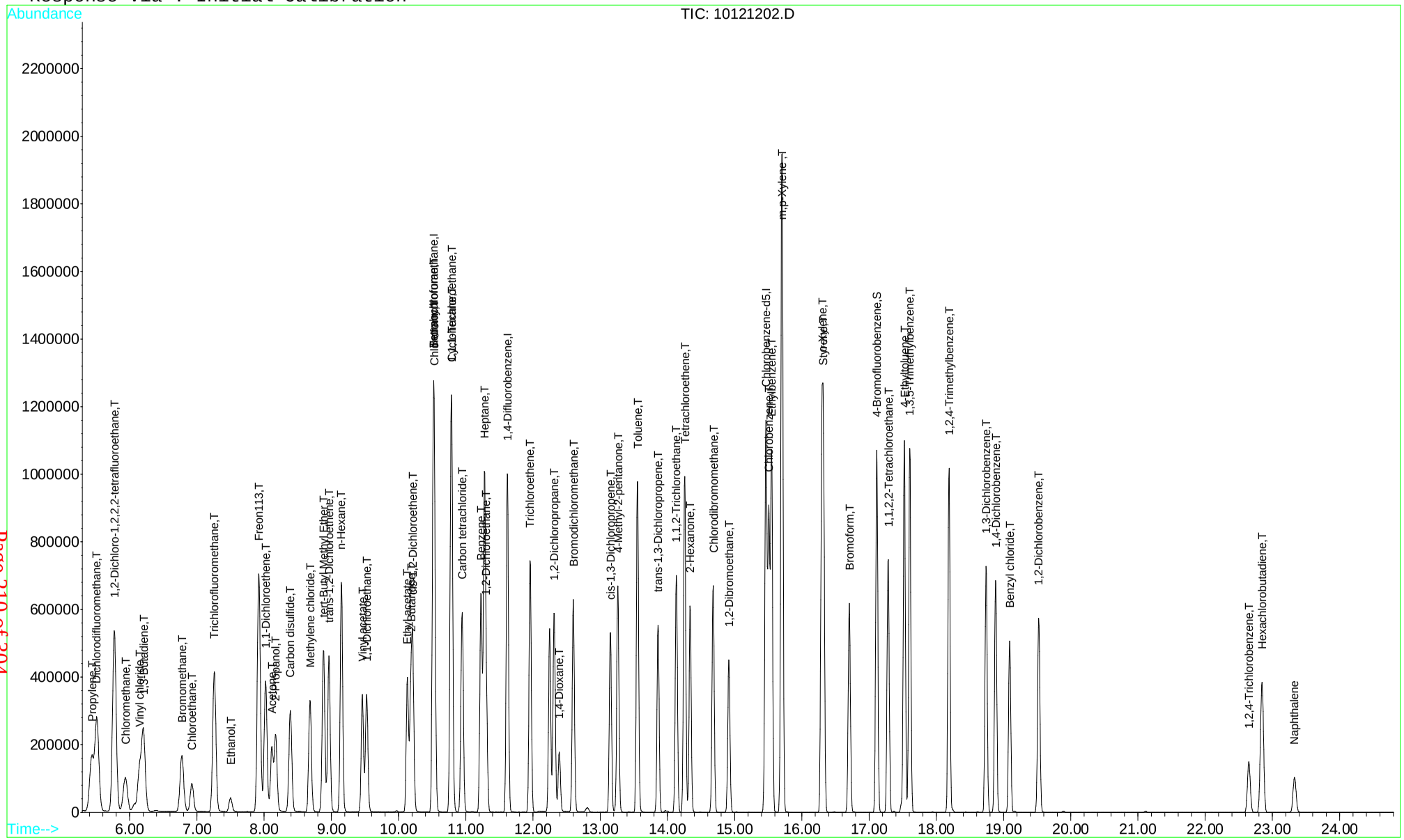
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.32	104	605136	11.61	ppbv		97
54)	Bromoform	16.71	173	399288	11.19	ppbv	#	98
56)	1,1,2,2-Tetrachloroethane	17.29	83	541402	10.88	ppbv	#	99
57)	4-Ethyltoluene	17.53	105	981998	11.10	ppbv		96
58)	1,3,5-Trimethylbenzene	17.60	105	824912	10.99	ppbv		96
59)	1,2,4-Trimethylbenzene	18.19	105	776616	11.14	ppbv		97
60)	1,3-Dichlorobenzene	18.75	146	416755	11.03	ppbv		96
61)	1,4-Dichlorobenzene	18.88	146	395778	11.09	ppbv		95
62)	Benzyl chloride	19.09	91	542011	11.55	ppbv		97
63)	1,2-Dichlorobenzene	19.53	146	349667	10.87	ppbv		96
64)	1,2,4-Trichlorobenzene	22.65	180	94579	11.31	ppbv		97
65)	Hexachlorobutadiene	22.85	225	155765	9.71	ppbv		99
66)	Naphthalene	23.33	128	173569	10.81	ppbv		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101212\10121202.D Vial: 2
Acq On : 12 Oct 2012 11:22 am Operator: RACHEL HILL
Sample : CCV VOA1 101212 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 12 11:47 2012 Quant Results File: 092412V1.RES

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration



Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration

Calibration Files
2 =09241207.D 4 =09241208.D 5 =09241209.D
6 =09241210.D 7 =09241211.D 8 =09241212.D

		Compound	2	4	5	6	7	8	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------							
2)	T	Propylene	1.262	1.241	1.249	1.215	1.156	1.120	1.204	4.36
3)	T	Dichlorodifluoromet	3.180	3.592	3.685	3.638	3.512	3.438	3.520	4.85
4)	T	1,2-Dichloro-1,2,2,	2.007	2.249	2.364	2.342	2.230	2.154	2.215	5.54
5)	T	Chloromethane	1.525	1.489	1.527	1.469	1.394	1.346	1.450	4.86
6)	T	Vinyl chloride	1.254	1.549	1.700	1.644	1.461	1.269	1.437	14.31
7)	T	1,3-Butadiene	0.868	1.021	1.074	1.049	0.957	0.840	0.924	15.86
8)	T	Bromomethane	1.180	1.350	1.422	1.413	1.372	1.347	1.358	6.24
9)	T	Chloroethane	0.764	0.881	0.917	0.909	0.882	0.869	0.879	6.27
10)	T	Trichlorofluorometh	3.346	3.218	3.345	3.303	3.200	3.068	3.226	3.49
11)	T	Ethanol	0.307	0.424	0.440	0.440	0.419	0.405	0.411	11.61
12)	T	Freon113	2.150	2.386	2.447	2.413	2.260	2.078	2.247	7.89
13)	T	1,1-Dichloroethene	1.963	2.240	2.327	2.255	2.177	2.051	2.155	6.03
14)	T	Acetone	1.750	2.012	1.983	1.945	1.829	1.658	1.838	7.89
15)	T	Carbon disulfide	2.805	3.188	3.346	3.268	3.131	3.058	3.135	5.53
16)	T	2-Propanol	1.417	2.081	2.105	2.058	1.963	1.839	1.910	12.47
17)	T	Methylene chloride	1.755	1.645	1.680	1.636	1.519	1.432	1.590	7.56
18)	T	tert-Butyl Methyl E	2.657	2.928	2.890	2.891	2.770	2.560	2.752	5.76
19)	T	trans-1,2-Dichloroe	1.848	2.036	2.067	2.047	1.930	1.822	1.938	5.73
20)	T	n-Hexane	2.204	2.434	2.471	2.426	2.274	2.123	2.289	6.82
21)	T	1,1-Dichloroethane	2.365	2.533	2.551	2.500	2.385	2.230	2.399	5.67
22)	T	Vinyl acetate	2.395	3.315	3.205	3.124	2.955	2.685	2.903	11.65
23)	T	cis-1,2-Dichloroeth	1.142	1.257	1.276	1.265	1.202	1.121	1.195	6.22
24)	T	2-Butanone	1.630	2.281	2.236	2.104	2.042	1.688	1.940	15.12
25)	T	Ethyl acetate	2.094	2.845	2.811	2.797	2.555	2.283	2.518	12.37
26)	T	Tetrahydrofuran	1.065	1.362	1.329	1.292	1.174	1.031	1.172	13.71
27)	T	Chloroform	2.106	2.317	2.339	2.282	2.140	1.947	2.145	8.40
28)	T	1,1,1-Trichloroetha	2.101	2.367	2.411	2.346	2.182	1.986	2.189	8.76
29)	T	Cyclohexane	2.324	2.523	2.521	2.442	2.223	1.946	2.231	14.81
30)	T	Carbon tetrachlorid	2.059	2.404	2.457	2.438	2.319	2.150	2.281	7.14
31)	T	Benzene	3.324	3.546	3.541	3.501	3.307	3.050	3.318	7.16
32)	T	1,2-Dichloroethane	1.480	1.649	1.650	1.602	1.513	1.379	1.518	8.06
33)	I	1,4-Difluorobenzene	----------ISTD----------							
34)	T	Heptane	0.603	0.647	0.638	0.600	0.537	0.441	0.541	22.08
35)	T	Trichloroethene	0.367	0.416	0.426	0.410	0.384	0.340	0.377	12.15
36)	T	1,2-Dichloropropane	0.362	0.419	0.415	0.405	0.385	0.336	0.374	11.83
37)	T	1,4-Dioxane	0.122	0.191	0.192	0.190	0.182	0.164	0.171	15.05
38)	T	Bromodichloromethan	0.551	0.644	0.648	0.635	0.598	0.525	0.581	11.93
39)	T	cis-1,3-Dichloropro	0.440	0.557	0.564	0.549	0.527	0.468	0.503	11.98
40)	T	4-Methyl-2-pentanon	0.208	0.338	0.337	0.333	0.316	0.285	0.296	16.64
41)	T	Toluene	0.995	1.097	1.091	1.064	0.997	0.866	0.980	13.28
42)	T	trans-1,3-Dichlorop	0.367	0.504	0.510	0.501	0.483	0.435	0.456	12.63
43)	T	1,1,2-Trichloroetha	0.327	0.377	0.378	0.373	0.349	0.308	0.341	11.71
44)	T	Tetrachloroethene	0.458	0.503	0.515	0.498	0.458	0.401	0.454	13.48
45)	T	2-Hexanone	0.322	0.657	0.627	0.624	0.579	0.504	0.536	22.60
46)	T	Chlorodibromomethan	0.462	0.597	0.601	0.590	0.553	0.485	0.531	13.42
47)	T	1,2-Dibromoethane	0.449	0.556	0.555	0.543	0.514	0.452	0.494	13.06
48)	I	Chlorobenzene-d5	----------ISTD----------							
49)	T	Chlorobenzene	0.815	0.955	0.949	0.928	0.860	0.741	0.842	14.01
50)	T	Ethylbenzene	1.454	1.613	1.589	1.550	1.419	1.203	1.405	15.83
51)	T	m,p-Xylene	1.141	1.242	1.203	1.133	0.996	0.816	1.026	21.27
52)	T	o-Xylene	1.112	1.268	1.252	1.203	1.106	0.930	1.092	16.54
53)	T	Styrene	0.704	0.933	0.924	0.894	0.829	0.699	0.794	17.16
54)	T	Bromoform	0.416	0.613	0.620	0.604	0.576	0.515	0.544	14.91
55)	S	4-Bromofluorobenzen	0.596	0.621	0.613	0.613	0.620	0.626	0.618	2.22
56)	T	1,1,2,2-Tetrachloro	0.703	0.864	0.853	0.834	0.785	0.682	0.758	13.75
57)	T	4-Ethyltoluene	1.280	1.554	1.506	1.470	1.391	1.204	1.348	13.84

(#) = Out of Range ### Number of calibration levels exceeded format ###

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration

Calibration Files
2 =09241207.D 4 =09241208.D 5 =09241209.D
6 =09241210.D 7 =09241211.D 8 =09241212.D

		Compound	2	4	5	6	7	8	Avg	%RSD
58)	T	1,3,5-Trimethylbenz	1.132	1.320	1.278	1.240	1.166	1.005	1.144	14.12
59)	T	1,2,4-Trimethylbenz	0.951	1.219	1.186	1.165	1.106	0.969	1.063	13.34
60)	T	1,3-Dichlorobenzene	0.470	0.636	0.632	0.623	0.609	0.556	0.576	11.62
61)	T	1,4-Dichlorobenzene	0.435	0.605	0.592	0.590	0.577	0.529	0.544	11.97
62)	T	Benzyl chloride	0.308	0.815	0.807	0.803	0.803	0.760	0.715	25.63
63)	T	1,2-Dichlorobenzene	0.405	0.540	0.532	0.521	0.511	0.478	0.490	10.28
64)	T	1,2,4-Trichlorobenz	0.070	0.133	0.129	0.130	0.137	0.138	0.127	21.14
65)	T	Hexachlorobutadiene	0.203	0.256	0.246	0.245	0.250	0.245	0.244	8.11
66)		Naphthalene	0.109	0.256	0.245	0.255	0.264	0.266	0.245	26.38

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report VOA 1

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration
Total Cpnds : 66

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Bromochloromethane	130	10.51	1.000	A	2	A	B
2	T	Propylene	41	5.44	0.517	A	2	A	B
3	T	Dichlorodifluoromethane	85	5.51	0.524	A	3	A	B
4	T	1,2-Dichloro-1,2,2,2-tetrafluo	135	5.76	0.548	A	2	A	B
5	T	Chloromethane	50	5.92	0.563	A	3	A	B
6	T	Vinyl chloride	62	6.14	0.584	A	2	A	B
7	T	1,3-Butadiene	39	6.19	0.589	A	2	A	B
8	T	Bromomethane	94	6.77	0.644	A	3	A	B
9	T	Chloroethane	64	6.92	0.658	A	3	A	B
10	T	Trichlorofluoromethane	101	7.26	0.690	A	3	A	B
11	T	Ethanol	45	7.49	0.712	A	2	A	B
12	T	Freon113	101	7.91	0.753	A	2	A	B
13	T	1,1-Dichloroethene	61	8.02	0.763	A	2	A	B
14	T	Acetone	43	8.11	0.771	A	2	A	B
15	T	Carbon disulfide	76	8.39	0.798	A	3	A	B
16	T	2-Propanol	45	8.16	0.776	A	2	A	B
17	T	Methylene chloride	49	8.68	0.825	A	2	A	B
18	T	tert-Butyl Methyl Ether	73	8.88	0.844	A	2	A	B
19	T	trans-1,2-Dichloroethene	61	8.96	0.852	A	2	A	B
20	T	n-Hexane	57	9.14	0.870	A	3	A	B
21	T	1,1-Dichloroethane	63	9.52	0.905	A	3	A	B
22	T	Vinyl acetate	43	9.45	0.899	A	2	A	B
23	T	cis-1,2-Dichloroethene	96	10.21	0.971	A	3	A	B
24	T	2-Butanone	43	10.17	0.968	A	2	A	B
25	T	Ethyl acetate	43	10.12	0.963	A	3	A	B
26	T	Tetrahydrofuran	42	10.51	1.000	A	2	A	B
27	T	Chloroform	83	10.53	1.002	A	2	A	B
28	T	1,1,1-Trichloroethane	97	10.78	1.025	A	3	A	B
29	T	Cyclohexane	56	10.79	1.026	A	2	A	B
30	T	Carbon tetrachloride	117	10.94	1.041	A	3	A	B
31	T	Benzene	78	11.22	1.067	A	3	A	B
32	T	1,2-Dichloroethane	62	11.30	1.075	A	3	A	B
33	I	1,4-Difluorobenzene	114	11.62	1.000	A	2	A	B
34	T	Heptane	43	11.27	0.970	A	3	A	B
35	T	Trichloroethene	130	11.95	1.029	A	3	A	B
36	T	1,2-Dichloropropane	63	12.31	1.059	A	3	A	B
37	T	1,4-Dioxane	88	12.39	1.066	A	2	A	B
38	T	Bromodichloromethane	83	12.60	1.084	A	2	A	B
39	T	cis-1,3-Dichloropropene	75	13.14	1.131	A	2	A	B
40	T	4-Methyl-2-pentanone	58	13.26	1.141	A	3	A	B
41	T	Toluene	91	13.55	1.167	A	2	A	B
42	T	trans-1,3-Dichloropropene	75	13.86	1.193	A	3	A	B
43	T	1,1,2-Trichloroethane	97	14.13	1.216	A	3	A	B
44	T	Tetrachloroethene	166	14.25	1.227	A	3	A	B
45	T	2-Hexanone	43	14.33	1.234	A	2	A	B
46	T	Chlorodibromomethane	129	14.68	1.263	A	2	A	B
47	T	1,2-Dibromoethane	107	14.91	1.283	A	2	A	B
48	I	Chlorobenzene-d5	117	15.46	1.000	A	2	A	B
49	T	Chlorobenzene	112	15.50	1.003	A	3	A	B
50	T	Ethylbenzene	91	15.55	1.005	A	2	A	B
51	T	m,p-Xylene	91	15.70	1.016	A	2	A	B
52	T	o-Xylene	91	16.29	1.054	A	2	A	B
53	T	Styrene	104	16.32	1.055	A	3	A	B
54	T	Bromoform	173	16.70	1.080	A	3	A	B
55	S	4-Bromofluorobenzene	95	17.11	1.107	A	2	A	B
56	T	1,1,2,2-Tetrachloroethane	83	17.28	1.118	A	2	A	B
57	T	4-Ethyltoluene	105	17.52	1.133	A	1	A	B
58	T	1,3,5-Trimethylbenzene	105	17.60	1.138	A	2	A	B
59	T	1,2,4-Trimethylbenzene	105	18.19	1.176	A	2	A	B
60	T	1,3-Dichlorobenzene	146	18.74	1.212	A	3	A	B
61	T	1,4-Dichlorobenzene	146	18.88	1.221	A	3	A	B
62	T	Benzyl chloride	91	19.09	1.235	A	2	A	B
63	T	1,2-Dichlorobenzene	146	19.53	1.263	A	3	A	B
64	T	1,2,4-Trichlorobenzene	180	22.65	1.465	A	3	A	B
65	T	Hexachlorobutadiene	225	22.85	1.478	A	2	A	B
66		Naphthalene	128	23.33	1.509	A	2	A	B

```
Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
  A/H = Area or Height
ID  R = R.T.  B = R.T. & Q  Q = Qvalue L = Largest  A = All
-----------------------------------------------------------------------
          092412V1.M     Tue Sep 25 10:25:18 2012
```

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\092412\09241215.D Vial: 15
Acq On : 24 Sep 2012 10:06 pm Operator: RACHEL HILL
Sample : ICV VOA1 092412 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	107	0.00
2	T	Propylene	1.204	1.215	-0.9	104	0.00
3	T	Dichlorodifluoromethane	3.520	3.809	-8.2	113	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.215	2.450	-10.6	116	0.00
5	T	Chloromethane	1.450	1.465	-1.0	105	0.00
6	T	Vinyl chloride	1.437	1.307	9.0	90	0.00
7	T	1,3-Butadiene	0.924	0.801	13.3	84	0.00
8	T	Bromomethane	1.358	1.487	-9.5	118	0.00
9	T	Chloroethane	0.879	0.955	-8.6	116	0.00
10	T	Trichlorofluoromethane	3.226	3.465	-7.4	115	0.00
11	T	Ethanol	0.411	0.441	-7.3	111	0.00
12	T	Freon113	2.247	2.603	-15.8	116	0.00
13	T	1,1-Dichloroethene	2.155	2.450	-13.7	117	0.00
14	T	Acetone	1.838	2.000	-8.8	106	0.00
15	T	Carbon disulfide	3.135	3.991	-27.3	134	0.00
16	T	2-Propanol	1.910	2.160	-13.1	111	0.00
17	T	Methylene chloride	1.590	1.662	-4.5	108	0.00
18	T	tert-Butyl Methyl Ether	2.752	3.036	-10.3	111	0.00
19	T	trans-1,2-Dichloroethene	1.938	2.243	-15.7	118	0.00
20	T	n-Hexane	2.289	2.525	-10.3	111	0.00
21	T	1,1-Dichloroethane	2.399	2.592	-8.0	109	0.00
22	T	Vinyl acetate	2.903	3.165	-9.0	102	0.00
23	T	cis-1,2-Dichloroethene	1.195	1.319	-10.4	112	0.00
24	T	2-Butanone	1.940	2.121	-9.3	99	0.00
25	T	Ethyl acetate	2.518	2.856	-13.4	107	0.00
26	T	Tetrahydrofuran	1.172	1.266	-8.0	99	0.00
27	T	Chloroform	2.145	2.319	-8.1	107	0.00
28	T	1,1,1-Trichloroethane	2.189	2.382	-8.8	107	0.00
29	T	Cyclohexane	2.231	2.541	-13.9	107	0.00
30	T	Carbon tetrachloride	2.281	2.506	-9.9	111	0.00
31	T	Benzene	3.318	3.628	-9.3	109	0.00
32	T	1,2-Dichloroethane	1.518	1.633	-7.6	106	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	110	0.00
34	T	Heptane	0.541	0.608	-12.4	103	0.00
35	T	Trichloroethene	0.377	0.423	-12.2	112	0.00
36	T	1,2-Dichloropropane	0.374	0.403	-7.8	106	0.00
37	T	1,4-Dioxane	0.171	0.193	-12.9	112	0.00
38	T	Bromodichloromethane	0.581	0.659	-13.4	113	0.00
39	T	cis-1,3-Dichloropropene	0.503	0.529	-5.2	105	0.00
40	T	4-Methyl-2-pentanone	0.296	0.332	-12.2	108	0.00
41	T	Toluene	0.980	1.171	-19.5	117	0.00
42	T	trans-1,3-Dichloropropene	0.456	0.544	-19.3	119	0.00
43	T	1,1,2-Trichloroethane	0.341	0.369	-8.2	108	0.00
44	T	Tetrachloroethene	0.454	0.507	-11.7	111	0.00
45	T	2-Hexanone	0.536	0.607	-13.2	102	0.00
46	T	Chlorodibromomethane	0.531	0.589	-10.9	108	0.00
47	T	1,2-Dibromoethane	0.494	0.547	-10.7	108	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	110	0.00
49	T	Chlorobenzene	0.842	0.928	-10.2	107	0.00
50	T	Ethylbenzene	1.405	1.547	-10.1	106	0.00
51	T	m,p-Xylene	1.026	1.170	-14.0	104	0.00
52	T	o-Xylene	1.092	1.235	-13.1	107	0.00
53	T	Styrene	0.794	0.908	-14.4	107	0.00
54	T	Bromoform	0.544	0.605	-11.2	109	0.00
55	S	4-Bromofluorobenzene	0.618	0.617	0.2	110	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\092412\09241215.D Vial: 15
Acq On : 24 Sep 2012 10:06 pm Operator: RACHEL HILL
Sample : ICV VOA1 092412 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.758	0.832	-9.8	106	0.00
57	T	4-Ethyltoluene	1.348	1.496	-11.0	106	0.00
58	T	1,3,5-Trimethylbenzene	1.144	1.248	-9.1	104	0.00
59	T	1,2,4-Trimethylbenzene	1.063	1.180	-11.0	107	0.00
60	T	1,3-Dichlorobenzene	0.576	0.631	-9.5	110	0.00
61	T	1,4-Dichlorobenzene	0.544	0.602	-10.7	110	0.00
62	T	Benzyl chloride	0.715	0.817	-14.3	111	0.00
63	T	1,2-Dichlorobenzene	0.490	0.524	-6.9	107	0.00
64	T	1,2,4-Trichlorobenzene	0.127	0.135	-6.3	112	0.00
65	T	Hexachlorobutadiene	0.244	0.236	3.3	102	0.00
66		Naphthalene	0.245	0.254	-3.7	110	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092412\09241215.D Vial: 15
Acq On : 24 Sep 2012 10:06 pm Operator: RACHEL HILL
Sample : ICV VOA1 092412 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Sep 25 10:05 2012 Quant Results File: 092412V1.RES

Quant Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration
DataAcq Meth : 092412V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.52	130	334452	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.62	114	1307672	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.46	117	1075644	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.12	95	663187	12.46	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 99.68%

Target Compounds						Qvalue
2) Propylene	5.44	41	331525	10.29	ppbv	99
3) Dichlorodifluoromethane	5.52	85	937650	9.96	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.77	135	622857	10.51	ppbv #	65
5) Chloromethane	5.93	50	372254	9.59	ppbv	98
6) Vinyl chloride	6.14	62	328772	8.55	ppbv	96
7) 1,3-Butadiene	6.20	39	210104	8.50	ppbv #	58
8) Bromomethane	6.78	94	369940	10.18	ppbv	100
9) Chloroethane	6.93	64	235182	10.00	ppbv	99
10) Trichlorofluoromethane	7.26	101	889958	10.31	ppbv	99
11) Ethanol	7.49	45	108443	9.86	ppbv	99
12) Freon113	7.92	101	682594	11.35	ppbv #	86
13) 1,1-Dichloroethene	8.02	61	649075	11.26	ppbv #	87
14) Acetone	8.11	43	535057	10.88	ppbv #	89
15) Carbon disulfide	8.39	76	1035735	12.35	ppbv #	100
16) 2-Propanol	8.16	45	583598	11.42	ppbv #	1
17) Methylene chloride	8.68	49	444654	10.45	ppbv	86
18) tert-Butyl Methyl Ether	8.88	73	804210	10.92	ppbv #	94
19) trans-1,2-Dichloroethene	8.96	61	588265	11.34	ppbv #	82
20) n-Hexane	9.15	57	682291	11.14	ppbv #	84
21) 1,1-Dichloroethane	9.53	63	672694	10.48	ppbv #	96
22) Vinyl acetate	9.46	43	838382	10.79	ppbv	99
23) cis-1,2-Dichloroethene	10.21	96	345889	10.82	ppbv #	80
24) 2-Butanone	10.18	43	561951	10.83	ppbv	97
25) Ethyl acetate	10.13	43	748984	11.12	ppbv #	100
26) Tetrahydrofuran	10.51	42	338708	10.80	ppbv	100
27) Chloroform	10.54	83	608063	10.59	ppbv	100
28) 1,1,1-Trichloroethane	10.78	97	611768	10.44	ppbv #	93
29) Cyclohexane	10.79	56	666359	11.16	ppbv #	80
30) Carbon tetrachloride	10.94	117	636911	10.44	ppbv	98
31) Benzene	11.23	78	931928	10.50	ppbv	96
32) 1,2-Dichloroethane	11.31	62	423733	10.43	ppbv #	97
34) Heptane	11.27	43	629714	11.12	ppbv #	92
35) Trichloroethene	11.96	130	425260	10.77	ppbv	94
36) 1,2-Dichloropropane	12.31	63	413044	10.55	ppbv #	94
37) 1,4-Dioxane	12.39	88	193961	10.84	ppbv #	84
38) Bromodichloromethane	12.60	83	662107	10.90	ppbv	99
39) cis-1,3-Dichloropropene	13.15	75	525569	9.99	ppbv	97
40) 4-Methyl-2-pentanone	13.26	58	347763	11.22	ppbv #	90
41) Toluene	13.55	91	1200255	11.71	ppbv	99
42) trans-1,3-Dichloropropene	13.86	75	517884	10.84	ppbv	98
43) 1,1,2-Trichloroethane	14.13	97	378667	10.62	ppbv	97
44) Tetrachloroethene	14.26	166	509353	10.72	ppbv	97
45) 2-Hexanone	14.33	43	622796	11.10	ppbv	85
46) Chlorodibromomethane	14.68	129	603600	10.86	ppbv	98
47) 1,2-Dibromoethane	14.91	107	549306	10.63	ppbv	100
49) Chlorobenzene	15.51	112	790561	10.92	ppbv #	92
50) Ethylbenzene	15.55	91	1304368	10.78	ppbv	94
51) m,p-Xylene	15.70	91	1932493	21.88	ppbv	93
52) o-Xylene	16.29	91	1062429	11.30	ppbv #	92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092412\09241215.D Vial: 15
Acq On : 24 Sep 2012 10:06 pm Operator: RACHEL HILL
Sample : ICV VOA1 092412 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Sep 25 10:05 2012 Quant Results File: 092412V1.RES

Quant Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration
DataAcq Meth : 092412V1

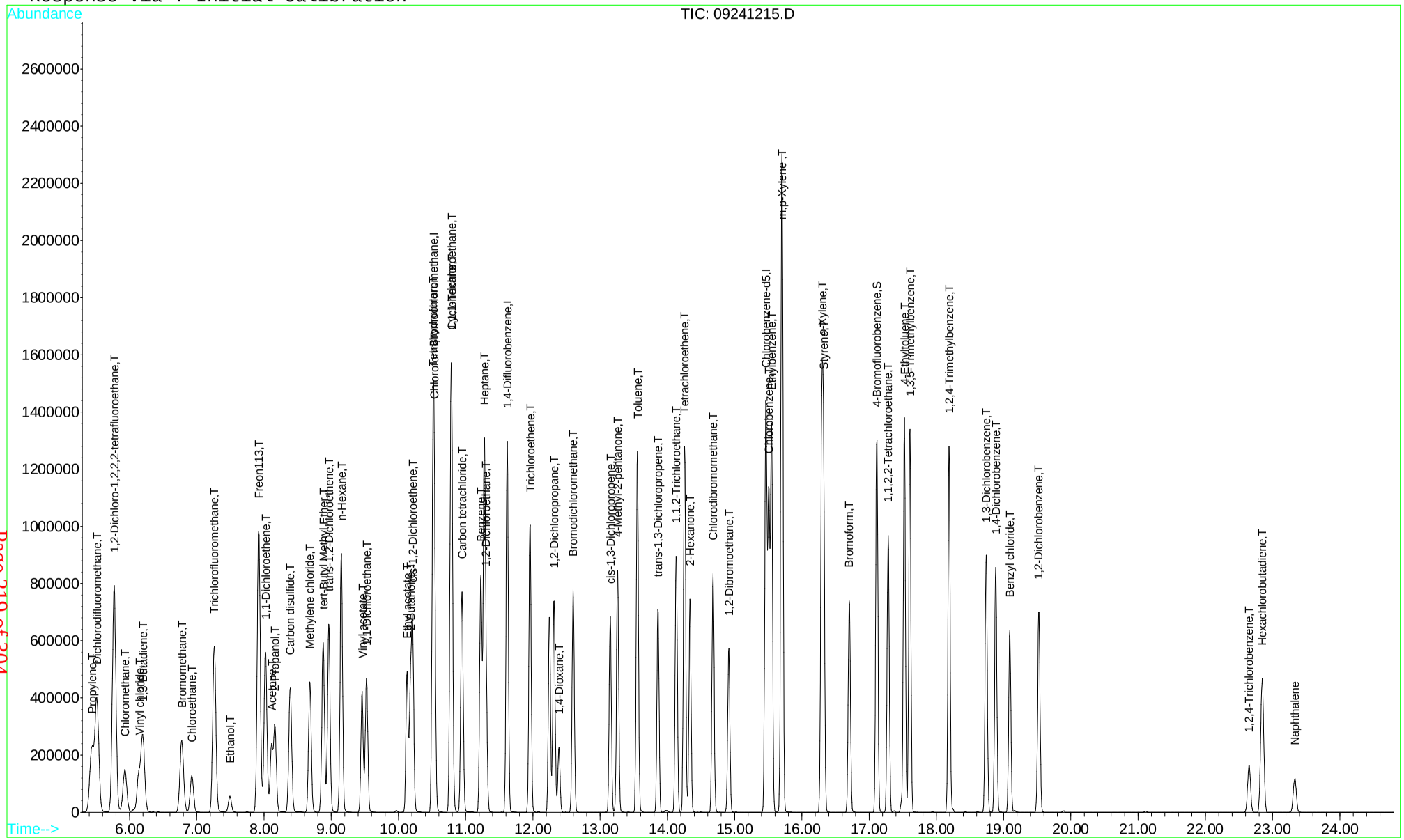
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.33	104	765783	11.20	ppbv		97
54)	Bromoform	16.70	173	499550	10.68	ppbv	#	97
56)	1,1,2,2-Tetrachloroethane	17.28	83	715806	10.97	ppbv	#	99
57)	4-Ethyltoluene	17.52	105	1261496	10.87	ppbv		96
58)	1,3,5-Trimethylbenzene	17.61	105	1042107	10.59	ppbv		96
59)	1,2,4-Trimethylbenzene	18.19	105	994907	10.88	ppbv		97
60)	1,3-Dichlorobenzene	18.74	146	526693	10.63	ppbv		96
61)	1,4-Dichlorobenzene	18.88	146	497162	10.62	ppbv		96
62)	Benzyl chloride	19.09	91	681699	11.07	ppbv		97
63)	1,2-Dichlorobenzene	19.53	146	437321	10.37	ppbv		96
64)	1,2,4-Trichlorobenzene	22.65	180	105440	9.61	ppbv		98
65)	Hexachlorobutadiene	22.85	225	190865	9.08	ppbv		99
66)	Naphthalene	23.33	128	201249	9.55	ppbv		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\092412\09241215.D Vial: 15
Acq On : 24 Sep 2012 10:06 pm Operator: RACHEL HILL
Sample : ICV VOA1 092412 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Sep 25 10:05 2012 Quant Results File: 092412V1.RES

Method : C:\HPCHEM\1\METHODS\092412V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Tue Sep 25 09:45:32 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA9_121010A **Run No.:** 52864

Analytical Run Date: 10/10/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 52793 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 10/12/12/PR AW 10.11.12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 101012	BFB_TUNE	TUNE	R52864	10/10/2012 10:41:00 AM	Celeste Hoitash		
CCV VOA9 101012	MA_APH	CCV	R52864	10/10/2012 11:25:00 AM	Celeste Hoitash		
RLVS VOA9 101012	MA_APH	RLVS	R52864	10/10/2012 12:17:00 PM	Celeste Hoitash		
MBLK VOA9 101012	MA_APH	MBLK	R52864	10/10/2012 3:04:00 PM	Celeste Hoitash		
1209B05-009A	MA_APH	SAMP	R52864	10/10/2012 3:48:00 PM	Celeste Hoitash		
1209B05-001A	MA_APH	SAMP	R52864	10/10/2012 4:34:00 PM	Celeste Hoitash		
1209B05-002A	MA_APH	SAMP	R52864	10/10/2012 6:06:00 PM	Celeste Hoitash		
1209B05-003A	MA_APH	SAMP	R52864	10/10/2012 6:51:00 PM	Celeste Hoitash		
1209B05-004A	MA_APH	SAMP	R52864	10/10/2012 7:41:00 PM	Celeste Hoitash		
1209B05-005A	MA_APH	SAMP	R52864	10/10/2012 8:30:00 PM	Celeste Hoitash		
1209B05-006A	MA_APH	SAMP	R52864	10/10/2012 9:15:00 PM	Celeste Hoitash		
1209B05-007A	MA_APH	SAMP	R52864	10/10/2012 10:01:00 PM	Celeste Hoitash		
1209B05-008A	MA_APH	SAMP	R52864	10/10/2012 10:47:00 PM	Celeste Hoitash		
1209B05-010A	MA_APH	SAMP	R52864	10/10/2012 11:32:00 PM	Celeste Hoitash		
1209B05-011A	MA_APH	SAMP	R52864	10/11/2012 12:16:00 AM	Celeste Hoitash		
1209B05-012A	MA_APH	SAMP	R52864	10/11/2012 1:46:00 AM	Celeste Hoitash		
1209B05-013A	MA_APH	SAMP	R52864	10/11/2012 2:30:00 AM	Celeste Hoitash		
1209B05-014A	MA_APH	SAMP	R52864	10/11/2012 3:16:00 AM	Celeste Hoitash		
1209B05-015A	MA_APH	SAMP	R52864	10/11/2012 3:59:00 AM	Celeste Hoitash		
1209B05-016A	MA_APH	SAMP	R52864	10/11/2012 4:45:00 AM	Celeste Hoitash		
1209B05-016Adup	MA_APH	DUP	R52864	10/11/2012 5:31:00 AM	Celeste Hoitash		
1209B05-017A	MA_APH	SAMP	R52864	10/11/2012 6:16:00 AM	Celeste Hoitash		
1209B05-018A	MA_APH	SAMP	R52864	10/11/2012 7:01:00 AM	Celeste Hoitash		
1209B05-019A	MA_APH	SAMP	R52864	10/11/2012 7:50:00 AM	Celeste Hoitash		
RLVS2 VOA9 10101	MA_APH	RLVS	R52864	10/11/2012 8:36:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

22-Oct-12

RunNo 52864

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1038119	BFB VOA9 101012	BFB_TUNE	TUNE	.\1\DATA\101012`	10/10/2012 10:4	1	R52864		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		90	90		100	0	0	0	0	0	90%	50	120	0%	
175	M		8.1	8.1		100	0	0	0	0	0	8%	4	9	0%	
176	M		97.5	97.5		100	0	0	0	0	0	98%	93	101	0%	
177	M		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	
50	M		16	16		100	0	0	0	0	0	16%	8	40	0%	
75	M		34.4	34.4		100	0	0	0	0	0	34%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		7	7		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1038120	CCV VOA9 101012	MA_APH	CCV	.\1\DATA\101012`	10/10/2012 11:2	1	R52864		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
C5-C8 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C5-C8 Aliphatic HC - TOTAL	A	µg/m³	211.03	211.03		234	0	0	0	0	0	90%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	1170	0%	0	0	0%	U
C9-C10 Aromatic HC - TOTAL	A	µg/m³	302.04	302.04		266	0	0	0	0	0	114%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	1330	0%	0	0	0%	U
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	357.25	357.25		378	0	0	0	0	0	95%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	1890	0%	0	0	0%	U
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	86.19	86.19		89.5	0	0	0	0	0	96%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\101012\10101202.D Vial: 2
Acq On : 10 Oct 2012 11:25 am Operator: RACHEL HILL
Sample : CCV VOA9 101012 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\100512V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 09 14:23:11 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	C5-C8 Aliphatic HC	29.200	25.896	11.3	85	-0.01
2	L1	C5-C8 Aliphatic HC {2}	36.400	32.582	10.5	99	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	37.457	10.4	98	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	31.888	9.9	97	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	37.975	10.0	97	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	45.209	7.7	97	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	211.027	9.8	96	-0.01
8	L1	C9-C12 Aliphatic HC	54.600	51.265	6.1	98	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	51.591	5.5	97	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	58.573	4.3	98	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	60.814	-0.0	100	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	67.340	3.8	100	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	63.996	16.9	89	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	357.255	5.5	97	0.00
15	L1	C9-C10 Aromatic HC	51.700	58.576	-13.3	109	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	58.698	-14.6	111	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	59.099	-13.2	109	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	66.894	-14.0	109	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	60.423	-14.9	111	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	63.699	-8.5	106	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	302.037	-13.5	109	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.08#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.28#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.16#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.93#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.70#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.15#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.28#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.28#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.49#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.38#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.49#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.66#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.31#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.21#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.66#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.85#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.20#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.20#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	87	0.00
41	S	4-Bromofluorobenzene	89.500	86.185	3.7	86	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101012\10101202.D Vial: 2
Acq On : 10 Oct 2012 11:25 am Operator: RACHEL HILL
Sample : CCV VOA9 101012 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 11 10:20 2012 Quant Results File: 100512V9.RES

Quant Method : C:\HPCHEM\1\METHODS\100512V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 09 14:23:11 2012
Response via : Initial Calibration
DataAcq Meth : 100512V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.38	117	732407	12.50	ug/m3	0.00

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.22	95	552596	86.19	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 96.30%

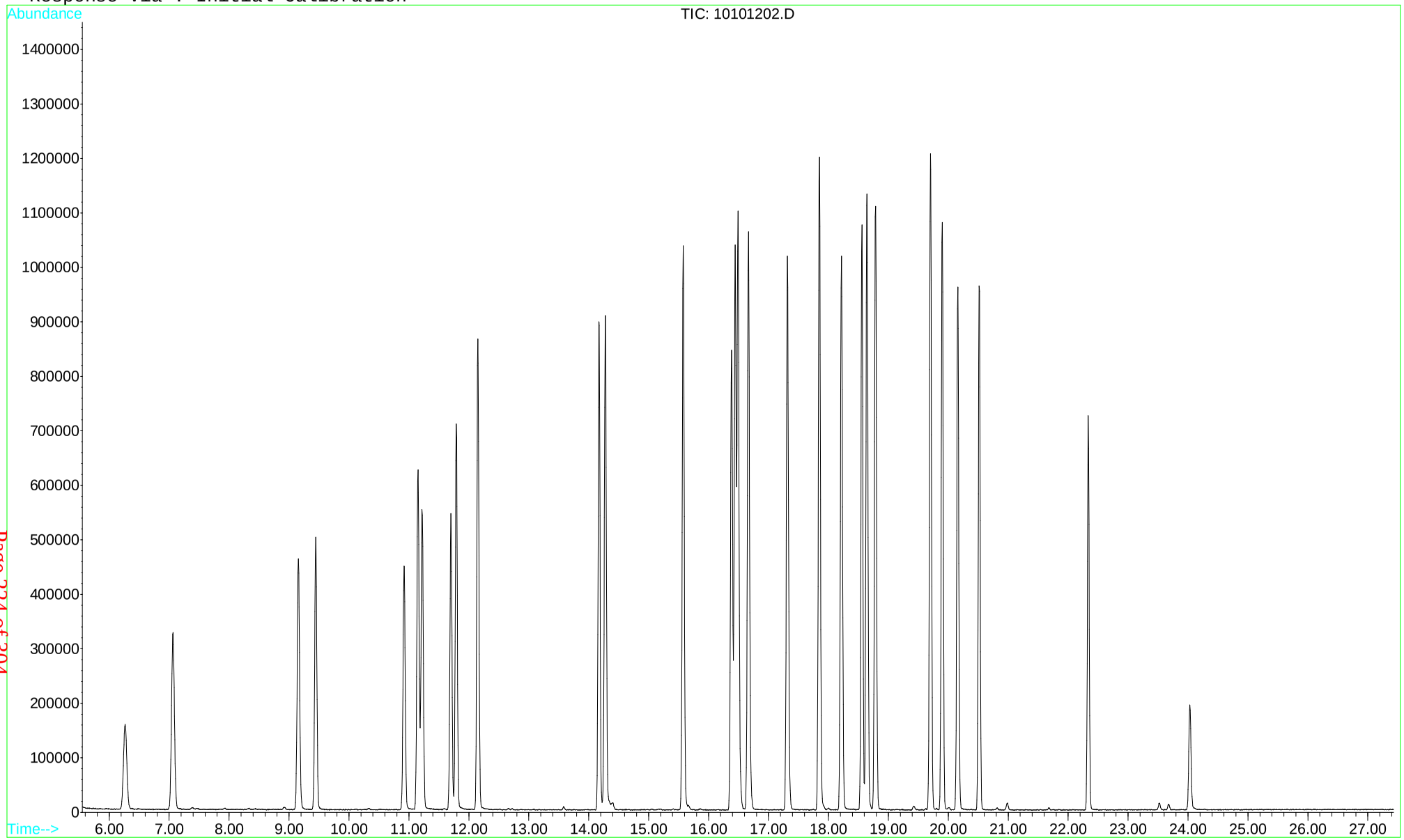
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.06	TIC	1102726	25.90	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.44	TIC	1275290	32.58	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.15	TIC	1647447	37.46	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.22	TIC	1426113	31.89	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.79	TIC	1636155	37.97	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.17	TIC	1999100	45.21	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.06	TIC	9086831m	211.03	ug/m3	
8) C9-C12 Aliphatic HC	15.58	TIC	2435044	51.27	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.44	TIC	2359481	51.59	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.56	TIC	2339375	58.57	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.70	TIC	2770769	60.81	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.51	TIC	2060462	67.34	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.34	TIC	1484466	64.00	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.58	TIC	13449597m	357.25	ug/m3	
15) C9-C10 Aromatic HC	17.85	120	267713	58.58	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.64	120	282690	58.70	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.79	120	412120	59.10	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.90	120	90641	66.89	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.16	120	316749	60.42	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.90	134	172518	63.70	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.85	TIC	1542431m	302.04	ug/m3	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101012\10101202.D Vial: 2
Acq On : 10 Oct 2012 11:25 am Operator: RACHEL HILL
Sample : CCV VOA9 101012 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 11 10:20 2012 Quant Results File: 100512V9.RES

Method : C:\HPCHEM\1\METHODS\100512V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 09 14:23:11 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA9_121011A **Run No.:** 52889

Analytical Run Date: 10/11/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 52793 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: PR AW 10.12.12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 101112	BFB_TUNE	TUNE	R52889	10/11/2012 9:57:00 AM	Charles O`Bryan		
CCV VOA9 101112	MA_APH	CCV	R52889	10/11/2012 10:43:00 AM	Charles O`Bryan		
RLVS VOA9 101112	MA_APH	RLVS	R52889	10/11/2012 11:27:00 AM	Charles O`Bryan		
MBLK VOA9 101112	MA_APH	MBLK	R52889	10/11/2012 12:31:00 PM	Charles O`Bryan		
1209B05-020A	MA_APH	SAMP	R52889	10/11/2012 1:17:00 PM	Charles O`Bryan		
1209B05-021A	MA_APH	SAMP	R52889	10/11/2012 2:02:00 PM	Charles O`Bryan		
1209B05-022A	MA_APH	SAMP	R52889	10/11/2012 3:40:00 PM	Charles O`Bryan		
1209B05-023A	MA_APH	SAMP	R52889	10/11/2012 4:29:00 PM	Charles O`Bryan		
1209B05-024A	MA_APH	SAMP	R52889	10/11/2012 5:19:00 PM	Charles O`Bryan		
1209B05-025A	MA_APH	SAMP	R52889	10/11/2012 6:03:00 PM	Charles O`Bryan		
1209B05-026A	MA_APH	SAMP	R52889	10/11/2012 7:34:00 PM	Charles O`Bryan		
1209B05-027A	MA_APH	SAMP	R52889	10/11/2012 9:01:00 PM	Charles O`Bryan		
1209B05-028A	MA_APH	SAMP	R52889	10/11/2012 9:47:00 PM	Charles O`Bryan		
1209B05-029A	MA_APH	SAMP	R52889	10/11/2012 10:31:00 PM	Charles O`Bryan		
1209B05-030A	MA_APH	SAMP	R52889	10/11/2012 11:14:00 PM	Charles O`Bryan		
1209B05-032A	MA_APH	SAMP	R52889	10/12/2012 1:04:00 AM	Charles O`Bryan		
1209B05-033A	MA_APH	SAMP	R52889	10/12/2012 1:50:00 AM	Charles O`Bryan		
1209B05-033Adup	MA_APH	DUP	R52889	10/12/2012 2:36:00 AM	Charles O`Bryan		
1209B05-034A	MA_APH	SAMP	R52889	10/12/2012 3:21:00 AM	Charles O`Bryan		
1209B05-035A	MA_APH	SAMP	R52889	10/12/2012 4:07:00 AM	Charles O`Bryan		
1209B05-036A	MA_APH	SAMP	R52889	10/12/2012 4:52:00 AM	Charles O`Bryan		
1209B05-038A	MA_APH	SAMP	R52889	10/12/2012 6:24:00 AM	Charles O`Bryan		
1209B05-039A	MA_APH	SAMP	R52889	10/12/2012 7:14:00 AM	Charles O`Bryan		
RLVS2 VOA9 10111	MA_APH	RLVS	R52889	10/12/2012 7:58:00 AM	Charles O`Bryan		

RTI Laboratories

ANALYTICAL RUN Summary

22-Oct-12

RunNo 52889

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1038766	BFB VOA9 101112	BFB_TUNE	TUNE	.\1\DATA\101112\	10/11/2012 9:57:	1	R52889		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		90.1	90.1		100	0	0	0	0	0	90%	50	120	0%	
175	M		8	8		100	0	0	0	0	0	8%	4	9	0%	
176	M		96.7	96.7		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.5	6.5		100	0	0	0	0	0	7%	5	9	0%	
50	M		15.1	15.1		100	0	0	0	0	0	15%	8	40	0%	
75	M		33.5	33.5		100	0	0	0	0	0	34%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1038772	CCV VOA9 101112	MA_APH	CCV	.\1\DATA\101112\	10/11/2012 10:4	1	R52889		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
C5-C8 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C5-C8 Aliphatic HC - TOTAL	A	µg/m³	208.2	208.2		234	0	0	0	0	0	89%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	1170	0%	0	0	0%	U
C9-C10 Aromatic HC - TOTAL	A	µg/m³	292.44	292.44		266	0	0	0	0	0	110%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	1330	0%	0	0	0%	U
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	346.52	346.52		378	0	0	0	0	0	92%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	1890	0%	0	0	0%	U
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	86.34	86.34		89.5	0	0	0	0	0	96%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\101112\10111202.D Vial: 2
Acq On : 11 Oct 2012 10:43 am Operator: RACHEL HILL
Sample : CCV VOA9 101112 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\100512V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 09 14:23:11 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	C5-C8 Aliphatic HC	29.200	26.555	9.1	87	-0.01
2	L1	C5-C8 Aliphatic HC {2}	36.400	32.174	11.6	98	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	36.726	12.1	96	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	30.787	13.0	94	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	37.338	11.5	96	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	44.640	8.9	96	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	208.196	11.0	95	-0.01
8	L1	C9-C12 Aliphatic HC	54.600	50.346	7.8	96	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	50.349	7.8	95	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	56.866	7.1	95	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	59.197	2.6	97	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	64.369	8.0	96	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	60.939	20.9	85	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	346.521	8.3	95	0.00
15	L1	C9-C10 Aromatic HC	51.700	56.842	-9.9	106	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	56.524	-10.4	107	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	57.730	-10.6	106	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	64.636	-10.1	106	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	57.780	-9.8	106	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	62.166	-5.9	104	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	292.441	-9.9	106	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.08#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.28#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.16#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.93#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.70#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.15#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.28#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.28#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.49#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.38#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.49#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.66#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.31#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.21#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.66#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.85#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.20#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.20#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	87	0.00
41	S	4-Bromofluorobenzene	89.500	86.339	3.5	86	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101112\10111202.D Vial: 2
Acq On : 11 Oct 2012 10:43 am Operator: RACHEL HILL
Sample : CCV VOA9 101112 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 12 10:01 2012 Quant Results File: 100512V9.RES

Quant Method : C:\HPCHEM\1\METHODS\100512V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 09 14:23:11 2012
Response via : Initial Calibration
DataAcq Meth : 100512V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.39	117	731485	12.50	ug/m3	0.00

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.22	95	552885	86.34	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 96.47%

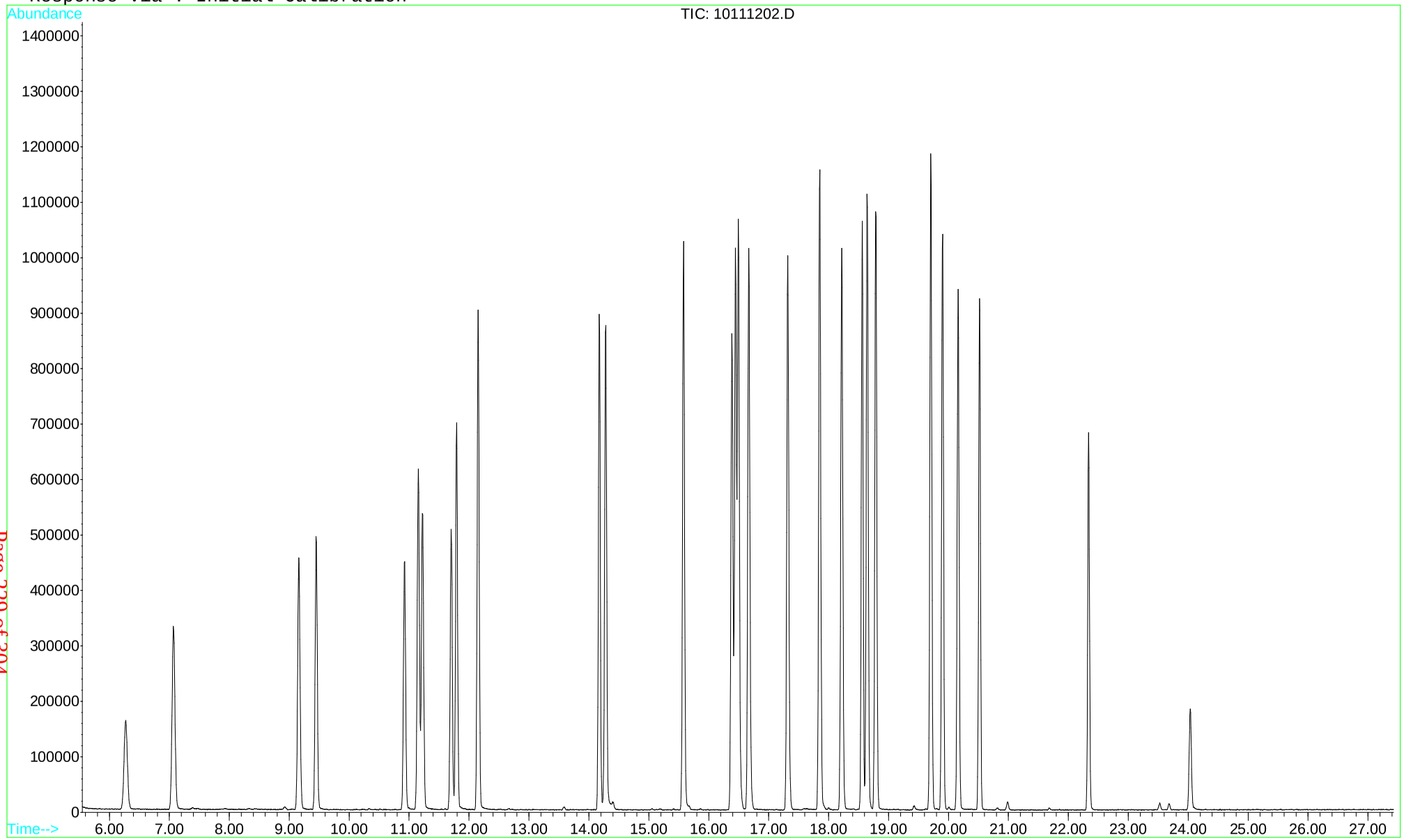
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.07	TIC	1130749	26.55	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.45	TIC	1259351	32.17	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.15	TIC	1615315	36.73	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.22	TIC	1376869	30.79	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.79	TIC	1608704	37.34	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.17	TIC	1973947	44.64	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.07	TIC	8964935m	208.20	ug/m3	
8) C9-C12 Aliphatic HC	15.58	TIC	2391393	50.35	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.45	TIC	2302688	50.35	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.56	TIC	2271194	56.87	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.70	TIC	2697100	59.20	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.52	TIC	1969558	64.37	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.34	TIC	1413569	60.94	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.58	TIC	13045502m	346.52	ug/m3	
15) C9-C10 Aromatic HC	17.85	120	259788	56.84	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.64	120	272221	56.52	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.79	120	402571	57.73	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.90	120	87582	64.64	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.16	120	302898	57.78	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.90	134	168366	62.17	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.85	TIC	1493426m	292.44	ug/m3	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101112\10111202.D Vial: 2
Acq On : 11 Oct 2012 10:43 am Operator: RACHEL HILL
Sample : CCV VOA9 101112 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 12 10:01 2012 Quant Results File: 100512V9.RES

Method : C:\HPCHEM\1\METHODS\100512V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 09 14:23:11 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA9_121012A** **Run No.:** 52943

Analytical Run Date: 10/12/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 52793 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 10/18/12/PR AW 10.15.12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 101212	BFB_TUNE	TUNE	R52943	10/12/2012 10:15:00 AM	Celeste Hoitash		
CCV VOA9 101212	MA_APH	CCV	R52943	10/12/2012 11:21:00 AM	Celeste Hoitash		
RLVS VOA9 101212	MA_APH	RLVS	R52943	10/12/2012 12:31:00 PM	Celeste Hoitash		
MBLK VOA9 101212	MA_APH	MBLK	R52943	10/12/2012 1:45:00 PM	Celeste Hoitash		
1209B05-042A	MA_APH	SAMP	R52943	10/12/2012 6:16:00 PM	Celeste Hoitash		
1209B05-043A	MA_APH	SAMP	R52943	10/12/2012 7:00:00 PM	Celeste Hoitash		
1209B05-043Adup	MA_APH	DUP	R52943	10/12/2012 7:45:00 PM	Celeste Hoitash		
1209B05-044A	MA_APH	SAMP	R52943	10/12/2012 8:30:00 PM	Celeste Hoitash		
1209B05-045A	MA_APH	SAMP	R52943	10/12/2012 9:15:00 PM	Celeste Hoitash		
1209B05-046A	MA_APH	SAMP	R52943	10/12/2012 9:58:00 PM	Celeste Hoitash		
1209B05-047A	MA_APH	SAMP	R52943	10/12/2012 11:24:00 PM	Celeste Hoitash		
1209B05-048A	MA_APH	SAMP	R52943	10/13/2012 12:08:00 AM	Celeste Hoitash		
1209B05-050A	MA_APH	SAMP	R52943	10/13/2012 1:51:00 AM	Celeste Hoitash		
1209B05-031A	MA_APH	SAMP	R52943	10/13/2012 3:22:00 AM	Celeste Hoitash		
1209B05-037A	MA_APH	SAMP	R52943	10/13/2012 4:11:00 AM	Celeste Hoitash		
1209B05-041A	MA_APH	SAMP	R52943	10/13/2012 7:15:00 AM	Celeste Hoitash		
1209B05-049A	MA_APH	SAMP	R52943	10/13/2012 8:05:00 AM	Celeste Hoitash		
RLVS2 VOA9 10121	MA_APH	RLVS	R52943	10/13/2012 8:51:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

22-Oct-12

RunNo 52943

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1039709	BFB VOA9 101212	BFB_TUNE	TUNE	.\1\DATA\101212`10/12/2012 10:1		1	R52943		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		90.5	90.5		100	0	0	0	0	0	91%	50	120	0%	
175	M		7.7	7.7		100	0	0	0	0	0	8%	4	9	0%	
176	M		98.1	98.1		100	0	0	0	0	0	98%	93	101	0%	
177	M		6.4	6.4		100	0	0	0	0	0	6%	5	9	0%	
50	M		15.6	15.6		100	0	0	0	0	0	16%	8	40	0%	
75	M		33.9	33.9		100	0	0	0	0	0	34%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1039710	CCV VOA9 101212	MA_APH	CCV	.\1\DATA\101212`10/12/2012 11:2		1	R52943		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
C5-C8 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C5-C8 Aliphatic HC - TOTAL	A	µg/m³	211.54	211.54		234	0	0	0	0	0	90%	70	130	0%	
C5-C8 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	29.876	117	1170	0%	0	0	0%	U
C9-C10 Aromatic HC - TOTAL	A	µg/m³	307.13	307.13		266	0	0	0	0	0	115%	70	130	0%	
C9-C10 Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	35.658	133	1330	0%	0	0	0%	U
C9-C12 Aliphatic	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
C9-C12 Aliphatic HC - TOTAL	A	µg/m³	355.66	355.66		378	0	0	0	0	0	94%	70	130	0%	
C9-C12 Aliphatic Hydrocarbons	A	µg/m³		0		0	0	0	25.766	189	1890	0%	0	0	0%	U
C9-C12 Aliphatic-Aromatic Hydrocarbons	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C5-C8 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
non C9-C12 - TOTAL	A	µg/m³		0		0	0	0	0	0	0	0%	0	0	0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%	80	120	0%	
4-Bromofluorobenzene	S	µg/m³	84.37	84.37		89.5	0	0	0	0	0	94%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\101212\10121202.D Vial: 2
Acq On : 12 Oct 2012 11:21 am Operator: RACHEL HILL
Sample : CCV VOA9 101212 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\100512V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 09 14:23:11 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	C5-C8 Aliphatic HC	29.200	27.006	7.5	89	0.00
2	L1	C5-C8 Aliphatic HC {2}	36.400	33.192	8.8	101	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	36.569	12.5	96	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	32.058	9.4	98	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	37.341	11.5	96	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	45.425	7.3	97	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	211.536	9.6	96	0.00
8	L1	C9-C12 Aliphatic HC	54.600	50.720	7.1	97	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	51.566	5.6	97	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	58.426	4.5	98	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	60.876	-0.1	100	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	66.731	4.7	99	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	63.500	17.5	88	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	355.655	5.9	97	0.00
15	L1	C9-C10 Aromatic HC	51.700	59.354	-14.8	110	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	59.219	-15.7	112	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	60.756	-16.4	112	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	68.327	-16.4	112	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	60.709	-15.4	112	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	65.527	-11.6	109	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	307.131	-15.5	111	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.08#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.28#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.16#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.93#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.70#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.15#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.28#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.28#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.49#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.38#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.49#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.66#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.31#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.21#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.66#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.85#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.20#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.20#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	97	0.00
41	S	4-Bromofluorobenzene	89.500	84.365	5.7	93	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\101212\10121202.D Vial: 2
Acq On : 12 Oct 2012 11:21 am Operator: RACHEL HILL
Sample : CCV VOA9 101212 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 15 10:25 2012 Quant Results File: 100512V9.RES

Quant Method : C:\HPCHEM\1\METHODS\100512V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 09 14:23:11 2012
Response via : Initial Calibration
DataAcq Meth : 100512V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.39	117	811442	12.50	ug/m3	0.00

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.21	95	599299	84.37	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 94.27%

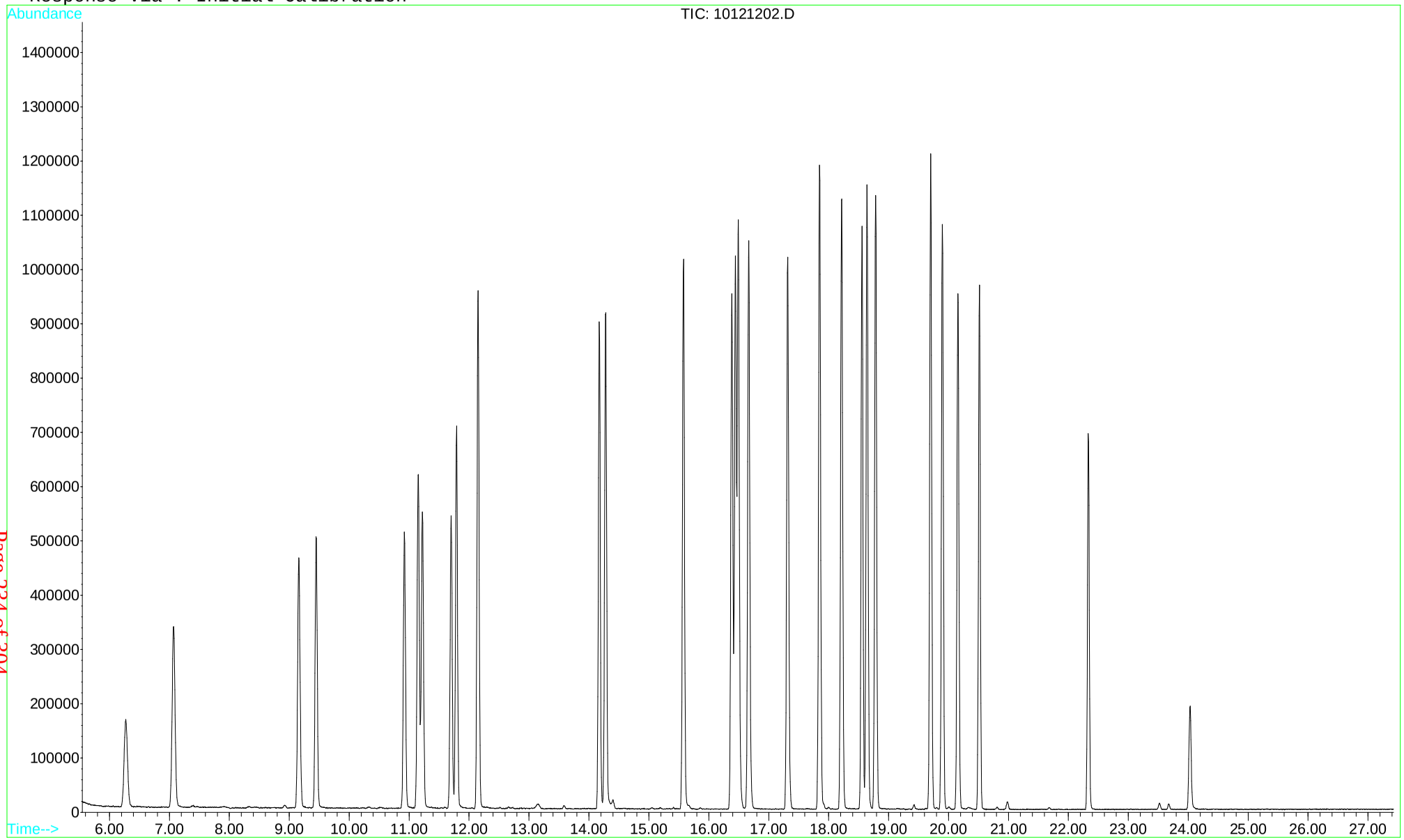
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.07	TIC	1149960	27.01	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.45	TIC	1299163	33.19	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.15	TIC	1608407	36.57	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.22	TIC	1433714	32.06	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.79	TIC	1608836	37.34	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.17	TIC	2008661	45.42	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.07	TIC	9108741m	211.54	ug/m3	
8) C9-C12 Aliphatic HC	15.58	TIC	2409125	50.72	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.45	TIC	2358324	51.57	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.56	TIC	2333503	58.43	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.70	TIC	2773603	60.88	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.52	TIC	2041844	66.73	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.33	TIC	1472975	63.50	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.58	TIC	13389374m	355.66	ug/m3	
15) C9-C10 Aromatic HC	17.85	120	271268	59.35	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.64	120	285199	59.22	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.78	120	423675	60.76	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.90	120	92583	68.33	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.16	120	318252	60.71	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.90	134	177469	65.53	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.85	TIC	1568446m	307.13	ug/m3	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\101212\10121202.D Vial: 2
Acq On : 12 Oct 2012 11:21 am Operator: RACHEL HILL
Sample : CCV VOA9 101212 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 15 10:25 2012 Quant Results File: 100512V9.RES

Method : C:\HPCHEM\1\METHODS\100512V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 09 14:23:11 2012
Response via : Initial Calibration



Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\100512V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 09 14:23:11 2012
Response via : Initial Calibration

Calibration Files
1 =10051203.D 2 =10051204.D 3 =10051205.D
4 =10051206.D 5 =10051207.D 6 =10051208.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)	L1	C5-C8 Aliphatic HC	5.478	4.427	4.232	4.108	4.080	3.830	4.258	E4	13.96
2)	L1	C5-C8 Aliphatic HC	5.581	3.541	3.327	3.348	3.316	4.431	3.914	E4	21.40
3)	L1	C5-C8 Aliphatic HC	6.034	4.021	3.734	3.735	3.754	4.983	4.398	E4	19.63
4)	L1	C5-C8 Aliphatic HC	6.021	4.139	3.909	3.826	3.823	4.989	4.472	E4	18.14
5)	L1	C5-C8 Aliphatic HC	5.740	3.991	3.730	3.730	3.729	4.831	4.309	E4	17.57
6)	L1	C5-C8 Aliphatic HC	5.910	4.213	3.810	3.842	3.868	4.874	4.422	E4	17.22
7)	L1	C5-C8 Aliphatic HC	5.813	4.050	3.772	3.761	3.759	4.701	4.306	E4	17.42
8)	L1	C9-C12 Aliphatic HC	6.314	4.569	4.112	4.143	4.189	5.202	4.750	E4	16.70
9)	L1	C9-C12 Aliphatic HC	6.274	4.449	3.938	3.936	4.136	4.961	4.573	E4	18.12
10)	L1	C9-C12 Aliphatic HC	5.195	3.890	3.453	3.430	3.596	4.395	3.994	E4	15.78
11)	L1	C9-C12 Aliphatic HC	5.876	4.553	4.063	3.993	4.147	4.867	4.556	E4	14.43
12)	L1	C9-C12 Aliphatic HC	3.727	2.937	2.644	2.564	2.782	3.495	3.060	E4	14.55
13)	L1	C9-C12 Aliphatic HC	2.626	2.165	2.058	2.003	2.212	2.673	2.320	E4	11.89
14)	L1	C9-C12 Aliphatic HC	4.829	3.650	3.285	3.247	3.416	4.152	3.765	E4	15.01
15)	L1	C9-C10 Aromatic HC	5.208	4.762	4.460	4.306	4.301	4.665	4.570	E3	7.40
16)	L1	C9-C10 Aromatic HC	5.434	4.975	4.738	4.424	4.604	4.964	4.816	E3	7.05
17)	L1	C9-C10 Aromatic HC	7.837	7.252	6.845	6.562	6.660	7.118	6.973	E3	6.71
18)	L1	C9-C10 Aromatic HC	1.488	1.411	1.332	1.262	1.284	1.404	1.355	E3	6.02
19)	L1	C9-C10 Aromatic HC	5.550	5.426	5.198	4.868	5.008	5.496	5.242	E3	4.92
20)	L1	C9-C10 Aromatic HC	3.087	2.766	2.584	2.466	2.556	2.880	2.708	E3	8.00
21)	L1	C9-C10 Aromatic HC	5.703	5.301	5.001	4.742	4.841	5.286	5.107	E3	6.66
22)		C5-C8 Aliphatic	5.813	4.050	3.772	3.761	3.759	4.701	4.306	E4	17.42
23)	L1	non C5-C8	4.172	3.812	3.830	3.018	2.929	2.750	3.375	E4	16.32
24)	L1	non C5-C8 {2}	3.950	3.104	3.013	2.923	2.877	3.399	3.158	E4	12.58
25)	L1	non C5-C8 {3}	2.710	2.072	1.942	2.105	2.142	2.609	2.327	E4	14.35
26)	L1	non C5-C8 {4}	5.081	3.775	3.534	3.447	3.441	4.364	3.959	E4	15.23
27)	L1	non C5-C8 {5}	4.632	3.960	3.738	4.094	4.238	4.461	4.306	E4	10.05
28)	L1	non C5-C8 {6}	6.250	5.036	4.690	4.803	4.805	5.464	5.156	E4	10.57
29)	L1	non C5-C8 - TOTAL	4.080	3.474	3.343	3.405	3.446	3.987	3.654	E4	8.37
30)		C9-C12 Aliphatic	4.829	3.650	3.285	3.247	3.416	4.152	3.765	E4	15.01
31)	L1	non C9-C12	4.610	4.073	3.738	4.115	4.050	4.576	4.298	E4	9.64
32)	L1	non C9-C12 {2}	5.988	5.011	4.680	4.558	4.543	5.073	4.883	E4	11.36
33)	L1	non C9-C12 {3}	6.113	5.273	4.926	4.785	4.808	5.349	5.172	E4	9.07
34)	L1	non C9-C12 {4}	5.963	5.149	4.776	4.571	4.675	5.220	5.024	E4	9.51
35)	L1	non C9-C12 {5}	3.628	3.258	2.988	3.223	3.405	3.703	3.473	E4	10.68
36)	L1	non C9-C12 - TOTAL	4.132	3.640	3.365	3.402	3.430	3.792	3.609	E4	7.62
37)	L1	C9-C10 Aromatic	5.703	5.301	5.001	4.742	4.841	5.286	5.107	E3	6.66
38)	L1	C9-C10 Aromatic {2}	5.703	5.301	5.001	4.742	4.841	5.286	5.107	E3	6.66
39)	L1	C9-C10 Aromatic - T	5.703	5.301	5.001	4.742	4.841	5.286	5.107	E3	6.66
40)	I	Chlorobenzene-d5	----------ISTD----------								
41)	S	4-Bromofluorobenzen	0.110	0.107	0.105	0.106	0.109	0.114	0.109		3.66

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\100512V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 09 14:23:11 2012
Response via : Initial Calibration
Total Cpnds : 41

PK#		Compound Name	QIon	Exp RT	Rel RT	Cal	#Qual	A/H	ID
1	L1	C5-C8 Aliphatic HC	TIC	7.08	1.000	A	0	A	B
2	L1	C5-C8 Aliphatic HC {2}	TIC	9.45	1.000	A	0	A	B
3	L1	C5-C8 Aliphatic HC {3}	TIC	11.15	1.000	A	0	A	B
4	L1	C5-C8 Aliphatic HC {4}	TIC	11.23	1.000	A	0	A	B
5	L1	C5-C8 Aliphatic HC {5}	TIC	11.79	1.000	A	0	A	B
6	L1	C5-C8 Aliphatic HC {6}	TIC	14.17	1.000	A	0	A	B
7	L1	C5-C8 Aliphatic HC - TOTAL	TIC	7.08	1.000	A	0	A	B
8	L1	C9-C12 Aliphatic HC	TIC	15.57	1.000	A	0	A	B
9	L1	C9-C12 Aliphatic HC {2}	TIC	16.44	1.000	A	0	A	B
10	L1	C9-C12 Aliphatic HC {3}	TIC	18.56	1.000	A	0	A	B
11	L1	C9-C12 Aliphatic HC {4}	TIC	19.70	1.000	A	0	A	B
12	L1	C9-C12 Aliphatic HC {5}	TIC	20.52	1.000	A	0	A	B
13	L1	C9-C12 Aliphatic HC {6}	TIC	22.34	1.000	A	0	A	B
14	L1	C9-C12 Aliphatic HC - TOTAL	TIC	15.57	1.000	A	0	A	B
15	L1	C9-C10 Aromatic HC	120	17.85	1.000	A	0	A	B
16	L1	C9-C10 Aromatic HC {2}	120	18.64	1.000	A	0	A	B
17	L1	C9-C10 Aromatic HC {3}	120	18.78	1.000	A	0	A	B
18	L1	C9-C10 Aromatic HC {4}	120	19.90	1.000	A	0	A	B
19	L1	C9-C10 Aromatic HC {5}	120	20.16	1.000	A	0	A	B
20	L1	C9-C10 Aromatic HC {6}	134	19.90	1.000	A	0	A	B
21	L1	C9-C10 Aromatic HC - TOTAL	TIC	17.85	1.000	A	0	A	B
22		C5-C8 Aliphatic	TIC	7.08	1.000	A	0	A	B
23	L1	non C5-C8	TIC	6.28	1.000	A	0	A	B
24	L1	non C5-C8 {2}	TIC	9.16	1.000	A	0	A	B
25	L1	non C5-C8 {3}	TIC	10.93	1.000	A	0	A	B
26	L1	non C5-C8 {4}	TIC	11.70	1.000	A	0	A	B
27	L1	non C5-C8 {5}	TIC	12.15	1.000	A	0	A	B
28	L1	non C5-C8 {6}	TIC	14.28	1.000	A	0	A	B
29	L1	non C5-C8 - TOTAL	TIC	6.28	1.000	A	0	A	B
30		C9-C12 Aliphatic	TIC	16.49	1.000	A	0	A	B
31	L1	non C9-C12	TIC	16.38	1.000	A	0	A	B
32	L1	non C9-C12 {2}	TIC	16.49	1.000	A	0	A	B
33	L1	non C9-C12 {3}	TIC	16.66	1.000	A	0	A	B
34	L1	non C9-C12 {4}	TIC	17.31	1.000	A	0	A	B
35	L1	non C9-C12 {5}	TIC	18.21	1.000	A	0	A	B
36	L1	non C9-C12 - TOTAL	TIC	16.66	1.000	A	0	A	B
37	L1	C9-C10 Aromatic	120	17.85	1.000	A	0	A	B
38	L1	C9-C10 Aromatic {2}	134	17.20	1.000	A	0	A	B
39	L1	C9-C10 Aromatic - TOTAL	134	17.20	1.000	A	1	A	B
40	I	Chlorobenzene-d5	117	16.39	1.000	A	2	A	B
41	S	4-Bromofluorobenzene	95	18.21	1.112	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

100512V9.M Tue Oct 09 14:27:27 2012

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\100512\10051211.D Vial: 11
Acq On : 5 Oct 2012 7:35 pm Operator: RACHEL HILL
Sample : ICV VOA9 100512 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\100512V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 09 14:23:11 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	C5-C8 Aliphatic HC	29.200	30.478	-4.4	100	0.00
2	L1	C5-C8 Aliphatic HC {2}	36.400	31.278	14.1	95	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	36.274	13.2	95	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	30.308	14.4	93	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	36.368	13.8	93	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	43.812	10.6	94	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	208.483	10.9	95	0.00
8	L1	C9-C12 Aliphatic HC	54.600	50.099	8.2	95	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	50.127	8.2	94	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	57.571	5.9	97	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	58.873	3.2	97	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	65.249	6.8	97	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	73.252	4.9	102	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	354.596	6.2	97	0.00
15	L1	C9-C10 Aromatic HC	51.700	52.033	-0.6	97	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	50.925	0.5	96	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	53.122	-1.8	98	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	59.650	-1.6	98	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	52.942	-0.7	97	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	57.906	1.4	97	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	268.016	-0.8	97	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.08#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.28#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.16#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.93#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.70#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.15#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.28#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.28#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.49#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.38#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.49#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.66#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.31#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.21#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.66#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.85#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.20#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.20#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	100	0.00
41	S	4-Bromofluorobenzene	89.500	88.103	1.6	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100512\10051211.D Vial: 11
Acq On : 5 Oct 2012 7:35 pm Operator: RACHEL HILL
Sample : ICV VOA9 100512 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 9 14:26 2012 Quant Results File: 100512V9.RES

Quant Method : C:\HPCHEM\1\METHODS\100512V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 09 14:23:11 2012
Response via : Initial Calibration
DataAcq Meth : 100512V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.38	117	836629	12.50	ug/m3	0.00

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.21	95	645276	88.10	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 98.44%

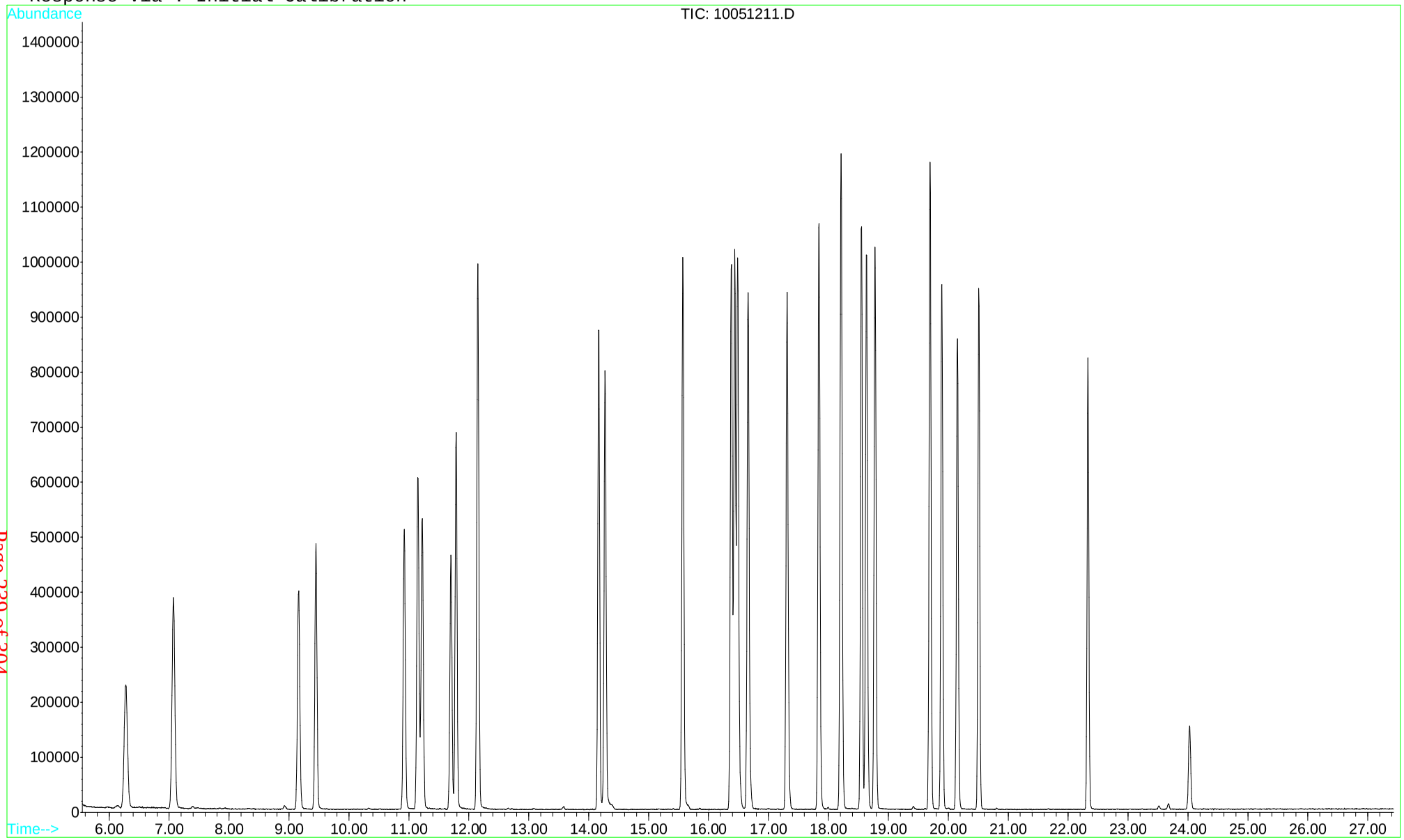
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.07	TIC	1297833	30.48	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.45	TIC	1224271	31.28	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.15	TIC	1595438	36.27	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.22	TIC	1355450	30.31	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.79	TIC	1566932	36.37	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.17	TIC	1937357	43.81	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.07	TIC	8977281m	208.48	ug/m3	
8) C9-C12 Aliphatic HC	15.57	TIC	2379623	50.10	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.44	TIC	2292495	50.13	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.55	TIC	2299364	57.57	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.70	TIC	2682319	58.87	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.51	TIC	1996509	65.25	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.33	TIC	1699181	73.25	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.57	TIC	13349491m	354.60	ug/m3	
15) C9-C10 Aromatic HC	17.84	120	237807	52.03	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.64	120	245254	50.92	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.78	120	370443	53.12	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.89	120	80826	59.65	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.15	120	277536	52.94	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.89	134	156828	57.91	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.84	TIC	1368694m	268.02	ug/m3	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\100512\10051211.D Vial: 11
Acq On : 5 Oct 2012 7:35 pm Operator: RACHEL HILL
Sample : ICV VOA9 100512 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 9 14:26 2012 Quant Results File: 100512V9.RES

Method : C:\HPCHEM\1\METHODS\100512V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Oct 09 14:23:11 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: GC-TCD 1_121010A **Run No.:** 52991

Analytical Run Date: 10/10/2012 **InstrumentID:** GC-TCD 1

Analyst: Jon Herndon **Column:** GC-TCD 1

Calibration ID: 49617 **Column ID:** Permanent Gases

Column Length: 2m 100/120mesh x 1mm ID

Run Comments: ch rev 10/22/12/pr 10-19-12msb

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-101012 TCD-A	ASTM-D2504	MBLK	R52991	10/10/2012 10:13:00 AM	Celeste Hoitash		
CCV-101012 TCD-A	ASTM-D2504	CCV	R52991	10/10/2012 10:42:00 AM	Celeste Hoitash		
LCS-101012 TCD-A	ASTM-D2504	LCS	R52991	10/10/2012 10:57:00 AM	Celeste Hoitash		
CRQL-101012 TCD-A	ASTM-D2504	CRQL	R52991	10/10/2012 11:20:00 AM	Celeste Hoitash		
1209B05-001B	ASTM-D2504	SAMP	R52991	10/10/2012 11:48:00 AM	Celeste Hoitash		
1209B05-002B	ASTM-D2504	SAMP	R52991	10/10/2012 12:06:00 PM	Celeste Hoitash		
1209B05-003B	ASTM-D2504	SAMP	R52991	10/10/2012 12:20:00 PM	Celeste Hoitash		
1209B05-004B	ASTM-D2504	SAMP	R52991	10/10/2012 12:51:00 PM	Celeste Hoitash		
1209B05-005B	ASTM-D2504	SAMP	R52991	10/10/2012 1:05:00 PM	Celeste Hoitash		
1209B05-006B	ASTM-D2504	SAMP	R52991	10/10/2012 1:20:00 PM	Celeste Hoitash		
1209B05-007B	ASTM-D2504	SAMP	R52991	10/10/2012 1:43:00 PM	Celeste Hoitash		
1209B05-008B	ASTM-D2504	SAMP	R52991	10/10/2012 1:59:00 PM	Celeste Hoitash		
1209B05-009B	ASTM-D2504	SAMP	R52991	10/10/2012 2:15:00 PM	Celeste Hoitash		
1209B05-010B	ASTM-D2504	SAMP	R52991	10/10/2012 3:32:00 PM	Celeste Hoitash		
1209B05-010BDUP	ASTM-D2504	DUP	R52991	10/10/2012 4:00:00 PM	Celeste Hoitash		
CCV-101012 TCD-B	ASTM-D2504	CCV	R52991	10/10/2012 5:29:00 PM	Celeste Hoitash		
CRQL-101012 TCD-B	ASTM-D2504	CRQL	R52991	10/10/2012 5:49:00 PM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

22-Oct-12

RunNo 52991

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1040796	MBLK-101012 TCD-A	ASTM-D2504	MBLK	)\101012\101012	10/10/2012 10:1	1	R52991		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Carbon Monoxide	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Methane	A	% v/v	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Oxygen	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1040797	CCV-101012 TCD-A	ASTM-D2504	CCV	)\101012\101012	10/10/2012 10:4	1	R52991		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.482	2.482		2.5	0	0	0.025	0.1	0	99%	85	115	0%	
Carbon Monoxide	A	% v/v	2.612	2.612		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Methane	A	% v/v	1.957	1.957		2	0	0	0.025	0.5	0	98%	85	115	0%	
Nitrogen	A	% v/v	2.673	2.673		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Oxygen	A	% v/v	2.521	2.521		2.5	0	0	0.025	0.1	0	101%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1040798	LCS-101012 TCD-A	ASTM-D2504	LCS	)\101012\101012	10/10/2012 10:5	1	R52991		0	1E+06	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.48	2.48		2.5	0	2.482	0.025	0.1	0	99%	70	130	0%	
Carbon Monoxide	A	% v/v	2.61	2.61		2.5	0	2.612	0.025	0.1	0	104%	70	130	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	70	130	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	70	130	0%	U

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1040811	CCV-101012 TCD-B	ASTM-D2504	CCV	)\101012\101012110/10/2012 5:29		1	R52991		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.533	2.533		2.5	0	0	0.025	0.1	0	101%	85	115	0%	
Carbon Monoxide	A	% v/v	2.636	2.636		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Methane	A	% v/v	1.92	1.92		2	0	0	0.025	0.5	0	96%	85	115	0%	
Nitrogen	A	% v/v	2.661	2.661		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Oxygen	A	% v/v	2.546	2.546		2.5	0	0	0.025	0.1	0	102%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1040812	CRQL-101012 TCD-B	ASTM-D2504	CRQL	)\101012\101012110/10/2012 5:49		1	R52991		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.313	0.313		0.3	0	0	0.025	0.1	0	104%	80	120	0%	
Carbon Monoxide	A	% v/v	0.138	0.138		0.14	0	0	0.025	0.1	0	99%	80	120	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	80	120	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	80	120	0%	U
Methane	A	% v/v	0.078	0.078		0.09	0	0	0.025	0.5	0	87%	80	120	0%	
Nitrogen	A	% v/v	1.36	1.36		1.39	0	0	0.025	0.1	0	98%	80	120	0%	
Oxygen	A	% v/v	0.077	0.077		0.08	0	0	0.025	0.1	0	96%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\101012\10101202.D Vial: 1
Acq On : 10 Oct 2012 10:42 am Operator:
Sample : CCV-101012 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Tue Oct 09 09:25:09 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.521	-0.8	0	-0.02
2	Nitrogen	2.500	2.673	-6.9	0	-0.03
3	Carbon Monoxide	2.500	2.612	-4.5	0	-0.04
4	Methane	2.000	1.957	2.1	0	-0.04
5	Carbon dioxide	2.500	2.482	0.7	0	-0.06

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\101012\10101202.D              Vial: 1
Acq On    : 10 Oct 2012  10:42 am                    Operator:
Sample    : CCV-101012 TCD-A                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

Method       : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title        :
Last Update  : Tue Oct 09 09:25:09 2012
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%

    Compound                      Amount  Calc.      %Dev  Area% Dev(min)
 ---------------------------------------------------------------------------
```

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101012\10101202.D Vial: 1
Acq On : 10 Oct 2012 10:42 am Operator:
Sample : CCV-101012 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 10 10:04 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Thu Oct 04 10:15:53 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.10	377699	2.521 % v/v
2)	Nitrogen	2.28	464921	2.673 % v/v
3)	Carbon Monoxide	2.96	425243	2.612 % v/v
4)	Methane	5.58	280448	1.957 % v/v
5)	Carbon dioxide	9.13	513724	2.482 % v/v

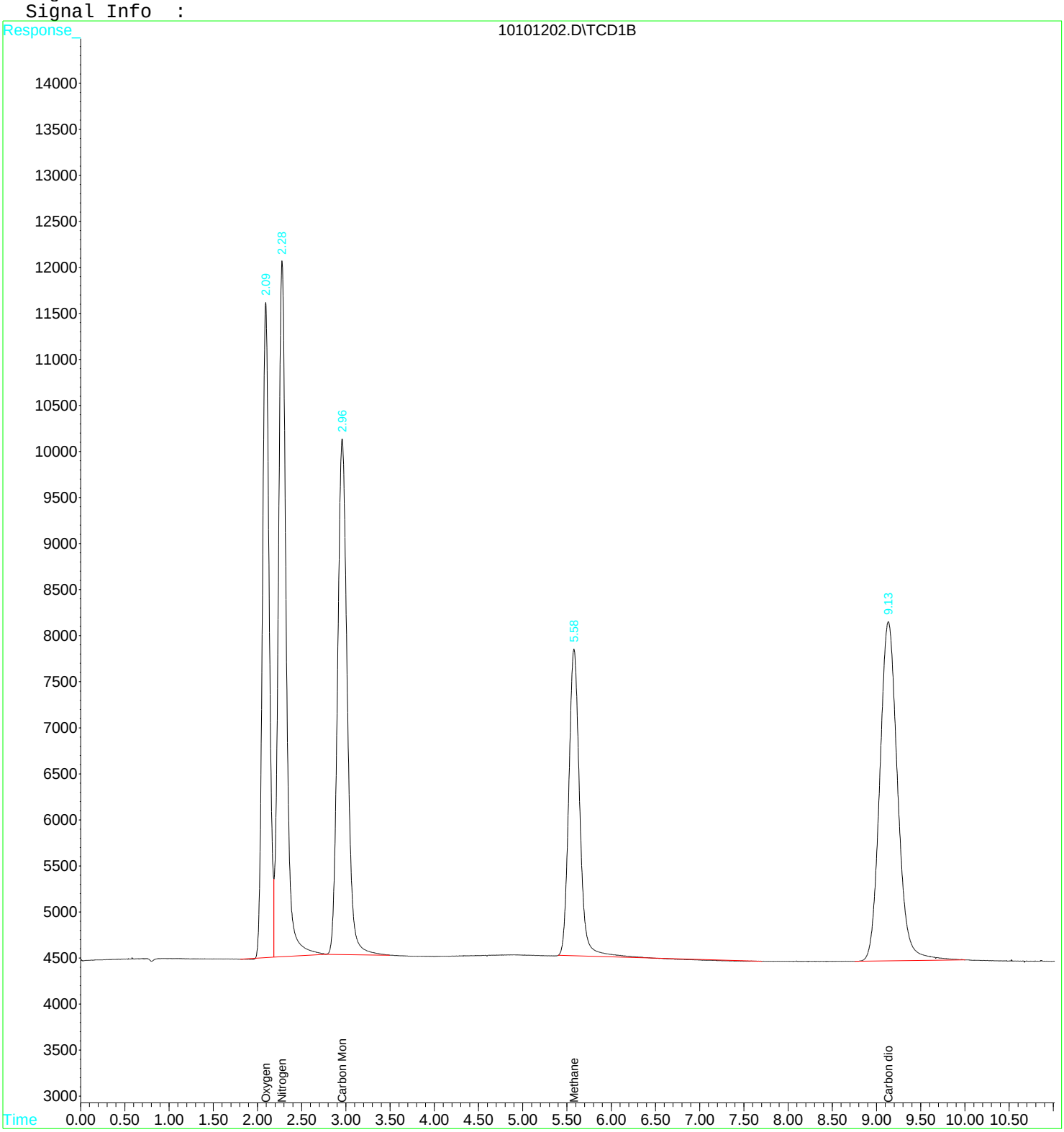
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101012\10101202.D Vial: 1
Acq On : 10 Oct 2012 10:42 am Operator:
Sample : CCV-101012 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 10 10:04 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Thu Oct 04 10:15:53 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\101012\10101216.D Vial: 1
Acq On : 10 Oct 2012 5:29 pm Operator:
Sample : CCV-101012 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Tue Oct 09 09:25:09 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.546	-1.8	0	-0.02
2	Nitrogen	2.500	2.661	-6.4	0	-0.03
3	Carbon Monoxide	2.500	2.636	-5.4	0	-0.04
4	Methane	2.000	1.920	4.0	0	-0.04
5	Carbon dioxide	2.500	2.533	-1.3	0	-0.06

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\101012\10101216.D              Vial: 1
Acq On    : 10 Oct 2012   5:29 pm                    Operator:
Sample    : CCV-101012 TCD-B                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

Method       : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title        :
Last Update  : Tue Oct 09 09:25:09 2012
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%

    Compound                      Amount  Calc.      %Dev  Area% Dev(min)
 ---------------------------------------------------------------------------
```

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101012\10101216.D Vial: 1
Acq On : 10 Oct 2012 5:29 pm Operator:
Sample : CCV-101012 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 16 8:44 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Thu Oct 04 10:15:53 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.10	381540	2.546 % v/v
2)	Nitrogen	2.28	462882	2.661 % v/v
3)	Carbon Monoxide	2.96	429293	2.636 % v/v
4)	Methane	5.58	275147	1.920 % v/v
5)	Carbon dioxide	9.13	524362	2.533 % v/v

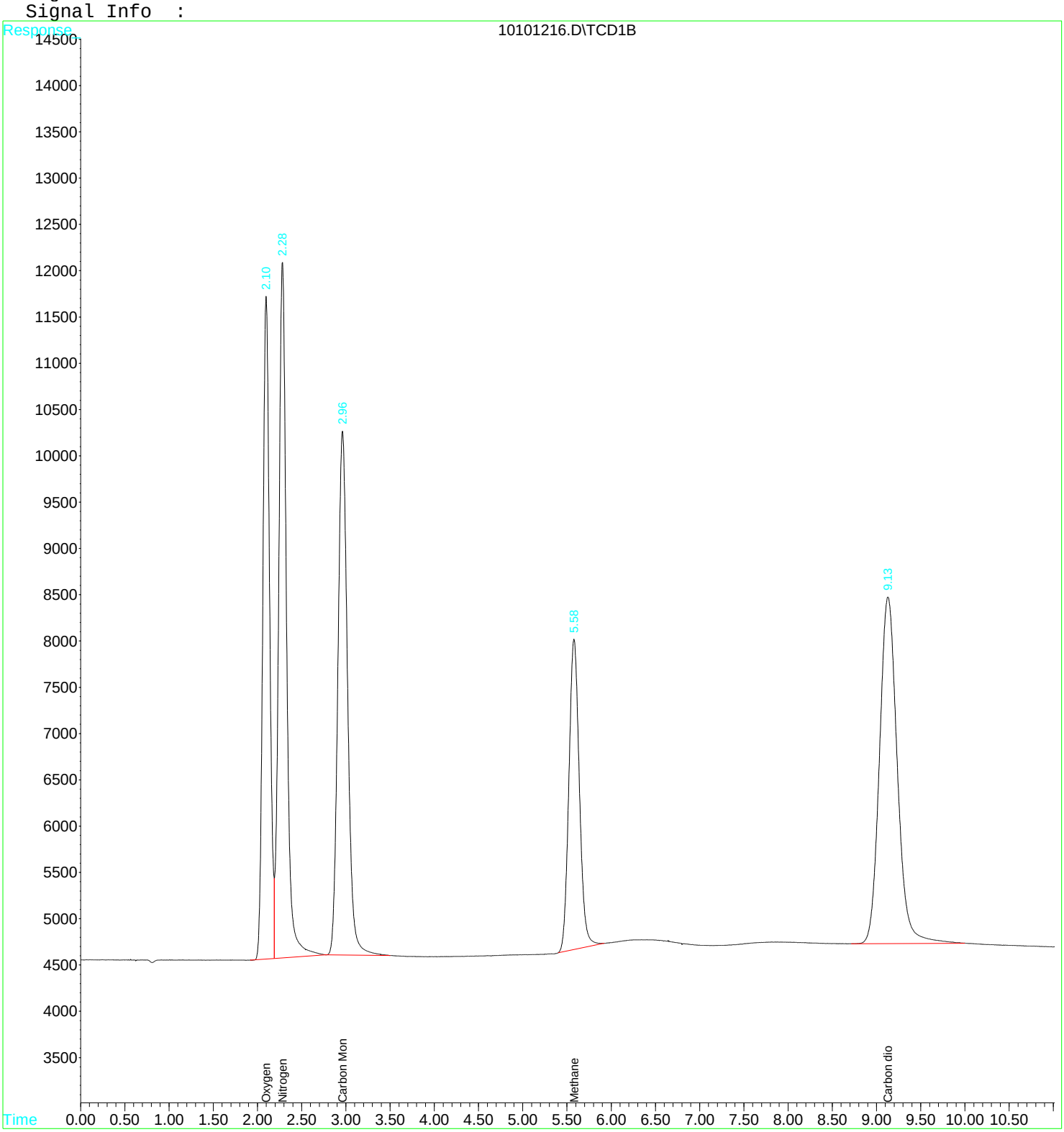
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101012\10101216.D Vial: 1
Acq On : 10 Oct 2012 5:29 pm Operator:
Sample : CCV-101012 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 16 8:44 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Thu Oct 04 10:15:53 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



RTI Laboratories

Run ID: GC-TCD 1_121016A **Run No.:** 53030

Analytical Run Date: 10/16/2012 **InstrumentID:** GC-TCD 1

Analyst: Jon Herndon **Column:** GC-TCD 1

Calibration ID: 49617 **Column ID:** Permanent Gases

Column Length: 2m 100/120mesh x 1mm ID

Run Comments: ch rev 10/22/12/pr 10-19-12msb

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-101612 TCD-A	ASTM-D2504	MBLK	R53030	10/16/2012 9:41:00 AM	Celeste Hoitash		
CCV-101612 TCD-A	ASTM-D2504	CCV	R53030	10/16/2012 10:12:00 AM	Celeste Hoitash		
LCS-101612 TCD-A	ASTM-D2504	LCS	R53030	10/16/2012 10:27:00 AM	Celeste Hoitash		
CRQL-101612 TCD-A	ASTM-D2504	CRQL	R53030	10/16/2012 11:17:00 AM	Celeste Hoitash		
1209B05-014B	ASTM-D2504	SAMP	R53030	10/16/2012 11:38:00 AM	Celeste Hoitash		
1209B05-015B	ASTM-D2504	SAMP	R53030	10/16/2012 11:53:00 AM	Celeste Hoitash		
1209B05-016B	ASTM-D2504	SAMP	R53030	10/16/2012 12:08:00 PM	Celeste Hoitash		
1209B05-017B	ASTM-D2504	SAMP	R53030	10/16/2012 12:22:00 PM	Celeste Hoitash		
1209B05-018B	ASTM-D2504	SAMP	R53030	10/16/2012 12:50:00 PM	Celeste Hoitash		
1209B05-019B	ASTM-D2504	SAMP	R53030	10/16/2012 1:08:00 PM	Celeste Hoitash		
1209B05-038B	ASTM-D2504	SAMP	R53030	10/16/2012 1:23:00 PM	Celeste Hoitash		
1209B05-011B	ASTM-D2504	SAMP	R53030	10/16/2012 1:37:00 PM	Celeste Hoitash		
1209B05-012B	ASTM-D2504	SAMP	R53030	10/16/2012 1:54:00 PM	Celeste Hoitash		
1209B05-012BDUP	ASTM-D2504	DUP	R53030	10/16/2012 2:34:00 PM	Celeste Hoitash		
CCV-101612 TCD-B	ASTM-D2504	CCV	R53030	10/16/2012 3:15:00 PM	Celeste Hoitash		
CRQL-101612 TCD-B	ASTM-D2504	CRQL	R53030	10/16/2012 3:46:00 PM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

22-Oct-12

RunNo 53030

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1041733	MBLK-101612 TCD-A	ASTM-D2504	MBLK	)\101612\101112	2010/16/2012 9:41	1	R53030		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Carbon Monoxide	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Methane	A	% v/v	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Oxygen	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1041735	CCV-101612 TCD-A	ASTM-D2504	CCV	)\101612\101112	2010/16/2012 10:1	1	R53030		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.467	2.467		2.5	0	0	0.025	0.1	0	99%	85	115	0%	
Carbon Monoxide	A	% v/v	2.599	2.599		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Methane	A	% v/v	1.913	1.913		2	0	0	0.025	0.5	0	96%	85	115	0%	
Nitrogen	A	% v/v	2.673	2.673		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Oxygen	A	% v/v	2.522	2.522		2.5	0	0	0.025	0.1	0	101%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1041737	LCS-101612 TCD-A	ASTM-D2504	LCS	)\101612\101112	2010/16/2012 10:2	1	R53030		0	1E+06	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.477	2.477		2.5	0	2.467	0.025	0.1	0	99%	70	130	0%	
Carbon Monoxide	A	% v/v	2.611	2.611		2.5	0	2.599	0.025	0.1	0	104%	70	130	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	70	130	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	70	130	0%	U

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1041747	1209B05-012B (Container-01 of 01)	ASTM-D2504	SAMP	)\101612\101112	10/16/2012 1:54	1	R53030		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Nitrogen	A	% v/v	81.545	81.545		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	% v/v	9.733	9.733		0	0	0	0.025	0.1	0	0%	0	0	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1041748	1209B05-012BDUP	ASTM-D2504	DUP	)\101612\101112	10/16/2012 2:34	1	R53030		0	1E+06	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	7.483	7.483		0	0	7.397	0.025	0.1	0	0%	0	0	1%	
Carbon Monoxide	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Methane	A	% v/v	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	82.583	82.583		0	0	81.545	0.025	0.1	0	0%	0	0	1%	
Oxygen	A	% v/v	9.827	9.827		0	0	9.733	0.025	0.1	0	0%	0	0	1%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1041749	CCV-101612 TCD-B	ASTM-D2504	CCV	)\101612\101112	10/16/2012 3:15	1	R53030		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.517	2.517		2.5	0	0	0.025	0.1	0	101%	85	115	0%	
Carbon Monoxide	A	% v/v	2.688	2.688		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Methane	A	% v/v	2.274	2.274		2	0	0	0.025	0.5	0	114%	85	115	0%	
Nitrogen	A	% v/v	2.716	2.716		2.5	0	0	0.025	0.1	0	109%	85	115	0%	
Oxygen	A	% v/v	2.563	2.563		2.5	0	0	0.025	0.1	0	103%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1041750	CRQL-101612 TCD-B	ASTM-D2504	CRQL	)\101612\101112	10/16/2012 3:46	1	R53030		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\101612\10111202.D Vial: 1
Acq On : 16 Oct 2012 10:12 am Operator:
Sample : CCV-101612 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 10:05:33 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.522	-0.9	0	0.00
2	Nitrogen	2.500	2.673	-6.9	0	0.00
3	Carbon Monoxide	2.500	2.599	-4.0	0	0.00
4	Methane	2.000	1.913	4.3	0	0.00
5	Carbon dioxide	2.500	2.467	1.3	0	0.00

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\101612\10111202.D              Vial: 1
Acq On    : 16 Oct 2012  10:12 am                    Operator:
Sample    : CCV-101612 TCD-A                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

Method       : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title        :
Last Update  : Wed Oct 17 10:05:33 2012
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%

    Compound                      Amount  Calc.      %Dev  Area% Dev(min)
 ---------------------------------------------------------------------------
```

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101612\10111202.D Vial: 1
Acq On : 16 Oct 2012 10:12 am Operator:
Sample : CCV-101612 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 17 8:44 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Thu Oct 04 10:15:53 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.09	377852	2.522 % v/v
2)	Nitrogen	2.27	465005	2.673 % v/v
3)	Carbon Monoxide	2.95	423123	2.599 % v/v
4)	Methane	5.57	274120	1.913 % v/v
5)	Carbon dioxide	9.12	510696	2.467 % v/v

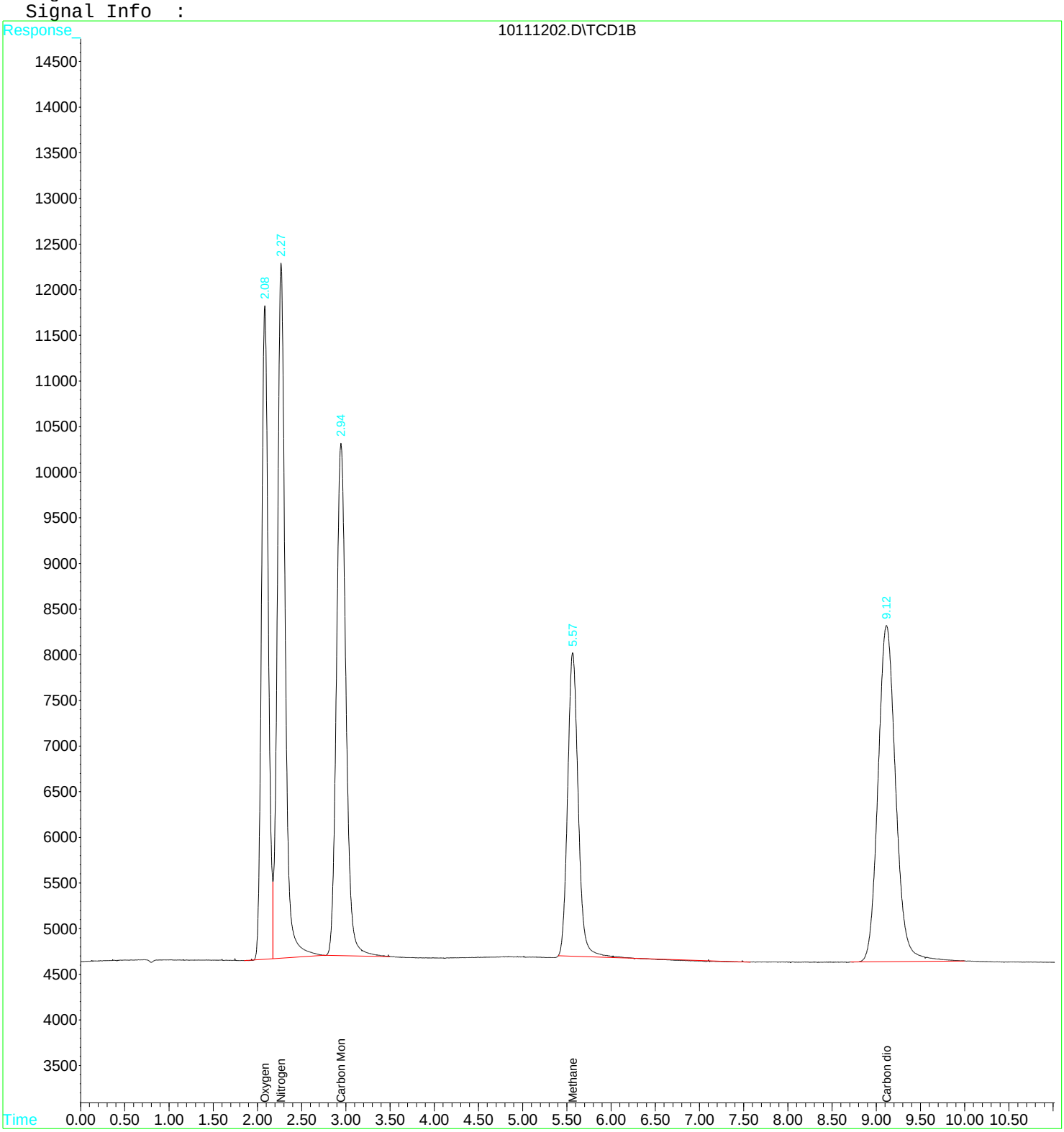
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101612\10111202.D Vial: 1
Acq On : 16 Oct 2012 10:12 am Operator:
Sample : CCV-101612 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 17 8:44 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Thu Oct 04 10:15:53 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\101612\10111215.D Vial: 1
Acq On : 16 Oct 2012 3:15 pm Operator:
Sample : CCV-101612 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 10:05:33 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.563	-2.5	0	0.00
2	Nitrogen	2.500	2.716	-8.6	0	0.00
3	Carbon Monoxide	2.500	2.688	-7.5	0	0.00
4	Methane	2.000	2.274	-13.7	0	0.00
5	Carbon dioxide	2.500	2.517	-0.7	0	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\101612\10111215.D              Vial: 1
Acq On    : 16 Oct 2012   3:15 pm                    Operator:
Sample    : CCV-101612 TCD-B                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

Method       : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title        :
Last Update  : Wed Oct 17 10:05:33 2012
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%

    Compound                      Amount  Calc.      %Dev  Area% Dev(min)
 ---------------------------------------------------------------------------
```

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101612\10111215.D Vial: 1
Acq On : 16 Oct 2012 3:15 pm Operator:
Sample : CCV-101612 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 17 8:54 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 09:52:22 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.09	383951	2.563	% v/v
2)	Nitrogen	2.28	472412	2.716	% v/v
3)	Carbon Monoxide	2.95	437670	2.688	% v/v
4)	Methane	5.57	325858	2.274	% v/v
5)	Carbon dioxide	9.11	521111	2.517	% v/v

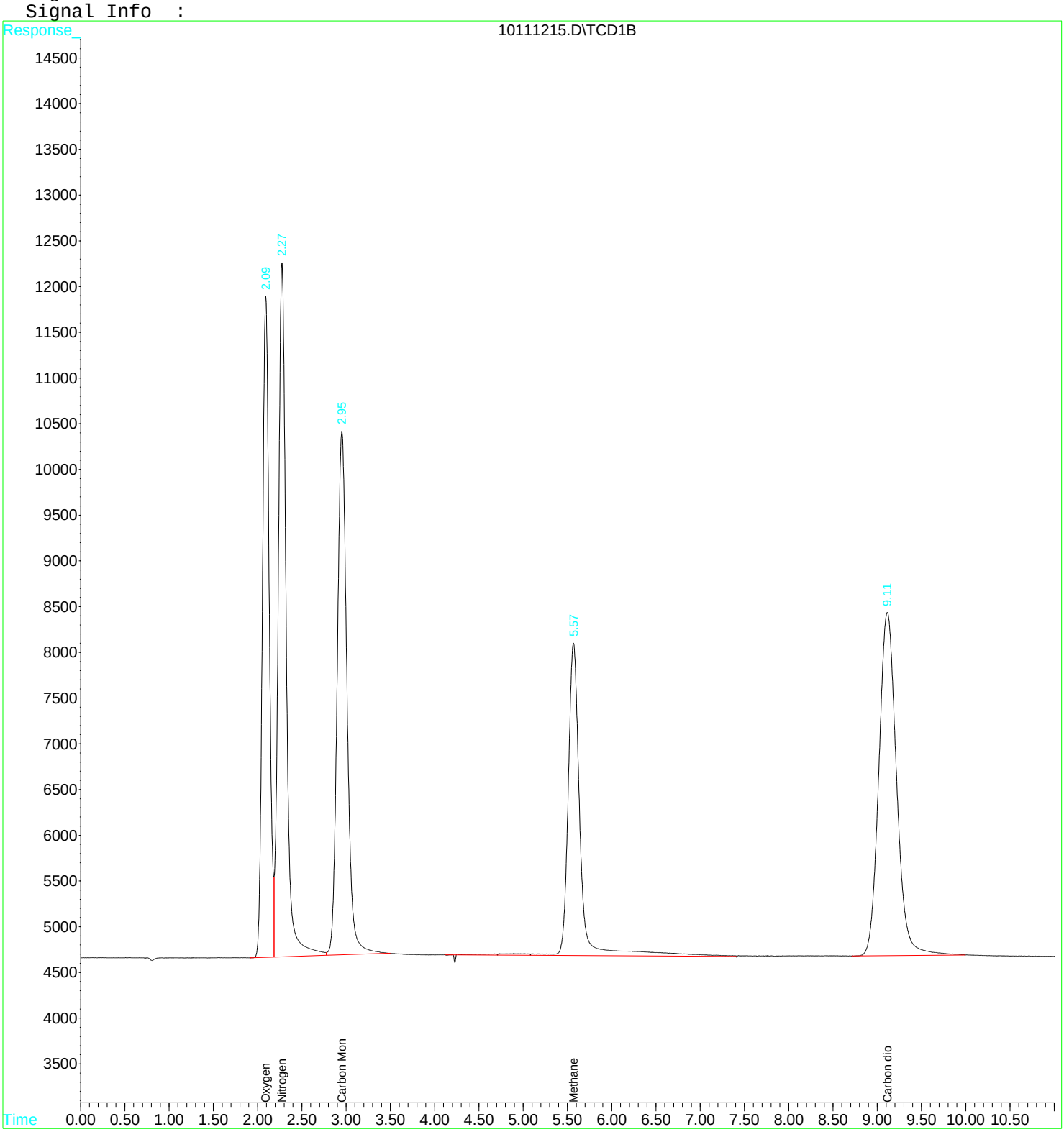
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101612\10111215.D Vial: 1
Acq On : 16 Oct 2012 3:15 pm Operator:
Sample : CCV-101612 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 17 8:54 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 09:52:22 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



RTI Laboratories

Run ID: GC-TCD 1_121017A **Run No.:** 53074

Analytical Run Date: 10/17/2012 **InstrumentID:** GC-TCD 1

Analyst: Jon Herndon **Column:** GC-TCD 1

Calibration ID: 49617 **Column ID:** Permanent Gases

Column Length: 2m 100/120mesh x 1mm ID

Run Comments: ch rev 10/22/12/pr 10-19-12msb

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-101712 TCD-A	ASTM-D2504	MBLK	R53074	10/17/2012 10:02:00 AM	Celeste Hoitash		
CCV-101712 TCD-A	ASTM-D2504	CCV	R53074	10/17/2012 10:32:00 AM	Celeste Hoitash		
LCS-101712 TCD-A	ASTM-D2504	LCS	R53074	10/17/2012 10:48:00 AM	Celeste Hoitash		
CRQL-101712 TCD-A	ASTM-D2504	CRQL	R53074	10/17/2012 11:03:00 AM	Celeste Hoitash		
1209B05-013B	ASTM-D2504	SAMP	R53074	10/17/2012 11:18:00 AM	Celeste Hoitash		
1209B05-020B	ASTM-D2504	SAMP	R53074	10/17/2012 11:38:00 AM	Celeste Hoitash		
1209B05-022B	ASTM-D2504	SAMP	R53074	10/17/2012 11:54:00 AM	Celeste Hoitash		
1209B05-023B	ASTM-D2504	SAMP	R53074	10/17/2012 12:13:00 PM	Celeste Hoitash		
1209B05-024B	ASTM-D2504	SAMP	R53074	10/17/2012 12:33:00 PM	Celeste Hoitash		
1209B05-025B	ASTM-D2504	SAMP	R53074	10/17/2012 12:48:00 PM	Celeste Hoitash		
1209B05-026B	ASTM-D2504	SAMP	R53074	10/17/2012 1:14:00 PM	Celeste Hoitash		
1209B05-027B	ASTM-D2504	SAMP	R53074	10/17/2012 1:29:00 PM	Celeste Hoitash		
1209B05-028B	ASTM-D2504	SAMP	R53074	10/17/2012 1:49:00 PM	Celeste Hoitash		
1209B05-039B	ASTM-D2504	SAMP	R53074	10/17/2012 2:05:00 PM	Celeste Hoitash		
1209B05-039BDUP	ASTM-D2504	DUP	R53074	10/17/2012 2:20:00 PM	Celeste Hoitash		
CCV-101712 TCD-B	ASTM-D2504	CCV	R53074	10/17/2012 2:47:00 PM	Celeste Hoitash		
1209B05-021B	ASTM-D2504	SAMP	R53074	10/17/2012 3:05:00 PM	Celeste Hoitash		
1209B05-029B	ASTM-D2504	SAMP	R53074	10/17/2012 3:25:00 PM	Celeste Hoitash		
1209B05-030B	ASTM-D2504	SAMP	R53074	10/17/2012 3:40:00 PM	Celeste Hoitash		
1209B05-031B	ASTM-D2504	SAMP	R53074	10/17/2012 3:57:00 PM	Celeste Hoitash		
1209B05-032B	ASTM-D2504	SAMP	R53074	10/17/2012 4:14:00 PM	Celeste Hoitash		
1209B05-034B	ASTM-D2504	SAMP	R53074	10/17/2012 4:30:00 PM	Celeste Hoitash		
1209B05-034BDUP	ASTM-D2504	DUP	R53074	10/17/2012 4:50:00 PM	Celeste Hoitash		
CCV-101712 TCD-C	ASTM-D2504	CCV	R53074	10/17/2012 5:17:00 PM	Celeste Hoitash		
CRQL-101712 TCD-B	ASTM-D2504	CRQL	R53074	10/17/2012 5:32:00 PM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

22-Oct-12

RunNo 53074

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1042490	MBLK-101712 TCD-A	ASTM-D2504	MBLK	)\101712\101712	010/17/2012 10:0	1	R53074		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Carbon Monoxide	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Methane	A	% v/v	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Oxygen	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1042491	CCV-101712 TCD-A	ASTM-D2504	CCV	)\101712\101712	010/17/2012 10:3	1	R53074		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.509	2.509		2.5	0	0	0.025	0.1	0	100%	85	115	0%	
Carbon Monoxide	A	% v/v	2.587	2.587		2.5	0	0	0.025	0.1	0	103%	85	115	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Methane	A	% v/v	2.051	2.051		2	0	0	0.025	0.5	0	103%	85	115	0%	
Nitrogen	A	% v/v	2.638	2.638		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Oxygen	A	% v/v	2.506	2.506		2.5	0	0	0.025	0.1	0	100%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1042492	LCS-101712 TCD-A	ASTM-D2504	LCS	)\101712\101712	010/17/2012 10:4	1	R53074		0	1E+06	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.462	2.462		2.5	0	2.509	0.025	0.1	0	98%	70	130	2%	
Carbon Monoxide	A	% v/v	2.59	2.59		2.5	0	2.587	0.025	0.1	0	104%	70	130	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	70	130	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	70	130	0%	U

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1042505	CCV-101712 TCD-B	ASTM-D2504	CCV	)\101712\101712	10/17/2012 2:47	1	R53074		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.483	2.483		2.5	0	0	0.025	0.1	0	99%	85	115	0%	
Carbon Monoxide	A	% v/v	2.614	2.614		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Methane	A	% v/v	1.893	1.893		2	0	0	0.025	0.5	0	95%	85	115	0%	
Nitrogen	A	% v/v	2.722	2.722		2.5	0	0	0.025	0.1	0	109%	85	115	0%	
Oxygen	A	% v/v	2.552	2.552		2.5	0	0	0.025	0.1	0	102%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1042506	1209B05-021B (Container-01 of 01)	ASTM-D2504	SAMP	)\101712\101712	10/17/2012 3:05	1	R53074		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.054	0.054		0	0	0	0.025	0.1	0	0%	0	0	0%	J
Carbon Monoxide	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Methane	A	% v/v	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	77.683	77.683		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	% v/v	20.692	20.692		0	0	0	0.025	0.1	0	0%	0	0	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1042507	1209B05-029B (Container-01 of 01)	ASTM-D2504	SAMP	)\101712\101712	10/17/2012 3:25	1	R53074		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	7.751	7.751		0	0	0	0.025	0.1	0	0%	0	0	0%	
Carbon Monoxide	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Methane	A	% v/v	0.005	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	80.896	80.896		0	0	0	0.025	0.1	0	0%	0	0	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1042512	1209B05-034BDUP	ASTM-D2504	DUP	)\101712\101712	10/17/2012 4:50	1	R53074		0	1E+06	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	% v/v	19.384	19.384		0	0	19.275	0.025	0.1	0	0%	0	0	1%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1042513	CCV-101712 TCD-C	ASTM-D2504	CCV	)\101712\101712	10/17/2012 5:17	1	R53074		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.487	2.487		2.5	0	0	0.025	0.1	0	99%	85	115	0%	
Carbon Monoxide	A	% v/v	2.645	2.645		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Methane	A	% v/v	1.894	1.894		2	0	0	0.025	0.5	0	95%	85	115	0%	
Nitrogen	A	% v/v	2.772	2.772		2.5	0	0	0.025	0.1	0	111%	85	115	0%	
Oxygen	A	% v/v	2.565	2.565		2.5	0	0	0.025	0.1	0	103%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1042514	CRQL-101712 TCD-B	ASTM-D2504	CRQL	)\101712\101712	10/17/2012 5:32	1	R53074		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.279	0.279		0.3	0	0	0.025	0.1	0	93%	80	120	0%	
Carbon Monoxide	A	% v/v	0.134	0.134		0.14	0	0	0.025	0.1	0	96%	80	120	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	80	120	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	80	120	0%	U
Methane	A	% v/v	0.076	0.076		0.09	0	0	0.025	0.5	0	84%	80	120	0%	
Nitrogen	A	% v/v	1.328	1.328		1.39	0	0	0.025	0.1	0	96%	80	120	0%	
Oxygen	A	% v/v	0.072	0.072		0.08	0	0	0.025	0.1	0	90%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\101712\10171202.D Vial: 1
Acq On : 17 Oct 2012 10:32 am Operator:
Sample : CCV-101712 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 10:05:33 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.506	-0.2	0	0.00
2	Nitrogen	2.500	2.638	-5.5	0	0.00
3	Carbon Monoxide	2.500	2.587	-3.5	0	0.00
4	Methane	2.000	2.051	-2.6	0	0.00
5	Carbon dioxide	2.500	2.509	-0.4	0	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0
10171202.D 062512.M Thu Oct 18 09:21:38 2012

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\101712\10171202.D              Vial: 1
Acq On    : 17 Oct 2012  10:32 am                    Operator:
Sample    : CCV-101712 TCD-A                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

Method       : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title        :
Last Update  : Wed Oct 17 10:05:33 2012
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%

    Compound                      Amount  Calc.      %Dev  Area% Dev(min)
 ---------------------------------------------------------------------------
```

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101712\10171202.D Vial: 1
Acq On : 17 Oct 2012 10:32 am Operator:
Sample : CCV-101712 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 17 16:33 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 09:52:22 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.09	375542	2.506 % v/v
2)	Nitrogen	2.27	458953	2.638 % v/v
3)	Carbon Monoxide	2.95	421214	2.587 % v/v
4)	Methane	5.56	293895	2.051 % v/v
5)	Carbon dioxide	9.11	519453	2.509 % v/v

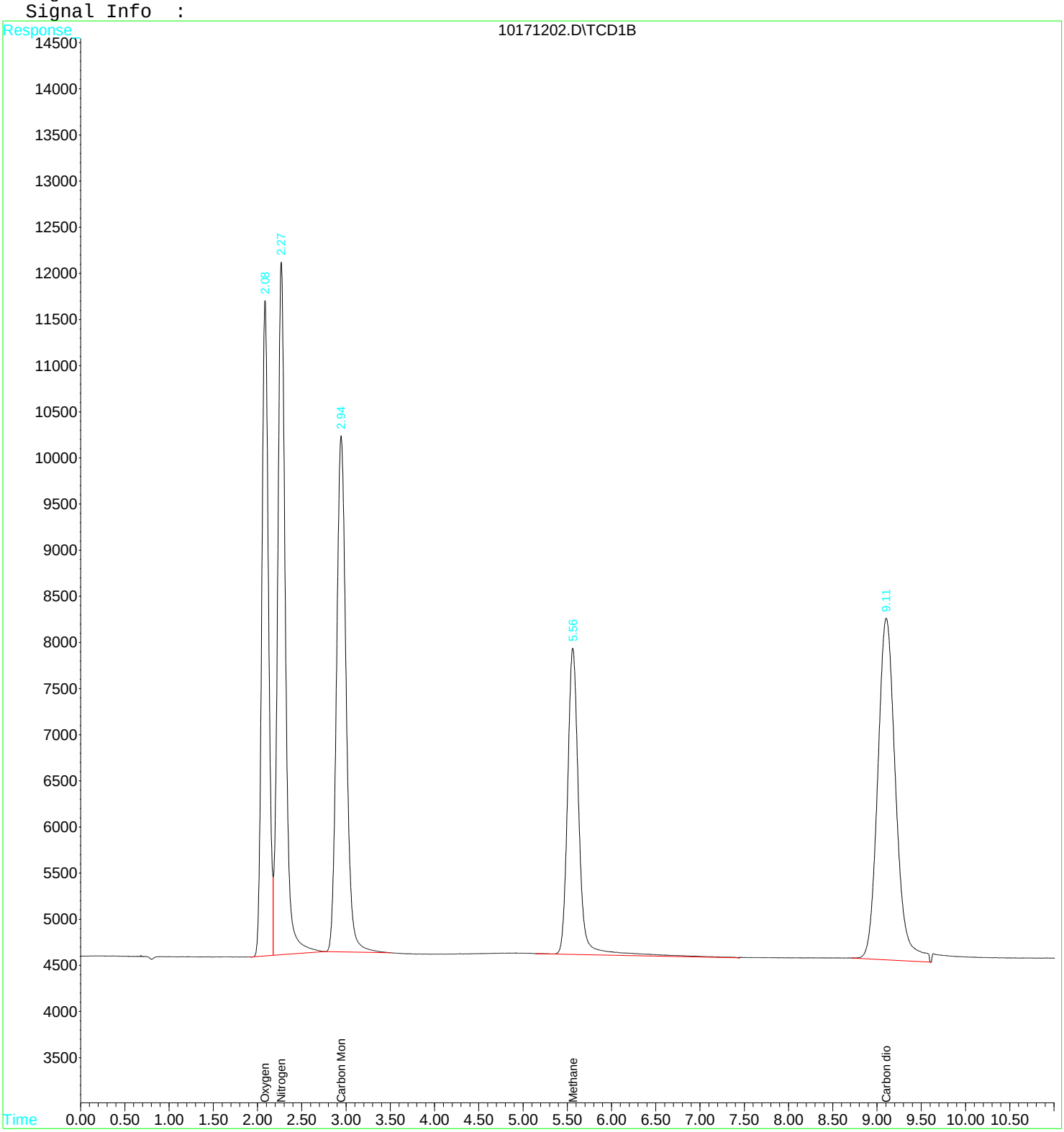
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101712\10171202.D Vial: 1
Acq On : 17 Oct 2012 10:32 am Operator:
Sample : CCV-101712 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 17 16:33 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 09:52:22 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\101712\10171216.D Vial: 1
Acq On : 17 Oct 2012 2:47 pm Operator:
Sample : CCV-101712 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 10:05:33 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.552	-2.1	0	0.00
2	Nitrogen	2.500	2.722	-8.9	0	0.00
3	Carbon Monoxide	2.500	2.614	-4.6	0	0.00
4	Methane	2.000	1.893	5.3	0	0.00
5	Carbon dioxide	2.500	2.483	0.7	0	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\101712\10171216.D              Vial: 1
Acq On    : 17 Oct 2012   2:47 pm                    Operator:
Sample    : CCV-101712 TCD-B                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

Method       : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title        :
Last Update  : Wed Oct 17 10:05:33 2012
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%

    Compound                      Amount  Calc.      %Dev  Area% Dev(min)
 ---------------------------------------------------------------------------
```

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101712\10171216.D Vial: 1
Acq On : 17 Oct 2012 2:47 pm Operator:
Sample : CCV-101712 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 17 16:32 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 09:52:22 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.09	382312	2.552 % v/v
2)	Nitrogen	2.27	473499	2.722 % v/v
3)	Carbon Monoxide	2.95	425635	2.614 % v/v
4)	Methane	5.56	271265	1.893 % v/v
5)	Carbon dioxide	9.10	514032	2.483 % v/v

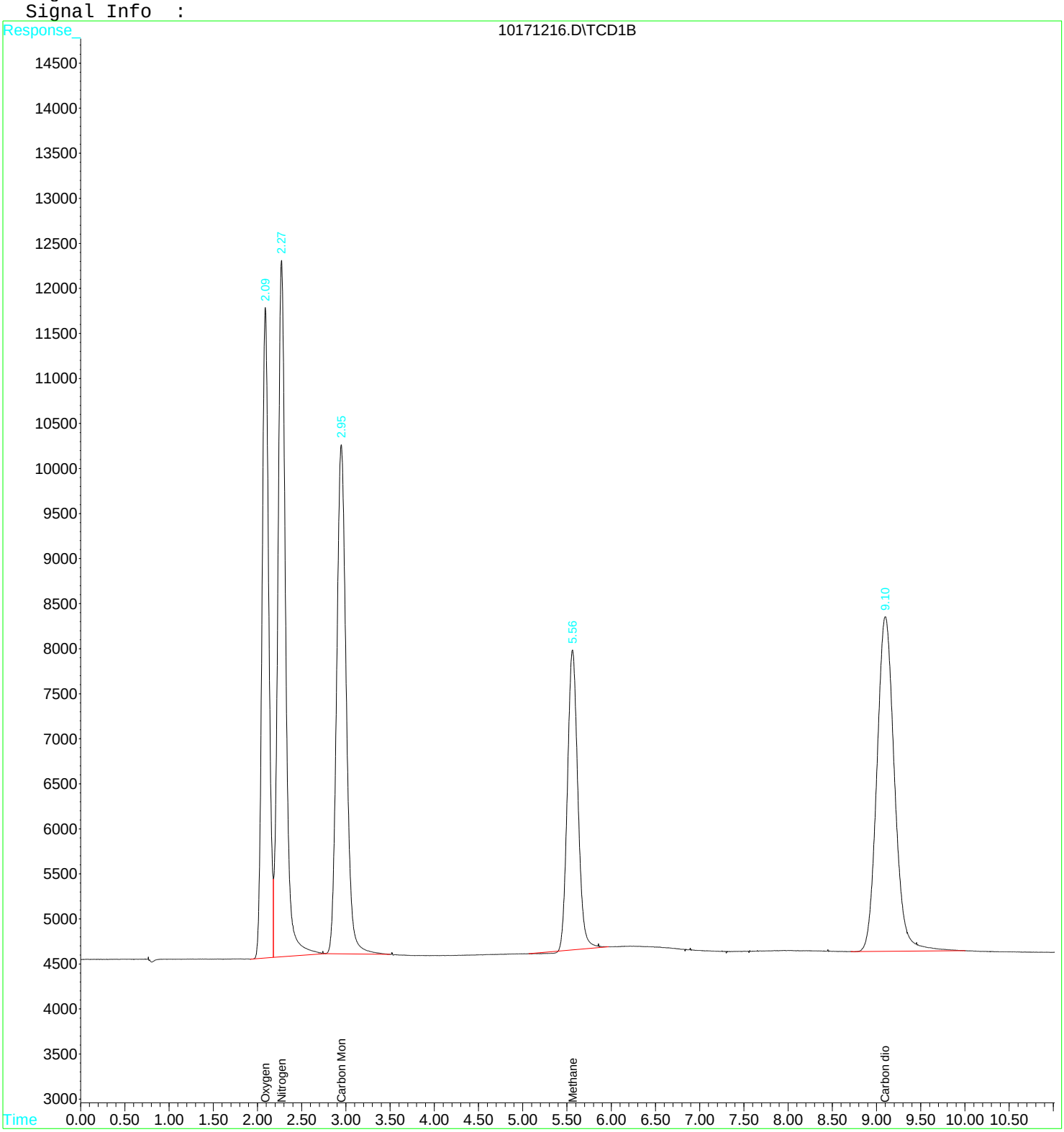
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101712\10171216.D Vial: 1
Acq On : 17 Oct 2012 2:47 pm Operator:
Sample : CCV-101712 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 17 16:32 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 09:52:22 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\101712\10171224.D Vial: 1
Acq On : 17 Oct 2012 5:17 pm Operator:
Sample : CCV-101712 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 10:05:33 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.565	-2.6	0	0.00
2	Nitrogen	2.500	2.772	-10.9	0	0.00
3	Carbon Monoxide	2.500	2.645	-5.8	0	0.00
4	Methane	2.000	1.894	5.3	0	0.00
5	Carbon dioxide	2.500	2.487	0.5	0	-0.02

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\101712\10171224.D              Vial: 1
Acq On    : 17 Oct 2012   5:17 pm                    Operator:
Sample    : CCV-101712 TCD-C                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

Method       : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title        :
Last Update  : Wed Oct 17 10:05:33 2012
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%

    Compound                      Amount  Calc.      %Dev  Area% Dev(min)
 ---------------------------------------------------------------------------
```

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101712\10171224.D Vial: 1
Acq On : 17 Oct 2012 5:17 pm Operator:
Sample : CCV-101712 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 17 16:31 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 09:52:22 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.09	384349	2.565 % v/v
2)	Nitrogen	2.27	482227	2.772 % v/v
3)	Carbon Monoxide	2.94	430610	2.645 % v/v
4)	Methane	5.56	271485	1.894 % v/v
5)	Carbon dioxide	9.10	514848	2.487 % v/v

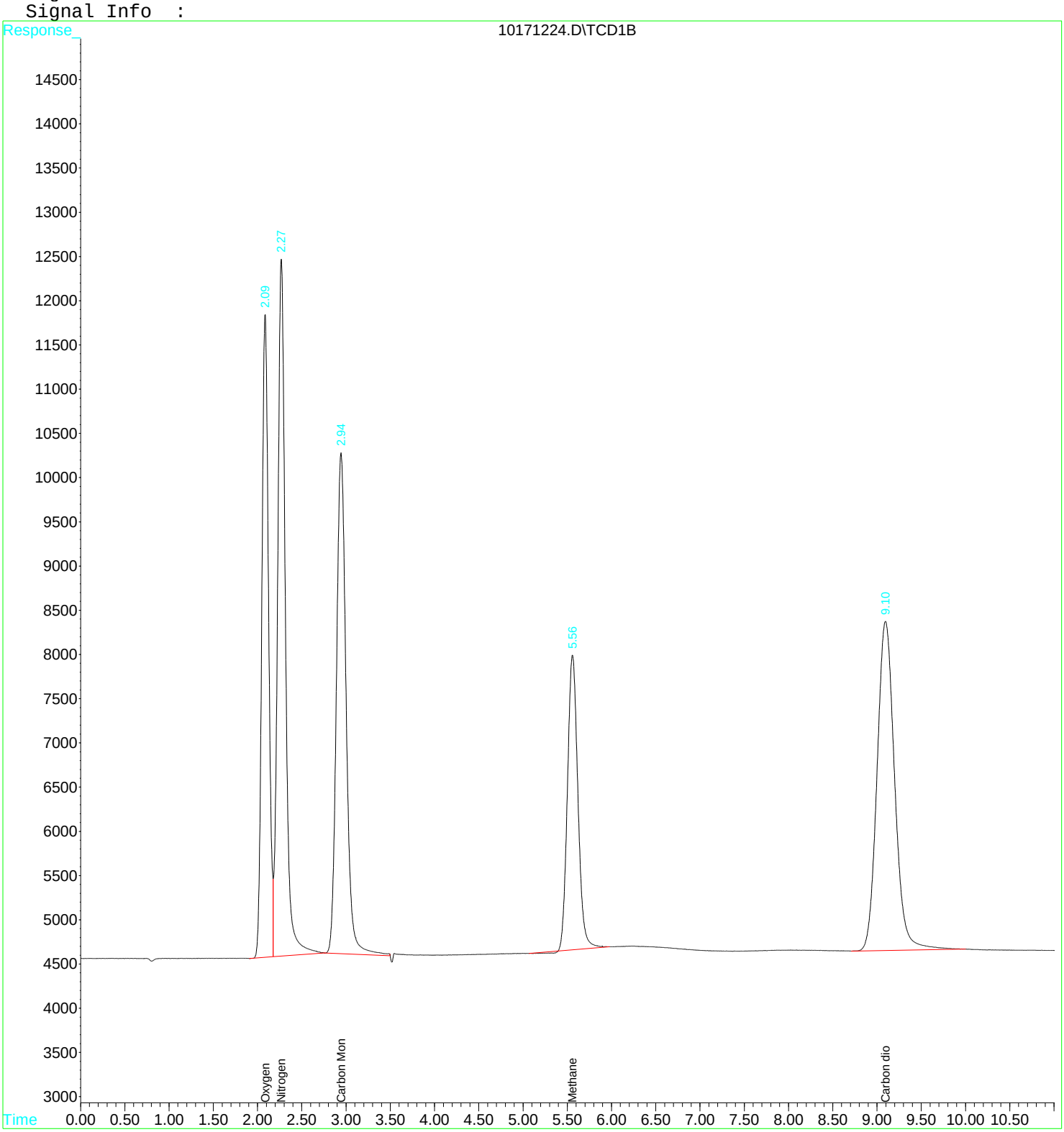
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101712\10171224.D Vial: 1
Acq On : 17 Oct 2012 5:17 pm Operator:
Sample : CCV-101712 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 17 16:31 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 09:52:22 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



RTI Laboratories

Run ID: GC-TCD 1_121018A **Run No.:** 53140

Analytical Run Date: 10/18/2012 **InstrumentID:** GC-TCD 1

Analyst: Mike Budziak **Column:** GC-TCD 1

Calibration ID: 49617 **Column ID:** Permanent Gases

Column Length: 2m 100/120mesh x 1mm ID

Run Comments: ch rev 10/22/12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-101812 TCD-A	ASTM-D2504	MBLK	R53140	10/18/2012 9:40:00 AM	Celeste Hoitash		
CCV-101812 TCD-A	ASTM-D2504	CCV	R53140	10/18/2012 10:22:00 AM	Celeste Hoitash		
LCS-101812 TCD-A	ASTM-D2504	LCS	R53140	10/18/2012 10:43:00 AM	Celeste Hoitash		
CRQL-101812 TCD-A	ASTM-D2504	CRQL	R53140	10/18/2012 10:58:00 AM	Celeste Hoitash		
1209B05-035B	ASTM-D2504	SAMP	R53140	10/18/2012 11:13:00 AM	Celeste Hoitash		
1209B05-036B	ASTM-D2504	SAMP	R53140	10/18/2012 11:28:00 AM	Celeste Hoitash		
1209B05-037B	ASTM-D2504	SAMP	R53140	10/18/2012 11:42:00 AM	Celeste Hoitash		
1209B05-041B	ASTM-D2504	SAMP	R53140	10/18/2012 11:57:00 AM	Celeste Hoitash		
1209B05-042B	ASTM-D2504	SAMP	R53140	10/18/2012 1:02:00 PM	Celeste Hoitash		
1209B05-043B	ASTM-D2504	SAMP	R53140	10/18/2012 1:19:00 PM	Celeste Hoitash		
1209B05-046B	ASTM-D2504	SAMP	R53140	10/18/2012 1:34:00 PM	Celeste Hoitash		
1209B05-047B	ASTM-D2504	SAMP	R53140	10/18/2012 1:50:00 PM	Celeste Hoitash		
1209B05-048B	ASTM-D2504	SAMP	R53140	10/18/2012 2:06:00 PM	Celeste Hoitash		
1209B05-049B	ASTM-D2504	SAMP	R53140	10/18/2012 2:22:00 PM	Celeste Hoitash		
1209B05-049BDUP	ASTM-D2504	DUP	R53140	10/18/2012 3:28:00 PM	Celeste Hoitash		
CCV-101812 TCD-B	ASTM-D2504	CCV	R53140	10/18/2012 3:49:00 PM	Celeste Hoitash		
CRQL-101812 TCD-B	ASTM-D2504	CRQL	R53140	10/18/2012 4:10:00 PM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

22-Oct-12

RunNo 53140

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1044073	MBLK-101812 TCD-A	ASTM-D2504	MBLK	)\101812\101812	010/18/2012 9:40	1	R53140		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Carbon Monoxide	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Methane	A	% v/v	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Oxygen	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1044074	CCV-101812 TCD-A	ASTM-D2504	CCV	)\101812\101812	010/18/2012 10:2	1	R53140		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.454	2.454		2.5	0	0	0.025	0.1	0	98%	85	115	0%	
Carbon Monoxide	A	% v/v	2.582	2.582		2.5	0	0	0.025	0.1	0	103%	85	115	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Methane	A	% v/v	1.999	1.999		2	0	0	0.025	0.5	0	100%	85	115	0%	
Nitrogen	A	% v/v	2.757	2.757		2.5	0	0	0.025	0.1	0	110%	85	115	0%	
Oxygen	A	% v/v	2.537	2.537		2.5	0	0	0.025	0.1	0	101%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1044075	LCS-101812 TCD-A	ASTM-D2504	LCS	)\101812\101812	010/18/2012 10:4	1	R53140		0	1E+06	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.467	2.467		2.5	0	2.454	0.025	0.1	0	99%	70	130	1%	
Carbon Monoxide	A	% v/v	2.59	2.59		2.5	0	2.582	0.025	0.1	0	104%	70	130	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	70	130	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	70	130	0%	U

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1044089	CCV-101812 TCD-B	ASTM-D2504	CCV	)\101812\101812	110/18/2012 3:49	1	R53140		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.468	2.468		2.5	0	0	0.025	0.1	0	99%	85	115	0%	
Carbon Monoxide	A	% v/v	2.603	2.603		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Methane	A	% v/v	1.914	1.914		2	0	0	0.025	0.5	0	96%	85	115	0%	
Nitrogen	A	% v/v	2.751	2.751		2.5	0	0	0.025	0.1	0	110%	85	115	0%	
Oxygen	A	% v/v	2.552	2.552		2.5	0	0	0.025	0.1	0	102%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1044090	CRQL-101812 TCD-B	ASTM-D2504	CRQL	)\101812\101812	110/18/2012 4:10	1	R53140		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.283	0.283		0.3	0	0	0.025	0.1	0	94%	80	120	0%	
Carbon Monoxide	A	% v/v	0.136	0.136		0.14	0	0	0.025	0.1	0	97%	80	120	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	80	120	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	80	120	0%	U
Methane	A	% v/v	0.074	0.074		0.09	0	0	0.025	0.5	0	82%	80	120	0%	
Nitrogen	A	% v/v	1.343	1.343		1.39	0	0	0.025	0.1	0	97%	80	120	0%	
Oxygen	A	% v/v	0.072	0.072		0.08	0	0	0.025	0.1	0	90%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\101812\10181202.D Vial: 1
Acq On : 18 Oct 2012 10:22 am Operator:
Sample : CCV-101812 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 10:05:33 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.537	-1.5	0	0.00
2	Nitrogen	2.500	2.757	-10.3	0	0.00
3	Carbon Monoxide	2.500	2.582	-3.3	0	0.00
4	Methane	2.000	1.999	0.0	0	0.00
5	Carbon dioxide	2.500	2.454	1.8	0	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\101812\10181202.D              Vial: 1
Acq On    : 18 Oct 2012  10:22 am                    Operator:
Sample    : CCV-101812 TCD-A                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

Method       : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title        :
Last Update  : Wed Oct 17 10:05:33 2012
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%

    Compound                      Amount  Calc.      %Dev  Area% Dev(min)
 ---------------------------------------------------------------------------
```

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101812\10181202.D Vial: 1
Acq On : 18 Oct 2012 10:22 am Operator:
Sample : CCV-101812 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 18 9:42 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 09:52:22 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.09	380148	2.537 % v/v
2)	Nitrogen	2.27	479530	2.757 % v/v
3)	Carbon Monoxide	2.95	420401	2.582 % v/v
4)	Methane	5.56	286526	1.999 % v/v
5)	Carbon dioxide	9.10	507944	2.454 % v/v

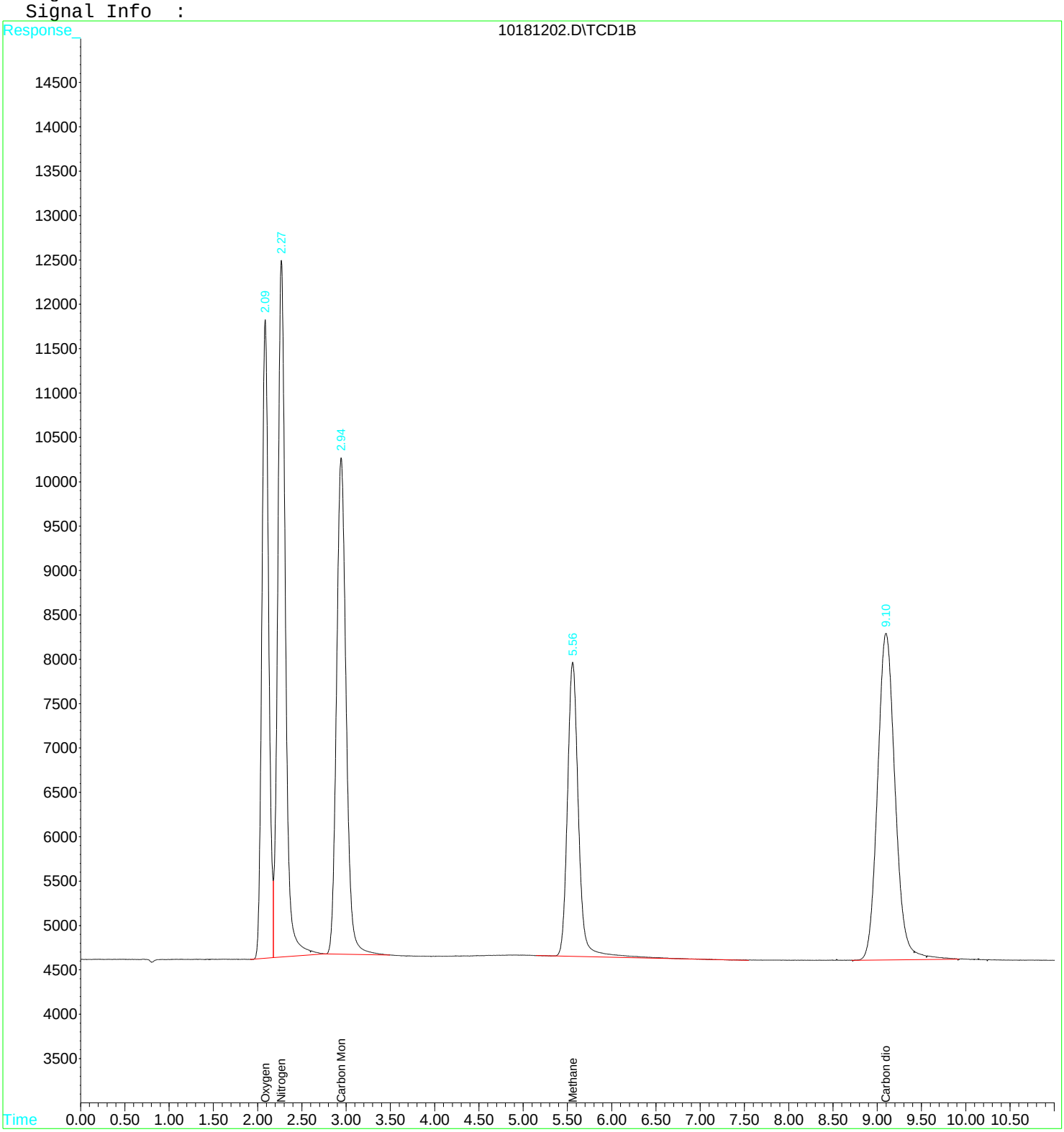
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101812\10181202.D Vial: 1
Acq On : 18 Oct 2012 10:22 am Operator:
Sample : CCV-101812 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 18 9:42 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 09:52:22 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\101812\10181216.D Vial: 1
Acq On : 18 Oct 2012 3:49 pm Operator:
Sample : CCV-101812 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 10:05:33 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.552	-2.1	0	0.00
2	Nitrogen	2.500	2.751	-10.0	0	0.00
3	Carbon Monoxide	2.500	2.603	-4.1	0	0.00
4	Methane	2.000	1.914	4.3	0	0.00
5	Carbon dioxide	2.500	2.468	1.3	0	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\101812\10181216.D              Vial: 1
Acq On    : 18 Oct 2012   3:49 pm                    Operator:
Sample    : CCV-101812 TCD-B                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

Method       : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title        :
Last Update  : Wed Oct 17 10:05:33 2012
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%

    Compound                      Amount  Calc.      %Dev  Area% Dev(min)
 ---------------------------------------------------------------------------
```

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101812\10181216.D Vial: 1
Acq On : 18 Oct 2012 3:49 pm Operator:
Sample : CCV-101812 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 18 15:09 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 09:52:22 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.09	382339	2.552 % v/v
2)	Nitrogen	2.27	478606	2.751 % v/v
3)	Carbon Monoxide	2.95	423903	2.603 % v/v
4)	Methane	5.56	274290	1.914 % v/v
5)	Carbon dioxide	9.10	510895	2.468 % v/v

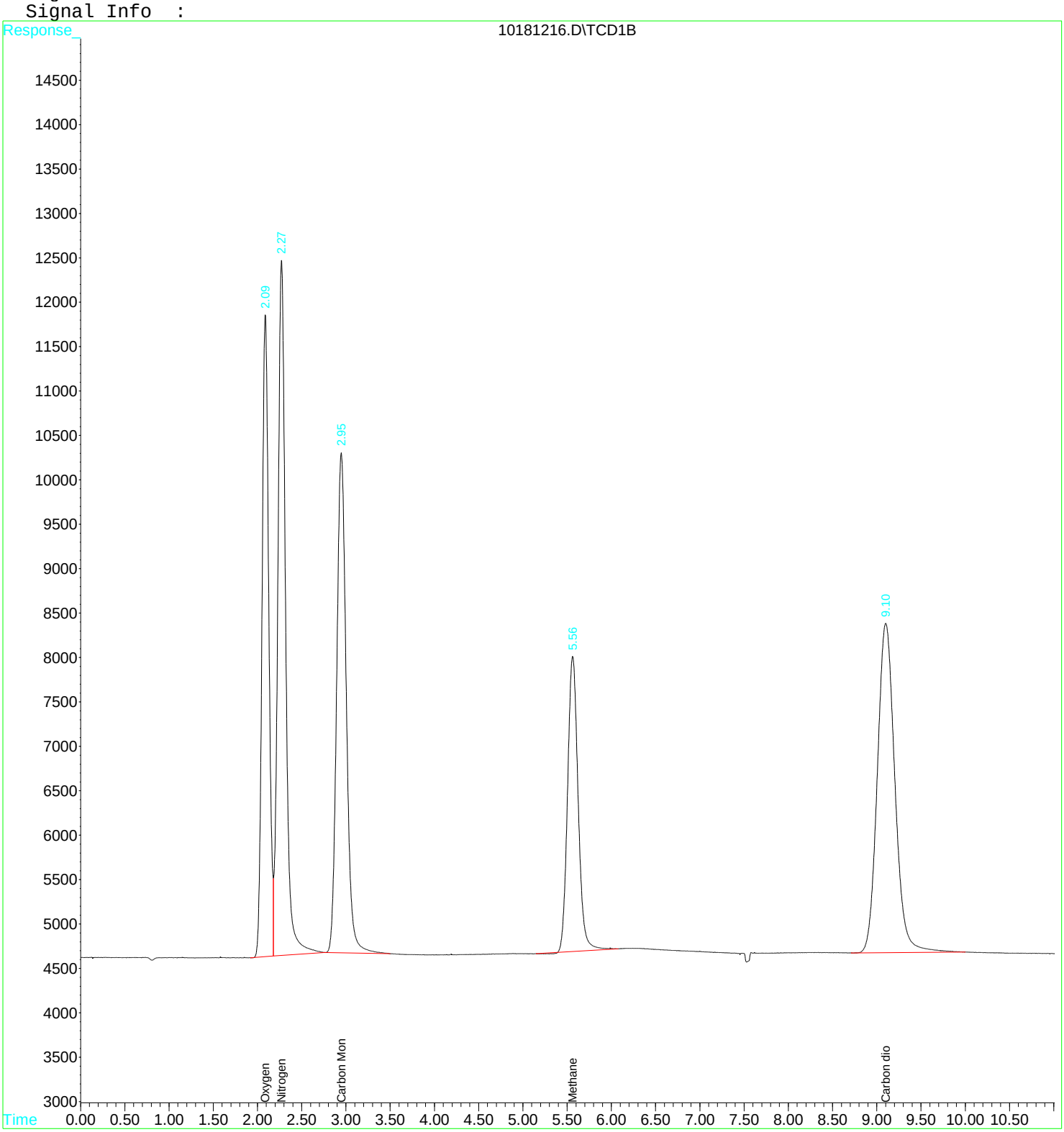
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101812\10181216.D Vial: 1
Acq On : 18 Oct 2012 3:49 pm Operator:
Sample : CCV-101812 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 18 15:09 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 09:52:22 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



RTI Laboratories

Run ID: GC-TCD 1_121019A **Run No.:** 53139

Analytical Run Date: 10/19/2012 **InstrumentID:** GC-TCD 1

Analyst: Mike Budziak **Column:** GC-TCD 1

Calibration ID: 49617 **Column ID:** Permanent Gases

Column Length: 2m 100/120mesh x 1mm ID

Run Comments: ch rev 10/22/12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-101912 TCD-A	ASTM-D2504	MBLK	R53139	10/19/2012 9:42:00 AM	Celeste Hoitash		
CCV-101912 TCD-A	ASTM-D2504	CCV	R53139	10/19/2012 10:50:00 AM	Celeste Hoitash		
LCS-101912 TCD-A	ASTM-D2504	LCS	R53139	10/19/2012 11:05:00 AM	Celeste Hoitash		
CRQL-101912 TCD-A	ASTM-D2504	CRQL	R53139	10/19/2012 11:25:00 AM	Celeste Hoitash		
1209B05-044B	ASTM-D2504	SAMP	R53139	10/19/2012 11:40:00 AM	Celeste Hoitash		
1209B05-045B	ASTM-D2504	SAMP	R53139	10/19/2012 12:16:00 PM	Celeste Hoitash		
1209B05-050B	ASTM-D2504	SAMP	R53139	10/19/2012 12:31:00 PM	Celeste Hoitash		
1209B05-050BDUP	ASTM-D2504	DUP	R53139	10/19/2012 12:47:00 PM	Celeste Hoitash		
CCV-101912 TCD-B	ASTM-D2504	CCV	R53139	10/19/2012 1:30:00 PM	Celeste Hoitash		
CRQL-101912 TCD-B	ASTM-D2504	CRQL	R53139	10/19/2012 2:18:00 PM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

22-Oct-12

RunNo 53139

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1044157	MBLK-101912 TCD-A	ASTM-D2504	MBLK	)\101912\101912	10/19/2012 9:42	1	R53139		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Carbon Monoxide	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Methane	A	% v/v	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Oxygen	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1044158	CCV-101912 TCD-A	ASTM-D2504	CCV	)\101912\101912	10/19/2012 10:5	1	R53139		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.459	2.459		2.5	0	0	0.025	0.1	0	98%	85	115	0%	
Carbon Monoxide	A	% v/v	2.582	2.582		2.5	0	0	0.025	0.1	0	103%	85	115	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Methane	A	% v/v	1.996	1.996		2	0	0	0.025	0.5	0	100%	85	115	0%	
Nitrogen	A	% v/v	2.757	2.757		2.5	0	0	0.025	0.1	0	110%	85	115	0%	
Oxygen	A	% v/v	2.536	2.536		2.5	0	0	0.025	0.1	0	101%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1044159	LCS-101912 TCD-A	ASTM-D2504	LCS	)\101912\101912	10/19/2012 11:0	1	R53139		0	1E+06	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.555	2.555		2.5	0	2.459	0.025	0.1	0	102%	70	130	4%	
Carbon Monoxide	A	% v/v	2.564	2.564		2.5	0	2.582	0.025	0.1	0	103%	70	130	1%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	70	130	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	70	130	0%	U

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1044164	1209B05-050BDUP	ASTM-D2504	DUP	)\101912\101912	010/19/2012 12:4	1	R53139		0	1E+06	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	% v/v	3.602	3.602		0	0	3.628	0.025	0.1	0	0%	0	0	1%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1044165	CCV-101912 TCD-B	ASTM-D2504	CCV	)\101912\101912	010/19/2012 1:30	1	R53139		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.446	2.446		2.5	0	0	0.025	0.1	0	98%	85	115	0%	
Carbon Monoxide	A	% v/v	2.579	2.579		2.5	0	0	0.025	0.1	0	103%	85	115	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Methane	A	% v/v	1.912	1.912		2	0	0	0.025	0.5	0	96%	85	115	0%	
Nitrogen	A	% v/v	2.637	2.637		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Oxygen	A	% v/v	2.499	2.499		2.5	0	0	0.025	0.1	0	100%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1044166	CRQL-101912 TCD-B	ASTM-D2504	CRQL	)\101912\101912	110/19/2012 2:18	1	R53139		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.29	0.29		0.3	0	0	0.025	0.1	0	97%	80	120	0%	
Carbon Monoxide	A	% v/v	0.131	0.131		0.14	0	0	0.025	0.1	0	94%	80	120	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	80	120	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	80	120	0%	U
Methane	A	% v/v	0.078	0.078		0.09	0	0	0.025	0.5	0	87%	80	120	0%	
Nitrogen	A	% v/v	1.345	1.345		1.39	0	0	0.025	0.1	0	97%	80	120	0%	
Oxygen	A	% v/v	0.074	0.074		0.08	0	0	0.025	0.1	0	93%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\101912\10191202.D Vial: 1
Acq On : 19 Oct 2012 10:50 am Operator:
Sample : CCV-101912 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 10:05:33 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.536	-1.4	0	0.00
2	Nitrogen	2.500	2.757	-10.3	0	0.00
3	Carbon Monoxide	2.500	2.582	-3.3	0	0.00
4	Methane	2.000	1.996	0.2	0	0.00
5	Carbon dioxide	2.500	2.459	1.6	0	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
10191202.D 062512.M Fri Oct 19 14:40:37 2012

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\101912\10191202.D              Vial: 1
Acq On    : 19 Oct 2012  10:50 am                    Operator:
Sample    : CCV-101912 TCD-A                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

Method       : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title        :
Last Update  : Wed Oct 17 10:05:33 2012
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%

    Compound                      Amount  Calc.      %Dev  Area% Dev(min)
 ---------------------------------------------------------------------------
```

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101912\10191202.D Vial: 1
Acq On : 19 Oct 2012 10:50 am Operator:
Sample : CCV-101912 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 19 10:05 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 09:52:22 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.09	379896	2.536 % v/v
2)	Nitrogen	2.27	479628	2.757 % v/v
3)	Carbon Monoxide	2.95	420386	2.582 % v/v
4)	Methane	5.56	286058	1.996 % v/v
5)	Carbon dioxide	9.10	508993	2.459 % v/v

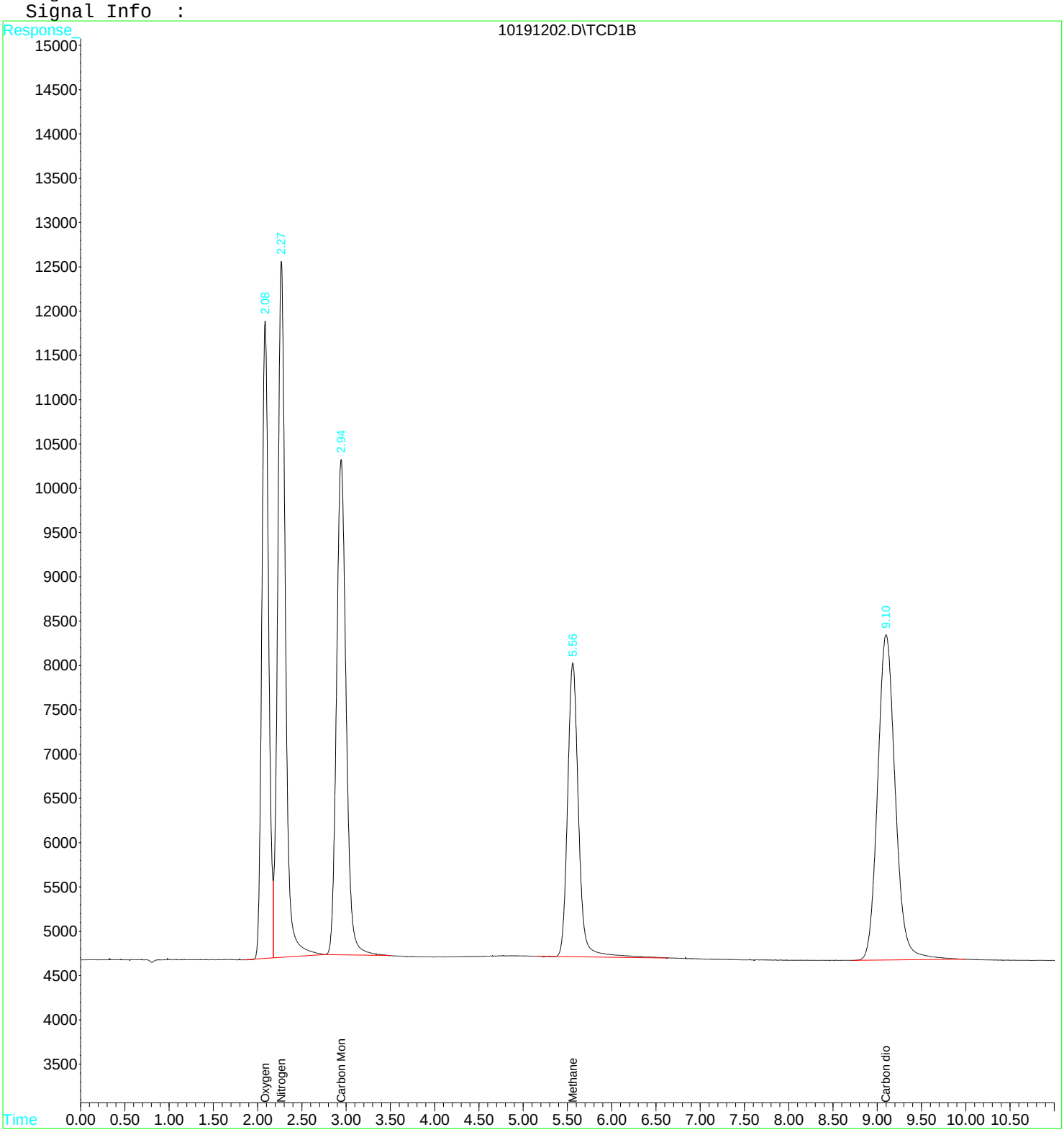
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101912\10191202.D Vial: 1
Acq On : 19 Oct 2012 10:50 am Operator:
Sample : CCV-101912 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 19 10:05 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 09:52:22 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\101912\10191209.D Vial: 1
Acq On : 19 Oct 2012 1:30 pm Operator:
Sample : CCV-101912 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Wed Oct 17 10:05:33 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.499	0.0	0	0.00
2	Nitrogen	2.500	2.637	-5.5	0	0.00
3	Carbon Monoxide	2.500	2.579	-3.2	0	0.00
4	Methane	2.000	1.912	4.4	0	0.00
5	Carbon dioxide	2.500	2.446	2.2	0	-0.01

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\101912\10191209.D              Vial: 1
Acq On    : 19 Oct 2012   1:30 pm                    Operator:
Sample    : CCV-101912 TCD-B                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

Method       : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title        :
Last Update  : Wed Oct 17 10:05:33 2012
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%

    Compound                      Amount  Calc.      %Dev  Area% Dev(min)
 ---------------------------------------------------------------------------
```

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101912\10191209.D Vial: 1
Acq On : 19 Oct 2012 1:30 pm Operator:
Sample : CCV-101912 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 19 13:20 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 19 12:23:16 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.09	374440	2.499	% v/v
2)	Nitrogen	2.27	458681	2.637	% v/v
3)	Carbon Monoxide	2.95	419919	2.579	% v/v
4)	Methane	5.56	274045	1.912	% v/v
5)	Carbon dioxide	9.10	506269	2.446	% v/v

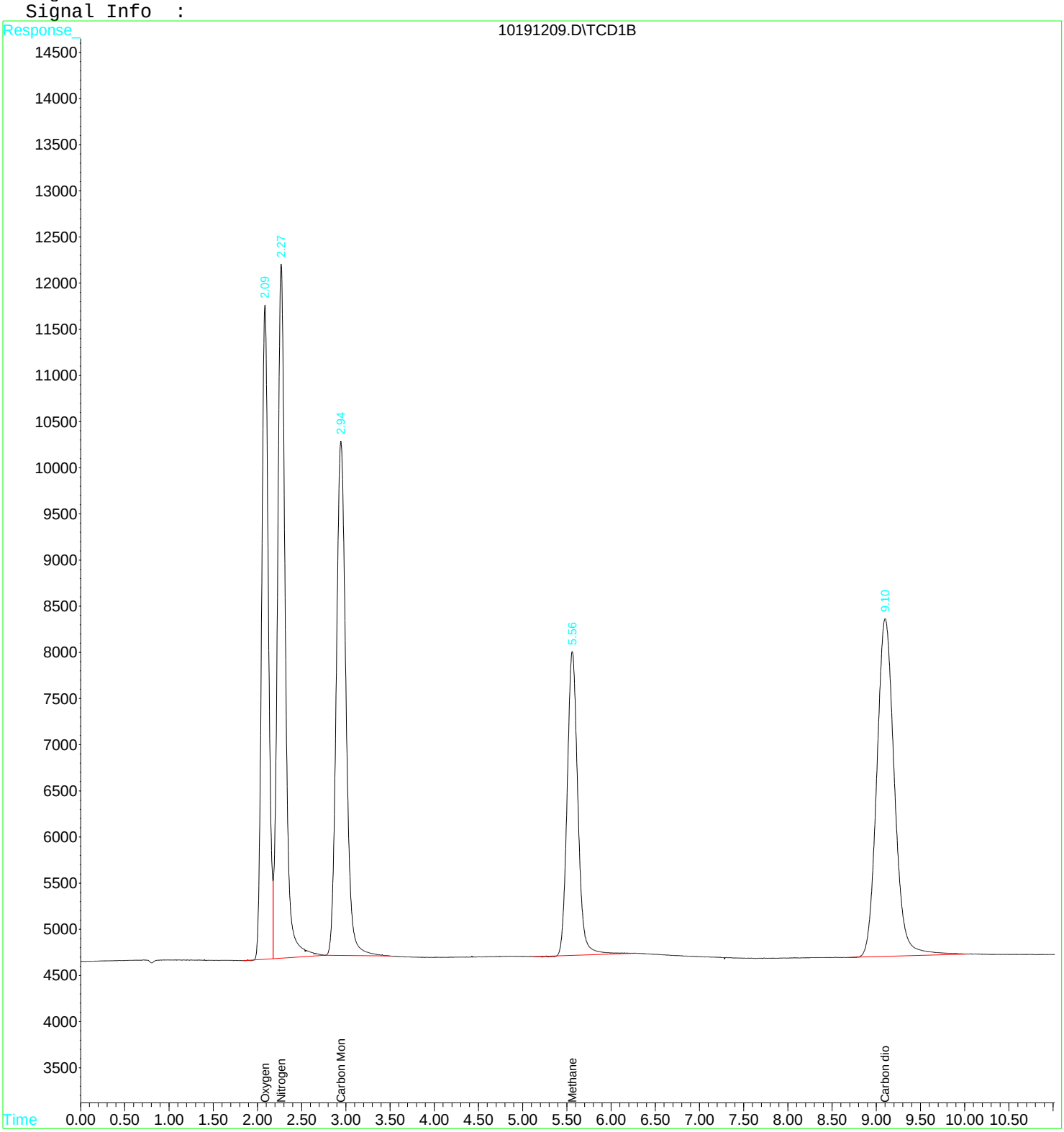
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\101912\10191209.D Vial: 1
Acq On : 19 Oct 2012 1:30 pm Operator:
Sample : CCV-101912 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 19 13:20 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Fri Oct 19 12:23:16 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Response Factor Report GC/TCD

Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Tue Jun 26 10:08:21 2012

Calibration Files
1 =06251202.D 2 =06251203.D 3 =06251204.D
4 =06251205.D 5 =06251206.D 6 =06251207.D

	Compound	1	2	3	4	5	6	Avg		%RSD
1)	Oxygen	1.438	1.499	1.479	1.481	1.430	1.632	1.498	E5	4.54
2)	Nitrogen	1.776	1.733	1.737	1.720	1.663	1.790	1.739	E5	2.40
3)	Carbon Monoxide	1.695	1.642	1.639	1.623	1.559	1.612	1.628	E5	2.72
4)	Methane	1.499	1.452	1.448	1.443	1.416	1.341	1.433	E5	3.67
5)	Carbon dioxide	2.156	2.072	2.078	2.053	1.983	2.079	2.070	E5	2.68

(#) = Out of Range ### Number of calibration levels exceeded format ###

062512.M Tue Jun 26 10:10:16 2012

Compound List Report GC/TCD

Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Tue Jun 26 10:08:21 2012
Response via : Initial Calibration
Total Cpnds : 5

PK#	Type	Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1		Oxygen	2.21	1.000	A	A	R
2		Nitrogen	2.38	1.000	A	A	R
3		Carbon Monoxide	3.13	1.000	A	A	R
4		Methane	5.75	1.000	A	A	R
5		Carbon dioxide	9.41	1.000	A	A	R

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

062512.M Tue Jun 26 10:10:22 2012

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\062512\06251210.D Vial: 1
Acq On : 25 Jun 2012 5:24 pm Operator:
Sample : ICV STD 1-2 Inst : GC/TCD
Misc : ICV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Mon Jun 25 17:07:33 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.613	-4.5	0	0.00
2	Nitrogen	2.500	2.746	-9.8	0	0.02
3	Carbon Monoxide	2.500	2.664	-6.6	0	-0.01
4	Methane	2.000	2.139	-6.9	0	-0.01
5	Carbon dioxide	2.500	2.623	-4.9	0	-0.02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\062512\06251210.D Vial: 1
Acq On : 25 Jun 2012 5:24 pm Operator:
Sample : ICV STD 1-2 Inst : GC/TCD
Misc : ICV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 25 16:36 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Mon Jun 25 17:07:33 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

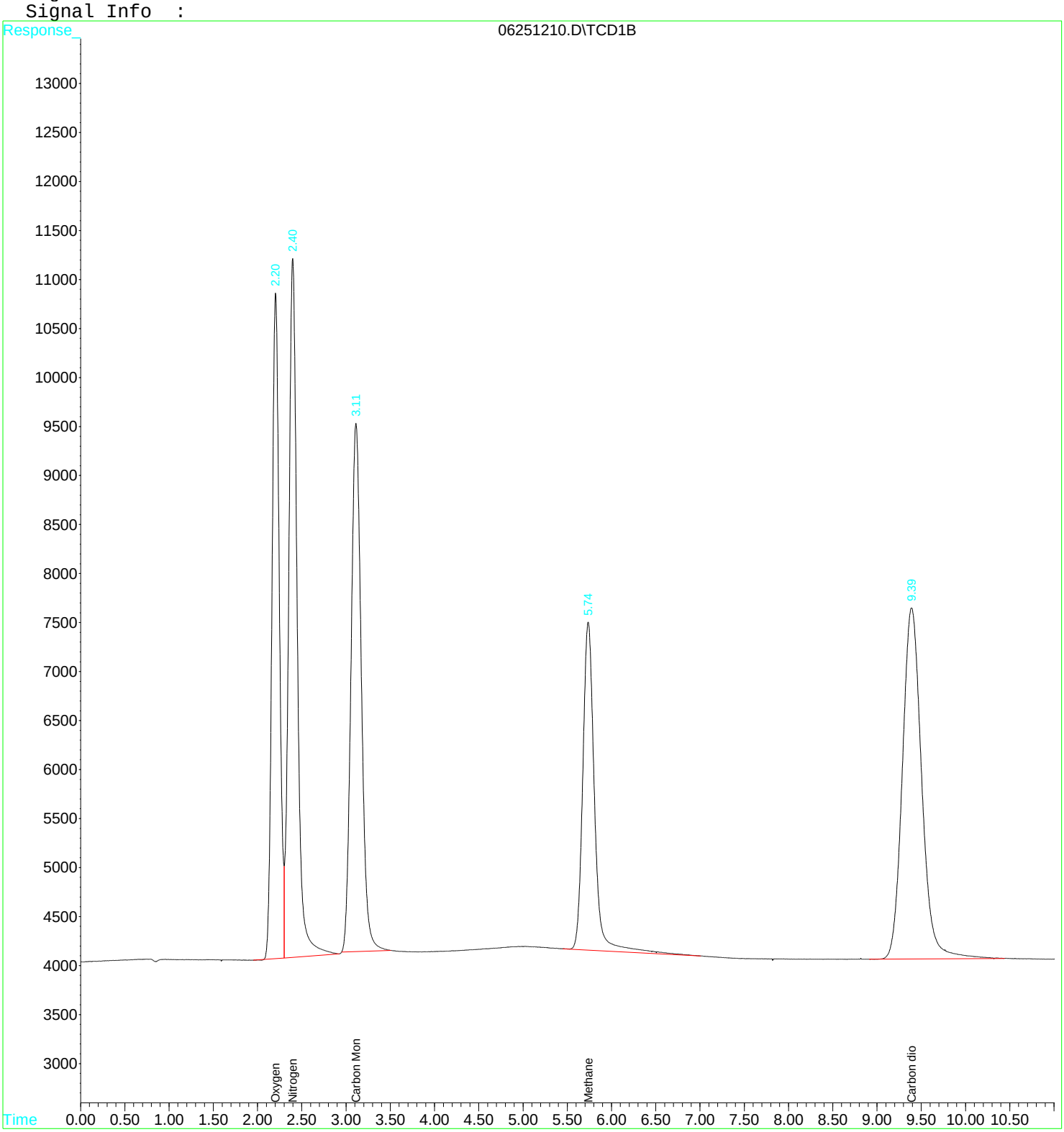
Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.20	391497	2.613	%
2)	Nitrogen	2.40	477577	2.746	%
3)	Carbon Monoxide	3.11	433851	2.664	%
4)	Methane	5.74	306500	2.139	%
5)	Carbon dioxide	9.39	542989	2.623	%

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\062512\06251210.D Vial: 1
Acq On : 25 Jun 2012 5:24 pm Operator:
Sample : ICV STD 1-2 Inst : GC/TCD
Misc : ICV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 25 16:36 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Mon Jun 25 17:07:33 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :