RTI LABORATORIES, INC.

Analytical Report

Level III Data Package

Work Order #: 1212722

Project: Kirtland AFB
Contract #: W912DY-10-D0014
CO#: 501
Tracking #: 140705-036A
Project # 140705
Task Order: 02

Shaw Environmental & Infrastructure, Inc
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Reviewed & Approved By: Date: 1/17/2013

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Contract #: W912DY-10-D0014

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RTI Laboratories, Inc.

Date: *17-Jan.-13*

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: 1212722

CASE NARRATIVE

SAMPLE RECEIPT:
Samples were received at the RTI Laboratory, Livonia, MI via commercial delivery on 12/18/2012 in good condition. The sample set consisted of 84 air samples.

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

SAMPLE 1212722-084A: Sample required secondary dilution for EPA Method TO15. Re-analysis exceeded hold time for Acetone, Cyclohexane, Heptane, n-Hexane and Toluene.

SAMPLES 1212722-054A & 055A: Instrument recalibration was required for QSM compliance for EPA Method TO15. Sample analysis exceeded hold time**.**

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 55285:

- SAMPLE 1212722-076A: High levels on non-target hydrocarbons present in sample.
- SAMPLE 1212722-017A: Internal standards Bromochloromethane failed +/-50% area count criteria. Not reporting any analytes associated with this Internal Standard (8000 Dilution Factor) under this analytical sequence ID. See Analytical Sequence ID 55245 for data for this sample.

RTI Laboratories, Inc.

Date: *17-Jan.-13*

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Project: Kirtland AFB
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Task Order: 02
Work Order: 1212722

CASE NARRATIVE

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.

Analytical Sequence ID 55137:

- Sample ID 1212722-038A DUP: The % RPD for C9-C12 Aliphatic Hydrocarbons was outside the acceptance criteria (200%).

Fixed Gases (Noncondensable Gases/Light 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.

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.

Celeste Horkash

Signed:_____for_____ Date:__January 17, 2013____
Charles O'Bryan, Director, Quality Management

RTI Laboratories - Definitions and Acronyms

WO#: 1212722

Date Reported: 1/14/2013
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

1212722

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV109

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

Samples Shipment Date: 13 DEC 2012
Lab Destination: RTI Laboratories
Lab Contact: Mike Truchan
Project Contact: Pamela Moss
Carrier/Waybill No.: UPS/2323121544

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) [signature] Date: 12/13/12 Time: 14:15
2. Relinquished By (Signature/Affiliation) n/a vmd 18dec12 Date: Time:
3. Relinquished By (Signature/Affiliation) Date: Time:

1. Received By (Signature/Affiliation) Rachel Dear Date: 18dec12 Time: 1114
2. Received By (Signature/Affiliation) n/a vmd 18dec12 Date: Time:
3. Received By (Signature/Affiliation) Date: Time:

Comments:
- packages signed for by Kathy Griffin
- Tedlar bag VA2197 received with low volume.
- Amber Vac sample VA2201 received at -1.5" Hg; VA2201 EPA-TO15 & MA-APH will be re-sampled. Run VA2201 tedlar bag for ASTM D2504 per client request. vmd 18dec12

	Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	"Hg Sample Vol	Units	Fil	CID	Condition On Receipt
1	VA1950	SVMW-02-050-GS-VA1950-REG	13 DEC 2012	10:26	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	624	
	VA1950	SVMW-02-050-GS-VA1950-REG	13 DEC 2012	10:26	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
2	VA1951	SVMW-02-100-GS-VA1951-REG	13 DEC 2012	10:50	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	693	
	VA1951	SVMW-02-100-GS-VA1951-REG	13 DEC 2012	10:50	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
3	VA1952	SVMW-02-150-GS-VA1952-REG	13 DEC 2012	11:13	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	826	
	VA1952	SVMW-02-150-GS-VA1952-REG	13 DEC 2012	11:13	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
4	VA1962	SVMW-05-050-GS-VA1962-REG	11 DEC 2012	08:38	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by	-4.5		N	815	

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV109

	Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol (" Hg)	Units	Fil	CID	Condition On Receipt
								MA DEP, VOCs / TPH by TO-15					
4	VA1962	SVMW-05-050-GS-VA1962-REG	11 DEC 2012	08:38	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
5	VA1963	SVMW-05-100-GS-VA1963-REG	11 DEC 2012	09:03	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4.5		N	635	
5	VA1963	SVMW-05-100-GS-VA1963-REG	11 DEC 2012	09:03	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
6	VA1964	SVMW-05-230-GS-VA1964-REG	11 DEC 2012	09:32	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	711	
6	VA1964	SVMW-05-230-GS-VA1964-REG	11 DEC 2012	09:32	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
7	VA1965	SVMW-05-290-GS-VA1965-REG	11 DEC 2012	09:57	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4.5		N	730	
7	VA1965	SVMW-05-290-GS-VA1965-REG	11 DEC 2012	09:57	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
8	VA1966	SVMW-06-050-GS-VA1966-REG	11 DEC 2012	10:44	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	750	
8	VA1966	SVMW-06-050-GS-VA1966-REG	11 DEC 2012	10:44	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
9	VA1967	SVMW-06-100-GS-VA1967-REG	11 DEC 2012	10:07	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	1173	
9	VA1967	SVMW-06-100-GS-VA1967-REG	11 DEC 2012	10:07	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
10	VA1968	SVMW-06-252-GS-VA1968-REG	11 DEC 2012	11:31	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	792	
10	VA1968	SVMW-06-252-GS-VA1968-REG	11 DEC 2012	11:31	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
dup 11	VA1969	SVMW-06-252-GS-VA1969-FD	11 DEC 2012	11:31	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	751	
dup 11	VA1969	SVMW-06-252-GS-VA1969-FD	11 DEC 2012	11:31	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
12	VA1970	SVMW-06-302-GS-VA1970-REG	11 DEC 2012	12:11	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	1218	
12	VA1970	SVMW-06-302-GS-VA1970-REG	11 DEC 2012	12:11	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
13	VA1971	SVMW-07-050-GS-VA1971-REG	13 DEC 2012	08:56	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4.5		N	522	
13	VA1971	SVMW-07-050-GS-VA1971-REG	13 DEC 2012	08:56	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
14	VA1972	SVMW-07-100-GS-VA1972-REG	13 DEC 2012	09:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4.5		N	1133	
14	VA1972	SVMW-07-100-GS-VA1972-REG	13 DEC 2012	09:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
15	VA1973	SVMW-07-150-GS-VA1973-REG	13 DEC 2012	10:06	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	658	
15	VA1973	SVMW-07-150-GS-VA1973-REG	13 DEC 2012	10:06	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
16	VA1992	SVMW-12-150-GS-VA1992-REG	11 DEC 2012	13:04	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	1190	
16	VA1992	SVMW-12-150-GS-VA1992-REG	11 DEC 2012	13:04	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
17	VA1993	SVMW-12-250-GS-VA1993-REG	11 DEC 2012	13:36	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	785	
17	VA1993	SVMW-12-250-GS-VA1993-REG	11 DEC 2012	13:36	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV109

	Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	"Hg Sample Vol	Units	Fil	CID	Condition On Receipt
18	VA1994	SVMW-12-350-GS-VA1994-REG	11 DEC 2012	14:14	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5.5		N	531	
	VA1994	SVMW-12-350-GS-VA1994-REG	11 DEC 2012	14:14	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
19	VA1995	SVMW-12-450-GS-VA1995-REG	11 DEC 2012	14:45	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5.5		N	609	
	VA1995	SVMW-12-450-GS-VA1995-REG	11 DEC 2012	14:45	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
20	VA2023	SVEW-10-410-GS-VA2023-REG	11 DEC 2012	15:33	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	591	
	VA2023	SVEW-10-410-GS-VA2023-REG	11 DEC 2012	15:33	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
dup 21	VA2024	SVEW-10-410-GS-VA2024-FD	11 DEC 2012	15:33	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	625	
	VA2024	SVEW-10-410-GS-VA2024-FD	11 DEC 2012	15:33	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
22	VA2048	KAFB-106111-025-GS-VA2048-REG	11 DEC 2012	13:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	1199	
	VA2048	KAFB-106111-025-GS-VA2048-REG	11 DEC 2012	13:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
23	VA2049	KAFB-106111-050-GS-VA2049-REG	11 DEC 2012	13:50	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5.5		N	604	
	VA2049	KAFB-106111-050-GS-VA2049-REG	11 DEC 2012	13:50	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
24	VA2050	KAFB-106111-150-GS-VA2050-REG	11 DEC 2012	14:20	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5.5		N	812	
	VA2050	KAFB-106111-150-GS-VA2050-REG	11 DEC 2012	14:20	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
25	VA2051	KAFB-106111-250-GS-VA2051-REG	11 DEC 2012	14:54	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5.5		N	521	
	VA2051	KAFB-106111-250-GS-VA2051-REG	11 DEC 2012	14:54	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
26	VA2052	KAFB-106111-350-GS-VA2052-REG	11 DEC 2012	15:27	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-3		N	585	
	VA2052	KAFB-106111-350-GS-VA2052-REG	11 DEC 2012	15:27	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
27	VA2053	KAFB-106111-450-GS-VA2053-REG	11 DEC 2012	16:03	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	1182	
	VA2053	KAFB-106111-450-GS-VA2053-REG	11 DEC 2012	16:03	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
28	VA2054	KAFB-106112-025-GS-VA2054-REG	12 DEC 2012	12:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	1195	
	VA2054	KAFB-106112-025-GS-VA2054-REG	12 DEC 2012	12:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
29	VA2055	KAFB-106112-050-GS-VA2055-REG	12 DEC 2012	13:14	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5.5		N	762	
	VA2055	KAFB-106112-050-GS-VA2055-REG	12 DEC 2012	13:14	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
30	VA2056	KAFB-106112-150-GS-VA2056-REG	12 DEC 2012	13:44	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5.5		N	557	
	VA2056	KAFB-106112-150-GS-VA2056-REG	12 DEC 2012	13:44	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
dup 31	VA2057	KAFB-106112-150-GS-VA2057-FD	12 DEC 2012	13:44	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	583	
	VA2057	KAFB-106112-150-GS-VA2057-FD	12 DEC 2012	13:44	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV109

	Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol (" Hg)	Units	Fil	CID	Condition On Receipt
32	VA2058	KAFB-106112-250-GS-VA2058-REG	12 DEC 2012	14:32	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	676	
	VA2058	KAFB-106112-250-GS-VA2058-REG	12 DEC 2012	14:32	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
33	VA2059	KAFB-106112-350-GS-VA2059-REG	12 DEC 2012	15:06	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5.5		N	679	
	VA2059	KAFB-106112-350-GS-VA2059-REG	12 DEC 2012	15:06	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
34	VA2060	KAFB-106112-450-GS-VA2060-REG	12 DEC 2012	16:01	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	582	
	VA2060	KAFB-106112-450-GS-VA2060-REG	12 DEC 2012	16:01	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
35	VA2094	KAFB-106118-025-GS-VA2094-REG	11 DEC 2012	09:32	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4.5		N	734	
	VA2094	KAFB-106118-025-GS-VA2094-REG	11 DEC 2012	09:32	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
36	VA2095	KAFB-106118-050-GS-VA2095-REG	11 DEC 2012	10:00	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	526	
	VA2095	KAFB-106118-050-GS-VA2095-REG	11 DEC 2012	10:00	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
37	VA2096	KAFB-106118-160-GS-VA2096-REG	11 DEC 2012	10:32	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	561	
	VA2096	KAFB-106118-160-GS-VA2096-REG	11 DEC 2012	10:32	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
38	VA2097	KAFB-106118-265-GS-VA2097-REG	11 DEC 2012	11:07	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5.5		N	721	
	VA2097	KAFB-106118-265-GS-VA2097-REG	11 DEC 2012	11:07	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
39	VA2098	KAFB-106118-350-GS-VA2098-REG	11 DEC 2012	11:43	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	692	
	VA2098	KAFB-106118-350-GS-VA2098-REG	11 DEC 2012	11:43	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
40	VA2099	KAFB-106118-450-GS-VA2099-REG	11 DEC 2012	12:20	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	789	
	VA2099	KAFB-106118-450-GS-VA2099-REG	11 DEC 2012	12:20	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
41	VA2100	KAFB-106119-025-GS-VA2100-REG	12 DEC 2012	13:00	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
	VA2100	KAFB-106119-025-GS-VA2100-REG	12 DEC 2012	13:00	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6.5		N	804	
42	VA2101	KAFB-106119-050-GS-VA2101-REG	12 DEC 2012	13:30	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	835	
	VA2101	KAFB-106119-050-GS-VA2101-REG	12 DEC 2012	13:30	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
43	VA2102	KAFB-106119-150-GS-VA2102-REG	12 DEC 2012	13:59	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5.5		N	546	
	VA2102	KAFB-106119-150-GS-VA2102-REG	12 DEC 2012	13:59	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
44	VA2103	KAFB-106119-250-GS-VA2103-REG	12 DEC 2012	14:31	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5.5		N	525	
	VA2103	KAFB-106119-250-GS-VA2103-REG	12 DEC 2012	14:31	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
45	VA2104	KAFB-106119-350-GS-VA2104-REG	12 DEC 2012	15:05	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	774	
	VA2104	KAFB-106119-350-GS-VA2104-REG	12 DEC 2012	15:05	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

* low volume tedlar bag

Reference Document No: 140705-SV109

	Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol (" Hg)	Units	Fil	CID	Condition On Receipt
dup 46	VA2105	KAFB-106119-350-GS-VA2105-FD	12 DEC 2012	15:05	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	741	
	VA2105	KAFB-106119-350-GS-VA2105-FD	12 DEC 2012	15:05	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
47	VA2106	KAFB-106119-450-GS-VA2106-REG	12 DEC 2012	15:56	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	1148	
	VA2106	KAFB-106119-450-GS-VA2106-REG	12 DEC 2012	15:56	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
48	VA2166	KAFB-106129-025-GS-VA2166-REG	13 DEC 2012	08:52	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4.5		N	727	
	VA2166	KAFB-106129-025-GS-VA2166-REG	13 DEC 2012	08:52	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
49	VA2167	KAFB-106129-050-GS-VA2167-REG	13 DEC 2012	09:20	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4.5		N	641	
	VA2167	KAFB-106129-050-GS-VA2167-REG	13 DEC 2012	09:20	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
50	VA2168	KAFB-106129-150-GS-VA2168-REG	13 DEC 2012	09:51	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4		N	1170	
	VA2168	KAFB-106129-150-GS-VA2168-REG	13 DEC 2012	09:51	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
51	VA2169	KAFB-106129-250-GS-VA2169-REG	13 DEC 2012	10:26	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	655	
	VA2169	KAFB-106129-250-GS-VA2169-REG	13 DEC 2012	10:26	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
52	VA2170	KAFB-106129-350-GS-VA2170-REG	13 DEC 2012	11:02	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	1215	
	VA2170	KAFB-106129-350-GS-VA2170-REG	13 DEC 2012	11:02	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
53	VA2171	KAFB-106129-450-GS-VA2171-REG	13 DEC 2012	11:40	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5.5		N	567	
	VA2171	KAFB-106129-450-GS-VA2171-REG	13 DEC 2012	11:40	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
54	VA2195	KAFB-106133-250-GS-VA2195-REG	06 DEC 2012	15:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5.5		N	464	
	VA2195	KAFB-106133-250-GS-VA2195-REG	06 DEC 2012	15:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
55	VA2196	KAFB-106133-350-GS-VA2196-REG	06 DEC 2012	16:21	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5.5		N	649	
	VA2196	KAFB-106133-350-GS-VA2196-REG	06 DEC 2012	16:21	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
56	VA2197	KAFB-106133-450-GS-VA2197-REG	10 DEC 2012	08:32	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4		N	579	
	VA2197	KAFB-106133-450-GS-VA2197-REG	10 DEC 2012	08:32	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		* okay - low volum
57	VA2198	KAFB-106134-025-GS-VA2198-REG	10 DEC 2012	09:37	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	656	
	VA2198	KAFB-106134-025-GS-VA2198-REG	10 DEC 2012	09:37	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
dup 58	VA2199	KAFB-106134-025-GS-VA2199-FD	10 DEC 2012	09:37	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	612	
	VA2199	KAFB-106134-025-GS-VA2199-FD	10 DEC 2012	09:37	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
59	VA2200	KAFB-106134-050-GS-VA2200-REG	10 DEC 2012	10:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	695	
	VA2200	KAFB-106134-050-GS-VA2200-REG	10 DEC 2012	10:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

* out of acceptable criteria of -3" Hg to -7" Hg

Reference Document No: 140705-SV109

	Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
60	VA2201	KAFB-106134-170-GS-VA2201-REG	10 DEC 2012	10:53	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	* -1.5	*	N	1181	RESAMPLE
	VA2201	KAFB-106134-170-GS-VA2201-REG	10 DEC 2012	10:53	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
61	VA2202	KAFB-106134-250-GS-VA2202-REG	10 DEC 2012	11:28	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
	VA2202	KAFB-106134-250-GS-VA2202-REG	10 DEC 2012	11:28	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	689	
62	VA2203	KAFB-106134-350-GS-VA2203-REG	10 DEC 2012	12:04	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	1185	
	VA2203	KAFB-106134-350-GS-VA2203-REG	10 DEC 2012	12:04	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
63	VA2204	KAFB-106134-450-GS-VA2204-REG	10 DEC 2012	12:42	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	728	
	VA2204	KAFB-106134-450-GS-VA2204-REG	10 DEC 2012	12:42	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
64	VA2232	KAFB-106139-025-GS-VA2232-REG	10 DEC 2012	13:31	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	1209	
	VA2232	KAFB-106139-025-GS-VA2232-REG	10 DEC 2012	13:31	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
65	VA2233	KAFB-106139-050-GS-VA2233-REG	10 DEC 2012	14:00	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	791	
	VA2233	KAFB-106139-050-GS-VA2233-REG	10 DEC 2012	14:00	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
66	VA2234	KAFB-106139-150-GS-VA2234-REG	10 DEC 2012	14:31	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4.5		N	1191	
	VA2234	KAFB-106139-150-GS-VA2234-REG	10 DEC 2012	14:31	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
67	VA2235	KAFB-106139-250-GS-VA2235-REG	10 DEC 2012	15:05	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4.5		N	634	
	VA2235	KAFB-106139-250-GS-VA2235-REG	10 DEC 2012	15:05	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
68	VA2236	KAFB-106139-250-GS-VA2236-FD	10 DEC 2012	15:05	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4		N	576	
	VA2236	KAFB-106139-250-GS-VA2236-FD	10 DEC 2012	15:05	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
69	VA2237	KAFB-106139-350-GS-VA2237-REG	10 DEC 2012	15:53	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4		N	752	
	VA2237	KAFB-106139-350-GS-VA2237-REG	10 DEC 2012	15:53	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
70	VA2238	KAFB-106139-450-GS-VA2238-REG	11 DEC 2012	08:40	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4.5		N	732	
	VA2238	KAFB-106139-450-GS-VA2238-REG	11 DEC 2012	08:40	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
71	VA2239	KAFB-106140-025-GS-VA2239-REG	12 DEC 2012	08:32	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
	VA2239	KAFB-106140-025-GS-VA2239-REG	12 DEC 2012	08:32	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4		N	809	
72	VA2240	KAFB-106140-050-GS-VA2240-REG	12 DEC 2012	09:04	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4		N	698	
	VA2240	KAFB-106140-050-GS-VA2240-REG	12 DEC 2012	09:04	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
73	VA2241	KAFB-106140-150-GS-VA2241-REG	12 DEC 2012	09:38	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4.5		N	806	
	VA2241	KAFB-106140-150-GS-VA2241-REG	12 DEC 2012	09:38	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV109

	Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol (" Hg)	Units	Fil	CID	Condition On Receipt
74	VA2242	KAFB-106140-250-GS-VA2242-REG	12 DEC 2012	10:13	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4.5		N	707	
	VA2242	KAFB-106140-250-GS-VA2242-REG	12 DEC 2012	10:13	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
75	VA2243	KAFB-106140-350-GS-VA2243-REG	12 DEC 2012	10:59	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	685	
	VA2243	KAFB-106140-350-GS-VA2243-REG	12 DEC 2012	10:59	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
76	VA2244	KAFB-106140-450-GS-VA2244-REG	12 DEC 2012	11:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	745	
	VA2244	KAFB-106140-450-GS-VA2244-REG	12 DEC 2012	11:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
77	VA2252	KAFB-106142-030-GS-VA2252-REG	12 DEC 2012	08:29	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4		N	630	
	VA2252	KAFB-106142-030-GS-VA2252-REG	12 DEC 2012	08:29	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
78	VA2253	KAFB-106142-050-GS-VA2253-REG	12 DEC 2012	08:58	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4		N	726	
	VA2253	KAFB-106142-050-GS-VA2253-REG	12 DEC 2012	08:58	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
79	VA2254	KAFB-106142-170-GS-VA2254-REG	12 DEC 2012	09:16	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4.5		N	589	
	VA2254	KAFB-106142-170-GS-VA2254-REG	12 DEC 2012	09:16	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
80	VA2255	KAFB-106142-250-GS-VA2255-REG	12 DEC 2012	10:05	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4.5		N	540	
	VA2255	KAFB-106142-250-GS-VA2255-REG	12 DEC 2012	10:05	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
81	VA2256	KAFB-106142-350-GS-VA2256-REG	12 DEC 2012	10:43	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
	VA2256	KAFB-106142-350-GS-VA2256-REG	12 DEC 2012	10:43	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-3.5		N	536	
82	VA2257	KAFB-106142-450-GS-VA2257-REG	12 DEC 2012	11:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	549	
	VA2257	KAFB-106142-450-GS-VA2257-REG	12 DEC 2012	11:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
83	VA2258	KAFB-106142-450-GS-VA2258-FD	12 DEC 2012	11:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4.5		N	830	
	VA2258	KAFB-106142-450-GS-VA2258-FD	12 DEC 2012	11:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		good
84	VA8109-TB	FIELDQC-AQ-VA8109-TB-TB	06 DEC 2012	12:00	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15	-30		N	713	

FROM:
DAVID AUBREY
(505) 307-8968
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

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

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4178 8162

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

REF 1:140705
REF 2:BB010030

RTI LABORATORIES
31628 GLENDALE ST

LIVONIA MI 48150

P: RED2 S: MPUR I: 3

DAG-4100

1Z10335E034178 8162

LRH9QDH MILIV138 DEC 18 04:18:24 2012
US 4821 HIP 12.1.6 OKILE810

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

12 amber vacs RD2
18dec12

WS 15.0.16 HP LaserJet 4 33.0A 10/2012

Fold here and place in label pouch

CUSTODY SEAL
DATE 12/13/12
SIGNATURE

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

FROM:
DAVID AUBREY
(505) 307-8968
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

1 LBS 2 OF 12
DWT: 12,9,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4020 5373

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

REF 1:140705
REF 2:BB010030

RTI LABORATORIES
31628 GLENDALE ST

LIVONIA MI 48150

P: RED2 S: MPUR I: 3

DAG -4100

1Z10335E 020 5373

LRW90DH 4 DEC 18 04:54:48 2012
US 4821 HIF 6 OKILE810

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

WS 15.0.16 HP LaserJet 4 33.0A 10/2012

Fold here and place in label pouch

CUSTODY SEAL
DATE 12/13/12
SIGNATURE T Dag

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

4 Tedlar Bags

Account Number	Emergency Contact Number	For Air Services Only (This shipment is within the limitations prescribed for: (Delete Non-Applicable Mode))
10335E	(800) 424-9300	
Reference Number	ER Registrant	~~Passenger Aircraft~~ XXXX / ~~Cargo Aircraft Only~~ XXXX
1Z10335E0340205373	Chemtrec CCN20044	

Hazardous Materials Description and Quantity
UN3167, Gas sample, non-pressurized, flammable, n.o.s., 2.1, ERG 115, 1 Fiberboard Box x 5 L

For Air Shipments, "I declare that all of the applicable air transport requirements have been met".
I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/ placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.
If this shipment contains radioactive material acceptable for passenger aircraft, such material is intended for use in, or incident to, research, medical diagnosis or treatment.

Signature 12/13/12 Date

Carrier Use Only
Initials DLD
SLIC 8710
Date 12/13/12

Page 1 of 1 1 Package

FROM:
DAVID AUBREY
(505) 307-8968
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

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

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4258 9189

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

REF 1:140705
REF 2:BB010030

RTI LABORATORIES
31628 GLENDALE ST
LIVONIA MI 48150

P: RED2 S: MPJR I: 3
DAG-4100
1Z10335E034258 9189
HBT7WST MILIV181 DEC 18 06:51:00 2012
US 4821 HIP 12.1.6 OKILE810

BILLING: P/P

12 amber vacs - RD2
18 dec 12

WS 15.0.16 HP LaserJet 4 33.0A 10/2012

Fold here and place in label pouch

CUSTODY SEAL
DATE 12/13/12
SIGNATURE

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

FROM:
DAVID AUBREY
(505) 307-8968
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

20 LBS **4 OF 12**
DWT: 20,14,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4057 5590

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

REF 1:140705
REF 2:BB010030

RTI LABORATORIES
31628 GLENDALE ST

LIVONIA MI 48150

P: RED2 S: MPUR I: 3

DAG-4100

1Z10335E034057 5590

LRW9QDH MILIV138 DEC 18 04:22:06 2012
US 4821 HIP 12.1.6 OKILE810

BILLING: P/P

12 amber vacs - RD2
18dec12

WS 15.0.16 HP LaserJet 4 33.0A 10/2012

Fold here and place in label pouch

CUSTODY SEAL
DATE 12/13/12
SIGNATURE

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

FROM:
DAVID AUBREY
(505) 307-8968
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

20 LBS **5 OF 12**
DWT: 20,14,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4236 0602

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

REF 1:140705
REF 2:BB010030

RTI LABORATORIES
31628 GLENDALE ST

LIVONIA MI 48150

P: RED2 S: MPUR I: 3

DAG-4100

1Z10335E034236 0602

NRR7RRR MILIV134 DEC 17 20:56:55 2012
IS 4821 HIP 12.1.6 OKILE810

BILLING: P/P

12 amber vacs - RD2
18dec12

WS 15.0.16 HP LaserJet 4 33.0A 10/2012

Fold here and place in label pouch

CUSTODY SEAL
DATE 12/13/12
SIGNATURE

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

FROM:
DAVID AUBREY
(505) 307-8968
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

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

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4030 0215

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

REF 1:140705
REF 2:BB010030

TI LABORATORIES
1628 GLENDALE ST

IVONIA MI 48150

: RED2 S: MPUR I: 3

DAG-4100

Z10335E034030 0215

RR7RRR MILIV134 DEC 17 20:48:52 2012
4821 HIP 12.1.6 OKILE810

BILLING: P/P

12 amber vacs - RD2
18dec12

WS 15.0.16 HP LaserJet 4 33.0A 10/2012

Fold here and place in label pouch

CUSTODY SEAL
DATE 12/13/12
SIGNATURE

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

FROM:
DAVID AUBREY
(505) 307-8968
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

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

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4151 0424

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

REF 1:140705
REF 2:BB010030

BILLING: P/P

RTI LABORATORIES
31628 GLENDALE ST

LIVONIA MI 48150

P: RED2 S: MPUR I: 3

DAG-4100

1Z10335E034151 0424

LRW9QDH MILIV13B DEC 18 04:37:51 2012
US 4821 HIP 12.1.6 OKILE810

12 amber vacs -RD2
18dec12

WS 15.0.16 HP LaserJet 4 33.0A 10/2012

Fold here and place in label pouch

CUSTODY SEAL
DATE 12/13/12
SIGNATURE

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

FROM:
DAVID AUBREY
(505) 307-8968
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

20 LBS **8 OF 12**
DWT: 20,14,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4146 7231

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

REF 1:140705
REF 2:BB010030

RTI LABORATORIES
31628 GLENDALE ST

LIVONIA MI 48150

P: RED2 S: MPUR I: 3

DAG-4100

1Z10335E034146 7231

MRR7RRR MILIV134 DEC 17 20:54:28 2012
US 4821 HIP 12.1.6 OKILE810

BILLING: P/P

12 amber VOCs - RD2 18dec12

WS 15.0.16 HP LaserJet 4 33.0A 10/2012

Fold here and place in label pouch

CUSTODY SEAL
DATE 12/13/12
SIGNATURE

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

FROM:
DAVID AUBREY
(505) 307-8968
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

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

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4260 6641

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

REF 1:140705
REF 2:BB010030

RTI LABORATORIES
31628 GLENDALE ST

LIVONIA MI 48150

P: RED2 S: MPUR I: 3

DAG-4100

1Z10335E034260 6641

MRR7RRR MILIV134 DEC 17 20:54:40 2012
IS 4821 HIP 12.1.6 OKILE810

BILLING: P/P

WS 15.0.16 HP LaserJet 4 33.0A 10/2012

Fold here and place in label pouch

24 tedlar bags

CUSTODY SEAL
DATE 12/13/12
SIGNATURE TRJ

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

2197 - Volume - Low
OK 2
analyze

FROM:
DAVID AUBREY
(505) 307-8968
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

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

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4292 4655

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

REF 1:140705
REF 2:BB010030

RTI LABORATORIES
31628 GLENDALE ST
LIVONIA MI 48150

P: RED2 S: MPUR I: 3

DAG-4100

1Z10335E034292 4655

1RR7RRR MILIV134 DEC 17 20:53:51 2012
1S 4821 HIP 12.1.6 OKILE810

BILLING: P/P

WS 15.0.16 HP LaserJet 4 33.0A 10/2012

Fold here and place in label pouch

CUSTODY SEAL
DATE 12/13/12
SIGNATURE [illegible]

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

24 - Tedlar Bags

FROM:
DAVID AUBREY
(505) 307-8968
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

3 LBS 11 OF 12
DWT: 18,18,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4257 7263

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

REF 1:140705
REF 2:BB010030

RTI LABORATORIES
31628 GLENDALE ST

LIVONIA MI 48150

P: RED2 S: MPUR I: 3

DAG-4100

1Z10335E034257 7263

LRW9QDH MILIV138 DEC 18 04:20:41 2012
US 4821 HIP 12.1.6 OKILEB10

BILLING: P/P

2le tedlar bags RD2 18dec12

WS 15.0.16 HP LaserJet 4 33.0A 10/2012

Fold here and place in label pouch

CUSTODY SEAL
DATE 12/13/12
SIGNATURE [illegible]

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

FROM:
DAVID AUBREY
(505) 307-8968
KAFB BFF/SHAW E & I, INC.
5202 RANDOLPH AVE SE
KIRTLAND AFB NM 87117

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

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4148 0476

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

REF 1:140705
REF 2:BB010030

BILLING: P/P

7le regulators RD2 18dec12

WS 15.0.16 HP LaserJet 4 33.0A 10/2012

Fold here and place in label pouch

REV. 12/0

CUSTODY SEAL
DATE 12/13/12
SIGNATURE TNoel

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

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:	**1212722**
RCPNo: **1**	Date and Time Received: **12/18/2012 11:14:00 AM**	Received by:	**Katherine Griffin**
Completed By:	Rachel Dean	Reviewed By:	Katherine Griffin
Completed Date:	**12/18/2012 4:37:21 PM**	Reviewed Date:	**12/19/2012 10:55 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: **1212722**

Comment: VA2197-Tedlar bag: received with low volume, enough to proceed with analysis

VA2201-Amber Vac was received at -1.5"Hg, which is out of acceptable crieteria (-3"Hg to -7"Hg) VA2201 will be re-sampled for EPA_TO15 & MA_APH analysis.

1 of 12: 1Z 103 35E 03 4178 8162
2 of 12: 1Z 103 35E 03 4020 5373
3 of 12: 1Z 103 35E 03 4258 9189
4 of 12: 1Z 103 35E 03 4057 5590
5 of 12: 1Z 103 35E 03 4236 0602
6 of 12: 1Z 103 35E 03 4030 0215
7 of 12: 1Z 103 35E 03 4151 0424
8 of 12: 1Z 103 35E 03 4146 7231
9 of 12: 1Z 103 35E 03 4260 6641
10 of 12: 1Z 103 35E 03 4292 4655
11 of 12: 1Z 103 35E 03 4257 7263
12 of 12: 1Z 103 35E 03 4148 0476

Client Contacted: Yes [x] No [ ] NA [ ] Person Contacted: Suasn, David & Lisa

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

Date Contacted: **12/18/2012 12:01:00 PM** Contacted By: **Rachel Dear**

Regarding: -1.5"Hg vacuum reading, out of acceptable criteria

Client Instructions: Cancel VA2201 EPA_TO15 & MA_APH analysis

CorrectiveAction: Client resampling - VA2201

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By
		Good	No	n/a		

SampleID	ContainerID	Type	Vacuum Read (inch Hg)	Orig pH	Adj pH	Req Min pH	Req Max pH
1212722-001A	624	Bottle	-5" Hg				
1212722-001B	Container-01 of 01	Bottle					
1212722-002A	693	Bottle	-5"Hg				
1212722-002B	Container-01 of 01	Bottle					
1212722-003A	826	Bottle	-6"Hg				
1212722-003B	Container-01 of 01	Bottle					
1212722-004A	815	Bottle	-4.5"Hg				
1212722-004B	Container-01 of 01	Bottle					
1212722-005A	635	Bottle	-4.5"Hg				
1212722-005B	Container-01 of 01	Bottle					
1212722-006A	711	Bottle	-5"Hg				
1212722-006B	Container-01 of 01	Bottle					
1212722-007A	730	Bottle	-4.5"Hg				
1212722-007B	Container-01 of 01	Bottle					
1212722-008A	750	Bottle	-5"Hg				
1212722-008B	Container-01 of 01	Bottle					
1212722-009A	1173	Bottle	-5"Hg				
1212722-009B	Container-01 of 01	Bottle					
1212722-010A	792	Bottle	-5"Hg				

1212722-010B	Container-01 of 01	Bottle					
1212722-011A	751	Bottle	-5"Hg				
1212722-011B	Container-01 of 01	Bottle					
1212722-012A	1218	Bottle	-5"Hg				
1212722-012B	Container-01 of 01	Bottle					
1212722-013A	522	Bottle	-4.5"Hg				
1212722-013B	Container-01 of 01	Bottle					
1212722-014A	1133	Bottle	-4.5"Hg				
1212722-014B	Container-01 of 01	Bottle					
1212722-015A	658	Bottle	-5"Hg				
1212722-015B	Container-01 of 01	Bottle					
1212722-016A	1190	Bottle	-5"Hg				
1212722-016B	Container-01 of 01	Bottle					
1212722-017A	785	Bottle	-5"Hg				
1212722-017B	Container-01 of 01	Bottle					
1212722-018A	531	Bottle	-5.5"Hg				
1212722-018B	Container-01 of 01	Bottle					
1212722-019A	669	Bottle	-5.5"Hg				
1212722-019B	Container-01 of 01	Bottle					
1212722-020A	591	Bottle	-5"Hg				
1212722-020B	Container-01 of 01	Bottle					
1212722-021A	625	Bottle	-5"Hg				
1212722-021B	Container-01 of 01	Bottle					
1212722-022A	1199	Bottle	-5"Hg				
1212722-022B	Container-01 of 01	Bottle					
1212722-023A	604	Bottle	-5.5"Hg				
1212722-023B	Container-01 of 01	Bottle					
1212722-024A	812	Bottle	-5.5"Hg				
1212722-024B	Container-01 of 01	Bottle					
1212722-025A	521	Bottle	-5.5"Hg				
1212722-025B	Container-01 of 01	Bottle					
1212722-026A	585	Bottle	-3"Hg				
1212722-026B	Container-01 of 01	Bottle					
1212722-027A	1182	Bottle	-5"Hg				
1212722-027B	Container-01 of 01	Bottle					
1212722-028A	1195	Bottle	-6"Hg				
1212722-028B	Container-01 of 01	Bottle					
1212722-029A	762	Bottle	-5.5"Hg				
1212722-029B	Container-01 of 01	Bottle					
1212722-030A	557	Bottle	-5.5"Hg				
1212722-030B	Container-01 of 01	Bottle					
1212722-031A	583	Bottle	-6"Hg				
1212722-031B	Container-01 of 01	Bottle					
1212722-032A	676	Bottle	-6"Hg				
1212722-032B	Container-01 of 01	Bottle					
1212722-033A	679	Bottle	-5.5"Hg				
1212722-033B	Container-01 of 01	Bottle					
1212722-034A	582	Bottle	-5"Hg				
1212722-034B	Container-01 of 01	Bottle					

1212722-035A	734	Bottle	-4.5"Hg				
1212722-035B	Container-01 of 01	Bottle					
1212722-036A	526	Bottle	-5"Hg				
1212722-036B	Container-01 of 01	Bottle					
1212722-037A	561	Bottle	-5"Hg				
1212722-037B	Container-01 of 01	Bottle					
1212722-038A	721	Bottle	-5.5"Hg				
1212722-038B	Container-01 of 01	Bottle					
1212722-039A	692	Bottle	-5"Hg				
1212722-039B	Container-01 of 01	Bottle					
1212722-040A	789	Bottle	-5"Hg				
1212722-040B	Container-01 of 01	Bottle					
1212722-041A	804	Bottle	-6.5"Hg				
1212722-041B	Container-01 of 01	Bottle					
1212722-042A	835	Bottle	-5"Hg				
1212722-042B	Container-01 of 01	Bottle					
1212722-043A	546	Bottle	-5.5"Hg				
1212722-043B	Container-01 of 01	Bottle					
1212722-044A	525	Bottle	-5.5"Hg				
1212722-044B	Container-01 of 01	Bottle					
1212722-045A	774	Bottle	-5"Hg				
1212722-045B	Container-01 of 01	Bottle					
1212722-046A	761	Bottle	-5"Hg				
1212722-046B	Container-01 of 01	Bottle					
1212722-047A	1148	Bottle	-5"Hg				
1212722-047B	Container-01 of 01	Bottle					
1212722-048A	727	Bottle	-4.5"Hg				
1212722-048B	Container-01 of 01	Bottle					
1212722-049A	661	Bottle	-4.5"Hg				
1212722-049B	Container-01 of 01	Bottle					
1212722-050A	1170	Bottle	-4"Hg				
1212722-050B	Container-01 of 01	Bottle					
1212722-051A	655	Bottle	-5"Hg				
1212722-051B	Container-01 of 01	Bottle					
1212722-052A	1215	Bottle	-6"Hg				
1212722-052B	Container-01 of 01	Bottle					
1212722-053A	562	Bottle	-5.5"Hg				
1212722-053B	Container-01 of 01	Bottle					
1212722-054A	664	Bottle	-5.5"Hg				
1212722-054B	Container-01 of 01	Bottle					
1212722-055A	649	Bottle	-5.5"Hg				
1212722-055B	Container-01 of 01	Bottle					
1212722-056A	579	Bottle	-4"Hg				
1212722-056B	Container-01 of 01	Bottle					
1212722-057A	656	Bottle	-5"Hg				
1212722-057B	Container-01 of 01	Bottle					
1212722-058A	612	Bottle	-5"Hg				
1212722-058B	Container-01 of 01	Bottle					
1212722-059A	695	Bottle	-5"Hg				

1212722-059B	Container-01 of 01	Bottle					
1212722-060B	Container-01 of 01	Bottle					
1212722-061A	689	Bottle	-5"Hg				
1212722-061B	Container-01 of 01	Bottle					
1212722-062A	1185	Bottle	-5"Hg				
1212722-062B	Container-01 of 01	Bottle					
1212722-063A	728	Bottle	-5"Hg				
1212722-063B	Container-01 of 01	Bottle					
1212722-064A	1209	Bottle	-5"Hg				
1212722-064B	Container-01 of 01	Bottle					
1212722-065A	791	Bottle	-5"Hg				
1212722-065B	Container-01 of 01	Bottle					
1212722-066A	1191	Bottle	-4.5"Hg				
1212722-066B	Container-01 of 01	Bottle					
1212722-067A	634	Bottle	-4.5"Hg				
1212722-067B	Container-01 of 01	Bottle					
1212722-068A	576	Bottle	-4"Hg				
1212722-068B	Container-01 of 01	Bottle					
1212722-069A	752	Bottle	-4"Hg				
1212722-069B	Container-01 of 01	Bottle					
1212722-070A	732	Bottle	-4.5"Hg				
1212722-070B	Container-01 of 01	Bottle					
1212722-071A	809	Bottle	-4"Hg				
1212722-071B	Container-01 of 01	Bottle					
1212722-072A	698	Bottle	-4"Hg				
1212722-072B	Container-01 of 01	Bottle					
1212722-073A	806	Bottle	-4.5"Hg				
1212722-073B	Container-01 of 01	Bottle					
1212722-074A	707	Bottle	-4.5"Hg				
1212722-074B	Container-01 of 01	Bottle					
1212722-075A	685	Bottle	-5"Hg				
1212722-075B	Container-01 of 01	Bottle					
1212722-076A	745	Bottle	-5"Hg				
1212722-076B	Container-01 of 01	Bottle					
1212722-077A	630	Bottle	-4"Hg				
1212722-077B	Container-01 of 01	Bottle					
1212722-078A	726	Bottle	-4"Hg				
1212722-078B	Container-01 of 01	Bottle					
1212722-079A	589	Bottle	-4.5"Hg				
1212722-079B	Container-01 of 01	Bottle					
1212722-080A	540	Bottle	-4.5"Hg				
1212722-080B	Container-01 of 01	Bottle					
1212722-081A	536	Bottle	-3.5"Hg				
1212722-081B	Container-01 of 01	Bottle					
1212722-082A	549	Bottle	-5"Hg				
1212722-082B	Container-01 of 01	Bottle					
1212722-083A	830	Bottle	-4.5"Hg				
1212722-083B	Container-01 of 01	Bottle					
1212722-084A	713	Bottle	-30"Hg				

RTI Laboratories - Workorder Sample Summary

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1212722-001A	VA1950		12/13/2012 10:26 AM	12/18/2012 11:14 AM	Air
1212722-001B	VA1950		12/13/2012 10:26 AM	12/18/2012 11:14 AM	Air
1212722-002A	VA1951		12/13/2012 10:50 AM	12/18/2012 11:14 AM	Air
1212722-002B	VA1951		12/13/2012 10:50 AM	12/18/2012 11:14 AM	Air
1212722-003A	VA1952		12/13/2012 11:13 AM	12/18/2012 11:14 AM	Air
1212722-003B	VA1952		12/13/2012 11:13 AM	12/18/2012 11:14 AM	Air
1212722-004A	VA1962		12/11/2012 8:38 AM	12/18/2012 11:14 AM	Air
1212722-004B	VA1962		12/11/2012 8:38 AM	12/18/2012 11:14 AM	Air
1212722-005A	VA1963		12/11/2012 9:03 AM	12/18/2012 11:14 AM	Air
1212722-005B	VA1963		12/11/2012 9:03 AM	12/18/2012 11:14 AM	Air
1212722-006A	VA1964		12/11/2012 9:32 AM	12/18/2012 11:14 AM	Air
1212722-006B	VA1964		12/11/2012 9:32 AM	12/18/2012 11:14 AM	Air
1212722-007A	VA1965		12/11/2012 9:57 AM	12/18/2012 11:14 AM	Air
1212722-007B	VA1965		12/11/2012 9:57 AM	12/18/2012 11:14 AM	Air
1212722-008A	VA1966		12/11/2012 10:44 AM	12/18/2012 11:14 AM	Air
1212722-008B	VA1966		12/11/2012 10:44 AM	12/18/2012 11:14 AM	Air
1212722-009A	VA1967		12/11/2012 10:07 AM	12/18/2012 11:14 AM	Air
1212722-009B	VA1967		12/11/2012 10:07 AM	12/18/2012 11:14 AM	Air
1212722-010A	VA1968		12/11/2012 11:31 AM	12/18/2012 11:14 AM	Air
1212722-010B	VA1968		12/11/2012 11:31 AM	12/18/2012 11:14 AM	Air
1212722-011A	VA1969		12/11/2012 11:31 AM	12/18/2012 11:14 AM	Air
1212722-011B	VA1969		12/11/2012 11:31 AM	12/18/2012 11:14 AM	Air
1212722-012A	VA1970		12/11/2012 12:11 PM	12/18/2012 11:14 AM	Air
1212722-012B	VA1970		12/11/2012 12:11 PM	12/18/2012 11:14 AM	Air
1212722-013A	VA1971		12/13/2012 8:56 AM	12/18/2012 11:14 AM	Air
1212722-013B	VA1971		12/13/2012 8:56 AM	12/18/2012 11:14 AM	Air
1212722-014A	VA1972		12/13/2012 9:22 AM	12/18/2012 11:14 AM	Air
1212722-014B	VA1972		12/13/2012 9:22 AM	12/18/2012 11:14 AM	Air
1212722-015A	VA1973		12/13/2012 10:06 AM	12/18/2012 11:14 AM	Air
1212722-015B	VA1973		12/13/2012 10:06 AM	12/18/2012 11:14 AM	Air
1212722-016A	VA1992		12/11/2012 1:04 PM	12/18/2012 11:14 AM	Air
1212722-016B	VA1992		12/11/2012 1:04 PM	12/18/2012 11:14 AM	Air
1212722-017A	VA1993		12/11/2012 1:36 PM	12/18/2012 11:14 AM	Air
1212722-017B	VA1993		12/11/2012 1:36 PM	12/18/2012 11:14 AM	Air
1212722-018A	VA1994		12/11/2012 2:14 PM	12/18/2012 11:14 AM	Air
1212722-018B	VA1994		12/11/2012 2:14 PM	12/18/2012 11:14 AM	Air
1212722-019A	VA1995		12/11/2012 2:45 PM	12/18/2012 11:14 AM	Air
1212722-019B	VA1995		12/11/2012 2:45 PM	12/18/2012 11:14 AM	Air
1212722-020A	VA2023		12/11/2012 3:33 PM	12/18/2012 11:14 AM	Air
1212722-020B	VA2023		12/11/2012 3:33 PM	12/18/2012 11:14 AM	Air
1212722-021A	VA2024		12/11/2012 3:33 PM	12/18/2012 11:14 AM	Air
1212722-021B	VA2024		12/11/2012 3:33 PM	12/18/2012 11:14 AM	Air
1212722-022A	VA2048		12/11/2012 1:22 PM	12/18/2012 11:14 AM	Air
1212722-022B	VA2048		12/11/2012 1:22 PM	12/18/2012 11:14 AM	Air
1212722-023A	VA2049		12/11/2012 1:50 PM	12/18/2012 11:14 AM	Air

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Date Reported: 1/14/2013
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Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1212722-023B	VA2049		12/11/2012 1:50 PM	12/18/2012 11:14 AM	Air
1212722-024A	VA2050		12/11/2012 2:20 PM	12/18/2012 11:14 AM	Air
1212722-024B	VA2050		12/11/2012 2:20 PM	12/18/2012 11:14 AM	Air
1212722-025A	VA2051		12/11/2012 2:54 PM	12/18/2012 11:14 AM	Air
1212722-025B	VA2051		12/11/2012 2:54 PM	12/18/2012 11:14 AM	Air
1212722-026A	VA2052		12/11/2012 3:27 PM	12/18/2012 11:14 AM	Air
1212722-026B	VA2052		12/11/2012 3:27 PM	12/18/2012 11:14 AM	Air
1212722-027A	VA2053		12/11/2012 4:03 PM	12/18/2012 11:14 AM	Air
1212722-027B	VA2053		12/11/2012 4:03 PM	12/18/2012 11:14 AM	Air
1212722-028A	VA2054		12/12/2012 12:46 PM	12/18/2012 11:14 AM	Air
1212722-028B	VA2054		12/12/2012 12:46 PM	12/18/2012 11:14 AM	Air
1212722-029A	VA2055		12/12/2012 1:14 PM	12/18/2012 11:14 AM	Air
1212722-029B	VA2055		12/12/2012 1:14 PM	12/18/2012 11:14 AM	Air
1212722-030A	VA2056		12/12/2012 1:44 PM	12/18/2012 11:14 AM	Air
1212722-030B	VA2056		12/12/2012 1:44 PM	12/18/2012 11:14 AM	Air
1212722-031A	VA2057		12/12/2012 1:44 PM	12/18/2012 11:14 AM	Air
1212722-031B	VA2057		12/12/2012 1:44 PM	12/18/2012 11:14 AM	Air
1212722-032A	VA2058		12/12/2012 2:32 PM	12/18/2012 11:14 AM	Air
1212722-032B	VA2058		12/12/2012 2:32 PM	12/18/2012 11:14 AM	Air
1212722-033A	VA2059		12/12/2012 3:06 PM	12/18/2012 11:14 AM	Air
1212722-033B	VA2059		12/12/2012 3:06 PM	12/18/2012 11:14 AM	Air
1212722-034A	VA2060		12/12/2012 4:01 PM	12/18/2012 11:14 AM	Air
1212722-034B	VA2060		12/12/2012 4:01 PM	12/18/2012 11:14 AM	Air
1212722-035A	VA2094		12/11/2012 9:32 AM	12/18/2012 11:14 AM	Air
1212722-035B	VA2094		12/11/2012 9:32 AM	12/18/2012 11:14 AM	Air
1212722-036A	VA2095		12/11/2012 10:00 AM	12/18/2012 11:14 AM	Air
1212722-036B	VA2095		12/11/2012 10:00 AM	12/18/2012 11:14 AM	Air
1212722-037A	VA2096		12/11/2012 10:32 AM	12/18/2012 11:14 AM	Air
1212722-037B	VA2096		12/11/2012 10:32 AM	12/18/2012 11:14 AM	Air
1212722-038A	VA2097		12/11/2012 11:07 AM	12/18/2012 11:14 AM	Air
1212722-038B	VA2097		12/11/2012 11:07 AM	12/18/2012 11:14 AM	Air
1212722-039A	VA2098		12/11/2012 11:43 AM	12/18/2012 11:14 AM	Air
1212722-039B	VA2098		12/11/2012 11:43 AM	12/18/2012 11:14 AM	Air
1212722-040A	VA2099		12/11/2012 12:20 PM	12/18/2012 11:14 AM	Air
1212722-040B	VA2099		12/11/2012 12:20 PM	12/18/2012 11:14 AM	Air
1212722-041A	VA2100		12/12/2012 1:00 PM	12/18/2012 11:14 AM	Air
1212722-041B	VA2100		12/12/2012 1:00 PM	12/18/2012 11:14 AM	Air
1212722-042A	VA2101		12/12/2012 1:30 PM	12/18/2012 11:14 AM	Air
1212722-042B	VA2101		12/12/2012 1:30 PM	12/18/2012 11:14 AM	Air
1212722-043A	VA2102		12/12/2012 1:59 PM	12/18/2012 11:14 AM	Air
1212722-043B	VA2102		12/12/2012 1:59 PM	12/18/2012 11:14 AM	Air
1212722-044A	VA2103		12/12/2012 2:31 PM	12/18/2012 11:14 AM	Air
1212722-044B	VA2103		12/12/2012 2:31 PM	12/18/2012 11:14 AM	Air
1212722-045A	VA2104		12/12/2012 3:05 PM	12/18/2012 11:14 AM	Air
1212722-045B	VA2104		12/12/2012 3:05 PM	12/18/2012 11:14 AM	Air

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Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1212722-046A	VA2105		12/12/2012 3:05 PM	12/18/2012 11:14 AM	Air
1212722-046B	VA2105		12/12/2012 3:05 PM	12/18/2012 11:14 AM	Air
1212722-047A	VA2106		12/12/2012 3:56 PM	12/18/2012 11:14 AM	Air
1212722-047B	VA2106		12/12/2012 3:56 PM	12/18/2012 11:14 AM	Air
1212722-048A	VA2166		12/13/2012 8:52 AM	12/18/2012 11:14 AM	Air
1212722-048B	VA2166		12/13/2012 8:52 AM	12/18/2012 11:14 AM	Air
1212722-049A	VA2167		12/13/2012 9:20 AM	12/18/2012 11:14 AM	Air
1212722-049B	VA2167		12/13/2012 9:20 AM	12/18/2012 11:14 AM	Air
1212722-050A	VA2168		12/13/2012 9:51 AM	12/18/2012 11:14 AM	Air
1212722-050B	VA2168		12/13/2012 9:51 AM	12/18/2012 11:14 AM	Air
1212722-051A	VA2169		12/13/2012 10:26 AM	12/18/2012 11:14 AM	Air
1212722-051B	VA2169		12/13/2012 10:26 AM	12/18/2012 11:14 AM	Air
1212722-052A	VA2170		12/13/2012 11:02 AM	12/18/2012 11:14 AM	Air
1212722-052B	VA2170		12/13/2012 11:02 AM	12/18/2012 11:14 AM	Air
1212722-053A	VA2171		12/13/2012 11:40 AM	12/18/2012 11:14 AM	Air
1212722-053B	VA2171		12/13/2012 11:40 AM	12/18/2012 11:14 AM	Air
1212722-054A	VA2195		12/6/2012 3:46 PM	12/18/2012 11:14 AM	Air
1212722-054B	VA2195		12/6/2012 3:46 PM	12/18/2012 11:14 AM	Air
1212722-055A	VA2196		12/6/2012 4:21 PM	12/18/2012 11:14 AM	Air
1212722-055B	VA2196		12/6/2012 4:21 PM	12/18/2012 11:14 AM	Air
1212722-056A	VA2197		12/10/2012 8:32 AM	12/18/2012 11:14 AM	Air
1212722-056B	VA2197		12/10/2012 8:32 AM	12/18/2012 11:14 AM	Air
1212722-057A	VA2198		12/10/2012 9:37 AM	12/18/2012 11:14 AM	Air
1212722-057B	VA2198		12/10/2012 9:37 AM	12/18/2012 11:14 AM	Air
1212722-058A	VA2199		12/10/2012 9:37 AM	12/18/2012 11:14 AM	Air
1212722-058B	VA2199		12/10/2012 9:37 AM	12/18/2012 11:14 AM	Air
1212722-059A	VA2200		12/10/2012 10:22 AM	12/18/2012 11:14 AM	Air
1212722-059B	VA2200		12/10/2012 10:22 AM	12/18/2012 11:14 AM	Air
1212722-060A	VA2201		12/10/2012 10:53 AM	12/18/2012 11:14 AM	Air
1212722-060B	VA2201		12/10/2012 10:53 AM	12/18/2012 11:14 AM	Air
1212722-061A	VA2202		12/10/2012 11:28 AM	12/18/2012 11:14 AM	Air
1212722-061B	VA2202		12/10/2012 11:28 AM	12/18/2012 11:14 AM	Air
1212722-062A	VA2203		12/10/2012 12:04 PM	12/18/2012 11:14 AM	Air
1212722-062B	VA2203		12/10/2012 12:04 PM	12/18/2012 11:14 AM	Air
1212722-063A	VA2204		12/10/2012 12:42 PM	12/18/2012 11:14 AM	Air
1212722-063B	VA2204		12/10/2012 12:42 PM	12/18/2012 11:14 AM	Air
1212722-064A	VA2232		12/10/2012 1:31 PM	12/18/2012 11:14 AM	Air
1212722-064B	VA2232		12/10/2012 1:31 PM	12/18/2012 11:14 AM	Air
1212722-065A	VA2233		12/10/2012 2:00 PM	12/18/2012 11:14 AM	Air
1212722-065B	VA2233		12/10/2012 2:00 PM	12/18/2012 11:14 AM	Air
1212722-066A	VA2234		12/10/2012 2:31 PM	12/18/2012 11:14 AM	Air
1212722-066B	VA2234		12/10/2012 2:31 PM	12/18/2012 11:14 AM	Air
1212722-067A	VA2235		12/10/2012 3:05 PM	12/18/2012 11:14 AM	Air
1212722-067B	VA2235		12/10/2012 3:05 PM	12/18/2012 11:14 AM	Air
1212722-068A	VA2236		12/10/2012 3:05 PM	12/18/2012 11:14 AM	Air

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Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1212722-068B	VA2236		12/10/2012 3:05 PM	12/18/2012 11:14 AM	Air
1212722-069A	VA2237		12/10/2012 3:53 PM	12/18/2012 11:14 AM	Air
1212722-069B	VA2237		12/10/2012 3:53 PM	12/18/2012 11:14 AM	Air
1212722-070A	VA2238		12/11/2012 8:40 AM	12/18/2012 11:14 AM	Air
1212722-070B	VA2238		12/11/2012 8:40 AM	12/18/2012 11:14 AM	Air
1212722-071A	VA2239		12/12/2012 8:32 AM	12/18/2012 11:14 AM	Air
1212722-071B	VA2239		12/12/2012 8:32 AM	12/18/2012 11:14 AM	Air
1212722-072A	VA2240		12/12/2012 9:04 AM	12/18/2012 11:14 AM	Air
1212722-072B	VA2240		12/12/2012 9:04 AM	12/18/2012 11:14 AM	Air
1212722-073A	VA2241		12/12/2012 9:38 AM	12/18/2012 11:14 AM	Air
1212722-073B	VA2241		12/12/2012 9:38 AM	12/18/2012 11:14 AM	Air
1212722-074A	VA2242		12/12/2012 10:13 AM	12/18/2012 11:14 AM	Air
1212722-074B	VA2242		12/12/2012 10:13 AM	12/18/2012 11:14 AM	Air
1212722-075A	VA2243		12/12/2012 10:59 AM	12/18/2012 11:14 AM	Air
1212722-075B	VA2243		12/12/2012 10:59 AM	12/18/2012 11:14 AM	Air
1212722-076A	VA2244		12/12/2012 11:46 AM	12/18/2012 11:14 AM	Air
1212722-076B	VA2244		12/12/2012 11:46 AM	12/18/2012 11:14 AM	Air
1212722-077A	VA2252		12/12/2012 8:29 AM	12/18/2012 11:14 AM	Air
1212722-077B	VA2252		12/12/2012 8:29 AM	12/18/2012 11:14 AM	Air
1212722-078A	VA2253		12/12/2012 8:58 AM	12/18/2012 11:14 AM	Air
1212722-078B	VA2253		12/12/2012 8:58 AM	12/18/2012 11:14 AM	Air
1212722-079A	VA2254		12/12/2012 9:16 AM	12/18/2012 11:14 AM	Air
1212722-079B	VA2254		12/12/2012 9:16 AM	12/18/2012 11:14 AM	Air
1212722-080A	VA2255		12/12/2012 10:05 AM	12/18/2012 11:14 AM	Air
1212722-080B	VA2255		12/12/2012 10:05 AM	12/18/2012 11:14 AM	Air
1212722-081A	VA2256		12/12/2012 10:43 AM	12/18/2012 11:14 AM	Air
1212722-081B	VA2256		12/12/2012 10:43 AM	12/18/2012 11:14 AM	Air
1212722-082A	VA2257		12/12/2012 11:22 AM	12/18/2012 11:14 AM	Air
1212722-082B	VA2257		12/12/2012 11:22 AM	12/18/2012 11:14 AM	Air
1212722-083A	VA2258		12/12/2012 11:22 AM	12/18/2012 11:14 AM	Air
1212722-083B	VA2258		12/12/2012 11:22 AM	12/18/2012 11:14 AM	Air
1212722-084A	VA8109-TB		12/6/2012 12:00 PM	12/18/2012 11:14 AM	Air

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Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1212722-001A	VA1950	12/13/2012 10:26 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/10/2013 12:17 PM
				EPA_TO15-Volatile Organic Compounds			1/11/2013 6:31 AM
1212722-001B	VA1950	12/13/2012 10:26 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/7/2013 12:47 PM
1212722-002A	VA1951	12/13/2012 10:50 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/10/2013 1:00 PM
				EPA_TO15-Volatile Organic Compounds			1/11/2013 7:58 AM
1212722-002B	VA1951	12/13/2012 10:50 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/7/2013 1:21 PM
1212722-003A	VA1952	12/13/2012 11:13 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/10/2013 1:42 PM
				EPA_TO15-Volatile Organic Compounds			1/11/2013 9:24 AM
1212722-003B	VA1952	12/13/2012 11:13 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/7/2013 1:36 PM
1212722-004A	VA1962	12/11/2012 8:38 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/5/2013 12:06 AM
				EPA_TO15-Volatile Organic Compounds			1/7/2013 12:15 PM
1212722-004B	VA1962	12/11/2012 8:38 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/7/2013 1:53 PM
1212722-005A	VA1963	12/11/2012 9:03 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/5/2013 2:25 AM
				EPA_TO15-Volatile Organic Compounds			1/7/2013 1:00 PM
1212722-005B	VA1963	12/11/2012 9:03 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/7/2013 2:28 PM
1212722-006A	VA1964	12/11/2012 9:32 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/5/2013 3:11 AM
				EPA_TO15-Volatile Organic Compounds			1/7/2013 1:45 PM

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Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1212722-006B	VA1964	12/11/2012 9:32 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/7/2013 2:46 PM
1212722-007A	VA1965	12/11/2012 9:57 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/7/2013 9:06 PM
				EPA_TO15-Volatile Organic Compounds			1/7/2013 5:55 PM
1212722-007B	VA1965	12/11/2012 9:57 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/7/2013 3:07 PM
1212722-008A	VA1966	12/11/2012 10:44 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/5/2013 9:48 PM
				EPA_TO15-Volatile Organic Compounds			1/7/2013 9:32 PM
1212722-008B	VA1966	12/11/2012 10:44 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/7/2013 3:24 PM
1212722-009A	VA1967	12/11/2012 10:07 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/7/2013 9:52 PM
				EPA_TO15-Volatile Organic Compounds			1/7/2013 7:22 PM
1212722-009B	VA1967	12/11/2012 10:07 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/7/2013 3:40 PM
1212722-010A	VA1968	12/11/2012 11:31 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/6/2013 12:02 AM
				EPA_TO15-Volatile Organic Compounds			1/8/2013 1:10 AM
1212722-010B	VA1968	12/11/2012 11:31 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/7/2013 4:04 PM
1212722-011A	VA1969	12/11/2012 11:31 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/6/2013 12:44 AM
				EPA_TO15-Volatile Organic Compounds			1/7/2013 11:43 PM
1212722-011B	VA1969	12/11/2012 11:31 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/7/2013 4:48 PM

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Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1212722-012A	VA1970	12/11/2012 12:11 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/6/2013 2:16 AM
				EPA_TO15-Volatile Organic Compounds			1/8/2013 2:40 AM
1212722-012B	VA1970	12/11/2012 12:11 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/7/2013 5:04 PM
1212722-013A	VA1971	12/13/2012 8:56 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/10/2013 1:36 AM
				EPA_TO15-Volatile Organic Compounds			1/11/2013 1:58 AM
1212722-013B	VA1971	12/13/2012 8:56 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/7/2013 5:22 PM
1212722-014A	VA1972	12/13/2012 9:22 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/10/2013 3:08 AM
				EPA_TO15-Volatile Organic Compounds			1/11/2013 3:28 AM
1212722-014B	VA1972	12/13/2012 9:22 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/7/2013 5:37 PM
1212722-015A	VA1973	12/13/2012 10:06 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/10/2013 4:42 AM
				EPA_TO15-Volatile Organic Compounds			1/11/2013 5:01 AM
1212722-015B	VA1973	12/13/2012 10:06 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/8/2013 12:12 PM
1212722-016A	VA1992	12/11/2012 1:04 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/8/2013 12:04 AM
				EPA_TO15-Volatile Organic Compounds			1/8/2013 4:14 AM
				EPA_TO15-Volatile Organic Compounds			1/8/2013 5:41 PM
1212722-016B	VA1992	12/11/2012 1:04 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/8/2013 12:41 PM
1212722-017A	VA1993	12/11/2012 1:36 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/6/2013 6:10 AM
				EPA_TO15-Volatile Organic Compounds			1/8/2013 7:15 PM

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Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1212722-017A	VA1993	12/11/2012 1:36 PM	Air				
				EPA_TO15-Volatile Organic Compounds			1/9/2013 12:32 PM
1212722-017B	VA1993	12/11/2012 1:36 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/8/2013 1:02 PM
1212722-018A	VA1994	12/11/2012 2:14 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/8/2013 2:57 AM
				EPA_TO15-Volatile Organic Compounds			1/8/2013 9:31 PM
1212722-018B	VA1994	12/11/2012 2:14 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/8/2013 1:19 PM
1212722-019A	VA1995	12/11/2012 2:45 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/8/2013 11:26 AM
				EPA_TO15-Volatile Organic Compounds			1/8/2013 11:01 PM
1212722-019B	VA1995	12/11/2012 2:45 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/8/2013 1:37 PM
1212722-020A	VA2023	12/11/2012 3:33 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/8/2013 6:58 PM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 2:04 AM
1212722-020B	VA2023	12/11/2012 3:33 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/8/2013 1:51 PM
1212722-021A	VA2024	12/11/2012 3:33 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/8/2013 6:14 PM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 2:46 AM
1212722-021B	VA2024	12/11/2012 3:33 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/8/2013 2:41 PM
1212722-022A	VA2048	12/11/2012 1:22 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/8/2013 1:30 AM
				EPA_TO15-Volatile Organic Compounds			1/8/2013 6:30 PM

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Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1212722-022B	VA2048	12/11/2012 1:22 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/8/2013 2:56 PM
1212722-023A	VA2049	12/11/2012 1:50 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/8/2013 2:13 AM
				EPA_TO15-Volatile Organic Compounds			1/8/2013 8:47 PM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 1:14 PM
1212722-023B	VA2049	12/11/2012 1:50 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/8/2013 3:10 PM
1212722-024A	VA2050	12/11/2012 2:20 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/8/2013 4:45 PM
				EPA_TO15-Volatile Organic Compounds			1/8/2013 10:16 PM
1212722-024B	VA2050	12/11/2012 2:20 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/8/2013 3:24 PM
1212722-025A	VA2051	12/11/2012 2:54 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/7/2013 3:04 PM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 12:34 AM
1212722-025B	VA2051	12/11/2012 2:54 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/8/2013 4:11 PM
1212722-026A	VA2052	12/11/2012 3:27 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/7/2013 3:53 PM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 1:22 AM
1212722-026B	VA2052	12/11/2012 3:27 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/8/2013 4:25 PM
1212722-027A	VA2053	12/11/2012 4:03 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/7/2013 6:52 PM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 3:29 AM
1212722-027B	VA2053	12/11/2012 4:03 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/8/2013 4:40 PM

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1212722-028A	VA2054	12/12/2012 12:46 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/9/2013 5:51 PM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 7:02 PM
1212722-028B	VA2054	12/12/2012 12:46 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/8/2013 4:54 PM
1212722-029A	VA2055	12/12/2012 1:14 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/9/2013 7:23 PM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 8:34 PM
1212722-029B	VA2055	12/12/2012 1:14 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/8/2013 5:08 PM
1212722-030A	VA2056	12/12/2012 1:44 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/9/2013 9:43 PM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 10:52 PM
1212722-030B	VA2056	12/12/2012 1:44 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/8/2013 5:22 PM
1212722-031A	VA2057	12/12/2012 1:44 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/9/2013 10:32 PM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 11:40 PM
1212722-031B	VA2057	12/12/2012 1:44 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/9/2013 12:28 PM
1212722-032A	VA2058	12/12/2012 2:32 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/10/2013 11:31 AM
				EPA_TO15-Volatile Organic Compounds			1/10/2013 2:37 AM
1212722-032B	VA2058	12/12/2012 2:32 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/9/2013 12:43 PM
1212722-033A	VA2059	12/12/2012 3:06 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/9/2013 3:29 PM
				EPA_TO15-Volatile Organic Compounds			1/10/2013 10:09 PM

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Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1212722-033B	VA2059	12/12/2012 3:06 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/9/2013 1:10 PM
1212722-034A	VA2060	12/12/2012 4:01 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/10/2013 6:10 AM
				EPA_TO15-Volatile Organic Compounds			1/11/2013 12:21 AM
1212722-034B	VA2060	12/12/2012 4:01 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/9/2013 1:25 PM
1212722-035A	VA2094	12/11/2012 9:32 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/5/2013 5:49 PM
				EPA_TO15-Volatile Organic Compounds			1/7/2013 4:32 PM
1212722-035B	VA2094	12/11/2012 9:32 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/9/2013 1:48 PM
1212722-036A	VA2095	12/11/2012 10:00 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/5/2013 7:27 PM
				EPA_TO15-Volatile Organic Compounds			1/7/2013 5:14 PM
1212722-036B	VA2095	12/11/2012 10:00 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/9/2013 2:03 PM
1212722-037A	VA2096	12/11/2012 10:32 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/5/2013 9:04 PM
				EPA_TO15-Volatile Organic Compounds			1/7/2013 6:37 PM
1212722-037B	VA2096	12/11/2012 10:32 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/9/2013 2:17 PM
1212722-038A	VA2097	12/11/2012 11:07 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/5/2013 10:34 PM
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/7/2013 11:20 PM
				EPA_TO15-Volatile Organic Compounds			1/7/2013 10:17 PM
				EPA_TO15-Volatile Organic Compounds			1/8/2013 5:00 PM

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1212722-038B	VA2097	12/11/2012 11:07 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/9/2013 2:31 PM
1212722-039A	VA2098	12/11/2012 11:43 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/6/2013 1:33 AM
				EPA_TO15-Volatile Organic Compounds			1/8/2013 1:59 AM
1212722-039B	VA2098	12/11/2012 11:43 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/9/2013 2:45 PM
1212722-040A	VA2099	12/11/2012 12:20 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/6/2013 3:05 AM
				EPA_TO15-Volatile Organic Compounds			1/8/2013 3:29 AM
1212722-040B	VA2099	12/11/2012 12:20 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/9/2013 3:08 PM
1212722-041A	VA2100	12/12/2012 1:00 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/9/2013 6:34 PM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 7:45 PM
1212722-041B	VA2100	12/12/2012 1:00 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/9/2013 3:53 PM
1212722-042A	VA2101	12/12/2012 1:30 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/9/2013 8:09 PM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 9:19 PM
1212722-042B	VA2101	12/12/2012 1:30 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/9/2013 4:09 PM
1212722-043A	VA2102	12/12/2012 1:59 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/9/2013 11:05 AM
				EPA_TO15-Volatile Organic Compounds			1/10/2013 12:25 AM
1212722-043B	VA2102	12/12/2012 1:59 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/9/2013 4:23 PM

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Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1212722-044A	VA2103	12/12/2012 2:31 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/9/2013 12:34 PM
				EPA_TO15-Volatile Organic Compounds			1/10/2013 1:54 AM
1212722-044B	VA2103	12/12/2012 2:31 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/9/2013 4:38 PM
1212722-045A	VA2104	12/12/2012 3:05 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/9/2013 2:03 PM
				EPA_TO15-Volatile Organic Compounds			1/10/2013 4:03 AM
1212722-045B	VA2104	12/12/2012 3:05 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/9/2013 4:52 PM
1212722-046A	VA2105	12/12/2012 3:05 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/9/2013 2:47 PM
				EPA_TO15-Volatile Organic Compounds			1/10/2013 3:20 AM
1212722-046B	VA2105	12/12/2012 3:05 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/9/2013 5:06 PM
1212722-047A	VA2106	12/12/2012 3:56 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/9/2013 11:17 PM
				EPA_TO15-Volatile Organic Compounds			1/10/2013 10:54 PM
1212722-047B	VA2106	12/12/2012 3:56 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/9/2013 5:20 PM
1212722-048A	VA2166	12/13/2012 8:52 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/10/2013 12:51 AM
				EPA_TO15-Volatile Organic Compounds			1/11/2013 1:10 AM
1212722-048B	VA2166	12/13/2012 8:52 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/9/2013 5:35 PM
1212722-049A	VA2167	12/13/2012 9:20 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/10/2013 2:25 AM
				EPA_TO15-Volatile Organic Compounds			1/11/2013 2:46 AM

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1212722-049B	VA2167	12/13/2012 9:20 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/9/2013 5:55 PM
1212722-050A	VA2168	12/13/2012 9:51 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/10/2013 3:57 AM
				EPA_TO15-Volatile Organic Compounds			1/11/2013 4:16 AM
1212722-050B	VA2168	12/13/2012 9:51 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/9/2013 6:10 PM
1212722-051A	VA2169	12/13/2012 10:26 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/10/2013 5:27 AM
				EPA_TO15-Volatile Organic Compounds			1/11/2013 7:16 AM
1212722-051B	VA2169	12/13/2012 10:26 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/4/2013 12:06 PM
1212722-052A	VA2170	12/13/2012 11:02 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/10/2013 2:25 PM
				EPA_TO15-Volatile Organic Compounds			1/11/2013 8:43 AM
1212722-052B	VA2170	12/13/2012 11:02 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/4/2013 12:21 PM
1212722-053A	VA2171	12/13/2012 11:40 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/10/2013 11:26 PM
				EPA_TO15-Volatile Organic Compounds			1/11/2013 10:06 AM
1212722-053B	VA2171	12/13/2012 11:40 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/4/2013 12:36 PM
1212722-054A	VA2195	12/6/2012 3:46 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/2/2013 11:41 PM
				EPA_TO15-Volatile Organic Compounds			1/6/2013 5:57 AM
1212722-054B	VA2195	12/6/2012 3:46 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/3/2013 2:40 PM

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1212722-055A	VA2196	12/6/2012 4:21 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/3/2013 12:26 AM
				EPA_TO15-Volatile Organic Compounds			1/6/2013 6:46 AM
1212722-055B	VA2196	12/6/2012 4:21 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/3/2013 2:54 PM
1212722-056A	VA2197	12/10/2012 8:32 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/3/2013 1:11 AM
				EPA_TO15-Volatile Organic Compounds			1/6/2013 7:34 AM
1212722-056B	VA2197	12/10/2012 8:32 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/4/2013 1:29 PM
1212722-057A	VA2198	12/10/2012 9:37 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/4/2013 2:45 PM
				EPA_TO15-Volatile Organic Compounds			1/6/2013 8:22 AM
1212722-057B	VA2198	12/10/2012 9:37 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/4/2013 1:57 PM
1212722-058A	VA2199	12/10/2012 9:37 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/3/2013 2:49 AM
				EPA_TO15-Volatile Organic Compounds			1/6/2013 9:11 AM
1212722-058B	VA2199	12/10/2012 9:37 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/4/2013 2:11 PM
1212722-059A	VA2200	12/10/2012 10:22 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/5/2013 1:28 PM
				EPA_TO15-Volatile Organic Compounds			1/6/2013 9:53 AM
1212722-059B	VA2200	12/10/2012 10:22 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/4/2013 2:27 PM
1212722-060B	VA2201	12/10/2012 10:53 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/4/2013 2:42 PM

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1212722-061A	VA2202	12/10/2012 11:28 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/4/2013 6:29 PM
				EPA_TO15-Volatile Organic Compounds			1/6/2013 11:05 AM
1212722-061B	VA2202	12/10/2012 11:28 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/4/2013 4:25 PM
1212722-062A	VA2203	12/10/2012 12:04 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/3/2013 5:12 AM
				EPA_TO15-Volatile Organic Compounds			1/6/2013 11:53 AM
1212722-062B	VA2203	12/10/2012 12:04 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/4/2013 4:39 PM
1212722-063A	VA2204	12/10/2012 12:42 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/3/2013 6:42 AM
				EPA_TO15-Volatile Organic Compounds			1/6/2013 12:38 PM
1212722-063B	VA2204	12/10/2012 12:42 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/3/2013 3:08 PM
1212722-064A	VA2232	12/10/2012 1:31 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/4/2013 7:18 PM
				EPA_TO15-Volatile Organic Compounds			1/6/2013 1:20 PM
1212722-064B	VA2232	12/10/2012 1:31 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/4/2013 4:54 PM
1212722-065A	VA2233	12/10/2012 2:00 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/4/2013 8:06 PM
				EPA_TO15-Volatile Organic Compounds			1/6/2013 2:02 PM
1212722-065B	VA2233	12/10/2012 2:00 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/4/2013 5:08 PM
1212722-066A	VA2234	12/10/2012 2:31 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/5/2013 2:11 PM
				EPA_TO15-Volatile Organic Compounds			1/6/2013 2:44 PM

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Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1212722-066B	VA2234	12/10/2012 2:31 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/4/2013 5:26 PM
1212722-067A	VA2235	12/10/2012 3:05 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/5/2013 2:53 PM
				EPA_TO15-Volatile Organic Compounds			1/7/2013 2:27 PM
1212722-067B	VA2235	12/10/2012 3:05 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/4/2013 5:40 PM
1212722-068A	VA2236	12/10/2012 3:05 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/5/2013 3:35 PM
				EPA_TO15-Volatile Organic Compounds			1/7/2013 3:08 PM
1212722-068B	VA2236	12/10/2012 3:05 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/4/2013 5:55 PM
1212722-069A	VA2237	12/10/2012 3:53 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/5/2013 4:18 PM
				EPA_TO15-Volatile Organic Compounds			1/6/2013 3:25 PM
1212722-069B	VA2237	12/10/2012 3:53 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/4/2013 6:09 PM
1212722-070A	VA2238	12/11/2012 8:40 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/5/2013 5:01 PM
				EPA_TO15-Volatile Organic Compounds			1/7/2013 3:50 PM
1212722-070B	VA2238	12/11/2012 8:40 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/4/2013 6:23 PM
1212722-071A	VA2239	12/12/2012 8:32 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/8/2013 7:40 PM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 1:56 PM
1212722-071B	VA2239	12/12/2012 8:32 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/10/2013 12:22 PM

RTI Laboratories - DATES REPORT

WO#: 1212722

Date Reported: 1/14/2013
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
1212722-072A	VA2240	12/12/2012 9:04 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/8/2013 9:11 PM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 2:38 PM
1212722-072B	VA2240	12/12/2012 9:04 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/10/2013 12:38 PM
1212722-073A	VA2241	12/12/2012 9:38 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/8/2013 11:25 PM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 3:19 PM
1212722-073B	VA2241	12/12/2012 9:38 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/10/2013 12:52 PM
1212722-074A	VA2242	12/12/2012 10:13 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/9/2013 1:03 AM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 4:55 AM
1212722-074B	VA2242	12/12/2012 10:13 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/10/2013 1:18 PM
1212722-075A	VA2243	12/12/2012 10:59 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/8/2013 1:43 PM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 4:04 PM
1212722-075B	VA2243	12/12/2012 10:59 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/10/2013 1:33 PM
1212722-076A	VA2244	12/12/2012 11:46 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/9/2013 1:45 AM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 4:46 PM
1212722-076B	VA2244	12/12/2012 11:46 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/10/2013 1:47 PM
1212722-077A	VA2252	12/12/2012 8:29 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/7/2013 7:38 PM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 4:14 AM

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WO#: 1212722

Date Reported: 1/14/2013
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
1212722-077B	VA2252	12/12/2012 8:29 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/10/2013 2:29 PM
1212722-078A	VA2253	12/12/2012 8:58 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/8/2013 8:29 PM
				EPA_TO15-Volatile Organic Compounds			1/8/2013 2:41 PM
1212722-078B	VA2253	12/12/2012 8:58 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/10/2013 2:43 PM
1212722-079A	VA2254	12/12/2012 9:16 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/8/2013 9:57 PM
				EPA_TO15-Volatile Organic Compounds			1/8/2013 3:29 PM
1212722-079B	VA2254	12/12/2012 9:16 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/10/2013 2:57 PM
1212722-080A	VA2255	12/12/2012 10:05 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/9/2013 12:14 AM
				EPA_TO15-Volatile Organic Compounds			1/8/2013 4:18 PM
1212722-080B	VA2255	12/12/2012 10:05 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/10/2013 3:13 PM
1212722-081A	VA2256	12/12/2012 10:43 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/8/2013 1:01 PM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 5:40 AM
1212722-081B	VA2256	12/12/2012 10:43 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/4/2013 2:56 PM
1212722-082A	VA2257	12/12/2012 11:22 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/8/2013 3:16 PM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 6:13 PM
1212722-082B	VA2257	12/12/2012 11:22 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/4/2013 3:14 PM

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Date Reported: 1/14/2013
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
1212722-083A	VA2258	12/12/2012 11:22 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			1/8/2013 3:59 PM
				EPA_TO15-Volatile Organic Compounds			1/9/2013 5:30 PM
1212722-083B	VA2258	12/12/2012 11:22 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			1/4/2013 4:06 PM
1212722-084A	VA8109-TB	12/6/2012 12:00 PM	Air				
				EPA_TO15-Volatile Organic Compounds			1/5/2013 2:33 AM
				EPA_TO15-Volatile Organic Compounds			1/6/2013 3:49 AM

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WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 10:26:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-001	**Matrix:**	Air
Client Sample ID:	VA1950		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	4.7	0.10		% v/v	1	1/7/2013 12:47 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/7/2013 12:47 PM
Methane	ND	0.50	U	% v/v	1	1/7/2013 12:47 PM
Nitrogen	84	0.10		% v/v	1	1/7/2013 12:47 PM
Oxygen	17	0.10		% v/v	1	1/7/2013 12:47 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/11/2013 6:31 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/11/2013 6:31 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/11/2013 6:31 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/11/2013 6:31 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/11/2013 6:31 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/11/2013 6:31 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/11/2013 6:31 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/11/2013 6:31 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/11/2013 6:31 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/11/2013 6:31 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/11/2013 6:31 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/11/2013 6:31 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/11/2013 6:31 AM
1,3-Butadiene	ND	800	U	ppbv	800	1/11/2013 6:31 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/11/2013 6:31 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/11/2013 6:31 AM
2-Butanone	ND	800	U	ppbv	800	1/11/2013 6:31 AM
2-Hexanone	ND	800	U	ppbv	800	1/11/2013 6:31 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Acetone	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Benzene	5,100	800		ppbv	800	1/11/2013 6:31 AM
Benzyl chloride	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Bromodichloromethane	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Bromoform	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Bromomethane	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Carbon disulfide	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Carbon tetrachloride	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Chlorobenzene	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Chlorodibromomethane	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Chloroethane	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Chloroform	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Chloromethane	ND	800	U	ppbv	800	1/11/2013 6:31 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/11/2013 6:31 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/11/2013 6:31 AM

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WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 10:26:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-001	**Matrix:**	Air
Client Sample ID:	VA1950		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	13,000	1,600		ppbv	800	1/11/2013 6:31 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Ethyl acetate	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Ethylbenzene	2,200	1,600		ppbv	800	1/11/2013 6:31 AM
Heptane	23,000	800		ppbv	800	1/11/2013 6:31 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/11/2013 6:31 AM
m,p-Xylene	6,000	1,600		ppbv	800	1/11/2013 6:31 AM
Methylene chloride	ND	4,000	U	ppbv	800	1/11/2013 6:31 AM
n-Hexane	3,100	1,600		ppbv	800	1/11/2013 6:31 AM
Naphthalene	ND	800	U	ppbv	800	1/11/2013 6:31 AM
o-Xylene	1,600	800		ppbv	800	1/11/2013 6:31 AM
Propylene	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Styrene	ND	800	U	ppbv	800	1/11/2013 6:31 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Tetrachloroethene	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Tetrahydrofuran	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Toluene	33,000	800		ppbv	800	1/11/2013 6:31 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/11/2013 6:31 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Trichloroethene	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Vinyl acetate	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Vinyl chloride	ND	800	U	ppbv	800	1/11/2013 6:31 AM
Xylenes, Total	7,600	2,400		ppbv	800	1/11/2013 6:31 AM
Surr: 4-Bromofluorobenzene	95.5	70-130		%REC	800	1/11/2013 6:31 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	850,000	94,000		µg/m³	800	1/10/2013 12:17 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/10/2013 12:17 PM
C9-C12 Aliphatic Hydrocarbons	53,000	150,000	J	µg/m³	800	1/10/2013 12:17 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	800	1/10/2013 12:17 PM

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WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 10:50:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-002	**Matrix:**	Air
Client Sample ID:	VA1951		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.50	0.10		% v/v	1	1/7/2013 1:21 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/7/2013 1:21 PM
Methane	ND	0.50	U	% v/v	1	1/7/2013 1:21 PM
Nitrogen	83	0.10		% v/v	1	1/7/2013 1:21 PM
Oxygen	22	0.10		% v/v	1	1/7/2013 1:21 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
1,1,2,2-Tetrachloroethane	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
1,1,2-Trichloroethane	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
1,1-Dichloroethane	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
1,1-Dichloroethene	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
1,2,4-Trichlorobenzene	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
1,2,4-Trimethylbenzene	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
1,2-Dibromoethane	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
1,2-Dichlorobenzene	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
1,2-Dichloroethane	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
1,2-Dichloropropane	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
1,3,5-Trimethylbenzene	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
1,3-Butadiene	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
1,3-Dichlorobenzene	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
1,4-Dichlorobenzene	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
2-Butanone	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
2-Hexanone	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
4-Methyl-2-pentanone	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Acetone	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Benzene	250,000	20,000		ppbv	20000	1/11/2013 7:58 AM
Benzyl chloride	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Bromodichloromethane	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Bromoform	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Bromomethane	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Carbon disulfide	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Carbon tetrachloride	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Chlorobenzene	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Chlorodibromomethane	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Chloroethane	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Chloroform	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Chloromethane	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
cis-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
cis-1,3-dichloropropene	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM

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WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 10:50:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-002	**Matrix:**	Air
Client Sample ID:	VA1951		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	560,000	40,000		ppbv	20000	1/11/2013 7:58 AM
Dichlorodifluoromethane	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Ethyl acetate	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Ethylbenzene	ND	40,000	U	ppbv	20000	1/11/2013 7:58 AM
Heptane	120,000	20,000		ppbv	20000	1/11/2013 7:58 AM
Hexachlorobutadiene	ND	40,000	U	ppbv	20000	1/11/2013 7:58 AM
m,p-Xylene	ND	40,000	U	ppbv	20000	1/11/2013 7:58 AM
Methylene chloride	ND	100,000	U	ppbv	20000	1/11/2013 7:58 AM
n-Hexane	280,000	40,000		ppbv	20000	1/11/2013 7:58 AM
Naphthalene	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
o-Xylene	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Propylene	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Styrene	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
tert-Butyl Methyl Ether	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Tetrachloroethene	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Tetrahydrofuran	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Toluene	320,000	20,000		ppbv	20000	1/11/2013 7:58 AM
trans-1,2-Dichloroethene	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
trans-1,3-dichloropropene	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Trichloroethene	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Trichlorofluoromethane	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Vinyl acetate	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Vinyl chloride	ND	20,000	U	ppbv	20000	1/11/2013 7:58 AM
Xylenes, Total	ND	60,000	U	ppbv	20000	1/11/2013 7:58 AM
Surr: 4-Bromofluorobenzene	95.2	70-130		%REC	20000	1/11/2013 7:58 AM
Mass APH Air		**Method:**				**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	21,000,000	2,300,000		µg/m³	20000	1/10/2013 1:00 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	1/10/2013 1:00 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	1/10/2013 1:00 PM
Surr: 4-Bromofluorobenzene	98.8	70-130		%REC	20000	1/10/2013 1:00 PM

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WO#: 1212722

Date Reported: 1/14/2013
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Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 11:13:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-003	**Matrix:**	Air
Client Sample ID:	VA1952		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	1.2	0.10		% v/v	1	1/7/2013 1:36 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/7/2013 1:36 PM
Methane	ND	0.50	U	% v/v	1	1/7/2013 1:36 PM
Nitrogen	84	0.10		% v/v	1	1/7/2013 1:36 PM
Oxygen	19	0.10		% v/v	1	1/7/2013 1:36 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
2-Butanone	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
2-Hexanone	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Acetone	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Benzene	42,000	8,000		ppbv	8000	1/11/2013 9:24 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Bromoform	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Bromomethane	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Chloroethane	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Chloroform	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Chloromethane	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 11:13:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-003	**Matrix:**	Air
Client Sample ID:	VA1952		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	70,000	16,000		ppbv	8000	1/11/2013 9:24 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/11/2013 9:24 AM
Heptane	33,000	8,000		ppbv	8000	1/11/2013 9:24 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/11/2013 9:24 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	1/11/2013 9:24 AM
Methylene chloride	ND	40,000	U	ppbv	8000	1/11/2013 9:24 AM
n-Hexane	63,000	16,000		ppbv	8000	1/11/2013 9:24 AM
Naphthalene	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
o-Xylene	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Propylene	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Styrene	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Toluene	52,000	8,000		ppbv	8000	1/11/2013 9:24 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Trichloroethene	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/11/2013 9:24 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	1/11/2013 9:24 AM
Surr: 4-Bromofluorobenzene	95.7	70-130		%REC	8000	1/11/2013 9:24 AM
Mass APH Air		**Method:**				**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	6,900,000	2,300,000		µg/m³	20000	1/10/2013 1:42 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	1/10/2013 1:42 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	1/10/2013 1:42 PM
Surr: 4-Bromofluorobenzene	96.9	70-130		%REC	20000	1/10/2013 1:42 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 8:38:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-004	**Matrix:**	Air
Client Sample ID:	VA1962		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	1.9	0.10		% v/v	1	1/7/2013 1:53 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/7/2013 1:53 PM
Methane	ND	0.50	U	% v/v	1	1/7/2013 1:53 PM
Nitrogen	83	0.10		% v/v	1	1/7/2013 1:53 PM
Oxygen	20	0.10		% v/v	1	1/7/2013 1:53 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/7/2013 12:15 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/7/2013 12:15 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/7/2013 12:15 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/7/2013 12:15 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/7/2013 12:15 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/7/2013 12:15 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/7/2013 12:15 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/7/2013 12:15 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/7/2013 12:15 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/7/2013 12:15 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/7/2013 12:15 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/7/2013 12:15 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/7/2013 12:15 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/7/2013 12:15 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/7/2013 12:15 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/7/2013 12:15 PM
2-Butanone	1,000	800		ppbv	800	1/7/2013 12:15 PM
2-Hexanone	ND	800	U	ppbv	800	1/7/2013 12:15 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Acetone	4,100	800		ppbv	800	1/7/2013 12:15 PM
Benzene	3,600	800		ppbv	800	1/7/2013 12:15 PM
Benzyl chloride	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Bromoform	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Bromomethane	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Carbon disulfide	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Chlorobenzene	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Chloroethane	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Chloroform	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Chloromethane	ND	800	U	ppbv	800	1/7/2013 12:15 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/7/2013 12:15 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/7/2013 12:15 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 8:38:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-004	**Matrix:**	Air
Client Sample ID:	VA1962		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	10,000	1,600		ppbv	800	1/7/2013 12:15 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Ethyl acetate	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Ethylbenzene	890	1,600	J	ppbv	800	1/7/2013 12:15 PM
Heptane	20,000	800		ppbv	800	1/7/2013 12:15 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/7/2013 12:15 PM
m,p-Xylene	2,300	1,600		ppbv	800	1/7/2013 12:15 PM
Methylene chloride	ND	4,000	U	ppbv	800	1/7/2013 12:15 PM
n-Hexane	3,400	1,600		ppbv	800	1/7/2013 12:15 PM
Naphthalene	ND	800	U	ppbv	800	1/7/2013 12:15 PM
o-Xylene	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Propylene	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Styrene	ND	800	U	ppbv	800	1/7/2013 12:15 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Toluene	24,000	800		ppbv	800	1/7/2013 12:15 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/7/2013 12:15 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Trichloroethene	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Vinyl acetate	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Vinyl chloride	ND	800	U	ppbv	800	1/7/2013 12:15 PM
Xylenes, Total	2,300	2,400	J	ppbv	800	1/7/2013 12:15 PM
Surr: 4-Bromofluorobenzene	94.2	70-130		%REC	800	1/7/2013 12:15 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	630,000	94,000		µg/m³	800	1/5/2013 12:06 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/5/2013 12:06 AM
C9-C12 Aliphatic Hydrocarbons	78,000	150,000	J	µg/m³	800	1/5/2013 12:06 AM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	800	1/5/2013 12:06 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 9:03:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-005	**Matrix:**	Air
Client Sample ID:	VA1963		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: cr**
Carbon dioxide	5.7	0.10		% v/v	1	1/7/2013 2:28 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/7/2013 2:28 PM
Methane	ND	0.50	U	% v/v	1	1/7/2013 2:28 PM
Nitrogen	85	0.10		% v/v	1	1/7/2013 2:28 PM
Oxygen	14	0.10		% v/v	1	1/7/2013 2:28 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/7/2013 1:00 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/7/2013 1:00 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/7/2013 1:00 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/7/2013 1:00 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/7/2013 1:00 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/7/2013 1:00 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/7/2013 1:00 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/7/2013 1:00 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/7/2013 1:00 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/7/2013 1:00 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/7/2013 1:00 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/7/2013 1:00 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/7/2013 1:00 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/7/2013 1:00 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/7/2013 1:00 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/7/2013 1:00 PM
2-Butanone	ND	800	U	ppbv	800	1/7/2013 1:00 PM
2-Hexanone	ND	800	U	ppbv	800	1/7/2013 1:00 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Acetone	2,700	800		ppbv	800	1/7/2013 1:00 PM
Benzene	3,000	800		ppbv	800	1/7/2013 1:00 PM
Benzyl chloride	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Bromoform	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Bromomethane	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Carbon disulfide	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Chlorobenzene	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Chloroethane	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Chloroform	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Chloromethane	ND	800	U	ppbv	800	1/7/2013 1:00 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/7/2013 1:00 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/7/2013 1:00 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 9:03:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-005	**Matrix:**	Air
Client Sample ID:	VA1963		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	13,000	1,600		ppbv	800	1/7/2013 1:00 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Ethyl acetate	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Ethylbenzene	ND	1,600	U	ppbv	800	1/7/2013 1:00 PM
Heptane	17,000	800		ppbv	800	1/7/2013 1:00 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/7/2013 1:00 PM
m,p-Xylene	2,000	1,600		ppbv	800	1/7/2013 1:00 PM
Methylene chloride	ND	4,000	U	ppbv	800	1/7/2013 1:00 PM
n-Hexane	4,400	1,600		ppbv	800	1/7/2013 1:00 PM
Naphthalene	ND	800	U	ppbv	800	1/7/2013 1:00 PM
o-Xylene	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Propylene	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Styrene	ND	800	U	ppbv	800	1/7/2013 1:00 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Toluene	19,000	800		ppbv	800	1/7/2013 1:00 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/7/2013 1:00 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Trichloroethene	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Vinyl acetate	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Vinyl chloride	ND	800	U	ppbv	800	1/7/2013 1:00 PM
Xylenes, Total	2,000	2,400	J	ppbv	800	1/7/2013 1:00 PM
Surr: 4-Bromofluorobenzene	94.1	70-130		%REC	800	1/7/2013 1:00 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	650,000	94,000		µg/m³	800	1/5/2013 2:25 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/5/2013 2:25 AM
C9-C12 Aliphatic Hydrocarbons	130,000	150,000	J	µg/m³	800	1/5/2013 2:25 AM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	800	1/5/2013 2:25 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 9:32:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-006	**Matrix:**	Air
Client Sample ID:	VA1964		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.34	0.10		% v/v	1	1/7/2013 2:46 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/7/2013 2:46 PM
Methane	ND	0.50	U	% v/v	1	1/7/2013 2:46 PM
Nitrogen	83	0.10		% v/v	1	1/7/2013 2:46 PM
Oxygen	22	0.10		% v/v	1	1/7/2013 2:46 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/7/2013 1:45 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/7/2013 1:45 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/7/2013 1:45 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/7/2013 1:45 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/7/2013 1:45 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/7/2013 1:45 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/7/2013 1:45 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/7/2013 1:45 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/7/2013 1:45 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/7/2013 1:45 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/7/2013 1:45 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/7/2013 1:45 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/7/2013 1:45 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/7/2013 1:45 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/7/2013 1:45 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/7/2013 1:45 PM
2-Butanone	ND	800	U	ppbv	800	1/7/2013 1:45 PM
2-Hexanone	ND	800	U	ppbv	800	1/7/2013 1:45 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Acetone	3,300	800		ppbv	800	1/7/2013 1:45 PM
Benzene	2,400	800		ppbv	800	1/7/2013 1:45 PM
Benzyl chloride	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Bromoform	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Bromomethane	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Carbon disulfide	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Chlorobenzene	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Chloroethane	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Chloroform	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Chloromethane	ND	800	U	ppbv	800	1/7/2013 1:45 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/7/2013 1:45 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/7/2013 1:45 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 9:32:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-006	**Matrix:**	Air
Client Sample ID:	VA1964		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	7,100	1,600		ppbv	800	1/7/2013 1:45 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Ethyl acetate	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Ethylbenzene	ND	1,600	U	ppbv	800	1/7/2013 1:45 PM
Heptane	15,000	800		ppbv	800	1/7/2013 1:45 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/7/2013 1:45 PM
m,p-Xylene	1,900	1,600		ppbv	800	1/7/2013 1:45 PM
Methylene chloride	ND	4,000	U	ppbv	800	1/7/2013 1:45 PM
n-Hexane	2,000	1,600		ppbv	800	1/7/2013 1:45 PM
Naphthalene	ND	800	U	ppbv	800	1/7/2013 1:45 PM
o-Xylene	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Propylene	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Styrene	ND	800	U	ppbv	800	1/7/2013 1:45 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Toluene	17,000	800		ppbv	800	1/7/2013 1:45 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/7/2013 1:45 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Trichloroethene	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Vinyl acetate	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Vinyl chloride	ND	800	U	ppbv	800	1/7/2013 1:45 PM
Xylenes, Total	1,900	2,400	J	ppbv	800	1/7/2013 1:45 PM
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	800	1/7/2013 1:45 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	650,000	94,000		µg/m³	800	1/5/2013 3:11 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/5/2013 3:11 AM
C9-C12 Aliphatic Hydrocarbons	55,000	150,000	J	µg/m³	800	1/5/2013 3:11 AM
Surr: 4-Bromofluorobenzene	97.2	70-130		%REC	800	1/5/2013 3:11 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 9:57:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-007	**Matrix:**	Air
Client Sample ID:	VA1965		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.54	0.10		% v/v	1	1/7/2013 3:07 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/7/2013 3:07 PM
Methane	ND	0.50	U	% v/v	1	1/7/2013 3:07 PM
Nitrogen	83	0.10		% v/v	1	1/7/2013 3:07 PM
Oxygen	22	0.10		% v/v	1	1/7/2013 3:07 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/7/2013 5:55 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/7/2013 5:55 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/7/2013 5:55 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/7/2013 5:55 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/7/2013 5:55 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 5:55 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/7/2013 5:55 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/7/2013 5:55 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/7/2013 5:55 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 5:55 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/7/2013 5:55 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/7/2013 5:55 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/7/2013 5:55 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/7/2013 5:55 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 5:55 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 5:55 PM
2-Butanone	ND	40	U	ppbv	40	1/7/2013 5:55 PM
2-Hexanone	ND	40	U	ppbv	40	1/7/2013 5:55 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Acetone	50	40		ppbv	40	1/7/2013 5:55 PM
Benzene	93	40		ppbv	40	1/7/2013 5:55 PM
Benzyl chloride	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Bromoform	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Bromomethane	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Carbon disulfide	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Chlorobenzene	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Chloroethane	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Chloroform	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Chloromethane	ND	40	U	ppbv	40	1/7/2013 5:55 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 5:55 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/7/2013 5:55 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 9:57:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-007	**Matrix:**	Air
Client Sample ID:	VA1965		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	300	80		ppbv	40	1/7/2013 5:55 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Ethyl acetate	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Ethylbenzene	ND	80	U	ppbv	40	1/7/2013 5:55 PM
Heptane	500	40		ppbv	40	1/7/2013 5:55 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/7/2013 5:55 PM
m,p-Xylene	120	80		ppbv	40	1/7/2013 5:55 PM
Methylene chloride	ND	200	U	ppbv	40	1/7/2013 5:55 PM
n-Hexane	79	80	J	ppbv	40	1/7/2013 5:55 PM
Naphthalene	ND	40	U	ppbv	40	1/7/2013 5:55 PM
o-Xylene	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Propylene	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Styrene	ND	40	U	ppbv	40	1/7/2013 5:55 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Toluene	570	40		ppbv	40	1/7/2013 5:55 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 5:55 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Trichloroethene	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Vinyl acetate	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Vinyl chloride	ND	40	U	ppbv	40	1/7/2013 5:55 PM
Xylenes, Total	120	120	J	ppbv	40	1/7/2013 5:55 PM
Surr: 4-Bromofluorobenzene	92.5	70-130		%REC	40	1/7/2013 5:55 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	21,000	4,700		µg/m³	40	1/7/2013 9:06 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/7/2013 9:06 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	1/7/2013 9:06 PM
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	40	1/7/2013 9:06 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 10:44:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-008	**Matrix:**	Air
Client Sample ID:	VA1966		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	1.7	0.10		% v/v	1	1/7/2013 3:24 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/7/2013 3:24 PM
Methane	ND	0.50	U	% v/v	1	1/7/2013 3:24 PM
Nitrogen	82	0.10		% v/v	1	1/7/2013 3:24 PM
Oxygen	22	0.10		% v/v	1	1/7/2013 3:24 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
1,1,2,2-Tetrachloroethane	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
1,1,2-Trichloroethane	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
1,1-Dichloroethane	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
1,1-Dichloroethene	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
1,2,4-Trichlorobenzene	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
1,2,4-Trimethylbenzene	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
1,2-Dibromoethane	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
1,2-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
1,2-Dichloroethane	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
1,2-Dichloropropane	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
1,3,5-Trimethylbenzene	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
1,3-Butadiene	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
1,3-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
1,4-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
2-Butanone	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
2-Hexanone	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
4-Methyl-2-pentanone	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Acetone	6,200	1,600		ppbv	1600	1/7/2013 9:32 PM
Benzene	3,600	1,600		ppbv	1600	1/7/2013 9:32 PM
Benzyl chloride	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Bromodichloromethane	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Bromoform	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Bromomethane	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Carbon disulfide	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Carbon tetrachloride	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Chlorobenzene	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Chlorodibromomethane	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Chloroethane	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Chloroform	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Chloromethane	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
cis-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
cis-1,3-dichloropropene	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 10:44:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-008	**Matrix:**	Air
Client Sample ID:	VA1966		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	12,000	3,200		ppbv	1600	1/7/2013 9:32 PM
Dichlorodifluoromethane	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Ethyl acetate	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Ethylbenzene	ND	3,200	U	ppbv	1600	1/7/2013 9:32 PM
Heptane	24,000	1,600		ppbv	1600	1/7/2013 9:32 PM
Hexachlorobutadiene	ND	3,200	U	ppbv	1600	1/7/2013 9:32 PM
m,p-Xylene	3,500	3,200		ppbv	1600	1/7/2013 9:32 PM
Methylene chloride	7,500	8,000	J	ppbv	1600	1/7/2013 9:32 PM
n-Hexane	3,300	3,200		ppbv	1600	1/7/2013 9:32 PM
Naphthalene	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
o-Xylene	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Propylene	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Styrene	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
tert-Butyl Methyl Ether	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Tetrachloroethene	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Tetrahydrofuran	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Toluene	25,000	1,600		ppbv	1600	1/7/2013 9:32 PM
trans-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
trans-1,3-dichloropropene	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Trichloroethene	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Trichlorofluoromethane	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Vinyl acetate	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Vinyl chloride	ND	1,600	U	ppbv	1600	1/7/2013 9:32 PM
Xylenes, Total	3,500	4,800	J	ppbv	1600	1/7/2013 9:32 PM
Surr: 4-Bromofluorobenzene	96.0	70-130		%REC	1600	1/7/2013 9:32 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	890,000	190,000		µg/m³	1600	1/5/2013 9:48 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	1/5/2013 9:48 PM
C9-C12 Aliphatic Hydrocarbons	100,000	300,000	J	µg/m³	1600	1/5/2013 9:48 PM
Surr: 4-Bromofluorobenzene	98.5	70-130		%REC	1600	1/5/2013 9:48 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 10:07:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-009	**Matrix:**	Air
Client Sample ID:	VA1967		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: cr**
Carbon dioxide	3.8	0.10		% v/v	1	1/7/2013 3:40 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/7/2013 3:40 PM
Methane	ND	0.50	U	% v/v	1	1/7/2013 3:40 PM
Nitrogen	83	0.10		% v/v	1	1/7/2013 3:40 PM
Oxygen	18	0.10		% v/v	1	1/7/2013 3:40 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/7/2013 7:22 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/7/2013 7:22 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/7/2013 7:22 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/7/2013 7:22 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/7/2013 7:22 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/7/2013 7:22 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/7/2013 7:22 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/7/2013 7:22 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/7/2013 7:22 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/7/2013 7:22 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/7/2013 7:22 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/7/2013 7:22 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/7/2013 7:22 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/7/2013 7:22 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/7/2013 7:22 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/7/2013 7:22 PM
2-Butanone	ND	800	U	ppbv	800	1/7/2013 7:22 PM
2-Hexanone	ND	800	U	ppbv	800	1/7/2013 7:22 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Acetone	5,500	800		ppbv	800	1/7/2013 7:22 PM
Benzene	3,500	800		ppbv	800	1/7/2013 7:22 PM
Benzyl chloride	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Bromoform	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Bromomethane	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Carbon disulfide	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Chlorobenzene	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Chloroethane	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Chloroform	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Chloromethane	ND	800	U	ppbv	800	1/7/2013 7:22 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/7/2013 7:22 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/7/2013 7:22 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 10:07:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-009	**Matrix:**	Air
Client Sample ID:	VA1967		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	11,000	1,600		ppbv	800	1/7/2013 7:22 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Ethyl acetate	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Ethylbenzene	1,200	1,600	J	ppbv	800	1/7/2013 7:22 PM
Heptane	23,000	800		ppbv	800	1/7/2013 7:22 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/7/2013 7:22 PM
m,p-Xylene	3,300	1,600		ppbv	800	1/7/2013 7:22 PM
Methylene chloride	6,600	4,000		ppbv	800	1/7/2013 7:22 PM
n-Hexane	2,900	1,600		ppbv	800	1/7/2013 7:22 PM
Naphthalene	ND	800	U	ppbv	800	1/7/2013 7:22 PM
o-Xylene	860	800		ppbv	800	1/7/2013 7:22 PM
Propylene	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Styrene	ND	800	U	ppbv	800	1/7/2013 7:22 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Toluene	28,000	800		ppbv	800	1/7/2013 7:22 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/7/2013 7:22 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Trichloroethene	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Vinyl acetate	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Vinyl chloride	ND	800	U	ppbv	800	1/7/2013 7:22 PM
Xylenes, Total	4,200	2,400		ppbv	800	1/7/2013 7:22 PM
Surr: 4-Bromofluorobenzene	93.6	70-130		%REC	800	1/7/2013 7:22 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	600,000	94,000		µg/m³	800	1/7/2013 9:52 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/7/2013 9:52 PM
C9-C12 Aliphatic Hydrocarbons	28,000	150,000	J	µg/m³	800	1/7/2013 9:52 PM
Surr: 4-Bromofluorobenzene	99.1	70-130		%REC	800	1/7/2013 9:52 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 11:31:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-010	**Matrix:**	Air
Client Sample ID:	VA1968		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	1.4	0.10		% v/v	1	1/7/2013 4:04 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/7/2013 4:04 PM
Methane	ND	0.50	U	% v/v	1	1/7/2013 4:04 PM
Nitrogen	87	0.10		% v/v	1	1/7/2013 4:04 PM
Oxygen	17	0.10		% v/v	1	1/7/2013 4:04 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
2-Butanone	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
2-Hexanone	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Acetone	11,000	8,000		ppbv	8000	1/8/2013 1:10 AM
Benzene	46,000	8,000		ppbv	8000	1/8/2013 1:10 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Bromoform	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Bromomethane	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Chloroethane	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Chloroform	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Chloromethane	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 11:31:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-010	**Matrix:**	Air
Client Sample ID:	VA1968		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	52,000	16,000		ppbv	8000	1/8/2013 1:10 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/8/2013 1:10 AM
Heptane	14,000	8,000		ppbv	8000	1/8/2013 1:10 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/8/2013 1:10 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	1/8/2013 1:10 AM
Methylene chloride	ND	40,000	U	ppbv	8000	1/8/2013 1:10 AM
n-Hexane	37,000	16,000		ppbv	8000	1/8/2013 1:10 AM
Naphthalene	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
o-Xylene	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Propylene	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Styrene	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Toluene	11,000	8,000		ppbv	8000	1/8/2013 1:10 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Trichloroethene	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/8/2013 1:10 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	1/8/2013 1:10 AM
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	8000	1/8/2013 1:10 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	4,100,000	940,000		µg/m³	8000	1/6/2013 12:02 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	1/6/2013 12:02 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	1/6/2013 12:02 AM
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	8000	1/6/2013 12:02 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 11:31:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-011	**Matrix:**	Air
Client Sample ID:	VA1969		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	1.4	0.10		% v/v	1	1/7/2013 4:48 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/7/2013 4:48 PM
Methane	ND	0.50	U	% v/v	1	1/7/2013 4:48 PM
Nitrogen	86	0.10		% v/v	1	1/7/2013 4:48 PM
Oxygen	16	0.10		% v/v	1	1/7/2013 4:48 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
2-Butanone	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
2-Hexanone	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Acetone	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Benzene	92,000	8,000		ppbv	8000	1/7/2013 11:43 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Bromoform	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Bromomethane	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Chloroethane	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Chloroform	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Chloromethane	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 11:31:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-011	**Matrix:**	Air
Client Sample ID:	VA1969		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	110,000	16,000		ppbv	8000	1/7/2013 11:43 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/7/2013 11:43 PM
Heptane	27,000	8,000		ppbv	8000	1/7/2013 11:43 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/7/2013 11:43 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	1/7/2013 11:43 PM
Methylene chloride	ND	40,000	U	ppbv	8000	1/7/2013 11:43 PM
n-Hexane	75,000	16,000		ppbv	8000	1/7/2013 11:43 PM
Naphthalene	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
o-Xylene	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Propylene	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Styrene	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Toluene	18,000	8,000		ppbv	8000	1/7/2013 11:43 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Trichloroethene	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/7/2013 11:43 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	1/7/2013 11:43 PM
Surr: 4-Bromofluorobenzene	96.5	70-130		%REC	8000	1/7/2013 11:43 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	6,000,000	940,000		µg/m³	8000	1/6/2013 12:44 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	1/6/2013 12:44 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	1/6/2013 12:44 AM
Surr: 4-Bromofluorobenzene	96.9	70-130		%REC	8000	1/6/2013 12:44 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 12:11:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-012	**Matrix:**	Air
Client Sample ID:	VA1970		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.98	0.10		% v/v	1	1/7/2013 5:04 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/7/2013 5:04 PM
Methane	ND	0.50	U	% v/v	1	1/7/2013 5:04 PM
Nitrogen	84	0.10		% v/v	1	1/7/2013 5:04 PM
Oxygen	19	0.10		% v/v	1	1/7/2013 5:04 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
2-Butanone	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
2-Hexanone	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Acetone	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Benzene	98,000	8,000		ppbv	8000	1/8/2013 2:40 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Bromoform	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Bromomethane	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Chloroethane	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Chloroform	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Chloromethane	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 12:11:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-012	**Matrix:**	Air
Client Sample ID:	VA1970		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	64,000	16,000		ppbv	8000	1/8/2013 2:40 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/8/2013 2:40 AM
Heptane	34,000	8,000		ppbv	8000	1/8/2013 2:40 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/8/2013 2:40 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	1/8/2013 2:40 AM
Methylene chloride	ND	40,000	U	ppbv	8000	1/8/2013 2:40 AM
n-Hexane	53,000	16,000		ppbv	8000	1/8/2013 2:40 AM
Naphthalene	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
o-Xylene	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Propylene	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Styrene	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Toluene	110,000	8,000		ppbv	8000	1/8/2013 2:40 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Trichloroethene	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/8/2013 2:40 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	1/8/2013 2:40 AM
Surr: 4-Bromofluorobenzene	94.5	70-130		%REC	8000	1/8/2013 2:40 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,800,000	940,000		µg/m³	8000	1/6/2013 2:16 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	1/6/2013 2:16 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	1/6/2013 2:16 AM
Surr: 4-Bromofluorobenzene	94.8	70-130		%REC	8000	1/6/2013 2:16 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 8:56:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-013	**Matrix:**	Air
Client Sample ID:	VA1971		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.052	0.10	J	% v/v	1	1/7/2013 5:22 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/7/2013 5:22 PM
Methane	ND	0.50	U	% v/v	1	1/7/2013 5:22 PM
Nitrogen	82	0.10		% v/v	1	1/7/2013 5:22 PM
Oxygen	23	0.10		% v/v	1	1/7/2013 5:22 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/11/2013 1:58 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/11/2013 1:58 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/11/2013 1:58 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/11/2013 1:58 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/11/2013 1:58 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/11/2013 1:58 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/11/2013 1:58 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/11/2013 1:58 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/11/2013 1:58 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/11/2013 1:58 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/11/2013 1:58 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/11/2013 1:58 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/11/2013 1:58 AM
1,3-Butadiene	ND	400	U	ppbv	400	1/11/2013 1:58 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/11/2013 1:58 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/11/2013 1:58 AM
2-Butanone	ND	400	U	ppbv	400	1/11/2013 1:58 AM
2-Hexanone	ND	400	U	ppbv	400	1/11/2013 1:58 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Acetone	720	400		ppbv	400	1/11/2013 1:58 AM
Benzene	3,300	400		ppbv	400	1/11/2013 1:58 AM
Benzyl chloride	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Bromodichloromethane	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Bromoform	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Bromomethane	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Carbon disulfide	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Carbon tetrachloride	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Chlorobenzene	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Chlorodibromomethane	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Chloroethane	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Chloroform	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Chloromethane	ND	400	U	ppbv	400	1/11/2013 1:58 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/11/2013 1:58 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/11/2013 1:58 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 8:56:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-013	**Matrix:**	Air
Client Sample ID:	VA1971		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,500	800		ppbv	400	1/11/2013 1:58 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Ethyl acetate	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Ethylbenzene	420	800	J	ppbv	400	1/11/2013 1:58 AM
Heptane	4,900	400		ppbv	400	1/11/2013 1:58 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/11/2013 1:58 AM
m,p-Xylene	1,000	800		ppbv	400	1/11/2013 1:58 AM
Methylene chloride	ND	2,000	U	ppbv	400	1/11/2013 1:58 AM
n-Hexane	920	800		ppbv	400	1/11/2013 1:58 AM
Naphthalene	ND	400	U	ppbv	400	1/11/2013 1:58 AM
o-Xylene	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Propylene	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Styrene	ND	400	U	ppbv	400	1/11/2013 1:58 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Tetrachloroethene	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Tetrahydrofuran	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Toluene	7,300	400		ppbv	400	1/11/2013 1:58 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/11/2013 1:58 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Trichloroethene	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Vinyl acetate	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Vinyl chloride	ND	400	U	ppbv	400	1/11/2013 1:58 AM
Xylenes, Total	1,000	1,200	J	ppbv	400	1/11/2013 1:58 AM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	400	1/11/2013 1:58 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	240,000	94,000		µg/m³	800	1/10/2013 1:36 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/10/2013 1:36 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	1/10/2013 1:36 AM
Surr: 4-Bromofluorobenzene	96.5	70-130		%REC	800	1/10/2013 1:36 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 9:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-014	**Matrix:**	Air
Client Sample ID:	VA1972		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.92	0.10		% v/v	1	1/7/2013 5:37 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/7/2013 5:37 PM
Methane	ND	0.50	U	% v/v	1	1/7/2013 5:37 PM
Nitrogen	82	0.10		% v/v	1	1/7/2013 5:37 PM
Oxygen	21	0.10		% v/v	1	1/7/2013 5:37 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
2-Butanone	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
2-Hexanone	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Acetone	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Benzene	36,000	8,000		ppbv	8000	1/11/2013 3:28 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Bromoform	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Bromomethane	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Chloroethane	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Chloroform	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Chloromethane	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 9:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-014	**Matrix:**	Air
Client Sample ID:	VA1972		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	66,000	16,000		ppbv	8000	1/11/2013 3:28 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/11/2013 3:28 AM
Heptane	19,000	8,000		ppbv	8000	1/11/2013 3:28 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/11/2013 3:28 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	1/11/2013 3:28 AM
Methylene chloride	ND	40,000	U	ppbv	8000	1/11/2013 3:28 AM
n-Hexane	45,000	16,000		ppbv	8000	1/11/2013 3:28 AM
Naphthalene	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
o-Xylene	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Propylene	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Styrene	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Toluene	42,000	8,000		ppbv	8000	1/11/2013 3:28 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Trichloroethene	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/11/2013 3:28 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	1/11/2013 3:28 AM
Surr: 4-Bromofluorobenzene	96.0	70-130		%REC	8000	1/11/2013 3:28 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	5,000,000	940,000		µg/m³	8000	1/10/2013 3:08 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	1/10/2013 3:08 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	1/10/2013 3:08 AM
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	8000	1/10/2013 3:08 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 10:06:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-015	**Matrix:**	Air
Client Sample ID:	VA1973		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.57	0.10		% v/v	1	1/8/2013 12:12 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/8/2013 12:12 PM
Methane	ND	0.50	U	% v/v	1	1/8/2013 12:12 PM
Nitrogen	82	0.10		% v/v	1	1/8/2013 12:12 PM
Oxygen	22	0.10		% v/v	1	1/8/2013 12:12 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/11/2013 5:01 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/11/2013 5:01 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/11/2013 5:01 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/11/2013 5:01 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/11/2013 5:01 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/11/2013 5:01 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/11/2013 5:01 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/11/2013 5:01 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/11/2013 5:01 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/11/2013 5:01 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/11/2013 5:01 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/11/2013 5:01 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/11/2013 5:01 AM
1,3-Butadiene	ND	800	U	ppbv	800	1/11/2013 5:01 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/11/2013 5:01 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/11/2013 5:01 AM
2-Butanone	ND	800	U	ppbv	800	1/11/2013 5:01 AM
2-Hexanone	ND	800	U	ppbv	800	1/11/2013 5:01 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Acetone	1,700	800		ppbv	800	1/11/2013 5:01 AM
Benzene	4,400	800		ppbv	800	1/11/2013 5:01 AM
Benzyl chloride	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Bromodichloromethane	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Bromoform	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Bromomethane	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Carbon disulfide	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Carbon tetrachloride	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Chlorobenzene	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Chlorodibromomethane	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Chloroethane	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Chloroform	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Chloromethane	ND	800	U	ppbv	800	1/11/2013 5:01 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/11/2013 5:01 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/11/2013 5:01 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 10:06:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-015	**Matrix:**	Air
Client Sample ID:	VA1973		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	8,400	1,600		ppbv	800	1/11/2013 5:01 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Ethyl acetate	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Ethylbenzene	1,300	1,600	J	ppbv	800	1/11/2013 5:01 AM
Heptane	15,000	800		ppbv	800	1/11/2013 5:01 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/11/2013 5:01 AM
m,p-Xylene	3,800	1,600		ppbv	800	1/11/2013 5:01 AM
Methylene chloride	8,900	4,000		ppbv	800	1/11/2013 5:01 AM
n-Hexane	3,700	1,600		ppbv	800	1/11/2013 5:01 AM
Naphthalene	ND	800	U	ppbv	800	1/11/2013 5:01 AM
o-Xylene	1,100	800		ppbv	800	1/11/2013 5:01 AM
Propylene	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Styrene	ND	800	U	ppbv	800	1/11/2013 5:01 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Tetrachloroethene	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Tetrahydrofuran	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Toluene	24,000	800		ppbv	800	1/11/2013 5:01 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/11/2013 5:01 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Trichloroethene	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Vinyl acetate	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Vinyl chloride	ND	800	U	ppbv	800	1/11/2013 5:01 AM
Xylenes, Total	4,800	2,400		ppbv	800	1/11/2013 5:01 AM
Surr: 4-Bromofluorobenzene	95.1	70-130		%REC	800	1/11/2013 5:01 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	600,000	94,000		µg/m³	800	1/10/2013 4:42 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/10/2013 4:42 AM
C9-C12 Aliphatic Hydrocarbons	36,000	150,000	J	µg/m³	800	1/10/2013 4:42 AM
Surr: 4-Bromofluorobenzene	98.8	70-130		%REC	800	1/10/2013 4:42 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 1:04:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-016	**Matrix:**	Air
Client Sample ID:	VA1992		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.079	0.10	J	% v/v	1	1/8/2013 12:41 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/8/2013 12:41 PM
Methane	ND	0.50	U	% v/v	1	1/8/2013 12:41 PM
Nitrogen	83	0.10		% v/v	1	1/8/2013 12:41 PM
Oxygen	23	0.10		% v/v	1	1/8/2013 12:41 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/8/2013 4:14 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/8/2013 4:14 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/8/2013 4:14 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/8/2013 4:14 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/8/2013 4:14 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/8/2013 4:14 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/8/2013 4:14 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/8/2013 4:14 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/8/2013 4:14 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/8/2013 4:14 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/8/2013 4:14 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/8/2013 4:14 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/8/2013 4:14 AM
1,3-Butadiene	ND	800	U	ppbv	800	1/8/2013 4:14 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/8/2013 4:14 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/8/2013 4:14 AM
2-Butanone	900	800		ppbv	800	1/8/2013 4:14 AM
2-Hexanone	ND	800	U	ppbv	800	1/8/2013 4:14 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Acetone	1,500	800		ppbv	800	1/8/2013 4:14 AM
Benzene	15,000	800		ppbv	800	1/8/2013 4:14 AM
Benzyl chloride	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Bromodichloromethane	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Bromoform	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Bromomethane	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Carbon disulfide	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Carbon tetrachloride	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Chlorobenzene	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Chlorodibromomethane	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Chloroethane	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Chloroform	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Chloromethane	ND	800	U	ppbv	800	1/8/2013 4:14 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/8/2013 4:14 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/8/2013 4:14 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 1:04:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-016	**Matrix:**	Air
Client Sample ID:	VA1992		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	26,000	1,600		ppbv	800	1/8/2013 4:14 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Ethyl acetate	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Ethylbenzene	2,600	1,600		ppbv	800	1/8/2013 4:14 AM
Heptane	42,000	8,000		ppbv	8000	1/8/2013 5:41 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/8/2013 4:14 AM
m,p-Xylene	7,300	1,600		ppbv	800	1/8/2013 4:14 AM
Methylene chloride	ND	4,000	U	ppbv	800	1/8/2013 4:14 AM
n-Hexane	6,900	1,600		ppbv	800	1/8/2013 4:14 AM
Naphthalene	ND	800	U	ppbv	800	1/8/2013 4:14 AM
o-Xylene	1,800	800		ppbv	800	1/8/2013 4:14 AM
Propylene	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Styrene	ND	800	U	ppbv	800	1/8/2013 4:14 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Tetrachloroethene	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Tetrahydrofuran	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Toluene	58,000	8,000		ppbv	8000	1/8/2013 5:41 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/8/2013 4:14 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Trichloroethene	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Vinyl acetate	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Vinyl chloride	ND	800	U	ppbv	800	1/8/2013 4:14 AM
Xylenes, Total	9,100	2,400		ppbv	800	1/8/2013 4:14 AM
Surr: 4-Bromofluorobenzene	90.1	70-130		%REC	800	1/8/2013 4:14 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,700,000	190,000		µg/m³	1600	1/8/2013 12:04 AM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	1/8/2013 12:04 AM
C9-C12 Aliphatic Hydrocarbons	110,000	300,000	J	µg/m³	1600	1/8/2013 12:04 AM
Surr: 4-Bromofluorobenzene	97.9	70-130		%REC	1600	1/8/2013 12:04 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 1:36:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-017	**Matrix:**	Air
Client Sample ID:	VA1993		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.21	0.10		% v/v	1	1/8/2013 1:02 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/8/2013 1:02 PM
Methane	ND	0.50	U	% v/v	1	1/8/2013 1:02 PM
Nitrogen	83	0.10		% v/v	1	1/8/2013 1:02 PM
Oxygen	22	0.10		% v/v	1	1/8/2013 1:02 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/8/2013 7:15 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/8/2013 7:15 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/8/2013 7:15 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/8/2013 7:15 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/8/2013 7:15 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/8/2013 7:15 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/8/2013 7:15 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/8/2013 7:15 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/8/2013 7:15 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/8/2013 7:15 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/8/2013 7:15 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/8/2013 7:15 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/8/2013 7:15 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/8/2013 7:15 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/8/2013 7:15 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/8/2013 7:15 PM
2-Butanone	ND	800	U	ppbv	800	1/8/2013 7:15 PM
2-Hexanone	ND	800	U	ppbv	800	1/8/2013 7:15 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Acetone	880	800		ppbv	800	1/8/2013 7:15 PM
Benzene	12,000	800		ppbv	800	1/8/2013 7:15 PM
Benzyl chloride	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Bromoform	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Bromomethane	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Carbon disulfide	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Chlorobenzene	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Chloroethane	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Chloroform	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Chloromethane	ND	800	U	ppbv	800	1/8/2013 7:15 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/8/2013 7:15 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/8/2013 7:15 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 1:36:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-017	**Matrix:**	Air
Client Sample ID:	VA1993		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	20,000	1,600		ppbv	800	1/8/2013 7:15 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Ethyl acetate	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Ethylbenzene	1,900	1,600		ppbv	800	1/8/2013 7:15 PM
Heptane	31,000	800		ppbv	800	1/8/2013 7:15 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/8/2013 7:15 PM
m,p-Xylene	5,300	1,600		ppbv	800	1/8/2013 7:15 PM
Methylene chloride	ND	4,000	U	ppbv	800	1/8/2013 7:15 PM
n-Hexane	5,800	1,600		ppbv	800	1/8/2013 7:15 PM
Naphthalene	ND	800	U	ppbv	800	1/8/2013 7:15 PM
o-Xylene	1,400	800		ppbv	800	1/8/2013 7:15 PM
Propylene	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Styrene	ND	800	U	ppbv	800	1/8/2013 7:15 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Toluene	44,000	8,000		ppbv	8000	1/9/2013 12:32 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/8/2013 7:15 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Trichloroethene	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Vinyl acetate	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Vinyl chloride	ND	800	U	ppbv	800	1/8/2013 7:15 PM
Xylenes, Total	6,700	2,400		ppbv	800	1/8/2013 7:15 PM
Surr: 4-Bromofluorobenzene	90.5	70-130		%REC	800	1/8/2013 7:15 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	870,000	94,000		µg/m³	800	1/6/2013 6:10 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/6/2013 6:10 AM
C9-C12 Aliphatic Hydrocarbons	86,000	150,000	J	µg/m³	800	1/6/2013 6:10 AM
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	800	1/6/2013 6:10 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 2:14:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-018	**Matrix:**	Air
Client Sample ID:	VA1994		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.87	0.10		% v/v	1	1/8/2013 1:19 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/8/2013 1:19 PM
Methane	ND	0.50	U	% v/v	1	1/8/2013 1:19 PM
Nitrogen	84	0.10		% v/v	1	1/8/2013 1:19 PM
Oxygen	20	0.10		% v/v	1	1/8/2013 1:19 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
1,1,2,2-Tetrachloroethane	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
1,1,2-Trichloroethane	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
1,1-Dichloroethane	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
1,1-Dichloroethene	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
1,2,4-Trichlorobenzene	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
1,2,4-Trimethylbenzene	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
1,2-Dibromoethane	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
1,2-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
1,2-Dichloroethane	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
1,2-Dichloropropane	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
1,3,5-Trimethylbenzene	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
1,3-Butadiene	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
1,3-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
1,4-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
2-Butanone	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
2-Hexanone	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
4-Methyl-2-pentanone	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Acetone	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Benzene	8,300	1,600		ppbv	1600	1/8/2013 9:31 PM
Benzyl chloride	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Bromodichloromethane	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Bromoform	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Bromomethane	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Carbon disulfide	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Carbon tetrachloride	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Chlorobenzene	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Chlorodibromomethane	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Chloroethane	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Chloroform	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Chloromethane	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
cis-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
cis-1,3-dichloropropene	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 2:14:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-018	**Matrix:**	Air
Client Sample ID:	VA1994		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	18,000	3,200		ppbv	1600	1/8/2013 9:31 PM
Dichlorodifluoromethane	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Ethyl acetate	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Ethylbenzene	2,200	3,200	J	ppbv	1600	1/8/2013 9:31 PM
Heptane	34,000	1,600		ppbv	1600	1/8/2013 9:31 PM
Hexachlorobutadiene	ND	3,200	U	ppbv	1600	1/8/2013 9:31 PM
m,p-Xylene	6,200	3,200		ppbv	1600	1/8/2013 9:31 PM
Methylene chloride	ND	8,000	U	ppbv	1600	1/8/2013 9:31 PM
n-Hexane	4,800	3,200		ppbv	1600	1/8/2013 9:31 PM
Naphthalene	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
o-Xylene	1,600	1,600		ppbv	1600	1/8/2013 9:31 PM
Propylene	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Styrene	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
tert-Butyl Methyl Ether	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Tetrachloroethene	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Tetrahydrofuran	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Toluene	43,000	1,600		ppbv	1600	1/8/2013 9:31 PM
trans-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
trans-1,3-dichloropropene	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Trichloroethene	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Trichlorofluoromethane	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Vinyl acetate	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Vinyl chloride	ND	1,600	U	ppbv	1600	1/8/2013 9:31 PM
Xylenes, Total	7,800	4,800		ppbv	1600	1/8/2013 9:31 PM
Surr: 4-Bromofluorobenzene	94.7	70-130		%REC	1600	1/8/2013 9:31 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,400,000	190,000		µg/m³	1600	1/8/2013 2:57 AM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	1/8/2013 2:57 AM
C9-C12 Aliphatic Hydrocarbons	73,000	300,000	J	µg/m³	1600	1/8/2013 2:57 AM
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	1600	1/8/2013 2:57 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 2:45:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-019	**Matrix:**	Air
Client Sample ID:	VA1995		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.18	0.10		% v/v	1	1/8/2013 1:37 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/8/2013 1:37 PM
Methane	ND	0.50	U	% v/v	1	1/8/2013 1:37 PM
Nitrogen	83	0.10		% v/v	1	1/8/2013 1:37 PM
Oxygen	22	0.10		% v/v	1	1/8/2013 1:37 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/8/2013 11:01 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/8/2013 11:01 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/8/2013 11:01 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/8/2013 11:01 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/8/2013 11:01 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/8/2013 11:01 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/8/2013 11:01 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/8/2013 11:01 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/8/2013 11:01 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/8/2013 11:01 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/8/2013 11:01 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/8/2013 11:01 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/8/2013 11:01 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/8/2013 11:01 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/8/2013 11:01 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/8/2013 11:01 PM
2-Butanone	ND	800	U	ppbv	800	1/8/2013 11:01 PM
2-Hexanone	ND	800	U	ppbv	800	1/8/2013 11:01 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Acetone	11,000	800		ppbv	800	1/8/2013 11:01 PM
Benzene	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Benzyl chloride	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Bromoform	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Bromomethane	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Carbon disulfide	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Chlorobenzene	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Chloroethane	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Chloroform	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Chloromethane	ND	800	U	ppbv	800	1/8/2013 11:01 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/8/2013 11:01 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/8/2013 11:01 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 2:45:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-019	**Matrix:**	Air
Client Sample ID:	VA1995		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,200	1,600	J	ppbv	800	1/8/2013 11:01 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Ethyl acetate	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Ethylbenzene	ND	1,600	U	ppbv	800	1/8/2013 11:01 PM
Heptane	1,900	800		ppbv	800	1/8/2013 11:01 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/8/2013 11:01 PM
m,p-Xylene	ND	1,600	U	ppbv	800	1/8/2013 11:01 PM
Methylene chloride	22,000	4,000		ppbv	800	1/8/2013 11:01 PM
n-Hexane	8,000	1,600		ppbv	800	1/8/2013 11:01 PM
Naphthalene	ND	800	U	ppbv	800	1/8/2013 11:01 PM
o-Xylene	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Propylene	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Styrene	ND	800	U	ppbv	800	1/8/2013 11:01 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Toluene	2,400	800		ppbv	800	1/8/2013 11:01 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/8/2013 11:01 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Trichloroethene	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Vinyl acetate	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Vinyl chloride	ND	800	U	ppbv	800	1/8/2013 11:01 PM
Xylenes, Total	ND	2,400	U	ppbv	800	1/8/2013 11:01 PM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	800	1/8/2013 11:01 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	460,000	94,000		µg/m³	800	1/8/2013 11:26 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/8/2013 11:26 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	1/8/2013 11:26 AM
Surr: 4-Bromofluorobenzene	95.6	70-130		%REC	800	1/8/2013 11:26 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 3:33:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-020	**Matrix:**	Air
Client Sample ID:	VA2023		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.089	0.10	J	% v/v	1	1/8/2013 1:51 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/8/2013 1:51 PM
Methane	ND	0.50	U	% v/v	1	1/8/2013 1:51 PM
Nitrogen	82	0.10		% v/v	1	1/8/2013 1:51 PM
Oxygen	22	0.10		% v/v	1	1/8/2013 1:51 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
2-Butanone	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
2-Hexanone	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Acetone	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Benzene	10,000	8,000		ppbv	8000	1/9/2013 2:04 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Bromoform	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Bromomethane	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Chloroethane	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Chloroform	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Chloromethane	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 3:33:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-020	**Matrix:**	Air
Client Sample ID:	VA2023		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	22,000	16,000		ppbv	8000	1/9/2013 2:04 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/9/2013 2:04 AM
Heptane	32,000	8,000		ppbv	8000	1/9/2013 2:04 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/9/2013 2:04 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	1/9/2013 2:04 AM
Methylene chloride	ND	40,000	U	ppbv	8000	1/9/2013 2:04 AM
n-Hexane	10,000	16,000	J	ppbv	8000	1/9/2013 2:04 AM
Naphthalene	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
o-Xylene	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Propylene	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Styrene	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Toluene	45,000	8,000		ppbv	8000	1/9/2013 2:04 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Trichloroethene	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/9/2013 2:04 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	1/9/2013 2:04 AM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	8000	1/9/2013 2:04 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	850,000	190,000		µg/m³	1600	1/8/2013 6:58 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	1/8/2013 6:58 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	1/8/2013 6:58 PM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	1600	1/8/2013 6:58 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 3:33:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-021	**Matrix:**	Air
Client Sample ID:	VA2024		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.093	0.10	J	% v/v	1	1/8/2013 2:41 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/8/2013 2:41 PM
Methane	ND	0.50	U	% v/v	1	1/8/2013 2:41 PM
Nitrogen	83	0.10		% v/v	1	1/8/2013 2:41 PM
Oxygen	22	0.10		% v/v	1	1/8/2013 2:41 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
2-Butanone	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
2-Hexanone	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Acetone	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Benzene	9,800	8,000		ppbv	8000	1/9/2013 2:46 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Bromoform	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Bromomethane	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Chloroethane	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Chloroform	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Chloromethane	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 3:33:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-021	**Matrix:**	Air
Client Sample ID:	VA2024		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	25,000	16,000		ppbv	8000	1/9/2013 2:46 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/9/2013 2:46 AM
Heptane	37,000	8,000		ppbv	8000	1/9/2013 2:46 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/9/2013 2:46 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	1/9/2013 2:46 AM
Methylene chloride	ND	40,000	U	ppbv	8000	1/9/2013 2:46 AM
n-Hexane	10,000	16,000	J	ppbv	8000	1/9/2013 2:46 AM
Naphthalene	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
o-Xylene	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Propylene	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Styrene	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Toluene	46,000	8,000		ppbv	8000	1/9/2013 2:46 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Trichloroethene	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/9/2013 2:46 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	1/9/2013 2:46 AM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	8000	1/9/2013 2:46 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,100,000	190,000		µg/m³	1600	1/8/2013 6:14 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	1/8/2013 6:14 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	1/8/2013 6:14 PM
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	1600	1/8/2013 6:14 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 1:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-022	**Matrix:**	Air
Client Sample ID:	VA2048		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.56	0.10		% v/v	1	1/8/2013 2:56 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/8/2013 2:56 PM
Methane	ND	0.50	U	% v/v	1	1/8/2013 2:56 PM
Nitrogen	82	0.10		% v/v	1	1/8/2013 2:56 PM
Oxygen	22	0.10		% v/v	1	1/8/2013 2:56 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/8/2013 6:30 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/8/2013 6:30 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/8/2013 6:30 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/8/2013 6:30 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/8/2013 6:30 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/8/2013 6:30 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/8/2013 6:30 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/8/2013 6:30 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/8/2013 6:30 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/8/2013 6:30 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/8/2013 6:30 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/8/2013 6:30 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/8/2013 6:30 PM
1,3-Butadiene	ND	400	U	ppbv	400	1/8/2013 6:30 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/8/2013 6:30 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/8/2013 6:30 PM
2-Butanone	ND	400	U	ppbv	400	1/8/2013 6:30 PM
2-Hexanone	ND	400	U	ppbv	400	1/8/2013 6:30 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Acetone	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Benzene	930	400		ppbv	400	1/8/2013 6:30 PM
Benzyl chloride	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Bromodichloromethane	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Bromoform	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Bromomethane	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Carbon disulfide	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Carbon tetrachloride	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Chlorobenzene	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Chlorodibromomethane	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Chloroethane	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Chloroform	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Chloromethane	ND	400	U	ppbv	400	1/8/2013 6:30 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/8/2013 6:30 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/8/2013 6:30 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 1:22:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-022	**Matrix:**	Air
Client Sample ID:	VA2048		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	700	800	J	ppbv	400	1/8/2013 6:30 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Ethyl acetate	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Ethylbenzene	ND	800	U	ppbv	400	1/8/2013 6:30 PM
Heptane	710	400		ppbv	400	1/8/2013 6:30 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/8/2013 6:30 PM
m,p-Xylene	ND	800	U	ppbv	400	1/8/2013 6:30 PM
Methylene chloride	ND	2,000	U	ppbv	400	1/8/2013 6:30 PM
n-Hexane	430	800	J	ppbv	400	1/8/2013 6:30 PM
Naphthalene	ND	400	U	ppbv	400	1/8/2013 6:30 PM
o-Xylene	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Propylene	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Styrene	ND	400	U	ppbv	400	1/8/2013 6:30 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Tetrachloroethene	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Tetrahydrofuran	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Toluene	3,200	400		ppbv	400	1/8/2013 6:30 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/8/2013 6:30 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Trichloroethene	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Vinyl acetate	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Vinyl chloride	ND	400	U	ppbv	400	1/8/2013 6:30 PM
Xylenes, Total	ND	1,200	U	ppbv	400	1/8/2013 6:30 PM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	400	1/8/2013 6:30 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	44,000	4,700		µg/m³	40	1/8/2013 1:30 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/8/2013 1:30 AM
C9-C12 Aliphatic Hydrocarbons	3,200	7,600	J	µg/m³	40	1/8/2013 1:30 AM
Surr: 4-Bromofluorobenzene	98.5	70-130		%REC	40	1/8/2013 1:30 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 1:50:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-023	**Matrix:**	Air
Client Sample ID:	VA2049		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	2.2	0.10		% v/v	1	1/8/2013 3:10 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/8/2013 3:10 PM
Methane	ND	0.50	U	% v/v	1	1/8/2013 3:10 PM
Nitrogen	83	0.10		% v/v	1	1/8/2013 3:10 PM
Oxygen	18	0.10		% v/v	1	1/8/2013 3:10 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/9/2013 1:14 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/9/2013 1:14 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/9/2013 1:14 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/9/2013 1:14 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/9/2013 1:14 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/9/2013 1:14 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/9/2013 1:14 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/9/2013 1:14 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/9/2013 1:14 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/9/2013 1:14 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/9/2013 1:14 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/9/2013 1:14 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/9/2013 1:14 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/9/2013 1:14 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/9/2013 1:14 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/9/2013 1:14 PM
2-Butanone	ND	40	U	ppbv	40	1/9/2013 1:14 PM
2-Hexanone	ND	40	U	ppbv	40	1/9/2013 1:14 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Acetone	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Benzene	1,200	40		ppbv	40	1/9/2013 1:14 PM
Benzyl chloride	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Bromoform	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Bromomethane	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Carbon disulfide	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Chlorobenzene	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Chloroethane	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Chloroform	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Chloromethane	ND	40	U	ppbv	40	1/9/2013 1:14 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/9/2013 1:14 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/9/2013 1:14 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 1:50:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-023	**Matrix:**	Air
Client Sample ID:	VA2049		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	790	80		ppbv	40	1/9/2013 1:14 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Ethyl acetate	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Ethylbenzene	49	80	J	ppbv	40	1/9/2013 1:14 PM
Heptane	890	40		ppbv	40	1/9/2013 1:14 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/9/2013 1:14 PM
m,p-Xylene	170	80		ppbv	40	1/9/2013 1:14 PM
Methylene chloride	ND	200	U	ppbv	40	1/9/2013 1:14 PM
n-Hexane	460	80		ppbv	40	1/9/2013 1:14 PM
Naphthalene	ND	40	U	ppbv	40	1/9/2013 1:14 PM
o-Xylene	43	40		ppbv	40	1/9/2013 1:14 PM
Propylene	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Styrene	ND	40	U	ppbv	40	1/9/2013 1:14 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Toluene	1,200	400		ppbv	400	1/8/2013 8:47 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/9/2013 1:14 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Trichloroethene	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Vinyl acetate	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Vinyl chloride	ND	40	U	ppbv	40	1/9/2013 1:14 PM
Xylenes, Total	220	120		ppbv	40	1/9/2013 1:14 PM
Surr: 4-Bromofluorobenzene	94.3	70-130		%REC	40	1/9/2013 1:14 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	35,000	4,700		µg/m³	40	1/8/2013 2:13 AM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/8/2013 2:13 AM
C9-C12 Aliphatic Hydrocarbons	2,300	7,600	J	µg/m³	40	1/8/2013 2:13 AM
Surr: 4-Bromofluorobenzene	97.7	70-130		%REC	40	1/8/2013 2:13 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 2:20:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-024	**Matrix:**	Air
Client Sample ID:	VA2050		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	1.3	0.10	m	% v/v	1	1/8/2013 3:24 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/8/2013 3:24 PM
Methane	ND	0.50	U	% v/v	1	1/8/2013 3:24 PM
Nitrogen	83	0.10		% v/v	1	1/8/2013 3:24 PM
Oxygen	20	0.10		% v/v	1	1/8/2013 3:24 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/8/2013 10:16 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/8/2013 10:16 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/8/2013 10:16 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/8/2013 10:16 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/8/2013 10:16 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/8/2013 10:16 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/8/2013 10:16 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/8/2013 10:16 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/8/2013 10:16 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/8/2013 10:16 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/8/2013 10:16 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/8/2013 10:16 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/8/2013 10:16 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/8/2013 10:16 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/8/2013 10:16 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/8/2013 10:16 PM
2-Butanone	ND	800	U	ppbv	800	1/8/2013 10:16 PM
2-Hexanone	ND	800	U	ppbv	800	1/8/2013 10:16 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Acetone	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Benzene	1,900	800		ppbv	800	1/8/2013 10:16 PM
Benzyl chloride	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Bromoform	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Bromomethane	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Carbon disulfide	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Chlorobenzene	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Chloroethane	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Chloroform	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Chloromethane	ND	800	U	ppbv	800	1/8/2013 10:16 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/8/2013 10:16 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/8/2013 10:16 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 2:20:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-024	**Matrix:**	Air
Client Sample ID:	VA2050		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,300	1,600		ppbv	800	1/8/2013 10:16 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Ethyl acetate	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Ethylbenzene	ND	1,600	U	ppbv	800	1/8/2013 10:16 PM
Heptane	1,000	800		ppbv	800	1/8/2013 10:16 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/8/2013 10:16 PM
m,p-Xylene	ND	1,600	U	ppbv	800	1/8/2013 10:16 PM
Methylene chloride	ND	4,000	U	ppbv	800	1/8/2013 10:16 PM
n-Hexane	1,300	1,600	J	ppbv	800	1/8/2013 10:16 PM
Naphthalene	ND	800	U	ppbv	800	1/8/2013 10:16 PM
o-Xylene	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Propylene	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Styrene	ND	800	U	ppbv	800	1/8/2013 10:16 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Toluene	3,500	800		ppbv	800	1/8/2013 10:16 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/8/2013 10:16 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Trichloroethene	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Vinyl acetate	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Vinyl chloride	ND	800	U	ppbv	800	1/8/2013 10:16 PM
Xylenes, Total	ND	2,400	U	ppbv	800	1/8/2013 10:16 PM
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	800	1/8/2013 10:16 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	260,000	94,000		µg/m³	800	1/8/2013 4:45 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/8/2013 4:45 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	1/8/2013 4:45 PM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	800	1/8/2013 4:45 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 2:54:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-025	**Matrix:**	Air
Client Sample ID:	VA2051		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.44	0.10		% v/v	1	1/8/2013 4:11 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/8/2013 4:11 PM
Methane	ND	0.50	U	% v/v	1	1/8/2013 4:11 PM
Nitrogen	83	0.10		% v/v	1	1/8/2013 4:11 PM
Oxygen	21	0.10		% v/v	1	1/8/2013 4:11 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/9/2013 12:34 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/9/2013 12:34 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/9/2013 12:34 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/9/2013 12:34 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/9/2013 12:34 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/9/2013 12:34 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/9/2013 12:34 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/9/2013 12:34 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/9/2013 12:34 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/9/2013 12:34 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/9/2013 12:34 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/9/2013 12:34 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/9/2013 12:34 AM
1,3-Butadiene	ND	400	U	ppbv	400	1/9/2013 12:34 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/9/2013 12:34 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/9/2013 12:34 AM
2-Butanone	ND	400	U	ppbv	400	1/9/2013 12:34 AM
2-Hexanone	ND	400	U	ppbv	400	1/9/2013 12:34 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Acetone	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Benzene	1,400	400		ppbv	400	1/9/2013 12:34 AM
Benzyl chloride	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Bromodichloromethane	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Bromoform	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Bromomethane	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Carbon disulfide	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Carbon tetrachloride	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Chlorobenzene	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Chlorodibromomethane	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Chloroethane	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Chloroform	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Chloromethane	ND	400	U	ppbv	400	1/9/2013 12:34 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/9/2013 12:34 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/9/2013 12:34 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 2:54:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-025	**Matrix:**	Air
Client Sample ID:	VA2051		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	880	800		ppbv	400	1/9/2013 12:34 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Ethyl acetate	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Ethylbenzene	ND	800	U	ppbv	400	1/9/2013 12:34 AM
Heptane	720	400		ppbv	400	1/9/2013 12:34 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/9/2013 12:34 AM
m,p-Xylene	ND	800	U	ppbv	400	1/9/2013 12:34 AM
Methylene chloride	ND	2,000	U	ppbv	400	1/9/2013 12:34 AM
n-Hexane	460	800	J	ppbv	400	1/9/2013 12:34 AM
Naphthalene	ND	400	U	ppbv	400	1/9/2013 12:34 AM
o-Xylene	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Propylene	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Styrene	ND	400	U	ppbv	400	1/9/2013 12:34 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Tetrachloroethene	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Tetrahydrofuran	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Toluene	2,800	400		ppbv	400	1/9/2013 12:34 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/9/2013 12:34 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Trichloroethene	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Vinyl acetate	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Vinyl chloride	ND	400	U	ppbv	400	1/9/2013 12:34 AM
Xylenes, Total	ND	1,200	U	ppbv	400	1/9/2013 12:34 AM
Surr: 4-Bromofluorobenzene	97.2	70-130		%REC	400	1/9/2013 12:34 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	120,000	47,000		µg/m³	400	1/7/2013 3:04 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/7/2013 3:04 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/7/2013 3:04 PM
Surr: 4-Bromofluorobenzene	95.7	70-130		%REC	400	1/7/2013 3:04 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 3:27:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-026	**Matrix:**	Air
Client Sample ID:	VA2052		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.79	0.10		% v/v	1	1/8/2013 4:25 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/8/2013 4:25 PM
Methane	ND	0.50	U	% v/v	1	1/8/2013 4:25 PM
Nitrogen	83	0.10		% v/v	1	1/8/2013 4:25 PM
Oxygen	21	0.10		% v/v	1	1/8/2013 4:25 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/9/2013 1:22 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/9/2013 1:22 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/9/2013 1:22 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/9/2013 1:22 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/9/2013 1:22 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/9/2013 1:22 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/9/2013 1:22 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/9/2013 1:22 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/9/2013 1:22 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/9/2013 1:22 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/9/2013 1:22 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/9/2013 1:22 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/9/2013 1:22 AM
1,3-Butadiene	ND	400	U	ppbv	400	1/9/2013 1:22 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/9/2013 1:22 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/9/2013 1:22 AM
2-Butanone	ND	400	U	ppbv	400	1/9/2013 1:22 AM
2-Hexanone	ND	400	U	ppbv	400	1/9/2013 1:22 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Acetone	420	400		ppbv	400	1/9/2013 1:22 AM
Benzene	3,700	400		ppbv	400	1/9/2013 1:22 AM
Benzyl chloride	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Bromodichloromethane	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Bromoform	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Bromomethane	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Carbon disulfide	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Carbon tetrachloride	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Chlorobenzene	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Chlorodibromomethane	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Chloroethane	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Chloroform	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Chloromethane	ND	400	U	ppbv	400	1/9/2013 1:22 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/9/2013 1:22 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/9/2013 1:22 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 3:27:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-026	**Matrix:**	Air
Client Sample ID:	VA2052		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	5,400	800		ppbv	400	1/9/2013 1:22 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Ethyl acetate	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Ethylbenzene	ND	800	U	ppbv	400	1/9/2013 1:22 AM
Heptane	770	400		ppbv	400	1/9/2013 1:22 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/9/2013 1:22 AM
m,p-Xylene	ND	800	U	ppbv	400	1/9/2013 1:22 AM
Methylene chloride	ND	2,000	U	ppbv	400	1/9/2013 1:22 AM
n-Hexane	2,400	800		ppbv	400	1/9/2013 1:22 AM
Naphthalene	ND	400	U	ppbv	400	1/9/2013 1:22 AM
o-Xylene	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Propylene	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Styrene	ND	400	U	ppbv	400	1/9/2013 1:22 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Tetrachloroethene	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Tetrahydrofuran	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Toluene	4,800	400		ppbv	400	1/9/2013 1:22 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/9/2013 1:22 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Trichloroethene	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Vinyl acetate	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Vinyl chloride	ND	400	U	ppbv	400	1/9/2013 1:22 AM
Xylenes, Total	ND	1,200	U	ppbv	400	1/9/2013 1:22 AM
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	400	1/9/2013 1:22 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	270,000	47,000		µg/m³	400	1/7/2013 3:53 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/7/2013 3:53 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/7/2013 3:53 PM
Surr: 4-Bromofluorobenzene	94.3	70-130		%REC	400	1/7/2013 3:53 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 4:03:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-027	**Matrix:**	Air
Client Sample ID:	VA2053		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.56	0.10		% v/v	1	1/8/2013 4:40 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/8/2013 4:40 PM
Methane	ND	0.50	U	% v/v	1	1/8/2013 4:40 PM
Nitrogen	84	0.10		% v/v	1	1/8/2013 4:40 PM
Oxygen	19	0.10		% v/v	1	1/8/2013 4:40 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
1,1,2,2-Tetrachloroethane	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
1,1,2-Trichloroethane	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
1,1-Dichloroethane	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
1,1-Dichloroethene	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
1,2,4-Trichlorobenzene	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
1,2,4-Trimethylbenzene	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
1,2-Dibromoethane	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
1,2-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
1,2-Dichloroethane	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
1,2-Dichloropropane	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
1,3,5-Trimethylbenzene	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
1,3-Butadiene	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
1,3-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
1,4-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
2-Butanone	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
2-Hexanone	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
4-Methyl-2-pentanone	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Acetone	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Benzene	14,000	1,600		ppbv	1600	1/9/2013 3:29 AM
Benzyl chloride	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Bromodichloromethane	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Bromoform	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Bromomethane	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Carbon disulfide	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Carbon tetrachloride	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Chlorobenzene	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Chlorodibromomethane	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Chloroethane	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Chloroform	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Chloromethane	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
cis-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
cis-1,3-dichloropropene	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 4:03:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-027	**Matrix:**	Air
Client Sample ID:	VA2053		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	12,000	3,200		ppbv	1600	1/9/2013 3:29 AM
Dichlorodifluoromethane	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Ethyl acetate	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Ethylbenzene	ND	3,200	U	ppbv	1600	1/9/2013 3:29 AM
Heptane	3,500	1,600		ppbv	1600	1/9/2013 3:29 AM
Hexachlorobutadiene	ND	3,200	U	ppbv	1600	1/9/2013 3:29 AM
m,p-Xylene	ND	3,200	U	ppbv	1600	1/9/2013 3:29 AM
Methylene chloride	ND	8,000	U	ppbv	1600	1/9/2013 3:29 AM
n-Hexane	12,000	3,200		ppbv	1600	1/9/2013 3:29 AM
Naphthalene	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
o-Xylene	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Propylene	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Styrene	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
tert-Butyl Methyl Ether	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Tetrachloroethene	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Tetrahydrofuran	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Toluene	18,000	1,600		ppbv	1600	1/9/2013 3:29 AM
trans-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
trans-1,3-dichloropropene	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Trichloroethene	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Trichlorofluoromethane	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Vinyl acetate	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Vinyl chloride	ND	1,600	U	ppbv	1600	1/9/2013 3:29 AM
Xylenes, Total	ND	4,800	U	ppbv	1600	1/9/2013 3:29 AM
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	1600	1/9/2013 3:29 AM
Mass APH Air		**Method:**				**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,200,000	190,000		µg/m³	1600	1/7/2013 6:52 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	1/7/2013 6:52 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	1/7/2013 6:52 PM
Surr: 4-Bromofluorobenzene	95.9	70-130		%REC	1600	1/7/2013 6:52 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 12:46:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-028	**Matrix:**	Air
Client Sample ID:	VA2054		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.30	0.10		% v/v	1	1/8/2013 4:54 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/8/2013 4:54 PM
Methane	ND	0.50	U	% v/v	1	1/8/2013 4:54 PM
Nitrogen	82	0.10		% v/v	1	1/8/2013 4:54 PM
Oxygen	22	0.10		% v/v	1	1/8/2013 4:54 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/9/2013 7:02 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/9/2013 7:02 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/9/2013 7:02 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/9/2013 7:02 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/9/2013 7:02 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/9/2013 7:02 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/9/2013 7:02 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/9/2013 7:02 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/9/2013 7:02 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/9/2013 7:02 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/9/2013 7:02 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/9/2013 7:02 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/9/2013 7:02 PM
1,3-Butadiene	ND	400	U	ppbv	400	1/9/2013 7:02 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/9/2013 7:02 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/9/2013 7:02 PM
2-Butanone	ND	400	U	ppbv	400	1/9/2013 7:02 PM
2-Hexanone	ND	400	U	ppbv	400	1/9/2013 7:02 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Acetone	510	400		ppbv	400	1/9/2013 7:02 PM
Benzene	710	400		ppbv	400	1/9/2013 7:02 PM
Benzyl chloride	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Bromodichloromethane	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Bromoform	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Bromomethane	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Carbon disulfide	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Carbon tetrachloride	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Chlorobenzene	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Chlorodibromomethane	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Chloroethane	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Chloroform	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Chloromethane	ND	400	U	ppbv	400	1/9/2013 7:02 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/9/2013 7:02 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/9/2013 7:02 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 12:46:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-028	**Matrix:**	Air
Client Sample ID:	VA2054		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,100	800		ppbv	400	1/9/2013 7:02 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Ethyl acetate	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Ethylbenzene	ND	800	U	ppbv	400	1/9/2013 7:02 PM
Heptane	920	400		ppbv	400	1/9/2013 7:02 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/9/2013 7:02 PM
m,p-Xylene	ND	800	U	ppbv	400	1/9/2013 7:02 PM
Methylene chloride	ND	2,000	U	ppbv	400	1/9/2013 7:02 PM
n-Hexane	700	800	J	ppbv	400	1/9/2013 7:02 PM
Naphthalene	ND	400	U	ppbv	400	1/9/2013 7:02 PM
o-Xylene	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Propylene	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Styrene	ND	400	U	ppbv	400	1/9/2013 7:02 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Tetrachloroethene	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Tetrahydrofuran	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Toluene	2,400	400		ppbv	400	1/9/2013 7:02 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/9/2013 7:02 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Trichloroethene	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Vinyl acetate	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Vinyl chloride	ND	400	U	ppbv	400	1/9/2013 7:02 PM
Xylenes, Total	ND	1,200	U	ppbv	400	1/9/2013 7:02 PM
Surr: 4-Bromofluorobenzene	93.3	70-130		%REC	400	1/9/2013 7:02 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	110,000	47,000		µg/m³	400	1/9/2013 5:51 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/9/2013 5:51 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/9/2013 5:51 PM
Surr: 4-Bromofluorobenzene	96.8	70-130		%REC	400	1/9/2013 5:51 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 1:14:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-029	**Matrix:**	Air
Client Sample ID:	VA2055		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.44	0.10		% v/v	1	1/8/2013 5:08 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/8/2013 5:08 PM
Methane	ND	0.50	U	% v/v	1	1/8/2013 5:08 PM
Nitrogen	82	0.10		% v/v	1	1/8/2013 5:08 PM
Oxygen	22	0.10		% v/v	1	1/8/2013 5:08 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/9/2013 8:34 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/9/2013 8:34 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/9/2013 8:34 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/9/2013 8:34 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/9/2013 8:34 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/9/2013 8:34 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/9/2013 8:34 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/9/2013 8:34 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/9/2013 8:34 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/9/2013 8:34 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/9/2013 8:34 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/9/2013 8:34 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/9/2013 8:34 PM
1,3-Butadiene	ND	400	U	ppbv	400	1/9/2013 8:34 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/9/2013 8:34 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/9/2013 8:34 PM
2-Butanone	ND	400	U	ppbv	400	1/9/2013 8:34 PM
2-Hexanone	ND	400	U	ppbv	400	1/9/2013 8:34 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Acetone	2,200	400		ppbv	400	1/9/2013 8:34 PM
Benzene	520	400		ppbv	400	1/9/2013 8:34 PM
Benzyl chloride	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Bromodichloromethane	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Bromoform	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Bromomethane	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Carbon disulfide	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Carbon tetrachloride	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Chlorobenzene	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Chlorodibromomethane	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Chloroethane	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Chloroform	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Chloromethane	ND	400	U	ppbv	400	1/9/2013 8:34 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/9/2013 8:34 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/9/2013 8:34 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 1:14:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-029	**Matrix:**	Air
Client Sample ID:	VA2055		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	670	800	J	ppbv	400	1/9/2013 8:34 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Ethyl acetate	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Ethylbenzene	ND	800	U	ppbv	400	1/9/2013 8:34 PM
Heptane	630	400		ppbv	400	1/9/2013 8:34 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/9/2013 8:34 PM
m,p-Xylene	ND	800	U	ppbv	400	1/9/2013 8:34 PM
Methylene chloride	15,000	2,000		ppbv	400	1/9/2013 8:34 PM
n-Hexane	2,500	800		ppbv	400	1/9/2013 8:34 PM
Naphthalene	ND	400	U	ppbv	400	1/9/2013 8:34 PM
o-Xylene	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Propylene	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Styrene	ND	400	U	ppbv	400	1/9/2013 8:34 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Tetrachloroethene	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Tetrahydrofuran	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Toluene	1,600	400		ppbv	400	1/9/2013 8:34 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/9/2013 8:34 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Trichloroethene	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Vinyl acetate	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Vinyl chloride	ND	400	U	ppbv	400	1/9/2013 8:34 PM
Xylenes, Total	ND	1,200	U	ppbv	400	1/9/2013 8:34 PM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	400	1/9/2013 8:34 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	97,000	47,000		µg/m³	400	1/9/2013 7:23 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/9/2013 7:23 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/9/2013 7:23 PM
Surr: 4-Bromofluorobenzene	96.9	70-130		%REC	400	1/9/2013 7:23 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 1:44:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-030	**Matrix:**	Air
Client Sample ID:	VA2056		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.72	0.10		% v/v	1	1/8/2013 5:22 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/8/2013 5:22 PM
Methane	ND	0.50	U	% v/v	1	1/8/2013 5:22 PM
Nitrogen	84	0.10		% v/v	1	1/8/2013 5:22 PM
Oxygen	19	0.10		% v/v	1	1/8/2013 5:22 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	200	U	ppbv	200	1/9/2013 10:52 PM
1,1,2,2-Tetrachloroethane	ND	200	U	ppbv	200	1/9/2013 10:52 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	200	U	ppbv	200	1/9/2013 10:52 PM
1,1,2-Trichloroethane	ND	200	U	ppbv	200	1/9/2013 10:52 PM
1,1-Dichloroethane	ND	200	U	ppbv	200	1/9/2013 10:52 PM
1,1-Dichloroethene	ND	200	U	ppbv	200	1/9/2013 10:52 PM
1,2,4-Trichlorobenzene	ND	200	U	ppbv	200	1/9/2013 10:52 PM
1,2,4-Trimethylbenzene	ND	200	U	ppbv	200	1/9/2013 10:52 PM
1,2-Dibromoethane	ND	200	U	ppbv	200	1/9/2013 10:52 PM
1,2-Dichlorobenzene	ND	200	U	ppbv	200	1/9/2013 10:52 PM
1,2-Dichloroethane	ND	200	U	ppbv	200	1/9/2013 10:52 PM
1,2-Dichloropropane	ND	200	U	ppbv	200	1/9/2013 10:52 PM
1,3,5-Trimethylbenzene	ND	200	U	ppbv	200	1/9/2013 10:52 PM
1,3-Butadiene	ND	200	U	ppbv	200	1/9/2013 10:52 PM
1,3-Dichlorobenzene	ND	200	U	ppbv	200	1/9/2013 10:52 PM
1,4-Dichlorobenzene	ND	200	U	ppbv	200	1/9/2013 10:52 PM
2-Butanone	ND	200	U	ppbv	200	1/9/2013 10:52 PM
2-Hexanone	ND	200	U	ppbv	200	1/9/2013 10:52 PM
4-Methyl-2-pentanone	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Acetone	210	200		ppbv	200	1/9/2013 10:52 PM
Benzene	660	200		ppbv	200	1/9/2013 10:52 PM
Benzyl chloride	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Bromodichloromethane	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Bromoform	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Bromomethane	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Carbon disulfide	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Carbon tetrachloride	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Chlorobenzene	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Chlorodibromomethane	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Chloroethane	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Chloroform	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Chloromethane	ND	200	U	ppbv	200	1/9/2013 10:52 PM
cis-1,2-Dichloroethene	ND	200	U	ppbv	200	1/9/2013 10:52 PM
cis-1,3-dichloropropene	ND	200	U	ppbv	200	1/9/2013 10:52 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 1:44:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-030	**Matrix:**	Air
Client Sample ID:	VA2056		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	980	400		ppbv	200	1/9/2013 10:52 PM
Dichlorodifluoromethane	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Ethyl acetate	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Ethylbenzene	ND	400	U	ppbv	200	1/9/2013 10:52 PM
Heptane	920	200		ppbv	200	1/9/2013 10:52 PM
Hexachlorobutadiene	ND	400	U	ppbv	200	1/9/2013 10:52 PM
m,p-Xylene	ND	400	U	ppbv	200	1/9/2013 10:52 PM
Methylene chloride	ND	1,000	U	ppbv	200	1/9/2013 10:52 PM
n-Hexane	620	400		ppbv	200	1/9/2013 10:52 PM
Naphthalene	ND	200	U	ppbv	200	1/9/2013 10:52 PM
o-Xylene	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Propylene	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Styrene	ND	200	U	ppbv	200	1/9/2013 10:52 PM
tert-Butyl Methyl Ether	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Tetrachloroethene	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Tetrahydrofuran	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Toluene	2,500	200		ppbv	200	1/9/2013 10:52 PM
trans-1,2-Dichloroethene	ND	200	U	ppbv	200	1/9/2013 10:52 PM
trans-1,3-dichloropropene	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Trichloroethene	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Trichlorofluoromethane	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Vinyl acetate	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Vinyl chloride	ND	200	U	ppbv	200	1/9/2013 10:52 PM
Xylenes, Total	ND	600	U	ppbv	200	1/9/2013 10:52 PM
Surr: 4-Bromofluorobenzene	94.2	70-130		%REC	200	1/9/2013 10:52 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	83,000	23,000		µg/m³	200	1/9/2013 9:43 PM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	1/9/2013 9:43 PM
C9-C12 Aliphatic Hydrocarbons	ND	38,000	U	µg/m³	200	1/9/2013 9:43 PM
Surr: 4-Bromofluorobenzene	96.4	70-130		%REC	200	1/9/2013 9:43 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 1:44:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-031	**Matrix:**	Air
Client Sample ID:	VA2057		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.66	0.10		% v/v	1	1/9/2013 12:28 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/9/2013 12:28 PM
Methane	ND	0.50	U	% v/v	1	1/9/2013 12:28 PM
Nitrogen	84	0.10		% v/v	1	1/9/2013 12:28 PM
Oxygen	19	0.10		% v/v	1	1/9/2013 12:28 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	200	U	ppbv	200	1/9/2013 11:40 PM
1,1,2,2-Tetrachloroethane	ND	200	U	ppbv	200	1/9/2013 11:40 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	200	U	ppbv	200	1/9/2013 11:40 PM
1,1,2-Trichloroethane	ND	200	U	ppbv	200	1/9/2013 11:40 PM
1,1-Dichloroethane	ND	200	U	ppbv	200	1/9/2013 11:40 PM
1,1-Dichloroethene	ND	200	U	ppbv	200	1/9/2013 11:40 PM
1,2,4-Trichlorobenzene	ND	200	U	ppbv	200	1/9/2013 11:40 PM
1,2,4-Trimethylbenzene	ND	200	U	ppbv	200	1/9/2013 11:40 PM
1,2-Dibromoethane	ND	200	U	ppbv	200	1/9/2013 11:40 PM
1,2-Dichlorobenzene	ND	200	U	ppbv	200	1/9/2013 11:40 PM
1,2-Dichloroethane	ND	200	U	ppbv	200	1/9/2013 11:40 PM
1,2-Dichloropropane	ND	200	U	ppbv	200	1/9/2013 11:40 PM
1,3,5-Trimethylbenzene	ND	200	U	ppbv	200	1/9/2013 11:40 PM
1,3-Butadiene	ND	200	U	ppbv	200	1/9/2013 11:40 PM
1,3-Dichlorobenzene	ND	200	U	ppbv	200	1/9/2013 11:40 PM
1,4-Dichlorobenzene	ND	200	U	ppbv	200	1/9/2013 11:40 PM
2-Butanone	ND	200	U	ppbv	200	1/9/2013 11:40 PM
2-Hexanone	ND	200	U	ppbv	200	1/9/2013 11:40 PM
4-Methyl-2-pentanone	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Acetone	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Benzene	480	200		ppbv	200	1/9/2013 11:40 PM
Benzyl chloride	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Bromodichloromethane	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Bromoform	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Bromomethane	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Carbon disulfide	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Carbon tetrachloride	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Chlorobenzene	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Chlorodibromomethane	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Chloroethane	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Chloroform	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Chloromethane	ND	200	U	ppbv	200	1/9/2013 11:40 PM
cis-1,2-Dichloroethene	ND	200	U	ppbv	200	1/9/2013 11:40 PM
cis-1,3-dichloropropene	ND	200	U	ppbv	200	1/9/2013 11:40 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 1:44:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-031	**Matrix:**	Air
Client Sample ID:	VA2057		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	770	400		ppbv	200	1/9/2013 11:40 PM
Dichlorodifluoromethane	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Ethyl acetate	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Ethylbenzene	ND	400	U	ppbv	200	1/9/2013 11:40 PM
Heptane	680	200		ppbv	200	1/9/2013 11:40 PM
Hexachlorobutadiene	ND	400	U	ppbv	200	1/9/2013 11:40 PM
m,p-Xylene	ND	400	U	ppbv	200	1/9/2013 11:40 PM
Methylene chloride	ND	1,000	U	ppbv	200	1/9/2013 11:40 PM
n-Hexane	460	400		ppbv	200	1/9/2013 11:40 PM
Naphthalene	ND	200	U	ppbv	200	1/9/2013 11:40 PM
o-Xylene	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Propylene	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Styrene	ND	200	U	ppbv	200	1/9/2013 11:40 PM
tert-Butyl Methyl Ether	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Tetrachloroethene	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Tetrahydrofuran	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Toluene	1,700	200		ppbv	200	1/9/2013 11:40 PM
trans-1,2-Dichloroethene	ND	200	U	ppbv	200	1/9/2013 11:40 PM
trans-1,3-dichloropropene	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Trichloroethene	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Trichlorofluoromethane	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Vinyl acetate	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Vinyl chloride	ND	200	U	ppbv	200	1/9/2013 11:40 PM
Xylenes, Total	ND	600	U	ppbv	200	1/9/2013 11:40 PM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	200	1/9/2013 11:40 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	69,000	23,000		µg/m³	200	1/9/2013 10:32 PM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	1/9/2013 10:32 PM
C9-C12 Aliphatic Hydrocarbons	ND	38,000	U	µg/m³	200	1/9/2013 10:32 PM
Surr: 4-Bromofluorobenzene	98.3	70-130		%REC	200	1/9/2013 10:32 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 2:32:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-032	**Matrix:**	Air
Client Sample ID:	VA2058		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.93	0.10		% v/v	1	1/9/2013 12:43 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/9/2013 12:43 PM
Methane	ND	0.50	U	% v/v	1	1/9/2013 12:43 PM
Nitrogen	84	0.10		% v/v	1	1/9/2013 12:43 PM
Oxygen	19	0.10		% v/v	1	1/9/2013 12:43 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
1,1,2,2-Tetrachloroethane	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
1,1,2-Trichloroethane	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
1,1-Dichloroethane	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
1,1-Dichloroethene	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
1,2,4-Trichlorobenzene	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
1,2,4-Trimethylbenzene	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
1,2-Dibromoethane	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
1,2-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
1,2-Dichloroethane	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
1,2-Dichloropropane	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
1,3,5-Trimethylbenzene	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
1,3-Butadiene	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
1,3-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
1,4-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
2-Butanone	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
2-Hexanone	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
4-Methyl-2-pentanone	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Acetone	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Benzene	17,000	1,600		ppbv	1600	1/10/2013 2:37 AM
Benzyl chloride	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Bromodichloromethane	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Bromoform	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Bromomethane	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Carbon disulfide	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Carbon tetrachloride	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Chlorobenzene	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Chlorodibromomethane	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Chloroethane	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Chloroform	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Chloromethane	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
cis-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
cis-1,3-dichloropropene	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 2:32:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-032	**Matrix:**	Air
Client Sample ID:	VA2058		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	32,000	3,200		ppbv	1600	1/10/2013 2:37 AM
Dichlorodifluoromethane	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Ethyl acetate	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Ethylbenzene	ND	3,200	U	ppbv	1600	1/10/2013 2:37 AM
Heptane	8,100	1,600		ppbv	1600	1/10/2013 2:37 AM
Hexachlorobutadiene	ND	3,200	U	ppbv	1600	1/10/2013 2:37 AM
m,p-Xylene	ND	3,200	U	ppbv	1600	1/10/2013 2:37 AM
Methylene chloride	ND	8,000	U	ppbv	1600	1/10/2013 2:37 AM
n-Hexane	29,000	3,200		ppbv	1600	1/10/2013 2:37 AM
Naphthalene	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
o-Xylene	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Propylene	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Styrene	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
tert-Butyl Methyl Ether	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Tetrachloroethene	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Tetrahydrofuran	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Toluene	17,000	1,600		ppbv	1600	1/10/2013 2:37 AM
trans-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
trans-1,3-dichloropropene	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Trichloroethene	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Trichlorofluoromethane	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Vinyl acetate	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Vinyl chloride	ND	1,600	U	ppbv	1600	1/10/2013 2:37 AM
Xylenes, Total	ND	4,800	U	ppbv	1600	1/10/2013 2:37 AM
Surr: 4-Bromofluorobenzene	97.0	70-130		%REC	1600	1/10/2013 2:37 AM
Mass APH Air		**Method:**				**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	2,900,000	940,000		µg/m³	8000	1/10/2013 11:31 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	1/10/2013 11:31 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	1/10/2013 11:31 AM
Surr: 4-Bromofluorobenzene	96.4	70-130		%REC	8000	1/10/2013 11:31 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 3:06:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-033	**Matrix:**	Air
Client Sample ID:	VA2059		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.77	0.10		% v/v	1	1/9/2013 1:10 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/9/2013 1:10 PM
Methane	ND	0.50	U	% v/v	1	1/9/2013 1:10 PM
Nitrogen	85	0.10		% v/v	1	1/9/2013 1:10 PM
Oxygen	19	0.10		% v/v	1	1/9/2013 1:10 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/10/2013 10:09 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/10/2013 10:09 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/10/2013 10:09 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/10/2013 10:09 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/10/2013 10:09 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/10/2013 10:09 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/10/2013 10:09 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/10/2013 10:09 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/10/2013 10:09 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/10/2013 10:09 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/10/2013 10:09 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/10/2013 10:09 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/10/2013 10:09 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/10/2013 10:09 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/10/2013 10:09 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/10/2013 10:09 PM
2-Butanone	ND	800	U	ppbv	800	1/10/2013 10:09 PM
2-Hexanone	ND	800	U	ppbv	800	1/10/2013 10:09 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Acetone	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Benzene	16,000	800		ppbv	800	1/10/2013 10:09 PM
Benzyl chloride	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Bromoform	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Bromomethane	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Carbon disulfide	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Chlorobenzene	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Chloroethane	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Chloroform	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Chloromethane	ND	800	U	ppbv	800	1/10/2013 10:09 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/10/2013 10:09 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/10/2013 10:09 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 3:06:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-033	**Matrix:**	Air
Client Sample ID:	VA2059		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	5,900	1,600		ppbv	800	1/10/2013 10:09 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Ethyl acetate	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Ethylbenzene	ND	1,600	U	ppbv	800	1/10/2013 10:09 PM
Heptane	1,800	800		ppbv	800	1/10/2013 10:09 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/10/2013 10:09 PM
m,p-Xylene	ND	1,600	U	ppbv	800	1/10/2013 10:09 PM
Methylene chloride	ND	4,000	U	ppbv	800	1/10/2013 10:09 PM
n-Hexane	5,900	1,600		ppbv	800	1/10/2013 10:09 PM
Naphthalene	ND	800	U	ppbv	800	1/10/2013 10:09 PM
o-Xylene	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Propylene	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Styrene	ND	800	U	ppbv	800	1/10/2013 10:09 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Toluene	18,000	800		ppbv	800	1/10/2013 10:09 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/10/2013 10:09 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Trichloroethene	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Vinyl acetate	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Vinyl chloride	ND	800	U	ppbv	800	1/10/2013 10:09 PM
Xylenes, Total	ND	2,400	U	ppbv	800	1/10/2013 10:09 PM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	800	1/10/2013 10:09 PM
Mass APH Air		**Method:**				**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	5,600,000	2,300,000		µg/m³	20000	1/9/2013 3:29 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	1/9/2013 3:29 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	1/9/2013 3:29 PM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	20000	1/9/2013 3:29 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 4:01:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-034	**Matrix:**	Air
Client Sample ID:	VA2060		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.19	0.10		% v/v	1	1/9/2013 1:25 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/9/2013 1:25 PM
Methane	ND	0.50	U	% v/v	1	1/9/2013 1:25 PM
Nitrogen	82	0.10		% v/v	1	1/9/2013 1:25 PM
Oxygen	22	0.10		% v/v	1	1/9/2013 1:25 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
2-Butanone	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
2-Hexanone	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Acetone	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Benzene	83,000	8,000		ppbv	8000	1/11/2013 12:21 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Bromoform	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Bromomethane	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Chloroethane	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Chloroform	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Chloromethane	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 4:01:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-034	**Matrix:**	Air
Client Sample ID:	VA2060		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	86,000	16,000		ppbv	8000	1/11/2013 12:21 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/11/2013 12:21 AM
Heptane	32,000	8,000		ppbv	8000	1/11/2013 12:21 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/11/2013 12:21 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	1/11/2013 12:21 AM
Methylene chloride	ND	40,000	U	ppbv	8000	1/11/2013 12:21 AM
n-Hexane	55,000	16,000		ppbv	8000	1/11/2013 12:21 AM
Naphthalene	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
o-Xylene	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Propylene	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Styrene	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Toluene	88,000	8,000		ppbv	8000	1/11/2013 12:21 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Trichloroethene	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/11/2013 12:21 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	1/11/2013 12:21 AM
Surr: 4-Bromofluorobenzene	96.7	70-130		%REC	8000	1/11/2013 12:21 AM
Mass APH Air		**Method:**				**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	5,300,000	940,000		µg/m³	8000	1/10/2013 6:10 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	1/10/2013 6:10 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	1/10/2013 6:10 AM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	8000	1/10/2013 6:10 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 9:32:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-035	**Matrix:**	Air
Client Sample ID:	VA2094		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.099	0.10	J	% v/v	1	1/9/2013 1:48 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/9/2013 1:48 PM
Methane	ND	0.50	U	% v/v	1	1/9/2013 1:48 PM
Nitrogen	83	0.10		% v/v	1	1/9/2013 1:48 PM
Oxygen	23	0.10		% v/v	1	1/9/2013 1:48 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/7/2013 4:32 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/7/2013 4:32 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/7/2013 4:32 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/7/2013 4:32 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/7/2013 4:32 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 4:32 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/7/2013 4:32 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/7/2013 4:32 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/7/2013 4:32 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 4:32 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/7/2013 4:32 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/7/2013 4:32 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/7/2013 4:32 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/7/2013 4:32 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 4:32 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 4:32 PM
2-Butanone	ND	40	U	ppbv	40	1/7/2013 4:32 PM
2-Hexanone	ND	40	U	ppbv	40	1/7/2013 4:32 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Acetone	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Benzene	360	40		ppbv	40	1/7/2013 4:32 PM
Benzyl chloride	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Bromoform	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Bromomethane	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Carbon disulfide	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Chlorobenzene	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Chloroethane	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Chloroform	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Chloromethane	ND	40	U	ppbv	40	1/7/2013 4:32 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 4:32 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/7/2013 4:32 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 9:32:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-035	**Matrix:**	Air
Client Sample ID:	VA2094		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	790	80		ppbv	40	1/7/2013 4:32 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Ethyl acetate	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Ethylbenzene	ND	80	U	ppbv	40	1/7/2013 4:32 PM
Heptane	910	40		ppbv	40	1/7/2013 4:32 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/7/2013 4:32 PM
m,p-Xylene	74	80	J	ppbv	40	1/7/2013 4:32 PM
Methylene chloride	ND	200	U	ppbv	40	1/7/2013 4:32 PM
n-Hexane	450	80		ppbv	40	1/7/2013 4:32 PM
Naphthalene	ND	40	U	ppbv	40	1/7/2013 4:32 PM
o-Xylene	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Propylene	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Styrene	ND	40	U	ppbv	40	1/7/2013 4:32 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Toluene	1,100	40		ppbv	40	1/7/2013 4:32 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 4:32 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Trichloroethene	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Vinyl acetate	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Vinyl chloride	ND	40	U	ppbv	40	1/7/2013 4:32 PM
Xylenes, Total	74	120	J	ppbv	40	1/7/2013 4:32 PM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	40	1/7/2013 4:32 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	110,000	47,000		µg/m³	400	1/5/2013 5:49 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/5/2013 5:49 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/5/2013 5:49 PM
Surr: 4-Bromofluorobenzene	98.1	70-130		%REC	400	1/5/2013 5:49 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 10:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-036	**Matrix:**	Air
Client Sample ID:	VA2095		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: cr**
Carbon dioxide	1.0	0.10		% v/v	1	1/9/2013 2:03 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/9/2013 2:03 PM
Methane	ND	0.50	U	% v/v	1	1/9/2013 2:03 PM
Nitrogen	82	0.10		% v/v	1	1/9/2013 2:03 PM
Oxygen	21	0.10		% v/v	1	1/9/2013 2:03 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/7/2013 5:14 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/7/2013 5:14 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/7/2013 5:14 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/7/2013 5:14 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/7/2013 5:14 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 5:14 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/7/2013 5:14 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/7/2013 5:14 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/7/2013 5:14 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 5:14 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/7/2013 5:14 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/7/2013 5:14 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/7/2013 5:14 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/7/2013 5:14 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 5:14 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 5:14 PM
2-Butanone	ND	40	U	ppbv	40	1/7/2013 5:14 PM
2-Hexanone	ND	40	U	ppbv	40	1/7/2013 5:14 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Acetone	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Benzene	380	40		ppbv	40	1/7/2013 5:14 PM
Benzyl chloride	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Bromoform	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Bromomethane	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Carbon disulfide	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Chlorobenzene	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Chloroethane	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Chloroform	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Chloromethane	ND	40	U	ppbv	40	1/7/2013 5:14 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 5:14 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/7/2013 5:14 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 10:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-036	**Matrix:**	Air
Client Sample ID:	VA2095		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	850	80		ppbv	40	1/7/2013 5:14 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Ethyl acetate	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Ethylbenzene	ND	80	U	ppbv	40	1/7/2013 5:14 PM
Heptane	970	40		ppbv	40	1/7/2013 5:14 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/7/2013 5:14 PM
m,p-Xylene	88	80		ppbv	40	1/7/2013 5:14 PM
Methylene chloride	ND	200	U	ppbv	40	1/7/2013 5:14 PM
n-Hexane	470	80		ppbv	40	1/7/2013 5:14 PM
Naphthalene	ND	40	U	ppbv	40	1/7/2013 5:14 PM
o-Xylene	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Propylene	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Styrene	ND	40	U	ppbv	40	1/7/2013 5:14 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Toluene	1,300	40		ppbv	40	1/7/2013 5:14 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 5:14 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Trichloroethene	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Vinyl acetate	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Vinyl chloride	ND	40	U	ppbv	40	1/7/2013 5:14 PM
Xylenes, Total	88	120	J	ppbv	40	1/7/2013 5:14 PM
Surr: 4-Bromofluorobenzene	94.2	70-130		%REC	40	1/7/2013 5:14 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	120,000	47,000		µg/m³	400	1/5/2013 7:27 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/5/2013 7:27 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/5/2013 7:27 PM
Surr: 4-Bromofluorobenzene	95.6	70-130		%REC	400	1/5/2013 7:27 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 10:32:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-037	**Matrix:**	Air
Client Sample ID:	VA2096		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.58	0.10		% v/v	1	1/9/2013 2:17 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/9/2013 2:17 PM
Methane	ND	0.50	U	% v/v	1	1/9/2013 2:17 PM
Nitrogen	84	0.10		% v/v	1	1/9/2013 2:17 PM
Oxygen	20	0.10		% v/v	1	1/9/2013 2:17 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/7/2013 6:37 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/7/2013 6:37 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/7/2013 6:37 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/7/2013 6:37 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/7/2013 6:37 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 6:37 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/7/2013 6:37 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/7/2013 6:37 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/7/2013 6:37 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 6:37 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/7/2013 6:37 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/7/2013 6:37 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/7/2013 6:37 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/7/2013 6:37 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 6:37 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 6:37 PM
2-Butanone	ND	40	U	ppbv	40	1/7/2013 6:37 PM
2-Hexanone	ND	40	U	ppbv	40	1/7/2013 6:37 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Acetone	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Benzene	580	40		ppbv	40	1/7/2013 6:37 PM
Benzyl chloride	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Bromoform	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Bromomethane	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Carbon disulfide	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Chlorobenzene	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Chloroethane	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Chloroform	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Chloromethane	ND	40	U	ppbv	40	1/7/2013 6:37 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 6:37 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/7/2013 6:37 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 10:32:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-037	**Matrix:**	Air
Client Sample ID:	VA2096		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	910	80		ppbv	40	1/7/2013 6:37 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Ethyl acetate	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Ethylbenzene	ND	80	U	ppbv	40	1/7/2013 6:37 PM
Heptane	920	40		ppbv	40	1/7/2013 6:37 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/7/2013 6:37 PM
m,p-Xylene	83	80		ppbv	40	1/7/2013 6:37 PM
Methylene chloride	ND	200	U	ppbv	40	1/7/2013 6:37 PM
n-Hexane	460	80		ppbv	40	1/7/2013 6:37 PM
Naphthalene	ND	40	U	ppbv	40	1/7/2013 6:37 PM
o-Xylene	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Propylene	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Styrene	ND	40	U	ppbv	40	1/7/2013 6:37 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Toluene	1,200	40		ppbv	40	1/7/2013 6:37 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 6:37 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Trichloroethene	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Vinyl acetate	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Vinyl chloride	ND	40	U	ppbv	40	1/7/2013 6:37 PM
Xylenes, Total	83	120	J	ppbv	40	1/7/2013 6:37 PM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	40	1/7/2013 6:37 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	160,000	47,000		µg/m³	400	1/5/2013 9:04 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/5/2013 9:04 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/5/2013 9:04 PM
Surr: 4-Bromofluorobenzene	94.2	70-130		%REC	400	1/5/2013 9:04 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 11:07:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-038	**Matrix:**	Air
Client Sample ID:	VA2097		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.45	0.10		% v/v	1	1/9/2013 2:31 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/9/2013 2:31 PM
Methane	ND	0.50	U	% v/v	1	1/9/2013 2:31 PM
Nitrogen	84	0.10		% v/v	1	1/9/2013 2:31 PM
Oxygen	19	0.10		% v/v	1	1/9/2013 2:31 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/7/2013 10:17 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/7/2013 10:17 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/7/2013 10:17 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/7/2013 10:17 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/7/2013 10:17 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/7/2013 10:17 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/7/2013 10:17 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/7/2013 10:17 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/7/2013 10:17 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/7/2013 10:17 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/7/2013 10:17 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/7/2013 10:17 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/7/2013 10:17 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/7/2013 10:17 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/7/2013 10:17 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/7/2013 10:17 PM
2-Butanone	ND	800	U	ppbv	800	1/7/2013 10:17 PM
2-Hexanone	ND	800	U	ppbv	800	1/7/2013 10:17 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Acetone	1,600	800		ppbv	800	1/7/2013 10:17 PM
Benzene	46,000	8,000		ppbv	8000	1/8/2013 5:00 PM
Benzyl chloride	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Bromoform	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Bromomethane	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Carbon disulfide	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Chlorobenzene	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Chloroethane	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Chloroform	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Chloromethane	ND	800	U	ppbv	800	1/7/2013 10:17 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/7/2013 10:17 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/7/2013 10:17 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 11:07:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-038	**Matrix:**	Air
Client Sample ID:	VA2097		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	16,000	1,600		ppbv	800	1/7/2013 10:17 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Ethyl acetate	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Ethylbenzene	ND	1,600	U	ppbv	800	1/7/2013 10:17 PM
Heptane	1,800	800		ppbv	800	1/7/2013 10:17 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/7/2013 10:17 PM
m,p-Xylene	ND	1,600	U	ppbv	800	1/7/2013 10:17 PM
Methylene chloride	1,700	4,000	J	ppbv	800	1/7/2013 10:17 PM
n-Hexane	11,000	1,600		ppbv	800	1/7/2013 10:17 PM
Naphthalene	ND	800	U	ppbv	800	1/7/2013 10:17 PM
o-Xylene	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Propylene	1,800	800		ppbv	800	1/7/2013 10:17 PM
Styrene	ND	800	U	ppbv	800	1/7/2013 10:17 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Toluene	54,000	8,000		ppbv	8000	1/8/2013 5:00 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/7/2013 10:17 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Trichloroethene	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Vinyl acetate	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Vinyl chloride	ND	800	U	ppbv	800	1/7/2013 10:17 PM
Xylenes, Total	ND	2,400	U	ppbv	800	1/7/2013 10:17 PM
Surr: 4-Bromofluorobenzene	95.3	70-130		%REC	800	1/7/2013 10:17 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,300,000	190,000		µg/m³	1600	1/7/2013 11:20 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	1/7/2013 11:20 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	1/7/2013 11:20 PM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	1600	1/7/2013 11:20 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 11:43:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-039	**Matrix:**	Air
Client Sample ID:	VA2098		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.47	0.10		% v/v	1	1/9/2013 2:45 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/9/2013 2:45 PM
Methane	ND	0.50	U	% v/v	1	1/9/2013 2:45 PM
Nitrogen	83	0.10		% v/v	1	1/9/2013 2:45 PM
Oxygen	20	0.10		% v/v	1	1/9/2013 2:45 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/8/2013 1:59 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/8/2013 1:59 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/8/2013 1:59 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/8/2013 1:59 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/8/2013 1:59 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/8/2013 1:59 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/8/2013 1:59 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/8/2013 1:59 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/8/2013 1:59 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/8/2013 1:59 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/8/2013 1:59 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/8/2013 1:59 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/8/2013 1:59 AM
1,3-Butadiene	ND	400	U	ppbv	400	1/8/2013 1:59 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/8/2013 1:59 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/8/2013 1:59 AM
2-Butanone	ND	400	U	ppbv	400	1/8/2013 1:59 AM
2-Hexanone	ND	400	U	ppbv	400	1/8/2013 1:59 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Acetone	1,600	400		ppbv	400	1/8/2013 1:59 AM
Benzene	3,600	400		ppbv	400	1/8/2013 1:59 AM
Benzyl chloride	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Bromodichloromethane	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Bromoform	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Bromomethane	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Carbon disulfide	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Carbon tetrachloride	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Chlorobenzene	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Chlorodibromomethane	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Chloroethane	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Chloroform	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Chloromethane	ND	400	U	ppbv	400	1/8/2013 1:59 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/8/2013 1:59 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/8/2013 1:59 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 11:43:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-039	**Matrix:**	Air
Client Sample ID:	VA2098		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,500	800		ppbv	400	1/8/2013 1:59 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Ethyl acetate	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Ethylbenzene	ND	800	U	ppbv	400	1/8/2013 1:59 AM
Heptane	1,000	400		ppbv	400	1/8/2013 1:59 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/8/2013 1:59 AM
m,p-Xylene	ND	800	U	ppbv	400	1/8/2013 1:59 AM
Methylene chloride	2,100	2,000		ppbv	400	1/8/2013 1:59 AM
n-Hexane	1,400	800		ppbv	400	1/8/2013 1:59 AM
Naphthalene	ND	400	U	ppbv	400	1/8/2013 1:59 AM
o-Xylene	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Propylene	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Styrene	ND	400	U	ppbv	400	1/8/2013 1:59 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Tetrachloroethene	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Tetrahydrofuran	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Toluene	11,000	400		ppbv	400	1/8/2013 1:59 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/8/2013 1:59 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Trichloroethene	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Vinyl acetate	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Vinyl chloride	ND	400	U	ppbv	400	1/8/2013 1:59 AM
Xylenes, Total	ND	1,200	U	ppbv	400	1/8/2013 1:59 AM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	400	1/8/2013 1:59 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	140,000	47,000		µg/m³	400	1/6/2013 1:33 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/6/2013 1:33 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/6/2013 1:33 AM
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	400	1/6/2013 1:33 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 12:20:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-040	**Matrix:**	Air
Client Sample ID:	VA2099		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.37	0.10		% v/v	1	1/9/2013 3:08 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/9/2013 3:08 PM
Methane	ND	0.50	U	% v/v	1	1/9/2013 3:08 PM
Nitrogen	84	0.10		% v/v	1	1/9/2013 3:08 PM
Oxygen	21	0.10		% v/v	1	1/9/2013 3:08 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/8/2013 3:29 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/8/2013 3:29 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/8/2013 3:29 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/8/2013 3:29 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/8/2013 3:29 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/8/2013 3:29 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/8/2013 3:29 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/8/2013 3:29 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/8/2013 3:29 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/8/2013 3:29 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/8/2013 3:29 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/8/2013 3:29 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/8/2013 3:29 AM
1,3-Butadiene	ND	400	U	ppbv	400	1/8/2013 3:29 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/8/2013 3:29 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/8/2013 3:29 AM
2-Butanone	ND	400	U	ppbv	400	1/8/2013 3:29 AM
2-Hexanone	ND	400	U	ppbv	400	1/8/2013 3:29 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Acetone	2,000	400		ppbv	400	1/8/2013 3:29 AM
Benzene	3,800	400		ppbv	400	1/8/2013 3:29 AM
Benzyl chloride	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Bromodichloromethane	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Bromoform	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Bromomethane	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Carbon disulfide	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Carbon tetrachloride	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Chlorobenzene	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Chlorodibromomethane	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Chloroethane	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Chloroform	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Chloromethane	ND	400	U	ppbv	400	1/8/2013 3:29 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/8/2013 3:29 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/8/2013 3:29 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 12:20:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-040	**Matrix:**	Air
Client Sample ID:	VA2099		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,100	800		ppbv	400	1/8/2013 3:29 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Ethyl acetate	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Ethylbenzene	ND	800	U	ppbv	400	1/8/2013 3:29 AM
Heptane	1,600	400		ppbv	400	1/8/2013 3:29 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/8/2013 3:29 AM
m,p-Xylene	ND	800	U	ppbv	400	1/8/2013 3:29 AM
Methylene chloride	1,400	2,000	J	ppbv	400	1/8/2013 3:29 AM
n-Hexane	1,300	800		ppbv	400	1/8/2013 3:29 AM
Naphthalene	ND	400	U	ppbv	400	1/8/2013 3:29 AM
o-Xylene	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Propylene	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Styrene	ND	400	U	ppbv	400	1/8/2013 3:29 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Tetrachloroethene	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Tetrahydrofuran	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Toluene	12,000	400		ppbv	400	1/8/2013 3:29 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/8/2013 3:29 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Trichloroethene	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Vinyl acetate	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Vinyl chloride	ND	400	U	ppbv	400	1/8/2013 3:29 AM
Xylenes, Total	ND	1,200	U	ppbv	400	1/8/2013 3:29 AM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	400	1/8/2013 3:29 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	240,000	47,000		µg/m³	400	1/6/2013 3:05 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/6/2013 3:05 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/6/2013 3:05 AM
Surr: 4-Bromofluorobenzene	96.9	70-130		%REC	400	1/6/2013 3:05 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 1:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-041	**Matrix:**	Air
Client Sample ID:	VA2100		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.63	0.10	m	% v/v	1	1/9/2013 3:53 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/9/2013 3:53 PM
Methane	ND	0.50	U	% v/v	1	1/9/2013 3:53 PM
Nitrogen	82	0.10		% v/v	1	1/9/2013 3:53 PM
Oxygen	22	0.10		% v/v	1	1/9/2013 3:53 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
1,1,2,2-Tetrachloroethane	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
1,1,2-Trichloroethane	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
1,1-Dichloroethane	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
1,1-Dichloroethene	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
1,2,4-Trichlorobenzene	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
1,2,4-Trimethylbenzene	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
1,2-Dibromoethane	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
1,2-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
1,2-Dichloroethane	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
1,2-Dichloropropane	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
1,3,5-Trimethylbenzene	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
1,3-Butadiene	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
1,3-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
1,4-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
2-Butanone	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
2-Hexanone	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
4-Methyl-2-pentanone	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Acetone	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Benzene	6,100	1,600		ppbv	1600	1/9/2013 7:45 PM
Benzyl chloride	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Bromodichloromethane	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Bromoform	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Bromomethane	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Carbon disulfide	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Carbon tetrachloride	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Chlorobenzene	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Chlorodibromomethane	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Chloroethane	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Chloroform	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Chloromethane	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
cis-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
cis-1,3-dichloropropene	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 1:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-041	**Matrix:**	Air
Client Sample ID:	VA2100		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	19,000	3,200		ppbv	1600	1/9/2013 7:45 PM
Dichlorodifluoromethane	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Ethyl acetate	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Ethylbenzene	1,800	3,200	J	ppbv	1600	1/9/2013 7:45 PM
Heptane	34,000	1,600		ppbv	1600	1/9/2013 7:45 PM
Hexachlorobutadiene	ND	3,200	U	ppbv	1600	1/9/2013 7:45 PM
m,p-Xylene	4,600	3,200		ppbv	1600	1/9/2013 7:45 PM
Methylene chloride	5,400	8,000	J	ppbv	1600	1/9/2013 7:45 PM
n-Hexane	5,100	3,200		ppbv	1600	1/9/2013 7:45 PM
Naphthalene	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
o-Xylene	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Propylene	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Styrene	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
tert-Butyl Methyl Ether	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Tetrachloroethene	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Tetrahydrofuran	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Toluene	39,000	1,600		ppbv	1600	1/9/2013 7:45 PM
trans-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
trans-1,3-dichloropropene	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Trichloroethene	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Trichlorofluoromethane	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Vinyl acetate	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Vinyl chloride	ND	1,600	U	ppbv	1600	1/9/2013 7:45 PM
Xylenes, Total	4,600	4,800	J	ppbv	1600	1/9/2013 7:45 PM
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	1600	1/9/2013 7:45 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,200,000	190,000		µg/m³	1600	1/9/2013 6:34 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	1/9/2013 6:34 PM
C9-C12 Aliphatic Hydrocarbons	47,000	300,000	J	µg/m³	1600	1/9/2013 6:34 PM
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	1600	1/9/2013 6:34 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 1:30:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-042	**Matrix:**	Air
Client Sample ID:	VA2101		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	2.7	0.10		% v/v	1	1/9/2013 4:09 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/9/2013 4:09 PM
Methane	ND	0.50	U	% v/v	1	1/9/2013 4:09 PM
Nitrogen	81	0.10		% v/v	1	1/9/2013 4:09 PM
Oxygen	21	0.10		% v/v	1	1/9/2013 4:09 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/9/2013 9:19 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/9/2013 9:19 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/9/2013 9:19 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/9/2013 9:19 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/9/2013 9:19 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/9/2013 9:19 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/9/2013 9:19 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/9/2013 9:19 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/9/2013 9:19 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/9/2013 9:19 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/9/2013 9:19 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/9/2013 9:19 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/9/2013 9:19 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/9/2013 9:19 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/9/2013 9:19 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/9/2013 9:19 PM
2-Butanone	ND	800	U	ppbv	800	1/9/2013 9:19 PM
2-Hexanone	ND	800	U	ppbv	800	1/9/2013 9:19 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Acetone	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Benzene	3,400	800		ppbv	800	1/9/2013 9:19 PM
Benzyl chloride	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Bromoform	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Bromomethane	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Carbon disulfide	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Chlorobenzene	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Chloroethane	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Chloroform	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Chloromethane	ND	800	U	ppbv	800	1/9/2013 9:19 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/9/2013 9:19 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/9/2013 9:19 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 1:30:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-042	**Matrix:**	Air
Client Sample ID:	VA2101		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	11,000	1,600		ppbv	800	1/9/2013 9:19 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Ethyl acetate	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Ethylbenzene	1,600	1,600	J	ppbv	800	1/9/2013 9:19 PM
Heptane	21,000	800		ppbv	800	1/9/2013 9:19 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/9/2013 9:19 PM
m,p-Xylene	4,400	1,600		ppbv	800	1/9/2013 9:19 PM
Methylene chloride	ND	4,000	U	ppbv	800	1/9/2013 9:19 PM
n-Hexane	2,400	1,600		ppbv	800	1/9/2013 9:19 PM
Naphthalene	ND	800	U	ppbv	800	1/9/2013 9:19 PM
o-Xylene	1,200	800		ppbv	800	1/9/2013 9:19 PM
Propylene	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Styrene	ND	800	U	ppbv	800	1/9/2013 9:19 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Toluene	28,000	800		ppbv	800	1/9/2013 9:19 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/9/2013 9:19 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Trichloroethene	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Vinyl acetate	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Vinyl chloride	ND	800	U	ppbv	800	1/9/2013 9:19 PM
Xylenes, Total	5,600	2,400		ppbv	800	1/9/2013 9:19 PM
Surr: 4-Bromofluorobenzene	92.1	70-130		%REC	800	1/9/2013 9:19 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	630,000	94,000		µg/m³	800	1/9/2013 8:09 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/9/2013 8:09 PM
C9-C12 Aliphatic Hydrocarbons	57,000	150,000	J	µg/m³	800	1/9/2013 8:09 PM
Surr: 4-Bromofluorobenzene	97.7	70-130		%REC	800	1/9/2013 8:09 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 1:59:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-043	**Matrix:**	Air
Client Sample ID:	VA2102		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	3.6	0.10		% v/v	1	1/9/2013 4:23 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/9/2013 4:23 PM
Methane	ND	0.50	U	% v/v	1	1/9/2013 4:23 PM
Nitrogen	85	0.10		% v/v	1	1/9/2013 4:23 PM
Oxygen	15	0.10		% v/v	1	1/9/2013 4:23 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/10/2013 12:25 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/10/2013 12:25 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/10/2013 12:25 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/10/2013 12:25 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/10/2013 12:25 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/10/2013 12:25 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/10/2013 12:25 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/10/2013 12:25 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/10/2013 12:25 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/10/2013 12:25 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/10/2013 12:25 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/10/2013 12:25 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/10/2013 12:25 AM
1,3-Butadiene	ND	800	U	ppbv	800	1/10/2013 12:25 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/10/2013 12:25 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/10/2013 12:25 AM
2-Butanone	ND	800	U	ppbv	800	1/10/2013 12:25 AM
2-Hexanone	ND	800	U	ppbv	800	1/10/2013 12:25 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Acetone	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Benzene	3,200	800		ppbv	800	1/10/2013 12:25 AM
Benzyl chloride	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Bromodichloromethane	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Bromoform	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Bromomethane	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Carbon disulfide	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Carbon tetrachloride	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Chlorobenzene	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Chlorodibromomethane	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Chloroethane	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Chloroform	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Chloromethane	ND	800	U	ppbv	800	1/10/2013 12:25 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/10/2013 12:25 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/10/2013 12:25 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 1:59:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-043	**Matrix:**	Air
Client Sample ID:	VA2102		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	11,000	1,600		ppbv	800	1/10/2013 12:25 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Ethyl acetate	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Ethylbenzene	1,500	1,600	J	ppbv	800	1/10/2013 12:25 AM
Heptane	20,000	800		ppbv	800	1/10/2013 12:25 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/10/2013 12:25 AM
m,p-Xylene	4,200	1,600		ppbv	800	1/10/2013 12:25 AM
Methylene chloride	ND	4,000	U	ppbv	800	1/10/2013 12:25 AM
n-Hexane	2,600	1,600		ppbv	800	1/10/2013 12:25 AM
Naphthalene	ND	800	U	ppbv	800	1/10/2013 12:25 AM
o-Xylene	1,100	800		ppbv	800	1/10/2013 12:25 AM
Propylene	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Styrene	ND	800	U	ppbv	800	1/10/2013 12:25 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Tetrachloroethene	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Tetrahydrofuran	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Toluene	26,000	800		ppbv	800	1/10/2013 12:25 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/10/2013 12:25 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Trichloroethene	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Vinyl acetate	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Vinyl chloride	ND	800	U	ppbv	800	1/10/2013 12:25 AM
Xylenes, Total	5,200	2,400		ppbv	800	1/10/2013 12:25 AM
Surr: 4-Bromofluorobenzene	94.1	70-130		%REC	800	1/10/2013 12:25 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	710,000	94,000		µg/m³	800	1/9/2013 11:05 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/9/2013 11:05 AM
C9-C12 Aliphatic Hydrocarbons	47,000	150,000	J	µg/m³	800	1/9/2013 11:05 AM
Surr: 4-Bromofluorobenzene	99.4	70-130		%REC	800	1/9/2013 11:05 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 2:31:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-044	**Matrix:**	Air
Client Sample ID:	VA2103		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	1.1	0.10		% v/v	1	1/9/2013 4:38 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/9/2013 4:38 PM
Methane	ND	0.50	U	% v/v	1	1/9/2013 4:38 PM
Nitrogen	85	0.10		% v/v	1	1/9/2013 4:38 PM
Oxygen	18	0.10		% v/v	1	1/9/2013 4:38 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
1,1,2,2-Tetrachloroethane	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
1,1,2-Trichloroethane	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
1,1-Dichloroethane	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
1,1-Dichloroethene	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
1,2,4-Trichlorobenzene	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
1,2,4-Trimethylbenzene	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
1,2-Dibromoethane	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
1,2-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
1,2-Dichloroethane	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
1,2-Dichloropropane	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
1,3,5-Trimethylbenzene	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
1,3-Butadiene	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
1,3-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
1,4-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
2-Butanone	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
2-Hexanone	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
4-Methyl-2-pentanone	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Acetone	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Benzene	29,000	1,600		ppbv	1600	1/10/2013 1:54 AM
Benzyl chloride	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Bromodichloromethane	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Bromoform	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Bromomethane	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Carbon disulfide	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Carbon tetrachloride	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Chlorobenzene	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Chlorodibromomethane	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Chloroethane	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Chloroform	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Chloromethane	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
cis-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
cis-1,3-dichloropropene	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 2:31:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-044	**Matrix:**	Air
Client Sample ID:	VA2103		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	19,000	3,200		ppbv	1600	1/10/2013 1:54 AM
Dichlorodifluoromethane	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Ethyl acetate	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Ethylbenzene	ND	3,200	U	ppbv	1600	1/10/2013 1:54 AM
Heptane	15,000	1,600		ppbv	1600	1/10/2013 1:54 AM
Hexachlorobutadiene	ND	3,200	U	ppbv	1600	1/10/2013 1:54 AM
m,p-Xylene	3,900	3,200		ppbv	1600	1/10/2013 1:54 AM
Methylene chloride	ND	8,000	U	ppbv	1600	1/10/2013 1:54 AM
n-Hexane	9,500	3,200		ppbv	1600	1/10/2013 1:54 AM
Naphthalene	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
o-Xylene	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Propylene	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Styrene	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
tert-Butyl Methyl Ether	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Tetrachloroethene	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Tetrahydrofuran	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Toluene	53,000	1,600		ppbv	1600	1/10/2013 1:54 AM
trans-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
trans-1,3-dichloropropene	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Trichloroethene	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Trichlorofluoromethane	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Vinyl acetate	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Vinyl chloride	ND	1,600	U	ppbv	1600	1/10/2013 1:54 AM
Xylenes, Total	3,900	4,800	J	ppbv	1600	1/10/2013 1:54 AM
Surr: 4-Bromofluorobenzene	95.5	70-130		%REC	1600	1/10/2013 1:54 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,400,000	190,000		µg/m³	1600	1/9/2013 12:34 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	1/9/2013 12:34 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	1/9/2013 12:34 PM
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	1600	1/9/2013 12:34 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 3:05:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-045	**Matrix:**	Air
Client Sample ID:	VA2104		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.085	0.10	J	% v/v	1	1/9/2013 4:52 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/9/2013 4:52 PM
Methane	ND	0.50	U	% v/v	1	1/9/2013 4:52 PM
Nitrogen	82	0.10		% v/v	1	1/9/2013 4:52 PM
Oxygen	22	0.10		% v/v	1	1/9/2013 4:52 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
1,1,2,2-Tetrachloroethane	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
1,1,2-Trichloroethane	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
1,1-Dichloroethane	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
1,1-Dichloroethene	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
1,2,4-Trichlorobenzene	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
1,2,4-Trimethylbenzene	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
1,2-Dibromoethane	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
1,2-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
1,2-Dichloroethane	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
1,2-Dichloropropane	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
1,3,5-Trimethylbenzene	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
1,3-Butadiene	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
1,3-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
1,4-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
2-Butanone	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
2-Hexanone	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
4-Methyl-2-pentanone	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Acetone	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Benzene	13,000	1,600		ppbv	1600	1/10/2013 4:03 AM
Benzyl chloride	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Bromodichloromethane	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Bromoform	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Bromomethane	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Carbon disulfide	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Carbon tetrachloride	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Chlorobenzene	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Chlorodibromomethane	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Chloroethane	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Chloroform	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Chloromethane	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
cis-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
cis-1,3-dichloropropene	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 3:05:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-045	**Matrix:**	Air
Client Sample ID:	VA2104		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	7,400	3,200		ppbv	1600	1/10/2013 4:03 AM
Dichlorodifluoromethane	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Ethyl acetate	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Ethylbenzene	ND	3,200	U	ppbv	1600	1/10/2013 4:03 AM
Heptane	4,700	1,600		ppbv	1600	1/10/2013 4:03 AM
Hexachlorobutadiene	ND	3,200	U	ppbv	1600	1/10/2013 4:03 AM
m,p-Xylene	1,700	3,200	J	ppbv	1600	1/10/2013 4:03 AM
Methylene chloride	ND	8,000	U	ppbv	1600	1/10/2013 4:03 AM
n-Hexane	4,100	3,200		ppbv	1600	1/10/2013 4:03 AM
Naphthalene	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
o-Xylene	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Propylene	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Styrene	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
tert-Butyl Methyl Ether	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Tetrachloroethene	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Tetrahydrofuran	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Toluene	32,000	1,600		ppbv	1600	1/10/2013 4:03 AM
trans-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
trans-1,3-dichloropropene	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Trichloroethene	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Trichlorofluoromethane	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Vinyl acetate	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Vinyl chloride	ND	1,600	U	ppbv	1600	1/10/2013 4:03 AM
Xylenes, Total	1,700	4,800	J	ppbv	1600	1/10/2013 4:03 AM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	1600	1/10/2013 4:03 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	570,000	190,000		µg/m³	1600	1/9/2013 2:03 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	1/9/2013 2:03 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	1/9/2013 2:03 PM
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	1600	1/9/2013 2:03 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 3:05:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-046	**Matrix:**	Air
Client Sample ID:	VA2105		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.54	0.10		% v/v	1	1/9/2013 5:06 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/9/2013 5:06 PM
Methane	ND	0.50	U	% v/v	1	1/9/2013 5:06 PM
Nitrogen	83	0.10		% v/v	1	1/9/2013 5:06 PM
Oxygen	20	0.10		% v/v	1	1/9/2013 5:06 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
1,1,2,2-Tetrachloroethane	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
1,1,2-Trichloroethane	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
1,1-Dichloroethane	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
1,1-Dichloroethene	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
1,2,4-Trichlorobenzene	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
1,2,4-Trimethylbenzene	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
1,2-Dibromoethane	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
1,2-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
1,2-Dichloroethane	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
1,2-Dichloropropane	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
1,3,5-Trimethylbenzene	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
1,3-Butadiene	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
1,3-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
1,4-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
2-Butanone	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
2-Hexanone	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
4-Methyl-2-pentanone	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Acetone	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Benzene	23,000	1,600		ppbv	1600	1/10/2013 3:20 AM
Benzyl chloride	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Bromodichloromethane	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Bromoform	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Bromomethane	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Carbon disulfide	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Carbon tetrachloride	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Chlorobenzene	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Chlorodibromomethane	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Chloroethane	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Chloroform	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Chloromethane	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
cis-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
cis-1,3-dichloropropene	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 3:05:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-046	**Matrix:**	Air
Client Sample ID:	VA2105		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	17,000	3,200		ppbv	1600	1/10/2013 3:20 AM
Dichlorodifluoromethane	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Ethyl acetate	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Ethylbenzene	ND	3,200	U	ppbv	1600	1/10/2013 3:20 AM
Heptane	15,000	1,600		ppbv	1600	1/10/2013 3:20 AM
Hexachlorobutadiene	ND	3,200	U	ppbv	1600	1/10/2013 3:20 AM
m,p-Xylene	3,500	3,200		ppbv	1600	1/10/2013 3:20 AM
Methylene chloride	ND	8,000	U	ppbv	1600	1/10/2013 3:20 AM
n-Hexane	7,500	3,200		ppbv	1600	1/10/2013 3:20 AM
Naphthalene	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
o-Xylene	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Propylene	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Styrene	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
tert-Butyl Methyl Ether	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Tetrachloroethene	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Tetrahydrofuran	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Toluene	61,000	1,600		ppbv	1600	1/10/2013 3:20 AM
trans-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
trans-1,3-dichloropropene	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Trichloroethene	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Trichlorofluoromethane	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Vinyl acetate	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Vinyl chloride	ND	1,600	U	ppbv	1600	1/10/2013 3:20 AM
Xylenes, Total	3,500	4,800	J	ppbv	1600	1/10/2013 3:20 AM
Surr: 4-Bromofluorobenzene	95.6	70-130		%REC	1600	1/10/2013 3:20 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	900,000	190,000		µg/m³	1600	1/9/2013 2:47 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	1/9/2013 2:47 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	1/9/2013 2:47 PM
Surr: 4-Bromofluorobenzene	98.6	70-130		%REC	1600	1/9/2013 2:47 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 3:56:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-047	**Matrix:**	Air
Client Sample ID:	VA2106		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.80	0.10		% v/v	1	1/9/2013 5:20 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/9/2013 5:20 PM
Methane	ND	0.50	U	% v/v	1	1/9/2013 5:20 PM
Nitrogen	83	0.10		% v/v	1	1/9/2013 5:20 PM
Oxygen	21	0.10		% v/v	1	1/9/2013 5:20 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/10/2013 10:54 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/10/2013 10:54 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/10/2013 10:54 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/10/2013 10:54 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/10/2013 10:54 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/10/2013 10:54 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/10/2013 10:54 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/10/2013 10:54 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/10/2013 10:54 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/10/2013 10:54 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/10/2013 10:54 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/10/2013 10:54 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/10/2013 10:54 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/10/2013 10:54 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/10/2013 10:54 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/10/2013 10:54 PM
2-Butanone	ND	800	U	ppbv	800	1/10/2013 10:54 PM
2-Hexanone	ND	800	U	ppbv	800	1/10/2013 10:54 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Acetone	1,300	800		ppbv	800	1/10/2013 10:54 PM
Benzene	9,600	800		ppbv	800	1/10/2013 10:54 PM
Benzyl chloride	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Bromoform	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Bromomethane	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Carbon disulfide	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Chlorobenzene	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Chloroethane	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Chloroform	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Chloromethane	ND	800	U	ppbv	800	1/10/2013 10:54 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/10/2013 10:54 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/10/2013 10:54 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 3:56:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-047	**Matrix:**	Air
Client Sample ID:	VA2106		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	9,900	1,600		ppbv	800	1/10/2013 10:54 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Ethyl acetate	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Ethylbenzene	2,000	1,600		ppbv	800	1/10/2013 10:54 PM
Heptane	15,000	800		ppbv	800	1/10/2013 10:54 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/10/2013 10:54 PM
m,p-Xylene	5,800	1,600		ppbv	800	1/10/2013 10:54 PM
Methylene chloride	2,000	4,000	J	ppbv	800	1/10/2013 10:54 PM
n-Hexane	2,900	1,600		ppbv	800	1/10/2013 10:54 PM
Naphthalene	ND	800	U	ppbv	800	1/10/2013 10:54 PM
o-Xylene	1,700	800		ppbv	800	1/10/2013 10:54 PM
Propylene	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Styrene	ND	800	U	ppbv	800	1/10/2013 10:54 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Toluene	38,000	800		ppbv	800	1/10/2013 10:54 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/10/2013 10:54 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Trichloroethene	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Vinyl acetate	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Vinyl chloride	ND	800	U	ppbv	800	1/10/2013 10:54 PM
Xylenes, Total	7,500	2,400		ppbv	800	1/10/2013 10:54 PM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	800	1/10/2013 10:54 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	900,000	94,000		µg/m³	800	1/9/2013 11:17 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/9/2013 11:17 PM
C9-C12 Aliphatic Hydrocarbons	68,000	150,000	J	µg/m³	800	1/9/2013 11:17 PM
Surr: 4-Bromofluorobenzene	98.1	70-130		%REC	800	1/9/2013 11:17 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 8:52:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-048	**Matrix:**	Air
Client Sample ID:	VA2166		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.19	0.10		% v/v	1	1/9/2013 5:35 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/9/2013 5:35 PM
Methane	ND	0.50	U	% v/v	1	1/9/2013 5:35 PM
Nitrogen	82	0.10		% v/v	1	1/9/2013 5:35 PM
Oxygen	22	0.10		% v/v	1	1/9/2013 5:35 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/11/2013 1:10 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/11/2013 1:10 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/11/2013 1:10 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/11/2013 1:10 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/11/2013 1:10 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/11/2013 1:10 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/11/2013 1:10 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/11/2013 1:10 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/11/2013 1:10 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/11/2013 1:10 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/11/2013 1:10 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/11/2013 1:10 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/11/2013 1:10 AM
1,3-Butadiene	ND	400	U	ppbv	400	1/11/2013 1:10 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/11/2013 1:10 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/11/2013 1:10 AM
2-Butanone	ND	400	U	ppbv	400	1/11/2013 1:10 AM
2-Hexanone	ND	400	U	ppbv	400	1/11/2013 1:10 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Acetone	960	400		ppbv	400	1/11/2013 1:10 AM
Benzene	1,800	400		ppbv	400	1/11/2013 1:10 AM
Benzyl chloride	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Bromodichloromethane	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Bromoform	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Bromomethane	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Carbon disulfide	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Carbon tetrachloride	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Chlorobenzene	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Chlorodibromomethane	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Chloroethane	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Chloroform	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Chloromethane	ND	400	U	ppbv	400	1/11/2013 1:10 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/11/2013 1:10 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/11/2013 1:10 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 8:52:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-048	**Matrix:**	Air
Client Sample ID:	VA2166		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	960	800		ppbv	400	1/11/2013 1:10 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Ethyl acetate	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Ethylbenzene	ND	800	U	ppbv	400	1/11/2013 1:10 AM
Heptane	1,100	400		ppbv	400	1/11/2013 1:10 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/11/2013 1:10 AM
m,p-Xylene	470	800	J	ppbv	400	1/11/2013 1:10 AM
Methylene chloride	1,300	2,000	J	ppbv	400	1/11/2013 1:10 AM
n-Hexane	920	800		ppbv	400	1/11/2013 1:10 AM
Naphthalene	ND	400	U	ppbv	400	1/11/2013 1:10 AM
o-Xylene	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Propylene	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Styrene	ND	400	U	ppbv	400	1/11/2013 1:10 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Tetrachloroethene	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Tetrahydrofuran	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Toluene	5,100	400		ppbv	400	1/11/2013 1:10 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/11/2013 1:10 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Trichloroethene	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Vinyl acetate	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Vinyl chloride	ND	400	U	ppbv	400	1/11/2013 1:10 AM
Xylenes, Total	470	1,200	J	ppbv	400	1/11/2013 1:10 AM
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	400	1/11/2013 1:10 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	110,000	47,000		µg/m³	400	1/10/2013 12:51 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/10/2013 12:51 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/10/2013 12:51 AM
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	400	1/10/2013 12:51 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 9:20:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-049	**Matrix:**	Air
Client Sample ID:	VA2167		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.17	0.10		% v/v	1	1/9/2013 5:55 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/9/2013 5:55 PM
Methane	ND	0.50	U	% v/v	1	1/9/2013 5:55 PM
Nitrogen	83	0.10		% v/v	1	1/9/2013 5:55 PM
Oxygen	22	0.10		% v/v	1	1/9/2013 5:55 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	200	U	ppbv	200	1/11/2013 2:46 AM
1,1,2,2-Tetrachloroethane	ND	200	U	ppbv	200	1/11/2013 2:46 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	200	U	ppbv	200	1/11/2013 2:46 AM
1,1,2-Trichloroethane	ND	200	U	ppbv	200	1/11/2013 2:46 AM
1,1-Dichloroethane	ND	200	U	ppbv	200	1/11/2013 2:46 AM
1,1-Dichloroethene	ND	200	U	ppbv	200	1/11/2013 2:46 AM
1,2,4-Trichlorobenzene	ND	200	U	ppbv	200	1/11/2013 2:46 AM
1,2,4-Trimethylbenzene	ND	200	U	ppbv	200	1/11/2013 2:46 AM
1,2-Dibromoethane	ND	200	U	ppbv	200	1/11/2013 2:46 AM
1,2-Dichlorobenzene	ND	200	U	ppbv	200	1/11/2013 2:46 AM
1,2-Dichloroethane	ND	200	U	ppbv	200	1/11/2013 2:46 AM
1,2-Dichloropropane	ND	200	U	ppbv	200	1/11/2013 2:46 AM
1,3,5-Trimethylbenzene	ND	200	U	ppbv	200	1/11/2013 2:46 AM
1,3-Butadiene	ND	200	U	ppbv	200	1/11/2013 2:46 AM
1,3-Dichlorobenzene	ND	200	U	ppbv	200	1/11/2013 2:46 AM
1,4-Dichlorobenzene	ND	200	U	ppbv	200	1/11/2013 2:46 AM
2-Butanone	ND	200	U	ppbv	200	1/11/2013 2:46 AM
2-Hexanone	ND	200	U	ppbv	200	1/11/2013 2:46 AM
4-Methyl-2-pentanone	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Acetone	360	200		ppbv	200	1/11/2013 2:46 AM
Benzene	1,600	200		ppbv	200	1/11/2013 2:46 AM
Benzyl chloride	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Bromodichloromethane	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Bromoform	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Bromomethane	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Carbon disulfide	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Carbon tetrachloride	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Chlorobenzene	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Chlorodibromomethane	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Chloroethane	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Chloroform	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Chloromethane	ND	200	U	ppbv	200	1/11/2013 2:46 AM
cis-1,2-Dichloroethene	ND	200	U	ppbv	200	1/11/2013 2:46 AM
cis-1,3-dichloropropene	ND	200	U	ppbv	200	1/11/2013 2:46 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 9:20:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-049	**Matrix:**	Air
Client Sample ID:	VA2167		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	960	400		ppbv	200	1/11/2013 2:46 AM
Dichlorodifluoromethane	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Ethyl acetate	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Ethylbenzene	ND	400	U	ppbv	200	1/11/2013 2:46 AM
Heptane	1,100	200		ppbv	200	1/11/2013 2:46 AM
Hexachlorobutadiene	ND	400	U	ppbv	200	1/11/2013 2:46 AM
m,p-Xylene	370	400	J	ppbv	200	1/11/2013 2:46 AM
Methylene chloride	600	1,000	J	ppbv	200	1/11/2013 2:46 AM
n-Hexane	790	400		ppbv	200	1/11/2013 2:46 AM
Naphthalene	ND	200	U	ppbv	200	1/11/2013 2:46 AM
o-Xylene	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Propylene	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Styrene	ND	200	U	ppbv	200	1/11/2013 2:46 AM
tert-Butyl Methyl Ether	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Tetrachloroethene	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Tetrahydrofuran	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Toluene	4,800	200		ppbv	200	1/11/2013 2:46 AM
trans-1,2-Dichloroethene	ND	200	U	ppbv	200	1/11/2013 2:46 AM
trans-1,3-dichloropropene	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Trichloroethene	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Trichlorofluoromethane	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Vinyl acetate	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Vinyl chloride	ND	200	U	ppbv	200	1/11/2013 2:46 AM
Xylenes, Total	370	600	J	ppbv	200	1/11/2013 2:46 AM
Surr: 4-Bromofluorobenzene	95.9	70-130		%REC	200	1/11/2013 2:46 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	95,000	47,000		µg/m³	400	1/10/2013 2:25 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/10/2013 2:25 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/10/2013 2:25 AM
Surr: 4-Bromofluorobenzene	99.6	70-130		%REC	400	1/10/2013 2:25 AM

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WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 9:51:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-050	**Matrix:**	Air
Client Sample ID:	VA2168		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.15	0.10		% v/v	1	1/9/2013 6:10 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/9/2013 6:10 PM
Methane	ND	0.50	U	% v/v	1	1/9/2013 6:10 PM
Nitrogen	83	0.10		% v/v	1	1/9/2013 6:10 PM
Oxygen	21	0.10		% v/v	1	1/9/2013 6:10 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	200	U	ppbv	200	1/11/2013 4:16 AM
1,1,2,2-Tetrachloroethane	ND	200	U	ppbv	200	1/11/2013 4:16 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	200	U	ppbv	200	1/11/2013 4:16 AM
1,1,2-Trichloroethane	ND	200	U	ppbv	200	1/11/2013 4:16 AM
1,1-Dichloroethane	ND	200	U	ppbv	200	1/11/2013 4:16 AM
1,1-Dichloroethene	ND	200	U	ppbv	200	1/11/2013 4:16 AM
1,2,4-Trichlorobenzene	ND	200	U	ppbv	200	1/11/2013 4:16 AM
1,2,4-Trimethylbenzene	ND	200	U	ppbv	200	1/11/2013 4:16 AM
1,2-Dibromoethane	ND	200	U	ppbv	200	1/11/2013 4:16 AM
1,2-Dichlorobenzene	ND	200	U	ppbv	200	1/11/2013 4:16 AM
1,2-Dichloroethane	ND	200	U	ppbv	200	1/11/2013 4:16 AM
1,2-Dichloropropane	ND	200	U	ppbv	200	1/11/2013 4:16 AM
1,3,5-Trimethylbenzene	ND	200	U	ppbv	200	1/11/2013 4:16 AM
1,3-Butadiene	ND	200	U	ppbv	200	1/11/2013 4:16 AM
1,3-Dichlorobenzene	ND	200	U	ppbv	200	1/11/2013 4:16 AM
1,4-Dichlorobenzene	ND	200	U	ppbv	200	1/11/2013 4:16 AM
2-Butanone	ND	200	U	ppbv	200	1/11/2013 4:16 AM
2-Hexanone	ND	200	U	ppbv	200	1/11/2013 4:16 AM
4-Methyl-2-pentanone	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Acetone	200	200		ppbv	200	1/11/2013 4:16 AM
Benzene	850	200		ppbv	200	1/11/2013 4:16 AM
Benzyl chloride	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Bromodichloromethane	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Bromoform	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Bromomethane	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Carbon disulfide	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Carbon tetrachloride	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Chlorobenzene	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Chlorodibromomethane	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Chloroethane	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Chloroform	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Chloromethane	ND	200	U	ppbv	200	1/11/2013 4:16 AM
cis-1,2-Dichloroethene	ND	200	U	ppbv	200	1/11/2013 4:16 AM
cis-1,3-dichloropropene	ND	200	U	ppbv	200	1/11/2013 4:16 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 9:51:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-050	**Matrix:**	Air
Client Sample ID:	VA2168		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	580	400		ppbv	200	1/11/2013 4:16 AM
Dichlorodifluoromethane	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Ethyl acetate	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Ethylbenzene	ND	400	U	ppbv	200	1/11/2013 4:16 AM
Heptane	670	200		ppbv	200	1/11/2013 4:16 AM
Hexachlorobutadiene	ND	400	U	ppbv	200	1/11/2013 4:16 AM
m,p-Xylene	210	400	J	ppbv	200	1/11/2013 4:16 AM
Methylene chloride	ND	1,000	U	ppbv	200	1/11/2013 4:16 AM
n-Hexane	440	400		ppbv	200	1/11/2013 4:16 AM
Naphthalene	ND	200	U	ppbv	200	1/11/2013 4:16 AM
o-Xylene	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Propylene	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Styrene	ND	200	U	ppbv	200	1/11/2013 4:16 AM
tert-Butyl Methyl Ether	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Tetrachloroethene	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Tetrahydrofuran	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Toluene	2,500	200		ppbv	200	1/11/2013 4:16 AM
trans-1,2-Dichloroethene	ND	200	U	ppbv	200	1/11/2013 4:16 AM
trans-1,3-dichloropropene	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Trichloroethene	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Trichlorofluoromethane	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Vinyl acetate	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Vinyl chloride	ND	200	U	ppbv	200	1/11/2013 4:16 AM
Xylenes, Total	210	600	J	ppbv	200	1/11/2013 4:16 AM
Surr: 4-Bromofluorobenzene	93.3	70-130		%REC	200	1/11/2013 4:16 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	75,000	47,000		µg/m³	400	1/10/2013 3:57 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/10/2013 3:57 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/10/2013 3:57 AM
Surr: 4-Bromofluorobenzene	97.0	70-130		%REC	400	1/10/2013 3:57 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 10:26:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-051	**Matrix:**	Air
Client Sample ID:	VA2169		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.38	0.10		% v/v	1	1/4/2013 12:06 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/4/2013 12:06 PM
Methane	ND	0.50	U	% v/v	1	1/4/2013 12:06 PM
Nitrogen	83	0.10		% v/v	1	1/4/2013 12:06 PM
Oxygen	20	0.10		% v/v	1	1/4/2013 12:06 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/11/2013 7:16 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/11/2013 7:16 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/11/2013 7:16 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/11/2013 7:16 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/11/2013 7:16 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/11/2013 7:16 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/11/2013 7:16 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/11/2013 7:16 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/11/2013 7:16 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/11/2013 7:16 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/11/2013 7:16 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/11/2013 7:16 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/11/2013 7:16 AM
1,3-Butadiene	ND	800	U	ppbv	800	1/11/2013 7:16 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/11/2013 7:16 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/11/2013 7:16 AM
2-Butanone	ND	800	U	ppbv	800	1/11/2013 7:16 AM
2-Hexanone	ND	800	U	ppbv	800	1/11/2013 7:16 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Acetone	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Benzene	1,700	800		ppbv	800	1/11/2013 7:16 AM
Benzyl chloride	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Bromodichloromethane	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Bromoform	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Bromomethane	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Carbon disulfide	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Carbon tetrachloride	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Chlorobenzene	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Chlorodibromomethane	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Chloroethane	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Chloroform	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Chloromethane	ND	800	U	ppbv	800	1/11/2013 7:16 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/11/2013 7:16 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/11/2013 7:16 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 10:26:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-051	**Matrix:**	Air
Client Sample ID:	VA2169		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	7,200	1,600		ppbv	800	1/11/2013 7:16 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Ethyl acetate	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Ethylbenzene	ND	1,600	U	ppbv	800	1/11/2013 7:16 AM
Heptane	1,400	800		ppbv	800	1/11/2013 7:16 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/11/2013 7:16 AM
m,p-Xylene	ND	1,600	U	ppbv	800	1/11/2013 7:16 AM
Methylene chloride	1,700	4,000	J	ppbv	800	1/11/2013 7:16 AM
n-Hexane	3,100	1,600		ppbv	800	1/11/2013 7:16 AM
Naphthalene	ND	800	U	ppbv	800	1/11/2013 7:16 AM
o-Xylene	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Propylene	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Styrene	ND	800	U	ppbv	800	1/11/2013 7:16 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Tetrachloroethene	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Tetrahydrofuran	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Toluene	4,800	800		ppbv	800	1/11/2013 7:16 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/11/2013 7:16 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Trichloroethene	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Vinyl acetate	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Vinyl chloride	ND	800	U	ppbv	800	1/11/2013 7:16 AM
Xylenes, Total	ND	2,400	U	ppbv	800	1/11/2013 7:16 AM
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	800	1/11/2013 7:16 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	570,000	94,000		µg/m³	800	1/10/2013 5:27 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/10/2013 5:27 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	1/10/2013 5:27 AM
Surr: 4-Bromofluorobenzene	97.5	70-130		%REC	800	1/10/2013 5:27 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 11:02:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-052	**Matrix:**	Air
Client Sample ID:	VA2170		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.32	0.10		% v/v	1	1/4/2013 12:21 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/4/2013 12:21 PM
Methane	ND	0.50	U	% v/v	1	1/4/2013 12:21 PM
Nitrogen	83	0.10		% v/v	1	1/4/2013 12:21 PM
Oxygen	21	0.10		% v/v	1	1/4/2013 12:21 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/11/2013 8:43 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/11/2013 8:43 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/11/2013 8:43 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/11/2013 8:43 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/11/2013 8:43 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/11/2013 8:43 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/11/2013 8:43 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/11/2013 8:43 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/11/2013 8:43 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/11/2013 8:43 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/11/2013 8:43 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/11/2013 8:43 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/11/2013 8:43 AM
1,3-Butadiene	ND	800	U	ppbv	800	1/11/2013 8:43 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/11/2013 8:43 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/11/2013 8:43 AM
2-Butanone	ND	800	U	ppbv	800	1/11/2013 8:43 AM
2-Hexanone	ND	800	U	ppbv	800	1/11/2013 8:43 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Acetone	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Benzene	3,200	800		ppbv	800	1/11/2013 8:43 AM
Benzyl chloride	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Bromodichloromethane	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Bromoform	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Bromomethane	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Carbon disulfide	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Carbon tetrachloride	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Chlorobenzene	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Chlorodibromomethane	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Chloroethane	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Chloroform	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Chloromethane	ND	800	U	ppbv	800	1/11/2013 8:43 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/11/2013 8:43 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/11/2013 8:43 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 11:02:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-052	**Matrix:**	Air
Client Sample ID:	VA2170		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	5,600	1,600		ppbv	800	1/11/2013 8:43 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Ethyl acetate	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Ethylbenzene	ND	1,600	U	ppbv	800	1/11/2013 8:43 AM
Heptane	1,500	800		ppbv	800	1/11/2013 8:43 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/11/2013 8:43 AM
m,p-Xylene	ND	1,600	U	ppbv	800	1/11/2013 8:43 AM
Methylene chloride	ND	4,000	U	ppbv	800	1/11/2013 8:43 AM
n-Hexane	4,100	1,600		ppbv	800	1/11/2013 8:43 AM
Naphthalene	ND	800	U	ppbv	800	1/11/2013 8:43 AM
o-Xylene	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Propylene	3,200	800		ppbv	800	1/11/2013 8:43 AM
Styrene	ND	800	U	ppbv	800	1/11/2013 8:43 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Tetrachloroethene	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Tetrahydrofuran	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Toluene	6,300	800		ppbv	800	1/11/2013 8:43 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/11/2013 8:43 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Trichloroethene	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Vinyl acetate	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Vinyl chloride	ND	800	U	ppbv	800	1/11/2013 8:43 AM
Xylenes, Total	ND	2,400	U	ppbv	800	1/11/2013 8:43 AM
Surr: 4-Bromofluorobenzene	95.6	70-130		%REC	800	1/11/2013 8:43 AM
Mass APH Air		**Method:**				**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,400,000	940,000		µg/m³	8000	1/10/2013 2:25 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	1/10/2013 2:25 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	1/10/2013 2:25 PM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	8000	1/10/2013 2:25 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 11:40:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-053	**Matrix:**	Air
Client Sample ID:	VA2171		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.083	0.10	J	% v/v	1	1/4/2013 12:36 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/4/2013 12:36 PM
Methane	ND	0.50	U	% v/v	1	1/4/2013 12:36 PM
Nitrogen	82	0.10		% v/v	1	1/4/2013 12:36 PM
Oxygen	22	0.10		% v/v	1	1/4/2013 12:36 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
2-Butanone	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
2-Hexanone	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Acetone	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Benzene	31,000	8,000		ppbv	8000	1/11/2013 10:06 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Bromoform	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Bromomethane	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Chloroethane	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Chloroform	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Chloromethane	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/13/2012 11:40:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-053	**Matrix:**	Air
Client Sample ID:	VA2171		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	43,000	16,000		ppbv	8000	1/11/2013 10:06 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	1/11/2013 10:06 AM
Heptane	26,000	8,000		ppbv	8000	1/11/2013 10:06 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	1/11/2013 10:06 AM
m,p-Xylene	ND	16,000	U	ppbv	8000	1/11/2013 10:06 AM
Methylene chloride	ND	40,000	U	ppbv	8000	1/11/2013 10:06 AM
n-Hexane	45,000	16,000		ppbv	8000	1/11/2013 10:06 AM
Naphthalene	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
o-Xylene	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Propylene	9,000	8,000		ppbv	8000	1/11/2013 10:06 AM
Styrene	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Toluene	81,000	8,000		ppbv	8000	1/11/2013 10:06 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Trichloroethene	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	1/11/2013 10:06 AM
Xylenes, Total	ND	24,000	U	ppbv	8000	1/11/2013 10:06 AM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	8000	1/11/2013 10:06 AM
Mass APH Air		**Method:**				**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	15,000,000	2,300,000		µg/m³	20000	1/10/2013 11:26 PM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	1/10/2013 11:26 PM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	1/10/2013 11:26 PM
Surr: 4-Bromofluorobenzene	94.2	70-130		%REC	20000	1/10/2013 11:26 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/6/2012 3:46:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-054	**Matrix:**	Air
Client Sample ID:	VA2195		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.18	0.10		% v/v	1	1/3/2013 2:40 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/3/2013 2:40 PM
Methane	ND	0.50	U	% v/v	1	1/3/2013 2:40 PM
Nitrogen	82	0.10		% v/v	1	1/3/2013 2:40 PM
Oxygen	22	0.10		% v/v	1	1/3/2013 2:40 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
1,1,2,2-Tetrachloroethane	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
1,1,2-Trichloroethane	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
1,1-Dichloroethane	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
1,1-Dichloroethene	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
1,2,4-Trichlorobenzene	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
1,2,4-Trimethylbenzene	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
1,2-Dibromoethane	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
1,2-Dichlorobenzene	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
1,2-Dichloroethane	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
1,2-Dichloropropane	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
1,3,5-Trimethylbenzene	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
1,3-Butadiene	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
1,3-Dichlorobenzene	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
1,4-Dichlorobenzene	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
2-Butanone	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
2-Hexanone	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
4-Methyl-2-pentanone	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Acetone	2,800	800	H	ppbv	800	1/6/2013 5:57 AM
Benzene	1,800	800	H	ppbv	800	1/6/2013 5:57 AM
Benzyl chloride	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Bromodichloromethane	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Bromoform	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Bromomethane	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Carbon disulfide	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Carbon tetrachloride	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Chlorobenzene	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Chlorodibromomethane	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Chloroethane	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Chloroform	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Chloromethane	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
cis-1,2-Dichloroethene	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
cis-1,3-dichloropropene	ND	800	UH	ppbv	800	1/6/2013 5:57 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/6/2012 3:46:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-054	**Matrix:**	Air
Client Sample ID:	VA2195		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,600	1,600	H	ppbv	800	1/6/2013 5:57 AM
Dichlorodifluoromethane	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Ethyl acetate	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Ethylbenzene	ND	1,600	UH	ppbv	800	1/6/2013 5:57 AM
Heptane	4,300	800	H	ppbv	800	1/6/2013 5:57 AM
Hexachlorobutadiene	ND	1,600	UH	ppbv	800	1/6/2013 5:57 AM
m,p-Xylene	ND	1,600	UH	ppbv	800	1/6/2013 5:57 AM
Methylene chloride	1,800	4,000	JH	ppbv	800	1/6/2013 5:57 AM
n-Hexane	2,600	1,600	H	ppbv	800	1/6/2013 5:57 AM
Naphthalene	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
o-Xylene	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Propylene	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Styrene	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
tert-Butyl Methyl Ether	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Tetrachloroethene	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Tetrahydrofuran	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Toluene	5,300	800	H	ppbv	800	1/6/2013 5:57 AM
trans-1,2-Dichloroethene	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
trans-1,3-dichloropropene	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Trichloroethene	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Trichlorofluoromethane	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Vinyl acetate	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Vinyl chloride	ND	800	UH	ppbv	800	1/6/2013 5:57 AM
Xylenes, Total	ND	2,400	UH	ppbv	800	1/6/2013 5:57 AM
Surr: 4-Bromofluorobenzene	96.0	70-130	H	%REC	800	1/6/2013 5:57 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	440,000	94,000		µg/m³	800	1/2/2013 11:41 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/2/2013 11:41 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	1/2/2013 11:41 PM
Surr: 4-Bromofluorobenzene	95.2	70-130		%REC	800	1/2/2013 11:41 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/6/2012 4:21:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-055	**Matrix:**	Air
Client Sample ID:	VA2196		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.70	0.10		% v/v	1	1/3/2013 2:54 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/3/2013 2:54 PM
Methane	ND	0.50	U	% v/v	1	1/3/2013 2:54 PM
Nitrogen	83	0.10		% v/v	1	1/3/2013 2:54 PM
Oxygen	20	0.10		% v/v	1	1/3/2013 2:54 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
1,1,2,2-Tetrachloroethane	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
1,1,2-Trichloroethane	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
1,1-Dichloroethane	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
1,1-Dichloroethene	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
1,2,4-Trichlorobenzene	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
1,2,4-Trimethylbenzene	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
1,2-Dibromoethane	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
1,2-Dichlorobenzene	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
1,2-Dichloroethane	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
1,2-Dichloropropane	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
1,3,5-Trimethylbenzene	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
1,3-Butadiene	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
1,3-Dichlorobenzene	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
1,4-Dichlorobenzene	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
2-Butanone	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
2-Hexanone	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
4-Methyl-2-pentanone	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Acetone	2,000	400	H	ppbv	400	1/6/2013 6:46 AM
Benzene	1,000	400	H	ppbv	400	1/6/2013 6:46 AM
Benzyl chloride	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Bromodichloromethane	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Bromoform	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Bromomethane	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Carbon disulfide	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Carbon tetrachloride	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Chlorobenzene	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Chlorodibromomethane	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Chloroethane	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Chloroform	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Chloromethane	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
cis-1,2-Dichloroethene	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
cis-1,3-dichloropropene	ND	400	UH	ppbv	400	1/6/2013 6:46 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/6/2012 4:21:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-055	**Matrix:**	Air
Client Sample ID:	VA2196		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,800	800	H	ppbv	400	1/6/2013 6:46 AM
Dichlorodifluoromethane	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Ethyl acetate	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Ethylbenzene	ND	800	UH	ppbv	400	1/6/2013 6:46 AM
Heptane	2,000	400	H	ppbv	400	1/6/2013 6:46 AM
Hexachlorobutadiene	ND	800	UH	ppbv	400	1/6/2013 6:46 AM
m,p-Xylene	ND	800	UH	ppbv	400	1/6/2013 6:46 AM
Methylene chloride	1,700	2,000	JH	ppbv	400	1/6/2013 6:46 AM
n-Hexane	1,300	800	H	ppbv	400	1/6/2013 6:46 AM
Naphthalene	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
o-Xylene	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Propylene	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Styrene	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
tert-Butyl Methyl Ether	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Tetrachloroethene	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Tetrahydrofuran	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Toluene	3,100	400	H	ppbv	400	1/6/2013 6:46 AM
trans-1,2-Dichloroethene	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
trans-1,3-dichloropropene	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Trichloroethene	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Trichlorofluoromethane	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Vinyl acetate	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Vinyl chloride	ND	400	UH	ppbv	400	1/6/2013 6:46 AM
Xylenes, Total	ND	1,200	UH	ppbv	400	1/6/2013 6:46 AM
Surr: 4-Bromofluorobenzene	97.3	70-130	H	%REC	400	1/6/2013 6:46 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	240,000	94,000		µg/m³	800	1/3/2013 12:26 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/3/2013 12:26 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	1/3/2013 12:26 AM
Surr: 4-Bromofluorobenzene	93.6	70-130		%REC	800	1/3/2013 12:26 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 8:32:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-056	**Matrix:**	Air
Client Sample ID:	VA2197		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.077	0.10	J	% v/v	1	1/4/2013 1:29 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/4/2013 1:29 PM
Methane	ND	0.50	U	% v/v	1	1/4/2013 1:29 PM
Nitrogen	83	0.10		% v/v	1	1/4/2013 1:29 PM
Oxygen	23	0.10		% v/v	1	1/4/2013 1:29 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/6/2013 7:34 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/6/2013 7:34 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/6/2013 7:34 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/6/2013 7:34 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/6/2013 7:34 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/6/2013 7:34 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/6/2013 7:34 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/6/2013 7:34 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/6/2013 7:34 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/6/2013 7:34 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/6/2013 7:34 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/6/2013 7:34 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/6/2013 7:34 AM
1,3-Butadiene	ND	400	U	ppbv	400	1/6/2013 7:34 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/6/2013 7:34 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/6/2013 7:34 AM
2-Butanone	920	400		ppbv	400	1/6/2013 7:34 AM
2-Hexanone	ND	400	U	ppbv	400	1/6/2013 7:34 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Acetone	6,000	400		ppbv	400	1/6/2013 7:34 AM
Benzene	970	400		ppbv	400	1/6/2013 7:34 AM
Benzyl chloride	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Bromodichloromethane	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Bromoform	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Bromomethane	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Carbon disulfide	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Carbon tetrachloride	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Chlorobenzene	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Chlorodibromomethane	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Chloroethane	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Chloroform	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Chloromethane	ND	400	U	ppbv	400	1/6/2013 7:34 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/6/2013 7:34 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/6/2013 7:34 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 8:32:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-056	**Matrix:**	Air
Client Sample ID:	VA2197		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,600	800		ppbv	400	1/6/2013 7:34 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Ethyl acetate	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Ethylbenzene	ND	800	U	ppbv	400	1/6/2013 7:34 AM
Heptane	4,400	400		ppbv	400	1/6/2013 7:34 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/6/2013 7:34 AM
m,p-Xylene	ND	800	U	ppbv	400	1/6/2013 7:34 AM
Methylene chloride	1,400	2,000	J	ppbv	400	1/6/2013 7:34 AM
n-Hexane	2,000	800		ppbv	400	1/6/2013 7:34 AM
Naphthalene	ND	400	U	ppbv	400	1/6/2013 7:34 AM
o-Xylene	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Propylene	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Styrene	ND	400	U	ppbv	400	1/6/2013 7:34 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Tetrachloroethene	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Tetrahydrofuran	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Toluene	3,400	400		ppbv	400	1/6/2013 7:34 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/6/2013 7:34 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Trichloroethene	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Vinyl acetate	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Vinyl chloride	ND	400	U	ppbv	400	1/6/2013 7:34 AM
Xylenes, Total	ND	1,200	U	ppbv	400	1/6/2013 7:34 AM
Surr: 4-Bromofluorobenzene	97.2	70-130		%REC	400	1/6/2013 7:34 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	520,000	94,000		µg/m³	800	1/3/2013 1:11 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/3/2013 1:11 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	1/3/2013 1:11 AM
Surr: 4-Bromofluorobenzene	95.7	70-130		%REC	800	1/3/2013 1:11 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 9:37:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-057	**Matrix:**	Air
Client Sample ID:	VA2198		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.047	0.10	J	% v/v	1	1/4/2013 1:57 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/4/2013 1:57 PM
Methane	ND	0.50	U	% v/v	1	1/4/2013 1:57 PM
Nitrogen	83	0.10		% v/v	1	1/4/2013 1:57 PM
Oxygen	23	0.10		% v/v	1	1/4/2013 1:57 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/6/2013 8:22 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/6/2013 8:22 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/6/2013 8:22 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/6/2013 8:22 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/6/2013 8:22 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/6/2013 8:22 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/6/2013 8:22 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/6/2013 8:22 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/6/2013 8:22 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/6/2013 8:22 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/6/2013 8:22 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/6/2013 8:22 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/6/2013 8:22 AM
1,3-Butadiene	ND	400	U	ppbv	400	1/6/2013 8:22 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/6/2013 8:22 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/6/2013 8:22 AM
2-Butanone	1,600	400		ppbv	400	1/6/2013 8:22 AM
2-Hexanone	ND	400	U	ppbv	400	1/6/2013 8:22 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Acetone	11,000	400		ppbv	400	1/6/2013 8:22 AM
Benzene	1,100	400		ppbv	400	1/6/2013 8:22 AM
Benzyl chloride	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Bromodichloromethane	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Bromoform	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Bromomethane	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Carbon disulfide	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Carbon tetrachloride	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Chlorobenzene	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Chlorodibromomethane	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Chloroethane	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Chloroform	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Chloromethane	ND	400	U	ppbv	400	1/6/2013 8:22 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/6/2013 8:22 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/6/2013 8:22 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 9:37:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-057	**Matrix:**	Air
Client Sample ID:	VA2198		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	4,200	800		ppbv	400	1/6/2013 8:22 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Ethyl acetate	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Ethylbenzene	ND	800	U	ppbv	400	1/6/2013 8:22 AM
Heptane	6,100	400		ppbv	400	1/6/2013 8:22 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/6/2013 8:22 AM
m,p-Xylene	ND	800	U	ppbv	400	1/6/2013 8:22 AM
Methylene chloride	2,400	2,000		ppbv	400	1/6/2013 8:22 AM
n-Hexane	1,900	800		ppbv	400	1/6/2013 8:22 AM
Naphthalene	ND	400	U	ppbv	400	1/6/2013 8:22 AM
o-Xylene	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Propylene	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Styrene	ND	400	U	ppbv	400	1/6/2013 8:22 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Tetrachloroethene	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Tetrahydrofuran	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Toluene	4,200	400		ppbv	400	1/6/2013 8:22 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/6/2013 8:22 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Trichloroethene	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Vinyl acetate	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Vinyl chloride	ND	400	U	ppbv	400	1/6/2013 8:22 AM
Xylenes, Total	ND	1,200	U	ppbv	400	1/6/2013 8:22 AM
Surr: 4-Bromofluorobenzene	96.9	70-130		%REC	400	1/6/2013 8:22 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	120,000	47,000		µg/m³	400	1/4/2013 2:45 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/4/2013 2:45 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/4/2013 2:45 PM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	400	1/4/2013 2:45 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 9:37:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-058	**Matrix:**	Air
Client Sample ID:	VA2199		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.17	0.10		% v/v	1	1/4/2013 2:11 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/4/2013 2:11 PM
Methane	ND	0.50	U	% v/v	1	1/4/2013 2:11 PM
Nitrogen	82	0.10		% v/v	1	1/4/2013 2:11 PM
Oxygen	22	0.10		% v/v	1	1/4/2013 2:11 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/6/2013 9:11 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/6/2013 9:11 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/6/2013 9:11 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/6/2013 9:11 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/6/2013 9:11 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/6/2013 9:11 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/6/2013 9:11 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/6/2013 9:11 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/6/2013 9:11 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/6/2013 9:11 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/6/2013 9:11 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/6/2013 9:11 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/6/2013 9:11 AM
1,3-Butadiene	ND	400	U	ppbv	400	1/6/2013 9:11 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/6/2013 9:11 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/6/2013 9:11 AM
2-Butanone	ND	400	U	ppbv	400	1/6/2013 9:11 AM
2-Hexanone	ND	400	U	ppbv	400	1/6/2013 9:11 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Acetone	2,700	400		ppbv	400	1/6/2013 9:11 AM
Benzene	470	400		ppbv	400	1/6/2013 9:11 AM
Benzyl chloride	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Bromodichloromethane	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Bromoform	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Bromomethane	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Carbon disulfide	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Carbon tetrachloride	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Chlorobenzene	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Chlorodibromomethane	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Chloroethane	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Chloroform	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Chloromethane	ND	400	U	ppbv	400	1/6/2013 9:11 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/6/2013 9:11 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/6/2013 9:11 AM

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WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 9:37:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-058	**Matrix:**	Air
Client Sample ID:	VA2199		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,000	800		ppbv	400	1/6/2013 9:11 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Ethyl acetate	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Ethylbenzene	ND	800	U	ppbv	400	1/6/2013 9:11 AM
Heptane	1,100	400		ppbv	400	1/6/2013 9:11 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/6/2013 9:11 AM
m,p-Xylene	ND	800	U	ppbv	400	1/6/2013 9:11 AM
Methylene chloride	2,300	2,000		ppbv	400	1/6/2013 9:11 AM
n-Hexane	800	800		ppbv	400	1/6/2013 9:11 AM
Naphthalene	ND	400	U	ppbv	400	1/6/2013 9:11 AM
o-Xylene	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Propylene	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Styrene	ND	400	U	ppbv	400	1/6/2013 9:11 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Tetrachloroethene	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Tetrahydrofuran	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Toluene	1,500	400		ppbv	400	1/6/2013 9:11 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/6/2013 9:11 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Trichloroethene	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Vinyl acetate	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Vinyl chloride	ND	400	U	ppbv	400	1/6/2013 9:11 AM
Xylenes, Total	ND	1,200	U	ppbv	400	1/6/2013 9:11 AM
Surr: 4-Bromofluorobenzene	96.8	70-130		%REC	400	1/6/2013 9:11 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	110,000	47,000		µg/m³	400	1/3/2013 2:49 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/3/2013 2:49 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/3/2013 2:49 AM
Surr: 4-Bromofluorobenzene	94.3	70-130		%REC	400	1/3/2013 2:49 AM

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WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 10:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-059	**Matrix:**	Air
Client Sample ID:	VA2200		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.15	0.10		% v/v	1	1/4/2013 2:27 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/4/2013 2:27 PM
Methane	ND	0.50	U	% v/v	1	1/4/2013 2:27 PM
Nitrogen	82	0.10		% v/v	1	1/4/2013 2:27 PM
Oxygen	22	0.10		% v/v	1	1/4/2013 2:27 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/6/2013 9:53 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/6/2013 9:53 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/6/2013 9:53 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/6/2013 9:53 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/6/2013 9:53 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/6/2013 9:53 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/6/2013 9:53 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/6/2013 9:53 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/6/2013 9:53 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/6/2013 9:53 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/6/2013 9:53 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/6/2013 9:53 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/6/2013 9:53 AM
1,3-Butadiene	ND	40	U	ppbv	40	1/6/2013 9:53 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/6/2013 9:53 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/6/2013 9:53 AM
2-Butanone	ND	40	U	ppbv	40	1/6/2013 9:53 AM
2-Hexanone	ND	40	U	ppbv	40	1/6/2013 9:53 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Acetone	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Benzene	340	40		ppbv	40	1/6/2013 9:53 AM
Benzyl chloride	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Bromodichloromethane	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Bromoform	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Bromomethane	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Carbon disulfide	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Carbon tetrachloride	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Chlorobenzene	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Chlorodibromomethane	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Chloroethane	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Chloroform	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Chloromethane	ND	40	U	ppbv	40	1/6/2013 9:53 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/6/2013 9:53 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/6/2013 9:53 AM

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WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 10:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-059	**Matrix:**	Air
Client Sample ID:	VA2200		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	610	80		ppbv	40	1/6/2013 9:53 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Ethyl acetate	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Ethylbenzene	ND	80	U	ppbv	40	1/6/2013 9:53 AM
Heptane	730	40		ppbv	40	1/6/2013 9:53 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/6/2013 9:53 AM
m,p-Xylene	84	80		ppbv	40	1/6/2013 9:53 AM
Methylene chloride	ND	200	U	ppbv	40	1/6/2013 9:53 AM
n-Hexane	380	80		ppbv	40	1/6/2013 9:53 AM
Naphthalene	ND	40	U	ppbv	40	1/6/2013 9:53 AM
o-Xylene	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Propylene	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Styrene	ND	40	U	ppbv	40	1/6/2013 9:53 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Tetrachloroethene	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Tetrahydrofuran	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Toluene	1,200	40		ppbv	40	1/6/2013 9:53 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/6/2013 9:53 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Trichloroethene	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Vinyl acetate	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Vinyl chloride	ND	40	U	ppbv	40	1/6/2013 9:53 AM
Xylenes, Total	84	120	J	ppbv	40	1/6/2013 9:53 AM
Surr: 4-Bromofluorobenzene	94.2	70-130		%REC	40	1/6/2013 9:53 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	35,000	4,700		µg/m³	40	1/5/2013 1:28 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/5/2013 1:28 PM
C9-C12 Aliphatic Hydrocarbons	1,800	7,600	J	µg/m³	40	1/5/2013 1:28 PM
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	40	1/5/2013 1:28 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 10:53:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-060	**Matrix:**	Air
Client Sample ID:	VA2201		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.20	0.10		% v/v	1	1/4/2013 2:42 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/4/2013 2:42 PM
Methane	ND	0.50	U	% v/v	1	1/4/2013 2:42 PM
Nitrogen	83	0.10		% v/v	1	1/4/2013 2:42 PM
Oxygen	21	0.10		% v/v	1	1/4/2013 2:42 PM

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WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 11:28:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-061	**Matrix:**	Air
Client Sample ID:	VA2202		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.38	0.10		% v/v	1	1/4/2013 4:25 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/4/2013 4:25 PM
Methane	ND	0.50	U	% v/v	1	1/4/2013 4:25 PM
Nitrogen	83	0.10		% v/v	1	1/4/2013 4:25 PM
Oxygen	22	0.10		% v/v	1	1/4/2013 4:25 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/6/2013 11:05 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/6/2013 11:05 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/6/2013 11:05 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/6/2013 11:05 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/6/2013 11:05 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/6/2013 11:05 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/6/2013 11:05 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/6/2013 11:05 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/6/2013 11:05 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/6/2013 11:05 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/6/2013 11:05 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/6/2013 11:05 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/6/2013 11:05 AM
1,3-Butadiene	ND	40	U	ppbv	40	1/6/2013 11:05 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/6/2013 11:05 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/6/2013 11:05 AM
2-Butanone	ND	40	U	ppbv	40	1/6/2013 11:05 AM
2-Hexanone	ND	40	U	ppbv	40	1/6/2013 11:05 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Acetone	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Benzene	400	40		ppbv	40	1/6/2013 11:05 AM
Benzyl chloride	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Bromodichloromethane	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Bromoform	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Bromomethane	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Carbon disulfide	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Carbon tetrachloride	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Chlorobenzene	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Chlorodibromomethane	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Chloroethane	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Chloroform	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Chloromethane	ND	40	U	ppbv	40	1/6/2013 11:05 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/6/2013 11:05 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/6/2013 11:05 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 11:28:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-061	**Matrix:**	Air
Client Sample ID:	VA2202		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	800	80		ppbv	40	1/6/2013 11:05 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Ethyl acetate	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Ethylbenzene	ND	80	U	ppbv	40	1/6/2013 11:05 AM
Heptane	940	40		ppbv	40	1/6/2013 11:05 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/6/2013 11:05 AM
m,p-Xylene	88	80		ppbv	40	1/6/2013 11:05 AM
Methylene chloride	ND	200	U	ppbv	40	1/6/2013 11:05 AM
n-Hexane	490	80		ppbv	40	1/6/2013 11:05 AM
Naphthalene	ND	40	U	ppbv	40	1/6/2013 11:05 AM
o-Xylene	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Propylene	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Styrene	ND	40	U	ppbv	40	1/6/2013 11:05 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Tetrachloroethene	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Tetrahydrofuran	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Toluene	1,300	40		ppbv	40	1/6/2013 11:05 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/6/2013 11:05 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Trichloroethene	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Vinyl acetate	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Vinyl chloride	ND	40	U	ppbv	40	1/6/2013 11:05 AM
Xylenes, Total	88	120	J	ppbv	40	1/6/2013 11:05 AM
Surr: 4-Bromofluorobenzene	96.4	70-130		%REC	40	1/6/2013 11:05 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	72,000	23,000		µg/m³	200	1/4/2013 6:29 PM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	1/4/2013 6:29 PM
C9-C12 Aliphatic Hydrocarbons	ND	38,000	U	µg/m³	200	1/4/2013 6:29 PM
Surr: 4-Bromofluorobenzene	96.5	70-130		%REC	200	1/4/2013 6:29 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 12:04:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-062	**Matrix:**	Air
Client Sample ID:	VA2203		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.29	0.10		% v/v	1	1/4/2013 4:39 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/4/2013 4:39 PM
Methane	ND	0.50	U	% v/v	1	1/4/2013 4:39 PM
Nitrogen	83	0.10		% v/v	1	1/4/2013 4:39 PM
Oxygen	21	0.10		% v/v	1	1/4/2013 4:39 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/6/2013 11:53 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/6/2013 11:53 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/6/2013 11:53 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/6/2013 11:53 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/6/2013 11:53 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/6/2013 11:53 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/6/2013 11:53 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/6/2013 11:53 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/6/2013 11:53 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/6/2013 11:53 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/6/2013 11:53 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/6/2013 11:53 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/6/2013 11:53 AM
1,3-Butadiene	ND	400	U	ppbv	400	1/6/2013 11:53 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/6/2013 11:53 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/6/2013 11:53 AM
2-Butanone	ND	400	U	ppbv	400	1/6/2013 11:53 AM
2-Hexanone	ND	400	U	ppbv	400	1/6/2013 11:53 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Acetone	1,500	400		ppbv	400	1/6/2013 11:53 AM
Benzene	410	400		ppbv	400	1/6/2013 11:53 AM
Benzyl chloride	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Bromodichloromethane	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Bromoform	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Bromomethane	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Carbon disulfide	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Carbon tetrachloride	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Chlorobenzene	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Chlorodibromomethane	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Chloroethane	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Chloroform	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Chloromethane	ND	400	U	ppbv	400	1/6/2013 11:53 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/6/2013 11:53 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/6/2013 11:53 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 12:04:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-062	**Matrix:**	Air
Client Sample ID:	VA2203		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	870	800		ppbv	400	1/6/2013 11:53 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Ethyl acetate	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Ethylbenzene	ND	800	U	ppbv	400	1/6/2013 11:53 AM
Heptane	830	400		ppbv	400	1/6/2013 11:53 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/6/2013 11:53 AM
m,p-Xylene	ND	800	U	ppbv	400	1/6/2013 11:53 AM
Methylene chloride	2,000	2,000		ppbv	400	1/6/2013 11:53 AM
n-Hexane	750	800	J	ppbv	400	1/6/2013 11:53 AM
Naphthalene	ND	400	U	ppbv	400	1/6/2013 11:53 AM
o-Xylene	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Propylene	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Styrene	ND	400	U	ppbv	400	1/6/2013 11:53 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Tetrachloroethene	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Tetrahydrofuran	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Toluene	1,300	400		ppbv	400	1/6/2013 11:53 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/6/2013 11:53 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Trichloroethene	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Vinyl acetate	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Vinyl chloride	ND	400	U	ppbv	400	1/6/2013 11:53 AM
Xylenes, Total	ND	1,200	U	ppbv	400	1/6/2013 11:53 AM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	400	1/6/2013 11:53 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	390,000	94,000		µg/m³	800	1/3/2013 5:12 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/3/2013 5:12 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	1/3/2013 5:12 AM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	800	1/3/2013 5:12 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 12:42:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-063	**Matrix:**	Air
Client Sample ID:	VA2204		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.078	0.10	J	% v/v	1	1/3/2013 3:08 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/3/2013 3:08 PM
Methane	ND	0.50	U	% v/v	1	1/3/2013 3:08 PM
Nitrogen	81	0.10		% v/v	1	1/3/2013 3:08 PM
Oxygen	22	0.10		% v/v	1	1/3/2013 3:08 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/6/2013 12:38 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/6/2013 12:38 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/6/2013 12:38 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/6/2013 12:38 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/6/2013 12:38 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/6/2013 12:38 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/6/2013 12:38 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/6/2013 12:38 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/6/2013 12:38 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/6/2013 12:38 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/6/2013 12:38 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/6/2013 12:38 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/6/2013 12:38 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/6/2013 12:38 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/6/2013 12:38 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/6/2013 12:38 PM
2-Butanone	ND	800	U	ppbv	800	1/6/2013 12:38 PM
2-Hexanone	ND	800	U	ppbv	800	1/6/2013 12:38 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Acetone	2,000	800		ppbv	800	1/6/2013 12:38 PM
Benzene	1,000	800		ppbv	800	1/6/2013 12:38 PM
Benzyl chloride	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Bromoform	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Bromomethane	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Carbon disulfide	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Chlorobenzene	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Chloroethane	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Chloroform	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Chloromethane	ND	800	U	ppbv	800	1/6/2013 12:38 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/6/2013 12:38 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/6/2013 12:38 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 12:42:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-063	**Matrix:**	Air
Client Sample ID:	VA2204		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,100	1,600		ppbv	800	1/6/2013 12:38 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Ethyl acetate	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Ethylbenzene	ND	1,600	U	ppbv	800	1/6/2013 12:38 PM
Heptane	930	800		ppbv	800	1/6/2013 12:38 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/6/2013 12:38 PM
m,p-Xylene	ND	1,600	U	ppbv	800	1/6/2013 12:38 PM
Methylene chloride	2,500	4,000	J	ppbv	800	1/6/2013 12:38 PM
n-Hexane	1,700	1,600		ppbv	800	1/6/2013 12:38 PM
Naphthalene	ND	800	U	ppbv	800	1/6/2013 12:38 PM
o-Xylene	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Propylene	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Styrene	ND	800	U	ppbv	800	1/6/2013 12:38 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Toluene	2,700	800		ppbv	800	1/6/2013 12:38 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/6/2013 12:38 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Trichloroethene	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Vinyl acetate	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Vinyl chloride	ND	800	U	ppbv	800	1/6/2013 12:38 PM
Xylenes, Total	ND	2,400	U	ppbv	800	1/6/2013 12:38 PM
Surr: 4-Bromofluorobenzene	97.0	70-130		%REC	800	1/6/2013 12:38 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	820,000	94,000		µg/m³	800	1/3/2013 6:42 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/3/2013 6:42 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	1/3/2013 6:42 AM
Surr: 4-Bromofluorobenzene	94.0	70-130		%REC	800	1/3/2013 6:42 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 1:31:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-064	**Matrix:**	Air
Client Sample ID:	VA2232		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.40	0.10		% v/v	1	1/4/2013 4:54 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/4/2013 4:54 PM
Methane	ND	0.50	U	% v/v	1	1/4/2013 4:54 PM
Nitrogen	82	0.10		% v/v	1	1/4/2013 4:54 PM
Oxygen	22	0.10		% v/v	1	1/4/2013 4:54 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/6/2013 1:20 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/6/2013 1:20 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/6/2013 1:20 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/6/2013 1:20 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/6/2013 1:20 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/6/2013 1:20 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/6/2013 1:20 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/6/2013 1:20 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/6/2013 1:20 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/6/2013 1:20 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/6/2013 1:20 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/6/2013 1:20 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/6/2013 1:20 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/6/2013 1:20 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/6/2013 1:20 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/6/2013 1:20 PM
2-Butanone	ND	40	U	ppbv	40	1/6/2013 1:20 PM
2-Hexanone	ND	40	U	ppbv	40	1/6/2013 1:20 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Acetone	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Benzene	280	40		ppbv	40	1/6/2013 1:20 PM
Benzyl chloride	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Bromoform	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Bromomethane	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Carbon disulfide	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Chlorobenzene	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Chloroethane	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Chloroform	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Chloromethane	ND	40	U	ppbv	40	1/6/2013 1:20 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/6/2013 1:20 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/6/2013 1:20 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 1:31:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-064	**Matrix:**	Air
Client Sample ID:	VA2232		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	490	80		ppbv	40	1/6/2013 1:20 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Ethyl acetate	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Ethylbenzene	ND	80	U	ppbv	40	1/6/2013 1:20 PM
Heptane	570	40		ppbv	40	1/6/2013 1:20 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/6/2013 1:20 PM
m,p-Xylene	92	80		ppbv	40	1/6/2013 1:20 PM
Methylene chloride	ND	200	U	ppbv	40	1/6/2013 1:20 PM
n-Hexane	280	80		ppbv	40	1/6/2013 1:20 PM
Naphthalene	ND	40	U	ppbv	40	1/6/2013 1:20 PM
o-Xylene	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Propylene	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Styrene	ND	40	U	ppbv	40	1/6/2013 1:20 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Toluene	1,100	40		ppbv	40	1/6/2013 1:20 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/6/2013 1:20 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Trichloroethene	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Vinyl acetate	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Vinyl chloride	ND	40	U	ppbv	40	1/6/2013 1:20 PM
Xylenes, Total	92	120	J	ppbv	40	1/6/2013 1:20 PM
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	40	1/6/2013 1:20 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	63,000	23,000		µg/m³	200	1/4/2013 7:18 PM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	1/4/2013 7:18 PM
C9-C12 Aliphatic Hydrocarbons	ND	38,000	U	µg/m³	200	1/4/2013 7:18 PM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	200	1/4/2013 7:18 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 2:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-065	**Matrix:**	Air
Client Sample ID:	VA2233		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.52	0.10		% v/v	1	1/4/2013 5:08 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/4/2013 5:08 PM
Methane	ND	0.50	U	% v/v	1	1/4/2013 5:08 PM
Nitrogen	82	0.10		% v/v	1	1/4/2013 5:08 PM
Oxygen	21	0.10		% v/v	1	1/4/2013 5:08 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/6/2013 2:02 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/6/2013 2:02 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/6/2013 2:02 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/6/2013 2:02 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/6/2013 2:02 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/6/2013 2:02 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/6/2013 2:02 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/6/2013 2:02 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/6/2013 2:02 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/6/2013 2:02 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/6/2013 2:02 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/6/2013 2:02 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/6/2013 2:02 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/6/2013 2:02 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/6/2013 2:02 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/6/2013 2:02 PM
2-Butanone	ND	40	U	ppbv	40	1/6/2013 2:02 PM
2-Hexanone	ND	40	U	ppbv	40	1/6/2013 2:02 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Acetone	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Benzene	220	40		ppbv	40	1/6/2013 2:02 PM
Benzyl chloride	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Bromoform	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Bromomethane	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Carbon disulfide	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Chlorobenzene	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Chloroethane	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Chloroform	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Chloromethane	ND	40	U	ppbv	40	1/6/2013 2:02 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/6/2013 2:02 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/6/2013 2:02 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 2:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-065	**Matrix:**	Air
Client Sample ID:	VA2233		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	390	80		ppbv	40	1/6/2013 2:02 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Ethyl acetate	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Ethylbenzene	ND	80	U	ppbv	40	1/6/2013 2:02 PM
Heptane	430	40		ppbv	40	1/6/2013 2:02 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/6/2013 2:02 PM
m,p-Xylene	70	80	J	ppbv	40	1/6/2013 2:02 PM
Methylene chloride	ND	200	U	ppbv	40	1/6/2013 2:02 PM
n-Hexane	230	80		ppbv	40	1/6/2013 2:02 PM
Naphthalene	ND	40	U	ppbv	40	1/6/2013 2:02 PM
o-Xylene	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Propylene	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Styrene	ND	40	U	ppbv	40	1/6/2013 2:02 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Toluene	780	40		ppbv	40	1/6/2013 2:02 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/6/2013 2:02 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Trichloroethene	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Vinyl acetate	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Vinyl chloride	ND	40	U	ppbv	40	1/6/2013 2:02 PM
Xylenes, Total	70	120	J	ppbv	40	1/6/2013 2:02 PM
Surr: 4-Bromofluorobenzene	96.2	70-130		%REC	40	1/6/2013 2:02 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	76,000	47,000		µg/m³	400	1/4/2013 8:06 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/4/2013 8:06 PM
C9-C12 Aliphatic Hydrocarbons	18,000	76,000	J	µg/m³	400	1/4/2013 8:06 PM
Surr: 4-Bromofluorobenzene	92.8	70-130		%REC	400	1/4/2013 8:06 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 2:31:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-066	**Matrix:**	Air
Client Sample ID:	VA2234		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.38	0.10		% v/v	1	1/4/2013 5:26 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/4/2013 5:26 PM
Methane	ND	0.50	U	% v/v	1	1/4/2013 5:26 PM
Nitrogen	83	0.10		% v/v	1	1/4/2013 5:26 PM
Oxygen	21	0.10		% v/v	1	1/4/2013 5:26 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/6/2013 2:44 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/6/2013 2:44 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	150	40		ppbv	40	1/6/2013 2:44 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/6/2013 2:44 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/6/2013 2:44 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/6/2013 2:44 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/6/2013 2:44 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/6/2013 2:44 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/6/2013 2:44 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/6/2013 2:44 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/6/2013 2:44 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/6/2013 2:44 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/6/2013 2:44 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/6/2013 2:44 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/6/2013 2:44 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/6/2013 2:44 PM
2-Butanone	ND	40	U	ppbv	40	1/6/2013 2:44 PM
2-Hexanone	ND	40	U	ppbv	40	1/6/2013 2:44 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Acetone	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Benzene	170	40		ppbv	40	1/6/2013 2:44 PM
Benzyl chloride	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Bromoform	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Bromomethane	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Carbon disulfide	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Carbon tetrachloride	220	40		ppbv	40	1/6/2013 2:44 PM
Chlorobenzene	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Chloroethane	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Chloroform	59	40		ppbv	40	1/6/2013 2:44 PM
Chloromethane	ND	40	U	ppbv	40	1/6/2013 2:44 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/6/2013 2:44 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/6/2013 2:44 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 2:31:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-066	**Matrix:**	Air
Client Sample ID:	VA2234		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	290	80		ppbv	40	1/6/2013 2:44 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Ethyl acetate	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Ethylbenzene	ND	80	U	ppbv	40	1/6/2013 2:44 PM
Heptane	320	40		ppbv	40	1/6/2013 2:44 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/6/2013 2:44 PM
m,p-Xylene	57	80	J	ppbv	40	1/6/2013 2:44 PM
Methylene chloride	ND	200	U	ppbv	40	1/6/2013 2:44 PM
n-Hexane	170	80		ppbv	40	1/6/2013 2:44 PM
Naphthalene	ND	40	U	ppbv	40	1/6/2013 2:44 PM
o-Xylene	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Propylene	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Styrene	ND	40	U	ppbv	40	1/6/2013 2:44 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Toluene	600	40		ppbv	40	1/6/2013 2:44 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/6/2013 2:44 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Trichloroethene	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Vinyl acetate	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Vinyl chloride	ND	40	U	ppbv	40	1/6/2013 2:44 PM
Xylenes, Total	57	120	J	ppbv	40	1/6/2013 2:44 PM
Surr: 4-Bromofluorobenzene	95.2	70-130		%REC	40	1/6/2013 2:44 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	16,000	4,700		µg/m³	40	1/5/2013 2:11 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/5/2013 2:11 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	1/5/2013 2:11 PM
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	40	1/5/2013 2:11 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 3:05:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-067	**Matrix:**	Air
Client Sample ID:	VA2235		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.47	0.10		% v/v	1	1/4/2013 5:40 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/4/2013 5:40 PM
Methane	ND	0.50	U	% v/v	1	1/4/2013 5:40 PM
Nitrogen	82	0.10		% v/v	1	1/4/2013 5:40 PM
Oxygen	21	0.10		% v/v	1	1/4/2013 5:40 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/7/2013 2:27 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/7/2013 2:27 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	170	40		ppbv	40	1/7/2013 2:27 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/7/2013 2:27 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/7/2013 2:27 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 2:27 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/7/2013 2:27 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/7/2013 2:27 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/7/2013 2:27 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 2:27 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/7/2013 2:27 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/7/2013 2:27 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/7/2013 2:27 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/7/2013 2:27 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 2:27 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 2:27 PM
2-Butanone	ND	40	U	ppbv	40	1/7/2013 2:27 PM
2-Hexanone	ND	40	U	ppbv	40	1/7/2013 2:27 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Acetone	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Benzene	1,200	40		ppbv	40	1/7/2013 2:27 PM
Benzyl chloride	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Bromoform	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Bromomethane	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Carbon disulfide	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Carbon tetrachloride	280	40		ppbv	40	1/7/2013 2:27 PM
Chlorobenzene	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Chloroethane	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Chloroform	63	40		ppbv	40	1/7/2013 2:27 PM
Chloromethane	ND	40	U	ppbv	40	1/7/2013 2:27 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 2:27 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/7/2013 2:27 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 3:05:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-067	**Matrix:**	Air
Client Sample ID:	VA2235		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	270	80		ppbv	40	1/7/2013 2:27 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Ethyl acetate	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Ethylbenzene	ND	80	U	ppbv	40	1/7/2013 2:27 PM
Heptane	280	40		ppbv	40	1/7/2013 2:27 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/7/2013 2:27 PM
m,p-Xylene	54	80	J	ppbv	40	1/7/2013 2:27 PM
Methylene chloride	ND	200	U	ppbv	40	1/7/2013 2:27 PM
n-Hexane	150	80		ppbv	40	1/7/2013 2:27 PM
Naphthalene	ND	40	U	ppbv	40	1/7/2013 2:27 PM
o-Xylene	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Propylene	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Styrene	ND	40	U	ppbv	40	1/7/2013 2:27 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Toluene	1,200	40		ppbv	40	1/7/2013 2:27 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 2:27 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Trichloroethene	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Vinyl acetate	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Vinyl chloride	ND	40	U	ppbv	40	1/7/2013 2:27 PM
Xylenes, Total	54	120	J	ppbv	40	1/7/2013 2:27 PM
Surr: 4-Bromofluorobenzene	93.8	70-130		%REC	40	1/7/2013 2:27 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	14,000	4,700		µg/m³	40	1/5/2013 2:53 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/5/2013 2:53 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	1/5/2013 2:53 PM
Surr: 4-Bromofluorobenzene	97.7	70-130		%REC	40	1/5/2013 2:53 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 3:05:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-068	**Matrix:**	Air
Client Sample ID:	VA2236		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.45	0.10		% v/v	1	1/4/2013 5:55 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/4/2013 5:55 PM
Methane	ND	0.50	U	% v/v	1	1/4/2013 5:55 PM
Nitrogen	82	0.10		% v/v	1	1/4/2013 5:55 PM
Oxygen	21	0.10		% v/v	1	1/4/2013 5:55 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/7/2013 3:08 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/7/2013 3:08 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	180	40		ppbv	40	1/7/2013 3:08 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/7/2013 3:08 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/7/2013 3:08 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 3:08 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/7/2013 3:08 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/7/2013 3:08 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/7/2013 3:08 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 3:08 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/7/2013 3:08 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/7/2013 3:08 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/7/2013 3:08 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/7/2013 3:08 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 3:08 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 3:08 PM
2-Butanone	ND	40	U	ppbv	40	1/7/2013 3:08 PM
2-Hexanone	ND	40	U	ppbv	40	1/7/2013 3:08 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Acetone	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Benzene	1,300	40		ppbv	40	1/7/2013 3:08 PM
Benzyl chloride	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Bromoform	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Bromomethane	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Carbon disulfide	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Carbon tetrachloride	300	40		ppbv	40	1/7/2013 3:08 PM
Chlorobenzene	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Chloroethane	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Chloroform	65	40		ppbv	40	1/7/2013 3:08 PM
Chloromethane	ND	40	U	ppbv	40	1/7/2013 3:08 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 3:08 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/7/2013 3:08 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 3:05:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-068	**Matrix:**	Air
Client Sample ID:	VA2236		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	380	80		ppbv	40	1/7/2013 3:08 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Ethyl acetate	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Ethylbenzene	ND	80	U	ppbv	40	1/7/2013 3:08 PM
Heptane	390	40		ppbv	40	1/7/2013 3:08 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/7/2013 3:08 PM
m,p-Xylene	70	80	J	ppbv	40	1/7/2013 3:08 PM
Methylene chloride	ND	200	U	ppbv	40	1/7/2013 3:08 PM
n-Hexane	200	80		ppbv	40	1/7/2013 3:08 PM
Naphthalene	ND	40	U	ppbv	40	1/7/2013 3:08 PM
o-Xylene	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Propylene	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Styrene	ND	40	U	ppbv	40	1/7/2013 3:08 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Toluene	1,400	40		ppbv	40	1/7/2013 3:08 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 3:08 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Trichloroethene	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Vinyl acetate	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Vinyl chloride	ND	40	U	ppbv	40	1/7/2013 3:08 PM
Xylenes, Total	70	120	J	ppbv	40	1/7/2013 3:08 PM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	40	1/7/2013 3:08 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	16,000	4,700		µg/m³	40	1/5/2013 3:35 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/5/2013 3:35 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	1/5/2013 3:35 PM
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	40	1/5/2013 3:35 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 3:53:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-069	**Matrix:**	Air
Client Sample ID:	VA2237		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.15	0.10		% v/v	1	1/4/2013 6:09 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/4/2013 6:09 PM
Methane	ND	0.50	U	% v/v	1	1/4/2013 6:09 PM
Nitrogen	82	0.10		% v/v	1	1/4/2013 6:09 PM
Oxygen	22	0.10		% v/v	1	1/4/2013 6:09 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/6/2013 3:25 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/6/2013 3:25 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	230	40		ppbv	40	1/6/2013 3:25 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/6/2013 3:25 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/6/2013 3:25 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/6/2013 3:25 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/6/2013 3:25 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/6/2013 3:25 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/6/2013 3:25 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/6/2013 3:25 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/6/2013 3:25 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/6/2013 3:25 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/6/2013 3:25 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/6/2013 3:25 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/6/2013 3:25 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/6/2013 3:25 PM
2-Butanone	ND	40	U	ppbv	40	1/6/2013 3:25 PM
2-Hexanone	ND	40	U	ppbv	40	1/6/2013 3:25 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Acetone	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Benzene	310	40		ppbv	40	1/6/2013 3:25 PM
Benzyl chloride	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Bromoform	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Bromomethane	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Carbon disulfide	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Carbon tetrachloride	300	40		ppbv	40	1/6/2013 3:25 PM
Chlorobenzene	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Chloroethane	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Chloroform	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Chloromethane	ND	40	U	ppbv	40	1/6/2013 3:25 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/6/2013 3:25 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/6/2013 3:25 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/10/2012 3:53:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-069	**Matrix:**	Air
Client Sample ID:	VA2237		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	260	80		ppbv	40	1/6/2013 3:25 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Ethyl acetate	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Ethylbenzene	ND	80	U	ppbv	40	1/6/2013 3:25 PM
Heptane	280	40		ppbv	40	1/6/2013 3:25 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/6/2013 3:25 PM
m,p-Xylene	50	80	J	ppbv	40	1/6/2013 3:25 PM
Methylene chloride	ND	200	U	ppbv	40	1/6/2013 3:25 PM
n-Hexane	150	80		ppbv	40	1/6/2013 3:25 PM
Naphthalene	ND	40	U	ppbv	40	1/6/2013 3:25 PM
o-Xylene	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Propylene	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Styrene	ND	40	U	ppbv	40	1/6/2013 3:25 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Toluene	570	40		ppbv	40	1/6/2013 3:25 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/6/2013 3:25 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Trichloroethene	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Vinyl acetate	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Vinyl chloride	ND	40	U	ppbv	40	1/6/2013 3:25 PM
Xylenes, Total	50	120	J	ppbv	40	1/6/2013 3:25 PM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	40	1/6/2013 3:25 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	19,000	4,700		µg/m³	40	1/5/2013 4:18 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/5/2013 4:18 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	1/5/2013 4:18 PM
Surr: 4-Bromofluorobenzene	96.8	70-130		%REC	40	1/5/2013 4:18 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 8:40:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-070	**Matrix:**	Air
Client Sample ID:	VA2238		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.24	0.10		% v/v	1	1/4/2013 6:23 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/4/2013 6:23 PM
Methane	ND	0.50	U	% v/v	1	1/4/2013 6:23 PM
Nitrogen	82	0.10		% v/v	1	1/4/2013 6:23 PM
Oxygen	22	0.10		% v/v	1	1/4/2013 6:23 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/7/2013 3:50 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/7/2013 3:50 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/7/2013 3:50 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/7/2013 3:50 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/7/2013 3:50 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 3:50 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/7/2013 3:50 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/7/2013 3:50 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/7/2013 3:50 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 3:50 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/7/2013 3:50 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/7/2013 3:50 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/7/2013 3:50 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/7/2013 3:50 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 3:50 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/7/2013 3:50 PM
2-Butanone	ND	40	U	ppbv	40	1/7/2013 3:50 PM
2-Hexanone	ND	40	U	ppbv	40	1/7/2013 3:50 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Acetone	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Benzene	330	40		ppbv	40	1/7/2013 3:50 PM
Benzyl chloride	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Bromoform	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Bromomethane	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Carbon disulfide	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Chlorobenzene	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Chloroethane	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Chloroform	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Chloromethane	ND	40	U	ppbv	40	1/7/2013 3:50 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 3:50 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/7/2013 3:50 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/11/2012 8:40:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-070	**Matrix:**	Air
Client Sample ID:	VA2238		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	550	80		ppbv	40	1/7/2013 3:50 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Ethyl acetate	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Ethylbenzene	ND	80	U	ppbv	40	1/7/2013 3:50 PM
Heptane	670	40		ppbv	40	1/7/2013 3:50 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/7/2013 3:50 PM
m,p-Xylene	64	80	J	ppbv	40	1/7/2013 3:50 PM
Methylene chloride	ND	200	U	ppbv	40	1/7/2013 3:50 PM
n-Hexane	370	80		ppbv	40	1/7/2013 3:50 PM
Naphthalene	ND	40	U	ppbv	40	1/7/2013 3:50 PM
o-Xylene	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Propylene	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Styrene	ND	40	U	ppbv	40	1/7/2013 3:50 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Toluene	1,000	40		ppbv	40	1/7/2013 3:50 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/7/2013 3:50 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Trichloroethene	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Vinyl acetate	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Vinyl chloride	ND	40	U	ppbv	40	1/7/2013 3:50 PM
Xylenes, Total	64	120	J	ppbv	40	1/7/2013 3:50 PM
Surr: 4-Bromofluorobenzene	94.8	70-130		%REC	40	1/7/2013 3:50 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	29,000	4,700		µg/m³	40	1/5/2013 5:01 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/5/2013 5:01 PM
C9-C12 Aliphatic Hydrocarbons	1,500	7,600	J	µg/m³	40	1/5/2013 5:01 PM
Surr: 4-Bromofluorobenzene	95.6	70-130		%REC	40	1/5/2013 5:01 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 8:32:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-071	**Matrix:**	Air
Client Sample ID:	VA2239		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.093	0.10	J	% v/v	1	1/10/2013 12:22 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/10/2013 12:22 PM
Methane	ND	0.50	U	% v/v	1	1/10/2013 12:22 PM
Nitrogen	83	0.10		% v/v	1	1/10/2013 12:22 PM
Oxygen	23	0.10		% v/v	1	1/10/2013 12:22 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/9/2013 1:56 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/9/2013 1:56 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/9/2013 1:56 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/9/2013 1:56 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/9/2013 1:56 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/9/2013 1:56 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/9/2013 1:56 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/9/2013 1:56 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/9/2013 1:56 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/9/2013 1:56 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/9/2013 1:56 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/9/2013 1:56 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/9/2013 1:56 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/9/2013 1:56 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/9/2013 1:56 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/9/2013 1:56 PM
2-Butanone	ND	40	U	ppbv	40	1/9/2013 1:56 PM
2-Hexanone	ND	40	U	ppbv	40	1/9/2013 1:56 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Acetone	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Benzene	210	40		ppbv	40	1/9/2013 1:56 PM
Benzyl chloride	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Bromoform	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Bromomethane	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Carbon disulfide	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Chlorobenzene	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Chloroethane	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Chloroform	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Chloromethane	ND	40	U	ppbv	40	1/9/2013 1:56 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/9/2013 1:56 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/9/2013 1:56 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 8:32:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-071	**Matrix:**	Air
Client Sample ID:	VA2239		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	170	80		ppbv	40	1/9/2013 1:56 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Ethyl acetate	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Ethylbenzene	ND	80	U	ppbv	40	1/9/2013 1:56 PM
Heptane	190	40		ppbv	40	1/9/2013 1:56 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/9/2013 1:56 PM
m,p-Xylene	ND	80	U	ppbv	40	1/9/2013 1:56 PM
Methylene chloride	ND	200	U	ppbv	40	1/9/2013 1:56 PM
n-Hexane	130	80		ppbv	40	1/9/2013 1:56 PM
Naphthalene	ND	40	U	ppbv	40	1/9/2013 1:56 PM
o-Xylene	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Propylene	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Styrene	ND	40	U	ppbv	40	1/9/2013 1:56 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Toluene	610	40		ppbv	40	1/9/2013 1:56 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/9/2013 1:56 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Trichloroethene	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Vinyl acetate	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Vinyl chloride	ND	40	U	ppbv	40	1/9/2013 1:56 PM
Xylenes, Total	ND	120	U	ppbv	40	1/9/2013 1:56 PM
Surr: 4-Bromofluorobenzene	96.0	70-130		%REC	40	1/9/2013 1:56 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	12,000	4,700		µg/m³	40	1/8/2013 7:40 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/8/2013 7:40 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	1/8/2013 7:40 PM
Surr: 4-Bromofluorobenzene	94.9	70-130		%REC	40	1/8/2013 7:40 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 9:04:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-072	**Matrix:**	Air
Client Sample ID:	VA2240		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.091	0.10	J	% v/v	1	1/10/2013 12:38 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/10/2013 12:38 PM
Methane	ND	0.50	U	% v/v	1	1/10/2013 12:38 PM
Nitrogen	83	0.10		% v/v	1	1/10/2013 12:38 PM
Oxygen	23	0.10		% v/v	1	1/10/2013 12:38 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/9/2013 2:38 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/9/2013 2:38 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/9/2013 2:38 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/9/2013 2:38 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/9/2013 2:38 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/9/2013 2:38 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/9/2013 2:38 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/9/2013 2:38 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/9/2013 2:38 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/9/2013 2:38 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/9/2013 2:38 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/9/2013 2:38 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/9/2013 2:38 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/9/2013 2:38 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/9/2013 2:38 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/9/2013 2:38 PM
2-Butanone	ND	40	U	ppbv	40	1/9/2013 2:38 PM
2-Hexanone	ND	40	U	ppbv	40	1/9/2013 2:38 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Acetone	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Benzene	260	40		ppbv	40	1/9/2013 2:38 PM
Benzyl chloride	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Bromoform	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Bromomethane	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Carbon disulfide	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Chlorobenzene	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Chloroethane	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Chloroform	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Chloromethane	ND	40	U	ppbv	40	1/9/2013 2:38 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/9/2013 2:38 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/9/2013 2:38 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 9:04:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-072	**Matrix:**	Air
Client Sample ID:	VA2240		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	230	80		ppbv	40	1/9/2013 2:38 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Ethyl acetate	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Ethylbenzene	ND	80	U	ppbv	40	1/9/2013 2:38 PM
Heptane	260	40		ppbv	40	1/9/2013 2:38 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/9/2013 2:38 PM
m,p-Xylene	50	80	J	ppbv	40	1/9/2013 2:38 PM
Methylene chloride	ND	200	U	ppbv	40	1/9/2013 2:38 PM
n-Hexane	160	80		ppbv	40	1/9/2013 2:38 PM
Naphthalene	ND	40	U	ppbv	40	1/9/2013 2:38 PM
o-Xylene	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Propylene	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Styrene	ND	40	U	ppbv	40	1/9/2013 2:38 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Toluene	980	40		ppbv	40	1/9/2013 2:38 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/9/2013 2:38 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Trichloroethene	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Vinyl acetate	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Vinyl chloride	ND	40	U	ppbv	40	1/9/2013 2:38 PM
Xylenes, Total	50	120	J	ppbv	40	1/9/2013 2:38 PM
Surr: 4-Bromofluorobenzene	96.5	70-130		%REC	40	1/9/2013 2:38 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	14,000	4,700		µg/m³	40	1/8/2013 9:11 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/8/2013 9:11 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	1/8/2013 9:11 PM
Surr: 4-Bromofluorobenzene	94.6	70-130		%REC	40	1/8/2013 9:11 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 9:38:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-073	**Matrix:**	Air
Client Sample ID:	VA2241		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.13	0.10		% v/v	1	1/10/2013 12:52 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/10/2013 12:52 PM
Methane	ND	0.50	U	% v/v	1	1/10/2013 12:52 PM
Nitrogen	83	0.10		% v/v	1	1/10/2013 12:52 PM
Oxygen	22	0.10		% v/v	1	1/10/2013 12:52 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/9/2013 3:19 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/9/2013 3:19 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/9/2013 3:19 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/9/2013 3:19 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/9/2013 3:19 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/9/2013 3:19 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/9/2013 3:19 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/9/2013 3:19 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/9/2013 3:19 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/9/2013 3:19 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/9/2013 3:19 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/9/2013 3:19 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/9/2013 3:19 PM
1,3-Butadiene	ND	40	U	ppbv	40	1/9/2013 3:19 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/9/2013 3:19 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/9/2013 3:19 PM
2-Butanone	ND	40	U	ppbv	40	1/9/2013 3:19 PM
2-Hexanone	ND	40	U	ppbv	40	1/9/2013 3:19 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Acetone	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Benzene	280	40		ppbv	40	1/9/2013 3:19 PM
Benzyl chloride	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Bromodichloromethane	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Bromoform	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Bromomethane	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Carbon disulfide	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Carbon tetrachloride	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Chlorobenzene	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Chlorodibromomethane	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Chloroethane	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Chloroform	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Chloromethane	ND	40	U	ppbv	40	1/9/2013 3:19 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/9/2013 3:19 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/9/2013 3:19 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 9:38:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-073	**Matrix:**	Air
Client Sample ID:	VA2241		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	250	80		ppbv	40	1/9/2013 3:19 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Ethyl acetate	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Ethylbenzene	ND	80	U	ppbv	40	1/9/2013 3:19 PM
Heptane	280	40		ppbv	40	1/9/2013 3:19 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/9/2013 3:19 PM
m,p-Xylene	51	80	J	ppbv	40	1/9/2013 3:19 PM
Methylene chloride	ND	200	U	ppbv	40	1/9/2013 3:19 PM
n-Hexane	170	80		ppbv	40	1/9/2013 3:19 PM
Naphthalene	ND	40	U	ppbv	40	1/9/2013 3:19 PM
o-Xylene	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Propylene	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Styrene	ND	40	U	ppbv	40	1/9/2013 3:19 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Tetrachloroethene	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Tetrahydrofuran	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Toluene	1,000	40		ppbv	40	1/9/2013 3:19 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/9/2013 3:19 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Trichloroethene	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Vinyl acetate	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Vinyl chloride	ND	40	U	ppbv	40	1/9/2013 3:19 PM
Xylenes, Total	51	120	J	ppbv	40	1/9/2013 3:19 PM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	40	1/9/2013 3:19 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	15,000	4,700		µg/m³	40	1/8/2013 11:25 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	1/8/2013 11:25 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	1/8/2013 11:25 PM
Surr: 4-Bromofluorobenzene	95.9	70-130		%REC	40	1/8/2013 11:25 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 10:13:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-074	**Matrix:**	Air
Client Sample ID:	VA2242		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.15	0.10		% v/v	1	1/10/2013 1:18 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/10/2013 1:18 PM
Methane	ND	0.50	U	% v/v	1	1/10/2013 1:18 PM
Nitrogen	84	0.10		% v/v	1	1/10/2013 1:18 PM
Oxygen	22	0.10		% v/v	1	1/10/2013 1:18 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	1/9/2013 4:55 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	1/9/2013 4:55 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	1/9/2013 4:55 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	1/9/2013 4:55 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	1/9/2013 4:55 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	1/9/2013 4:55 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	1/9/2013 4:55 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	1/9/2013 4:55 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	1/9/2013 4:55 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	1/9/2013 4:55 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	1/9/2013 4:55 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	1/9/2013 4:55 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	1/9/2013 4:55 AM
1,3-Butadiene	ND	40	U	ppbv	40	1/9/2013 4:55 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	1/9/2013 4:55 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	1/9/2013 4:55 AM
2-Butanone	ND	40	U	ppbv	40	1/9/2013 4:55 AM
2-Hexanone	ND	40	U	ppbv	40	1/9/2013 4:55 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Acetone	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Benzene	270	40		ppbv	40	1/9/2013 4:55 AM
Benzyl chloride	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Bromodichloromethane	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Bromoform	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Bromomethane	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Carbon disulfide	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Carbon tetrachloride	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Chlorobenzene	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Chlorodibromomethane	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Chloroethane	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Chloroform	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Chloromethane	ND	40	U	ppbv	40	1/9/2013 4:55 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	1/9/2013 4:55 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	1/9/2013 4:55 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 10:13:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-074	**Matrix:**	Air
Client Sample ID:	VA2242		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	270	80		ppbv	40	1/9/2013 4:55 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Ethyl acetate	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Ethylbenzene	ND	80	U	ppbv	40	1/9/2013 4:55 AM
Heptane	290	40		ppbv	40	1/9/2013 4:55 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	1/9/2013 4:55 AM
m,p-Xylene	52	80	J	ppbv	40	1/9/2013 4:55 AM
Methylene chloride	ND	200	U	ppbv	40	1/9/2013 4:55 AM
n-Hexane	170	80		ppbv	40	1/9/2013 4:55 AM
Naphthalene	ND	40	U	ppbv	40	1/9/2013 4:55 AM
o-Xylene	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Propylene	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Styrene	ND	40	U	ppbv	40	1/9/2013 4:55 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Tetrachloroethene	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Tetrahydrofuran	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Toluene	1,000	40		ppbv	40	1/9/2013 4:55 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	1/9/2013 4:55 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Trichloroethene	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Vinyl acetate	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Vinyl chloride	ND	40	U	ppbv	40	1/9/2013 4:55 AM
Xylenes, Total	52	120	J	ppbv	40	1/9/2013 4:55 AM
Surr: 4-Bromofluorobenzene	98.1	70-130		%REC	40	1/9/2013 4:55 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	38,000	23,000		µg/m³	200	1/9/2013 1:03 AM
C9-C10 Aromatic Hydrocarbons	ND	27,000	U	µg/m³	200	1/9/2013 1:03 AM
C9-C12 Aliphatic Hydrocarbons	ND	38,000	U	µg/m³	200	1/9/2013 1:03 AM
Surr: 4-Bromofluorobenzene	96.0	70-130		%REC	200	1/9/2013 1:03 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 10:59:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-075	**Matrix:**	Air
Client Sample ID:	VA2243		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.23	0.10		% v/v	1	1/10/2013 1:33 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/10/2013 1:33 PM
Methane	ND	0.50	U	% v/v	1	1/10/2013 1:33 PM
Nitrogen	84	0.10		% v/v	1	1/10/2013 1:33 PM
Oxygen	22	0.10		% v/v	1	1/10/2013 1:33 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/9/2013 4:04 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/9/2013 4:04 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/9/2013 4:04 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/9/2013 4:04 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/9/2013 4:04 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/9/2013 4:04 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/9/2013 4:04 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/9/2013 4:04 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/9/2013 4:04 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/9/2013 4:04 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/9/2013 4:04 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/9/2013 4:04 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/9/2013 4:04 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/9/2013 4:04 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/9/2013 4:04 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/9/2013 4:04 PM
2-Butanone	ND	800	U	ppbv	800	1/9/2013 4:04 PM
2-Hexanone	ND	800	U	ppbv	800	1/9/2013 4:04 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Acetone	1,400	800		ppbv	800	1/9/2013 4:04 PM
Benzene	21,000	800		ppbv	800	1/9/2013 4:04 PM
Benzyl chloride	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Bromoform	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Bromomethane	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Carbon disulfide	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Chlorobenzene	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Chloroethane	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Chloroform	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Chloromethane	ND	800	U	ppbv	800	1/9/2013 4:04 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/9/2013 4:04 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/9/2013 4:04 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 10:59:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-075	**Matrix:**	Air
Client Sample ID:	VA2243		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	17,000	1,600		ppbv	800	1/9/2013 4:04 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Ethyl acetate	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Ethylbenzene	ND	1,600	U	ppbv	800	1/9/2013 4:04 PM
Heptane	3,200	800		ppbv	800	1/9/2013 4:04 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/9/2013 4:04 PM
m,p-Xylene	ND	1,600	U	ppbv	800	1/9/2013 4:04 PM
Methylene chloride	ND	4,000	U	ppbv	800	1/9/2013 4:04 PM
n-Hexane	15,000	1,600		ppbv	800	1/9/2013 4:04 PM
Naphthalene	ND	800	U	ppbv	800	1/9/2013 4:04 PM
o-Xylene	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Propylene	1,700	800		ppbv	800	1/9/2013 4:04 PM
Styrene	ND	800	U	ppbv	800	1/9/2013 4:04 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Toluene	24,000	800		ppbv	800	1/9/2013 4:04 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/9/2013 4:04 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Trichloroethene	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Vinyl acetate	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Vinyl chloride	ND	800	U	ppbv	800	1/9/2013 4:04 PM
Xylenes, Total	ND	2,400	U	ppbv	800	1/9/2013 4:04 PM
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	800	1/9/2013 4:04 PM
Mass APH Air		**Method:**				**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,400,000	940,000		µg/m³	8000	1/8/2013 1:43 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	1/8/2013 1:43 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	1/8/2013 1:43 PM
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	8000	1/8/2013 1:43 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 11:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-076	**Matrix:**	Air
Client Sample ID:	VA2244		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.053	0.10	J	% v/v	1	1/10/2013 1:47 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/10/2013 1:47 PM
Methane	ND	0.50	U	% v/v	1	1/10/2013 1:47 PM
Nitrogen	82	0.10		% v/v	1	1/10/2013 1:47 PM
Oxygen	23	0.10		% v/v	1	1/10/2013 1:47 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/9/2013 4:46 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/9/2013 4:46 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/9/2013 4:46 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/9/2013 4:46 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/9/2013 4:46 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/9/2013 4:46 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/9/2013 4:46 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/9/2013 4:46 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/9/2013 4:46 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/9/2013 4:46 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/9/2013 4:46 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/9/2013 4:46 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/9/2013 4:46 PM
1,3-Butadiene	ND	800	U	ppbv	800	1/9/2013 4:46 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/9/2013 4:46 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/9/2013 4:46 PM
2-Butanone	ND	800	U	ppbv	800	1/9/2013 4:46 PM
2-Hexanone	ND	800	U	ppbv	800	1/9/2013 4:46 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Acetone	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Benzene	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Benzyl chloride	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Bromodichloromethane	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Bromoform	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Bromomethane	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Carbon disulfide	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Carbon tetrachloride	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Chlorobenzene	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Chlorodibromomethane	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Chloroethane	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Chloroform	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Chloromethane	ND	800	U	ppbv	800	1/9/2013 4:46 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/9/2013 4:46 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/9/2013 4:46 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 11:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-076	**Matrix:**	Air
Client Sample ID:	VA2244		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,600	1,600	J	ppbv	800	1/9/2013 4:46 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Ethyl acetate	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Ethylbenzene	ND	1,600	U	ppbv	800	1/9/2013 4:46 PM
Heptane	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/9/2013 4:46 PM
m,p-Xylene	ND	1,600	U	ppbv	800	1/9/2013 4:46 PM
Methylene chloride	ND	4,000	U	ppbv	800	1/9/2013 4:46 PM
n-Hexane	1,400	1,600	J	ppbv	800	1/9/2013 4:46 PM
Naphthalene	ND	800	U	ppbv	800	1/9/2013 4:46 PM
o-Xylene	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Propylene	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Styrene	ND	800	U	ppbv	800	1/9/2013 4:46 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Tetrachloroethene	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Tetrahydrofuran	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Toluene	ND	800	U	ppbv	800	1/9/2013 4:46 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/9/2013 4:46 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Trichloroethene	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Vinyl acetate	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Vinyl chloride	ND	800	U	ppbv	800	1/9/2013 4:46 PM
Xylenes, Total	ND	2,400	U	ppbv	800	1/9/2013 4:46 PM
Surr: 4-Bromofluorobenzene	96.8	70-130		%REC	800	1/9/2013 4:46 PM
Mass APH Air		**Method:**				**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	6,600,000	2,300,000		µg/m³	20000	1/9/2013 1:45 AM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	1/9/2013 1:45 AM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	1/9/2013 1:45 AM
Surr: 4-Bromofluorobenzene	95.9	70-130		%REC	20000	1/9/2013 1:45 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 8:29:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-077	**Matrix:**	Air
Client Sample ID:	VA2252		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.062	0.10	J	% v/v	1	1/10/2013 2:29 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/10/2013 2:29 PM
Methane	ND	0.50	U	% v/v	1	1/10/2013 2:29 PM
Nitrogen	84	0.10		% v/v	1	1/10/2013 2:29 PM
Oxygen	23	0.10		% v/v	1	1/10/2013 2:29 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/9/2013 4:14 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/9/2013 4:14 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/9/2013 4:14 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/9/2013 4:14 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/9/2013 4:14 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/9/2013 4:14 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/9/2013 4:14 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/9/2013 4:14 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/9/2013 4:14 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/9/2013 4:14 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/9/2013 4:14 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/9/2013 4:14 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/9/2013 4:14 AM
1,3-Butadiene	ND	800	U	ppbv	800	1/9/2013 4:14 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/9/2013 4:14 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/9/2013 4:14 AM
2-Butanone	ND	800	U	ppbv	800	1/9/2013 4:14 AM
2-Hexanone	ND	800	U	ppbv	800	1/9/2013 4:14 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Acetone	960	800		ppbv	800	1/9/2013 4:14 AM
Benzene	1,400	800		ppbv	800	1/9/2013 4:14 AM
Benzyl chloride	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Bromodichloromethane	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Bromoform	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Bromomethane	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Carbon disulfide	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Carbon tetrachloride	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Chlorobenzene	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Chlorodibromomethane	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Chloroethane	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Chloroform	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Chloromethane	ND	800	U	ppbv	800	1/9/2013 4:14 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/9/2013 4:14 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/9/2013 4:14 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 8:29:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-077	**Matrix:**	Air
Client Sample ID:	VA2252		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,700	1,600		ppbv	800	1/9/2013 4:14 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Ethyl acetate	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Ethylbenzene	ND	1,600	U	ppbv	800	1/9/2013 4:14 AM
Heptane	6,800	800		ppbv	800	1/9/2013 4:14 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/9/2013 4:14 AM
m,p-Xylene	1,200	1,600	J	ppbv	800	1/9/2013 4:14 AM
Methylene chloride	ND	4,000	U	ppbv	800	1/9/2013 4:14 AM
n-Hexane	1,400	1,600	J	ppbv	800	1/9/2013 4:14 AM
Naphthalene	ND	800	U	ppbv	800	1/9/2013 4:14 AM
o-Xylene	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Propylene	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Styrene	ND	800	U	ppbv	800	1/9/2013 4:14 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Tetrachloroethene	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Tetrahydrofuran	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Toluene	8,100	800		ppbv	800	1/9/2013 4:14 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/9/2013 4:14 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Trichloroethene	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Vinyl acetate	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Vinyl chloride	ND	800	U	ppbv	800	1/9/2013 4:14 AM
Xylenes, Total	1,200	2,400	J	ppbv	800	1/9/2013 4:14 AM
Surr: 4-Bromofluorobenzene	96.0	70-130		%REC	800	1/9/2013 4:14 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	370,000	94,000		µg/m³	800	1/7/2013 7:38 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/7/2013 7:38 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	1/7/2013 7:38 PM
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	800	1/7/2013 7:38 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 8:58:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-078	**Matrix:**	Air
Client Sample ID:	VA2253		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.17	0.10		% v/v	1	1/10/2013 2:43 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/10/2013 2:43 PM
Methane	ND	0.50	U	% v/v	1	1/10/2013 2:43 PM
Nitrogen	83	0.10		% v/v	1	1/10/2013 2:43 PM
Oxygen	22	0.10		% v/v	1	1/10/2013 2:43 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/8/2013 2:41 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/8/2013 2:41 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/8/2013 2:41 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/8/2013 2:41 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/8/2013 2:41 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/8/2013 2:41 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/8/2013 2:41 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/8/2013 2:41 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/8/2013 2:41 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/8/2013 2:41 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/8/2013 2:41 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/8/2013 2:41 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/8/2013 2:41 PM
1,3-Butadiene	ND	400	U	ppbv	400	1/8/2013 2:41 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/8/2013 2:41 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/8/2013 2:41 PM
2-Butanone	ND	400	U	ppbv	400	1/8/2013 2:41 PM
2-Hexanone	ND	400	U	ppbv	400	1/8/2013 2:41 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Acetone	2,000	400		ppbv	400	1/8/2013 2:41 PM
Benzene	1,900	400		ppbv	400	1/8/2013 2:41 PM
Benzyl chloride	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Bromodichloromethane	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Bromoform	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Bromomethane	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Carbon disulfide	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Carbon tetrachloride	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Chlorobenzene	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Chlorodibromomethane	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Chloroethane	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Chloroform	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Chloromethane	ND	400	U	ppbv	400	1/8/2013 2:41 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/8/2013 2:41 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/8/2013 2:41 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 8:58:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-078	**Matrix:**	Air
Client Sample ID:	VA2253		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	5,500	800		ppbv	400	1/8/2013 2:41 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Ethyl acetate	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Ethylbenzene	640	800	J	ppbv	400	1/8/2013 2:41 PM
Heptane	10,000	400		ppbv	400	1/8/2013 2:41 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/8/2013 2:41 PM
m,p-Xylene	1,700	800		ppbv	400	1/8/2013 2:41 PM
Methylene chloride	1,800	2,000	J	ppbv	400	1/8/2013 2:41 PM
n-Hexane	1,400	800		ppbv	400	1/8/2013 2:41 PM
Naphthalene	ND	400	U	ppbv	400	1/8/2013 2:41 PM
o-Xylene	440	400		ppbv	400	1/8/2013 2:41 PM
Propylene	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Styrene	ND	400	U	ppbv	400	1/8/2013 2:41 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Tetrachloroethene	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Tetrahydrofuran	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Toluene	13,000	400		ppbv	400	1/8/2013 2:41 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/8/2013 2:41 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Trichloroethene	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Vinyl acetate	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Vinyl chloride	ND	400	U	ppbv	400	1/8/2013 2:41 PM
Xylenes, Total	2,200	1,200		ppbv	400	1/8/2013 2:41 PM
Surr: 4-Bromofluorobenzene	93.6	70-130		%REC	400	1/8/2013 2:41 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	340,000	47,000		µg/m³	400	1/8/2013 8:29 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/8/2013 8:29 PM
C9-C12 Aliphatic Hydrocarbons	18,000	76,000	J	µg/m³	400	1/8/2013 8:29 PM
Surr: 4-Bromofluorobenzene	98.5	70-130		%REC	400	1/8/2013 8:29 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 9:16:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-079	**Matrix:**	Air
Client Sample ID:	VA2254		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.13	0.10		% v/v	1	1/10/2013 2:57 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/10/2013 2:57 PM
Methane	ND	0.50	U	% v/v	1	1/10/2013 2:57 PM
Nitrogen	83	0.10		% v/v	1	1/10/2013 2:57 PM
Oxygen	22	0.10		% v/v	1	1/10/2013 2:57 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/8/2013 3:29 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/8/2013 3:29 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/8/2013 3:29 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/8/2013 3:29 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/8/2013 3:29 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/8/2013 3:29 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/8/2013 3:29 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/8/2013 3:29 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/8/2013 3:29 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/8/2013 3:29 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/8/2013 3:29 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/8/2013 3:29 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/8/2013 3:29 PM
1,3-Butadiene	ND	400	U	ppbv	400	1/8/2013 3:29 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/8/2013 3:29 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/8/2013 3:29 PM
2-Butanone	ND	400	U	ppbv	400	1/8/2013 3:29 PM
2-Hexanone	ND	400	U	ppbv	400	1/8/2013 3:29 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Acetone	860	400		ppbv	400	1/8/2013 3:29 PM
Benzene	1,100	400		ppbv	400	1/8/2013 3:29 PM
Benzyl chloride	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Bromodichloromethane	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Bromoform	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Bromomethane	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Carbon disulfide	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Carbon tetrachloride	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Chlorobenzene	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Chlorodibromomethane	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Chloroethane	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Chloroform	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Chloromethane	ND	400	U	ppbv	400	1/8/2013 3:29 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/8/2013 3:29 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/8/2013 3:29 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 9:16:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-079	**Matrix:**	Air
Client Sample ID:	VA2254		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,900	800		ppbv	400	1/8/2013 3:29 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Ethyl acetate	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Ethylbenzene	ND	800	U	ppbv	400	1/8/2013 3:29 PM
Heptane	4,900	400		ppbv	400	1/8/2013 3:29 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/8/2013 3:29 PM
m,p-Xylene	740	800	J	ppbv	400	1/8/2013 3:29 PM
Methylene chloride	ND	2,000	U	ppbv	400	1/8/2013 3:29 PM
n-Hexane	1,700	800		ppbv	400	1/8/2013 3:29 PM
Naphthalene	ND	400	U	ppbv	400	1/8/2013 3:29 PM
o-Xylene	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Propylene	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Styrene	ND	400	U	ppbv	400	1/8/2013 3:29 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Tetrachloroethene	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Tetrahydrofuran	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Toluene	5,800	400		ppbv	400	1/8/2013 3:29 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/8/2013 3:29 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Trichloroethene	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Vinyl acetate	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Vinyl chloride	ND	400	U	ppbv	400	1/8/2013 3:29 PM
Xylenes, Total	740	1,200	J	ppbv	400	1/8/2013 3:29 PM
Surr: 4-Bromofluorobenzene	92.8	70-130		%REC	400	1/8/2013 3:29 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	210,000	94,000		µg/m³	800	1/8/2013 9:57 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	1/8/2013 9:57 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	1/8/2013 9:57 PM
Surr: 4-Bromofluorobenzene	96.7	70-130		%REC	800	1/8/2013 9:57 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 10:05:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-080	**Matrix:**	Air
Client Sample ID:	VA2255		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.13	0.10		% v/v	1	1/10/2013 3:13 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/10/2013 3:13 PM
Methane	ND	0.50	U	% v/v	1	1/10/2013 3:13 PM
Nitrogen	83	0.10		% v/v	1	1/10/2013 3:13 PM
Oxygen	22	0.10		% v/v	1	1/10/2013 3:13 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	1/8/2013 4:18 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	1/8/2013 4:18 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	1/8/2013 4:18 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	1/8/2013 4:18 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	1/8/2013 4:18 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	1/8/2013 4:18 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	1/8/2013 4:18 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	1/8/2013 4:18 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	1/8/2013 4:18 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	1/8/2013 4:18 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	1/8/2013 4:18 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	1/8/2013 4:18 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	1/8/2013 4:18 PM
1,3-Butadiene	ND	400	U	ppbv	400	1/8/2013 4:18 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	1/8/2013 4:18 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	1/8/2013 4:18 PM
2-Butanone	ND	400	U	ppbv	400	1/8/2013 4:18 PM
2-Hexanone	ND	400	U	ppbv	400	1/8/2013 4:18 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Acetone	510	400		ppbv	400	1/8/2013 4:18 PM
Benzene	1,400	400		ppbv	400	1/8/2013 4:18 PM
Benzyl chloride	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Bromodichloromethane	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Bromoform	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Bromomethane	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Carbon disulfide	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Carbon tetrachloride	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Chlorobenzene	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Chlorodibromomethane	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Chloroethane	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Chloroform	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Chloromethane	ND	400	U	ppbv	400	1/8/2013 4:18 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	1/8/2013 4:18 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	1/8/2013 4:18 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 10:05:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-080	**Matrix:**	Air
Client Sample ID:	VA2255		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	4,100	800		ppbv	400	1/8/2013 4:18 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Ethyl acetate	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Ethylbenzene	ND	800	U	ppbv	400	1/8/2013 4:18 PM
Heptane	7,800	400		ppbv	400	1/8/2013 4:18 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	1/8/2013 4:18 PM
m,p-Xylene	760	800	J	ppbv	400	1/8/2013 4:18 PM
Methylene chloride	ND	2,000	U	ppbv	400	1/8/2013 4:18 PM
n-Hexane	1,200	800		ppbv	400	1/8/2013 4:18 PM
Naphthalene	ND	400	U	ppbv	400	1/8/2013 4:18 PM
o-Xylene	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Propylene	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Styrene	ND	400	U	ppbv	400	1/8/2013 4:18 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Tetrachloroethene	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Tetrahydrofuran	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Toluene	7,300	400		ppbv	400	1/8/2013 4:18 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	1/8/2013 4:18 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Trichloroethene	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Vinyl acetate	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Vinyl chloride	ND	400	U	ppbv	400	1/8/2013 4:18 PM
Xylenes, Total	760	1,200	J	ppbv	400	1/8/2013 4:18 PM
Surr: 4-Bromofluorobenzene	93.7	70-130		%REC	400	1/8/2013 4:18 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	290,000	47,000		µg/m³	400	1/9/2013 12:14 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/9/2013 12:14 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	1/9/2013 12:14 AM
Surr: 4-Bromofluorobenzene	97.9	70-130		%REC	400	1/9/2013 12:14 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 10:43:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-081	**Matrix:**	Air
Client Sample ID:	VA2256		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.15	0.10		% v/v	1	1/4/2013 2:56 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/4/2013 2:56 PM
Methane	ND	0.50	U	% v/v	1	1/4/2013 2:56 PM
Nitrogen	82	0.10		% v/v	1	1/4/2013 2:56 PM
Oxygen	22	0.10		% v/v	1	1/4/2013 2:56 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	1/9/2013 5:40 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	1/9/2013 5:40 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	1/9/2013 5:40 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	1/9/2013 5:40 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	1/9/2013 5:40 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	1/9/2013 5:40 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	1/9/2013 5:40 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	1/9/2013 5:40 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	1/9/2013 5:40 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	1/9/2013 5:40 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	1/9/2013 5:40 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	1/9/2013 5:40 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	1/9/2013 5:40 AM
1,3-Butadiene	ND	800	U	ppbv	800	1/9/2013 5:40 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	1/9/2013 5:40 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	1/9/2013 5:40 AM
2-Butanone	ND	800	U	ppbv	800	1/9/2013 5:40 AM
2-Hexanone	ND	800	U	ppbv	800	1/9/2013 5:40 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Acetone	1,100	800		ppbv	800	1/9/2013 5:40 AM
Benzene	2,300	800		ppbv	800	1/9/2013 5:40 AM
Benzyl chloride	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Bromodichloromethane	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Bromoform	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Bromomethane	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Carbon disulfide	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Carbon tetrachloride	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Chlorobenzene	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Chlorodibromomethane	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Chloroethane	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Chloroform	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Chloromethane	ND	800	U	ppbv	800	1/9/2013 5:40 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	1/9/2013 5:40 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	1/9/2013 5:40 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 10:43:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-081	**Matrix:**	Air
Client Sample ID:	VA2256		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	6,600	1,600		ppbv	800	1/9/2013 5:40 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Ethyl acetate	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Ethylbenzene	ND	1,600	U	ppbv	800	1/9/2013 5:40 AM
Heptane	12,000	800		ppbv	800	1/9/2013 5:40 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	1/9/2013 5:40 AM
m,p-Xylene	1,900	1,600		ppbv	800	1/9/2013 5:40 AM
Methylene chloride	ND	4,000	U	ppbv	800	1/9/2013 5:40 AM
n-Hexane	2,200	1,600		ppbv	800	1/9/2013 5:40 AM
Naphthalene	ND	800	U	ppbv	800	1/9/2013 5:40 AM
o-Xylene	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Propylene	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Styrene	ND	800	U	ppbv	800	1/9/2013 5:40 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Tetrachloroethene	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Tetrahydrofuran	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Toluene	14,000	800		ppbv	800	1/9/2013 5:40 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	1/9/2013 5:40 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Trichloroethene	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Vinyl acetate	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Vinyl chloride	ND	800	U	ppbv	800	1/9/2013 5:40 AM
Xylenes, Total	1,900	2,400	J	ppbv	800	1/9/2013 5:40 AM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	800	1/9/2013 5:40 AM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	410,000	47,000		µg/m³	400	1/8/2013 1:01 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	1/8/2013 1:01 PM
C9-C12 Aliphatic Hydrocarbons	22,000	76,000	J	µg/m³	400	1/8/2013 1:01 PM
Surr: 4-Bromofluorobenzene	96.5	70-130		%REC	400	1/8/2013 1:01 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 11:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-082	**Matrix:**	Air
Client Sample ID:	VA2257		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.077	0.10	J	% v/v	1	1/4/2013 3:14 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/4/2013 3:14 PM
Methane	ND	0.50	U	% v/v	1	1/4/2013 3:14 PM
Nitrogen	82	0.10		% v/v	1	1/4/2013 3:14 PM
Oxygen	22	0.10		% v/v	1	1/4/2013 3:14 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
1,1,2,2-Tetrachloroethane	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
1,1,2-Trichloroethane	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
1,1-Dichloroethane	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
1,1-Dichloroethene	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
1,2,4-Trichlorobenzene	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
1,2,4-Trimethylbenzene	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
1,2-Dibromoethane	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
1,2-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
1,2-Dichloroethane	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
1,2-Dichloropropane	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
1,3,5-Trimethylbenzene	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
1,3-Butadiene	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
1,3-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
1,4-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
2-Butanone	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
2-Hexanone	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
4-Methyl-2-pentanone	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Acetone	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Benzene	15,000	1,600		ppbv	1600	1/9/2013 6:13 PM
Benzyl chloride	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Bromodichloromethane	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Bromoform	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Bromomethane	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Carbon disulfide	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Carbon tetrachloride	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Chlorobenzene	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Chlorodibromomethane	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Chloroethane	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Chloroform	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Chloromethane	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
cis-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
cis-1,3-dichloropropene	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 11:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-082	**Matrix:**	Air
Client Sample ID:	VA2257		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	12,000	3,200		ppbv	1600	1/9/2013 6:13 PM
Dichlorodifluoromethane	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Ethyl acetate	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Ethylbenzene	1,600	3,200	J	ppbv	1600	1/9/2013 6:13 PM
Heptane	20,000	1,600		ppbv	1600	1/9/2013 6:13 PM
Hexachlorobutadiene	ND	3,200	U	ppbv	1600	1/9/2013 6:13 PM
m,p-Xylene	4,100	3,200		ppbv	1600	1/9/2013 6:13 PM
Methylene chloride	ND	8,000	U	ppbv	1600	1/9/2013 6:13 PM
n-Hexane	3,300	3,200		ppbv	1600	1/9/2013 6:13 PM
Naphthalene	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
o-Xylene	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Propylene	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Styrene	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
tert-Butyl Methyl Ether	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Tetrachloroethene	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Tetrahydrofuran	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Toluene	30,000	1,600		ppbv	1600	1/9/2013 6:13 PM
trans-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
trans-1,3-dichloropropene	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Trichloroethene	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Trichlorofluoromethane	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Vinyl acetate	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Vinyl chloride	ND	1,600	U	ppbv	1600	1/9/2013 6:13 PM
Xylenes, Total	4,100	4,800	J	ppbv	1600	1/9/2013 6:13 PM
Surr: 4-Bromofluorobenzene	95.3	70-130		%REC	1600	1/9/2013 6:13 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	820,000	190,000		µg/m³	1600	1/8/2013 3:16 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	1/8/2013 3:16 PM
C9-C12 Aliphatic Hydrocarbons	45,000	300,000	J	µg/m³	1600	1/8/2013 3:16 PM
Surr: 4-Bromofluorobenzene	96.4	70-130		%REC	1600	1/8/2013 3:16 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 11:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-083	**Matrix:**	Air
Client Sample ID:	VA2258		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: cr**
Carbon dioxide	0.049	0.10	J	% v/v	1	1/4/2013 4:06 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	1/4/2013 4:06 PM
Methane	ND	0.50	U	% v/v	1	1/4/2013 4:06 PM
Nitrogen	82	0.10		% v/v	1	1/4/2013 4:06 PM
Oxygen	23	0.10		% v/v	1	1/4/2013 4:06 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RH3**
1,1,1-Trichloroethane	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
1,1,2,2-Tetrachloroethane	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
1,1,2-Trichloroethane	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
1,1-Dichloroethane	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
1,1-Dichloroethene	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
1,2,4-Trichlorobenzene	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
1,2,4-Trimethylbenzene	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
1,2-Dibromoethane	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
1,2-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
1,2-Dichloroethane	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
1,2-Dichloropropane	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
1,3,5-Trimethylbenzene	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
1,3-Butadiene	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
1,3-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
1,4-Dichlorobenzene	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
2-Butanone	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
2-Hexanone	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
4-Methyl-2-pentanone	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Acetone	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Benzene	11,000	1,600		ppbv	1600	1/9/2013 5:30 PM
Benzyl chloride	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Bromodichloromethane	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Bromoform	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Bromomethane	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Carbon disulfide	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Carbon tetrachloride	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Chlorobenzene	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Chlorodibromomethane	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Chloroethane	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Chloroform	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Chloromethane	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
cis-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
cis-1,3-dichloropropene	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/12/2012 11:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1212722-083	**Matrix:**	Air
Client Sample ID:	VA2258		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	16,000	3,200		ppbv	1600	1/9/2013 5:30 PM
Dichlorodifluoromethane	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Ethyl acetate	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Ethylbenzene	1,700	3,200	J	ppbv	1600	1/9/2013 5:30 PM
Heptane	25,000	1,600		ppbv	1600	1/9/2013 5:30 PM
Hexachlorobutadiene	ND	3,200	U	ppbv	1600	1/9/2013 5:30 PM
m,p-Xylene	4,300	3,200		ppbv	1600	1/9/2013 5:30 PM
Methylene chloride	ND	8,000	U	ppbv	1600	1/9/2013 5:30 PM
n-Hexane	3,600	3,200		ppbv	1600	1/9/2013 5:30 PM
Naphthalene	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
o-Xylene	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Propylene	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Styrene	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
tert-Butyl Methyl Ether	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Tetrachloroethene	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Tetrahydrofuran	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Toluene	32,000	1,600		ppbv	1600	1/9/2013 5:30 PM
trans-1,2-Dichloroethene	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
trans-1,3-dichloropropene	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Trichloroethene	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Trichlorofluoromethane	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Vinyl acetate	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Vinyl chloride	ND	1,600	U	ppbv	1600	1/9/2013 5:30 PM
Xylenes, Total	4,300	4,800	J	ppbv	1600	1/9/2013 5:30 PM
Surr: 4-Bromofluorobenzene	96.2	70-130		%REC	1600	1/9/2013 5:30 PM
Mass APH Air	**Method:**					**Analyst: RH3**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	990,000	190,000		µg/m³	1600	1/8/2013 3:59 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	1/8/2013 3:59 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	1/8/2013 3:59 PM
Surr: 4-Bromofluorobenzene	95.7	70-130		%REC	1600	1/8/2013 3:59 PM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/6/2012 12:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-084	**Matrix:**	Air
Client Sample ID:	VA8109-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RH3**
1,1,1-Trichloroethane	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
1,1,2,2-Tetrachloroethane	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
1,1,2-Trichloroethane	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
1,1-Dichloroethane	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
1,1-Dichloroethene	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
1,2,4-Trichlorobenzene	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
1,2,4-Trimethylbenzene	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
1,2-Dibromoethane	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
1,2-Dichlorobenzene	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
1,2-Dichloroethane	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
1,2-Dichloropropane	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
1,3,5-Trimethylbenzene	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
1,3-Butadiene	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
1,3-Dichlorobenzene	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
1,4-Dichlorobenzene	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
2-Butanone	36	4.0		ppbv	4	1/5/2013 2:33 AM
2-Hexanone	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
4-Methyl-2-pentanone	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Acetone	580	40	H	ppbv	40	1/6/2013 3:49 AM
Benzene	120	4.0		ppbv	4	1/5/2013 2:33 AM
Benzyl chloride	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Bromodichloromethane	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Bromoform	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Bromomethane	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Carbon disulfide	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Carbon tetrachloride	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Chlorobenzene	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Chlorodibromomethane	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Chloroethane	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Chloroform	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Chloromethane	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
cis-1,2-Dichloroethene	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
cis-1,3-dichloropropene	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Cyclohexane	840	80	H	ppbv	40	1/6/2013 3:49 AM
Dichlorodifluoromethane	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Ethyl acetate	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Ethylbenzene	5.2	8.0	J	ppbv	4	1/5/2013 2:33 AM
Heptane	1,200	40	H	ppbv	40	1/6/2013 3:49 AM
Hexachlorobutadiene	ND	8.0	U	ppbv	4	1/5/2013 2:33 AM
m,p-Xylene	11	8.0		ppbv	4	1/5/2013 2:33 AM
Methylene chloride	ND	20	U	ppbv	4	1/5/2013 2:33 AM

RTI Laboratories - Analytical Report

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	12/6/2012 12:00:00 PM
Project:	Kirtland AFB		
Lab ID:	1212722-084	**Matrix:**	Air
Client Sample ID:	VA8109-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
n-Hexane	320	80	H	ppbv	40	1/6/2013 3:49 AM
Naphthalene	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
o-Xylene	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Propylene	4.5	4.0		ppbv	4	1/5/2013 2:33 AM
Styrene	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
tert-Butyl Methyl Ether	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Tetrachloroethene	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Tetrahydrofuran	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Toluene	510	40	H	ppbv	40	1/6/2013 3:49 AM
trans-1,2-Dichloroethene	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
trans-1,3-dichloropropene	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Trichloroethene	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Trichlorofluoromethane	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Vinyl acetate	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Vinyl chloride	ND	4.0	U	ppbv	4	1/5/2013 2:33 AM
Xylenes, Total	11	12	J	ppbv	4	1/5/2013 2:33 AM
Surr: 4-Bromofluorobenzene	97.2	70-130		%REC	4	1/5/2013 2:33 AM

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55087**

Sample ID:	**MBLK VOA9 010213**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**55087**
Client ID:	**PBW**	Batch ID:	**R55087**	TestNo:	**MA_APH**			Analysis Date:	**1/2/2013**	SeqNo:	**1086091**

Analyte	Result	PQL	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		92.6	70	130				

Sample ID:	**1212437-020ADUP**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**55087**
Client ID:	**ZZZZZZ**	Batch ID:	**R55087**	TestNo:	**MA_APH**			Analysis Date:	**1/2/2013**	SeqNo:	**1086093**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	810,000	94,000						813,300	0.452	30	
C9-C10 Aromatic Hydrocarbons	ND	110,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	150,000						0	0	30	U
Surr: 4-Bromofluorobenzene	68,000		71,600		95.6	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55105**

Sample ID: **MBLK-010313 TCD-A** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55105**
Client ID: **PBW** Batch ID: **R55105** TestNo: **ASTM-D2504** Analysis Date: **1/3/2013** SeqNo: **1086344**

Analyte	Result	PQL	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-010313 TCD** Samp Type: **LCS** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55105**
Client ID: **LCSW** Batch ID: **R55105** TestNo: **ASTM-D2504** Analysis Date: **1/3/2013** SeqNo: **1086346**

Analyte	Result	PQL	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	103	70	130	2.573	0.272	20	
Carbon Monoxide	2.7	0.10	2.500	0	108	70	130	2.672	0.634	20	
Methane	2.1	0.50	2.000	0	104	70	130	2.063	1.06	20	
Nitrogen	2.8	0.10	2.500	0	112	70	130	2.818	0.891	20	
Oxygen	2.7	0.10	2.500	0	108	70	130	2.689	0.186	20	

Sample ID: **1212722-063BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55105**
Client ID: **VA2204** Batch ID: **R55105** TestNo: **ASTM-D2504** Analysis Date: **1/3/2013** SeqNo: **1086356**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.080	0.10						0.07800	2.53	20	J
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	82	0.10						81.46	0.121	20	
Oxygen	22	0.10						22.48	0.710	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55111**

Sample ID:	**MBLK VOA9 010313**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**55111**
Client ID:	**PBW**	Batch ID:	**R55111**	TestNo:	**MA_APH**			Analysis Date:	**1/4/2013**	SeqNo:	**1086444**

Analyte	Result	PQL	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	84		89.50		93.4	70	130				

Sample ID:	**1212722-004ADUP**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**55111**
Client ID:	**VA1962**	Batch ID:	**R55111**	TestNo:	**MA_APH**			Analysis Date:	**1/5/2013**	SeqNo:	**1086795**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	640,000	94,000						629,200	1.42	30	
C9-C10 Aromatic Hydrocarbons	ND	110,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	65,000	150,000						78,380	18.9	30	J
Surr: 4-Bromofluorobenzene	70,000		71,600		97.3	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55129**

Sample ID:	**1212437-019ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55129**
Client ID:	**ZZZZZZ**	Batch ID:	**R55129**	TestNo:	**TO-15**			Analysis Date:	**1/4/2013**	SeqNo:	**1086764**

Analyte	Result	PQL	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
Benzene	21,000	800						19,210	7.11	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
Chloromethane	ND	800						0	0	25	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55129**

Sample ID:	**1212437-019ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55129**
Client ID:	**ZZZZZZ**	Batch ID:	**R55129**	TestNo:	**TO-15**			Analysis Date:	**1/4/2013**	SeqNo:	**1086764**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	ND	800						0	0	25	U
cis-1,3-dichloropropene	ND	800						0	0	25	U
Dichlorodifluoromethane	ND	800						0	0	25	U
Ethyl acetate	ND	800						0	0	25	U
Ethylbenzene	ND	1,600						0	0	25	U
Hexachlorobutadiene	ND	1,600						0	0	25	U
m,p-Xylene	2,800	1,600						2,848	1.70	25	
Methylene chloride	2,400	4,000						2,480	2.95	25	J
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
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	2,800	2,400						2,848	1.70	25	
Surr: 4-Bromofluorobenzene	9,300		10,000		92.6	70	130		0	25	

Sample ID:	**MBLK/CCDBV95 VOA PBW**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55129**
Client ID:		Batch ID:	**R55129**	TestNo:	**TO-15**			Analysis Date:	**1/4/2013**	SeqNo:	**1086769**

Analyte	Result	PQL	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

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55129**

Sample ID:	**MBLK/CCDBV95**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55129**
Client ID:	**VOA PBW**	Batch ID:	**R55129**	TestNo:	**TO-15**			Analysis Date:	**1/4/2013**	SeqNo:	**1086769**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
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
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
Chloromethane	ND	1.0									U
cis-1,2-Dichloroethene	ND	1.0									U
cis-1,3-dichloropropene	ND	1.0									U
Dichlorodifluoromethane	ND	1.0									U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55129**

Sample ID:	**MBLK/CCDBV95**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55129**
Client ID:	**VOA PBW**	Batch ID:	**R55129**	TestNo:	**TO-15**			Analysis Date:	**1/4/2013**	SeqNo:	**1086769**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Ethyl acetate	ND	1.0									U
Ethylbenzene	ND	2.0									U
Hexachlorobutadiene	ND	2.0									U
m,p-Xylene	ND	2.0									U
Methylene chloride	ND	5.0									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
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		93.0	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55137**

Sample ID:	**MBLK VOA9 010513**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**55137**
Client ID:	**PBW**	Batch ID:	**R55137**	TestNo:	**MA_APH**			Analysis Date:	**1/5/2013**	SeqNo:	**1086949**

Analyte	Result	PQL	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	84		89.50		94.2	70	130				

Sample ID:	**1212722-038ADUP**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**55137**
Client ID:	**VA2097**	Batch ID:	**R55137**	TestNo:	**MA_APH**			Analysis Date:	**1/5/2013**	SeqNo:	**1086961**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	1,100,000	94,000						1,081,000	4.72	30	E
C9-C10 Aromatic Hydrocarbons	ND	110,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	36,000	150,000						0	200	30	JR
Surr: 4-Bromofluorobenzene	70,000		71,600		98.2	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55152**

Sample ID:	**MBLK VOA1 010513**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55152**
Client ID:	**PBW**	Batch ID:	**R55152**	TestNo:	**TO-15**			Analysis Date:	**1/5/2013**	SeqNo:	**1087111**

Analyte	Result	PQL	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#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55152**

Sample ID:	**MBLK VOA1 010513**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55152**
Client ID:	**PBW**	Batch ID:	**R55152**	TestNo:	**TO-15**			Analysis Date:	**1/5/2013**	SeqNo:	**1087111**

Analyte	Result	PQL	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		94.0	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55152**

Sample ID:	**1212437-020ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55152**
Client ID:	**ZZZZZZ**	Batch ID:	**R55152**	TestNo:	**TO-15**			Analysis Date:	**1/5/2013**	SeqNo:	**1087113**

Analyte	Result	PQL	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	UH
1,1,2,2-Tetrachloroethane	ND	800						0	0	25	UH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800						0	0	25	UH
1,1,2-Trichloroethane	ND	800						0	0	25	UH
1,1-Dichloroethane	ND	800						0	0	25	UH
1,1-Dichloroethene	ND	800						0	0	25	UH
1,2,4-Trichlorobenzene	ND	800						0	0	25	UH
1,2,4-Trimethylbenzene	ND	800						0	0	25	UH
1,2-Dibromoethane	ND	800						0	0	25	UH
1,2-Dichlorobenzene	ND	800						0	0	25	UH
1,2-Dichloroethane	ND	800						0	0	25	UH
1,2-Dichloropropane	ND	800						0	0	25	UH
1,3,5-Trimethylbenzene	ND	800						0	0	25	UH
1,3-Butadiene	ND	800						0	0	25	UH
1,3-Dichlorobenzene	ND	800						0	0	25	UH
1,4-Dichlorobenzene	ND	800						0	0	25	UH
2-Butanone	ND	800						0	0	25	UH
2-Hexanone	ND	800						0	0	25	UH
4-Methyl-2-pentanone	ND	800						0	0	25	UH
Acetone	1,500	800						1,280	17.7	25	H
Benzene	12,000	800						10,070	13.6	25	H
Benzyl chloride	ND	800						0	0	25	UH
Bromodichloromethane	ND	800						0	0	25	UH
Bromoform	ND	800						0	0	25	UH
Bromomethane	ND	800						0	0	25	UH
Carbon disulfide	ND	800						0	0	25	UH
Carbon tetrachloride	ND	800						0	0	25	UH
Chlorobenzene	ND	800						0	0	25	UH
Chlorodibromomethane	ND	800						0	0	25	UH
Chloroethane	ND	800						0	0	25	UH
Chloroform	ND	800						0	0	25	UH

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55152**

Sample ID:	**1212437-020ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55152**
Client ID:	**ZZZZZZ**	Batch ID:	**R55152**	TestNo:	**TO-15**			Analysis Date:	**1/5/2013**	SeqNo:	**1087113**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	800						0	0	25	UH
cis-1,2-Dichloroethene	ND	800						0	0	25	UH
cis-1,3-dichloropropene	ND	800						0	0	25	UH
Cyclohexane	17,000	1,600						15,620	10.7	25	H
Dichlorodifluoromethane	ND	800						0	0	25	UH
Ethyl acetate	ND	800						0	0	25	UH
Ethylbenzene	ND	1,600						0	0	25	UH
Heptane	21,000	800						18,700	12.7	25	H
Hexachlorobutadiene	ND	1,600						0	0	25	UH
m,p-Xylene	1,800	1,600						1,608	11.7	25	H
Methylene chloride	ND	4,000						0	0	25	UH
n-Hexane	14,000	1,600						13,100	9.87	25	H
Naphthalene	ND	800						0	0	25	UH
o-Xylene	ND	800						0	0	25	UH
Propylene	ND	800						0	0	25	UH
Styrene	ND	800						0	0	25	UH
tert-Butyl Methyl Ether	ND	800						0	0	25	UH
Tetrachloroethene	ND	800						0	0	25	UH
Tetrahydrofuran	ND	800						0	0	25	UH
Toluene	29,000	800						25,550	14.0	25	H
trans-1,2-Dichloroethene	ND	800						0	0	25	UH
trans-1,3-dichloropropene	ND	800						0	0	25	UH
Trichloroethene	ND	800						0	0	25	UH
Trichlorofluoromethane	ND	800						0	0	25	UH
Vinyl acetate	ND	800						0	0	25	UH
Vinyl chloride	ND	800						0	0	25	UH
Xylenes, Total	1,800	2,400						1,608	11.7	25	JH
Surr: 4-Bromofluorobenzene	9,200		10,000		91.8	70	130		0	25	H

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55197**

Sample ID:	**MBLK VOA9 010613**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**55197**
Client ID:	**PBW**	Batch ID:	**R55197**	TestNo:	**MA_APH**			Analysis Date:	**1/7/2013**	SeqNo:	**1087980**

Analyte	Result	PQL	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	86		89.50		96.2	70	130				

Sample ID:	**1212722-009ADUP**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**55197**
Client ID:	**VA1967**	Batch ID:	**R55197**	TestNo:	**MA_APH**			Analysis Date:	**1/7/2013**	SeqNo:	**1087987**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	570,000	94,000						599,600	4.24	30	
C9-C10 Aromatic Hydrocarbons	ND	110,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	22,000	150,000						28,020	22.1	30	J
Surr: 4-Bromofluorobenzene	70,000		71,600		98.2	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55200**

Sample ID:	**MBLK VOA1 010713**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55200**
Client ID:	**PBW**	Batch ID:	**R55200**	TestNo:	**TO-15**			Analysis Date:	**1/7/2013**	SeqNo:	**1088028**

Analyte	Result	PQL	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#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55200**

Sample ID:	**MBLK VOA1 010713**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55200**
Client ID:	**PBW**	Batch ID:	**R55200**	TestNo:	**TO-15**			Analysis Date:	**1/7/2013**	SeqNo:	**1088028**

Analyte	Result	PQL	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		94.0	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55200**

Sample ID:	**1212722-009ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55200**
Client ID:	**VA1967**	Batch ID:	**R55200**	TestNo:	**TO-15**			Analysis Date:	**1/7/2013**	SeqNo:	**1088040**

Analyte	Result	PQL	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	6,200	800						5,544	11.7	25	
Benzene	3,900	800						3,464	11.5	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#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55200**

Sample ID:	**1212722-009ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55200**
Client ID:	**VA1967**	Batch ID:	**R55200**	TestNo:	**TO-15**			Analysis Date:	**1/7/2013**	SeqNo:	**1088040**

Analyte	Result	PQL	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	13,000	1,600						11,180	11.5	25	
Dichlorodifluoromethane	ND	800						0	0	25	U
Ethyl acetate	ND	800						0	0	25	U
Ethylbenzene	1,400	1,600						1,248	9.17	25	J
Heptane	25,000	800						23,230	8.60	25	
Hexachlorobutadiene	ND	1,600						0	0	25	U
m,p-Xylene	3,600	1,600						3,320	9.20	25	
Methylene chloride	7,000	4,000						6,584	6.47	25	
n-Hexane	3,300	1,600						2,936	10.3	25	
Naphthalene	ND	800						0	0	25	U
o-Xylene	930	800						856.0	8.07	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	31,000	800						27,660	11.2	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	4,600	2,400						4,176	8.97	25	
Surr: 4-Bromofluorobenzene	9,200		10,000		92.4	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55205**

Sample ID: **MBLK-010413 TCD-A** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55205**
Client ID: **PBW** Batch ID: **R55205** TestNo: **ASTM-D2504** Analysis Date: **1/4/2013** SeqNo: **1088105**

Analyte	Result	PQL	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-010413 TCD** Samp Type: **LCS** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55205**
Client ID: **LCSW** Batch ID: **R55205** TestNo: **ASTM-D2504** Analysis Date: **1/4/2013** SeqNo: **1088107**

Analyte	Result	PQL	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	2.563	0.313	20	
Carbon Monoxide	2.7	0.10	2.500	0	106	70	130	2.675	0.788	20	
Methane	2.1	0.50	2.000	0	103	70	130	2.077	0.968	20	
Nitrogen	2.8	0.10	2.500	0	111	70	130	2.803	1.11	20	
Oxygen	2.7	0.10	2.500	0	106	70	130	2.688	1.01	20	

Sample ID: **1212722-082BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55205**
Client ID: **VA2257** Batch ID: **R55205** TestNo: **ASTM-D2504** Analysis Date: **1/4/2013** SeqNo: **1088119**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.076	0.10						0.07700	1.31	20	J
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	82	0.10						82.34	0.126	20	
Oxygen	23	0.10						22.50	0.982	20	

Sample ID: **1212722-070BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55205**
Client ID: **VA2238** Batch ID: **R55205** TestNo: **ASTM-D2504** Analysis Date: **1/4/2013** SeqNo: **1088131**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.23	0.10						0.2350	0.426	20	
Carbon Monoxide	ND	0.10						0	0	20	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55205**

Sample ID:	**1212722-070BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**55205**
Client ID:	**VA2238**	Batch ID:	**R55205**	TestNo:	**ASTM-D2504**			Analysis Date:	**1/4/2013**	SeqNo:	**1088131**

Analyte	Result	PQL	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	82	0.10						81.99	0.132	20	
Oxygen	22	0.10						22.12	0.131	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55208**

Sample ID: **MBLK-010713 TCD-A** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55208**
Client ID: **PBW** Batch ID: **R55208** TestNo: **ASTM-D2504** Analysis Date: **1/7/2013** SeqNo: **1088144**

Analyte	Result	PQL	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-010713 TCD** Samp Type: **LCS** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55208**
Client ID: **LCSW** Batch ID: **R55208** TestNo: **ASTM-D2504** Analysis Date: **1/7/2013** SeqNo: **1088146**

Analyte	Result	PQL	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	103	70	130	2.615	1.15	20	
Carbon Monoxide	2.7	0.10	2.500	0	108	70	130	2.713	0.851	20	
Methane	2.1	0.50	2.000	0	104	70	130	2.103	0.764	20	
Nitrogen	2.8	0.10	2.500	0	111	70	130	2.800	1.19	20	
Oxygen	2.7	0.10	2.500	0	107	70	130	2.697	0.670	20	

Sample ID: **1212722-010BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55208**
Client ID: **VA1968** Batch ID: **R55208** TestNo: **ASTM-D2504** Analysis Date: **1/7/2013** SeqNo: **1088158**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	1.3	0.10						1.353	0.519	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	86	0.10						86.64	0.937	20	
Oxygen	16	0.10						16.66	1.68	20	

Sample ID: **1212722-014BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55208**
Client ID: **VA1972** Batch ID: **R55208** TestNo: **ASTM-D2504** Analysis Date: **1/7/2013** SeqNo: **1088164**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.92	0.10						0.9180	0.218	20	
Carbon Monoxide	ND	0.10						0	0	20	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55208**

Sample ID:	**1212722-014BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**55208**
Client ID:	**VA1972**	Batch ID:	**R55208**	TestNo:	**ASTM-D2504**			Analysis Date:	**1/7/2013**	SeqNo:	**1088164**

Analyte	Result	PQL	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	82	0.10						82.16	0.241	20	
Oxygen	21	0.10						21.45	0.285	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R55229**

Sample ID: **MBLK-010813 TCD-A** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55229**
Client ID: **PBW** Batch ID: **R55229** TestNo: **ASTM-D2504** Analysis Date: **1/8/2013** SeqNo: **1088561**

Analyte	Result	PQL	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-010813 TCD** Samp Type: **LCS** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55229**
Client ID: **LCSW** Batch ID: **R55229** TestNo: **ASTM-D2504** Analysis Date: **1/8/2013** SeqNo: **1088563**

Analyte	Result	PQL	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	103	70	130	2.571	0.504	20	
Carbon Monoxide	2.7	0.10	2.500	0	107	70	130	2.673	0.336	20	
Methane	2.0	0.50	2.000	0	101	70	130	2.079	2.73	20	
Nitrogen	2.8	0.10	2.500	0	110	70	130	2.757	0.0363	20	
Oxygen	2.7	0.10	2.500	0	107	70	130	2.666	0.150	20	

Sample ID: **1212722-024BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55229**
Client ID: **VA2050** Batch ID: **R55229** TestNo: **ASTM-D2504** Analysis Date: **1/8/2013** SeqNo: **1088575**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	1.3	0.10						1.291	0.848	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	84	0.10						82.81	0.903	20	
Oxygen	20	0.10						20.10	0.748	20	

Sample ID: **1212722-030BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55229**
Client ID: **VA2056** Batch ID: **R55229** TestNo: **ASTM-D2504** Analysis Date: **1/8/2013** SeqNo: **1088583**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.73	0.10						0.7220	1.38	20	
Carbon Monoxide	ND	0.10						0	0	20	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55229**

Sample ID:	**1212722-030BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**55229**
Client ID:	**VA2056**	Batch ID:	**R55229**	TestNo:	**ASTM-D2504**			Analysis Date:	**1/8/2013**	SeqNo:	**1088583**

Analyte	Result	PQL	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	84	0.10						84.02	0.432	20	
Oxygen	19	0.10						19.08	0.0786	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55242**

Sample ID:	**MBLK VOA9 010813**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**55242**
Client ID:	**PBW**	Batch ID:	**R55242**	TestNo:	**MA_APH**			Analysis Date:	**1/8/2013**	SeqNo:	**1088855**

Analyte	Result	PQL	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		92.4	70	130				

Sample ID:	**1212722-024ADUP**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**55242**
Client ID:	**VA2050**	Batch ID:	**R55242**	TestNo:	**MA_APH**			Analysis Date:	**1/8/2013**	SeqNo:	**1088862**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	260,000	94,000						255,200	0.0470	30	
C9-C10 Aromatic Hydrocarbons	ND	110,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	150,000						0	0	30	U
Surr: 4-Bromofluorobenzene	69,000		71,600		96.4	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55245**

Sample ID:	**MBLK/dbvcc69 VOA**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55245**
Client ID:	**PBW**	Batch ID:	**R55245**	TestNo:	**TO-15**			Analysis Date:	**1/8/2013**	SeqNo:	**1088948**

Analyte	Result	PQL	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#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55245**

Sample ID:	**MBLK/dbvcc69 VOA**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55245**
Client ID:	**PBW**	Batch ID:	**R55245**	TestNo:	**TO-15**			Analysis Date:	**1/8/2013**	SeqNo:	**1088948**

Analyte	Result	PQL	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		89.8	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55245**

Sample ID:	**1212722-017ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55245**
Client ID:	**VA1993**	Batch ID:	**R55245**	TestNo:	**TO-15**			Analysis Date:	**1/8/2013**	SeqNo:	**1088956**

Analyte	Result	PQL	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	910	800						880.0	3.57	25	
Benzene	12,000	800						11,850	3.78	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#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55245**

Sample ID:	**1212722-017ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55245**
Client ID:	**VA1993**	Batch ID:	**R55245**	TestNo:	**TO-15**			Analysis Date:	**1/8/2013**	SeqNo:	**1088956**

Analyte	Result	PQL	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	20,000	1,600						19,590	2.34	25	
Dichlorodifluoromethane	ND	800						0	0	25	U
Ethyl acetate	ND	800						0	0	25	U
Ethylbenzene	2,100	1,600						1,936	7.17	25	
Heptane	33,000	800						31,140	5.88	25	
Hexachlorobutadiene	ND	1,600						0	0	25	U
m,p-Xylene	5,700	1,600						5,344	6.52	25	
Methylene chloride	ND	4,000						0	0	25	U
n-Hexane	5,800	1,600						5,752	1.52	25	
Naphthalene	ND	800						0	0	25	U
o-Xylene	1,500	800						1,376	7.28	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	45,000	800						41,940	8.05	25	E
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	7,200	2,400						6,720	6.67	25	
Surr: 4-Bromofluorobenzene	9,100		10,000		90.6	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55281**

Sample ID:	**MBLK VOA9 010913**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**55281**
Client ID:	**PBW**	Batch ID:	**R55281**	TestNo:	**MA_APH**			Analysis Date:	**1/9/2013**	SeqNo:	**1089493**

Analyte	Result	PQL	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:	**1212722-042ADUP**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**55281**
Client ID:	**VA2101**	Batch ID:	**R55281**	TestNo:	**MA_APH**			Analysis Date:	**1/9/2013**	SeqNo:	**1089503**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	640,000	94,000						630,600	0.733	30	
C9-C10 Aromatic Hydrocarbons	ND	110,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	56,000	150,000						56,820	1.08	30	J
Surr: 4-Bromofluorobenzene	70,000		71,600		97.6	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55282**

Sample ID: **MBLK-010913 TCD-A** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55282**
Client ID: **PBW** Batch ID: **R55282** TestNo: **ASTM-D2504** Analysis Date: **1/9/2013** SeqNo: **1089520**

Analyte	Result	PQL	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									Um

Sample ID: **LCS-010913 TCD** Samp Type: **LCS** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55282**
Client ID: **LCSW** Batch ID: **R55282** TestNo: **ASTM-D2504** Analysis Date: **1/9/2013** SeqNo: **1089522**

Analyte	Result	PQL	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	103	70	130	2.559	0.234	20	
Carbon Monoxide	2.7	0.10	2.500	0	106	70	130	2.667	0.188	20	
Methane	2.1	0.50	2.000	0	104	70	130	2.072	0.0966	20	
Nitrogen	2.7	0.10	2.500	0	110	70	130	2.736	0.146	20	
Oxygen	2.7	0.10	2.500	0	106	70	130	2.649	0.0755	20	

Sample ID: **1212722-040BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55282**
Client ID: **VA2099** Batch ID: **R55282** TestNo: **ASTM-D2504** Analysis Date: **1/9/2013** SeqNo: **1089534**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.37	0.10						0.3730	1.35	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	82	0.10						83.71	1.89	20	
Oxygen	21	0.10						21.24	1.37	20	

Sample ID: **1212722-050BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55282**
Client ID: **VA2168** Batch ID: **R55282** TestNo: **ASTM-D2504** Analysis Date: **1/9/2013** SeqNo: **1089546**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.15	0.10						0.1530	0.656	20	m
Carbon Monoxide	ND	0.10						0	0	20	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55282**

Sample ID:	**1212722-050BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**55282**
Client ID:	**VA2168**	Batch ID:	**R55282**	TestNo:	**ASTM-D2504**			Analysis Date:	**1/9/2013**	SeqNo:	**1089546**

Analyte	Result	PQL	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	83	0.10						83.34	0.491	20	
Oxygen	21	0.10						21.11	0.503	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55285**

Sample ID:	**MBLK/dbvcc27 VOA**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55285**
Client ID:	**PBW**	Batch ID:	**R55285**	TestNo:	**TO-15**			Analysis Date:	**1/9/2013**	SeqNo:	**1089590**

Analyte	Result	PQL	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#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55285**

Sample ID:	**MBLK/dbvcc27 VOA**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55285**
Client ID:	**PBW**	Batch ID:	**R55285**	TestNo:	**TO-15**			Analysis Date:	**1/9/2013**	SeqNo:	**1089590**

Analyte	Result	PQL	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		93.3	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55285**

Sample ID:	**1212722-042ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55285**
Client ID:	**VA2101**	Batch ID:	**R55285**	TestNo:	**TO-15**			Analysis Date:	**1/9/2013**	SeqNo:	**1089604**

Analyte	Result	PQL	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	ND	800						0	0	25	U
Benzene	3,900	800						3,408	12.3	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#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55285**

Sample ID:	**1212722-042ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55285**
Client ID:	**VA2101**	Batch ID:	**R55285**	TestNo:	**TO-15**			Analysis Date:	**1/9/2013**	SeqNo:	**1089604**

Analyte	Result	PQL	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						10,820	8.36	25	
Dichlorodifluoromethane	ND	800						0	0	25	U
Ethyl acetate	ND	800						0	0	25	U
Ethylbenzene	1,700	1,600						1,560	9.76	25	
Heptane	22,000	800						21,140	5.88	25	
Hexachlorobutadiene	ND	1,600						0	0	25	U
m,p-Xylene	4,800	1,600						4,448	8.44	25	
Methylene chloride	ND	4,000						0	0	25	U
n-Hexane	2,700	1,600						2,440	9.67	25	
Naphthalene	ND	800						0	0	25	U
o-Xylene	1,200	800						1,160	6.02	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	31,000	800						28,060	10.7	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	6,100	2,400						5,608	7.95	25	
Surr: 4-Bromofluorobenzene	9,300		10,000		92.7	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55307**

Sample ID: **MBLK-011013 TCD-A** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55307**
Client ID: **PBW** Batch ID: **R55307** TestNo: **ASTM-D2504** Analysis Date: **1/10/2013** SeqNo: **1089984**

Analyte	Result	PQL	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-011013 TCD** Samp Type: **LCS** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55307**
Client ID: **LCSW** Batch ID: **R55307** TestNo: **ASTM-D2504** Analysis Date: **1/10/2013** SeqNo: **1089986**

Analyte	Result	PQL	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	104	70	130	2.619	0.421	20	
Carbon Monoxide	2.7	0.10	2.500	0	109	70	130	2.716	0.0737	20	
Methane	1.9	0.50	2.000	0	94.8	70	130	2.113	10.8	20	
Nitrogen	2.8	0.10	2.500	0	111	70	130	2.804	0.680	20	
Oxygen	2.7	0.10	2.500	0	108	70	130	2.708	0.481	20	

Sample ID: **1212722-080BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55307**
Client ID: **VA2255** Batch ID: **R55307** TestNo: **ASTM-D2504** Analysis Date: **1/10/2013** SeqNo: **1089998**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.13	0.10						0.1320	0	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	83	0.10						82.78	0.163	20	
Oxygen	22	0.10						22.36	0.197	20	

Sample ID: **1212959-010BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **55307**
Client ID: **ZZZZZZ** Batch ID: **R55307** TestNo: **ASTM-D2504** Analysis Date: **1/10/2013** SeqNo: **1090010**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.44	0.10						0.4400	0.227	20	
Carbon Monoxide	ND	0.10						0	0	20	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55307**

Sample ID:	**1212959-010BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**55307**
Client ID:	**ZZZZZZ**	Batch ID:	**R55307**	TestNo:	**ASTM-D2504**			Analysis Date:	**1/10/2013**	SeqNo:	**1090010**

Analyte	Result	PQL	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	85	0.10						84.98	0.0577	20	
Oxygen	19	0.10						19.33	0.0673	20	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55322**

Sample ID:	**MBLK/DBV41 CC VO**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55322**
Client ID:	**PBW**	Batch ID:	**R55322**	TestNo:	**TO-15**			Analysis Date:	**1/10/2013**	SeqNo:	**1090261**

Analyte	Result	PQL	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#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55322**

Sample ID:	**MBLK/DBV41 CC VO**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55322**
Client ID:	**PBW**	Batch ID:	**R55322**	TestNo:	**TO-15**			Analysis Date:	**1/10/2013**	SeqNo:	**1090261**

Analyte	Result	PQL	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#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55322**

Sample ID:	**1212722-047ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55322**
Client ID:	**VA2106**	Batch ID:	**R55322**	TestNo:	**TO-15**			Analysis Date:	**1/10/2013**	SeqNo:	**1090264**

Analyte	Result	PQL	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	1,300	800						1,280	1.86	25	
Benzene	10,000	800						9,624	3.75	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#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55322**

Sample ID:	**1212722-047ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**55322**
Client ID:	**VA2106**	Batch ID:	**R55322**	TestNo:	**TO-15**			Analysis Date:	**1/10/2013**	SeqNo:	**1090264**

Analyte	Result	PQL	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	10,000	1,600						9,904	3.88	25	
Dichlorodifluoromethane	ND	800						0	0	25	U
Ethyl acetate	ND	800						0	0	25	U
Ethylbenzene	2,000	1,600						2,008	0.398	25	
Heptane	16,000	800						15,400	1.70	25	
Hexachlorobutadiene	ND	1,600						0	0	25	U
m,p-Xylene	5,800	1,600						5,768	0.139	25	
Methylene chloride	2,000	4,000						2,008	0.398	25	J
n-Hexane	3,000	1,600						2,896	4.59	25	
Naphthalene	ND	800						0	0	25	U
o-Xylene	1,700	800						1,688	0.943	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	39,000	800						38,180	0.876	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	7,500	2,400						7,456	0.107	25	
Surr: 4-Bromofluorobenzene	9,600		10,000		95.5	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1212722

Date Reported: 1/14/2013
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R55326**

Sample ID:	**MBLK VOA9 011013**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**55326**
Client ID:	**PBW**	Batch ID:	**R55326**	TestNo:	**MA_APH**			Analysis Date:	**1/10/2013**	SeqNo:	**1090378**

Analyte	Result	PQL	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	85		89.50		95.0	70	130				

Sample ID:	**1212959-001ADUP**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**55326**
Client ID:	**ZZZZZZ**	Batch ID:	**R55326**	TestNo:	**MA_APH**			Analysis Date:	**1/10/2013**	SeqNo:	**1090393**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	640,000	94,000						605,800	5.84	30	
C9-C10 Aromatic Hydrocarbons	ND	110,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	38,000	150,000						28,500	29.6	30	J
Surr: 4-Bromofluorobenzene	70,000		71,600		97.4	70	130		0	30	

Injection Log

Directory: C:\HPCHEM\1\DATA\010313B

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	01031301.d	1.	BFB VOA1 010313	TUNE BFB_TUNE	3 Jan 2013 21:04
2	2	01031302.d	1.	1ppb VOA1 010313	data not used	3 Jan 2013 21:47
3	3	01031303.d	1.	1ppb VOA1 010313	ICAL2EPA_TO15	3 Jan 2013 22:31
4	4	01031304.d	1.	10ppb VOA1 010313	ICAL4EPA_TO15	3 Jan 2013 23:14
5	5	01031305.d	1.	12ppb VOA1 010313	ICAL5EPA_TO15	3 Jan 2013 23:57
6	6	01031306.d	1.	15ppb VOA1 010313	ICAL6EPA_TO15	4 Jan 2013 00:40
7	7	01031307.d	1.	20ppb VOA1 010313	ICAL7EPA_TO15	4 Jan 2013 01:23
8	8	01031308.d	1.	30ppb VOA1 010313	ICAL8EPA_TO15	4 Jan 2013 02:07
9	9	01031309.d	1.	50ppb VOA1 010313	ICAL8EPA_TO15	4 Jan 2013 02:53
10	1	01031310.d	1.	BFB2 VOA1 010313	TUNE BFB_TUNE	4 Jan 2013 03:34
11	2	01031311.d	1.	ICV VOA1 010313	ICV EPA_TO15	4 Jan 2013 04:17
12	3	01031312.d	1.	RLVS VOA1 0101313	RLVS EPA_TO15	4 Jan 2013 05:01
13	4	01031313.d	1.	MBLK VOA1 010313	data not used	4 Jan 2013 05:51
14	5	01031314.d	8000.	1212437-011A	SAMP EPA_TO15	4 Jan 2013 06:32
15	6	01031315.d	20000.	1212437-017A	SAMP EPA_TO15	4 Jan 2013 07:15
16	7	01031316.d	20000.	1212437-018A	data not used	4 Jan 2013 07:57
17	8	01031317.d	800.	1212437-019A	SAMP EPA_TO15	4 Jan 2013 08:43
18	9	01031318.d	800.	1212437-019ADUP	DUP EPA_TO15	4 Jan 2013 09:28
19	10	01031319.d	40000.	1212437-018A	SAMP EPA_TO15	4 Jan 2013 10:11
20	10	01031320.d	400.	1212437-021A	SAMP EPA_TO15	4 Jan 2013 10:59
21	11	01031321.d	400.	1212437-020A	SAMP EPA_TO15	4 Jan 2013 11:55
22	12	01031322.d	800.	1212437-041A	SAMP EPA_TO15	4 Jan 2013 12:41
23	13	01031323.d	800.	1212437-021A	data not used	4 Jan 2013 13:27
24	11	01031324.d	800.	1212437-020A	data not used	4 Jan 2013 14:16
25	12	01031325.d	800.	1212437-021A	data not used	4 Jan 2013 15:05
26	13	01031326.d	1.	MBLK/CCDBV95 VOA1 010313	MBLK EPA_TO15	4 Jan 2013 16:01
27	14	01031327.d	1.	MBLK/CCDBV67 VOA1 010313	data not used	4 Jan 2013 16:49
28	9	01031328.d	400.	1212437-022A	SAMP EPA_TO15	4 Jan 2013 17:37
29	10	01031329.d	20000.	1212437-001A	SAMP EPA_TO15	4 Jan 2013 18:20
30	11	01031330.d	160000.	1212437-002A	SAMP EPA_TO15	4 Jan 2013 19:02
31	12	01031331.d	400.	1212437-023A	SAMP EPA_TO15	4 Jan 2013 19:52
32	13	01031332.d	8000.	1212437-004A	SAMP EPA_TO15	4 Jan 2013 20:34
33	14	01031333.d	8000.	1212437-003A	SAMP EPA_TO15	4 Jan 2013 21:17
34	15	01031334.d	400.	1212437-024A	SAMP EPA_TO15	4 Jan 2013 22:06
35	16	01031335.d	80000.	1212437-005A	SAMP EPA_TO15	4 Jan 2013 22:49
36	1	01031336.d	8000.	1212437-025A	data not used	4 Jan 2013 23:31
37	2	01031337.d	800.	1212437-026A	SAMP EPA_TO15	5 Jan 2013 00:17
38	3	01031338.d	800.	1212437-027A	SAMP EPA_TO15	5 Jan 2013 01:02
39	4	01031339.d	800.	1212437-028A	SAMP EPA_TO15	5 Jan 2013 01:48
40	5	01031340.d	4.	1212722-084A	SAMP EPA_TO15	5 Jan 2013 02:33
41	1	01031341.d	1.	RLVS2 VOA1 0101313	RLVS EPA_TO15	5 Jan 2013 03:17

RTI Laboratories

ANALYTICAL RUN Summary

15-Jan-13

RunNo 55129

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1086758	BFB2 VOA1 010313	BFB_TUNE	TUNE	.1\DATA\010313	E1/4/2013 3:34:00	1	R55129		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		77.5	77.5		100	0	0	0	0	0	78%	50	200	0%	
175	M		7.3	7.3		100	0	0	0	0	0	7%	4	9	0%	
176	M		98.1	98.1		100	0	0	0	0	0	98%	93	101	0%	
177	M		6.5	6.5		100	0	0	0	0	0	7%	5	9	0%	
50	M		20.8	20.8		100	0	0	0	0	0	21%	8	40	0%	
75	M		45.8	45.8		100	0	0	0	0	0	46%	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
1086759	ICV VOA1 010313	EPA_TO15	ICV	.1\DATA\010313	E1/4/2013 4:17:00	1	R55129		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	10.37	10.37		9.6	0	0	0.107	1	50	108%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.3	10.3		10	0	0	0.211	1	50	103%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.32	10.32		9.8	0	0	0.108	1	50	105%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	10.02	10.02		9.8	0	0	0.2	1	50	102%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.04	10.04		9.7	0	0	0.111	1	50	104%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.43	10.43		9.9	0	0	0.097	1	50	105%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	8.32	8.32		9.1	0	0	0.271	1	50	91%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.35	10.35		9.8	0	0	0.245	1	50	106%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.96	9.96		9.6	0	0	0.186	1	50	104%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.48	9.48		9.7	0	0	0.208	1	50	98%	70	130	0%	
1,2-Dichloroethane	A	ppbv	10.4	10.4		9.7	0	0	0.196	1	50	107%	70	130	0%	
1,2-Dichloropropane	A	ppbv	10.19	10.19		9.8	0	0	0.224	1	50	104%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	10.23	10.23		9.7	0	0	0.24	1	50	105%	70	130	0%	
1,3-Butadiene	A	ppbv	9.94	9.94		9.8	0	0	0.152	1	50	101%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.85	9.85		9.7	0	0	0.202	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
1086759	ICV VOA1 010313	EPA_TO15	ICV	.1\DATA\010313	E1/4/2013 4:17:00	1	R55129		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.79	9.79		9.6	0	0	0.194	1	50	102%	70	130	0%	
1,4-Dioxane	A	ppbv	10.45	10.45		9.6	0	0	0.128	1	50	109%	70	130	0%	
2-Butanone	A	ppbv	10.54	10.54		9.9	0	0	0.287	1	50	106%	70	130	0%	
2-Hexanone	A	ppbv	11.22	11.22		9.8	0	0	0.135	1	50	114%	70	130	0%	
2-Propanol	A	ppbv	11.41	11.41		10.1	0	0	0.329	1	50	113%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	11.06	11.06		10	0	0	0.157	1	50	111%	70	130	0%	
Acetone	A	ppbv	10.88	10.88		10	0	0	0.43	1	50	109%	70	130	0%	
Benzene	A	ppbv	9.99	9.99		9.6	0	0	0.126	1	50	104%	70	130	0%	
Benzyl chloride	A	ppbv	10.31	10.31		9.7	0	0	0.155	1	50	106%	70	130	0%	
Bromodichloromethane	A	ppbv	10.28	10.28		9.6	0	0	0.156	1	50	107%	70	130	0%	
Bromoform	A	ppbv	10.48	10.48		9.6	0	0	0.197	1	50	109%	70	130	0%	
Bromomethane	A	ppbv	9.33	9.33		9.3	0	0	0.075	1	50	100%	70	130	0%	
Carbon disulfide	A	ppbv	11.32	11.32		9.7	0	0	0.093	1	50	117%	70	130	0%	
Carbon tetrachloride	A	ppbv	10.08	10.08		9.5	0	0	0.114	1	50	106%	70	130	0%	
Chlorobenzene	A	ppbv	10.25	10.25		9.9	0	0	0.275	1	50	104%	70	130	0%	
Chlorodibromomethane	A	ppbv	10.55	10.55		9.2	0	0	0.165	1	50	115%	70	130	0%	
Chloroethane	A	ppbv	9.37	9.37		9.8	0	0	0.063	1	50	96%	70	130	0%	
Chloroform	A	ppbv	10.28	10.28		9.4	0	0	0.126	1	50	109%	70	130	0%	
Chloromethane	A	ppbv	9.62	9.62		9.8	0	0	0.104	1	50	98%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	10.05	10.05		9.8	0	0	0.107	1	50	103%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	9.41	9.41		9.5	0	0	0.166	1	50	99%	70	130	0%	
Cyclohexane	A	ppbv	10.84	10.84		9.8	0	0	0.684	2	50	111%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.16	9.16		9.2	0	0	0.086	1	50	100%	70	130	0%	
Ethanol	A	ppbv	9.17	9.17		9.2	0	0	1.962	5	50	100%	70	130	0%	
Ethyl acetate	A	ppbv	10.56	10.56		9.8	0	0	0.157	1	50	108%	70	130	0%	
Ethylbenzene	A	ppbv	10.27	10.27		9.8	0	0	0.737	2	50	105%	70	130	0%	
Heptane	A	ppbv	10.74	10.74		9.9	0	0	0.249	1	50	108%	70	130	0%	
Hexachlorobutadiene	A	ppbv	7.59	7.59		9.4	0	0	0.374	2	50	81%	70	130	0%	
m,p-Xylene	A	ppbv	22.42	22.42		19.2	0	0	0.524	2	100	117%	70	130	0%	
Methylene chloride	A	ppbv	9.97	9.97		10	0	0	2.077	5	50	100%	70	130	0%	
n-Hexane	A	ppbv	10.64	10.64		10.1	0	0	0.692	2	50	105%	70	130	0%	
Naphthalene	A	ppbv	7.84	7.84		9.2	0	0	0.247	1	50	85%	70	130	0%	
o-Xylene	A	ppbv	10.86	10.86		10	0	0	0.258	1	50	109%	70	130	0%	
Propylene	A	ppbv	9.83	9.83		10.2	0	0	0.075	1	50	96%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1086759	ICV VOA1 010313	EPA_TO15	ICV	.1\DATA\010313	E1/4/2013 4:17:00	1	R55129		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	10.79	10.79		9.8	0	0	0.263	1	50	110%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	10.57	10.57		9.9	0	0	0.228	1	50	107%	70	130	0%	
Tetrachloroethene	A	ppbv	10.32	10.32		9.6	0	0	0.148	1	50	108%	70	130	0%	
Tetrahydrofuran	A	ppbv	10.65	10.65		10	0	0	0.201	1	50	107%	70	130	0%	
Toluene	A	ppbv	11.27	11.27		9.8	0	0	0.158	1	50	115%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.76	10.76		9.8	0	0	0.117	1	50	110%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	10.29	10.29		9.1	0	0	0.171	1	50	113%	70	130	0%	
Trichloroethene	A	ppbv	9.88	9.88		9.6	0	0	0.119	1	50	103%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.47	9.47		9.6	0	0	0.148	1	50	99%	70	130	0%	
Vinyl acetate	A	ppbv	10.84	10.84		9.9	0	0	0.266	1	50	109%	70	130	0%	
Vinyl chloride	A	ppbv	9.48	9.48		9.4	0	0	0.072	1	50	101%	70	130	0%	
Xylenes, Total	C	ppbv	33.28	33.28		29.2	0	0	0.782	3	150	114%	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	12.32	12.32		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
1086760	RLVS VOA1 010131	EPA_TO15	RLVS	.1\DATA\010313	E1/4/2013 5:01:00	1	R55129		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	0.96	0.96		0.996	0	0	0.107	1	50	96%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	0.95	0.95		1	0	0	0.211	1	50	95%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.98	0.98		0.98	0	0	0.108	1	50	100%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.86	0.86		0.98	0	0	0.2	1	50	88%	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	1.06	1.06		0.99	0	0	0.097	1	50	107%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.04	1.04		0.91	0	0	0.271	1	50	114%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	0.89	0.89		0.98	0	0	0.245	1	50	91%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.8	0.8		0.96	0	0	0.186	1	50	83%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	0.92	0.92		0.97	0	0	0.208	1	50	95%	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	0.92	0.92		0.98	0	0	0.224	1	50	94%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\010313B\01031311.D Vial: 2
Acq On : 4 Jan 2013 4:17 am Operator: RACHEL HILL
Sample : ICV VOA1 010313 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\010313V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 04 10:30:43 2013
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	105	0.00
2	T	Propylene	1.368	1.318	3.7	94	0.00
3	T	Dichlorodifluoromethane	3.598	3.584	0.4	94	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.309	2.299	0.4	95	0.00
5	T	Chloromethane	1.418	1.435	-1.2	94	0.00
6	T	Vinyl chloride	1.812	1.826	-0.8	92	0.00
7	T	1,3-Butadiene	1.341	1.360	-1.4	91	0.00
8	T	Bromomethane	1.285	1.288	-0.2	99	0.00
9	T	Chloroethane	0.800	0.815	-1.9	97	0.00
10	T	Trichlorofluoromethane	3.317	3.273	1.3	94	0.00
11	T	Ethanol	0.471	0.470	0.2	99	0.00
12	T	Freon113	2.335	2.460	-5.4	96	0.00
13	T	1,1-Dichloroethene	2.064	2.174	-5.3	97	0.00
14	T	Acetone	2.347	2.553	-8.8	99	0.00
15	T	Carbon disulfide	3.037	3.545	-16.7	111	0.00
16	T	2-Propanol	2.182	2.464	-12.9	107	0.00
17	T	Methylene chloride	1.610	1.605	0.3	94	0.00
18	T	tert-Butyl Methyl Ether	3.277	3.498	-6.7	96	0.00
19	T	trans-1,2-Dichloroethene	1.896	2.083	-9.9	100	0.00
20	T	n-Hexane	2.200	2.318	-5.4	96	0.00
21	T	1,1-Dichloroethane	2.384	2.467	-3.5	94	0.00
22	T	Vinyl acetate	3.656	4.003	-9.5	94	0.00
23	T	cis-1,2-Dichloroethene	1.254	1.285	-2.5	96	0.00
24	T	2-Butanone	2.467	2.626	-6.4	94	0.00
25	T	Ethyl acetate	3.149	3.394	-7.8	98	0.00
26	T	Tetrahydrofuran	1.637	1.743	-6.5	92	0.00
27	T	Chloroform	2.538	2.662	-4.9	92	0.00
28	T	1,1,1-Trichloroethane	2.538	2.741	-8.0	92	0.00
29	T	Cyclohexane	2.291	2.534	-10.6	94	0.00
30	T	Carbon tetrachloride	2.473	2.624	-6.1	95	0.00
31	T	Benzene	3.711	3.860	-4.0	95	0.00
32	T	1,2-Dichloroethane	1.664	1.784	-7.2	92	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	106	0.00
34	T	Heptane	0.815	0.884	-8.5	93	0.00
35	T	Trichloroethene	0.486	0.500	-2.9	96	0.00
36	T	1,2-Dichloropropane	0.454	0.473	-4.2	94	0.00
37	T	1,4-Dioxane	0.207	0.225	-8.7	102	0.00
38	T	Bromodichloromethane	0.792	0.847	-6.9	97	0.00
39	T	cis-1,3-Dichloropropene	0.659	0.653	0.9	91	0.00
40	T	4-Methyl-2-pentanone	0.344	0.380	-10.5	101	0.00
41	T	Toluene	1.296	1.491	-15.0	105	0.00
42	T	trans-1,3-Dichloropropene	0.597	0.676	-13.2	105	0.00
43	T	1,1,2-Trichloroethane	0.447	0.457	-2.2	95	0.00
44	T	Tetrachloroethene	0.614	0.660	-7.5	96	0.00
45	T	2-Hexanone	0.753	0.862	-14.5	101	0.00
46	T	Chlorodibromomethane	0.715	0.770	-7.7	97	0.00
47	T	1,2-Dibromoethane	0.646	0.670	-3.7	97	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	110	0.00
49	T	Chlorobenzene	1.120	1.160	-3.6	96	0.00
50	T	Ethylbenzene	1.917	2.010	-4.9	94	0.00
51	T	m,p-Xylene	1.443	1.685	-16.8	95	0.00
52	T	o-Xylene	1.521	1.652	-8.6	96	0.00
53	T	Styrene	1.104	1.215	-10.1	98	0.00
54	T	Bromoform	0.742	0.810	-9.2	99	0.00
55	S	4-Bromofluorobenzene	0.623	0.613	1.6	109	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\010313B\01031311.D Vial: 2
Acq On : 4 Jan 2013 4:17 am Operator: RACHEL HILL
Sample : ICV VOA1 010313 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\010313V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 04 10:30:43 2013
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	0.983	1.012	-3.0	96	0.00
57	T	4-Ethyltoluene	1.828	1.927	-5.4	96	0.00
58	T	1,3,5-Trimethylbenzene	1.560	1.644	-5.4	95	0.00
59	T	1,2,4-Trimethylbenzene	1.459	1.541	-5.6	94	0.00
60	T	1,3-Dichlorobenzene	0.772	0.784	-1.6	97	0.00
61	T	1,4-Dichlorobenzene	0.720	0.734	-1.9	97	0.00
62	T	Benzyl chloride	0.902	0.959	-6.3	93	0.00
63	T	1,2-Dichlorobenzene	0.641	0.626	2.3	88	0.00
64	T	1,2,4-Trichlorobenzene	0.195	0.178	8.7	67	0.00
65	T	Hexachlorobutadiene	0.404	0.326	19.3	64	0.00
66		Naphthalene	0.369	0.315	14.6	56	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010313B\01031311.D Vial: 2
Acq On : 4 Jan 2013 4:17 am Operator: RACHEL HILL
Sample : ICV VOA1 010313 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 4 10:32 2013 Quant Results File: 010313V1.RES

Quant Method : C:\HPCHEM\1\METHODS\010313V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 04 10:30:43 2013
Response via : Initial Calibration
DataAcq Meth : 010313V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.53	130	198375	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.62	114	665551	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.47	117	545186	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.12	95	334427	12.32	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 98.56%				
Target Compounds							Qvalue
2) Propylene	5.44	41	213349	9.83	ppbv		96
3) Dichlorodifluoromethane	5.51	85	523246	9.16	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.77	135	346638	9.46	ppbv	#	63
5) Chloromethane	5.93	50	216340	9.62	ppbv		99
6) Vinyl chloride	6.15	62	272466	9.48	ppbv		99
7) 1,3-Butadiene	6.20	39	211440	9.94	ppbv		100
8) Bromomethane	6.78	94	190144	9.33	ppbv		99
9) Chloroethane	6.93	64	119031	9.37	ppbv		98
10) Trichlorofluoromethane	7.26	101	498586	9.47	ppbv		98
11) Ethanol	7.50	45	68585	9.17	ppbv		100
12) Freon113	7.93	101	382573	10.32	ppbv		89
13) 1,1-Dichloroethene	8.03	61	341621	10.43	ppbv	#	86
14) Acetone	8.12	43	405127	10.88	ppbv	#	91
15) Carbon disulfide	8.39	76	545756	11.32	ppbv	#	99
16) 2-Propanol	8.17	45	395009	11.41	ppbv	#	1
17) Methylene chloride	8.68	49	254775	9.97	ppbv	#	83
18) tert-Butyl Methyl Ether	8.89	73	549649	10.57	ppbv	#	91
19) trans-1,2-Dichloroethene	8.97	61	323925	10.76	ppbv	#	81
20) n-Hexane	9.15	57	371617	10.64	ppbv		94
21) 1,1-Dichloroethane	9.53	63	379799	10.04	ppbv	#	97
22) Vinyl acetate	9.46	43	628955	10.84	ppbv	#	96
23) cis-1,2-Dichloroethene	10.22	96	199906	10.05	ppbv	#	80
24) 2-Butanone	10.19	43	412638	10.54	ppbv		92
25) Ethyl acetate	10.13	43	527835	10.56	ppbv	#	98
26) Tetrahydrofuran	10.52	42	276652	10.65	ppbv		92
27) Chloroform	10.54	83	413972	10.28	ppbv		99
28) 1,1,1-Trichloroethane	10.79	97	417668	10.37	ppbv		95
29) Cyclohexane	10.80	56	394125	10.84	ppbv		89
30) Carbon tetrachloride	10.95	117	395589	10.08	ppbv		98
31) Benzene	11.23	78	588107	9.99	ppbv		95
32) 1,2-Dichloroethane	11.31	62	274631	10.40	ppbv	#	97
34) Heptane	11.28	43	465831	10.74	ppbv	#	92
35) Trichloroethene	11.96	130	255662	9.88	ppbv		94
36) 1,2-Dichloropropane	12.32	63	246548	10.19	ppbv		97
37) 1,4-Dioxane	12.40	88	115151	10.45	ppbv	#	82
38) Bromodichloromethane	12.61	83	433041	10.28	ppbv		98
39) cis-1,3-Dichloropropene	13.16	75	330065	9.41	ppbv		98
40) 4-Methyl-2-pentanone	13.27	58	202427	11.06	ppbv	#	93
41) Toluene	13.56	91	777978	11.27	ppbv		98
42) trans-1,3-Dichloropropene	13.87	75	327394	10.29	ppbv		97
43) 1,1,2-Trichloroethane	14.14	97	238718	10.02	ppbv		97
44) Tetrachloroethene	14.26	166	337250	10.32	ppbv		97
45) 2-Hexanone	14.34	43	449609	11.22	ppbv		98
46) Chlorodibromomethane	14.69	129	401689	10.55	ppbv		99
47) 1,2-Dibromoethane	14.92	107	342479	9.96	ppbv		100
49) Chlorobenzene	15.51	112	500694	10.25	ppbv	#	89
50) Ethylbenzene	15.56	91	858936	10.27	ppbv		95
51) m,p-Xylene	15.71	91	1410912	22.42	ppbv		95
52) o-Xylene	16.30	91	720645	10.86	ppbv	#	93

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010313B\01031311.D Vial: 2
Acq On : 4 Jan 2013 4:17 am Operator: RACHEL HILL
Sample : ICV VOA1 010313 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 4 10:32 2013 Quant Results File: 010313V1.RES

Quant Method : C:\HPCHEM\1\METHODS\010313V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 04 10:30:43 2013
Response via : Initial Calibration
DataAcq Meth : 010313V1

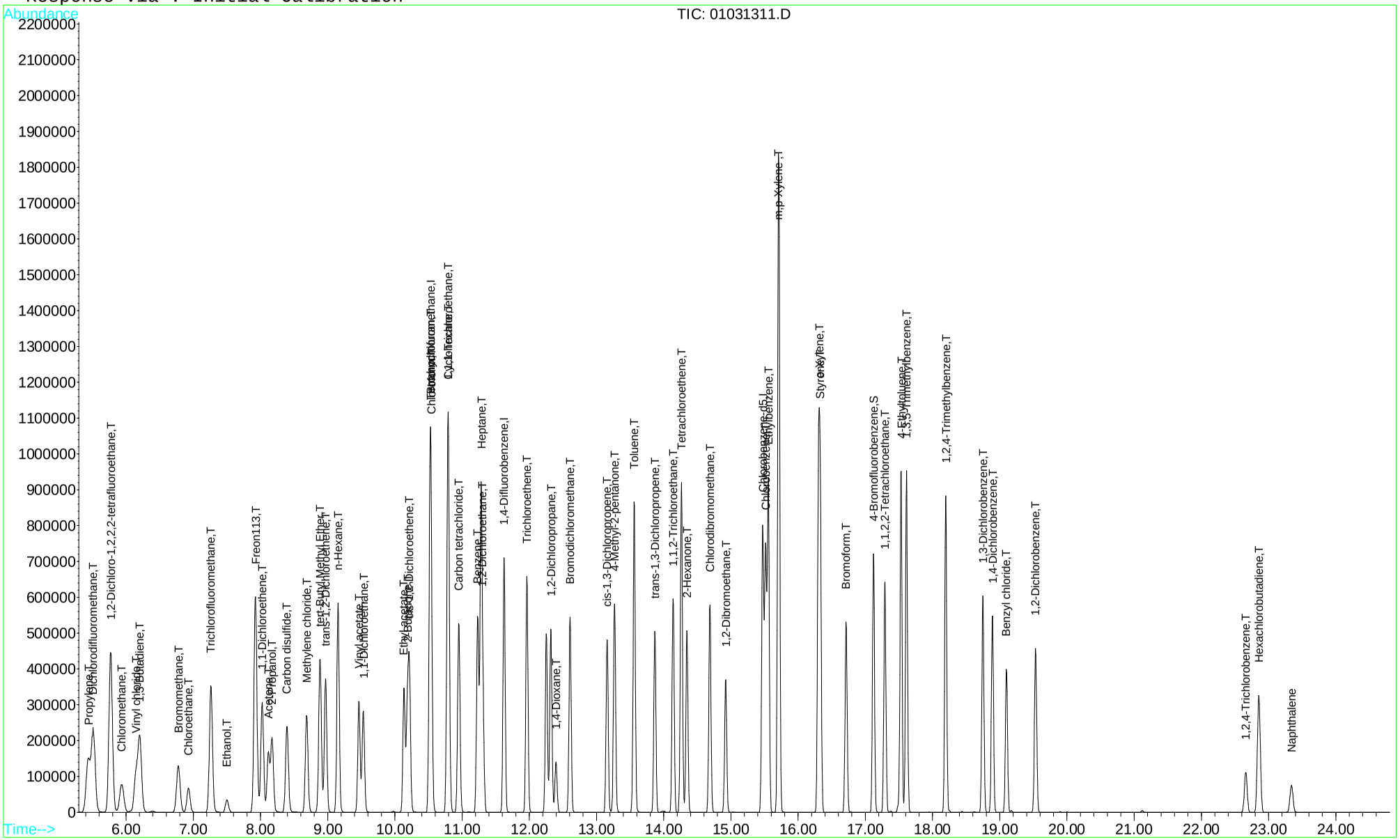
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.33	104	519214	10.79	ppbv		97
54)	Bromoform	16.71	173	339286	10.48	ppbv		98
56)	1,1,2,2-Tetrachloroethane	17.29	83	441422	10.30	ppbv	#	98
57)	4-Ethyltoluene	17.53	105	823794	10.33	ppbv		95
58)	1,3,5-Trimethylbenzene	17.61	105	695692	10.23	ppbv		94
59)	1,2,4-Trimethylbenzene	18.20	105	658854	10.35	ppbv		95
60)	1,3-Dichlorobenzene	18.75	146	331601	9.85	ppbv		96
61)	1,4-Dichlorobenzene	18.89	146	307312	9.79	ppbv		95
62)	Benzyl chloride	19.10	91	405522	10.31	ppbv		95
63)	1,2-Dichlorobenzene	19.53	146	264873	9.48	ppbv		95
64)	1,2,4-Trichlorobenzene	22.66	180	70628	8.32	ppbv		98
65)	Hexachlorobutadiene	22.86	225	133679	7.59	ppbv		99
66)	Naphthalene	23.34	128	126338	7.84	ppbv		98

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010313B\01031311.D Vial: 2
Acq On : 4 Jan 2013 4:17 am Operator: RACHEL HILL
Sample : ICV VOA1 010313 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 4 10:32 2013 Quant Results File: 010313V1.RES

Method : C:\HPCHEM\1\METHODS\010313V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 04 10:30:43 2013
Response via : Initial Calibration



Injection Log

Directory: C:\HPCHEM\1\DATA\010513

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	01051301.d	1.	BFB VOA1 010513	TUNE BFB_TUNE	5 Jan 2013 08:34
2	2	01051302.d	1.	CCV VOA1 010513	data not used	5 Jan 2013 10:00
3	3	01051303.d	1.	CCV VOA1 010513	data not used	5 Jan 2013 11:22
4	4	01051304.d	1.	1ppbv VOA1 010513	data not used	5 Jan 2013 12:45
5	5	01051305.d	1.	1ppbv VOA1 010513	ICAL2EPA_TO15	5 Jan 2013 13:29
6	6	01051306.d	1.	10ppbv VOA1 010513	ICAL3EPA_TO15	5 Jan 2013 14:12
7	7	01051307.d	1.	12ppbv VOA1 010513	ICAL4EPA_TO15	5 Jan 2013 14:54
8	8	01051308.d	1.	15ppbv VOA1 010513	ICAL5EPA_TO15	5 Jan 2013 15:37
9	9	01051309.d	1.	20ppbv VOA1 010513	ICAL6EPA_TO15	5 Jan 2013 16:21
10	10	01051310.d	1.	30ppbv VOA1 010513	ICAL7EPA_TO15	5 Jan 2013 17:05
11	11	01051311.d	1.	50ppbv VOA1 010513	ICAL8EPA_TO15	5 Jan 2013 17:50
12	1	01051312.d	1.	BFB VOA1 010513	TUNE BFB_TUNE	5 Jan 2013 18:32
13	3	01051313.d	1.	ICV VOA1 010513	ICV EPA_TO15	5 Jan 2013 19:15
14	4	01051314.d	1.	RLVS VOA1 010513	RLVS EPA_TO15	5 Jan 2013 19:59
15	5	01051315.d	1.	MBLK VOA1 010513	MBLK EPA_TO15	5 Jan 2013 21:18
16	1	01051316.d	800.	1212437-020A	SAMP EPA_TO15	5 Jan 2013 22:03
17	1	01051317.d	800.	1212437-020ADUP	DUP EPA_TO15	5 Jan 2013 22:47
18	2	01051318.d	800.	1212437-021A	SAMP EPA_TO15	5 Jan 2013 23:32
19	3	01051319.d	40000.	1212437-004A	data not used	6 Jan 2013 00:13
20	4	01051320.d	40000.	1212437-003A	data not used	6 Jan 2013 00:55
21	6	01051321.d	160000.	1212437-004A	SAMP EPA_TO15	6 Jan 2013 01:37
22	7	01051322.d	800.	1212437-025A	SAMP EPA_TO15	6 Jan 2013 02:22
23	7	01051323.d	800.	1212437-025A	data not used	6 Jan 2013 03:07
24	8	01051324.d	40.	1212722-084A	SAMP EPA_TO15	6 Jan 2013 03:49
25	9	01051325.d	160000.	1212437-003A	SAMP EPA_TO15	6 Jan 2013 04:30
26	10	01051326.d	160000.	1212437-005A	SAMP EPA_TO15	6 Jan 2013 05:12
27	11	01051327.d	800.	1212722-054A	SAMP EPA_TO15	6 Jan 2013 05:57
28	12	01051328.d	400.	1212722-055A	SAMP EPA_TO15	6 Jan 2013 06:46
29	13	01051329.d	400.	1212722-056A	SAMP EPA_TO15	6 Jan 2013 07:34
30	14	01051330.d	400.	1212722-057A	SAMP EPA_TO15	6 Jan 2013 08:22
31	15	01051331.d	400.	1212722-058A	SAMP EPA_TO15	6 Jan 2013 09:11
32	16	01051332.d	40.	1212722-059A	SAMP EPA_TO15	6 Jan 2013 09:53
33	17	01051333.d	40.	1212722-061A	SAMP EPA_TO15	6 Jan 2013 11:05
34	18	01051334.d	400.	1212722-062A	SAMP EPA_TO15	6 Jan 2013 11:53
35	19	01051335.d	800.	1212722-063A	SAMP EPA_TO15	6 Jan 2013 12:38
36	20	01051336.d	40.	1212722-064A	SAMP EPA_TO15	6 Jan 2013 13:20
37	21	01051337.d	40.	1212722-065A	SAMP EPA_TO15	6 Jan 2013 14:02
38	22	01051338.d	40.	1212722-066A	SAMP EPA_TO15	6 Jan 2013 14:44
39	23	01051339.d	40.	1212722-069A	SAMP EPA_TO15	6 Jan 2013 15:25
40	24	01051340.d	1.	ccdbv61	data not used	6 Jan 2013 16:14
41	4	01051341.d	1.	RLVS2 VOA1 010513	RLVS EPA_TO15	6 Jan 2013 18:04

RTI Laboratories

ANALYTICAL RUN Summary

15-Jan-13

RunNo 55152

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1087108	BFB2 VOA1 010513	BFB_TUNE	TUNE	\\1\DATA\010513\	1/5/2013 6:32:00	1	R55152		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		76.9	76.9		100	0	0	0	0	0	77%	50	200	0%	
175	M		7.2	7.2		100	0	0	0	0	0	7%	4	9	0%	
176	M		97.6	97.6		100	0	0	0	0	0	98%	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		45.9	45.9		100	0	0	0	0	0	46%	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
1087109	ICV VOA1 010513	EPA_TO15	ICV	\\1\DATA\010513\	1/5/2013 7:15:00	1	R55152		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	10.26	10.26		9.6	0	0	0.107	1	50	107%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.09	10.09		10	0	0	0.211	1	50	101%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.48	10.48		9.8	0	0	0.108	1	50	107%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.48	9.48		9.8	0	0	0.2	1	50	97%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.14	10.14		9.7	0	0	0.111	1	50	105%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.65	10.65		9.9	0	0	0.097	1	50	108%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	9.13	9.13		9.1	0	0	0.271	1	50	100%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.23	10.23		9.8	0	0	0.245	1	50	104%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.33	9.33		9.6	0	0	0.186	1	50	97%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.62	9.62		9.7	0	0	0.208	1	50	99%	70	130	0%	
1,2-Dichloroethane	A	ppbv	10.39	10.39		9.7	0	0	0.196	1	50	107%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.74	9.74		9.8	0	0	0.224	1	50	99%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	10.12	10.12		9.7	0	0	0.24	1	50	104%	70	130	0%	
1,3-Butadiene	A	ppbv	9.92	9.92		9.8	0	0	0.152	1	50	101%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.75	9.75		9.7	0	0	0.202	1	50	101%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1087109	ICV VOA1 010513	EPA_TO15	ICV	\\1\DATA\010513\	1/5/2013 7:15:00	1	R55152		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.72	9.72		9.6	0	0	0.194	1	50	101%	70	130	0%	
1,4-Dioxane	A	ppbv	10	10		9.6	0	0	0.128	1	50	104%	70	130	0%	
2-Butanone	A	ppbv	10.75	10.75		9.9	0	0	0.287	1	50	109%	70	130	0%	
2-Hexanone	A	ppbv	10.8	10.8		9.8	0	0	0.135	1	50	110%	70	130	0%	
2-Propanol	A	ppbv	11.39	11.39		10.1	0	0	0.329	1	50	113%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.57	10.57		10	0	0	0.157	1	50	106%	70	130	0%	
Acetone	A	ppbv	10.86	10.86		10	0	0	0.43	1	50	109%	70	130	0%	
Benzene	A	ppbv	9.97	9.97		9.6	0	0	0.126	1	50	104%	70	130	0%	
Benzyl chloride	A	ppbv	10.47	10.47		9.7	0	0	0.155	1	50	108%	70	130	0%	
Bromodichloromethane	A	ppbv	9.79	9.79		9.6	0	0	0.156	1	50	102%	70	130	0%	
Bromoform	A	ppbv	10.14	10.14		9.6	0	0	0.197	1	50	106%	70	130	0%	
Bromomethane	A	ppbv	9.22	9.22		9.3	0	0	0.075	1	50	99%	70	130	0%	
Carbon disulfide	A	ppbv	11.47	11.47		9.7	0	0	0.093	1	50	118%	70	130	0%	
Carbon tetrachloride	A	ppbv	10.02	10.02		9.5	0	0	0.114	1	50	105%	70	130	0%	
Chlorobenzene	A	ppbv	9.99	9.99		9.9	0	0	0.275	1	50	101%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.89	9.89		9.2	0	0	0.165	1	50	108%	70	130	0%	
Chloroethane	A	ppbv	9.25	9.25		9.8	0	0	0.063	1	50	94%	70	130	0%	
Chloroform	A	ppbv	10.24	10.24		9.4	0	0	0.126	1	50	109%	70	130	0%	
Chloromethane	A	ppbv	9.53	9.53		9.8	0	0	0.104	1	50	97%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	10.06	10.06		9.8	0	0	0.107	1	50	103%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	8.96	8.96		9.5	0	0	0.166	1	50	94%	70	130	0%	
Cyclohexane	A	ppbv	10.89	10.89		9.8	0	0	0.684	2	50	111%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.13	9.13		9.2	0	0	0.086	1	50	99%	70	130	0%	
Ethanol	A	ppbv	9.2	9.2		9.2	0	0	1.962	5	50	100%	70	130	0%	
Ethyl acetate	A	ppbv	11.28	11.28		9.8	0	0	0.157	1	50	115%	70	130	0%	
Ethylbenzene	A	ppbv	10.03	10.03		9.8	0	0	0.737	2	50	102%	70	130	0%	
Heptane	A	ppbv	10.25	10.25		9.9	0	0	0.249	1	50	104%	70	130	0%	
Hexachlorobutadiene	A	ppbv	8.43	8.43		9.4	0	0	0.374	2	50	90%	70	130	0%	
m,p-Xylene	A	ppbv	21.78	21.78		19.2	0	0	0.524	2	100	113%	70	130	0%	
Methylene chloride	A	ppbv	10.2	10.2		10	0	0	2.077	5	50	102%	70	130	0%	
n-Hexane	A	ppbv	10.86	10.86		10.1	0	0	0.692	2	50	108%	70	130	0%	
Naphthalene	A	ppbv	9.1	9.1		9.2	0	0	0.247	1	50	99%	70	130	0%	
o-Xylene	A	ppbv	10.57	10.57		10	0	0	0.258	1	50	106%	70	130	0%	
Propylene	A	ppbv	9.83	9.83		10.2	0	0	0.075	1	50	96%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1087109	ICV VOA1 010513	EPA_TO15	ICV	[\1\DATA\010513\	1/5/2013 7:15:00	1	R55152		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	10.44	10.44		9.8	0	0	0.263	1	50	107%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	10.75	10.75		9.9	0	0	0.228	1	50	109%	70	130	0%	
Tetrachloroethene	A	ppbv	9.72	9.72		9.6	0	0	0.148	1	50	101%	70	130	0%	
Tetrahydrofuran	A	ppbv	10.82	10.82		10	0	0	0.201	1	50	108%	70	130	0%	
Toluene	A	ppbv	10.77	10.77		9.8	0	0	0.158	1	50	110%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.91	10.91		9.8	0	0	0.117	1	50	111%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.75	9.75		9.1	0	0	0.171	1	50	107%	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	9.57	9.57		9.6	0	0	0.148	1	50	100%	70	130	0%	
Vinyl acetate	A	ppbv	11	11		9.9	0	0	0.266	1	50	111%	70	130	0%	
Vinyl chloride	A	ppbv	9.47	9.47		9.4	0	0	0.072	1	50	101%	70	130	0%	
Xylenes, Total	C	ppbv	32.35	32.35		29.2	0	0	0.782	3	150	111%	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	12.41	12.41		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
1087110	RLVS VOA1 010513	EPA_TO15	RLVS	[\1\DATA\010513\	1/5/2013 7:59:00	1	R55152		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	0.92	0.92		0.996	0	0	0.107	1	50	92%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	0.9	0.9		1	0	0	0.211	1	50	90%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.93	0.93		0.98	0	0	0.108	1	50	95%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.79	0.79		0.98	0	0	0.2	1	50	81%	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	1.01	1.01		0.99	0	0	0.097	1	50	102%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.13	1.13		0.91	0	0	0.271	1	50	124%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	0.87	0.87		0.98	0	0	0.245	1	50	89%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.76	0.76		0.96	0	0	0.186	1	50	79%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	0.9	0.9		0.97	0	0	0.208	1	50	93%	70	130	0%	
1,2-Dichloroethane	A	ppbv	1.03	1.03		0.97	0	0	0.196	1	50	106%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.85	0.85		0.98	0	0	0.224	1	50	87%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\010513\01051313.D Vial: 3
Acq On : 5 Jan 2013 7:15 pm Operator: RACHEL HILL
Sample : ICV VOA1 010513 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
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	110	0.00
2	T	Propylene	1.423	1.372	3.6	97	0.00
3	T	Dichlorodifluoromethane	3.682	3.654	0.8	97	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.327	2.303	1.0	98	0.00
5	T	Chloromethane	1.465	1.471	-0.4	96	0.00
6	T	Vinyl chloride	1.907	1.920	-0.7	95	0.00
7	T	1,3-Butadiene	1.437	1.454	-1.2	94	0.00
8	T	Bromomethane	1.368	1.357	0.8	104	0.00
9	T	Chloroethane	0.836	0.840	-0.5	100	0.00
10	T	Trichlorofluoromethane	3.406	3.395	0.3	99	0.00
11	T	Ethanol	0.479	0.478	0.2	102	0.00
12	T	Freon113	2.404	2.572	-7.0	103	0.00
13	T	1,1-Dichloroethene	2.139	2.302	-7.6	104	0.00
14	T	Acetone	2.405	2.612	-8.6	103	0.00
15	T	Carbon disulfide	3.094	3.659	-18.3	116	0.00
16	T	2-Propanol	2.238	2.522	-12.7	110	0.00
17	T	Methylene chloride	1.655	1.687	-1.9	100	0.00
18	T	tert-Butyl Methyl Ether	3.300	3.582	-8.5	102	0.00
19	T	trans-1,2-Dichloroethene	1.956	2.178	-11.3	106	0.00
20	T	n-Hexane	2.274	2.446	-7.6	103	0.00
21	T	1,1-Dichloroethane	2.435	2.545	-4.5	99	0.00
22	T	Vinyl acetate	3.745	4.163	-11.2	99	0.00
23	T	cis-1,2-Dichloroethene	1.273	1.306	-2.6	101	0.00
24	T	2-Butanone	2.580	2.801	-8.6	102	0.00
25	T	Ethyl acetate	3.229	3.715	-15.1	108	0.00
26	T	Tetrahydrofuran	1.706	1.846	-8.2	97	0.00
27	T	Chloroform	2.633	2.751	-4.5	96	0.00
28	T	1,1,1-Trichloroethane	2.624	2.805	-6.9	96	0.00
29	T	Cyclohexane	2.399	2.664	-11.0	100	0.00
30	T	Carbon tetrachloride	2.515	2.654	-5.5	99	0.00
31	T	Benzene	3.755	3.900	-3.9	99	0.00
32	T	1,2-Dichloroethane	1.728	1.851	-7.1	96	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	113	0.00
34	T	Heptane	0.894	0.925	-3.5	98	0.00
35	T	Trichloroethene	0.516	0.501	2.9	99	0.00
36	T	1,2-Dichloropropane	0.485	0.481	0.8	98	0.00
37	T	1,4-Dioxane	0.215	0.223	-3.7	107	0.00
38	T	Bromodichloromethane	0.844	0.861	-2.0	101	0.00
39	T	cis-1,3-Dichloropropene	0.696	0.657	5.6	95	0.00
40	T	4-Methyl-2-pentanone	0.365	0.385	-5.5	106	0.00
41	T	Toluene	1.364	1.500	-10.0	110	0.00
42	T	trans-1,3-Dichloropropene	0.634	0.679	-7.1	108	0.00
43	T	1,1,2-Trichloroethane	0.470	0.455	3.2	99	0.00
44	T	Tetrachloroethene	0.652	0.660	-1.2	100	0.00
45	T	2-Hexanone	0.803	0.884	-10.1	107	0.00
46	T	Chlorodibromomethane	0.755	0.762	-0.9	100	0.00
47	T	1,2-Dibromoethane	0.679	0.660	2.8	99	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	114	0.00
49	T	Chlorobenzene	1.175	1.186	-0.9	100	0.00
50	T	Ethylbenzene	2.023	2.070	-2.3	98	0.00
51	T	m,p-Xylene	1.550	1.758	-13.4	98	0.00
52	T	o-Xylene	1.610	1.701	-5.7	100	0.00
53	T	Styrene	1.159	1.234	-6.5	101	0.00
54	T	Bromoform	0.776	0.820	-5.7	102	0.00
55	S	4-Bromofluorobenzene	0.619	0.614	0.8	114	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\010513\01051313.D Vial: 3
Acq On : 5 Jan 2013 7:15 pm Operator: RACHEL HILL
Sample : ICV VOA1 010513 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
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	1.030	1.039	-0.9	101	0.00
57	T	4-Ethyltoluene	1.901	1.969	-3.6	103	0.00
58	T	1,3,5-Trimethylbenzene	1.617	1.687	-4.3	102	0.00
59	T	1,2,4-Trimethylbenzene	1.494	1.560	-4.4	104	0.00
60	T	1,3-Dichlorobenzene	0.783	0.787	-0.5	107	0.00
61	T	1,4-Dichlorobenzene	0.726	0.735	-1.2	108	0.00
62	T	Benzyl chloride	0.898	0.970	-8.0	111	0.00
63	T	1,2-Dichlorobenzene	0.634	0.629	0.8	108	0.00
64	T	1,2,4-Trichlorobenzene	0.183	0.183	0.0	127	0.00
65	T	Hexachlorobutadiene	0.392	0.351	10.5	115	0.00
66		Naphthalene	0.332	0.329	0.9	128	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010513\01051313.D Vial: 3
Acq On : 5 Jan 2013 7:15 pm Operator: RACHEL HILL
Sample : ICV VOA1 010513 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 6 11:05 2013 Quant Results File: 010513V1.RES

Quant Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
Response via : Initial Calibration
DataAcq Meth : 010513V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.53	130	196257	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.62	114	662025	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.47	117	527812	12.50	ppbv		0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.12	95	324183	12.41	ppbv		0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 99.28%

Target Compounds							Qvalue
2) Propylene	5.44	41	219665	9.83	ppbv		96
3) Dichlorodifluoromethane	5.52	85	527777	9.13	ppbv		98
4) 1,2-Dichloro-1,2,2,2-tetra	5.78	135	343555	9.40	ppbv	#	62
5) Chloromethane	5.94	50	219366	9.53	ppbv		99
6) Vinyl chloride	6.15	62	283417	9.47	ppbv		99
7) 1,3-Butadiene	6.21	39	223714	9.92	ppbv		99
8) Bromomethane	6.78	94	198070	9.22	ppbv		100
9) Chloroethane	6.93	64	121374	9.25	ppbv		97
10) Trichlorofluoromethane	7.27	101	511673	9.57	ppbv		98
11) Ethanol	7.50	45	69114	9.20	ppbv		99
12) Freon113	7.93	101	395724	10.48	ppbv		87
13) 1,1-Dichloroethene	8.03	61	357773	10.65	ppbv	#	85
14) Acetone	8.12	43	410128	10.86	ppbv	#	91
15) Carbon disulfide	8.40	76	557225	11.47	ppbv	#	99
16) 2-Propanol	8.18	45	400006	11.39	ppbv	#	1
17) Methylene chloride	8.69	49	264858	10.20	ppbv	#	81
18) tert-Butyl Methyl Ether	8.89	73	556830	10.75	ppbv	#	90
19) trans-1,2-Dichloroethene	8.97	61	335129	10.91	ppbv	#	80
20) n-Hexane	9.16	57	387800	10.86	ppbv	#	92
21) 1,1-Dichloroethane	9.53	63	387614	10.14	ppbv	#	97
22) Vinyl acetate	9.46	43	647023	11.00	ppbv	#	95
23) cis-1,2-Dichloroethene	10.22	96	201014	10.06	ppbv	#	79
24) 2-Butanone	10.19	43	435326	10.75	ppbv	#	90
25) Ethyl acetate	10.14	43	571620	11.28	ppbv	#	99
26) Tetrahydrofuran	10.53	42	289803	10.82	ppbv		91
27) Chloroform	10.54	83	423272	10.24	ppbv		100
28) 1,1,1-Trichloroethane	10.79	97	422768	10.26	ppbv		95
29) Cyclohexane	10.80	56	409931	10.89	ppbv		88
30) Carbon tetrachloride	10.95	117	395820	10.02	ppbv		99
31) Benzene	11.23	78	587840	9.97	ppbv		94
32) 1,2-Dichloroethane	11.31	62	281841	10.39	ppbv	#	97
34) Heptane	11.28	43	485218	10.25	ppbv	#	91
35) Trichloroethene	11.96	130	254948	9.34	ppbv		94
36) 1,2-Dichloropropane	12.32	63	249842	9.74	ppbv		97
37) 1,4-Dioxane	12.40	88	113634	10.00	ppbv	#	81
38) Bromodichloromethane	12.61	83	437610	9.79	ppbv		98
39) cis-1,3-Dichloropropene	13.16	75	330574	8.96	ppbv		97
40) 4-Methyl-2-pentanone	13.27	58	204167	10.57	ppbv	#	92
41) Toluene	13.56	91	778310	10.77	ppbv		98
42) trans-1,3-Dichloropropene	13.87	75	327139	9.75	ppbv		96
43) 1,1,2-Trichloroethane	14.14	97	236306	9.48	ppbv		96
44) Tetrachloroethene	14.27	166	335402	9.72	ppbv		97
45) 2-Hexanone	14.34	43	459020	10.80	ppbv		98
46) Chlorodibromomethane	14.69	129	395685	9.89	ppbv		99
47) 1,2-Dibromoethane	14.92	107	335472	9.33	ppbv		100
49) Chlorobenzene	15.52	112	495656	9.99	ppbv	#	88
50) Ethylbenzene	15.56	91	856453	10.03	ppbv		95
51) m,p-Xylene	15.71	91	1425139	21.78	ppbv		95
52) o-Xylene	16.31	91	718096	10.57	ppbv	#	92

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010513\01051313.D Vial: 3
Acq On : 5 Jan 2013 7:15 pm Operator: RACHEL HILL
Sample : ICV VOA1 010513 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 6 11:05 2013 Quant Results File: 010513V1.RES

Quant Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
Response via : Initial Calibration
DataAcq Meth : 010513V1

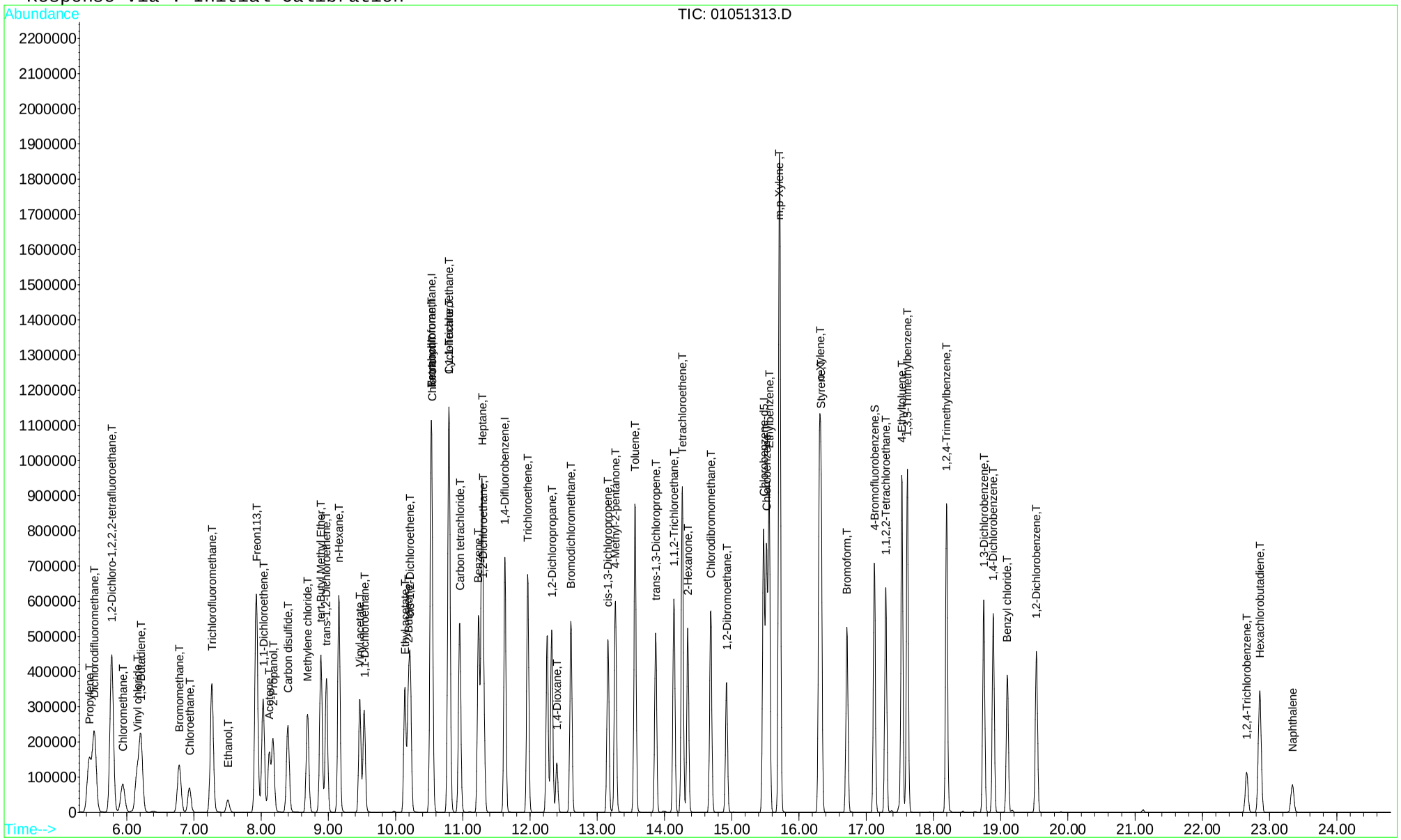
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.33	104	510725	10.44	ppbv		97
54)	Bromoform	16.71	173	332318	10.14	ppbv		98
56)	1,1,2,2-Tetrachloroethane	17.29	83	438769	10.09	ppbv	#	98
57)	4-Ethyltoluene	17.53	105	814755	10.15	ppbv		94
58)	1,3,5-Trimethylbenzene	17.61	105	690766	10.12	ppbv		94
59)	1,2,4-Trimethylbenzene	18.19	105	645530	10.23	ppbv		95
60)	1,3-Dichlorobenzene	18.75	146	322161	9.75	ppbv	#	95
61)	1,4-Dichlorobenzene	18.89	146	297758	9.72	ppbv	#	95
62)	Benzyl chloride	19.10	91	397312	10.47	ppbv		95
63)	1,2-Dichlorobenzene	19.53	146	257497	9.62	ppbv	#	95
64)	1,2,4-Trichlorobenzene	22.66	180	70424	9.13	ppbv		97
65)	Hexachlorobutadiene	22.85	225	139424	8.43	ppbv		99
66)	Naphthalene	23.34	128	127724	9.10	ppbv		99

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010513\01051313.D Vial: 3
Acq On : 5 Jan 2013 7:15 pm Operator: RACHEL HILL
Sample : ICV VOA1 010513 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 6 11:05 2013 Quant Results File: 010513V1.RES

Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
Response via : Initial Calibration



Injection Log

Directory: C:\HPCHEM\1\DATA\010713

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	01071301.d	1.	BFB VOA1 010713	TUNE BFB_TUNE	7 Jan 2013 08:33
2	2	01071302.d	1.	CCV VOA1 010713	data not used	7 Jan 2013 09:16
3	3	01071303.d	1.	CCV VOA1 010713	CCV EPA_TO15	7 Jan 2013 09:58
4	4	01071304.d	1.	RLVS VOA1 010713	RLVS EPA_TO15	7 Jan 2013 10:41
5	5	01071305.d	1.	MBLK VOA1 010713	MBLK EPA_TO15	7 Jan 2013 11:30
6	6	01071306.d	800.	1212722-004A	SAMP EPA_TO15	7 Jan 2013 12:15
7	7	01071307.d	800.	1212722-005A	SAMP EPA_TO15	7 Jan 2013 13:00
8	8	01071308.d	800.	1212722-006A	SAMP EPA_TO15	7 Jan 2013 13:45
9	9	01071309.d	40.	1212722-067A	SAMP EPA_TO15	7 Jan 2013 14:27
10	10	01071310.d	40.	1212722-068A	SAMP EPA_TO15	7 Jan 2013 15:08
11	11	01071311.d	40.	1212722-070A	SAMP EPA_TO15	7 Jan 2013 15:50
12	12	01071312.d	40.	1212722-035A	SAMP EPA_TO15	7 Jan 2013 16:32
13	2	01071313.d	40.	1212722-036A	SAMP EPA_TO15	7 Jan 2013 17:14
14	3	01071314.d	40.	1212722-007A	SAMP EPA_TO15	7 Jan 2013 17:55
15	4	01071315.d	40.	1212722-037A	SAMP EPA_TO15	7 Jan 2013 18:37
16	6	01071316.d	800.	1212722-009A	SAMP EPA_TO15	7 Jan 2013 19:22
17	6	01071317.d	800.	1212722-009ADUP	DUP EPA_TO15	7 Jan 2013 20:07
18	6	01071318.d	8000.	1212722-009A	data not used	7 Jan 2013 20:49
19	7	01071319.d	1600.	1212722-008A	SAMP EPA_TO15	7 Jan 2013 21:32
20	8	01071320.d	800.	1212722-038A	SAMP EPA_TO15	7 Jan 2013 22:17
21	9	01071321.d	800.	1212722-011A	data not used	7 Jan 2013 23:02
22	9	01071322.d	8000.	1212722-011A	SAMP EPA_TO15	7 Jan 2013 23:43
23	10	01071323.d	800.	1212722-010A	data not used	8 Jan 2013 00:29
24	10	01071324.d	8000.	1212722-010A	SAMP EPA_TO15	8 Jan 2013 01:10
25	11	01071325.d	400.	1212722-039A	SAMP EPA_TO15	8 Jan 2013 01:59
26	12	01071326.d	8000.	1212722-012A	SAMP EPA_TO15	8 Jan 2013 02:40
27	13	01071327.d	400.	1212722-040A	SAMP EPA_TO15	8 Jan 2013 03:29
28	14	01071328.d	800.	1212722-016A	SAMP EPA_TO15	8 Jan 2013 04:14
29	14	01071329.d	800.	1212722-016A	data not used	8 Jan 2013 04:59
30	15	01071330.d	800.	1212722-022A	data not used	8 Jan 2013 05:44
31	1	01071331.d	1.	RLVS VOA1 010713	RLVS EPA_TO15	8 Jan 2013 06:27

RTI Laboratories

ANALYTICAL RUN Summary

16-Jan-13

RunNo 55200

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1088025	BFB VOA1 010713	BFB_TUNE	TUNE	\\1\DATA\010713\	1/7/2013 8:33:00	1	R55200		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		76.3	76.3		100	0	0	0	0	0	76%	50	200	0%	
175	M		7.2	7.2		100	0	0	0	0	0	7%	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		23	23		100	0	0	0	0	0	23%	8	40	0%	
75	M		47.6	47.6		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
1088026	CCV VOA1 010713	EPA_TO15	CCV	\\1\DATA\010713\	1/7/2013 9:58:00	1	R55200		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	10.55	10.55		9.6	0	0	0.107	1	50	110%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.09	10.09		10	0	0	0.211	1	50	101%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	9.82	9.82		9.8	0	0	0.108	1	50	100%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.45	9.45		9.8	0	0	0.2	1	50	96%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.29	10.29		9.7	0	0	0.111	1	50	106%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.18	10.18		9.9	0	0	0.097	1	50	103%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	8.56	8.56		9.1	0	0	0.271	1	50	94%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.03	10.03		9.8	0	0	0.245	1	50	102%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.31	9.31		9.6	0	0	0.186	1	50	97%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.45	9.45		9.7	0	0	0.208	1	50	97%	70	130	0%	
1,2-Dichloroethane	A	ppbv	10.92	10.92		9.7	0	0	0.196	1	50	113%	70	130	0%	
1,2-Dichloropropane	A	ppbv	10.04	10.04		9.8	0	0	0.224	1	50	102%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	10.08	10.08		9.7	0	0	0.24	1	50	104%	70	130	0%	
1,3-Butadiene	A	ppbv	10.87	10.87		9.8	0	0	0.152	1	50	111%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.51	9.51		9.7	0	0	0.202	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
1088026	CCV VOA1 010713	EPA_TO15	CCV	\\1\DATA\010713\	1/7/2013 9:58:00	1	R55200		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.46	9.46		9.6	0	0	0.194	1	50	99%	70	130	0%	
1,4-Dioxane	A	ppbv	9.23	9.23		9.6	0	0	0.128	1	50	96%	70	130	0%	
2-Butanone	A	ppbv	10.75	10.75		9.9	0	0	0.287	1	50	109%	70	130	0%	
2-Hexanone	A	ppbv	10.24	10.24		9.8	0	0	0.135	1	50	104%	70	130	0%	
2-Propanol	A	ppbv	10.28	10.28		10.1	0	0	0.329	1	50	102%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	9.87	9.87		10	0	0	0.157	1	50	99%	70	130	0%	
Acetone	A	ppbv	10.48	10.48		10	0	0	0.43	1	50	105%	70	130	0%	
Benzene	A	ppbv	10.17	10.17		9.6	0	0	0.126	1	50	106%	70	130	0%	
Benzyl chloride	A	ppbv	10.04	10.04		9.7	0	0	0.155	1	50	104%	70	130	0%	
Bromodichloromethane	A	ppbv	9.66	9.66		9.6	0	0	0.156	1	50	101%	70	130	0%	
Bromoform	A	ppbv	10.09	10.09		9.6	0	0	0.197	1	50	105%	70	130	0%	
Bromomethane	A	ppbv	8.63	8.63		9.3	0	0	0.075	1	50	93%	70	130	0%	
Carbon disulfide	A	ppbv	9.54	9.54		9.7	0	0	0.093	1	50	98%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.9	9.9		9.5	0	0	0.114	1	50	104%	70	130	0%	
Chlorobenzene	A	ppbv	10.12	10.12		9.9	0	0	0.275	1	50	102%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.77	9.77		9.2	0	0	0.165	1	50	106%	70	130	0%	
Chloroethane	A	ppbv	9.13	9.13		9.8	0	0	0.063	1	50	93%	70	130	0%	
Chloroform	A	ppbv	10.66	10.66		9.4	0	0	0.126	1	50	113%	70	130	0%	
Chloromethane	A	ppbv	10.08	10.08		9.8	0	0	0.104	1	50	103%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.75	9.75		9.8	0	0	0.107	1	50	99%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	9.48	9.48		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	9.14	9.14		9.2	0	0	0.086	1	50	99%	70	130	0%	
Ethanol	A	ppbv	9.03	9.03		9.2	0	0	1.962	5	50	98%	70	130	0%	
Ethyl acetate	A	ppbv	10.34	10.34		9.8	0	0	0.157	1	50	106%	70	130	0%	
Ethylbenzene	A	ppbv	10.51	10.51		9.8	0	0	0.737	2	50	107%	70	130	0%	
Heptane	A	ppbv	11.35	11.35		9.9	0	0	0.249	1	50	115%	70	130	0%	
Hexachlorobutadiene	A	ppbv	7.98	7.98		9.4	0	0	0.374	2	50	85%	70	130	0%	
m,p-Xylene	A	ppbv	23.21	23.21		19.2	0	0	0.524	2	100	121%	70	130	0%	
Methylene chloride	A	ppbv	10.33	10.33		10	0	0	2.077	5	50	103%	70	130	0%	
n-Hexane	A	ppbv	10.79	10.79		10.1	0	0	0.692	2	50	107%	70	130	0%	
Naphthalene	A	ppbv	8.55	8.55		9.2	0	0	0.247	1	50	93%	70	130	0%	
o-Xylene	A	ppbv	10.92	10.92		10	0	0	0.258	1	50	109%	70	130	0%	
Propylene	A	ppbv	10.3	10.3		10.2	0	0	0.075	1	50	101%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1088026	CCV VOA1 010713	EPA_TO15	CCV	[\1\DATA\010713\	1/7/2013 9:58:00	1	R55200		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	10.65	10.65		9.8	0	0	0.263	1	50	109%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	10.37	10.37		9.9	0	0	0.228	1	50	105%	70	130	0%	
Tetrachloroethene	A	ppbv	9.62	9.62		9.6	0	0	0.148	1	50	100%	70	130	0%	
Tetrahydrofuran	A	ppbv	11.41	11.41		10	0	0	0.201	1	50	114%	70	130	0%	
Toluene	A	ppbv	10.3	10.3		9.8	0	0	0.158	1	50	105%	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	9.1	9.1		9.1	0	0	0.171	1	50	100%	70	130	0%	
Trichloroethene	A	ppbv	9.5	9.5		9.6	0	0	0.119	1	50	99%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.44	9.44		9.6	0	0	0.148	1	50	98%	70	130	0%	
Vinyl acetate	A	ppbv	11.05	11.05		9.9	0	0	0.266	1	50	112%	70	130	0%	
Vinyl chloride	A	ppbv	10.03	10.03		9.4	0	0	0.072	1	50	107%	70	130	0%	
Xylenes, Total	C	ppbv	34.13	34.13		29.2	0	0	0.782	3	150	117%	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	12.43	12.43		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
1088027	RLVS VOA1 010713	EPA_TO15	RLVS	[\1\DATA\010713\	1/7/2013 10:41:0	1	R55200		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	0.93	0.93		0.996	0	0	0.107	1	50	93%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	0.91	0.91		1	0	0	0.211	1	50	91%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.93	0.93		0.98	0	0	0.108	1	50	95%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.76	0.76		0.98	0	0	0.2	1	50	78%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.05	1.05		0.97	0	0	0.111	1	50	108%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1.05	1.05		0.99	0	0	0.097	1	50	106%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.08	1.08		0.91	0	0	0.271	1	50	119%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	0.88	0.88		0.98	0	0	0.245	1	50	90%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.74	0.74		0.96	0	0	0.186	1	50	77%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	0.9	0.9		0.97	0	0	0.208	1	50	93%	70	130	0%	
1,2-Dichloroethane	A	ppbv	1.08	1.08		0.97	0	0	0.196	1	50	111%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.89	0.89		0.98	0	0	0.224	1	50	91%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\010713\01071303.D Vial: 3
Acq On : 7 Jan 2013 9:58 am Operator: RACHEL HILL
Sample : CCV VOA1 010713 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
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	101	0.00
2	T	Propylene	1.423	1.437	-1.0	93	0.00
3	T	Dichlorodifluoromethane	3.682	3.656	0.7	90	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.327	2.262	2.8	88	0.00
5	T	Chloromethane	1.465	1.555	-6.1	94	0.00
6	T	Vinyl chloride	1.907	2.035	-6.7	92	0.00
7	T	1,3-Butadiene	1.437	1.594	-10.9	95	0.00
8	T	Bromomethane	1.368	1.269	7.2	90	0.00
9	T	Chloroethane	0.836	0.829	0.8	91	0.00
10	T	Trichlorofluoromethane	3.406	3.350	1.6	90	0.00
11	T	Ethanol	0.479	0.470	1.9	92	0.00
12	T	Freon113	2.404	2.408	-0.2	89	0.00
13	T	1,1-Dichloroethene	2.139	2.199	-2.8	91	0.00
14	T	Acetone	2.405	2.521	-4.8	91	0.00
15	T	Carbon disulfide	3.094	3.044	1.6	89	0.00
16	T	2-Propanol	2.238	2.278	-1.8	91	0.00
17	T	Methylene chloride	1.655	1.710	-3.3	93	0.00
18	T	tert-Butyl Methyl Ether	3.300	3.458	-4.8	90	0.00
19	T	trans-1,2-Dichloroethene	1.956	2.032	-3.9	91	0.00
20	T	n-Hexane	2.274	2.429	-6.8	94	0.00
21	T	1,1-Dichloroethane	2.435	2.584	-6.1	92	0.00
22	T	Vinyl acetate	3.745	4.180	-11.6	91	0.00
23	T	cis-1,2-Dichloroethene	1.273	1.267	0.5	90	0.00
24	T	2-Butanone	2.580	2.802	-8.6	94	0.00
25	T	Ethyl acetate	3.229	3.406	-5.5	91	0.00
26	T	Tetrahydrofuran	1.706	1.948	-14.2	94	0.00
27	T	Chloroform	2.633	2.865	-8.8	92	0.00
28	T	1,1,1-Trichloroethane	2.624	2.884	-9.9	91	0.00
29	T	Cyclohexane	2.399	2.741	-14.3	94	0.00
30	T	Carbon tetrachloride	2.515	2.621	-4.2	90	0.00
31	T	Benzene	3.755	3.979	-6.0	93	0.00
32	T	1,2-Dichloroethane	1.728	1.946	-12.6	93	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	103	0.00
34	T	Heptane	0.894	1.025	-14.7	99	0.00
35	T	Trichloroethene	0.516	0.510	1.2	91	0.00
36	T	1,2-Dichloropropane	0.485	0.497	-2.5	92	0.00
37	T	1,4-Dioxane	0.215	0.206	4.2	89	0.00
38	T	Bromodichloromethane	0.844	0.849	-0.6	91	0.00
39	T	cis-1,3-Dichloropropene	0.696	0.695	0.1	91	0.00
40	T	4-Methyl-2-pentanone	0.365	0.360	1.4	90	0.00
41	T	Toluene	1.364	1.434	-5.1	96	0.00
42	T	trans-1,3-Dichloropropene	0.634	0.633	0.2	91	0.00
43	T	1,1,2-Trichloroethane	0.470	0.454	3.4	89	0.00
44	T	Tetrachloroethene	0.652	0.653	-0.2	89	0.00
45	T	2-Hexanone	0.803	0.839	-4.5	92	0.00
46	T	Chlorodibromomethane	0.755	0.753	0.3	89	0.00
47	T	1,2-Dibromoethane	0.679	0.658	3.1	90	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	101	0.00
49	T	Chlorobenzene	1.175	1.202	-2.3	90	0.00
50	T	Ethylbenzene	2.023	2.170	-7.3	92	0.00
51	T	m,p-Xylene	1.550	1.873	-20.8	94	0.00
52	T	o-Xylene	1.610	1.758	-9.2	92	0.00
53	T	Styrene	1.159	1.260	-8.7	92	0.00
54	T	Bromoform	0.776	0.815	-5.0	90	0.00
55	S	4-Bromofluorobenzene	0.619	0.615	0.6	101	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\010713\01071303.D Vial: 3
Acq On : 7 Jan 2013 9:58 am Operator: RACHEL HILL
Sample : CCV VOA1 010713 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
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	1.030	1.040	-1.0	90	0.00
57	T	4-Ethyltoluene	1.901	1.968	-3.5	91	0.00
58	T	1,3,5-Trimethylbenzene	1.617	1.680	-3.9	91	0.00
59	T	1,2,4-Trimethylbenzene	1.494	1.529	-2.3	91	0.00
60	T	1,3-Dichlorobenzene	0.783	0.768	1.9	93	0.00
61	T	1,4-Dichlorobenzene	0.726	0.715	1.5	94	0.00
62	T	Benzyl chloride	0.898	0.929	-3.5	95	0.00
63	T	1,2-Dichlorobenzene	0.634	0.617	2.7	94	0.00
64	T	1,2,4-Trichlorobenzene	0.183	0.172	6.0	106	0.00
65	T	Hexachlorobutadiene	0.392	0.332	15.3	97	0.00
66		Naphthalene	0.332	0.309	6.9	107	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010713\01071303.D Vial: 3
Acq On : 7 Jan 2013 9:58 am Operator: RACHEL HILL
Sample : CCV VOA1 010713 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 7 10:23 2013 Quant Results File: 010513V1.RES

Quant Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
Response via : Initial Calibration
DataAcq Meth : 010513V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.52	130	180393	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.62	114	601060	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.47	117	470783	12.50	ppbv		0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.12	95	289700	12.43	ppbv		0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 99.44%

Target Compounds							Qvalue
2) Propylene	5.44	41	211505	10.30	ppbv		96
3) Dichlorodifluoromethane	5.51	85	485454	9.14	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.78	135	310150	9.23	ppbv	#	59
5) Chloromethane	5.94	50	213158	10.08	ppbv		98
6) Vinyl chloride	6.15	62	276108	10.03	ppbv		98
7) 1,3-Butadiene	6.21	39	225403	10.87	ppbv		97
8) Bromomethane	6.78	94	170336	8.63	ppbv		98
9) Chloroethane	6.93	64	110089	9.13	ppbv		96
10) Trichlorofluoromethane	7.27	101	464135	9.44	ppbv		98
11) Ethanol	7.50	45	62380	9.03	ppbv		99
12) Freon113	7.93	101	340573	9.82	ppbv		86
13) 1,1-Dichloroethene	8.02	61	314200	10.18	ppbv	#	83
14) Acetone	8.12	43	363786	10.48	ppbv	#	90
15) Carbon disulfide	8.40	76	426074	9.54	ppbv	#	99
16) 2-Propanol	8.17	45	332018	10.28	ppbv	#	1
17) Methylene chloride	8.69	49	246710	10.33	ppbv	#	77
18) tert-Butyl Methyl Ether	8.89	73	494014	10.37	ppbv	#	88
19) trans-1,2-Dichloroethene	8.97	61	287384	10.18	ppbv	#	78
20) n-Hexane	9.15	57	353982	10.79	ppbv	#	90
21) 1,1-Dichloroethane	9.53	63	361695	10.29	ppbv	#	97
22) Vinyl acetate	9.46	43	597256	11.05	ppbv	#	95
23) cis-1,2-Dichloroethene	10.22	96	179210	9.75	ppbv	#	75
24) 2-Butanone	10.18	43	400391	10.75	ppbv	#	88
25) Ethyl acetate	10.14	43	481725	10.34	ppbv	#	98
26) Tetrahydrofuran	10.52	42	281055	11.41	ppbv		87
27) Chloroform	10.54	83	405230	10.66	ppbv		99
28) 1,1,1-Trichloroethane	10.79	97	399521	10.55	ppbv	#	93
29) Cyclohexane	10.80	56	387679	11.20	ppbv	#	85
30) Carbon tetrachloride	10.95	117	359342	9.90	ppbv		98
31) Benzene	11.23	78	551222	10.17	ppbv		93
32) 1,2-Dichloroethane	11.31	62	272349	10.92	ppbv	#	97
34) Heptane	11.28	43	487905	11.35	ppbv	#	88
35) Trichloroethene	11.96	130	235466	9.50	ppbv		93
36) 1,2-Dichloropropane	12.32	63	233972	10.04	ppbv		97
37) 1,4-Dioxane	12.40	88	95285	9.23	ppbv	#	78
38) Bromodichloromethane	12.61	83	392096	9.66	ppbv		98
39) cis-1,3-Dichloropropene	13.16	75	317514	9.48	ppbv		96
40) 4-Methyl-2-pentanone	13.27	58	173108	9.87	ppbv	#	90
41) Toluene	13.56	91	675736	10.30	ppbv		98
42) trans-1,3-Dichloropropene	13.87	75	277160	9.10	ppbv		95
43) 1,1,2-Trichloroethane	14.14	97	213710	9.45	ppbv		95
44) Tetrachloroethene	14.26	166	301327	9.62	ppbv		96
45) 2-Hexanone	14.34	43	395368	10.24	ppbv		95
46) Chlorodibromomethane	14.69	129	354977	9.77	ppbv		99
47) 1,2-Dibromoethane	14.92	107	303926	9.31	ppbv		100
49) Chlorobenzene	15.51	112	448095	10.12	ppbv	#	85
50) Ethylbenzene	15.56	91	800934	10.51	ppbv		93
51) m,p-Xylene	15.71	91	1354402	23.21	ppbv		93
52) o-Xylene	16.30	91	662146	10.92	ppbv	#	90

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010713\01071303.D Vial: 3
Acq On : 7 Jan 2013 9:58 am Operator: RACHEL HILL
Sample : CCV VOA1 010713 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 7 10:23 2013 Quant Results File: 010513V1.RES

Quant Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
Response via : Initial Calibration
DataAcq Meth : 010513V1

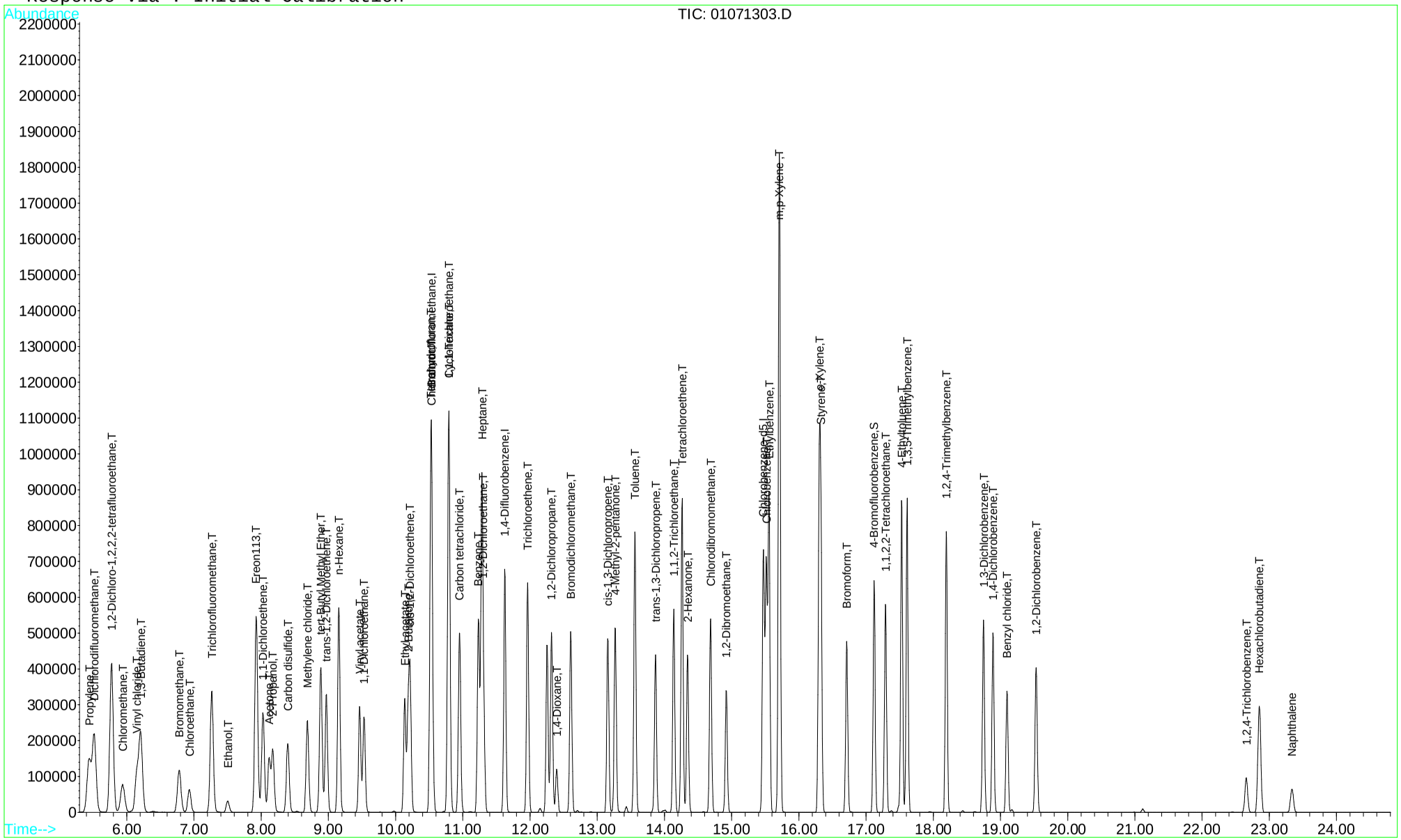
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.33	104	465070	10.65	ppbv		96
54)	Bromoform	16.71	173	294807	10.09	ppbv	#	98
56)	1,1,2,2-Tetrachloroethane	17.29	83	391634	10.09	ppbv	#	98
57)	4-Ethyltoluene	17.53	105	726338	10.15	ppbv		93
58)	1,3,5-Trimethylbenzene	17.61	105	613694	10.08	ppbv		93
59)	1,2,4-Trimethylbenzene	18.19	105	564340	10.03	ppbv		94
60)	1,3-Dichlorobenzene	18.75	146	280392	9.51	ppbv	#	95
61)	1,4-Dichlorobenzene	18.89	146	258459	9.46	ppbv	#	94
62)	Benzyl chloride	19.10	91	339553	10.04	ppbv		94
63)	1,2-Dichlorobenzene	19.53	146	225531	9.45	ppbv	#	94
64)	1,2,4-Trichlorobenzene	22.66	180	58906	8.56	ppbv		98
65)	Hexachlorobutadiene	22.85	225	117695	7.98	ppbv		99
66)	Naphthalene	23.34	128	107018	8.55	ppbv		98

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010713\01071303.D Vial: 3
Acq On : 7 Jan 2013 9:58 am Operator: RACHEL HILL
Sample : CCV VOA1 010713 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 7 10:23 2013 Quant Results File: 010513V1.RES

Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
Response via : Initial Calibration



Injection Log

Directory: C:\HPCHEM\1\DATA\010813

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	01081301.d	1.	BFB VOA1 010813	TUNE BFB_TUNE	8 Jan 2013 07:46
2	2	01081302.d	1.	CCV VOA1 010813	data not used	8 Jan 2013 08:29
3	3	01081303.d	1.	CCV VOA1 010813	CCV EPA_TO15	8 Jan 2013 09:13
4	4	01081304.d	1.	RLVS VOA1 010813	RLVS EPA_TO15	8 Jan 2013 09:56
5	5	01081305.d	1.	MBLK/dbvcc69 VOA1 010813	MBLK EPA_TO15	8 Jan 2013 10:46
6	6	01081306.d	1.	dbvcc58 VOA1 010813	data not used	8 Jan 2013 11:34
7	7	01081307.d	400.	1212722-071A	data not used	8 Jan 2013 12:23
8	8	01081308.d	800.	1212722-072A	data not used	8 Jan 2013 13:08
9	9	01081309.d	800.	1212722-073A	data not used	8 Jan 2013 13:53
10	10	01081310.d	400.	1212722-078A	SAMP EPA_TO15	8 Jan 2013 14:41
11	11	01081311.d	400.	1212722-079A	SAMP EPA_TO15	8 Jan 2013 15:29
12	12	01081312.d	400.	1212722-080A	SAMP EPA_TO15	8 Jan 2013 16:18
13	13	01081313.d	8000.	1212722-038A	SAMP EPA_TO15	8 Jan 2013 17:00
14	14	01081314.d	8000.	1212722-016A	SAMP EPA_TO15	8 Jan 2013 17:41
15	1	01081315.d	400.	1212722-022A	SAMP EPA_TO15	8 Jan 2013 18:30
16	2	01081316.d	800.	1212722-017A	SAMP EPA_TO15	8 Jan 2013 19:15
17	2	01081317.d	800.	1212722-017ADUP	DUP EPA_TO15	8 Jan 2013 19:59
18	3	01081318.d	400.	1212722-023A	SAMP EPA_TO15	8 Jan 2013 20:47
19	4	01081319.d	1600.	1212722-018A	SAMP EPA_TO15	8 Jan 2013 21:31
20	6	01081320.d	800.	1212722-024A	SAMP EPA_TO15	8 Jan 2013 22:16
21	7	01081321.d	800.	1212722-019A	SAMP EPA_TO15	8 Jan 2013 23:01
22	7	01081322.d	800.	1212722-019A	data not used	8 Jan 2013 23:45
23	9	01081323.d	400.	1212722-025A	SAMP EPA_TO15	9 Jan 2013 00:34
24	10	01081324.d	400.	1212722-026A	SAMP EPA_TO15	9 Jan 2013 01:22
25	11	01081325.d	8000.	1212722-020A	SAMP EPA_TO15	9 Jan 2013 02:04
26	12	01081326.d	8000.	1212722-021A	SAMP EPA_TO15	9 Jan 2013 02:46
27	13	01081327.d	1600.	1212722-027A	SAMP EPA_TO15	9 Jan 2013 03:29
28	15	01081328.d	800.	1212722-077A	SAMP EPA_TO15	9 Jan 2013 04:14
29	16	01081329.d	40.	1212722-074A	SAMP EPA_TO15	9 Jan 2013 04:55
30	8	01081330.d	800.	1212722-081A	SAMP EPA_TO15	9 Jan 2013 05:40
31	4	01081331.d	1.	RLVS2 VOA1 010813	RLVS EPA_TO15	9 Jan 2013 06:23

RTI Laboratories

ANALYTICAL RUN Summary

16-Jan-13

RunNo 55245

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1088945	BFB VOA1 010813	BFB_TUNE	TUNE	\\1\DATA\010813\	1/8/2013 7:46:00	1	R55245		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		73.3	73.3		100	0	0	0	0	0	73%	50	200	0%	
175	M		7.3	7.3		100	0	0	0	0	0	7%	4	9	0%	
176	M		96.5	96.5		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		24.6	24.6		100	0	0	0	0	0	25%	8	40	0%	
75	M		48.5	48.5		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		6.9	6.9		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
1088946	CCV VOA1 010813	EPA_TO15	CCV	\\1\DATA\010813\	1/8/2013 9:13:00	1	R55245		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	10.76	10.76		9.6	0	0	0.107	1	50	112%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.47	10.47		10	0	0	0.211	1	50	105%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.04	10.04		9.8	0	0	0.108	1	50	102%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.74	9.74		9.8	0	0	0.2	1	50	99%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.8	10.8		9.7	0	0	0.111	1	50	111%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.76	10.76		9.9	0	0	0.097	1	50	109%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	7.47	7.47		9.1	0	0	0.271	1	50	82%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.18	10.18		9.8	0	0	0.245	1	50	104%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.62	9.62		9.6	0	0	0.186	1	50	100%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.26	9.26		9.7	0	0	0.208	1	50	95%	70	130	0%	
1,2-Dichloroethane	A	ppbv	11.32	11.32		9.7	0	0	0.196	1	50	117%	70	130	0%	
1,2-Dichloropropane	A	ppbv	10.67	10.67		9.8	0	0	0.224	1	50	109%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	10.32	10.32		9.7	0	0	0.24	1	50	106%	70	130	0%	
1,3-Butadiene	A	ppbv	11.68	11.68		9.8	0	0	0.152	1	50	119%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.55	9.55		9.7	0	0	0.202	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
1088946	CCV VOA1 010813	EPA_TO15	CCV	\\1\DATA\010813\	1/8/2013 9:13:00	1	R55245		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.38	9.38		9.6	0	0	0.194	1	50	98%	70	130	0%	
1,4-Dioxane	A	ppbv	9.53	9.53		9.6	0	0	0.128	1	50	99%	70	130	0%	
2-Butanone	A	ppbv	10.99	10.99		9.9	0	0	0.287	1	50	111%	70	130	0%	
2-Hexanone	A	ppbv	11.19	11.19		9.8	0	0	0.135	1	50	114%	70	130	0%	
2-Propanol	A	ppbv	10.84	10.84		10.1	0	0	0.329	1	50	107%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.56	10.56		10	0	0	0.157	1	50	106%	70	130	0%	
Acetone	A	ppbv	11.12	11.12		10	0	0	0.43	1	50	111%	70	130	0%	
Benzene	A	ppbv	10.34	10.34		9.6	0	0	0.126	1	50	108%	70	130	0%	
Benzyl chloride	A	ppbv	9.75	9.75		9.7	0	0	0.155	1	50	101%	70	130	0%	
Bromodichloromethane	A	ppbv	9.95	9.95		9.6	0	0	0.156	1	50	104%	70	130	0%	
Bromoform	A	ppbv	10.21	10.21		9.6	0	0	0.197	1	50	106%	70	130	0%	
Bromomethane	A	ppbv	8.74	8.74		9.3	0	0	0.075	1	50	94%	70	130	0%	
Carbon disulfide	A	ppbv	9.83	9.83		9.7	0	0	0.093	1	50	101%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.92	9.92		9.5	0	0	0.114	1	50	104%	70	130	0%	
Chlorobenzene	A	ppbv	10.57	10.57		9.9	0	0	0.275	1	50	107%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.96	9.96		9.2	0	0	0.165	1	50	108%	70	130	0%	
Chloroethane	A	ppbv	9.53	9.53		9.8	0	0	0.063	1	50	97%	70	130	0%	
Chloroform	A	ppbv	11.01	11.01		9.4	0	0	0.126	1	50	117%	70	130	0%	
Chloromethane	A	ppbv	10.31	10.31		9.8	0	0	0.104	1	50	105%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.96	9.96		9.8	0	0	0.107	1	50	102%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	9.85	9.85		9.5	0	0	0.166	1	50	104%	70	130	0%	
Cyclohexane	A	ppbv	11.68	11.68		9.8	0	0	0.684	2	50	119%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.17	9.17		9.2	0	0	0.086	1	50	100%	70	130	0%	
Ethanol	A	ppbv	9.46	9.46		9.2	0	0	1.962	5	50	103%	70	130	0%	
Ethyl acetate	A	ppbv	11.28	11.28		9.8	0	0	0.157	1	50	115%	70	130	0%	
Ethylbenzene	A	ppbv	10.77	10.77		9.8	0	0	0.737	2	50	110%	70	130	0%	
Heptane	A	ppbv	11.73	11.73		9.9	0	0	0.249	1	50	118%	70	130	0%	
Hexachlorobutadiene	A	ppbv	7.22	7.22		9.4	0	0	0.374	2	50	77%	70	130	0%	
m,p-Xylene	A	ppbv	24.22	24.22		19.2	0	0	0.524	2	100	126%	70	130	0%	
Methylene chloride	A	ppbv	11.09	11.09		10	0	0	2.077	5	50	111%	70	130	0%	
n-Hexane	A	ppbv	11.2	11.2		10.1	0	0	0.692	2	50	111%	70	130	0%	
Naphthalene	A	ppbv	7.48	7.48		9.2	0	0	0.247	1	50	81%	70	130	0%	
o-Xylene	A	ppbv	11.19	11.19		10	0	0	0.258	1	50	112%	70	130	0%	
Propylene	A	ppbv	10.67	10.67		10.2	0	0	0.075	1	50	105%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1088946	CCV VOA1 010813	EPA_TO15	CCV	[\1\DATA\010813\	1/8/2013 9:13:00	1	R55245		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	10.83	10.83		9.8	0	0	0.263	1	50	111%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	10.67	10.67		9.9	0	0	0.228	1	50	108%	70	130	0%	
Tetrachloroethene	A	ppbv	9.71	9.71		9.6	0	0	0.148	1	50	101%	70	130	0%	
Tetrahydrofuran	A	ppbv	12.26	12.26		10	0	0	0.201	1	50	123%	70	130	0%	
Toluene	A	ppbv	10.21	10.21		9.8	0	0	0.158	1	50	104%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.63	10.63		9.8	0	0	0.117	1	50	108%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.44	9.44		9.1	0	0	0.171	1	50	104%	70	130	0%	
Trichloroethene	A	ppbv	9.72	9.72		9.6	0	0	0.119	1	50	101%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.67	9.67		9.6	0	0	0.148	1	50	101%	70	130	0%	
Vinyl acetate	A	ppbv	11.77	11.77		9.9	0	0	0.266	1	50	119%	70	130	0%	
Vinyl chloride	A	ppbv	10.15	10.15		9.4	0	0	0.072	1	50	108%	70	130	0%	
Xylenes, Total	C	ppbv	35.41	35.41		29.2	0	0	0.782	3	150	121%	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	12.36	12.36		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
1088947	RLVS VOA1 010813	EPA_TO15	RLVS	[\1\DATA\010813\	1/8/2013 9:56:00	1	R55245		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	0.96	0.96		0.996	0	0	0.107	1	50	96%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	0.97	0.97		1	0	0	0.211	1	50	97%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.96	0.96		0.98	0	0	0.108	1	50	98%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.81	0.81		0.98	0	0	0.2	1	50	83%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.11	1.11		0.97	0	0	0.111	1	50	114%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1.11	1.11		0.99	0	0	0.097	1	50	112%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.58	1.58		0.91	0	0	0.271	1	50	174%	70	130	0%	S
1,2,4-Trimethylbenzene	A	ppbv	0.96	0.96		0.98	0	0	0.245	1	50	98%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.74	0.74		0.96	0	0	0.186	1	50	77%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	1.08	1.08		0.97	0	0	0.208	1	50	111%	70	130	0%	
1,2-Dichloroethane	A	ppbv	1.12	1.12		0.97	0	0	0.196	1	50	115%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.91	0.91		0.98	0	0	0.224	1	50	93%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\010813\01081303.D Vial: 3
Acq On : 8 Jan 2013 9:13 am Operator: RACHEL HILL
Sample : CCV VOA1 010813 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
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	87	0.00
2	T	Propylene	1.423	1.489	-4.6	83	0.00
3	T	Dichlorodifluoromethane	3.682	3.670	0.3	78	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.327	2.191	5.8	74	0.00
5	T	Chloromethane	1.465	1.590	-8.5	83	0.00
6	T	Vinyl chloride	1.907	2.059	-8.0	81	0.00
7	T	1,3-Butadiene	1.437	1.712	-19.1	88	0.00
8	T	Bromomethane	1.368	1.285	6.1	79	0.00
9	T	Chloroethane	0.836	0.865	-3.5	82	0.00
10	T	Trichlorofluoromethane	3.406	3.431	-0.7	80	0.00
11	T	Ethanol	0.479	0.492	-2.7	83	0.00
12	T	Freon113	2.404	2.464	-2.5	78	0.00
13	T	1,1-Dichloroethene	2.139	2.325	-8.7	83	0.00
14	T	Acetone	2.405	2.674	-11.2	84	0.00
15	T	Carbon disulfide	3.094	3.135	-1.3	79	0.00
16	T	2-Propanol	2.238	2.401	-7.3	83	0.00
17	T	Methylene chloride	1.655	1.835	-10.9	86	0.00
18	T	tert-Butyl Methyl Ether	3.300	3.556	-7.8	80	0.00
19	T	trans-1,2-Dichloroethene	1.956	2.122	-8.5	82	0.00
20	T	n-Hexane	2.274	2.522	-10.9	84	0.00
21	T	1,1-Dichloroethane	2.435	2.710	-11.3	84	0.00
22	T	Vinyl acetate	3.745	4.451	-18.9	84	0.00
23	T	cis-1,2-Dichloroethene	1.273	1.294	-1.6	79	0.00
24	T	2-Butanone	2.580	2.864	-11.0	83	0.00
25	T	Ethyl acetate	3.229	3.716	-15.1	86	0.00
26	T	Tetrahydrofuran	1.706	2.092	-22.6	88	0.00
27	T	Chloroform	2.633	2.959	-12.4	82	0.00
28	T	1,1,1-Trichloroethane	2.624	2.940	-12.0	80	0.00
29	T	Cyclohexane	2.399	2.858	-19.1	85	0.00
30	T	Carbon tetrachloride	2.515	2.627	-4.5	78	0.00
31	T	Benzene	3.755	4.046	-7.7	82	0.00
32	T	1,2-Dichloroethane	1.728	2.016	-16.7	83	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	88	0.00
34	T	Heptane	0.894	1.060	-18.6	87	0.00
35	T	Trichloroethene	0.516	0.522	-1.2	80	0.00
36	T	1,2-Dichloropropane	0.485	0.528	-8.9	84	0.00
37	T	1,4-Dioxane	0.215	0.213	0.9	79	0.00
38	T	Bromodichloromethane	0.844	0.875	-3.7	80	0.00
39	T	cis-1,3-Dichloropropene	0.696	0.722	-3.7	81	0.00
40	T	4-Methyl-2-pentanone	0.365	0.385	-5.5	83	0.00
41	T	Toluene	1.364	1.421	-4.2	81	0.00
42	T	trans-1,3-Dichloropropene	0.634	0.658	-3.8	81	0.00
43	T	1,1,2-Trichloroethane	0.470	0.468	0.4	79	0.00
44	T	Tetrachloroethene	0.652	0.659	-1.1	77	0.00
45	T	2-Hexanone	0.803	0.916	-14.1	86	0.00
46	T	Chlorodibromomethane	0.755	0.768	-1.7	78	0.00
47	T	1,2-Dibromoethane	0.679	0.680	-0.1	79	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	86	0.00
49	T	Chlorobenzene	1.175	1.255	-6.8	80	0.00
50	T	Ethylbenzene	2.023	2.224	-9.9	80	0.00
51	T	m,p-Xylene	1.550	1.955	-26.1	83	0.00
52	T	o-Xylene	1.610	1.802	-11.9	80	0.00
53	T	Styrene	1.159	1.281	-10.5	80	0.00
54	T	Bromoform	0.776	0.826	-6.4	78	0.00
55	S	4-Bromofluorobenzene	0.619	0.612	1.1	86	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\010813\01081303.D Vial: 3
Acq On : 8 Jan 2013 9:13 am Operator: RACHEL HILL
Sample : CCV VOA1 010813 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
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	1.030	1.079	-4.8	80	0.00
57	T	4-Ethyltoluene	1.901	2.017	-6.1	80	0.00
58	T	1,3,5-Trimethylbenzene	1.617	1.720	-6.4	79	0.00
59	T	1,2,4-Trimethylbenzene	1.494	1.552	-3.9	79	0.00
60	T	1,3-Dichlorobenzene	0.783	0.771	1.5	80	0.00
61	T	1,4-Dichlorobenzene	0.726	0.709	2.3	79	0.00
62	T	Benzyl chloride	0.898	0.903	-0.6	78	0.00
63	T	1,2-Dichlorobenzene	0.634	0.605	4.6	79	0.00
64	T	1,2,4-Trichlorobenzene	0.183	0.150	18.0	79	0.00
65	T	Hexachlorobutadiene	0.392	0.301	23.2	75	0.00
66		Naphthalene	0.332	0.270	18.7	80	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010813\01081303.D Vial: 3
Acq On : 8 Jan 2013 9:13 am Operator: RACHEL HILL
Sample : CCV VOA1 010813 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 8 9:38 2013 Quant Results File: 010513V1.RES

Quant Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
Response via : Initial Calibration
DataAcq Meth : 010513V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.53	130	156040	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.62	114	513862	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.47	117	399898	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.12	95	244647	12.36	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 98.88%

Target Compounds						Qvalue
2) Propylene	5.44	41	189596	10.67	ppbv	96
3) Dichlorodifluoromethane	5.52	85	421537	9.17	ppbv	98
4) 1,2-Dichloro-1,2,2,2-tetra	5.77	135	259826	8.94	ppbv #	55
5) Chloromethane	5.94	50	188609	10.31	ppbv	98
6) Vinyl chloride	6.15	62	241577	10.15	ppbv	99
7) 1,3-Butadiene	6.21	39	209408	11.68	ppbv	95
8) Bromomethane	6.78	94	149224	8.74	ppbv #	98
9) Chloroethane	6.93	64	99381	9.53	ppbv	95
10) Trichlorofluoromethane	7.26	101	411146	9.67	ppbv #	98
11) Ethanol	7.50	45	56514	9.46	ppbv	99
12) Freon113	7.92	101	301424	10.04	ppbv #	84
13) 1,1-Dichloroethene	8.03	61	287302	10.76	ppbv #	82
14) Acetone	8.11	43	333791	11.12	ppbv #	91
15) Carbon disulfide	8.39	76	379616	9.83	ppbv #	99
16) 2-Propanol	8.17	45	302752	10.84	ppbv #	1
17) Methylene chloride	8.68	49	229063	11.09	ppbv #	75
18) tert-Butyl Methyl Ether	8.89	73	439409	10.67	ppbv #	87
19) trans-1,2-Dichloroethene	8.97	61	259641	10.63	ppbv #	77
20) n-Hexane	9.16	57	318009	11.20	ppbv #	89
21) 1,1-Dichloroethane	9.53	63	328138	10.80	ppbv #	96
22) Vinyl acetate	9.46	43	550060	11.77	ppbv #	94
23) cis-1,2-Dichloroethene	10.22	96	158338	9.96	ppbv #	74
24) 2-Butanone	10.19	43	353949	10.99	ppbv #	89
25) Ethyl acetate	10.13	43	454539	11.28	ppbv #	100
26) Tetrahydrofuran	10.52	42	261138	12.26	ppbv #	85
27) Chloroform	10.54	83	361970	11.01	ppbv	99
28) 1,1,1-Trichloroethane	10.79	97	352340	10.76	ppbv #	93
29) Cyclohexane	10.79	56	349575	11.68	ppbv #	83
30) Carbon tetrachloride	10.95	117	311517	9.92	ppbv	98
31) Benzene	11.23	78	484876	10.34	ppbv	93
32) 1,2-Dichloroethane	11.31	62	244165	11.32	ppbv #	97
34) Heptane	11.28	43	431225	11.73	ppbv #	86
35) Trichloroethene	11.96	130	206040	9.72	ppbv	92
36) 1,2-Dichloropropane	12.32	63	212624	10.67	ppbv	96
37) 1,4-Dioxane	12.40	88	84035	9.53	ppbv #	74
38) Bromodichloromethane	12.61	83	345128	9.95	ppbv	98
39) cis-1,3-Dichloropropene	13.16	75	281952	9.85	ppbv	96
40) 4-Methyl-2-pentanone	13.27	58	158286	10.56	ppbv #	90
41) Toluene	13.56	91	572576	10.21	ppbv	97
42) trans-1,3-Dichloropropene	13.87	75	245968	9.44	ppbv #	95
43) 1,1,2-Trichloroethane	14.14	97	188346	9.74	ppbv	95
44) Tetrachloroethene	14.27	166	260235	9.71	ppbv	96
45) 2-Hexanone	14.34	43	369089	11.19	ppbv	94
46) Chlorodibromomethane	14.68	129	309334	9.96	ppbv	99
47) 1,2-Dibromoethane	14.92	107	268430	9.62	ppbv	100
49) Chlorobenzene	15.52	112	397396	10.57	ppbv #	85
50) Ethylbenzene	15.56	91	697191	10.77	ppbv	92
51) m,p-Xylene	15.71	91	1200987	24.22	ppbv	93
52) o-Xylene	16.30	91	576384	11.19	ppbv #	89

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010813\01081303.D Vial: 3
Acq On : 8 Jan 2013 9:13 am Operator: RACHEL HILL
Sample : CCV VOA1 010813 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 8 9:38 2013 Quant Results File: 010513V1.RES

Quant Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
Response via : Initial Calibration
DataAcq Meth : 010513V1

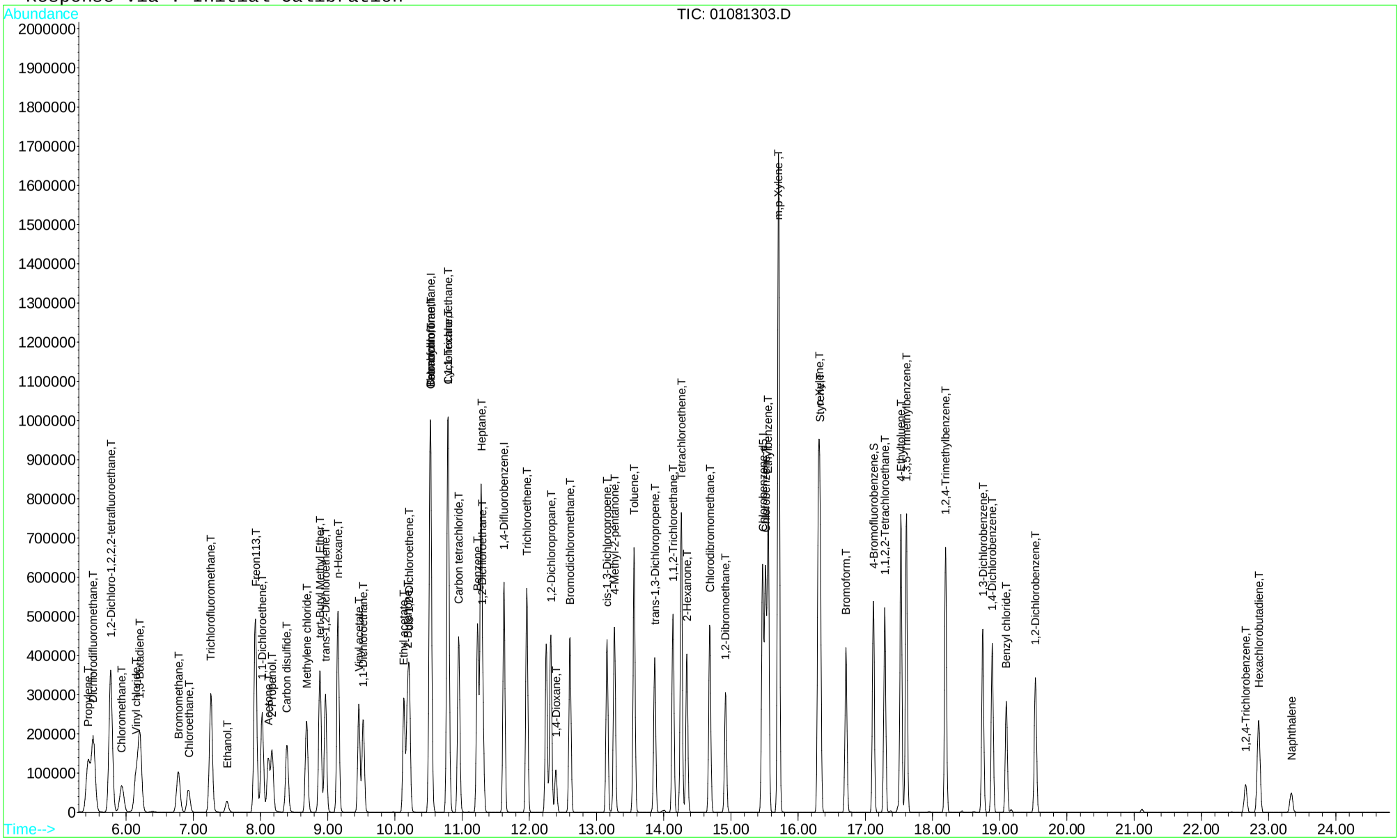
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.33	104	401712	10.83	ppbv		96
54)	Bromoform	16.71	173	253619	10.21	ppbv	#	98
56)	1,1,2,2-Tetrachloroethane	17.29	83	345175	10.47	ppbv	#	98
57)	4-Ethyltoluene	17.53	105	632280	10.40	ppbv		93
58)	1,3,5-Trimethylbenzene	17.61	105	533809	10.32	ppbv		93
59)	1,2,4-Trimethylbenzene	18.19	105	486486	10.18	ppbv		94
60)	1,3-Dichlorobenzene	18.75	146	239116	9.55	ppbv	#	94
61)	1,4-Dichlorobenzene	18.89	146	217662	9.38	ppbv	#	94
62)	Benzyl chloride	19.10	91	280205	9.75	ppbv		94
63)	1,2-Dichlorobenzene	19.53	146	187809	9.26	ppbv	#	94
64)	1,2,4-Trichlorobenzene	22.66	180	43646	7.47	ppbv		98
65)	Hexachlorobutadiene	22.85	225	90436	7.22	ppbv		100
66)	Naphthalene	23.34	128	79550	7.48	ppbv		98

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010813\01081303.D Vial: 3
Acq On : 8 Jan 2013 9:13 am Operator: RACHEL HILL
Sample : CCV VOA1 010813 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 8 9:38 2013 Quant Results File: 010513V1.RES

Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
Response via : Initial Calibration



Injection Log

Directory: C:\HPCHEM\1\DATA\010913

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	01091301.d	1.	BFB VOA1 010913	TUNE BFB_TUNE	9 Jan 2013 07:50
2	2	01091302.d	1.	CCV VOA1 010913	data not used	9 Jan 2013 08:33
3	3	01091303.d	1.	CCV VOA1 010913	CCV EPA_TO15	9 Jan 2013 09:35
4	4	01091304.d	1.	RLVS VOA1 010913	RLVS EPA_TO15	9 Jan 2013 10:19
5	5	01091305.d	1.	MBLK/dbvcc27 VOA1 010913	MBLK EPA_TO15	9 Jan 2013 11:08
6	6	01091306.d	8000.	1212722-019A	data not used	9 Jan 2013 11:50
7	7	01091307.d	8000.	1212722-017A	SAMP EPA_TO15	9 Jan 2013 12:32
8	8	01091308.d	40.	1212722-023A	SAMP EPA_TO15	9 Jan 2013 13:14
9	9	01091309.d	40.	1212722-071A	SAMP EPA_TO15	9 Jan 2013 13:56
10	10	01091310.d	40.	1212722-072A	SAMP EPA_TO15	9 Jan 2013 14:38
11	11	01091311.d	40.	1212722-073A	SAMP EPA_TO15	9 Jan 2013 15:19
12	12	01091312.d	800.	1212722-075A	SAMP EPA_TO15	9 Jan 2013 16:04
13	13	01091313.d	800.	1212722-076A	SAMP EPA_TO15	9 Jan 2013 16:46
14	14	01091314.d	1600.	1212722-083A	SAMP EPA_TO15	9 Jan 2013 17:30
15	10	01091315.d	1600.	1212722-082A	SAMP EPA_TO15	9 Jan 2013 18:13
16	1	01091316.d	400.	1212722-028A	SAMP EPA_TO15	9 Jan 2013 19:02
17	2	01091317.d	1600.	1212722-041A	SAMP EPA_TO15	9 Jan 2013 19:45
18	3	01091318.d	400.	1212722-029A	SAMP EPA_TO15	9 Jan 2013 20:34
19	4	01091319.d	800.	1212722-042A	SAMP EPA_TO15	9 Jan 2013 21:19
20	4	01091320.d	800.	1212722-042ADUP	DUP EPA_TO15	9 Jan 2013 22:04
21	6	01091321.d	200.	1212722-030A	SAMP EPA_TO15	9 Jan 2013 22:52
22	7	01091322.d	200.	1212722-031A	SAMP EPA_TO15	9 Jan 2013 23:40
23	11	01091323.d	800.	1212722-043A	SAMP EPA_TO15	10 Jan 2013 00:25
24	11	01091324.d	800.	1212722-043A	data not used	10 Jan 2013 01:11
25	12	01091325.d	1600.	1212722-044A	SAMP EPA_TO15	10 Jan 2013 01:54
26	13	01091326.d	1600.	1212722-032A	SAMP EPA_TO15	10 Jan 2013 02:37
27	14	01091327.d	1600.	1212722-046A	SAMP EPA_TO15	10 Jan 2013 03:20
28	15	01091328.d	1600.	1212722-045A	SAMP EPA_TO15	10 Jan 2013 04:03
29	1	01091329.d	1.	RLVS2 VOA1 010913	RLVS EPA_TO15	10 Jan 2013 04:46

RTI Laboratories

ANALYTICAL RUN Summary

16-Jan-13

RunNo 55285

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1089587	BFB VOA1 010913	BFB_TUNE	TUNE	\\1\DATA\010913\	1/9/2013 7:50:00	1	R55285		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		73.8	73.8		100	0	0	0	0	0	74%	50	200	0%	
175	M		7.1	7.1		100	0	0	0	0	0	7%	4	9	0%	
176	M		97.2	97.2		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		24.8	24.8		100	0	0	0	0	0	25%	8	40	0%	
75	M		49.4	49.4		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
1089588	CCV VOA1 010913	EPA_TO15	CCV	\\1\DATA\010913\	1/9/2013 9:35:00	1	R55285		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	10.59	10.59		9.6	0	0	0.107	1	50	110%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.93	10.93		10	0	0	0.211	1	50	109%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.07	10.07		9.8	0	0	0.108	1	50	103%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.93	9.93		9.8	0	0	0.2	1	50	101%	70	130	0%	
1,1-Dichloroethane	A	ppbv	10.95	10.95		9.7	0	0	0.111	1	50	113%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.92	10.92		9.9	0	0	0.097	1	50	110%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	8.65	8.65		9.1	0	0	0.271	1	50	95%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.67	10.67		9.8	0	0	0.245	1	50	109%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.82	9.82		9.6	0	0	0.186	1	50	102%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.79	9.79		9.7	0	0	0.208	1	50	101%	70	130	0%	
1,2-Dichloroethane	A	ppbv	11.16	11.16		9.7	0	0	0.196	1	50	115%	70	130	0%	
1,2-Dichloropropane	A	ppbv	10.98	10.98		9.8	0	0	0.224	1	50	112%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	10.61	10.61		9.7	0	0	0.24	1	50	109%	70	130	0%	
1,3-Butadiene	A	ppbv	12.26	12.26		9.8	0	0	0.152	1	50	125%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.82	9.82		9.7	0	0	0.202	1	50	101%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1089588	CCV VOA1 010913	EPA_TO15	CCV	\\1\DATA\010913\	1/9/2013 9:35:00	1	R55285		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.81	9.81		9.6	0	0	0.194	1	50	102%	70	130	0%	
1,4-Dioxane	A	ppbv	9.91	9.91		9.6	0	0	0.128	1	50	103%	70	130	0%	
2-Butanone	A	ppbv	11.4	11.4		9.9	0	0	0.287	1	50	115%	70	130	0%	
2-Hexanone	A	ppbv	12.09	12.09		9.8	0	0	0.135	1	50	123%	70	130	0%	
2-Propanol	A	ppbv	11.16	11.16		10.1	0	0	0.329	1	50	110%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	11.22	11.22		10	0	0	0.157	1	50	112%	70	130	0%	
Acetone	A	ppbv	11.42	11.42		10	0	0	0.43	1	50	114%	70	130	0%	
Benzene	A	ppbv	10.17	10.17		9.6	0	0	0.126	1	50	106%	70	130	0%	
Benzyl chloride	A	ppbv	10.42	10.42		9.7	0	0	0.155	1	50	107%	70	130	0%	
Bromodichloromethane	A	ppbv	10.24	10.24		9.6	0	0	0.156	1	50	107%	70	130	0%	
Bromoform	A	ppbv	10.1	10.1		9.6	0	0	0.197	1	50	105%	70	130	0%	
Bromomethane	A	ppbv	9.69	9.69		9.3	0	0	0.075	1	50	104%	70	130	0%	
Carbon disulfide	A	ppbv	9.88	9.88		9.7	0	0	0.093	1	50	102%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.62	9.62		9.5	0	0	0.114	1	50	101%	70	130	0%	
Chlorobenzene	A	ppbv	10.42	10.42		9.9	0	0	0.275	1	50	105%	70	130	0%	
Chlorodibromomethane	A	ppbv	10.02	10.02		9.2	0	0	0.165	1	50	109%	70	130	0%	
Chloroethane	A	ppbv	9.87	9.87		9.8	0	0	0.063	1	50	101%	70	130	0%	
Chloroform	A	ppbv	10.95	10.95		9.4	0	0	0.126	1	50	116%	70	130	0%	
Chloromethane	A	ppbv	11.1	11.1		9.8	0	0	0.104	1	50	113%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.92	9.92		9.8	0	0	0.107	1	50	101%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	10.08	10.08		9.5	0	0	0.166	1	50	106%	70	130	0%	
Cyclohexane	A	ppbv	11.87	11.87		9.8	0	0	0.684	2	50	121%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.23	9.23		9.2	0	0	0.086	1	50	100%	70	130	0%	
Ethanol	A	ppbv	9.94	9.94		9.2	0	0	1.962	5	50	108%	70	130	0%	
Ethyl acetate	A	ppbv	11.61	11.61		9.8	0	0	0.157	1	50	118%	70	130	0%	
Ethylbenzene	A	ppbv	10.93	10.93		9.8	0	0	0.737	2	50	112%	70	130	0%	
Heptane	A	ppbv	12.37	12.37		9.9	0	0	0.249	1	50	125%	70	130	0%	
Hexachlorobutadiene	A	ppbv	7.65	7.65		9.4	0	0	0.374	2	50	81%	70	130	0%	
m,p-Xylene	A	ppbv	24.51	24.51		19.2	0	0	0.524	2	100	128%	70	130	0%	
Methylene chloride	A	ppbv	11.43	11.43		10	0	0	2.077	5	50	114%	70	130	0%	
n-Hexane	A	ppbv	11.42	11.42		10.1	0	0	0.692	2	50	113%	70	130	0%	
Naphthalene	A	ppbv	8.58	8.58		9.2	0	0	0.247	1	50	93%	70	130	0%	
o-Xylene	A	ppbv	11.33	11.33		10	0	0	0.258	1	50	113%	70	130	0%	
Propylene	A	ppbv	11.42	11.42		10.2	0	0	0.075	1	50	112%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1089588	CCV VOA1 010913	EPA_TO15	CCV	[\1\DATA\010913\	1/9/2013 9:35:00	1	R55285		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	11.06	11.06		9.8	0	0	0.263	1	50	113%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	10.51	10.51		9.9	0	0	0.228	1	50	106%	70	130	0%	
Tetrachloroethene	A	ppbv	10.01	10.01		9.6	0	0	0.148	1	50	104%	70	130	0%	
Tetrahydrofuran	A	ppbv	12.65	12.65		10	0	0	0.201	1	50	127%	70	130	0%	
Toluene	A	ppbv	10.31	10.31		9.8	0	0	0.158	1	50	105%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.77	10.77		9.8	0	0	0.117	1	50	110%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.69	9.69		9.1	0	0	0.171	1	50	106%	70	130	0%	
Trichloroethene	A	ppbv	9.7	9.7		9.6	0	0	0.119	1	50	101%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.68	9.68		9.6	0	0	0.148	1	50	101%	70	130	0%	
Vinyl acetate	A	ppbv	12.1	12.1		9.9	0	0	0.266	1	50	122%	70	130	0%	
Vinyl chloride	A	ppbv	10.54	10.54		9.4	0	0	0.072	1	50	112%	70	130	0%	
Xylenes, Total	C	ppbv	35.84	35.84		29.2	0	0	0.782	3	150	123%	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	12.89	12.89		12.5	0	0	0	0	0	103%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1089589	RLVS VOA1 010913	EPA_TO15	RLVS	[\1\DATA\010913\	1/9/2013 10:19:0	1	R55285		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	0.98	0.98		0.996	0	0	0.107	1	50	98%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	0.99	0.99		1	0	0	0.211	1	50	99%	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	0.83	0.83		0.98	0	0	0.2	1	50	85%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.16	1.16		0.97	0	0	0.111	1	50	120%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1.16	1.16		0.99	0	0	0.097	1	50	117%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.04	1.04		0.91	0	0	0.271	1	50	114%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	0.93	0.93		0.98	0	0	0.245	1	50	95%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.8	0.8		0.96	0	0	0.186	1	50	83%	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	1.16	1.16		0.97	0	0	0.196	1	50	120%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1	1		0.98	0	0	0.224	1	50	102%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\010913\01091303.D Vial: 3
Acq On : 9 Jan 2013 9:35 am Operator: RACHEL HILL
Sample : CCV VOA1 010913 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\011013V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
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	80	0.00
2	T	Propylene	1.423	1.594	-12.0	82	0.00
3	T	Dichlorodifluoromethane	3.682	3.694	-0.3	72	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.327	2.187	6.0	68	0.00
5	T	Chloromethane	1.465	1.711	-16.8	82	0.00
6	T	Vinyl chloride	1.907	2.138	-12.1	77	0.00
7	T	1,3-Butadiene	1.437	1.798	-25.1	85	0.00
8	T	Bromomethane	1.368	1.425	-4.2	80	0.00
9	T	Chloroethane	0.836	0.897	-7.3	78	0.00
10	T	Trichlorofluoromethane	3.406	3.436	-0.9	73	0.00
11	T	Ethanol	0.479	0.517	-7.9	80	0.00
12	T	Freon113	2.404	2.470	-2.7	72	0.00
13	T	1,1-Dichloroethene	2.139	2.359	-10.3	78	0.00
14	T	Acetone	2.405	2.747	-14.2	79	0.00
15	T	Carbon disulfide	3.094	3.152	-1.9	73	0.00
16	T	2-Propanol	2.238	2.472	-10.5	79	0.00
17	T	Methylene chloride	1.655	1.892	-14.3	82	0.00
18	T	tert-Butyl Methyl Ether	3.300	3.503	-6.2	73	0.00
19	T	trans-1,2-Dichloroethene	1.956	2.150	-9.9	76	0.00
20	T	n-Hexane	2.274	2.572	-13.1	79	0.00
21	T	1,1-Dichloroethane	2.435	2.747	-12.8	78	0.00
22	T	Vinyl acetate	3.745	4.577	-22.2	80	0.00
23	T	cis-1,2-Dichloroethene	1.273	1.288	-1.2	73	0.00
24	T	2-Butanone	2.580	2.970	-15.1	79	0.00
25	T	Ethyl acetate	3.229	3.826	-18.5	81	0.00
26	T	Tetrahydrofuran	1.706	2.158	-26.5	83	0.00
27	T	Chloroform	2.633	2.943	-11.8	75	0.00
28	T	1,1,1-Trichloroethane	2.624	2.894	-10.3	72	0.00
29	T	Cyclohexane	2.399	2.905	-21.1	79	0.00
30	T	Carbon tetrachloride	2.515	2.548	-1.3	70	0.00
31	T	Benzene	3.755	3.977	-5.9	74	0.00
32	T	1,2-Dichloroethane	1.728	1.989	-15.1	75	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	78	0.00
34	T	Heptane	0.894	1.117	-24.9	82	0.00
35	T	Trichloroethene	0.516	0.521	-1.0	71	0.00
36	T	1,2-Dichloropropane	0.485	0.543	-12.0	77	0.00
37	T	1,4-Dioxane	0.215	0.222	-3.3	73	0.00
38	T	Bromodichloromethane	0.844	0.900	-6.6	73	0.00
39	T	cis-1,3-Dichloropropene	0.696	0.739	-6.2	74	0.00
40	T	4-Methyl-2-pentanone	0.365	0.409	-12.1	78	0.00
41	T	Toluene	1.364	1.436	-5.3	73	0.00
42	T	trans-1,3-Dichloropropene	0.634	0.675	-6.5	74	0.00
43	T	1,1,2-Trichloroethane	0.470	0.477	-1.5	71	0.00
44	T	Tetrachloroethene	0.652	0.679	-4.1	71	0.00
45	T	2-Hexanone	0.803	0.990	-23.3	83	0.00
46	T	Chlorodibromomethane	0.755	0.772	-2.3	70	0.00
47	T	1,2-Dibromoethane	0.679	0.695	-2.4	72	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	78	0.00
49	T	Chlorobenzene	1.175	1.237	-5.3	72	0.00
50	T	Ethylbenzene	2.023	2.256	-11.5	74	0.00
51	T	m,p-Xylene	1.550	1.979	-27.7	76	0.00
52	T	o-Xylene	1.610	1.824	-13.3	73	0.00
53	T	Styrene	1.159	1.308	-12.9	74	0.00
54	T	Bromoform	0.776	0.816	-5.2	70	0.00
55	S	4-Bromofluorobenzene	0.619	0.638	-3.1	81	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\010913\01091303.D Vial: 3
Acq On : 9 Jan 2013 9:35 am Operator: RACHEL HILL
Sample : CCV VOA1 010913 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\011013V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
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	1.030	1.126	-9.3	75	0.00
57	T	4-Ethyltoluene	1.901	2.085	-9.7	75	0.00
58	T	1,3,5-Trimethylbenzene	1.617	1.769	-9.4	74	0.00
59	T	1,2,4-Trimethylbenzene	1.494	1.627	-8.9	75	0.00
60	T	1,3-Dichlorobenzene	0.783	0.793	-1.3	74	0.00
61	T	1,4-Dichlorobenzene	0.726	0.741	-2.1	75	0.00
62	T	Benzyl chloride	0.898	0.965	-7.5	76	0.00
63	T	1,2-Dichlorobenzene	0.634	0.640	-0.9	75	0.00
64	T	1,2,4-Trichlorobenzene	0.183	0.174	4.9	83	0.00
65	T	Hexachlorobutadiene	0.392	0.319	18.6	72	0.00
66		Naphthalene	0.332	0.310	6.6	83	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010913\01091303.D Vial: 3
Acq On : 9 Jan 2013 9:35 am Operator: RACHEL HILL
Sample : CCV VOA1 010913 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 9 10:00 2013 Quant Results File: 010513V1.RES

Quant Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
Response via : Initial Calibration
DataAcq Meth : 010513V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.52	130	143355	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.62	114	456802	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.47	117	362691	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.12	95	231393	12.89	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 103.12%

Target Compounds						Qvalue
2) Propylene	5.44	41	186433	11.42	ppbv	97
3) Dichlorodifluoromethane	5.51	85	389762	9.23	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.77	135	238270	8.93	ppbv #	54
5) Chloromethane	5.93	50	186465	11.10	ppbv	98
6) Vinyl chloride	6.15	62	230514	10.54	ppbv	98
7) 1,3-Butadiene	6.20	39	202041	12.26	ppbv	94
8) Bromomethane	6.77	94	152005	9.69	ppbv #	98
9) Chloroethane	6.93	64	94591	9.87	ppbv #	95
10) Trichlorofluoromethane	7.26	101	378247	9.68	ppbv #	98
11) Ethanol	7.50	45	54583	9.94	ppbv	98
12) Freon113	7.92	101	277619	10.07	ppbv #	84
13) 1,1-Dichloroethene	8.02	61	267835	10.92	ppbv #	81
14) Acetone	8.12	43	315047	11.42	ppbv #	91
15) Carbon disulfide	8.39	76	350585	9.88	ppbv #	99
16) 2-Propanol	8.17	45	286285	11.16	ppbv #	1
17) Methylene chloride	8.68	49	216972	11.43	ppbv #	73
18) tert-Butyl Methyl Ether	8.88	73	397706	10.51	ppbv #	86
19) trans-1,2-Dichloroethene	8.97	61	241587	10.77	ppbv #	75
20) n-Hexane	9.15	57	297871	11.42	ppbv #	90
21) 1,1-Dichloroethane	9.53	63	305620	10.95	ppbv #	96
22) Vinyl acetate	9.46	43	519679	12.10	ppbv #	94
23) cis-1,2-Dichloroethene	10.21	96	144811	9.92	ppbv #	72
24) 2-Butanone	10.18	43	337248	11.40	ppbv #	88
25) Ethyl acetate	10.13	43	430017	11.61	ppbv #	100
26) Tetrahydrofuran	10.52	42	247472	12.65	ppbv #	83
27) Chloroform	10.54	83	330807	10.95	ppbv	99
28) 1,1,1-Trichloroethane	10.79	97	318603	10.59	ppbv #	92
29) Cyclohexane	10.79	56	326474	11.87	ppbv #	82
30) Carbon tetrachloride	10.95	117	277578	9.62	ppbv	97
31) Benzene	11.23	78	437854	10.17	ppbv	92
32) 1,2-Dichloroethane	11.31	62	221216	11.16	ppbv #	97
34) Heptane	11.28	43	404218	12.37	ppbv #	85
35) Trichloroethene	11.96	130	182700	9.70	ppbv	92
36) 1,2-Dichloropropane	12.32	63	194480	10.98	ppbv	96
37) 1,4-Dioxane	12.40	88	77715	9.91	ppbv #	73
38) Bromodichloromethane	12.61	83	315796	10.24	ppbv	97
39) cis-1,3-Dichloropropene	13.15	75	256647	10.08	ppbv	95
40) 4-Methyl-2-pentanone	13.26	58	149549	11.22	ppbv #	89
41) Toluene	13.56	91	514333	10.31	ppbv	97
42) trans-1,3-Dichloropropene	13.87	75	224489	9.69	ppbv #	94
43) 1,1,2-Trichloroethane	14.14	97	170771	9.93	ppbv	95
44) Tetrachloroethene	14.26	166	238297	10.01	ppbv	96
45) 2-Hexanone	14.34	43	354479	12.09	ppbv	94
46) Chlorodibromomethane	14.69	129	276555	10.02	ppbv	99
47) 1,2-Dibromoethane	14.92	107	243648	9.82	ppbv	99
49) Chlorobenzene	15.51	112	355462	10.42	ppbv #	83
50) Ethylbenzene	15.56	91	641497	10.93	ppbv	92
51) m,p-Xylene	15.71	91	1102287	24.51	ppbv	92
52) o-Xylene	16.30	91	529204	11.33	ppbv #	88

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010913\01091303.D Vial: 3
Acq On : 9 Jan 2013 9:35 am Operator: RACHEL HILL
Sample : CCV VOA1 010913 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 9 10:00 2013 Quant Results File: 010513V1.RES

Quant Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
Response via : Initial Calibration
DataAcq Meth : 010513V1

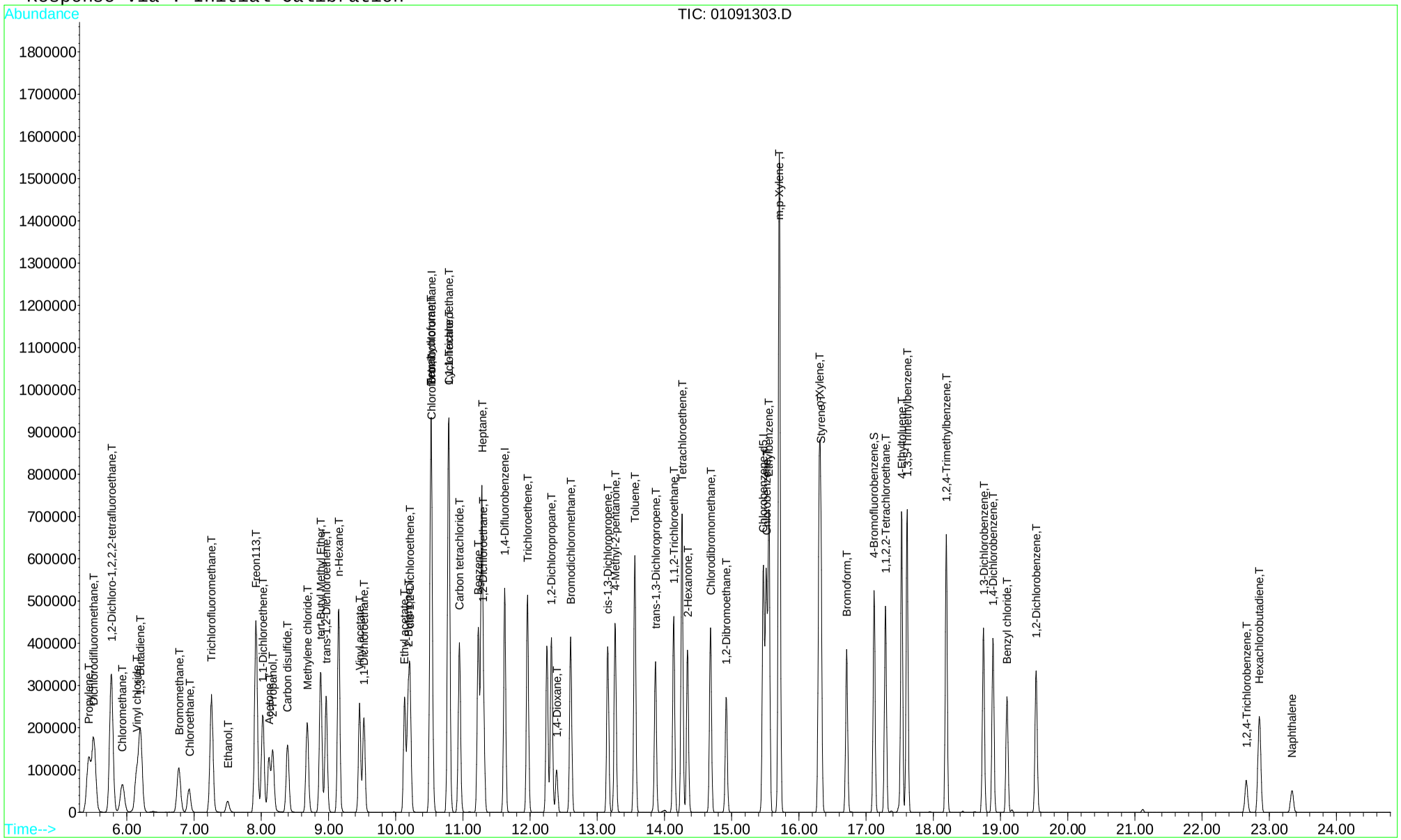
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.33	104	371969	11.06	ppbv		96
54)	Bromoform	16.71	173	227343	10.10	ppbv	#	98
56)	1,1,2,2-Tetrachloroethane	17.29	83	326706	10.93	ppbv	#	98
57)	4-Ethyltoluene	17.53	105	592931	10.75	ppbv		93
58)	1,3,5-Trimethylbenzene	17.61	105	497806	10.61	ppbv		93
59)	1,2,4-Trimethylbenzene	18.19	105	462646	10.67	ppbv		93
60)	1,3-Dichlorobenzene	18.75	146	223077	9.82	ppbv	#	94
61)	1,4-Dichlorobenzene	18.89	146	206490	9.81	ppbv	#	93
62)	Benzyl chloride	19.10	91	271520	10.42	ppbv	#	93
63)	1,2-Dichlorobenzene	19.53	146	180013	9.79	ppbv	#	94
64)	1,2,4-Trichlorobenzene	22.66	180	45823	8.65	ppbv		98
65)	Hexachlorobutadiene	22.86	225	86915	7.65	ppbv		99
66)	Naphthalene	23.34	128	82708	8.58	ppbv		98

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010913\01091303.D Vial: 3
Acq On : 9 Jan 2013 9:35 am Operator: RACHEL HILL
Sample : CCV VOA1 010913 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 9 10:00 2013 Quant Results File: 010513V1.RES

Method : C:\HPCHEM\1\METHODS\011013V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
Response via : Initial Calibration



Injection Log

Directory: C:\HPCHEM\1\DATA\011013B

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	01101301.d	1.	BFB VOA1 011013	TUNE BFB_TUNE	10 Jan 2013 10:06
2	2	01101302.d	1.	1ppb VOA1 011013	data not used	10 Jan 2013 10:50
3	3	01101303.d	1.	1ppb VOA1 011013	ICAL2EPA_TO15	10 Jan 2013 11:34
4	4	01101304.d	1.	10ppb VOA1 011013	ICAL4EPA_TO15	10 Jan 2013 12:16
5	5	01101305.d	1.	12ppb VOA1 011013	ICAL5EPA_TO15	10 Jan 2013 12:59
6	6	01101306.d	1.	15ppb VOA1 011013	ICAL6EPA_TO15	10 Jan 2013 13:42
7	7	01101307.d	1.	20ppb VOA1 011013	ICAL7EPA_TO15	10 Jan 2013 14:26
8	8	01101308.d	1.	30ppb VOA1 011013	ICAL8EPA_TO15	10 Jan 2013 15:10
9	9	01101309.d	1.	50ppb VOA1 011013	ICAL9EPA_TO15	10 Jan 2013 15:55
10	1	01101310.d	1.	BFB2 VOA1 011013	TUNE BFB_TUNE	10 Jan 2013 16:37
11	2	01101311.d	1.	ICV VOA1 011013	data not used	10 Jan 2013 17:20
12	3	01101312.d	1.	ICV VOA1 011013	ICV EPA_TO15	10 Jan 2013 19:54
13	3	01101313.d	1.	RLVS VOA1 011013	RLVS EPA_TO15	10 Jan 2013 20:38
14	4	01101314.d	1.	MBLK/DBV41 CC VOA1 011013	MBLK EPA_TO15	10 Jan 2013 21:28
15	1	01101315.d	800.	1212722-033A	SAMP EPA_TO15	10 Jan 2013 22:09
16	2	01101316.d	800.	1212722-047A	SAMP EPA_TO15	10 Jan 2013 22:54
17	2	01101317.d	800.	1212722-047ADUP	DUP EPA_TO15	10 Jan 2013 23:39
18	3	01101318.d	8000.	1212722-034A	SAMP EPA_TO15	11 Jan 2013 00:21
19	4	01101319.d	400.	1212722-048A	SAMP EPA_TO15	11 Jan 2013 01:10
20	6	01101320.d	400.	1212722-013A	SAMP EPA_TO15	11 Jan 2013 01:58
21	7	01101321.d	200.	1212722-049A	SAMP EPA_TO15	11 Jan 2013 02:46
22	8	01101322.d	8000.	1212722-014A	SAMP EPA_TO15	11 Jan 2013 03:28
23	9	01101323.d	200.	1212722-050A	SAMP EPA_TO15	11 Jan 2013 04:16
24	10	01101324.d	800.	1212722-015A	SAMP EPA_TO15	11 Jan 2013 05:01
25	10	01101325.d	800.	1212722-015A	data not used	11 Jan 2013 05:46
26	11	01101326.d	800.	1212722-001A	SAMP EPA_TO15	11 Jan 2013 06:31
27	12	01101327.d	800.	1212722-051A	SAMP EPA_TO15	11 Jan 2013 07:16
28	13	01101328.d	20000.	1212722-002A	SAMP EPA_TO15	11 Jan 2013 07:58
29	14	01101329.d	800.	1212722-052A	SAMP EPA_TO15	11 Jan 2013 08:43
30	15	01101330.d	8000.	1212722-003A	SAMP EPA_TO15	11 Jan 2013 09:24
31	16	01101331.d	8000.	1212722-053A	SAMP EPA_TO15	11 Jan 2013 10:06
32	17	01101332.d	1.	bvcc91	data not used	11 Jan 2013 10:55
33	3	01101333.d	1.	RLVS2 VOA1 011013	RLVS EPA_TO15	11 Jan 2013 11:38

RTI Laboratories

ANALYTICAL RUN Summary

16-Jan-13

RunNo 55322

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1090258	BFB2 VOA1 011013	BFB_TUNE	TUNE	.1\DATA\011013	E1/10/2013 4:37:0	1	R55322		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		97.1	97.1		100	0	0	0	0	0	97%	50	200	0%	
175	M		7.1	7.1		100	0	0	0	0	0	7%	4	9	0%	
176	M		99.6	99.6		100	0	0	0	0	0	100%	93	101	0%	
177	M		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	
50	M		17.9	17.9		100	0	0	0	0	0	18%	8	40	0%	
75	M		46.7	46.7		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		6.9	6.9		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
1090259	ICV VOA1 011013	EPA_TO15	ICV	.1\DATA\011013	E1/10/2013 7:54:0	1	R55322		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	11.28	11.28		9.6	0	0	0.107	1	50	118%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	11.14	11.14		10	0	0	0.211	1	50	111%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	11.26	11.26		9.8	0	0	0.108	1	50	115%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	10.88	10.88		9.8	0	0	0.2	1	50	111%	70	130	0%	
1,1-Dichloroethane	A	ppbv	11.29	11.29		9.7	0	0	0.111	1	50	116%	70	130	0%	
1,1-Dichloroethene	A	ppbv	11.38	11.38		9.9	0	0	0.097	1	50	115%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	9.69	9.69		9.1	0	0	0.271	1	50	106%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	11.13	11.13		9.8	0	0	0.245	1	50	114%	70	130	0%	
1,2-Dibromoethane	A	ppbv	10.78	10.78		9.6	0	0	0.186	1	50	112%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.83	10.83		9.7	0	0	0.208	1	50	112%	70	130	0%	
1,2-Dichloroethane	A	ppbv	11.41	11.41		9.7	0	0	0.196	1	50	118%	70	130	0%	
1,2-Dichloropropane	A	ppbv	10.84	10.84		9.8	0	0	0.224	1	50	111%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	11.03	11.03		9.7	0	0	0.24	1	50	114%	70	130	0%	
1,3-Butadiene	A	ppbv	11.11	11.11		9.8	0	0	0.152	1	50	113%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	10.81	10.81		9.7	0	0	0.202	1	50	111%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1090259	ICV VOA1 011013	EPA_TO15	ICV	.1\DATA\011013	1/10/2013 7:54:0	1	R55322		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	10.8	10.8		9.6	0	0	0.194	1	50	113%	70	130	0%	
1,4-Dioxane	A	ppbv	10.5	10.5		9.6	0	0	0.128	1	50	109%	70	130	0%	
2-Butanone	A	ppbv	11.43	11.43		9.9	0	0	0.287	1	50	115%	70	130	0%	
2-Hexanone	A	ppbv	10.65	10.65		9.8	0	0	0.135	1	50	109%	70	130	0%	
2-Propanol	A	ppbv	11.41	11.41		10.1	0	0	0.329	1	50	113%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.69	10.69		10	0	0	0.157	1	50	107%	70	130	0%	
Acetone	A	ppbv	11.55	11.55		10	0	0	0.43	1	50	116%	70	130	0%	
Benzene	A	ppbv	11.15	11.15		9.6	0	0	0.126	1	50	116%	70	130	0%	
Benzyl chloride	A	ppbv	11.4	11.4		9.7	0	0	0.155	1	50	118%	70	130	0%	
Bromodichloromethane	A	ppbv	10.88	10.88		9.6	0	0	0.156	1	50	113%	70	130	0%	
Bromoform	A	ppbv	11.13	11.13		9.6	0	0	0.197	1	50	116%	70	130	0%	
Bromomethane	A	ppbv	10.54	10.54		9.3	0	0	0.075	1	50	113%	70	130	0%	
Carbon disulfide	A	ppbv	11.25	11.25		9.7	0	0	0.093	1	50	116%	70	130	0%	
Carbon tetrachloride	A	ppbv	11.3	11.3		9.5	0	0	0.114	1	50	119%	70	130	0%	
Chlorobenzene	A	ppbv	11.29	11.29		9.9	0	0	0.275	1	50	114%	70	130	0%	
Chlorodibromomethane	A	ppbv	11.24	11.24		9.2	0	0	0.165	1	50	122%	70	130	0%	
Chloroethane	A	ppbv	10.45	10.45		9.8	0	0	0.063	1	50	107%	70	130	0%	
Chloroform	A	ppbv	11.36	11.36		9.4	0	0	0.126	1	50	121%	70	130	0%	
Chloromethane	A	ppbv	10.7	10.7		9.8	0	0	0.104	1	50	109%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	11.26	11.26		9.8	0	0	0.107	1	50	115%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	10.75	10.75		9.5	0	0	0.166	1	50	113%	70	130	0%	
Cyclohexane	A	ppbv	11.04	11.04		9.8	0	0	0.684	2	50	113%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	10.96	10.96		9.2	0	0	0.086	1	50	119%	70	130	0%	
Ethanol	A	ppbv	9.89	9.89		9.2	0	0	1.962	5	50	108%	70	130	0%	
Ethyl acetate	A	ppbv	11.1	11.1		9.8	0	0	0.157	1	50	113%	70	130	0%	
Ethylbenzene	A	ppbv	11.23	11.23		9.8	0	0	0.737	2	50	115%	70	130	0%	
Heptane	A	ppbv	10.92	10.92		9.9	0	0	0.249	1	50	110%	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	22.53	22.53		19.2	0	0	0.524	2	100	117%	70	130	0%	
Methylene chloride	A	ppbv	10.93	10.93		10	0	0	2.077	5	50	109%	70	130	0%	
n-Hexane	A	ppbv	11.33	11.33		10.1	0	0	0.692	2	50	112%	70	130	0%	
Naphthalene	A	ppbv	10.11	10.11		9.2	0	0	0.247	1	50	110%	70	130	0%	
o-Xylene	A	ppbv	11.41	11.41		10	0	0	0.258	1	50	114%	70	130	0%	
Propylene	A	ppbv	11.23	11.23		10.2	0	0	0.075	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
1090259	ICV VOA1 011013	EPA_TO15	ICV	.1\DATA\011013E	1/10/2013 7:54:0	1	R55322		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	11.25	11.25		9.8	0	0	0.263	1	50	115%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	11.77	11.77		9.9	0	0	0.228	1	50	119%	70	130	0%	
Tetrachloroethene	A	ppbv	10.6	10.6		9.6	0	0	0.148	1	50	110%	70	130	0%	
Tetrahydrofuran	A	ppbv	11.22	11.22		10	0	0	0.201	1	50	112%	70	130	0%	
Toluene	A	ppbv	10.99	10.99		9.8	0	0	0.158	1	50	112%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	11.18	11.18		9.8	0	0	0.117	1	50	114%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	10.39	10.39		9.1	0	0	0.171	1	50	114%	70	130	0%	
Trichloroethene	A	ppbv	10.82	10.82		9.6	0	0	0.119	1	50	113%	70	130	0%	
Trichlorofluoromethane	A	ppbv	11.12	11.12		9.6	0	0	0.148	1	50	116%	70	130	0%	
Vinyl acetate	A	ppbv	11.72	11.72		9.9	0	0	0.266	1	50	118%	70	130	0%	
Vinyl chloride	A	ppbv	10.87	10.87		9.4	0	0	0.072	1	50	116%	70	130	0%	
Xylenes, Total	C	ppbv	33.94	33.94		29.2	0	0	0.782	3	150	116%	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	12.42	12.42		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
1090260	RLVS VOA1 011013	EPA_TO15	RLVS	.1\DATA\011013E	1/10/2013 8:38:0	1	R55322		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	0.94	0.94		0.996	0	0	0.107	1	50	94%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1	1		1	0	0	0.211	1	50	100%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.97	0.97		0.98	0	0	0.108	1	50	99%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.9	0.9		0.98	0	0	0.2	1	50	92%	70	130	0%	
1,1-Dichloroethane	A	ppbv	0.99	0.99		0.97	0	0	0.111	1	50	102%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.97	0.97		0.99	0	0	0.097	1	50	98%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	1.21	1.21		0.91	0	0	0.271	1	50	133%	70	130	0%	S
1,2,4-Trimethylbenzene	A	ppbv	0.98	0.98		0.98	0	0	0.245	1	50	100%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.87	0.87		0.96	0	0	0.186	1	50	91%	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	0.99	0.99		0.97	0	0	0.196	1	50	102%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.91	0.91		0.98	0	0	0.224	1	50	93%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\011013B\01101312.D Vial: 3
Acq On : 10 Jan 2013 7:54 pm Operator: RACHEL HILL
Sample : ICV VOA1 011013 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\011013V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 11 09:41:17 2013
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	118	0.00
2	T	Propylene	1.061	1.167	-10.0	116	-0.02
3	T	Dichlorodifluoromethane	3.366	4.009	-19.1	124	-0.01
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.533	2.990	-18.0	122	0.00
5	T	Chloromethane	1.215	1.368	-12.6	114	0.00
6	T	Vinyl chloride	1.514	1.751	-15.7	118	0.00
7	T	1,3-Butadiene	1.027	1.165	-13.4	113	0.00
8	T	Bromomethane	1.315	1.490	-13.3	120	-0.01
9	T	Chloroethane	0.741	0.841	-13.5	120	-0.01
10	T	Trichlorofluoromethane	3.363	3.895	-15.8	122	0.00
11	T	Ethanol	0.376	0.404	-7.4	117	0.00
12	T	Freon113	2.325	2.671	-14.9	119	0.00
13	T	1,1-Dichloroethene	1.809	2.079	-14.9	119	0.00
14	T	Acetone	1.783	2.060	-15.5	115	0.00
15	T	Carbon disulfide	2.802	3.250	-16.0	121	0.00
16	T	2-Propanol	1.713	1.935	-13.0	118	0.00
17	T	Methylene chloride	1.361	1.487	-9.3	114	0.00
18	T	tert-Butyl Methyl Ether	2.965	3.525	-18.9	119	0.00
19	T	trans-1,2-Dichloroethene	1.647	1.880	-14.1	117	0.00
20	T	n-Hexane	1.916	2.150	-12.2	114	0.00
21	T	1,1-Dichloroethane	2.089	2.431	-16.4	118	0.00
22	T	Vinyl acetate	2.880	3.409	-18.4	114	0.00
23	T	cis-1,2-Dichloroethene	1.195	1.373	-14.9	118	0.00
24	T	2-Butanone	1.991	2.299	-15.5	113	0.00
25	T	Ethyl acetate	2.517	2.852	-13.3	110	0.00
26	T	Tetrahydrofuran	1.304	1.462	-12.1	109	0.00
27	T	Chloroform	2.313	2.681	-15.9	117	0.00
28	T	1,1,1-Trichloroethane	2.443	2.870	-17.5	118	0.00
29	T	Cyclohexane	2.037	2.295	-12.7	112	0.00
30	T	Carbon tetrachloride	2.565	3.052	-19.0	121	0.00
31	T	Benzene	3.396	3.944	-16.1	117	0.00
32	T	1,2-Dichloroethane	1.453	1.709	-17.6	117	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	122	0.00
34	T	Heptane	0.650	0.717	-10.3	111	0.00
35	T	Trichloroethene	0.497	0.561	-12.9	119	0.00
36	T	1,2-Dichloropropane	0.395	0.437	-10.6	115	0.00
37	T	1,4-Dioxane	0.194	0.212	-9.3	117	0.00
38	T	Bromodichloromethane	0.715	0.811	-13.4	119	0.00
39	T	cis-1,3-Dichloropropene	0.599	0.678	-13.2	119	0.00
40	T	4-Methyl-2-pentanone	0.292	0.312	-6.8	114	0.00
41	T	Toluene	1.214	1.361	-12.1	117	0.00
42	T	trans-1,3-Dichloropropene	0.548	0.625	-14.1	119	0.00
43	T	1,1,2-Trichloroethane	0.421	0.467	-10.9	118	0.00
44	T	Tetrachloroethene	0.707	0.780	-10.3	117	0.00
45	T	2-Hexanone	0.591	0.643	-8.8	111	0.00
46	T	Chlorodibromomethane	0.731	0.839	-14.8	120	0.00
47	T	1,2-Dibromoethane	0.632	0.710	-12.3	118	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	119	0.00
49	T	Chlorobenzene	1.119	1.275	-13.9	117	0.00
50	T	Ethylbenzene	1.781	2.041	-14.6	116	0.00
51	T	m,p-Xylene	1.374	1.613	-17.4	113	0.00
52	T	o-Xylene	1.422	1.623	-14.1	116	0.00
53	T	Styrene	1.069	1.228	-14.9	115	0.00
54	T	Bromoform	0.872	1.011	-15.9	119	0.00
55	S	4-Bromofluorobenzene	0.571	0.567	0.7	119	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\011013B\01101312.D Vial: 3
Acq On : 10 Jan 2013 7:54 pm Operator: RACHEL HILL
Sample : ICV VOA1 011013 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\011013V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 11 09:41:17 2013
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	0.901	1.004	-11.4	116	0.00
57	T	4-Ethyltoluene	1.778	2.018	-13.5	116	0.00
58	T	1,3,5-Trimethylbenzene	1.506	1.713	-13.7	116	0.00
59	T	1,2,4-Trimethylbenzene	1.407	1.598	-13.6	117	0.00
60	T	1,3-Dichlorobenzene	0.873	0.973	-11.5	118	0.00
61	T	1,4-Dichlorobenzene	0.819	0.922	-12.6	118	0.00
62	T	Benzyl chloride	0.832	0.979	-17.7	119	0.00
63	T	1,2-Dichlorobenzene	0.727	0.812	-11.7	118	0.00
64	T	1,2,4-Trichlorobenzene	0.233	0.248	-6.4	118	0.00
65	T	Hexachlorobutadiene	0.476	0.475	0.2	110	0.00
66		Naphthalene	0.353	0.387	-9.6	117	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011013B\01101312.D Vial: 3
Acq On : 10 Jan 2013 7:54 pm Operator: RACHEL HILL
Sample : ICV VOA1 011013 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 11 9:42 2013 Quant Results File: 011013V1.RES

Quant Method : C:\HPCHEM\1\METHODS\011013V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 11 09:41:17 2013
Response via : Initial Calibration
DataAcq Meth : 011013V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.52	130	316706	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.62	114	1105182	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.47	117	888776	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.12	95	504371	12.42	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 99.36%

Target Compounds						Qvalue
2) Propylene	5.42	41	301706	11.23	ppbv	98
3) Dichlorodifluoromethane	5.50	85	934574	10.96	ppbv	100
4) 1,2-Dichloro-1,2,2,2-tetra	5.76	135	719606	11.21	ppbv #	85
5) Chloromethane	5.93	50	329308	10.70	ppbv	100
6) Vinyl chloride	6.14	62	417137	10.87	ppbv	99
7) 1,3-Butadiene	6.20	39	289253	11.11	ppbv	89
8) Bromomethane	6.77	94	351177	10.54	ppbv	99
9) Chloroethane	6.92	64	196110	10.45	ppbv	99
10) Trichlorofluoromethane	7.25	101	947381	11.12	ppbv	99
11) Ethanol	7.49	45	94208	9.89	ppbv	99
12) Freon113	7.92	101	663114	11.26	ppbv	99
13) 1,1-Dichloroethene	8.02	61	521511	11.38	ppbv	92
14) Acetone	8.11	43	522014	11.55	ppbv #	97
15) Carbon disulfide	8.39	76	798745	11.25	ppbv #	99
16) 2-Propanol	8.17	45	495185	11.41	ppbv #	1
17) Methylene chloride	8.68	49	376793	10.93	ppbv	92
18) tert-Butyl Methyl Ether	8.88	73	884197	11.77	ppbv	99
19) trans-1,2-Dichloroethene	8.96	61	466822	11.18	ppbv	90
20) n-Hexane	9.15	57	550116	11.33	ppbv	96
21) 1,1-Dichloroethane	9.52	63	597472	11.29	ppbv	99
22) Vinyl acetate	9.46	43	855201	11.72	ppbv	99
23) cis-1,2-Dichloroethene	10.21	96	340871	11.26	ppbv	90
24) 2-Butanone	10.18	43	576644	11.43	ppbv	96
25) Ethyl acetate	10.13	43	708046	11.10	ppbv #	100
26) Tetrahydrofuran	10.52	42	370537	11.22	ppbv	99
27) Chloroform	10.54	83	665618	11.36	ppbv	100
28) 1,1,1-Trichloroethane	10.78	97	697997	11.28	ppbv	98
29) Cyclohexane	10.79	56	569820	11.04	ppbv	92
30) Carbon tetrachloride	10.95	117	734683	11.30	ppbv	99
31) Benzene	11.23	78	959181	11.15	ppbv	98
32) 1,2-Dichloroethane	11.31	62	419981	11.41	ppbv	98
34) Heptane	11.28	43	627592	10.92	ppbv	96
35) Trichloroethene	11.96	130	476055	10.82	ppbv	98
36) 1,2-Dichloropropane	12.32	63	378646	10.84	ppbv	99
37) 1,4-Dioxane	12.40	88	179877	10.50	ppbv	93
38) Bromodichloromethane	12.60	83	687985	10.88	ppbv	100
39) cis-1,3-Dichloropropene	13.15	75	569128	10.75	ppbv	99
40) 4-Methyl-2-pentanone	13.26	58	275664	10.69	ppbv	96
41) Toluene	13.56	91	1179013	10.99	ppbv	99
42) trans-1,3-Dichloropropene	13.87	75	503028	10.39	ppbv	98
43) 1,1,2-Trichloroethane	14.14	97	404631	10.88	ppbv	98
44) Tetrachloroethene	14.26	166	662076	10.60	ppbv	100
45) 2-Hexanone	14.34	43	556930	10.65	ppbv	96
46) Chlorodibromomethane	14.68	129	726536	11.24	ppbv	99
47) 1,2-Dibromoethane	14.92	107	602212	10.78	ppbv	99
49) Chlorobenzene	15.51	112	897570	11.29	ppbv	98
50) Ethylbenzene	15.55	91	1422154	11.23	ppbv	98
51) m,p-Xylene	15.71	91	2201892	22.53	ppbv	97
52) o-Xylene	16.30	91	1154054	11.41	ppbv	97

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011013B\01101312.D Vial: 3
Acq On : 10 Jan 2013 7:54 pm Operator: RACHEL HILL
Sample : ICV VOA1 011013 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 11 9:42 2013 Quant Results File: 011013V1.RES

Quant Method : C:\HPCHEM\1\METHODS\011013V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 11 09:41:17 2013
Response via : Initial Calibration
DataAcq Meth : 011013V1

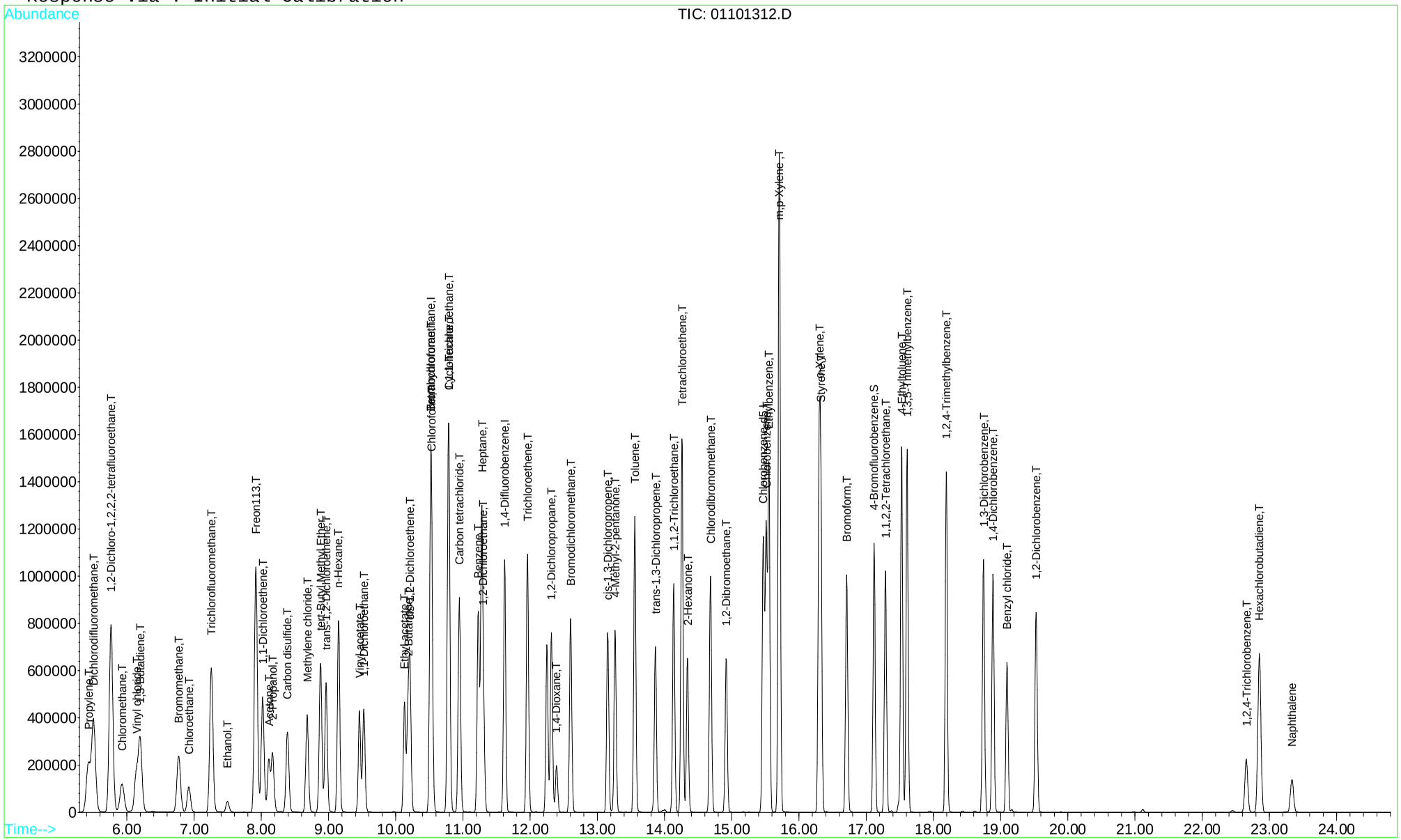
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.33	104	855638	11.25	ppbv	99
54)	Bromoform	16.71	173	690332	11.13	ppbv	100
56)	1,1,2,2-Tetrachloroethane	17.29	83	713663	11.14	ppbv	100
57)	4-Ethyltoluene	17.53	105	1406413	11.13	ppbv	98
58)	1,3,5-Trimethylbenzene	17.61	105	1181252	11.03	ppbv	98
59)	1,2,4-Trimethylbenzene	18.19	105	1113230	11.13	ppbv	98
60)	1,3-Dichlorobenzene	18.74	146	670949	10.81	ppbv	99
61)	1,4-Dichlorobenzene	18.89	146	629014	10.80	ppbv	99
62)	Benzyl chloride	19.10	91	674921	11.40	ppbv	99
63)	1,2-Dichlorobenzene	19.53	146	559950	10.83	ppbv	99
64)	1,2,4-Trichlorobenzene	22.66	180	160401	9.69	ppbv	98
65)	Hexachlorobutadiene	22.85	225	317275	9.37	ppbv	99
66)	Naphthalene	23.34	128	253301	10.11	ppbv	100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011013B\01101312.D Vial: 3
Acq On : 10 Jan 2013 7:54 pm Operator: RACHEL HILL
Sample : ICV VOA1 011013 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 11 9:42 2013 Quant Results File: 011013V1.RES

Method : C:\HPCHEM\1\METHODS\011013V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 11 09:41:17 2013
Response via : Initial Calibration



Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\010313V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 04 10:30:43 2013
Response via : Initial Calibration

Calibration Files
2 =01031303.D 4 =01031304.D 5 =01031305.D
6 =01031306.D 7 =01031307.D 8 =01031308.D

		Compound	2	4	5	6	7	8	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------							
2)	T	Propylene	1.574	1.485	1.384	1.357	1.242	1.218	1.368	9.32
3)	T	Dichlorodifluoromet	3.399	4.005	3.722	3.686	3.387	3.347	3.598	6.59
4)	T	1,2-Dichloro-1,2,2,	2.093	2.540	2.381	2.362	2.207	2.213	2.309	6.40
5)	T	Chloromethane	1.610	1.605	1.448	1.447	1.290	1.230	1.418	10.80
6)	T	Vinyl chloride	1.881	2.098	1.937	1.871	1.686	1.587	1.812	10.28
7)	T	1,3-Butadiene	1.424	1.575	1.433	1.389	1.239	1.155	1.341	11.66
8)	T	Bromomethane	1.144	1.371	1.293	1.296	1.230	1.343	1.285	5.93
9)	T	Chloroethane	0.746	0.889	0.844	0.829	0.769	0.752	0.800	6.74
10)	T	Trichlorofluorometh	3.393	3.682	3.449	3.415	3.153	3.011	3.317	7.03
11)	T	Ethanol	0.589	0.500	0.479	0.475	0.424	0.396	0.471	13.43
12)	T	Freon113	2.097	2.691	2.532	2.517	2.311	2.121	2.335	10.60
13)	T	1,1-Dichloroethene	2.033	2.365	2.204	2.150	1.981	1.828	2.064	9.11
14)	T	Acetone	2.709	2.710	2.533	2.466	2.160	1.889	2.347	14.61
15)	T	Carbon disulfide	2.891	3.373	3.167	3.097	2.898	2.780	3.037	6.59
16)	T	2-Propanol	2.441	2.439	2.314	2.248	2.016	1.858	2.182	10.88
17)	T	Methylene chloride	1.995	1.798	1.665	1.625	1.463	1.323	1.610	14.65
18)	T	tert-Butyl Methyl E	3.215	3.835	3.596	3.544	3.133	2.723	3.277	12.24
19)	T	trans-1,2-Dichloroe	1.846	2.188	2.042	2.009	1.830	1.656	1.896	10.11
20)	T	n-Hexane	2.156	2.543	2.376	2.340	2.127	1.914	2.200	10.55
21)	T	1,1-Dichloroethane	2.340	2.773	2.595	2.542	2.277	2.032	2.384	11.12
22)	T	Vinyl acetate	3.016	4.484	4.193	4.083	3.602	3.062	3.656	16.46
23)	T	cis-1,2-Dichloroeth	1.108	1.407	1.327	1.328	1.222	1.159	1.254	8.37
24)	T	2-Butanone	2.253	2.949	2.804	2.716	2.430	2.028	2.467	14.71
25)	T	Ethyl acetate	2.838	3.641	3.654	3.345	3.124	2.636	3.149	13.06
26)	T	Tetrahydrofuran	1.657	1.994	1.841	1.775	1.544	1.344	1.637	15.64
27)	T	Chloroform	2.484	3.043	2.847	2.777	2.454	2.147	2.538	14.78
28)	T	1,1,1-Trichloroetha	2.341	3.136	2.941	2.859	2.491	2.107	2.538	18.11
29)	T	Cyclohexane	2.240	2.835	2.610	2.515	2.193	1.882	2.291	16.97
30)	T	Carbon tetrachlorid	2.152	2.924	2.748	2.725	2.466	2.215	2.473	13.49
31)	T	Benzene	3.481	4.302	4.065	4.006	3.587	3.214	3.711	11.15
32)	T	1,2-Dichloroethane	1.692	2.052	1.909	1.823	1.577	1.330	1.664	17.64
33)	I	1,4-Difluorobenzene	----------ISTD----------							
34)	T	Heptane	0.743	1.009	0.934	0.910	0.812	0.706	0.815	18.02
35)	T	Trichloroethene	0.376	0.556	0.534	0.542	0.509	0.481	0.486	14.45
36)	T	1,2-Dichloropropane	0.383	0.537	0.504	0.508	0.460	0.415	0.454	14.31
37)	T	1,4-Dioxane	0.159	0.234	0.226	0.226	0.210	0.200	0.207	12.40
38)	T	Bromodichloromethan	0.622	0.931	0.886	0.897	0.820	0.748	0.792	15.84
39)	T	cis-1,3-Dichloropro	0.505	0.760	0.731	0.735	0.679	0.627	0.659	14.39
40)	T	4-Methyl-2-pentanon	0.257	0.401	0.382	0.383	0.353	0.329	0.344	14.99
41)	T	Toluene	1.057	1.508	1.440	1.461	1.332	1.223	1.296	14.63
42)	T	trans-1,3-Dichlorop	0.427	0.685	0.667	0.671	0.620	0.581	0.597	15.62
43)	T	1,1,2-Trichloroetha	0.341	0.512	0.489	0.500	0.462	0.437	0.447	14.05
44)	T	Tetrachloroethene	0.479	0.728	0.700	0.716	0.652	0.574	0.614	18.84
45)	T	2-Hexanone	0.543	0.907	0.864	0.858	0.774	0.700	0.753	18.10
46)	T	Chlorodibromomethan	0.513	0.847	0.820	0.834	0.763	0.685	0.715	19.39
47)	T	1,2-Dibromoethane	0.468	0.735	0.719	0.733	0.681	0.636	0.646	15.92
48)	I	Chlorobenzene-d5	----------ISTD----------							
49)	T	Chlorobenzene	0.915	1.328	1.271	1.254	1.162	1.062	1.120	16.54
50)	T	Ethylbenzene	1.676	2.343	2.234	2.175	1.970	1.715	1.917	19.33
51)	T	m,p-Xylene	1.355	1.955	1.820	1.671	1.403	1.109	1.443	28.41
52)	T	o-Xylene	1.338	1.892	1.803	1.755	1.559	1.320	1.521	21.39
53)	T	Styrene	0.790	1.362	1.311	1.304	1.180	1.018	1.104	22.79
54)	T	Bromoform	0.522	0.904	0.882	0.879	0.797	0.686	0.742	22.53
55)	S	4-Bromofluorobenzen	0.600	0.618	0.620	0.628	0.627	0.632	0.623	1.87
56)	T	1,1,2,2-Tetrachloro	0.842	1.162	1.093	1.096	1.007	0.924	0.983	15.07
57)	T	4-Ethyltoluene	1.597	2.221	2.068	2.070	1.879	1.661	1.828	17.71

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

Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\010313V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 04 10:30:43 2013
Response via : Initial Calibration

Calibration Files
2 =01031303.D 4 =01031304.D 5 =01031305.D
6 =01031306.D 7 =01031307.D 8 =01031308.D

		Compound	2	4	5	6	7	8	Avg	%RSD
58)	T	1,3,5-Trimethylbenz	1.432	1.914	1.771	1.745	1.579	1.401	1.560	18.14
59)	T	1,2,4-Trimethylbenz	1.258	1.806	1.614	1.631	1.487	1.345	1.459	17.14
60)	T	1,3-Dichlorobenzene	0.622	0.890	0.817	0.839	0.795	0.763	0.772	12.04
61)	T	1,4-Dichlorobenzene	0.562	0.835	0.756	0.785	0.743	0.715	0.720	12.66
62)	T	Benzyl chloride	0.486	1.132	0.970	0.999	0.941	0.907	0.902	22.29
63)	T	1,2-Dichlorobenzene	0.561	0.780	0.645	0.667	0.631	0.612	0.641	11.04
64)	T	1,2,4-Trichlorobenz	0.244	0.294	0.150	0.169	0.160	0.165	0.195	27.47
65)	T	Hexachlorobutadiene	0.617	0.557	0.311	0.354	0.328	0.335	0.404	31.34
66)		Naphthalene	0.507	0.618	0.265	0.304	0.285	0.292	0.369	37.06

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

Compound List Report VOA 1

Method : C:\HPCHEM\1\METHODS\010313V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 04 10:30:43 2013
Response via : Initial Calibration
Total Cpnds : 66

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Bromochloromethane	130	10.52	1.000	A	2	A	B
2	T	Propylene	41	5.44	0.516	A	2	A	B
3	T	Dichlorodifluoromethane	85	5.51	0.523	A	3	A	B
4	T	1,2-Dichloro-1,2,2,2-tetrafluo	135	5.77	0.548	A	2	A	B
5	T	Chloromethane	50	5.94	0.564	A	3	A	B
6	T	Vinyl chloride	62	6.15	0.584	A	2	A	B
7	T	1,3-Butadiene	39	6.20	0.590	A	2	A	B
8	T	Bromomethane	94	6.78	0.644	A	3	A	B
9	T	Chloroethane	64	6.93	0.659	A	3	A	B
10	T	Trichlorofluoromethane	101	7.27	0.690	A	3	A	B
11	T	Ethanol	45	7.50	0.712	A	2	A	B
12	T	Freon113	101	7.92	0.753	A	2	A	B
13	T	1,1-Dichloroethene	61	8.02	0.762	A	2	A	B
14	T	Acetone	43	8.12	0.771	A	2	A	B
15	T	Carbon disulfide	76	8.40	0.798	A	3	A	B
16	T	2-Propanol	45	8.17	0.776	A	2	A	B
17	T	Methylene chloride	49	8.69	0.826	A	2	A	B
18	T	tert-Butyl Methyl Ether	73	8.89	0.844	A	2	A	B
19	T	trans-1,2-Dichloroethene	61	8.97	0.852	A	2	A	B
20	T	n-Hexane	57	9.15	0.870	A	3	A	B
21	T	1,1-Dichloroethane	63	9.53	0.906	A	3	A	B
22	T	Vinyl acetate	43	9.46	0.899	A	2	A	B
23	T	cis-1,2-Dichloroethene	96	10.22	0.971	A	3	A	B
24	T	2-Butanone	43	10.18	0.968	A	2	A	B
25	T	Ethyl acetate	43	10.14	0.963	A	3	A	B
26	T	Tetrahydrofuran	42	10.52	1.000	A	2	A	B
27	T	Chloroform	83	10.54	1.001	A	2	A	B
28	T	1,1,1-Trichloroethane	97	10.79	1.025	A	3	A	B
29	T	Cyclohexane	56	10.80	1.026	A	2	A	B
30	T	Carbon tetrachloride	117	10.95	1.040	A	3	A	B
31	T	Benzene	78	11.23	1.067	A	3	A	B
32	T	1,2-Dichloroethane	62	11.31	1.075	A	3	A	B
33	I	1,4-Difluorobenzene	114	11.62	1.000	A	2	A	B
34	T	Heptane	43	11.28	0.971	A	3	A	B
35	T	Trichloroethene	130	11.96	1.029	A	3	A	B
36	T	1,2-Dichloropropane	63	12.32	1.060	A	3	A	B
37	T	1,4-Dioxane	88	12.40	1.067	A	2	A	B
38	T	Bromodichloromethane	83	12.61	1.085	A	2	A	B
39	T	cis-1,3-Dichloropropene	75	13.16	1.132	A	2	A	B
40	T	4-Methyl-2-pentanone	58	13.27	1.142	A	3	A	B
41	T	Toluene	91	13.56	1.167	A	2	A	B
42	T	trans-1,3-Dichloropropene	75	13.87	1.193	A	3	A	B
43	T	1,1,2-Trichloroethane	97	14.14	1.216	A	3	A	B
44	T	Tetrachloroethene	166	14.26	1.227	A	3	A	B
45	T	2-Hexanone	43	14.34	1.234	A	2	A	B
46	T	Chlorodibromomethane	129	14.69	1.264	A	2	A	B
47	T	1,2-Dibromoethane	107	14.92	1.284	A	2	A	B
48	I	Chlorobenzene-d5	117	15.47	1.000	A	2	A	B
49	T	Chlorobenzene	112	15.51	1.003	A	3	A	B
50	T	Ethylbenzene	91	15.56	1.005	A	2	A	B
51	T	m,p-Xylene	91	15.71	1.016	A	2	A	B
52	T	o-Xylene	91	16.30	1.054	A	2	A	B
53	T	Styrene	104	16.33	1.055	A	3	A	B
54	T	Bromoform	173	16.71	1.080	A	3	A	B
55	S	4-Bromofluorobenzene	95	17.12	1.106	A	2	A	B
56	T	1,1,2,2-Tetrachloroethane	83	17.29	1.118	A	2	A	B
57	T	4-Ethyltoluene	105	17.53	1.133	A	1	A	B
58	T	1,3,5-Trimethylbenzene	105	17.61	1.138	A	2	A	B
59	T	1,2,4-Trimethylbenzene	105	18.20	1.176	A	2	A	B
60	T	1,3-Dichlorobenzene	146	18.75	1.212	A	3	A	B
61	T	1,4-Dichlorobenzene	146	18.89	1.221	A	3	A	B
62	T	Benzyl chloride	91	19.10	1.234	A	2	A	B
63	T	1,2-Dichlorobenzene	146	19.53	1.262	A	3	A	B
64	T	1,2,4-Trichlorobenzene	180	22.66	1.464	A	3	A	B
65	T	Hexachlorobutadiene	225	22.86	1.477	A	2	A	B
66		Naphthalene	128	23.34	1.508	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
-----------------------------------------------------------------------
          010313V1.M     Sat Jan 05 08:44:09 2013
```

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\010313B\01031311.D Vial: 2
Acq On : 4 Jan 2013 4:17 am Operator: RACHEL HILL
Sample : ICV VOA1 010313 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\010313V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 04 10:30:43 2013
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	105	0.00
2	T	Propylene	1.368	1.318	3.7	94	0.00
3	T	Dichlorodifluoromethane	3.598	3.584	0.4	94	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.309	2.299	0.4	95	0.00
5	T	Chloromethane	1.418	1.435	-1.2	94	0.00
6	T	Vinyl chloride	1.812	1.826	-0.8	92	0.00
7	T	1,3-Butadiene	1.341	1.360	-1.4	91	0.00
8	T	Bromomethane	1.285	1.288	-0.2	99	0.00
9	T	Chloroethane	0.800	0.815	-1.9	97	0.00
10	T	Trichlorofluoromethane	3.317	3.273	1.3	94	0.00
11	T	Ethanol	0.471	0.470	0.2	99	0.00
12	T	Freon113	2.335	2.460	-5.4	96	0.00
13	T	1,1-Dichloroethene	2.064	2.174	-5.3	97	0.00
14	T	Acetone	2.347	2.553	-8.8	99	0.00
15	T	Carbon disulfide	3.037	3.545	-16.7	111	0.00
16	T	2-Propanol	2.182	2.464	-12.9	107	0.00
17	T	Methylene chloride	1.610	1.605	0.3	94	0.00
18	T	tert-Butyl Methyl Ether	3.277	3.498	-6.7	96	0.00
19	T	trans-1,2-Dichloroethene	1.896	2.083	-9.9	100	0.00
20	T	n-Hexane	2.200	2.318	-5.4	96	0.00
21	T	1,1-Dichloroethane	2.384	2.467	-3.5	94	0.00
22	T	Vinyl acetate	3.656	4.003	-9.5	94	0.00
23	T	cis-1,2-Dichloroethene	1.254	1.285	-2.5	96	0.00
24	T	2-Butanone	2.467	2.626	-6.4	94	0.00
25	T	Ethyl acetate	3.149	3.394	-7.8	98	0.00
26	T	Tetrahydrofuran	1.637	1.743	-6.5	92	0.00
27	T	Chloroform	2.538	2.662	-4.9	92	0.00
28	T	1,1,1-Trichloroethane	2.538	2.741	-8.0	92	0.00
29	T	Cyclohexane	2.291	2.534	-10.6	94	0.00
30	T	Carbon tetrachloride	2.473	2.624	-6.1	95	0.00
31	T	Benzene	3.711	3.860	-4.0	95	0.00
32	T	1,2-Dichloroethane	1.664	1.784	-7.2	92	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	106	0.00
34	T	Heptane	0.815	0.884	-8.5	93	0.00
35	T	Trichloroethene	0.486	0.500	-2.9	96	0.00
36	T	1,2-Dichloropropane	0.454	0.473	-4.2	94	0.00
37	T	1,4-Dioxane	0.207	0.225	-8.7	102	0.00
38	T	Bromodichloromethane	0.792	0.847	-6.9	97	0.00
39	T	cis-1,3-Dichloropropene	0.659	0.653	0.9	91	0.00
40	T	4-Methyl-2-pentanone	0.344	0.380	-10.5	101	0.00
41	T	Toluene	1.296	1.491	-15.0	105	0.00
42	T	trans-1,3-Dichloropropene	0.597	0.676	-13.2	105	0.00
43	T	1,1,2-Trichloroethane	0.447	0.457	-2.2	95	0.00
44	T	Tetrachloroethene	0.614	0.660	-7.5	96	0.00
45	T	2-Hexanone	0.753	0.862	-14.5	101	0.00
46	T	Chlorodibromomethane	0.715	0.770	-7.7	97	0.00
47	T	1,2-Dibromoethane	0.646	0.670	-3.7	97	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	110	0.00
49	T	Chlorobenzene	1.120	1.160	-3.6	96	0.00
50	T	Ethylbenzene	1.917	2.010	-4.9	94	0.00
51	T	m,p-Xylene	1.443	1.685	-16.8	95	0.00
52	T	o-Xylene	1.521	1.652	-8.6	96	0.00
53	T	Styrene	1.104	1.215	-10.1	98	0.00
54	T	Bromoform	0.742	0.810	-9.2	99	0.00
55	S	4-Bromofluorobenzene	0.623	0.613	1.6	109	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\010313B\01031311.D Vial: 2
Acq On : 4 Jan 2013 4:17 am Operator: RACHEL HILL
Sample : ICV VOA1 010313 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\010313V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 04 10:30:43 2013
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	0.983	1.012	-3.0	96	0.00
57	T	4-Ethyltoluene	1.828	1.927	-5.4	96	0.00
58	T	1,3,5-Trimethylbenzene	1.560	1.644	-5.4	95	0.00
59	T	1,2,4-Trimethylbenzene	1.459	1.541	-5.6	94	0.00
60	T	1,3-Dichlorobenzene	0.772	0.784	-1.6	97	0.00
61	T	1,4-Dichlorobenzene	0.720	0.734	-1.9	97	0.00
62	T	Benzyl chloride	0.902	0.959	-6.3	93	0.00
63	T	1,2-Dichlorobenzene	0.641	0.626	2.3	88	0.00
64	T	1,2,4-Trichlorobenzene	0.195	0.178	8.7	67	0.00
65	T	Hexachlorobutadiene	0.404	0.326	19.3	64	0.00
66		Naphthalene	0.369	0.315	14.6	56	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010313B\01031311.D Vial: 2
Acq On : 4 Jan 2013 4:17 am Operator: RACHEL HILL
Sample : ICV VOA1 010313 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 4 10:32 2013 Quant Results File: 010313V1.RES

Quant Method : C:\HPCHEM\1\METHODS\010313V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 04 10:30:43 2013
Response via : Initial Calibration
DataAcq Meth : 010313V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.53	130	198375	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.62	114	665551	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.47	117	545186	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.12	95	334427	12.32	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 98.56%				
Target Compounds							Qvalue
2) Propylene	5.44	41	213349	9.83	ppbv		96
3) Dichlorodifluoromethane	5.51	85	523246	9.16	ppbv		99
4) 1,2-Dichloro-1,2,2,2-tetra	5.77	135	346638	9.46	ppbv	#	63
5) Chloromethane	5.93	50	216340	9.62	ppbv		99
6) Vinyl chloride	6.15	62	272466	9.48	ppbv		99
7) 1,3-Butadiene	6.20	39	211440	9.94	ppbv		100
8) Bromomethane	6.78	94	190144	9.33	ppbv		99
9) Chloroethane	6.93	64	119031	9.37	ppbv		98
10) Trichlorofluoromethane	7.26	101	498586	9.47	ppbv		98
11) Ethanol	7.50	45	68585	9.17	ppbv		100
12) Freon113	7.93	101	382573	10.32	ppbv		89
13) 1,1-Dichloroethene	8.03	61	341621	10.43	ppbv	#	86
14) Acetone	8.12	43	405127	10.88	ppbv	#	91
15) Carbon disulfide	8.39	76	545756	11.32	ppbv	#	99
16) 2-Propanol	8.17	45	395009	11.41	ppbv	#	1
17) Methylene chloride	8.68	49	254775	9.97	ppbv	#	83
18) tert-Butyl Methyl Ether	8.89	73	549649	10.57	ppbv	#	91
19) trans-1,2-Dichloroethene	8.97	61	323925	10.76	ppbv	#	81
20) n-Hexane	9.15	57	371617	10.64	ppbv		94
21) 1,1-Dichloroethane	9.53	63	379799	10.04	ppbv	#	97
22) Vinyl acetate	9.46	43	628955	10.84	ppbv	#	96
23) cis-1,2-Dichloroethene	10.22	96	199906	10.05	ppbv	#	80
24) 2-Butanone	10.19	43	412638	10.54	ppbv		92
25) Ethyl acetate	10.13	43	527835	10.56	ppbv	#	98
26) Tetrahydrofuran	10.52	42	276652	10.65	ppbv		92
27) Chloroform	10.54	83	413972	10.28	ppbv		99
28) 1,1,1-Trichloroethane	10.79	97	417668	10.37	ppbv		95
29) Cyclohexane	10.80	56	394125	10.84	ppbv		89
30) Carbon tetrachloride	10.95	117	395589	10.08	ppbv		98
31) Benzene	11.23	78	588107	9.99	ppbv		95
32) 1,2-Dichloroethane	11.31	62	274631	10.40	ppbv	#	97
34) Heptane	11.28	43	465831	10.74	ppbv	#	92
35) Trichloroethene	11.96	130	255662	9.88	ppbv		94
36) 1,2-Dichloropropane	12.32	63	246548	10.19	ppbv		97
37) 1,4-Dioxane	12.40	88	115151	10.45	ppbv	#	82
38) Bromodichloromethane	12.61	83	433041	10.28	ppbv		98
39) cis-1,3-Dichloropropene	13.16	75	330065	9.41	ppbv		98
40) 4-Methyl-2-pentanone	13.27	58	202427	11.06	ppbv	#	93
41) Toluene	13.56	91	777978	11.27	ppbv		98
42) trans-1,3-Dichloropropene	13.87	75	327394	10.29	ppbv		97
43) 1,1,2-Trichloroethane	14.14	97	238718	10.02	ppbv		97
44) Tetrachloroethene	14.26	166	337250	10.32	ppbv		97
45) 2-Hexanone	14.34	43	449609	11.22	ppbv		98
46) Chlorodibromomethane	14.69	129	401689	10.55	ppbv		99
47) 1,2-Dibromoethane	14.92	107	342479	9.96	ppbv		100
49) Chlorobenzene	15.51	112	500694	10.25	ppbv	#	89
50) Ethylbenzene	15.56	91	858936	10.27	ppbv		95
51) m,p-Xylene	15.71	91	1410912	22.42	ppbv		95
52) o-Xylene	16.30	91	720645	10.86	ppbv	#	93

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010313B\01031311.D Vial: 2
Acq On : 4 Jan 2013 4:17 am Operator: RACHEL HILL
Sample : ICV VOA1 010313 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 4 10:32 2013 Quant Results File: 010313V1.RES

Quant Method : C:\HPCHEM\1\METHODS\010313V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 04 10:30:43 2013
Response via : Initial Calibration
DataAcq Meth : 010313V1

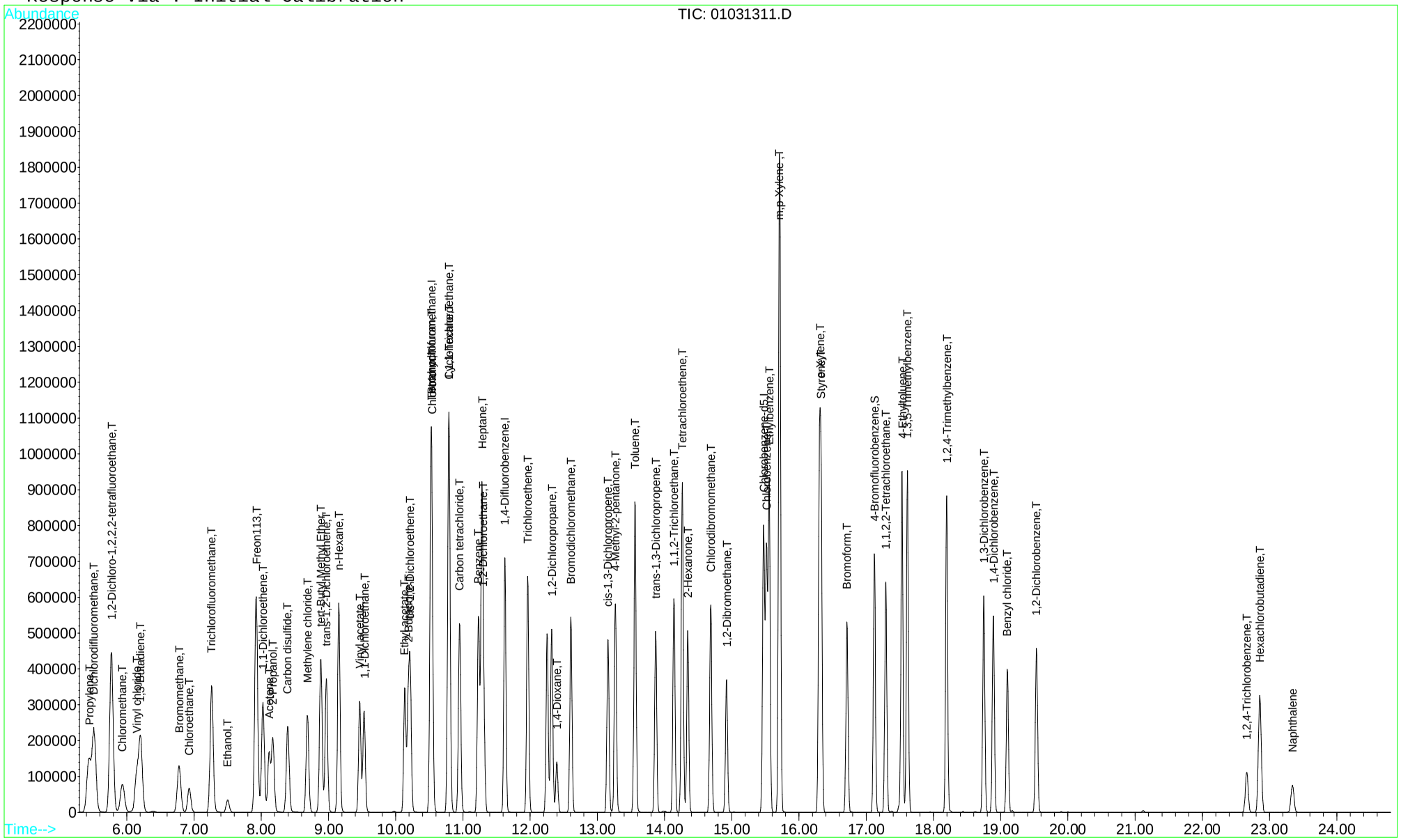
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.33	104	519214	10.79	ppbv		97
54)	Bromoform	16.71	173	339286	10.48	ppbv		98
56)	1,1,2,2-Tetrachloroethane	17.29	83	441422	10.30	ppbv	#	98
57)	4-Ethyltoluene	17.53	105	823794	10.33	ppbv		95
58)	1,3,5-Trimethylbenzene	17.61	105	695692	10.23	ppbv		94
59)	1,2,4-Trimethylbenzene	18.20	105	658854	10.35	ppbv		95
60)	1,3-Dichlorobenzene	18.75	146	331601	9.85	ppbv		96
61)	1,4-Dichlorobenzene	18.89	146	307312	9.79	ppbv		95
62)	Benzyl chloride	19.10	91	405522	10.31	ppbv		95
63)	1,2-Dichlorobenzene	19.53	146	264873	9.48	ppbv		95
64)	1,2,4-Trichlorobenzene	22.66	180	70628	8.32	ppbv		98
65)	Hexachlorobutadiene	22.86	225	133679	7.59	ppbv		99
66)	Naphthalene	23.34	128	126338	7.84	ppbv		98

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010313B\01031311.D Vial: 2
Acq On : 4 Jan 2013 4:17 am Operator: RACHEL HILL
Sample : ICV VOA1 010313 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 4 10:32 2013 Quant Results File: 010313V1.RES

Method : C:\HPCHEM\1\METHODS\010313V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 04 10:30:43 2013
Response via : Initial Calibration



Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
Response via : Initial Calibration

Calibration Files
2 =01051305.D 4 =01051306.D 5 =01051307.D
6 =01051308.D 7 =01051309.D 8 =01051310.D

		Compound	2	4	5	6	7	8	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------							
2)	T	Propylene	1.617	1.554	1.496	1.417	1.287	1.289	1.423	9.59
3)	T	Dichlorodifluoromet	3.469	4.111	3.934	3.772	3.441	3.486	3.682	7.12
4)	T	1,2-Dichloro-1,2,2,	2.064	2.575	2.482	2.392	2.209	2.272	2.327	7.37
5)	T	Chloromethane	1.645	1.674	1.593	1.469	1.310	1.296	1.465	11.92
6)	T	Vinyl chloride	1.957	2.223	2.081	1.976	1.755	1.725	1.907	11.10
7)	T	1,3-Butadiene	1.511	1.689	1.585	1.490	1.314	1.276	1.437	12.53
8)	T	Bromomethane	1.167	1.424	1.376	1.380	1.407	1.463	1.368	6.95
9)	T	Chloroethane	0.754	0.921	0.895	0.848	0.772	0.859	0.836	7.45
10)	T	Trichlorofluorometh	3.445	3.758	3.656	3.510	3.168	3.207	3.406	7.49
11)	T	Ethanol	0.619	0.516	0.500	0.478	0.409	0.420	0.479	15.86
12)	T	Freon113	2.179	2.739	2.669	2.581	2.296	2.315	2.404	10.87
13)	T	1,1-Dichloroethene	2.132	2.434	2.346	2.233	1.990	1.972	2.139	9.79
14)	T	Acetone	2.863	2.781	2.679	2.495	2.099	2.065	2.405	16.56
15)	T	Carbon disulfide	2.963	3.455	3.307	3.178	2.871	2.921	3.094	7.19
16)	T	2-Propanol	2.557	2.518	2.436	2.280	1.983	1.999	2.238	12.41
17)	T	Methylene chloride	1.988	1.857	1.775	1.690	1.459	1.452	1.655	14.23
18)	T	tert-Butyl Methyl E	3.342	3.854	3.742	3.506	2.958	2.988	3.300	13.04
19)	T	trans-1,2-Dichloroe	1.910	2.255	2.159	2.079	1.808	1.809	1.956	10.89
20)	T	n-Hexane	2.225	2.610	2.557	2.410	2.103	2.098	2.274	11.42
21)	T	1,1-Dichloroethane	2.430	2.828	2.744	2.574	2.211	2.211	2.435	12.10
22)	T	Vinyl acetate	3.146	4.605	4.468	4.129	3.456	3.405	3.745	17.27
23)	T	cis-1,2-Dichloroeth	1.162	1.421	1.387	1.339	1.187	1.231	1.273	8.39
24)	T	2-Butanone	2.434	3.016	3.119	2.913	2.354	2.223	2.580	16.79
25)	T	Ethyl acetate	3.030	3.784	3.742	3.500	2.900	2.925	3.229	13.53
26)	T	Tetrahydrofuran	1.737	2.076	1.982	1.844	1.545	1.481	1.706	16.77
27)	T	Chloroform	2.570	3.137	3.029	2.861	2.467	2.363	2.633	15.20
28)	T	1,1,1-Trichloroetha	2.377	3.202	3.124	2.960	2.518	2.301	2.624	18.53
29)	T	Cyclohexane	2.332	2.932	2.800	2.664	2.227	2.070	2.399	17.52
30)	T	Carbon tetrachlorid	2.159	2.932	2.881	2.759	2.421	2.404	2.515	13.89
31)	T	Benzene	3.652	4.316	4.252	3.974	3.416	3.478	3.755	11.50
32)	T	1,2-Dichloroethane	1.789	2.109	2.043	1.874	1.563	1.474	1.728	18.25
33)	I	1,4-Difluorobenzene	----------ISTD----------							
34)	T	Heptane	0.776	1.066	1.039	1.021	0.858	0.855	0.894	17.42
35)	T	Trichloroethene	0.384	0.573	0.567	0.577	0.514	0.561	0.516	14.98
36)	T	1,2-Dichloropropane	0.402	0.553	0.544	0.541	0.462	0.495	0.485	13.80
37)	T	1,4-Dioxane	0.166	0.237	0.236	0.237	0.204	0.225	0.215	12.55
38)	T	Bromodichloromethan	0.634	0.959	0.954	0.958	0.830	0.886	0.844	15.98
39)	T	cis-1,3-Dichloropro	0.526	0.783	0.778	0.774	0.672	0.737	0.696	14.35
40)	T	4-Methyl-2-pentanon	0.272	0.409	0.408	0.408	0.352	0.385	0.365	14.57
41)	T	Toluene	1.086	1.536	1.530	1.531	1.319	1.432	1.364	14.33
42)	T	trans-1,3-Dichlorop	0.444	0.711	0.713	0.707	0.618	0.679	0.634	15.87
43)	T	1,1,2-Trichloroetha	0.354	0.520	0.516	0.524	0.458	0.510	0.470	14.06
44)	T	Tetrachloroethene	0.491	0.748	0.744	0.761	0.666	0.672	0.652	18.35
45)	T	2-Hexanone	0.578	0.933	0.930	0.920	0.771	0.827	0.803	17.59
46)	T	Chlorodibromomethan	0.518	0.865	0.868	0.877	0.767	0.807	0.755	19.32
47)	T	1,2-Dibromoethane	0.487	0.754	0.763	0.757	0.671	0.742	0.679	15.85
48)	I	Chlorobenzene-d5	----------ISTD----------							
49)	T	Chlorobenzene	0.953	1.350	1.332	1.312	1.164	1.198	1.175	15.16
50)	T	Ethylbenzene	1.751	2.390	2.341	2.299	2.009	1.949	2.023	17.49
51)	T	m,p-Xylene	1.424	2.031	1.945	1.826	1.488	1.274	1.550	26.78
52)	T	o-Xylene	1.377	1.941	1.898	1.868	1.616	1.496	1.610	19.92
53)	T	Styrene	0.815	1.388	1.371	1.362	1.198	1.152	1.159	21.42
54)	T	Bromoform	0.537	0.915	0.922	0.913	0.809	0.775	0.776	21.26
55)	S	4-Bromofluorobenzen	0.592	0.615	0.619	0.627	0.625	0.622	0.619	2.09
56)	T	1,1,2,2-Tetrachloro	0.870	1.166	1.150	1.150	1.020	1.040	1.030	13.65
57)	T	4-Ethyltoluene	1.651	2.183	2.157	2.158	1.889	1.857	1.901	15.46

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

Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
Response via : Initial Calibration

Calibration Files
2 =01051305.D 4 =01051306.D 5 =01051307.D
6 =01051308.D 7 =01051309.D 8 =01051310.D

		Compound	2	4	5	6	7	8	Avg	%RSD
58)	T	1,3,5-Trimethylbenz	1.442	1.874	1.852	1.836	1.613	1.546	1.617	16.27
59)	T	1,2,4-Trimethylbenz	1.247	1.699	1.671	1.690	1.499	1.501	1.494	14.72
60)	T	1,3-Dichlorobenzene	0.638	0.835	0.847	0.849	0.773	0.831	0.783	10.46
61)	T	1,4-Dichlorobenzene	0.568	0.774	0.783	0.788	0.715	0.778	0.726	11.24
62)	T	Benzyl chloride	0.477	0.994	1.002	1.018	0.912	0.979	0.898	21.23
63)	T	1,2-Dichlorobenzene	0.543	0.663	0.667	0.688	0.612	0.655	0.634	7.84
64)	T	1,2,4-Trichlorobenz	0.175	0.164	0.170	0.223	0.157	0.169	0.183	14.98
65)	T	Hexachlorobutadiene	0.429	0.347	0.343	0.541	0.333	0.347	0.392	19.04
66)		Naphthalene	0.303	0.292	0.300	0.447	0.283	0.298	0.332	19.49

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

Compound List Report VOA 1

Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
Response via : Initial Calibration
Total Cpnds : 66

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Bromochloromethane	130	10.53	1.000	A	2	A	B
2	T	Propylene	41	5.44	0.517	A	2	A	B
3	T	Dichlorodifluoromethane	85	5.52	0.524	A	3	A	B
4	T	1,2-Dichloro-1,2,2,2-tetrafluo	135	5.77	0.548	A	2	A	B
5	T	Chloromethane	50	5.93	0.564	A	3	A	B
6	T	Vinyl chloride	62	6.15	0.584	A	2	A	B
7	T	1,3-Butadiene	39	6.21	0.590	A	2	A	B
8	T	Bromomethane	94	6.78	0.644	A	3	A	B
9	T	Chloroethane	64	6.93	0.659	A	3	A	B
10	T	Trichlorofluoromethane	101	7.26	0.690	A	3	A	B
11	T	Ethanol	45	7.50	0.713	A	2	A	B
12	T	Freon113	101	7.93	0.753	A	2	A	B
13	T	1,1-Dichloroethene	61	8.03	0.763	A	2	A	B
14	T	Acetone	43	8.12	0.771	A	2	A	B
15	T	Carbon disulfide	76	8.40	0.798	A	3	A	B
16	T	2-Propanol	45	8.17	0.776	A	2	A	B
17	T	Methylene chloride	49	8.69	0.825	A	2	A	B
18	T	tert-Butyl Methyl Ether	73	8.89	0.844	A	2	A	B
19	T	trans-1,2-Dichloroethene	61	8.97	0.852	A	2	A	B
20	T	n-Hexane	57	9.16	0.870	A	3	A	B
21	T	1,1-Dichloroethane	63	9.53	0.906	A	3	A	B
22	T	Vinyl acetate	43	9.46	0.899	A	2	A	B
23	T	cis-1,2-Dichloroethene	96	10.22	0.971	A	3	A	B
24	T	2-Butanone	43	10.19	0.968	A	2	A	B
25	T	Ethyl acetate	43	10.13	0.963	A	3	A	B
26	T	Tetrahydrofuran	42	10.52	1.000	A	2	A	B
27	T	Chloroform	83	10.54	1.001	A	2	A	B
28	T	1,1,1-Trichloroethane	97	10.79	1.025	A	3	A	B
29	T	Cyclohexane	56	10.79	1.025	A	2	A	B
30	T	Carbon tetrachloride	117	10.96	1.041	A	3	A	B
31	T	Benzene	78	11.23	1.067	A	3	A	B
32	T	1,2-Dichloroethane	62	11.31	1.075	A	3	A	B
33	I	1,4-Difluorobenzene	114	11.62	1.000	A	2	A	B
34	T	Heptane	43	11.28	0.971	A	3	A	B
35	T	Trichloroethene	130	11.96	1.029	A	3	A	B
36	T	1,2-Dichloropropane	63	12.32	1.060	A	3	A	B
37	T	1,4-Dioxane	88	12.40	1.067	A	2	A	B
38	T	Bromodichloromethane	83	12.61	1.085	A	2	A	B
39	T	cis-1,3-Dichloropropene	75	13.16	1.132	A	2	A	B
40	T	4-Methyl-2-pentanone	58	13.27	1.141	A	3	A	B
41	T	Toluene	91	13.56	1.166	A	2	A	B
42	T	trans-1,3-Dichloropropene	75	13.87	1.193	A	3	A	B
43	T	1,1,2-Trichloroethane	97	14.14	1.216	A	3	A	B
44	T	Tetrachloroethene	166	14.27	1.227	A	3	A	B
45	T	2-Hexanone	43	14.34	1.234	A	2	A	B
46	T	Chlorodibromomethane	129	14.69	1.264	A	2	A	B
47	T	1,2-Dibromoethane	107	14.92	1.283	A	2	A	B
48	I	Chlorobenzene-d5	117	15.47	1.000	A	2	A	B
49	T	Chlorobenzene	112	15.52	1.003	A	3	A	B
50	T	Ethylbenzene	91	15.56	1.005	A	2	A	B
51	T	m,p-Xylene	91	15.71	1.015	A	2	A	B
52	T	o-Xylene	91	16.31	1.054	A	2	A	B
53	T	Styrene	104	16.33	1.055	A	3	A	B
54	T	Bromoform	173	16.71	1.080	A	3	A	B
55	S	4-Bromofluorobenzene	95	17.12	1.106	A	2	A	B
56	T	1,1,2,2-Tetrachloroethane	83	17.29	1.117	A	2	A	B
57	T	4-Ethyltoluene	105	17.53	1.133	A	1	A	B
58	T	1,3,5-Trimethylbenzene	105	17.61	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	18.75	1.212	A	3	A	B
61	T	1,4-Dichlorobenzene	146	18.89	1.221	A	3	A	B
62	T	Benzyl chloride	91	19.10	1.234	A	2	A	B
63	T	1,2-Dichlorobenzene	146	19.53	1.262	A	3	A	B
64	T	1,2,4-Trichlorobenzene	180	22.66	1.464	A	3	A	B
65	T	Hexachlorobutadiene	225	22.85	1.477	A	2	A	B
66		Naphthalene	128	23.34	1.508	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
-----------------------------------------------------------------------
          010513V1.M     Sun Jan 06 22:24:08 2013
```

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\010513\01051313.D Vial: 3
Acq On : 5 Jan 2013 7:15 pm Operator: RACHEL HILL
Sample : ICV VOA1 010513 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
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	110	0.00
2	T	Propylene	1.423	1.372	3.6	97	0.00
3	T	Dichlorodifluoromethane	3.682	3.654	0.8	97	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.327	2.303	1.0	98	0.00
5	T	Chloromethane	1.465	1.471	-0.4	96	0.00
6	T	Vinyl chloride	1.907	1.920	-0.7	95	0.00
7	T	1,3-Butadiene	1.437	1.454	-1.2	94	0.00
8	T	Bromomethane	1.368	1.357	0.8	104	0.00
9	T	Chloroethane	0.836	0.840	-0.5	100	0.00
10	T	Trichlorofluoromethane	3.406	3.395	0.3	99	0.00
11	T	Ethanol	0.479	0.478	0.2	102	0.00
12	T	Freon113	2.404	2.572	-7.0	103	0.00
13	T	1,1-Dichloroethene	2.139	2.302	-7.6	104	0.00
14	T	Acetone	2.405	2.612	-8.6	103	0.00
15	T	Carbon disulfide	3.094	3.659	-18.3	116	0.00
16	T	2-Propanol	2.238	2.522	-12.7	110	0.00
17	T	Methylene chloride	1.655	1.687	-1.9	100	0.00
18	T	tert-Butyl Methyl Ether	3.300	3.582	-8.5	102	0.00
19	T	trans-1,2-Dichloroethene	1.956	2.178	-11.3	106	0.00
20	T	n-Hexane	2.274	2.446	-7.6	103	0.00
21	T	1,1-Dichloroethane	2.435	2.545	-4.5	99	0.00
22	T	Vinyl acetate	3.745	4.163	-11.2	99	0.00
23	T	cis-1,2-Dichloroethene	1.273	1.306	-2.6	101	0.00
24	T	2-Butanone	2.580	2.801	-8.6	102	0.00
25	T	Ethyl acetate	3.229	3.715	-15.1	108	0.00
26	T	Tetrahydrofuran	1.706	1.846	-8.2	97	0.00
27	T	Chloroform	2.633	2.751	-4.5	96	0.00
28	T	1,1,1-Trichloroethane	2.624	2.805	-6.9	96	0.00
29	T	Cyclohexane	2.399	2.664	-11.0	100	0.00
30	T	Carbon tetrachloride	2.515	2.654	-5.5	99	0.00
31	T	Benzene	3.755	3.900	-3.9	99	0.00
32	T	1,2-Dichloroethane	1.728	1.851	-7.1	96	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	113	0.00
34	T	Heptane	0.894	0.925	-3.5	98	0.00
35	T	Trichloroethene	0.516	0.501	2.9	99	0.00
36	T	1,2-Dichloropropane	0.485	0.481	0.8	98	0.00
37	T	1,4-Dioxane	0.215	0.223	-3.7	107	0.00
38	T	Bromodichloromethane	0.844	0.861	-2.0	101	0.00
39	T	cis-1,3-Dichloropropene	0.696	0.657	5.6	95	0.00
40	T	4-Methyl-2-pentanone	0.365	0.385	-5.5	106	0.00
41	T	Toluene	1.364	1.500	-10.0	110	0.00
42	T	trans-1,3-Dichloropropene	0.634	0.679	-7.1	108	0.00
43	T	1,1,2-Trichloroethane	0.470	0.455	3.2	99	0.00
44	T	Tetrachloroethene	0.652	0.660	-1.2	100	0.00
45	T	2-Hexanone	0.803	0.884	-10.1	107	0.00
46	T	Chlorodibromomethane	0.755	0.762	-0.9	100	0.00
47	T	1,2-Dibromoethane	0.679	0.660	2.8	99	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	114	0.00
49	T	Chlorobenzene	1.175	1.186	-0.9	100	0.00
50	T	Ethylbenzene	2.023	2.070	-2.3	98	0.00
51	T	m,p-Xylene	1.550	1.758	-13.4	98	0.00
52	T	o-Xylene	1.610	1.701	-5.7	100	0.00
53	T	Styrene	1.159	1.234	-6.5	101	0.00
54	T	Bromoform	0.776	0.820	-5.7	102	0.00
55	S	4-Bromofluorobenzene	0.619	0.614	0.8	114	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\010513\01051313.D Vial: 3
Acq On : 5 Jan 2013 7:15 pm Operator: RACHEL HILL
Sample : ICV VOA1 010513 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
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	1.030	1.039	-0.9	101	0.00
57	T	4-Ethyltoluene	1.901	1.969	-3.6	103	0.00
58	T	1,3,5-Trimethylbenzene	1.617	1.687	-4.3	102	0.00
59	T	1,2,4-Trimethylbenzene	1.494	1.560	-4.4	104	0.00
60	T	1,3-Dichlorobenzene	0.783	0.787	-0.5	107	0.00
61	T	1,4-Dichlorobenzene	0.726	0.735	-1.2	108	0.00
62	T	Benzyl chloride	0.898	0.970	-8.0	111	0.00
63	T	1,2-Dichlorobenzene	0.634	0.629	0.8	108	0.00
64	T	1,2,4-Trichlorobenzene	0.183	0.183	0.0	127	0.00
65	T	Hexachlorobutadiene	0.392	0.351	10.5	115	0.00
66		Naphthalene	0.332	0.329	0.9	128	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010513\01051313.D Vial: 3
Acq On : 5 Jan 2013 7:15 pm Operator: RACHEL HILL
Sample : ICV VOA1 010513 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 6 11:05 2013 Quant Results File: 010513V1.RES

Quant Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
Response via : Initial Calibration
DataAcq Meth : 010513V1

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	10.53	130	196257	12.50	ppbv		0.00
33) 1,4-Difluorobenzene	11.62	114	662025	12.50	ppbv		0.00
48) Chlorobenzene-d5	15.47	117	527812	12.50	ppbv		0.00
System Monitoring Compounds							
55) 4-Bromofluorobenzene	17.12	95	324183	12.41	ppbv		0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 99.28%				
Target Compounds							Qvalue
2) Propylene	5.44	41	219665	9.83	ppbv		96
3) Dichlorodifluoromethane	5.52	85	527777	9.13	ppbv		98
4) 1,2-Dichloro-1,2,2,2-tetra	5.78	135	343555	9.40	ppbv	#	62
5) Chloromethane	5.94	50	219366	9.53	ppbv		99
6) Vinyl chloride	6.15	62	283417	9.47	ppbv		99
7) 1,3-Butadiene	6.21	39	223714	9.92	ppbv		99
8) Bromomethane	6.78	94	198070	9.22	ppbv		100
9) Chloroethane	6.93	64	121374	9.25	ppbv		97
10) Trichlorofluoromethane	7.27	101	511673	9.57	ppbv		98
11) Ethanol	7.50	45	69114	9.20	ppbv		99
12) Freon113	7.93	101	395724	10.48	ppbv		87
13) 1,1-Dichloroethene	8.03	61	357773	10.65	ppbv	#	85
14) Acetone	8.12	43	410128	10.86	ppbv	#	91
15) Carbon disulfide	8.40	76	557225	11.47	ppbv	#	99
16) 2-Propanol	8.18	45	400006	11.39	ppbv	#	1
17) Methylene chloride	8.69	49	264858	10.20	ppbv	#	81
18) tert-Butyl Methyl Ether	8.89	73	556830	10.75	ppbv	#	90
19) trans-1,2-Dichloroethene	8.97	61	335129	10.91	ppbv	#	80
20) n-Hexane	9.16	57	387800	10.86	ppbv	#	92
21) 1,1-Dichloroethane	9.53	63	387614	10.14	ppbv	#	97
22) Vinyl acetate	9.46	43	647023	11.00	ppbv	#	95
23) cis-1,2-Dichloroethene	10.22	96	201014	10.06	ppbv	#	79
24) 2-Butanone	10.19	43	435326	10.75	ppbv	#	90
25) Ethyl acetate	10.14	43	571620	11.28	ppbv	#	99
26) Tetrahydrofuran	10.53	42	289803	10.82	ppbv		91
27) Chloroform	10.54	83	423272	10.24	ppbv		100
28) 1,1,1-Trichloroethane	10.79	97	422768	10.26	ppbv		95
29) Cyclohexane	10.80	56	409931	10.89	ppbv		88
30) Carbon tetrachloride	10.95	117	395820	10.02	ppbv		99
31) Benzene	11.23	78	587840	9.97	ppbv		94
32) 1,2-Dichloroethane	11.31	62	281841	10.39	ppbv	#	97
34) Heptane	11.28	43	485218	10.25	ppbv	#	91
35) Trichloroethene	11.96	130	254948	9.34	ppbv		94
36) 1,2-Dichloropropane	12.32	63	249842	9.74	ppbv		97
37) 1,4-Dioxane	12.40	88	113634	10.00	ppbv	#	81
38) Bromodichloromethane	12.61	83	437610	9.79	ppbv		98
39) cis-1,3-Dichloropropene	13.16	75	330574	8.96	ppbv		97
40) 4-Methyl-2-pentanone	13.27	58	204167	10.57	ppbv	#	92
41) Toluene	13.56	91	778310	10.77	ppbv		98
42) trans-1,3-Dichloropropene	13.87	75	327139	9.75	ppbv		96
43) 1,1,2-Trichloroethane	14.14	97	236306	9.48	ppbv		96
44) Tetrachloroethene	14.27	166	335402	9.72	ppbv		97
45) 2-Hexanone	14.34	43	459020	10.80	ppbv		98
46) Chlorodibromomethane	14.69	129	395685	9.89	ppbv		99
47) 1,2-Dibromoethane	14.92	107	335472	9.33	ppbv		100
49) Chlorobenzene	15.52	112	495656	9.99	ppbv	#	88
50) Ethylbenzene	15.56	91	856453	10.03	ppbv		95
51) m,p-Xylene	15.71	91	1425139	21.78	ppbv		95
52) o-Xylene	16.31	91	718096	10.57	ppbv	#	92

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010513\01051313.D Vial: 3
Acq On : 5 Jan 2013 7:15 pm Operator: RACHEL HILL
Sample : ICV VOA1 010513 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 6 11:05 2013 Quant Results File: 010513V1.RES

Quant Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
Response via : Initial Calibration
DataAcq Meth : 010513V1

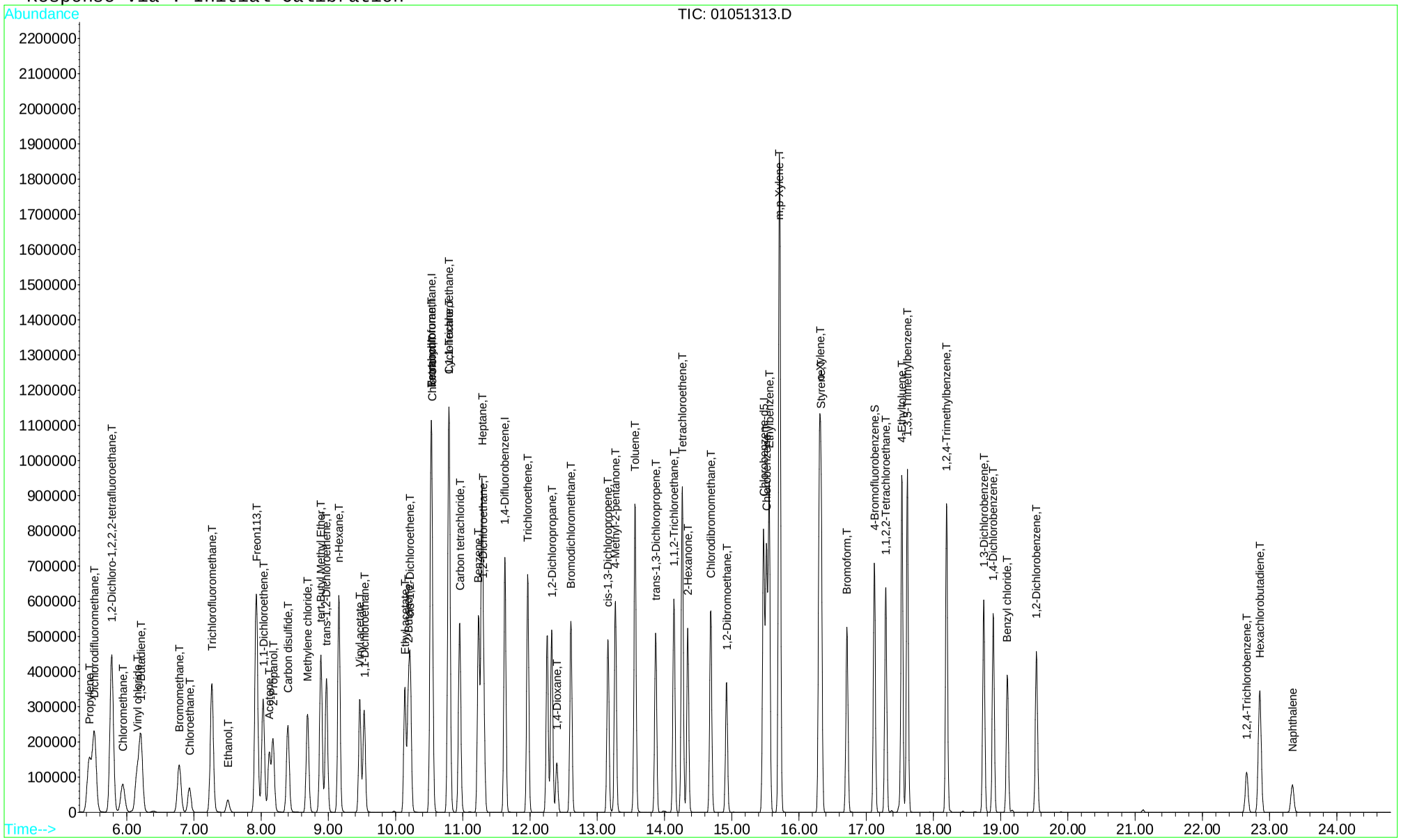
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.33	104	510725	10.44	ppbv		97
54)	Bromoform	16.71	173	332318	10.14	ppbv		98
56)	1,1,2,2-Tetrachloroethane	17.29	83	438769	10.09	ppbv	#	98
57)	4-Ethyltoluene	17.53	105	814755	10.15	ppbv		94
58)	1,3,5-Trimethylbenzene	17.61	105	690766	10.12	ppbv		94
59)	1,2,4-Trimethylbenzene	18.19	105	645530	10.23	ppbv		95
60)	1,3-Dichlorobenzene	18.75	146	322161	9.75	ppbv	#	95
61)	1,4-Dichlorobenzene	18.89	146	297758	9.72	ppbv	#	95
62)	Benzyl chloride	19.10	91	397312	10.47	ppbv		95
63)	1,2-Dichlorobenzene	19.53	146	257497	9.62	ppbv	#	95
64)	1,2,4-Trichlorobenzene	22.66	180	70424	9.13	ppbv		97
65)	Hexachlorobutadiene	22.85	225	139424	8.43	ppbv		99
66)	Naphthalene	23.34	128	127724	9.10	ppbv		99

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010513\01051313.D Vial: 3
Acq On : 5 Jan 2013 7:15 pm Operator: RACHEL HILL
Sample : ICV VOA1 010513 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 6 11:05 2013 Quant Results File: 010513V1.RES

Method : C:\HPCHEM\1\METHODS\010513V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Sun Jan 06 11:05:05 2013
Response via : Initial Calibration



Response Factor Report VOA 1

Method : C:\HPCHEM\1\METHODS\011013V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 11 09:41:17 2013
Response via : Initial Calibration

Calibration Files
2 =01101303.D 4 =01101304.D 5 =01101305.D
6 =01101306.D 7 =01101307.D 8 =01101308.D

		Compound	2	4	5	6	7	8	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------							
2)	T	Propylene	1.234	1.189	1.074	1.044	0.988	0.954	1.061	10.74
3)	T	Dichlorodifluoromet	3.341	3.834	3.478	3.420	3.245	3.156	3.366	7.38
4)	T	1,2-Dichloro-1,2,2,	2.472	2.884	2.622	2.588	2.471	2.400	2.533	7.50
5)	T	Chloromethane	1.369	1.421	1.256	1.212	1.133	1.076	1.215	11.89
6)	T	Vinyl chloride	1.509	1.755	1.598	1.564	1.460	1.385	1.514	9.42
7)	T	1,3-Butadiene	1.059	1.215	1.091	1.063	0.979	0.918	1.027	11.37
8)	T	Bromomethane	1.350	1.467	1.331	1.365	1.305	1.230	1.315	7.64
9)	T	Chloroethane	0.701	0.831	0.769	0.750	0.720	0.723	0.741	6.51
10)	T	Trichlorofluorometh	3.584	3.776	3.507	3.444	3.262	3.087	3.363	9.15
11)	T	Ethanol	0.435	0.410	0.391	0.384	0.351	0.333	0.376	10.76
12)	T	Freon113	2.351	2.645	2.496	2.443	2.286	2.105	2.325	10.19
13)	T	1,1-Dichloroethene	1.867	2.071	1.924	1.874	1.761	1.624	1.809	10.04
14)	T	Acetone	2.128	2.119	1.984	1.911	1.676	1.502	1.783	19.98
15)	T	Carbon disulfide	2.817	3.182	2.946	2.849	2.706	2.592	2.802	7.95
16)	T	2-Propanol	1.850	1.936	1.841	1.780	1.614	1.528	1.713	10.81
17)	T	Methylene chloride	1.658	1.547	1.424	1.382	1.265	1.156	1.361	15.01
18)	T	tert-Butyl Methyl E	3.164	3.484	3.290	3.188	2.816	2.519	2.965	14.68
19)	T	trans-1,2-Dichloroe	1.726	1.900	1.764	1.721	1.584	1.463	1.647	11.14
20)	T	n-Hexane	1.948	2.226	2.061	2.003	1.851	1.705	1.916	10.96
21)	T	1,1-Dichloroethane	2.217	2.440	2.279	2.196	1.976	1.823	2.089	12.81
22)	T	Vinyl acetate	2.491	3.532	3.328	3.220	2.808	2.513	2.880	16.80
23)	T	cis-1,2-Dichloroeth	1.187	1.376	1.283	1.255	1.150	1.083	1.195	9.94
24)	T	2-Butanone	1.998	2.410	2.203	2.223	1.925	1.657	1.991	16.00
25)	T	Ethyl acetate	2.516	3.064	2.739	2.701	2.434	2.133	2.517	14.25
26)	T	Tetrahydrofuran	1.346	1.580	1.477	1.408	1.238	1.111	1.304	16.43
27)	T	Chloroform	2.367	2.716	2.533	2.468	2.227	2.035	2.313	13.00
28)	T	1,1,1-Trichloroetha	2.410	2.871	2.706	2.640	2.382	2.156	2.443	13.29
29)	T	Cyclohexane	2.059	2.424	2.251	2.195	1.988	1.795	2.037	14.43
30)	T	Carbon tetrachlorid	2.409	2.985	2.815	2.770	2.530	2.331	2.565	11.93
31)	T	Benzene	3.600	3.984	3.743	3.619	3.228	2.932	3.396	13.85
32)	T	1,2-Dichloroethane	1.544	1.728	1.632	1.568	1.387	1.230	1.453	15.94
33)	I	1,4-Difluorobenzene	----------ISTD----------							
34)	T	Heptane	0.641	0.790	0.731	0.701	0.652	0.562	0.650	16.36
35)	T	Trichloroethene	0.455	0.574	0.538	0.530	0.504	0.459	0.497	10.84
36)	T	1,2-Dichloropropane	0.381	0.463	0.437	0.427	0.391	0.349	0.395	12.83
37)	T	1,4-Dioxane	0.175	0.221	0.214	0.207	0.193	0.178	0.194	10.62
38)	T	Bromodichloromethan	0.648	0.829	0.794	0.775	0.721	0.652	0.715	12.46
39)	T	cis-1,3-Dichloropro	0.528	0.696	0.665	0.649	0.601	0.549	0.599	12.34
40)	T	4-Methyl-2-pentanon	0.256	0.334	0.322	0.311	0.290	0.270	0.292	10.90
41)	T	Toluene	1.189	1.416	1.345	1.306	1.202	1.080	1.214	13.07
42)	T	trans-1,3-Dichlorop	0.450	0.639	0.611	0.593	0.555	0.510	0.548	13.08
43)	T	1,1,2-Trichloroetha	0.388	0.483	0.459	0.450	0.422	0.385	0.421	10.82
44)	T	Tetrachloroethene	0.673	0.813	0.764	0.744	0.710	0.644	0.707	10.46
45)	T	2-Hexanone	0.499	0.708	0.672	0.646	0.592	0.534	0.591	14.73
46)	T	Chlorodibromomethan	0.611	0.850	0.815	0.800	0.750	0.677	0.731	13.41
47)	T	1,2-Dibromoethane	0.575	0.735	0.701	0.679	0.632	0.573	0.632	12.12
48)	I	Chlorobenzene-d5	----------ISTD----------							
49)	T	Chlorobenzene	1.090	1.300	1.247	1.205	1.122	0.992	1.119	13.37
50)	T	Ethylbenzene	1.842	2.109	2.007	1.925	1.768	1.524	1.781	15.97
51)	T	m,p-Xylene	1.456	1.707	1.622	1.502	1.340	1.113	1.374	21.17
52)	T	o-Xylene	1.455	1.678	1.616	1.535	1.408	1.224	1.422	15.76
53)	T	Styrene	0.929	1.271	1.224	1.178	1.088	0.964	1.069	15.49
54)	T	Bromoform	0.679	1.013	0.992	0.958	0.899	0.815	0.872	14.67
55)	S	4-Bromofluorobenzen	0.550	0.570	0.566	0.569	0.572	0.580	0.571	2.19
56)	T	1,1,2,2-Tetrachloro	0.898	1.036	0.992	0.952	0.893	0.811	0.901	11.90
57)	T	4-Ethyltoluene	1.825	2.078	1.984	1.897	1.759	1.552	1.778	14.23

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

Method : C:\HPCHEM\1\METHODS\011013V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 11 09:41:17 2013
Response via : Initial Calibration

Calibration Files
2 =01101303.D 4 =01101304.D 5 =01101305.D
6 =01101306.D 7 =01101307.D 8 =01101308.D

		Compound	2	4	5	6	7	8	Avg	%RSD
58)	T	1,3,5-Trimethylbenz	1.582	1.768	1.689	1.590	1.474	1.302	1.506	14.69
59)	T	1,2,4-Trimethylbenz	1.393	1.632	1.565	1.502	1.390	1.261	1.407	12.90
60)	T	1,3-Dichlorobenzene	0.848	0.985	0.958	0.915	0.858	0.801	0.873	9.77
61)	T	1,4-Dichlorobenzene	0.784	0.929	0.901	0.864	0.803	0.751	0.819	10.02
62)	T	Benzyl chloride	0.486	0.979	0.958	0.917	0.874	0.825	0.832	20.08
63)	T	1,2-Dichlorobenzene	0.734	0.820	0.787	0.752	0.710	0.662	0.727	9.38
64)	T	1,2,4-Trichlorobenz	0.256	0.252	0.239	0.228	0.218	0.217	0.233	7.03
65)	T	Hexachlorobutadiene	0.601	0.516	0.472	0.454	0.442	0.431	0.476	13.42
66)		Naphthalene	0.350	0.396	0.367	0.347	0.337	0.338	0.353	6.36

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

Compound List Report VOA 1

Method : C:\HPCHEM\1\METHODS\011013V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 11 09:41:17 2013
Response via : Initial Calibration
Total Cpnds : 66

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Bromochloromethane	130	10.53	1.000	A	2	A	B
2	T	Propylene	41	5.44	0.517	A	2	A	B
3	T	Dichlorodifluoromethane	85	5.52	0.524	A	3	A	B
4	T	1,2-Dichloro-1,2,2,2-tetrafluo	135	5.77	0.548	A	2	A	B
5	T	Chloromethane	50	5.93	0.564	A	3	A	B
6	T	Vinyl chloride	62	6.15	0.584	A	2	A	B
7	T	1,3-Butadiene	39	6.21	0.590	A	2	A	B
8	T	Bromomethane	94	6.78	0.644	A	3	A	B
9	T	Chloroethane	64	6.93	0.659	A	3	A	B
10	T	Trichlorofluoromethane	101	7.26	0.690	A	3	A	B
11	T	Ethanol	45	7.50	0.713	A	2	A	B
12	T	Freon113	101	7.93	0.753	A	2	A	B
13	T	1,1-Dichloroethene	61	8.03	0.763	A	2	A	B
14	T	Acetone	43	8.12	0.771	A	2	A	B
15	T	Carbon disulfide	76	8.40	0.798	A	3	A	B
16	T	2-Propanol	45	8.17	0.776	A	2	A	B
17	T	Methylene chloride	49	8.69	0.825	A	2	A	B
18	T	tert-Butyl Methyl Ether	73	8.89	0.844	A	2	A	B
19	T	trans-1,2-Dichloroethene	61	8.97	0.852	A	2	A	B
20	T	n-Hexane	57	9.16	0.870	A	3	A	B
21	T	1,1-Dichloroethane	63	9.53	0.906	A	3	A	B
22	T	Vinyl acetate	43	9.46	0.899	A	2	A	B
23	T	cis-1,2-Dichloroethene	96	10.22	0.971	A	3	A	B
24	T	2-Butanone	43	10.19	0.968	A	2	A	B
25	T	Ethyl acetate	43	10.13	0.963	A	3	A	B
26	T	Tetrahydrofuran	42	10.52	1.000	A	2	A	B
27	T	Chloroform	83	10.54	1.001	A	2	A	B
28	T	1,1,1-Trichloroethane	97	10.79	1.025	A	3	A	B
29	T	Cyclohexane	56	10.79	1.025	A	2	A	B
30	T	Carbon tetrachloride	117	10.96	1.041	A	3	A	B
31	T	Benzene	78	11.23	1.067	A	3	A	B
32	T	1,2-Dichloroethane	62	11.31	1.075	A	3	A	B
33	I	1,4-Difluorobenzene	114	11.62	1.000	A	2	A	B
34	T	Heptane	43	11.28	0.971	A	3	A	B
35	T	Trichloroethene	130	11.96	1.029	A	3	A	B
36	T	1,2-Dichloropropane	63	12.32	1.060	A	3	A	B
37	T	1,4-Dioxane	88	12.40	1.067	A	2	A	B
38	T	Bromodichloromethane	83	12.61	1.085	A	2	A	B
39	T	cis-1,3-Dichloropropene	75	13.16	1.132	A	2	A	B
40	T	4-Methyl-2-pentanone	58	13.27	1.141	A	3	A	B
41	T	Toluene	91	13.56	1.166	A	2	A	B
42	T	trans-1,3-Dichloropropene	75	13.87	1.193	A	3	A	B
43	T	1,1,2-Trichloroethane	97	14.14	1.216	A	3	A	B
44	T	Tetrachloroethene	166	14.27	1.227	A	3	A	B
45	T	2-Hexanone	43	14.34	1.234	A	2	A	B
46	T	Chlorodibromomethane	129	14.69	1.264	A	2	A	B
47	T	1,2-Dibromoethane	107	14.92	1.283	A	2	A	B
48	I	Chlorobenzene-d5	117	15.47	1.000	A	2	A	B
49	T	Chlorobenzene	112	15.52	1.003	A	3	A	B
50	T	Ethylbenzene	91	15.56	1.005	A	2	A	B
51	T	m,p-Xylene	91	15.71	1.015	A	2	A	B
52	T	o-Xylene	91	16.31	1.054	A	2	A	B
53	T	Styrene	104	16.33	1.055	A	3	A	B
54	T	Bromoform	173	16.71	1.080	A	3	A	B
55	S	4-Bromofluorobenzene	95	17.12	1.106	A	2	A	B
56	T	1,1,2,2-Tetrachloroethane	83	17.29	1.117	A	2	A	B
57	T	4-Ethyltoluene	105	17.53	1.133	A	1	A	B
58	T	1,3,5-Trimethylbenzene	105	17.61	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	18.75	1.212	A	3	A	B
61	T	1,4-Dichlorobenzene	146	18.89	1.221	A	3	A	B
62	T	Benzyl chloride	91	19.10	1.234	A	2	A	B
63	T	1,2-Dichlorobenzene	146	19.53	1.262	A	3	A	B
64	T	1,2,4-Trichlorobenzene	180	22.66	1.464	A	3	A	B
65	T	Hexachlorobutadiene	225	22.85	1.477	A	2	A	B
66		Naphthalene	128	23.34	1.508	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
-----------------------------------------------------------------------
          011013V1.M     Fri Jan 11 10:38:51 2013
```

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\011013B\01101312.D Vial: 3
Acq On : 10 Jan 2013 7:54 pm Operator: RACHEL HILL
Sample : ICV VOA1 011013 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\011013V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 11 09:41:17 2013
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	118	0.00
2	T	Propylene	1.061	1.167	-10.0	116	-0.02
3	T	Dichlorodifluoromethane	3.366	4.009	-19.1	124	-0.01
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.533	2.990	-18.0	122	0.00
5	T	Chloromethane	1.215	1.368	-12.6	114	0.00
6	T	Vinyl chloride	1.514	1.751	-15.7	118	0.00
7	T	1,3-Butadiene	1.027	1.165	-13.4	113	0.00
8	T	Bromomethane	1.315	1.490	-13.3	120	-0.01
9	T	Chloroethane	0.741	0.841	-13.5	120	-0.01
10	T	Trichlorofluoromethane	3.363	3.895	-15.8	122	0.00
11	T	Ethanol	0.376	0.404	-7.4	117	0.00
12	T	Freon113	2.325	2.671	-14.9	119	0.00
13	T	1,1-Dichloroethene	1.809	2.079	-14.9	119	0.00
14	T	Acetone	1.783	2.060	-15.5	115	0.00
15	T	Carbon disulfide	2.802	3.250	-16.0	121	0.00
16	T	2-Propanol	1.713	1.935	-13.0	118	0.00
17	T	Methylene chloride	1.361	1.487	-9.3	114	0.00
18	T	tert-Butyl Methyl Ether	2.965	3.525	-18.9	119	0.00
19	T	trans-1,2-Dichloroethene	1.647	1.880	-14.1	117	0.00
20	T	n-Hexane	1.916	2.150	-12.2	114	0.00
21	T	1,1-Dichloroethane	2.089	2.431	-16.4	118	0.00
22	T	Vinyl acetate	2.880	3.409	-18.4	114	0.00
23	T	cis-1,2-Dichloroethene	1.195	1.373	-14.9	118	0.00
24	T	2-Butanone	1.991	2.299	-15.5	113	0.00
25	T	Ethyl acetate	2.517	2.852	-13.3	110	0.00
26	T	Tetrahydrofuran	1.304	1.462	-12.1	109	0.00
27	T	Chloroform	2.313	2.681	-15.9	117	0.00
28	T	1,1,1-Trichloroethane	2.443	2.870	-17.5	118	0.00
29	T	Cyclohexane	2.037	2.295	-12.7	112	0.00
30	T	Carbon tetrachloride	2.565	3.052	-19.0	121	0.00
31	T	Benzene	3.396	3.944	-16.1	117	0.00
32	T	1,2-Dichloroethane	1.453	1.709	-17.6	117	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	122	0.00
34	T	Heptane	0.650	0.717	-10.3	111	0.00
35	T	Trichloroethene	0.497	0.561	-12.9	119	0.00
36	T	1,2-Dichloropropane	0.395	0.437	-10.6	115	0.00
37	T	1,4-Dioxane	0.194	0.212	-9.3	117	0.00
38	T	Bromodichloromethane	0.715	0.811	-13.4	119	0.00
39	T	cis-1,3-Dichloropropene	0.599	0.678	-13.2	119	0.00
40	T	4-Methyl-2-pentanone	0.292	0.312	-6.8	114	0.00
41	T	Toluene	1.214	1.361	-12.1	117	0.00
42	T	trans-1,3-Dichloropropene	0.548	0.625	-14.1	119	0.00
43	T	1,1,2-Trichloroethane	0.421	0.467	-10.9	118	0.00
44	T	Tetrachloroethene	0.707	0.780	-10.3	117	0.00
45	T	2-Hexanone	0.591	0.643	-8.8	111	0.00
46	T	Chlorodibromomethane	0.731	0.839	-14.8	120	0.00
47	T	1,2-Dibromoethane	0.632	0.710	-12.3	118	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	119	0.00
49	T	Chlorobenzene	1.119	1.275	-13.9	117	0.00
50	T	Ethylbenzene	1.781	2.041	-14.6	116	0.00
51	T	m,p-Xylene	1.374	1.613	-17.4	113	0.00
52	T	o-Xylene	1.422	1.623	-14.1	116	0.00
53	T	Styrene	1.069	1.228	-14.9	115	0.00
54	T	Bromoform	0.872	1.011	-15.9	119	0.00
55	S	4-Bromofluorobenzene	0.571	0.567	0.7	119	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\011013B\01101312.D Vial: 3
Acq On : 10 Jan 2013 7:54 pm Operator: RACHEL HILL
Sample : ICV VOA1 011013 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

Method : C:\HPCHEM\1\METHODS\011013V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 11 09:41:17 2013
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	0.901	1.004	-11.4	116	0.00
57	T	4-Ethyltoluene	1.778	2.018	-13.5	116	0.00
58	T	1,3,5-Trimethylbenzene	1.506	1.713	-13.7	116	0.00
59	T	1,2,4-Trimethylbenzene	1.407	1.598	-13.6	117	0.00
60	T	1,3-Dichlorobenzene	0.873	0.973	-11.5	118	0.00
61	T	1,4-Dichlorobenzene	0.819	0.922	-12.6	118	0.00
62	T	Benzyl chloride	0.832	0.979	-17.7	119	0.00
63	T	1,2-Dichlorobenzene	0.727	0.812	-11.7	118	0.00
64	T	1,2,4-Trichlorobenzene	0.233	0.248	-6.4	118	0.00
65	T	Hexachlorobutadiene	0.476	0.475	0.2	110	0.00
66		Naphthalene	0.353	0.387	-9.6	117	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011013B\01101312.D Vial: 3
Acq On : 10 Jan 2013 7:54 pm Operator: RACHEL HILL
Sample : ICV VOA1 011013 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 11 9:42 2013 Quant Results File: 011013V1.RES

Quant Method : C:\HPCHEM\1\METHODS\011013V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 11 09:41:17 2013
Response via : Initial Calibration
DataAcq Meth : 011013V1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.52	130	316706	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.62	114	1105182	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.47	117	888776	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.12	95	504371	12.42	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 99.36%

Target Compounds						Qvalue
2) Propylene	5.42	41	301706	11.23	ppbv	98
3) Dichlorodifluoromethane	5.50	85	934574	10.96	ppbv	100
4) 1,2-Dichloro-1,2,2,2-tetra	5.76	135	719606	11.21	ppbv #	85
5) Chloromethane	5.93	50	329308	10.70	ppbv	100
6) Vinyl chloride	6.14	62	417137	10.87	ppbv	99
7) 1,3-Butadiene	6.20	39	289253	11.11	ppbv	89
8) Bromomethane	6.77	94	351177	10.54	ppbv	99
9) Chloroethane	6.92	64	196110	10.45	ppbv	99
10) Trichlorofluoromethane	7.25	101	947381	11.12	ppbv	99
11) Ethanol	7.49	45	94208	9.89	ppbv	99
12) Freon113	7.92	101	663114	11.26	ppbv	99
13) 1,1-Dichloroethene	8.02	61	521511	11.38	ppbv	92
14) Acetone	8.11	43	522014	11.55	ppbv #	97
15) Carbon disulfide	8.39	76	798745	11.25	ppbv #	99
16) 2-Propanol	8.17	45	495185	11.41	ppbv #	1
17) Methylene chloride	8.68	49	376793	10.93	ppbv	92
18) tert-Butyl Methyl Ether	8.88	73	884197	11.77	ppbv	99
19) trans-1,2-Dichloroethene	8.96	61	466822	11.18	ppbv	90
20) n-Hexane	9.15	57	550116	11.33	ppbv	96
21) 1,1-Dichloroethane	9.52	63	597472	11.29	ppbv	99
22) Vinyl acetate	9.46	43	855201	11.72	ppbv	99
23) cis-1,2-Dichloroethene	10.21	96	340871	11.26	ppbv	90
24) 2-Butanone	10.18	43	576644	11.43	ppbv	96
25) Ethyl acetate	10.13	43	708046	11.10	ppbv #	100
26) Tetrahydrofuran	10.52	42	370537	11.22	ppbv	99
27) Chloroform	10.54	83	665618	11.36	ppbv	100
28) 1,1,1-Trichloroethane	10.78	97	697997	11.28	ppbv	98
29) Cyclohexane	10.79	56	569820	11.04	ppbv	92
30) Carbon tetrachloride	10.95	117	734683	11.30	ppbv	99
31) Benzene	11.23	78	959181	11.15	ppbv	98
32) 1,2-Dichloroethane	11.31	62	419981	11.41	ppbv	98
34) Heptane	11.28	43	627592	10.92	ppbv	96
35) Trichloroethene	11.96	130	476055	10.82	ppbv	98
36) 1,2-Dichloropropane	12.32	63	378646	10.84	ppbv	99
37) 1,4-Dioxane	12.40	88	179877	10.50	ppbv	93
38) Bromodichloromethane	12.60	83	687985	10.88	ppbv	100
39) cis-1,3-Dichloropropene	13.15	75	569128	10.75	ppbv	99
40) 4-Methyl-2-pentanone	13.26	58	275664	10.69	ppbv	96
41) Toluene	13.56	91	1179013	10.99	ppbv	99
42) trans-1,3-Dichloropropene	13.87	75	503028	10.39	ppbv	98
43) 1,1,2-Trichloroethane	14.14	97	404631	10.88	ppbv	98
44) Tetrachloroethene	14.26	166	662076	10.60	ppbv	100
45) 2-Hexanone	14.34	43	556930	10.65	ppbv	96
46) Chlorodibromomethane	14.68	129	726536	11.24	ppbv	99
47) 1,2-Dibromoethane	14.92	107	602212	10.78	ppbv	99
49) Chlorobenzene	15.51	112	897570	11.29	ppbv	98
50) Ethylbenzene	15.55	91	1422154	11.23	ppbv	98
51) m,p-Xylene	15.71	91	2201892	22.53	ppbv	97
52) o-Xylene	16.30	91	1154054	11.41	ppbv	97

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011013B\01101312.D Vial: 3
Acq On : 10 Jan 2013 7:54 pm Operator: RACHEL HILL
Sample : ICV VOA1 011013 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 11 9:42 2013 Quant Results File: 011013V1.RES

Quant Method : C:\HPCHEM\1\METHODS\011013V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 11 09:41:17 2013
Response via : Initial Calibration
DataAcq Meth : 011013V1

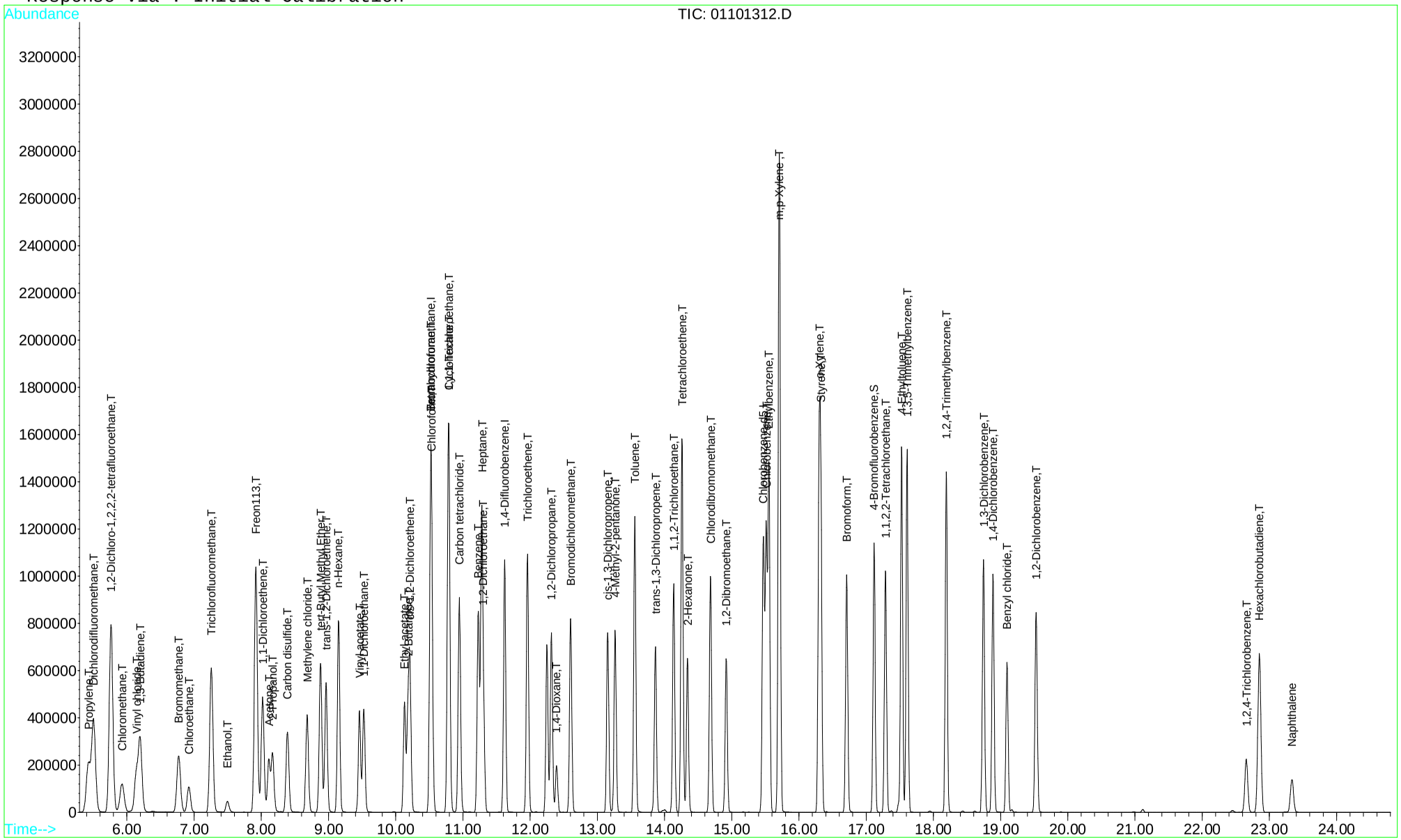
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53)	Styrene	16.33	104	855638	11.25	ppbv	99
54)	Bromoform	16.71	173	690332	11.13	ppbv	100
56)	1,1,2,2-Tetrachloroethane	17.29	83	713663	11.14	ppbv	100
57)	4-Ethyltoluene	17.53	105	1406413	11.13	ppbv	98
58)	1,3,5-Trimethylbenzene	17.61	105	1181252	11.03	ppbv	98
59)	1,2,4-Trimethylbenzene	18.19	105	1113230	11.13	ppbv	98
60)	1,3-Dichlorobenzene	18.74	146	670949	10.81	ppbv	99
61)	1,4-Dichlorobenzene	18.89	146	629014	10.80	ppbv	99
62)	Benzyl chloride	19.10	91	674921	11.40	ppbv	99
63)	1,2-Dichlorobenzene	19.53	146	559950	10.83	ppbv	99
64)	1,2,4-Trichlorobenzene	22.66	180	160401	9.69	ppbv	98
65)	Hexachlorobutadiene	22.85	225	317275	9.37	ppbv	99
66)	Naphthalene	23.34	128	253301	10.11	ppbv	100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011013B\01101312.D Vial: 3
Acq On : 10 Jan 2013 7:54 pm Operator: RACHEL HILL
Sample : ICV VOA1 011013 Inst : VOA 1
Misc : ICV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Jan 11 9:42 2013 Quant Results File: 011013V1.RES

Method : C:\HPCHEM\1\METHODS\011013V1.M (RTE Integrator)
Title : TO15 ppbv
Last Update : Fri Jan 11 09:41:17 2013
Response via : Initial Calibration



Injection Log

Directory: C:\HPCHEM\1\DATA\010213

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	01021301.d	1.	BFB VOA9 010213	TUNE BFB_TUNE	2 Jan 2013 09:06
2	2	01021302.d	1.	CCV VOA9 010213	CCV MA_APH	2 Jan 2013 09:49
3	3	01021303.d	1.	RLVS VOA9 010213	RLVS MA_APH	2 Jan 2013 10:32
4	4	01021304.d	1.	MBLK VOA9 010213	MBLK MA_APH	2 Jan 2013 12:11
5	5	01021305.d	40000.	1212437-018A	DATA NOT USED	2 Jan 2013 12:53
6	6	01021306.d	800.	1212437-020A	SAMP MA_APH	2 Jan 2013 14:04
7	7	01021307.d	800.	1212437-020ADUP	DUP MA_APH	2 Jan 2013 14:49
8	8	01021308.d	800.	1212437-021A	SAMP MA_APH	2 Jan 2013 15:34
9	9	01021309.d	80000.	1212437-018A	SAMP MA_APH	2 Jan 2013 16:16
10	9	01021310.d	40000.	1212437-001A	SAMP MA_APH	2 Jan 2013 16:59
11	15	01021311.d	20000.	1212437-003A	DATA NOT USED	2 Jan 2013 17:42
12	16	01021312.d	20000.	1212437-004A	DATA NOT USED	2 Jan 2013 18:24
13	17	01021313.d	80000.	1212437-005A	DATA NOT USED	2 Jan 2013 19:06
14	18	01021314.d	800.	1212437-024A	SAMP MA_APH	2 Jan 2013 19:51
15	19	01021315.d	800.	1212437-025A	DATA NOT USED	2 Jan 2013 20:36
16	10	01021316.d	800.	1212437-026A	SAMP MA_APH	2 Jan 2013 21:22
17	11	01021317.d	800.	1212437-027A	SAMP MA_APH	2 Jan 2013 22:07
18	12	01021318.d	800.	1212437-028A	SAMP MA_APH	2 Jan 2013 22:52
19	21	01021319.d	800.	1212722-054A	SAMP MA_APH	2 Jan 2013 23:41
20	22	01021320.d	800.	1212722-055A	SAMP MA_APH	3 Jan 2013 00:26
21	23	01021321.d	800.	1212722-056A	SAMP MA_APH	3 Jan 2013 01:11
22	24	01021322.d	800.	1212722-057A	DATA NOT USED	3 Jan 2013 02:00
23	25	01021323.d	400.	1212722-058A	SAMP MA_APH	3 Jan 2013 02:49
24	26	01021324.d	400.	1212722-059A	DATA NOT USED	3 Jan 2013 03:38
25	27	01021325.d	400.	1212722-061A	DATA NOT USED	3 Jan 2013 04:27
26	28	01021326.d	800.	1212722-062A	SAMP MA_APH	3 Jan 2013 05:12
27	28	01021327.d	800.	1212722-062A	DATA NOT USED	3 Jan 2013 05:57
28	29	01021328.d	800.	1212722-063A	SAMP MA_APH	3 Jan 2013 06:42
29	11	01021329.d	400.	1212722-064A	DATA NOT USED	3 Jan 2013 07:31
30	1	01021330.d	1.	RLVS2 VOA9 010213	DATA NOT USED	3 Jan 2013 08:18
31	2	01021331.d	1.	RLVS2 VOA9 010213	RLVS MA_APH	3 Jan 2013 10:43

RTI Laboratories

ANALYTICAL RUN Summary

15-Jan-13

RunNo 55087

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1086088	BFB VOA9 010213	BFB_TUNE	TUNE	\\1\DATA\010213\	1/2/2013 9:06:00	1	R55087		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		79.9	79.9		100	0	0	0	0	0	80%	50	200	0%	
175	M		7.6	7.6		100	0	0	0	0	0	8%	4	9	0%	
176	M		96.9	96.9		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.8	6.8		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		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		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
1086089	CCV VOA9 010213	MA_APH	CCV	\\1\DATA\010213\	1/2/2013 9:49:00	1	R55087		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	256.29	256.29		234	0	0	0	0	0	110%	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	300.4	300.4		266	0	0	0	0	0	113%	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	442.03	442.03		378	0	0	0	0	0	117%	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	86.87	86.87		89.5	0	0	0	0	0	97%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\010213\01021302.D Vial: 2
Acq On : 2 Jan 2013 9:49 am Operator: RACHEL HILL
Sample : CCV VOA9 010213 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\123112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Jan 01 12:28:20 2013
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	28.192	3.5	90	0.00
2	L1	C5-C8 Aliphatic HC {2}	36.400	40.002	-9.9	95	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	46.623	-11.5	96	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	40.036	-13.1	99	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	47.319	-12.1	97	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	54.871	-12.0	96	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	256.290	-9.5	96	0.00
8	L1	C9-C12 Aliphatic HC	54.600	62.559	-14.6	98	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	58.320	-6.8	100	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	70.403	-15.0	98	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	71.221	-17.1	102	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	85.459	-22.1	101	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	96.771	-25.7	100	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	442.028	-16.9	100	0.00
15	L1	C9-C10 Aromatic HC	51.700	58.440	-13.0	99	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	57.013	-11.4	99	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	58.932	-12.9	99	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	67.147	-14.4	100	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	59.430	-13.0	101	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	66.009	-12.5	99	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	300.400	-12.9	100	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-6.85#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.21#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.01#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.74#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.52#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-11.96#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.07#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.21#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.21#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.18#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.28#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.46#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.11#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.01#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.46#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.04#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.04#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.04#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	85	0.00
41	S	4-Bromofluorobenzene	89.500	86.870	2.9	84	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010213\01021302.D Vial: 2
Acq On : 2 Jan 2013 9:49 am Operator: RACHEL HILL
Sample : CCV VOA9 010213 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 3 12:26 2013 Quant Results File: 123112V9.RES

Quant Method : C:\HPCHEM\1\METHODS\123112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Jan 01 12:28:20 2013
Response via : Initial Calibration
DataAcq Meth : 123112V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.18	117	690799	12.50	ug/m3	0.00

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.01	95	500968	86.87	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 97.06%

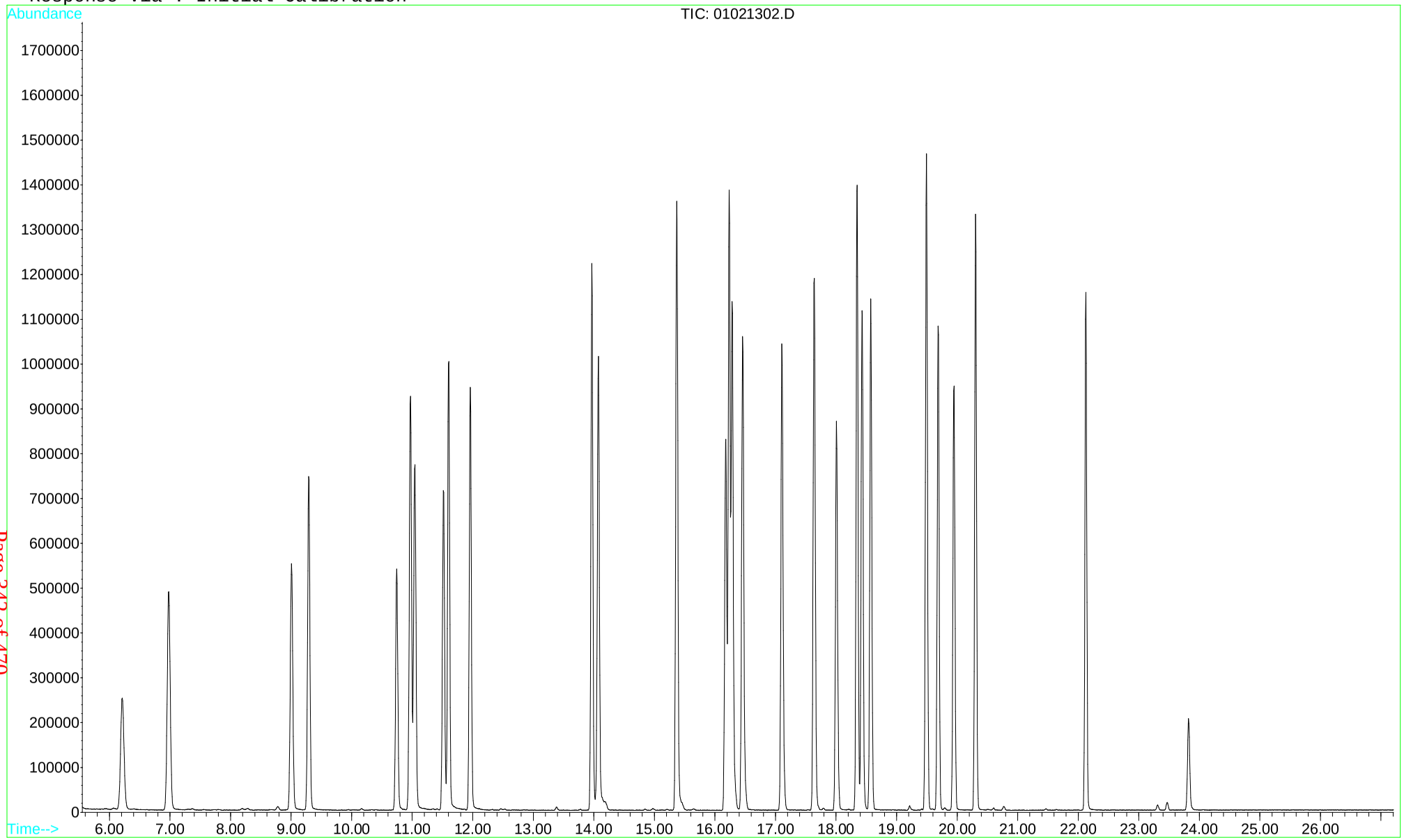
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	6.98	TIC	1715514	28.19	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.29	TIC	1956340	40.00	ug/m3	100
3) C5-C8 Aliphatic HC {3}	10.97	TIC	2485776	46.62	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.04	TIC	2036655	40.04	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.60	TIC	2416106	47.32	ug/m3	100
6) C5-C8 Aliphatic HC {6}	13.97	TIC	2765928	54.87	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	6.98	TIC	13376319m	256.29	ug/m3	
8) C9-C12 Aliphatic HC	15.37	TIC	3364521	62.56	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.23	TIC	1920256m	58.32	ug/m3	
10) C9-C12 Aliphatic HC {3}	18.35	TIC	3164459	70.40	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.49	TIC	3379264	71.22	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.30	TIC	2918274	85.46	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.13	TIC	2465212	96.77	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.37	TIC	17211986m	442.03	ug/m3	
15) C9-C10 Aromatic HC	17.64	120	273565	58.44	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.43	120	277610	57.01	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.57	120	413273	58.93	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.69	120	91587	67.15	ug/m3	100
19) C9-C10 Aromatic HC {5}	19.95	120	310025	59.43	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.69	134	191134	66.01	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	18.01	TIC	1557194m	300.40	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010213\01021302.D Vial: 2
Acq On : 2 Jan 2013 9:49 am Operator: RACHEL HILL
Sample : CCV VOA9 010213 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 3 12:26 2013 Quant Results File: 123112V9.RES

Method : C:\HPCHEM\1\METHODS\123112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Jan 01 12:28:20 2013
Response via : Initial Calibration



Injection Log

Directory: C:\HPCHEM\1\DATA\010313B

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	01031301.d	1.	BFB VOA9 123112	TUNE BFB_TUNE	3 Jan 2013 21:58
2	2	01031302.d	1.	ICAL1 VOA9 123112	DATA NOT USED	3 Jan 2013 23:20
3	3	01031303.d	1.	ICAL1 VOA9 123112	ICAL1MA_APH	4 Jan 2013 00:03
4	4	01031304.d	1.	ICAL2 VOA9 123112	ICAL2MA_APH	4 Jan 2013 00:45
5	5	01031305.d	1.	ICAL3 VOA9 123112	ICAL3MA_APH	4 Jan 2013 01:28
6	6	01031306.d	1.	ICAL4 VOA9 123112	ICAL4MA_APH	4 Jan 2013 02:11
7	7	01031307.d	1.	ICAL5 VOA9 123112	ICAL5MA_APH	4 Jan 2013 02:55
8	8	01031308.d	1.	ICAL6 VOA9 123112	ICAL6MA_APH	4 Jan 2013 03:39
9	9	01031309.d	1.	ICAL7 VOA9 123112	ICAL7MA_APH	4 Jan 2013 04:24
10	2	01031310.d	1.	BFB2 VOA9 123112	TUNE BFB_TUNE	4 Jan 2013 05:06
11	2	01031311.d	1.	ICV VOA9 123112	data not used	4 Jan 2013 05:49
12	3	01031312.d	1.	RLVS VOA9 123112	data not used	4 Jan 2013 06:32
13	4	01031313.d	1.	ICV VOA9 123112	ICV MA_APH	4 Jan 2013 07:14
14	5	01031314.d	1.	RLVS VOA9 123112	RLVS MA_APH	4 Jan 2013 07:57
15	4	01031315.d	1.	MBLK VOA9 123112	MBLK MA_APH	4 Jan 2013 08:46
16	5	01031316.d	800.	1212373-023A	SAMP MA_APH	4 Jan 2013 09:31
17	6	01031317.d	800.	1212373-024A	SAMP MA_APH	4 Jan 2013 10:16
18	7	01031318.d	400.	1212437-023A	SAMP MA_APH	4 Jan 2013 11:06
19	8	01031319.d	80000.	1212437-003A	data not used	4 Jan 2013 11:48
20	9	01031320.d	80000.	1212437-004A	data not used	4 Jan 2013 12:31
21	10	01031321.d	160000.	1212437-005A	SAMP MA_APH	4 Jan 2013 13:13
22	11	01031322.d	8000.	1212437-025A	SAMP MA_APH	4 Jan 2013 13:56
23	12	01031323.d	400.	1212722-057A	SAMP MA_APH	4 Jan 2013 14:45
24	13	01031324.d	160000.	1212437-004A	SAMP MA_APH	4 Jan 2013 15:27
25	14	01031325.d	160000.	1212437-003A	SAMP MA_APH	4 Jan 2013 16:10
26	13	01031326.d	800.	1212722-059A	data not used	4 Jan 2013 16:55
27	9	01031327.d	800.	1212722-059A	data not used	4 Jan 2013 17:40
28	10	01031328.d	200.	1212722-061A	SAMP MA_APH	4 Jan 2013 18:29
29	11	01031329.d	200.	1212722-064A	SAMP MA_APH	4 Jan 2013 19:18
30	12	01031330.d	400.	1212722-065A	SAMP MA_APH	4 Jan 2013 20:06
31	21	01031331.d	400.	1212722-066A	data not used	4 Jan 2013 20:55
32	22	01031332.d	400.	1212722-068A	SAMP MA_APH	4 Jan 2013 21:44
33	23	01031333.d	400.	1212722-067A	data not used	4 Jan 2013 22:32
34	24	01031334.d	400.	1212722-069A	data not used	4 Jan 2013 23:21
35	25	01031335.d	800.	1212722-004A	SAMP MA_APH	5 Jan 2013 00:06
36	25	01031336.d	800.	1212722-004ADUP	DUP MA_APH	5 Jan 2013 00:52
37	26	01031337.d	400.	1212722-070A	data not used	5 Jan 2013 01:40
38	27	01031338.d	800.	1212722-005A	SAMP MA_APH	5 Jan 2013 02:25
39	28	01031339.d	800.	1212722-006A	SAMP MA_APH	5 Jan 2013 03:11
40	29	01031340.d	1600.	1212722-007A	data not used	5 Jan 2013 03:54
41	1	01031341.d	1.	RLVS VOA9 123112	data not used	5 Jan 2013 04:37
42	2	01031342.d	1.	RLVS VOA9 123112	RLVS MA_APH	5 Jan 2013 08:34

RTI Laboratories

ANALYTICAL RUN Summary

09-Jan-13

RunNo 55111

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1086441	BFB2 VOA9 010313	BFB_TUNE	TUNE	.1\DATA\010313	E1/4/2013 5:06:00	1	R55111		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		64.5	64.5		100	0	0	0	0	0	65%	50	200	0%	
175	M		7.6	7.6		100	0	0	0	0	0	8%	4	9	0%	
176	M		96.1	96.1		100	0	0	0	0	0	96%	93	101	0%	
177	M		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	
50	M		20	20		100	0	0	0	0	0	20%	8	40	0%	
75	M		41.6	41.6		100	0	0	0	0	0	42%	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
1086442	ICV VOA9 010313	MA_APH	ICV	.1\DATA\010313	E1/4/2013 7:14:00	1	R55111		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	264.63	264.63		234	0	0	0	0	0	113%	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	308.21	308.21		266	0	0	0	0	0	116%	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	443.86	443.86		378	0	0	0	0	0	117%	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	86.9	86.9		89.5	0	0	0	0	0	97%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\010313B\01031313.D Vial: 4
Acq On : 4 Jan 2013 7:14 am Operator: RACHEL HILL
Sample : ICV VOA9 123112 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\010313V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 04 10:58:14 2013
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	31.315	-7.2	99	0.00
2	L1	C5-C8 Aliphatic HC {2}	36.400	41.377	-13.7	104	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	47.310	-13.2	104	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	40.582	-14.6	104	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	48.095	-14.0	103	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	56.339	-15.0	103	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	264.632	-13.1	103	0.00
8	L1	C9-C12 Aliphatic HC	54.600	63.630	-16.5	103	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	59.367	-8.7	107	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	71.572	-16.9	103	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	71.986	-18.4	105	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	84.261	-20.4	106	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	94.227	-22.4	104	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	443.860	-17.4	104	0.00
15	L1	C9-C10 Aromatic HC	51.700	59.757	-15.6	104	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	58.397	-14.1	101	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	60.464	-15.8	104	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	67.777	-15.5	102	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	60.816	-15.6	103	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	68.812	-17.2	104	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	308.212	-15.9	103	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-6.85#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.21#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.01#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.74#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.52#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-11.96#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.07#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.21#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.21#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.18#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.28#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.46#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.11#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.01#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.46#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.04#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.04#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.04#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	104	0.00
41	S	4-Bromofluorobenzene	89.500	86.903	2.9	103	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010313B\01031313.D Vial: 4
Acq On : 4 Jan 2013 7:14 am Operator: RACHEL HILL
Sample : ICV VOA9 123112 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 4 11:52 2013 Quant Results File: 010313V9.RES

Quant Method : C:\HPCHEM\1\METHODS\010313V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 04 10:58:14 2013
Response via : Initial Calibration
DataAcq Meth : 010313V9

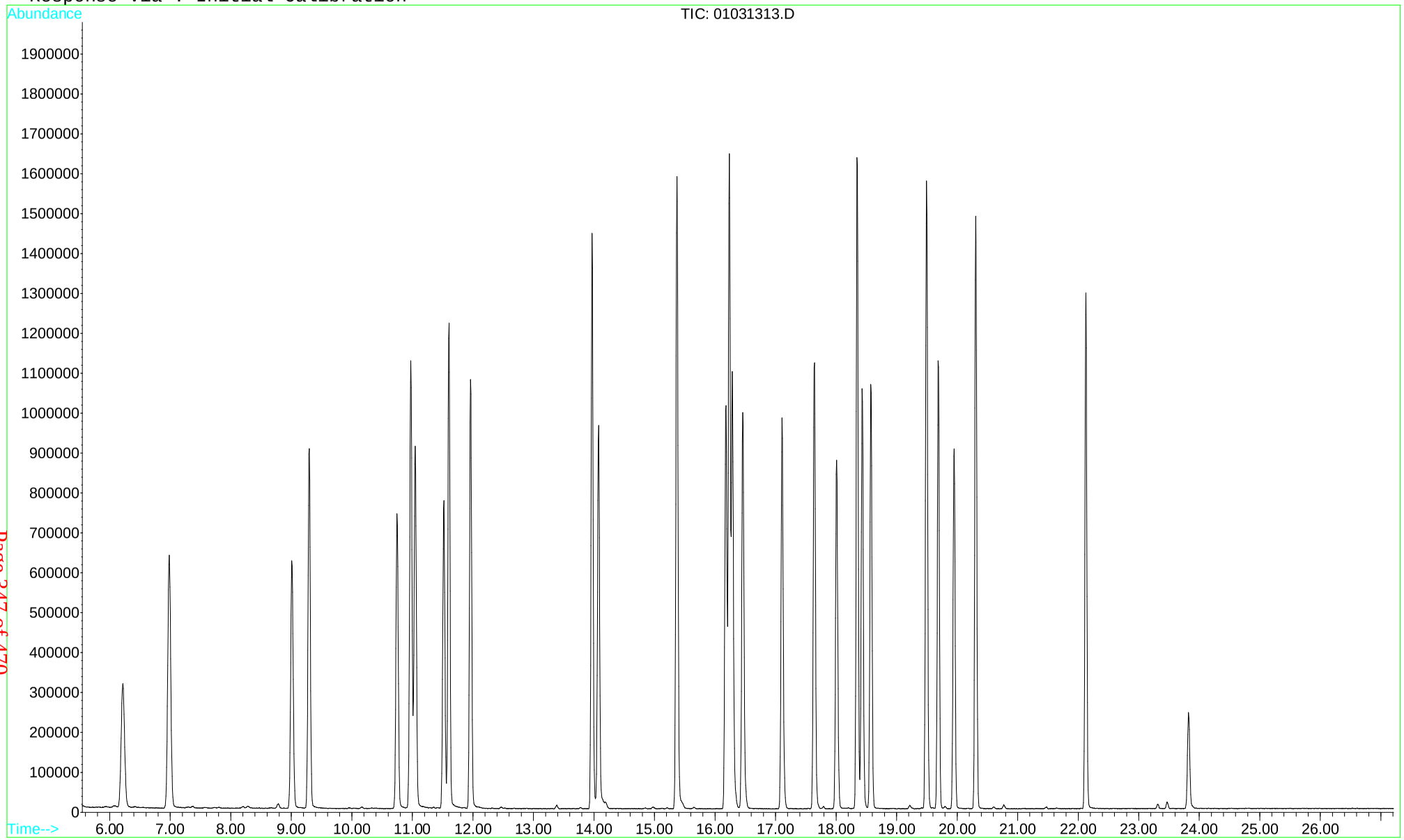
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.18	117	800438	12.50	ug/m3	0.00
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.01	95	512722	86.90	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 97.09%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	6.98	TIC	2205175	31.32	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.30	TIC	2370610	41.38	ug/m3	100
3) C5-C8 Aliphatic HC {3}	10.97	TIC	2975771	47.31	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.05	TIC	2392824	40.58	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.61	TIC	2878364	48.10	ug/m3	100
6) C5-C8 Aliphatic HC {6}	13.97	TIC	3249722	56.34	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	6.98	TIC	16072466m	264.63	ug/m3	
8) C9-C12 Aliphatic HC	15.37	TIC	3880223	63.63	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.24	TIC	2303613m	59.37	ug/m3	
10) C9-C12 Aliphatic HC {3}	18.35	TIC	3676401	71.57	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.49	TIC	3694421	71.99	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.31	TIC	3308236	84.26	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.13	TIC	2791257	94.23	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.37	TIC	19654151m	443.86	ug/m3	
15) C9-C10 Aromatic HC	17.64	120	293193	59.76	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.43	120	297529	58.40	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.57	120	442668	60.46	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.69	120	95658	67.78	ug/m3	100
19) C9-C10 Aromatic HC {5}	19.95	120	333020	60.82	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.69	134	260150	68.81	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	18.01	TIC	1722218m	308.21	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010313B\01031313.D Vial: 4
Acq On : 4 Jan 2013 7:14 am Operator: RACHEL HILL
Sample : ICV VOA9 123112 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 4 11:52 2013 Quant Results File: 010313V9.RES

Method : C:\HPCHEM\1\METHODS\010313V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 04 10:58:14 2013
Response via : Initial Calibration



Injection Log

Directory: C:\HPCHEM\1\DATA\010513

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	01051301.d	1.	BFB VOA9 010513	TUNE BFB_TUNE	5 Jan 2013 09:23
2	2	01051302.d	1.	CCV VOA9 010513	CCV MA_APH	5 Jan 2013 10:06
3	3	01051303.d	1.	RLVS VOA9 010513	RLVS MA_APH	5 Jan 2013 10:48
4	4	01051304.d	1.	MBLK VOA9 010513	MBLK MA_APH	5 Jan 2013 12:45
5	11	01051305.d	40.	1212722-059A	SAMP MA_APH	5 Jan 2013 13:28
6	12	01051306.d	40.	1212722-066A	SAMP MA_APH	5 Jan 2013 14:11
7	13	01051307.d	40.	1212722-067A	SAMP MA_APH	5 Jan 2013 14:53
8	14	01051308.d	40.	1212722-068A	SAMP MA_APH	5 Jan 2013 15:35
9	15	01051309.d	40.	1212722-069A	SAMP MA_APH	5 Jan 2013 16:18
10	16	01051310.d	40.	1212722-070A	SAMP MA_APH	5 Jan 2013 17:01
11	17	01051311.d	400.	1212722-035A	SAMP MA_APH	5 Jan 2013 17:49
12	18	01051312.d	400.	1212722-007A	data not used	5 Jan 2013 18:38
13	19	01051313.d	400.	1212722-036A	SAMP MA_APH	5 Jan 2013 19:27
14	10	01051314.d	400.	1212722-009A	data not used	5 Jan 2013 20:16
15	11	01051315.d	400.	1212722-037A	SAMP MA_APH	5 Jan 2013 21:04
16	12	01051316.d	1600.	1212722-008A	SAMP MA_APH	5 Jan 2013 21:48
17	21	01051317.d	800.	1212722-038A	SAMP MA_APH	5 Jan 2013 22:34
18	21	01051318.d	800.	1212722-038ADUP	DUP MA_APH	5 Jan 2013 23:19
19	22	01051319.d	8000.	1212722-010A	SAMP MA_APH	6 Jan 2013 00:02
20	23	01051320.d	8000.	1212722-011A	SAMP MA_APH	6 Jan 2013 00:44
21	24	01051321.d	400.	1212722-039A	SAMP MA_APH	6 Jan 2013 01:33
22	25	01051322.d	8000.	1212722-012A	SAMP MA_APH	6 Jan 2013 02:16
23	26	01051323.d	400.	1212722-040A	SAMP MA_APH	6 Jan 2013 03:05
24	27	01051324.d	800.	1212722-016A	data not used	6 Jan 2013 03:50
25	27	01051325.d	800.	1212722-016A	data not used	6 Jan 2013 04:36
26	28	01051326.d	400.	1212722-022A	data not used	6 Jan 2013 05:24
27	29	01051327.d	800.	1212722-017A	SAMP MA_APH	6 Jan 2013 06:10
28	3	01051328.d	1.	RLVS2 VOA9 010513	RLVS MA_APH	6 Jan 2013 06:52

RTI Laboratories

ANALYTICAL RUN Summary

16-Jan-13

RunNo 55137

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1086946	BFB VOA9 010513	BFB_TUNE	TUNE	\\1\DATA\010513\	1/5/2013 9:23:00	1	R55137		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		63.2	63.2		100	0	0	0	0	0	63%	50	200	0%	
175	M		7.5	7.5		100	0	0	0	0	0	8%	4	9	0%	
176	M		95.7	95.7		100	0	0	0	0	0	96%	93	101	0%	
177	M		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	
50	M		20.9	20.9		100	0	0	0	0	0	21%	8	40	0%	
75	M		41.9	41.9		100	0	0	0	0	0	42%	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
1086947	CCV VOA9 010513	MA_APH	CCV	\\1\DATA\010513\	1/5/2013 10:06:0	1	R55137		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	257.59	257.59		234	0	0	0	0	0	110%	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	299.35	299.35		266	0	0	0	0	0	113%	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	439.07	439.07		378	0	0	0	0	0	116%	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	87.32	87.32		89.5	0	0	0	0	0	98%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\010513\01051302.D Vial: 2
Acq On : 5 Jan 2013 10:06 am Operator: RACHEL HILL
Sample : CCV VOA9 010513 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\010313V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 04 10:58:14 2013
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	30.446	-4.3	97	0.00
2	L1	C5-C8 Aliphatic HC {2}	36.400	40.300	-10.7	101	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	46.244	-10.6	101	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	39.335	-11.1	101	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	46.499	-10.2	100	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	55.154	-12.6	100	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	257.593	-10.1	100	0.00
8	L1	C9-C12 Aliphatic HC	54.600	61.857	-13.3	100	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	61.850	-13.3	111	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	71.043	-16.1	102	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	70.222	-15.5	102	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	83.210	-18.9	104	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	92.821	-20.5	103	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	439.065	-16.2	103	0.00
15	L1	C9-C10 Aromatic HC	51.700	57.899	-12.0	101	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	57.479	-12.3	100	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	58.697	-12.4	100	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	65.828	-12.1	99	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	58.759	-11.7	99	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	66.496	-13.3	100	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	299.352	-12.5	100	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-6.85#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.21#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.01#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.74#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.52#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-11.96#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.07#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.21#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.21#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.18#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.28#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.46#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.11#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.01#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.46#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.04#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.04#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.04#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	98	0.00
41	S	4-Bromofluorobenzene	89.500	87.316	2.4	97	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010513\01051302.D Vial: 2
Acq On : 5 Jan 2013 10:06 am Operator: RACHEL HILL
Sample : CCV VOA9 010513 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 6 14:01 2013 Quant Results File: 010313V9.RES

Quant Method : C:\HPCHEM\1\METHODS\010313V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 04 10:58:14 2013
Response via : Initial Calibration
DataAcq Meth : 010313V9

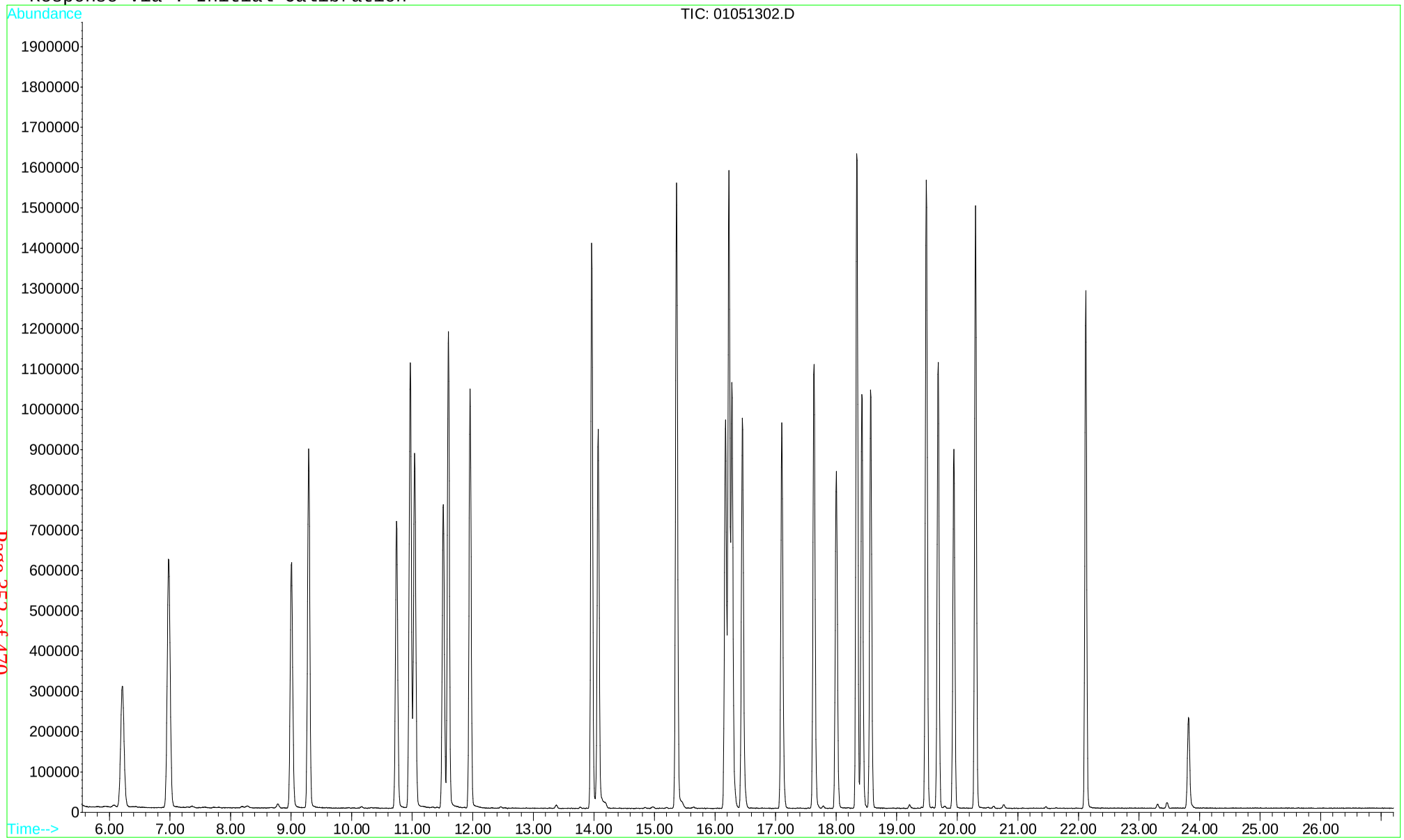
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.18	117	753051	12.50	ug/m3	0.00
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.00	95	484661	87.32	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 97.56%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	6.98	TIC	2143964	30.45	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.29	TIC	2308923	40.30	ug/m3	100
3) C5-C8 Aliphatic HC {3}	10.97	TIC	2908697	46.24	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.04	TIC	2319243	39.33	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.60	TIC	2782825	46.50	ug/m3	100
6) C5-C8 Aliphatic HC {6}	13.96	TIC	3181337	55.15	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	6.98	TIC	15644989m	257.59	ug/m3	
8) C9-C12 Aliphatic HC	15.36	TIC	3772142	61.86	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.23	TIC	2399953m	61.85	ug/m3	
10) C9-C12 Aliphatic HC {3}	18.34	TIC	3649264	71.04	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.49	TIC	3603900	70.22	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.30	TIC	3266969	83.21	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.12	TIC	2749597	92.82	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.36	TIC	19441825m	439.07	ug/m3	
15) C9-C10 Aromatic HC	17.64	120	284076	57.90	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.43	120	292853	57.48	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.57	120	429733	58.70	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.68	120	92907	65.83	ug/m3	100
19) C9-C10 Aromatic HC {5}	19.94	120	321753	58.76	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.69	134	251393	66.50	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	18.00	TIC	1672715m	299.35	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010513\01051302.D Vial: 2
Acq On : 5 Jan 2013 10:06 am Operator: RACHEL HILL
Sample : CCV VOA9 010513 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 6 14:01 2013 Quant Results File: 010313V9.RES

Method : C:\HPCHEM\1\METHODS\010313V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 04 10:58:14 2013
Response via : Initial Calibration



Injection Log

Directory: C:\HPCHEM\1\DATA\010613B

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	01061301.d	1.	BFB VOA9 010613	TUNE BFB_TUNE	6 Jan 2013 21:41
2	2	01061302.d	1.	ICAL1 VOA9 010613	DATA NOT USED	6 Jan 2013 22:24
3	3	01061303.d	1.	ICAL1 VOA9 010613	ICAL1MA_APH	6 Jan 2013 23:07
4	4	01061304.d	1.	ICAL2 VOA9 010613	ICAL2MA_APH	6 Jan 2013 23:50
5	5	01061305.d	1.	ICAL3 VOA9 010613	ICAL3MA_APH	7 Jan 2013 00:33
6	6	01061306.d	1.	ICAL4 VOA9 010613	ICAL4MA_APH	7 Jan 2013 01:16
7	7	01061307.d	1.	ICAL5 VOA9 010613	ICAL5MA_APH	7 Jan 2013 01:59
8	8	01061308.d	1.	ICAL6 VOA9 010613	ICAL6MA_APH	7 Jan 2013 02:43
9	9	01061309.d	1.	ICAL7 VOA9 010613	ICAL7MA_APH	7 Jan 2013 03:28
10	2	01061310.d	1.	BFB2 VOA9 010613	TUNE BFB_TUNE	7 Jan 2013 04:11
11	2	01061311.d	1.	ICV VOA9 010613	data not used	7 Jan 2013 04:58
12	3	01061312.d	1.	ICV VOA9 010613	ICV MA_APH	7 Jan 2013 09:21
13	3	01061313.d	1.	RLVS VOA9 0101613	RLVS MA_APH	7 Jan 2013 10:04
14	4	01061314.d	1.	MBLK VOA9 010613	MBLK MA_APH	7 Jan 2013 11:00
15	5	01061315.d	400.	1212722-023A	data not used	7 Jan 2013 11:49
16	6	01061316.d	400.	1212722-018A	data not used	7 Jan 2013 12:38
17	7	01061317.d	400.	1212722-024A	data not used	7 Jan 2013 13:27
18	8	01061318.d	400.	1212722-019A	data not used	7 Jan 2013 14:16
19	9	01061319.d	400.	1212722-025A	SAMP MA_APH	7 Jan 2013 15:04
20	10	01061320.d	400.	1212722-026A	SAMP MA_APH	7 Jan 2013 15:53
21	11	01061321.d	800.	1212722-021A	data not used	7 Jan 2013 16:39
22	12	01061322.d	800.	1212722-021A	data not used	7 Jan 2013 17:24
23	8	01061323.d	800.	1212722-020A	data not used	7 Jan 2013 18:09
24	9	01061324.d	1600.	1212722-027A	SAMP MA_APH	7 Jan 2013 18:52
25	10	01061325.d	800.	1212722-077A	SAMP MA_APH	7 Jan 2013 19:38
26	11	01061326.d	800.	1212722-071A	data not used	7 Jan 2013 20:23
27	21	01061327.d	40.	1212722-007A	SAMP MA_APH	7 Jan 2013 21:06
28	22	01061328.d	800.	1212722-009A	SAMP MA_APH	7 Jan 2013 21:52
29	22	01061329.d	800.	1212722-009ADUP	DUP MA_APH	7 Jan 2013 22:37
30	23	01061330.d	1600.	1212722-038A	SAMP MA_APH	7 Jan 2013 23:20
31	24	01061331.d	1600.	1212722-016A	SAMP MA_APH	8 Jan 2013 00:04
32	24	01061332.d	1600.	1212722-016A	data not used	8 Jan 2013 00:48
33	25	01061333.d	40.	1212722-022A	SAMP MA_APH	8 Jan 2013 01:30
34	11	01061334.d	40.	1212722-023A	SAMP MA_APH	8 Jan 2013 02:13
35	12	01061335.d	1600.	1212722-018A	SAMP MA_APH	8 Jan 2013 02:57
36	3	01061336.d	1.	RLVS2 VOA9 0101613	RLVS MA_APH	8 Jan 2013 03:41

RTI Laboratories

ANALYTICAL RUN Summary

16-Jan-13

RunNo 55197

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1087977	BFB2 VOA9 010613	BFB_TUNE	TUNE	.1\DATA\010613	E1/7/2013 4:11:00	1	R55197		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		60.9	60.9		100	0	0	0	0	0	61%	50	200	0%	
175	M		7.5	7.5		100	0	0	0	0	0	8%	4	9	0%	
176	M		98.2	98.2		100	0	0	0	0	0	98%	93	101	0%	
177	M		7	7		100	0	0	0	0	0	7%	5	9	0%	
50	M		23.8	23.8		100	0	0	0	0	0	24%	8	40	0%	
75	M		43.9	43.9		100	0	0	0	0	0	44%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		7.1	7.1		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
1087978	ICV VOA9 010613	MA_APH	ICV	.1\DATA\010613	E1/7/2013 9:21:00	1	R55197		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	240.2	240.2		234	0	0	0	0	0	103%	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	283.02	283.02		266	0	0	0	0	0	106%	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	389.57	389.57		378	0	0	0	0	0	103%	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	88.9	88.9		89.5	0	0	0	0	0	99%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\010613B\01061312.D Vial: 3
Acq On : 7 Jan 2013 9:21 am Operator: RACHEL HILL
Sample : ICV VOA9 010613 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\010613V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jan 07 17:03:40 2013
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	31.929	-9.3	104	0.00
2	L1	C5-C8 Aliphatic HC {2}	36.400	36.695	-0.8	93	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	42.017	-0.5	91	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	35.940	-1.5	95	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	42.515	-0.7	92	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	50.924	-3.9	94	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	240.197	-2.6	94	0.00
8	L1	C9-C12 Aliphatic HC	54.600	56.039	-2.6	92	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	47.100	13.7	84	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	64.415	-5.3	95	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	65.348	-7.5	97	-0.01
12	L1	C9-C12 Aliphatic HC {5}	70.000	73.844	-5.5	94	-0.01
13	L1	C9-C12 Aliphatic HC {6}	77.000	82.622	-7.3	91	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	389.572	-3.1	93	0.00
15	L1	C9-C10 Aromatic HC	51.700	53.797	-4.1	94	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	53.501	-4.5	95	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	55.258	-5.9	95	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	63.259	-7.8	97	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	56.245	-6.9	97	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	64.279	-9.5	100	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	283.018	-6.4	96	-0.01
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-6.85#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.21#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.01#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.74#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.52#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-11.96#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.07#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.21#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.21#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.18#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.28#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.46#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.11#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.01#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.46#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.04#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.04#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.04#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	114	0.00
41	S	4-Bromofluorobenzene	89.500	88.899	0.7	114	-0.01

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010613B\01061312.D Vial: 3
Acq On : 7 Jan 2013 9:21 am Operator: RACHEL HILL
Sample : ICV VOA9 010613 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 9:04 2013 Quant Results File: 010613V9.RES

Quant Method : C:\HPCHEM\1\METHODS\010613V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jan 07 17:03:40 2013
Response via : Initial Calibration
DataAcq Meth : 010613V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.17	117	296856	12.50	ug/m3	0.00

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.00	95	187782	88.90	ug/m3	-0.01

Spiked Amount 89.500 Range 70 - 130 Recovery = 99.33%

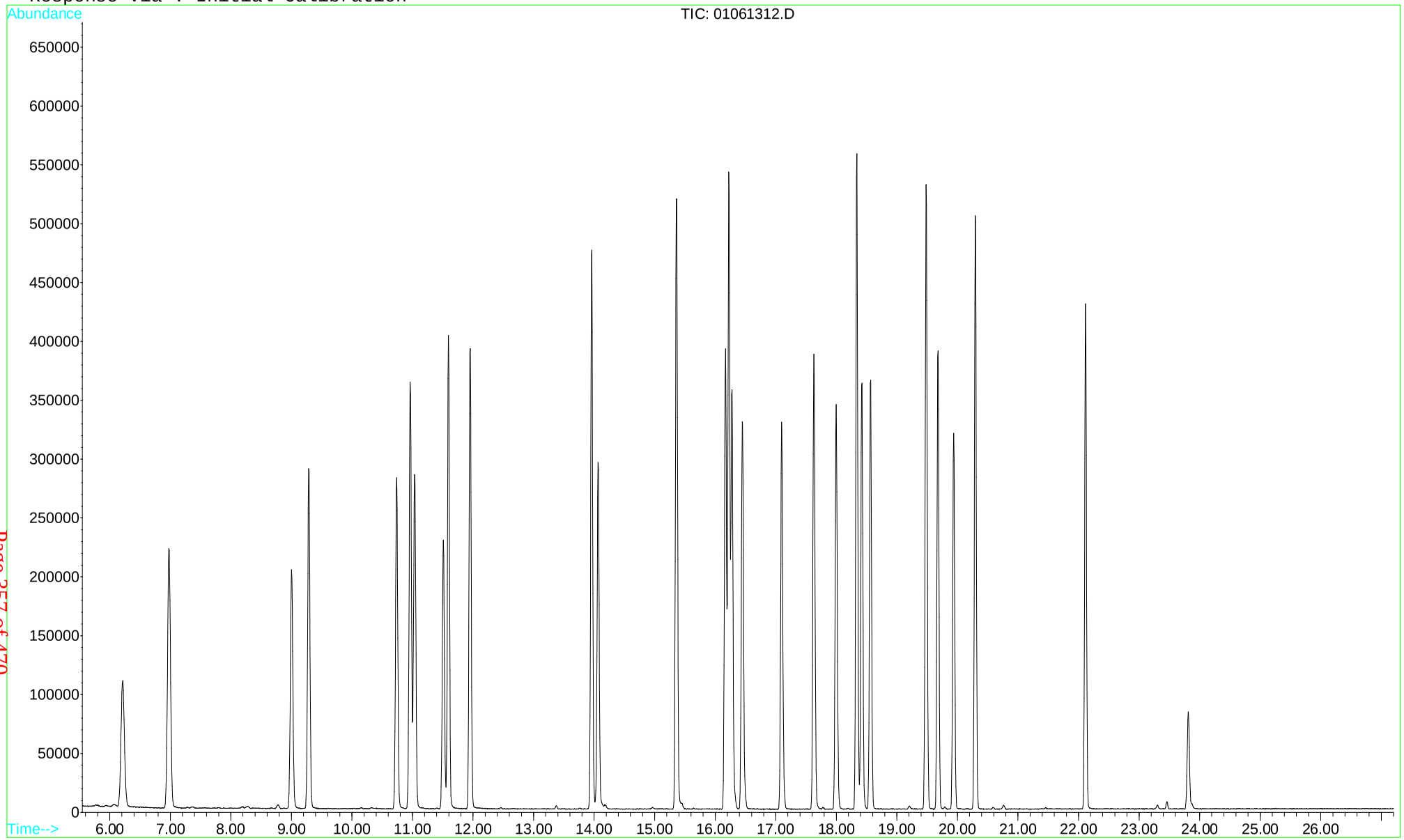
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	6.98	TIC	766212	31.93	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.28	TIC	750153	36.69	ug/m3	100
3) C5-C8 Aliphatic HC {3}	10.96	TIC	947916	42.02	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.03	TIC	751567	35.94	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.59	TIC	912837	42.51	ug/m3	100
6) C5-C8 Aliphatic HC {6}	13.96	TIC	1066620	50.92	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	6.98	TIC	5195305m	240.20	ug/m3	
8) C9-C12 Aliphatic HC	15.36	TIC	1250969	56.04	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.22	TIC	683627m	47.10	ug/m3	
10) C9-C12 Aliphatic HC {3}	18.34	TIC	1228825	64.41	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.48	TIC	1223582	65.35	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.29	TIC	1093665	73.84	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.12	TIC	906668	82.62	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.36	TIC	6387336m	389.57	ug/m3	
15) C9-C10 Aromatic HC	17.63	120	92018	53.80	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.42	120	95159	53.50	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.57	120	142155	55.26	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.68	120	31570	63.26	ug/m3	100
19) C9-C10 Aromatic HC {5}	19.94	120	108294	56.25	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.68	134	85175	64.28	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	18.00	TIC	554371m	283.02	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010613B\01061312.D Vial: 3
Acq On : 7 Jan 2013 9:21 am Operator: RACHEL HILL
Sample : ICV VOA9 010613 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 9:04 2013 Quant Results File: 010613V9.RES

Method : C:\HPCHEM\1\METHODS\010613V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jan 07 17:03:40 2013
Response via : Initial Calibration



Injection Log

Directory: C:\HPCHEM\1\DATA\010813

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	01081301.d	1.	BFB VOA9 010813	TUNE BFB_TUNE	8 Jan 2013 07:41
2	2	01081302.d	1.	CCV VOA9 010813	ICV MA_APH	8 Jan 2013 08:24
3	3	01081303.d	1.	RLVS VOA9 010813	RLVS MA_APH	8 Jan 2013 09:06
4	4	01081304.d	1.	MBLK VOA9 010813	MBLK MA_APH	8 Jan 2013 09:56
5	5	01081305.d	800.	1212722-024A	data not used	8 Jan 2013 10:41
6	6	01081306.d	800.	1212722-019A	SAMP MA_APH	8 Jan 2013 11:26
7	7	01081307.d	800.	1212722-074A	data not used	8 Jan 2013 12:12
8	8	01081308.d	400.	1212722-081A	SAMP MA_APH	8 Jan 2013 13:01
9	9	01081309.d	8000.	1212722-075A	SAMP MA_APH	8 Jan 2013 13:43
10	10	01081310.d	400.	1212722-082A	data not used	8 Jan 2013 14:32
11	11	01081311.d	1600.	1212722-082A	SAMP MA_APH	8 Jan 2013 15:16
12	12	01081312.d	1600.	1212722-083A	SAMP MA_APH	8 Jan 2013 15:59
13	13	01081313.d	800.	1212722-024A	SAMP MA_APH	8 Jan 2013 16:45
14	14	01081314.d	800.	1212722-024ADUP	DUP MA_APH	8 Jan 2013 17:30
15	17	01081315.d	1600.	1212722-021A	SAMP MA_APH	8 Jan 2013 18:14
16	18	01081316.d	1600.	1212722-020A	SAMP MA_APH	8 Jan 2013 18:58
17	22	01081317.d	40.	1212722-071A	SAMP MA_APH	8 Jan 2013 19:40
18	23	01081318.d	400.	1212722-078A	SAMP MA_APH	8 Jan 2013 20:29
19	24	01081319.d	40.	1212722-072A	SAMP MA_APH	8 Jan 2013 21:11
20	25	01081320.d	800.	1212722-079A	SAMP MA_APH	8 Jan 2013 21:57
21	25	01081321.d	800.	1212722-079A	data not used	8 Jan 2013 22:43
22	26	01081322.d	40.	1212722-073A	SAMP MA_APH	8 Jan 2013 23:25
23	27	01081323.d	400.	1212722-080A	SAMP MA_APH	9 Jan 2013 00:14
24	28	01081324.d	200.	1212722-074A	SAMP MA_APH	9 Jan 2013 01:03
25	12	01081325.d	20000.	1212722-076A	SAMP MA_APH	9 Jan 2013 01:45
26	13	01081326.d	1600.	1212722-028A	data not used	9 Jan 2013 02:30
27	14	01081327.d	400.	1212722-041A	data not used	9 Jan 2013 03:19
28	15	01081328.d	1600.	1212722-029A	data not used	9 Jan 2013 04:02
29	16	01081329.d	400.	1212722-042A	data not used	9 Jan 2013 04:51
30	19	01081330.d	800.	1212722-030A	data not used	9 Jan 2013 05:37
31	10	01081331.d	800.	1212722-031A	data not used	9 Jan 2013 06:22
32	3	01081332.d	1.	RLVS2 VOA9 010813	RLVS MA_APH	9 Jan 2013 07:05

RTI Laboratories

ANALYTICAL RUN Summary

16-Jan-13

RunNo 55242

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1088852	BFB VOA9 010813	BFB_TUNE	TUNE	\\1\DATA\010813\	1/8/2013 7:41:00	1	R55242		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		65.3	65.3		100	0	0	0	0	0	65%	50	200	0%	
175	M		7.9	7.9		100	0	0	0	0	0	8%	4	9	0%	
176	M		100.7	100.7		100	0	0	0	0	0	101%	93	101	0%	
177	M		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	
50	M		22.8	22.8		100	0	0	0	0	0	23%	8	40	0%	
75	M		44.9	44.9		100	0	0	0	0	0	45%	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
1088853	CCV VOA9 010813	MA_APH	CCV	\\1\DATA\010813\	1/8/2013 8:24:00	1	R55242		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	250.85	250.85		234	0	0	0	0	0	107%	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	313.73	313.73		266	0	0	0	0	0	118%	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	419.32	419.32		378	0	0	0	0	0	111%	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	89.7	89.7		89.5	0	0	0	0	0	100%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\010813\01081302.D Vial: 2
Acq On : 8 Jan 2013 8:24 am Operator: RACHEL HILL
Sample : CCV VOA9 010813 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\010613V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jan 07 17:03:40 2013
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	31.733	-8.7	103	0.00
2	L1	C5-C8 Aliphatic HC {2}	36.400	38.754	-6.5	98	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	44.690	-6.9	97	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	37.844	-6.9	100	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	45.045	-6.7	97	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	52.763	-7.7	97	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	250.848	-7.2	98	0.00
8	L1	C9-C12 Aliphatic HC	54.600	59.204	-8.4	97	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	54.256	0.6	96	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	69.198	-13.1	102	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	71.172	-17.1	106	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	80.237	-14.6	102	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	84.289	-9.5	93	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	419.322	-10.9	100	0.00
15	L1	C9-C10 Aromatic HC	51.700	56.748	-9.8	99	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	57.363	-12.0	101	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	59.757	-14.5	103	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	73.547	-25.3	113	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	65.776	-25.0	113	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	74.231	-26.5	115	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	313.732	-17.9	106	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-6.85#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.21#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.01#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.74#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.52#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-11.96#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.07#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.21#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.21#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.18#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.28#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.46#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.11#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.01#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.46#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.04#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.04#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.04#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	108	0.00
41	S	4-Bromofluorobenzene	89.500	89.703	-0.2	109	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010813\01081302.D Vial: 2
Acq On : 8 Jan 2013 8:24 am Operator: RACHEL HILL
Sample : CCV VOA9 010813 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 9:20 2013 Quant Results File: 010613V9.RES

Quant Method : C:\HPCHEM\1\METHODS\010613V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jan 07 17:03:40 2013
Response via : Initial Calibration
DataAcq Meth : 010613V9

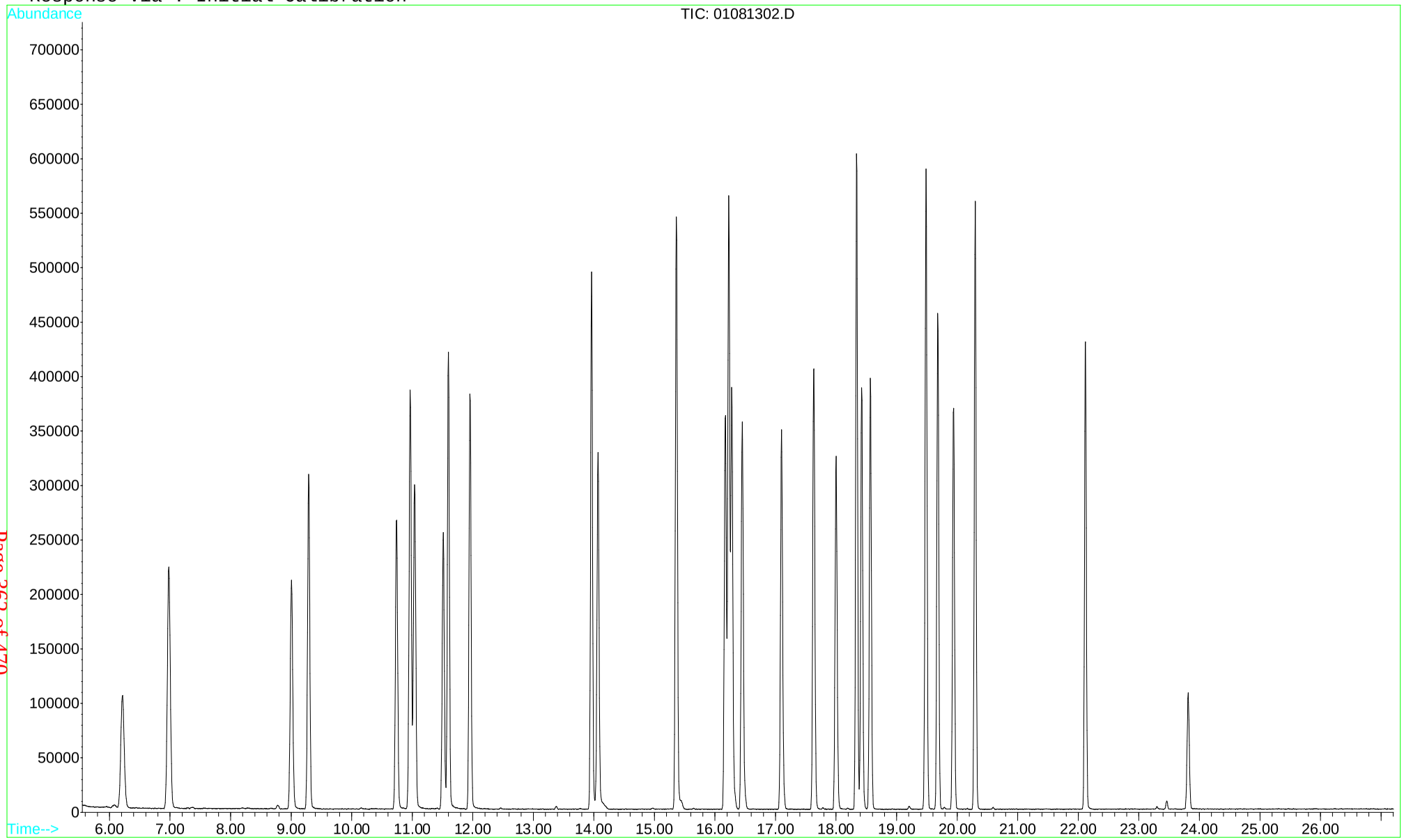
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.17	117	281850	12.50	ug/m3	0.00
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.00	95	179902	89.70	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 100.22%			
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	6.98	TIC	761511	31.73	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.29	TIC	792249	38.75	ug/m3	100
3) C5-C8 Aliphatic HC {3}	10.97	TIC	1008223	44.69	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.04	TIC	791384	37.84	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.60	TIC	967160	45.04	ug/m3	100
6) C5-C8 Aliphatic HC {6}	13.96	TIC	1105151	52.76	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	6.98	TIC	5425678m	250.85	ug/m3	
8) C9-C12 Aliphatic HC	15.36	TIC	1321620	59.20	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.23	TIC	787482m	54.26	ug/m3	
10) C9-C12 Aliphatic HC {3}	18.34	TIC	1320073	69.20	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.49	TIC	1332627	71.17	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.30	TIC	1188338	80.24	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.12	TIC	924966	84.29	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.36	TIC	6875106m	419.32	ug/m3	
15) C9-C10 Aromatic HC	17.63	120	97065	56.75	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.42	120	102028	57.36	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.57	120	153730	59.76	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.68	120	36704	73.55	ug/m3	100
19) C9-C10 Aromatic HC {5}	19.94	120	126644	65.78	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.68	134	98362	74.23	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	18.00	TIC	614533m	313.73	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010813\01081302.D Vial: 2
Acq On : 8 Jan 2013 8:24 am Operator: RACHEL HILL
Sample : CCV VOA9 010813 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 9 9:20 2013 Quant Results File: 010613V9.RES

Method : C:\HPCHEM\1\METHODS\010613V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jan 07 17:03:40 2013
Response via : Initial Calibration



Injection Log

Directory: C:\HPCHEM\1\DATA\010913

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	01091301.d	1.	BFB VOA9 010913	TUNE BFB_TUNE	9 Jan 2013 07:48
2	2	01091302.d	1.	CCV VOA9 010913	ICV MA_APH	9 Jan 2013 08:30
3	3	01091303.d	1.	RLVS VOA9 010913	RLVS MA_APH	9 Jan 2013 09:29
4	4	01091304.d	1.	MBLK VOA9 010913	MBLK MA_APH	9 Jan 2013 10:20
5	5	01091305.d	800.	1212722-043A	SAMP MA_APH	9 Jan 2013 11:05
6	6	01091306.d	800.	1212722-044A	data not used	9 Jan 2013 11:51
7	7	01091307.d	1600.	1212722-044A	SAMP MA_APH	9 Jan 2013 12:34
8	8	01091308.d	800.	1212722-032A	data not used	9 Jan 2013 13:19
9	9	01091309.d	1600.	1212722-045A	SAMP MA_APH	9 Jan 2013 14:03
10	10	01091310.d	1600.	1212722-046A	SAMP MA_APH	9 Jan 2013 14:47
11	11	01091311.d	20000.	1212722-033A	SAMP MA_APH	9 Jan 2013 15:29
12	12	01091312.d	400.	1212722-034A	data not used	9 Jan 2013 16:18
13	11	01091313.d	1600.	1212722-032A	data not used	9 Jan 2013 17:02
14	12	01091314.d	400.	1212722-028A	SAMP MA_APH	9 Jan 2013 17:51
15	13	01091315.d	1600.	1212722-041A	SAMP MA_APH	9 Jan 2013 18:34
16	14	01091316.d	400.	1212722-029A	SAMP MA_APH	9 Jan 2013 19:23
17	16	01091317.d	800.	1212722-042A	SAMP MA_APH	9 Jan 2013 20:09
18	16	01091318.d	800.	1212722-042ADUP	DUP MA_APH	9 Jan 2013 20:54
19	17	01091319.d	200.	1212722-030A	SAMP MA_APH	9 Jan 2013 21:43
20	18	01091320.d	200.	1212722-031A	SAMP MA_APH	9 Jan 2013 22:32
21	19	01091321.d	800.	1212722-047A	SAMP MA_APH	9 Jan 2013 23:17
22	19	01091322.d	800.	1212722-047A	data not used	10 Jan 2013 00:02
23	10	01091323.d	400.	1212722-048A	SAMP MA_APH	10 Jan 2013 00:51
24	11	01091324.d	800.	1212722-013A	SAMP MA_APH	10 Jan 2013 01:36
25	12	01091325.d	400.	1212722-049A	SAMP MA_APH	10 Jan 2013 02:25
26	21	01091326.d	8000.	1212722-014A	SAMP MA_APH	10 Jan 2013 03:08
27	22	01091327.d	400.	1212722-050A	SAMP MA_APH	10 Jan 2013 03:57
28	23	01091328.d	800.	1212722-015A	SAMP MA_APH	10 Jan 2013 04:42
29	24	01091329.d	800.	1212722-051A	SAMP MA_APH	10 Jan 2013 05:27
30	25	01091330.d	8000.	1212722-034A	SAMP MA_APH	10 Jan 2013 06:10
31	26	01091331.d	1600.	1212722-032A	data not used	10 Jan 2013 06:54
32	27	01091332.d	1.	RLVS2 VOA9 010913	RLVS MA_APH	10 Jan 2013 07:37

RTI Laboratories

ANALYTICAL RUN Summary

16-Jan-13

RunNo 55281

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1089490	BFB VOA9 010913	BFB_TUNE	TUNE	\\1\DATA\010913\	1/9/2013 7:48:00	1	R55281		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		61.2	61.2		100	0	0	0	0	0	61%	50	200	0%	
175	M		8.2	8.2		100	0	0	0	0	0	8%	4	9	0%	
176	M		100.6	100.6		100	0	0	0	0	0	101%	93	101	0%	
177	M		6.3	6.3		100	0	0	0	0	0	6%	5	9	0%	
50	M		24.5	24.5		100	0	0	0	0	0	25%	8	40	0%	
75	M		45.2	45.2		100	0	0	0	0	0	45%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		7.3	7.3		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
1089491	CCV VOA9 010913	MA_APH	CCV	\\1\DATA\010913\	1/9/2013 8:30:00	1	R55281		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	257.61	257.61		234	0	0	0	0	0	110%	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	307.98	307.98		266	0	0	0	0	0	116%	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	423.88	423.88		378	0	0	0	0	0	112%	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	88.54	88.54		89.5	0	0	0	0	0	99%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\010913\01091302.D Vial: 2
Acq On : 9 Jan 2013 8:30 am Operator: RACHEL HILL
Sample : CCV VOA9 010913 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\010613V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jan 07 17:03:40 2013
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	31.313	-7.2	102	0.00
2	L1	C5-C8 Aliphatic HC {2}	36.400	40.200	-10.4	102	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	46.473	-11.2	101	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	38.646	-9.2	102	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	46.739	-10.8	101	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	54.357	-10.9	100	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	257.610	-10.1	101	0.00
8	L1	C9-C12 Aliphatic HC	54.600	60.402	-10.6	99	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	55.560	-1.8	99	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	68.943	-12.7	101	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	69.513	-14.3	104	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	80.810	-15.4	103	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	89.443	-16.2	99	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	423.883	-12.1	101	0.00
15	L1	C9-C10 Aromatic HC	51.700	59.254	-14.6	103	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	59.132	-15.5	104	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	60.281	-15.5	104	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	68.169	-16.1	104	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	60.583	-15.2	105	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	68.672	-17.0	106	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	307.979	-15.8	104	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-6.85#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.21#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.01#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.74#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.52#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-11.96#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.07#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.21#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.21#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.18#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.28#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.46#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.11#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.01#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.46#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.04#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.04#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.04#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	106	0.00
41	S	4-Bromofluorobenzene	89.500	88.543	1.1	106	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010913\01091302.D Vial: 2
Acq On : 9 Jan 2013 8:30 am Operator: RACHEL HILL
Sample : CCV VOA9 010913 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 11:02 2013 Quant Results File: 010613V9.RES

Quant Method : C:\HPCHEM\1\METHODS\010613V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jan 07 17:03:40 2013
Response via : Initial Calibration
DataAcq Meth : 010613V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.17	117	276121	12.50	ug/m3	0.00

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.00	95	173966	88.54	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 98.93%

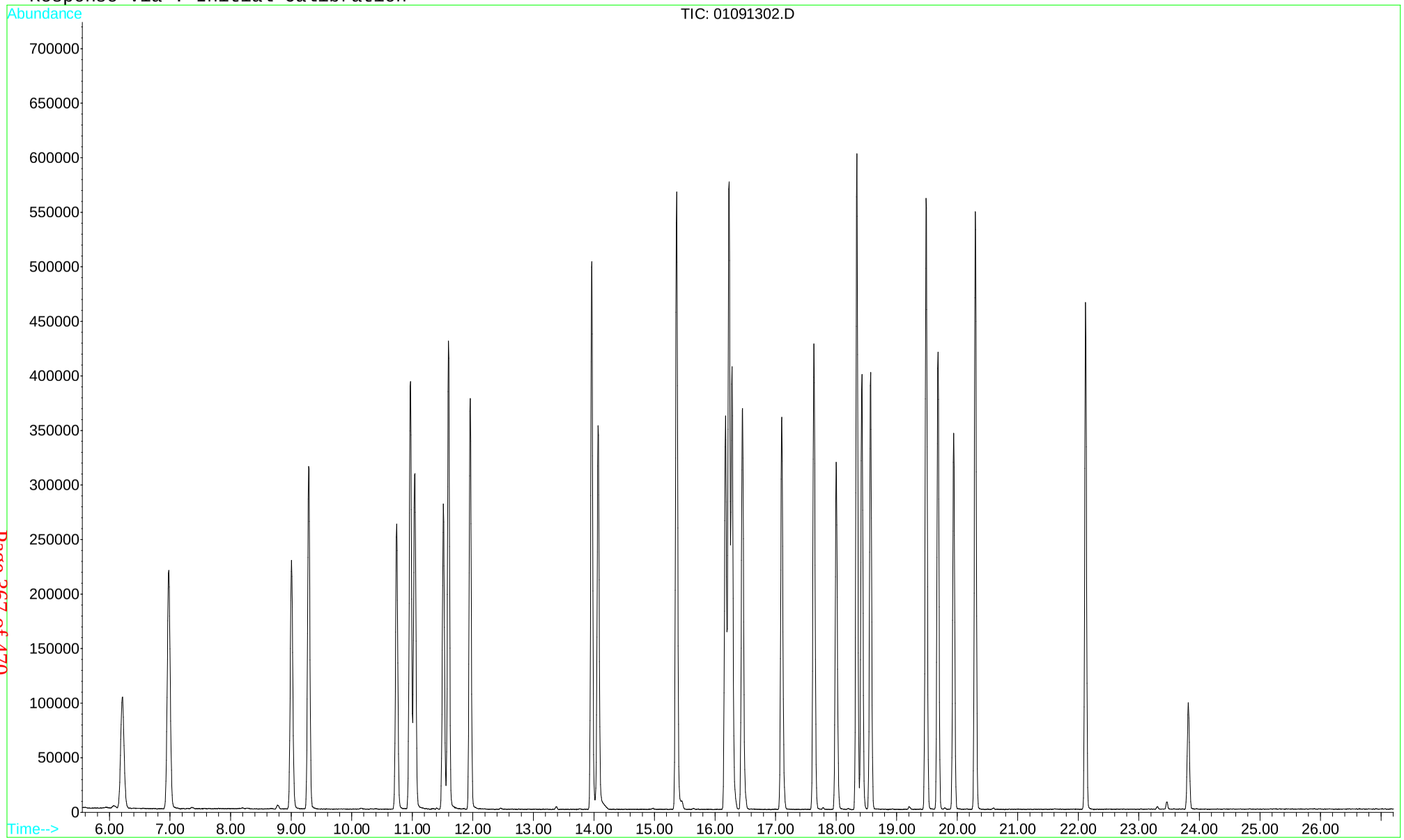
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	6.98	TIC	751450	31.31	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.29	TIC	821817	40.20	ug/m3	100
3) C5-C8 Aliphatic HC {3}	10.97	TIC	1048449	46.47	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.04	TIC	808169	38.65	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.60	TIC	1003531	46.74	ug/m3	100
6) C5-C8 Aliphatic HC {6}	13.97	TIC	1138526	54.36	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	6.98	TIC	5571942m	257.61	ug/m3	
8) C9-C12 Aliphatic HC	15.37	TIC	1348363	60.40	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.23	TIC	806412m	55.56	ug/m3	
10) C9-C12 Aliphatic HC {3}	18.34	TIC	1315201	68.94	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.49	TIC	1301563	69.51	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.30	TIC	1196828	80.81	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.12	TIC	981519	89.44	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.37	TIC	6949886m	423.88	ug/m3	
15) C9-C10 Aromatic HC	17.63	120	101352	59.25	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.43	120	105174	59.13	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.57	120	155078	60.28	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.68	120	34020	68.17	ug/m3	100
19) C9-C10 Aromatic HC {5}	19.94	120	116645	60.58	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.68	134	90996	68.67	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	18.00	TIC	603265m	307.98	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010913\01091302.D Vial: 2
Acq On : 9 Jan 2013 8:30 am Operator: RACHEL HILL
Sample : CCV VOA9 010913 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 10 11:02 2013 Quant Results File: 010613V9.RES

Method : C:\HPCHEM\1\METHODS\010613V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jan 07 17:03:40 2013
Response via : Initial Calibration



Injection Log

Directory: C:\HPCHEM\1\DATA\011013

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	01101301.d	1.	BFB VOA9 011013	TUNE BFB_TUNE	10 Jan 2013 08:27
2	2	01101302.d	1.	CCV VOA9 011013	CCV MA_APH	10 Jan 2013 09:09
3	3	01101303.d	1.	RLVS VOA9 011013	RLVS MA_APH	10 Jan 2013 09:53
4	4	01101304.d	1.	MBLK VOA9 011013	MBLK MA_APH	10 Jan 2013 10:49
5	5	01101305.d	8000.	1212722-032A	SAMP MA_APH	10 Jan 2013 11:31
6	6	01101306.d	800.	1212722-001A	SAMP MA_APH	10 Jan 2013 12:17
7	7	01101307.d	20000.	1212722-002A	SAMP MA_APH	10 Jan 2013 13:00
8	8	01101308.d	20000.	1212722-003A	SAMP MA_APH	10 Jan 2013 13:42
9	9	01101309.d	8000.	1212722-052A	SAMP MA_APH	10 Jan 2013 14:25
10	10	01101310.d	8000.	1212722-053A	data not used	10 Jan 2013 15:07
11	11	01101311.d	800.	1212722-001A	data not used	10 Jan 2013 15:52
12	12	01101312.d	400.	1212959-037A	SAMP MA_APH	10 Jan 2013 16:41
13	13	01101313.d	400.	1212959-038A	SAMP MA_APH	10 Jan 2013 17:30
14	14	01101314.d	400.	1212959-039A	data not used	10 Jan 2013 18:19
15	15	01101315.d	1600.	1212959-041A	SAMP MA_APH	10 Jan 2013 19:02
16	16	01101316.d	800.	1212959-001A	SAMP MA_APH	10 Jan 2013 19:48
17	17	01101317.d	800.	1212959-001ADUP	DUP MA_APH	10 Jan 2013 20:34
18	18	01101318.d	20000.	1212959-002A	SAMP MA_APH	10 Jan 2013 21:16
19	19	01101319.d	20000.	1212959-003A	SAMP MA_APH	10 Jan 2013 21:59
20	20	01101320.d	1600.	1212959-004A	data not used	10 Jan 2013 22:43
21	21	01101321.d	20000.	1212722-053A	SAMP MA_APH	10 Jan 2013 23:26
22	3	01101322.d	1.	RLVS2 VOA9 011013	RLVS MA_APH	11 Jan 2013 00:10

RTI Laboratories

ANALYTICAL RUN Summary

16-Jan-13

RunNo 55326

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1090375	BFB VOA9 011013	BFB_TUNE	TUNE	\\1\DATA\011013\	1/10/2013 8:27:0	1	R55326		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		59.4	59.4		100	0	0	0	0	0	59%	50	200	0%	
175	M		8.1	8.1		100	0	0	0	0	0	8%	4	9	0%	
176	M		100.9	100.9		100	0	0	0	0	0	101%	93	101	0%	
177	M		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	
50	M		24.2	24.2		100	0	0	0	0	0	24%	8	40	0%	
75	M		46.6	46.6		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		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
1090376	CCV VOA9 011013	MA_APH	CCV	\\1\DATA\011013\	1/10/2013 9:09:0	1	R55326		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	259.9	259.9		234	0	0	0	0	0	111%	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	309.23	309.23		266	0	0	0	0	0	116%	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	425.89	425.89		378	0	0	0	0	0	113%	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	88.61	88.61		89.5	0	0	0	0	0	99%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\011013\01101302.D Vial: 2
Acq On : 10 Jan 2013 9:09 am Operator: RACHEL HILL
Sample : CCV VOA9 011013 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\010613V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jan 07 17:03:40 2013
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	32.202	-10.3	105	0.00
2	L1	C5-C8 Aliphatic HC {2}	36.400	40.444	-11.1	102	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	46.110	-10.3	100	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	39.284	-11.0	103	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	47.000	-11.4	101	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	54.952	-12.1	101	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	259.900	-11.1	102	0.00
8	L1	C9-C12 Aliphatic HC	54.600	61.475	-12.6	101	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	57.492	-5.3	102	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	69.026	-12.8	101	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	69.891	-15.0	104	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	79.515	-13.6	101	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	88.662	-15.1	98	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	425.890	-12.7	101	0.00
15	L1	C9-C10 Aromatic HC	51.700	59.519	-15.1	104	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	59.096	-15.4	104	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	60.598	-16.1	104	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	68.325	-16.4	105	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	60.904	-15.8	105	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	69.091	-17.7	107	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	309.233	-16.3	105	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-6.85#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.21#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.01#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.74#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.52#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-11.96#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.07#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.21#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.21#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.18#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.28#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.46#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.11#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.01#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.46#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.04#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.04#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.04#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	108	0.00
41	S	4-Bromofluorobenzene	89.500	88.607	1.0	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
01061304.D 010613V9.M Fri Jan 11 12:12:48 2013

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\011013\01101302.D Vial: 2
Acq On : 10 Jan 2013 9:09 am Operator: RACHEL HILL
Sample : CCV VOA9 011013 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 11 11:16 2013 Quant Results File: 010613V9.RES

Quant Method : C:\HPCHEM\1\METHODS\010613V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jan 07 17:03:40 2013
Response via : Initial Calibration
DataAcq Meth : 010613V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.17	117	282540	12.50	ug/m3	0.00

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.00	95	178138	88.61	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 99.01%

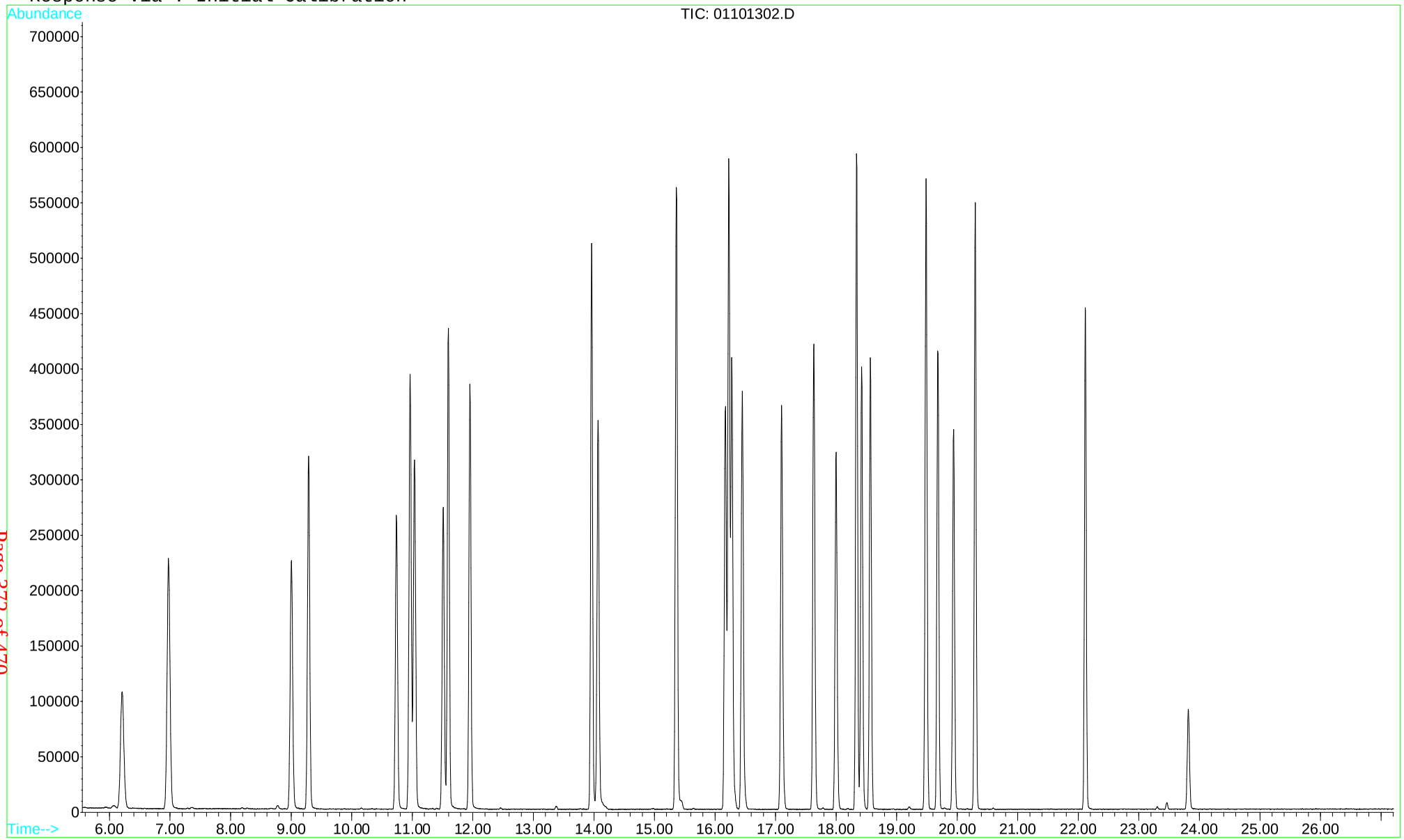
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	6.97	TIC	772777	32.20	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.29	TIC	826796	40.44	ug/m3	100
3) C5-C8 Aliphatic HC {3}	10.97	TIC	1040258	46.11	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.04	TIC	821499	39.28	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.60	TIC	1009145	47.00	ug/m3	100
6) C5-C8 Aliphatic HC {6}	13.96	TIC	1150996	54.95	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	6.97	TIC	5621471m	259.90	ug/m3	
8) C9-C12 Aliphatic HC	15.36	TIC	1372314	61.48	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.23	TIC	834448m	57.49	ug/m3	
10) C9-C12 Aliphatic HC {3}	18.34	TIC	1316791	69.03	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.49	TIC	1308631	69.89	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.30	TIC	1177649	79.51	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.11	TIC	972958	88.66	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.36	TIC	6982791m	425.89	ug/m3	
15) C9-C10 Aromatic HC	17.63	120	101805	59.52	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.42	120	105111	59.10	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.57	120	155892	60.60	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.68	120	34098	68.32	ug/m3	100
19) C9-C10 Aromatic HC {5}	19.94	120	117263	60.90	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.68	134	91552	69.09	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	18.00	TIC	605721m	309.23	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\011013\01101302.D Vial: 2
Acq On : 10 Jan 2013 9:09 am Operator: RACHEL HILL
Sample : CCV VOA9 011013 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 11 11:16 2013 Quant Results File: 010613V9.RES

Method : C:\HPCHEM\1\METHODS\010613V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jan 07 17:03:40 2013
Response via : Initial Calibration



Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\123112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Jan 01 12:28:20 2013
Response via : Initial Calibration

Calibration Files
1 =12311203.D 2 =12311204.D 3 =12311205.D
4 =12311206.D 5 =12311207.D 6 =12311208.D

		Compound	1	2	3	4	5	6	Avg	%RSD
1)	L1	C5-C8 Aliphatic HC	6.808	6.547	6.428	6.225	5.986	5.536	6.085 E4	10.01
2)	L1	C5-C8 Aliphatic HC	5.443	5.635	5.093	4.967	4.818	4.285	4.891 E4	12.04
3)	L1	C5-C8 Aliphatic HC	5.963	6.185	5.565	5.352	5.327	4.703	5.332 E4	12.81
4)	L1	C5-C8 Aliphatic HC	5.488	5.806	5.237	5.170	5.020	4.570	5.087 E4	10.05
5)	L1	C5-C8 Aliphatic HC	5.677	5.922	5.308	5.236	5.094	4.450	5.106 E4	12.85
6)	L1	C5-C8 Aliphatic HC	5.710	5.863	5.271	5.115	5.017	4.378	5.041 E4	13.68
7)	L1	C5-C8 Aliphatic HC	5.811	5.972	5.438	5.309	5.181	4.605	5.219 E4	12.00
8)	L1	C9-C12 Aliphatic HC	6.094	6.278	5.579	5.504	5.343	4.675	5.378 E4	13.84
9)	L1	C9-C12 Aliphatic HC	2.705	3.532	3.141	3.521	3.498	3.533	3.293 E4	9.67
10)	L1	C9-C12 Aliphatic HC	5.029	5.296	4.723	4.588	4.501	3.894	4.495 E4	14.30
11)	L1	C9-C12 Aliphatic HC	5.399	5.445	4.933	4.796	4.729	4.167	4.745 E4	13.02
12)	L1	C9-C12 Aliphatic HC	3.620	4.122	3.617	3.528	3.436	2.865	3.415 E4	14.08
13)	L1	C9-C12 Aliphatic HC	2.583	3.212	2.796	2.714	2.546	1.995	2.547 E4	17.20
14)	L1	C9-C12 Aliphatic HC	4.149	4.568	4.056	4.023	3.920	3.422	3.894 E4	12.35
15)	L1	C9-C10 Aromatic HC	4.776	5.319	4.726	4.783	4.849	4.315	4.681 E3	8.95
16)	L1	C9-C10 Aromatic HC	4.813	5.465	4.953	4.909	5.108	4.585	4.869 E3	7.89
17)	L1	C9-C10 Aromatic HC	7.076	7.987	7.101	7.148	7.298	6.507	7.013 E3	9.02
18)	L1	C9-C10 Aromatic HC	1.318	1.553	1.408	1.388	1.444	1.291	1.364 E3	9.45
19)	L1	C9-C10 Aromatic HC	4.991	5.822	5.358	5.295	5.438	4.970	5.217 E3	7.35
20)	L1	C9-C10 Aromatic HC	2.788	3.303	3.018	2.980	3.063	2.742	2.896 E3	10.19
21)	L1	C9-C10 Aromatic HC	5.136	5.876	5.287	5.266	5.399	4.866	5.184 E3	8.54
22)		C5-C8 Aliphatic	5.811	5.972	5.438	5.309	5.181	4.605	5.219 E4	12.00
23)	L1	non C5-C8	4.860	4.649	4.562	4.449	4.299	4.083	4.400 E4	7.56
24)	L1	non C5-C8 {2}	3.681	4.295	3.723	3.682	3.665	3.274	3.620 E4	11.02
25)	L1	non C5-C8 {3}	2.649	2.647	2.658	2.661	2.676	2.633	2.658 E4	0.64
26)	L1	non C5-C8 {4}	4.824	5.543	4.618	4.627	4.657	4.012	4.587 E4	12.22
27)	L1	non C5-C8 {5}	4.497	4.435	4.456	4.489	4.536	4.346	4.476 E4	1.63
28)	L1	non C5-C8 {6}	5.478	6.337	5.483	5.423	5.461	4.760	5.350 E4	11.02
29)	L1	non C5-C8 - TOTAL	3.931	4.401	4.124	4.167	4.231	3.899	4.076 E4	5.32
30)		C9-C12 Aliphatic	4.149	4.568	4.056	4.023	3.920	3.422	3.894 E4	12.35
31)	L1	non C9-C12	4.045	4.014	4.121	4.085	4.016	3.929	4.081 E4	3.33
32)	L1	non C9-C12 {2}	5.331	5.385	5.207	4.824	4.618	4.114	4.745 E4	13.34
33)	L1	non C9-C12 {3}	5.315	5.832	5.174	5.098	5.144	4.542	5.054 E4	10.12
34)	L1	non C9-C12 {4}	5.160	5.614	5.014	4.941	5.006	4.432	4.903 E4	9.79
35)	L1	non C9-C12 {5}	2.892	2.835	2.894	2.934	2.989	3.010	2.963 E4	3.87
36)	L1	non C9-C12 - TOTAL	3.515	3.705	3.550	3.487	3.483	3.170	3.416 E4	7.11
37)	L1	C9-C10 Aromatic	5.136	5.876	5.287	5.266	5.399	4.866	5.184 E3	8.54
38)	L1	C9-C10 Aromatic {2}	5.136	5.876	5.287	5.266	5.399	4.866	5.184 E3	8.54
39)	L1	C9-C10 Aromatic - T	5.136	5.876	5.287	5.266	5.399	4.866	5.184 E3	8.54
40)	I	Chlorobenzene-d5	----------ISTD----------							
41)	S	4-Bromofluorobenzen	0.102	0.103	0.103	0.104	0.104	0.106	0.104	1.91

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

Compound List Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\123112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Jan 01 12:28:20 2013
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	6.98	1.000	A	0	A	B
2	L1	C5-C8 Aliphatic HC {2}	TIC	9.29	1.000	A	0	A	B
3	L1	C5-C8 Aliphatic HC {3}	TIC	10.97	1.000	A	0	A	B
4	L1	C5-C8 Aliphatic HC {4}	TIC	11.04	1.000	A	0	A	B
5	L1	C5-C8 Aliphatic HC {5}	TIC	11.60	1.000	A	0	A	B
6	L1	C5-C8 Aliphatic HC {6}	TIC	13.97	1.000	A	0	A	B
7	L1	C5-C8 Aliphatic HC - TOTAL	TIC	6.98	1.000	A	0	A	B
8	L1	C9-C12 Aliphatic HC	TIC	15.37	1.000	A	0	A	B
9	L1	C9-C12 Aliphatic HC {2}	TIC	16.23	1.000	A	0	A	B
10	L1	C9-C12 Aliphatic HC {3}	TIC	18.34	1.000	A	0	A	B
11	L1	C9-C12 Aliphatic HC {4}	TIC	19.49	1.000	A	0	A	B
12	L1	C9-C12 Aliphatic HC {5}	TIC	20.31	1.000	A	0	A	B
13	L1	C9-C12 Aliphatic HC {6}	TIC	22.12	1.000	A	0	A	B
14	L1	C9-C12 Aliphatic HC - TOTAL	TIC	15.37	1.000	A	0	A	B
15	L1	C9-C10 Aromatic HC	120	17.63	1.000	A	0	A	B
16	L1	C9-C10 Aromatic HC {2}	120	18.43	1.000	A	0	A	B
17	L1	C9-C10 Aromatic HC {3}	120	18.57	1.000	A	0	A	B
18	L1	C9-C10 Aromatic HC {4}	120	19.69	1.000	A	0	A	B
19	L1	C9-C10 Aromatic HC {5}	120	19.94	1.000	A	0	A	B
20	L1	C9-C10 Aromatic HC {6}	134	19.69	1.000	A	0	A	B
21	L1	C9-C10 Aromatic HC - TOTAL	TIC	18.01	1.000	A	0	A	B
22		C5-C8 Aliphatic	TIC	6.85	1.000	A	0	A	B
23	L1	non C5-C8	TIC	6.21	1.000	A	0	A	B
24	L1	non C5-C8 {2}	TIC	9.01	1.000	A	0	A	B
25	L1	non C5-C8 {3}	TIC	10.74	1.000	A	0	A	B
26	L1	non C5-C8 {4}	TIC	11.52	1.000	A	0	A	B
27	L1	non C5-C8 {5}	TIC	11.96	1.000	A	0	A	B
28	L1	non C5-C8 {6}	TIC	14.07	1.000	A	0	A	B
29	L1	non C5-C8 - TOTAL	TIC	6.21	1.000	A	0	A	B
30		C9-C12 Aliphatic	TIC	16.21	1.000	A	0	A	B
31	L1	non C9-C12	TIC	16.18	1.000	A	0	A	B
32	L1	non C9-C12 {2}	TIC	16.28	1.000	A	0	A	B
33	L1	non C9-C12 {3}	TIC	16.46	1.000	A	0	A	B
34	L1	non C9-C12 {4}	TIC	17.11	1.000	A	0	A	B
35	L1	non C9-C12 {5}	TIC	18.01	1.000	A	0	A	B
36	L1	non C9-C12 - TOTAL	TIC	16.46	1.000	A	0	A	B
37	L1	C9-C10 Aromatic	120	17.04	1.000	A	0	A	B
38	L1	C9-C10 Aromatic {2}	134	17.04	1.000	A	0	A	B
39	L1	C9-C10 Aromatic - TOTAL	134	17.04	1.000	A	1	A	B
40	I	Chlorobenzene-d5	117	16.18	1.000	A	2	A	B
41	S	4-Bromofluorobenzene	95	18.01	1.113	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

123112V9.M Wed Jan 02 15:11:50 2013

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\123112B\12311212.D Vial: 3
Acq On : 1 Jan 2013 10:23 am Operator: RACHEL HILL
Sample : ICV VOA9 123112 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\123112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Jan 01 12:28:20 2013
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	31.341	-7.3	100	0.00
2	L1	C5-C8 Aliphatic HC {2}	36.400	38.319	-5.3	91	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	43.418	-3.9	90	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	37.678	-6.4	93	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	44.792	-6.1	92	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	52.509	-7.2	92	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	248.059	-6.0	93	0.00
8	L1	C9-C12 Aliphatic HC	54.600	58.763	-7.6	92	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	48.559	11.1	83	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	65.432	-6.9	91	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	66.919	-10.1	96	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	75.196	-7.4	89	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	85.625	-11.2	88	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	401.258	-6.2	90	0.00
15	L1	C9-C10 Aromatic HC	51.700	54.010	-4.5	92	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	53.865	-5.2	94	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	55.264	-5.9	93	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	62.191	-5.9	93	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	55.738	-6.0	95	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	62.444	-6.4	93	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	281.470	-5.8	93	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-6.85#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.21#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.01#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.74#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.52#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-11.96#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.07#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.21#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.21#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.18#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.28#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.46#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.11#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.01#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.46#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.04#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.04#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.04#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	102	0.00
41	S	4-Bromofluorobenzene	89.500	87.969	1.7	101	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\123112B\12311212.D Vial: 3
Acq On : 1 Jan 2013 10:23 am Operator: RACHEL HILL
Sample : ICV VOA9 123112 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 1 12:29 2013 Quant Results File: 123112V9.RES

Quant Method : C:\HPCHEM\1\METHODS\123112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Jan 01 12:28:20 2013
Response via : Initial Calibration
DataAcq Meth : 123112V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.18	117	822328	12.50	ug/m3	0.00
System Monitoring Compounds						
41) 4-Bromofluorobenzene	18.01	95	603897	87.97	ug/m3	0.00
Spiked Amount 89.500	Range 70 - 130		Recovery = 98.29%			

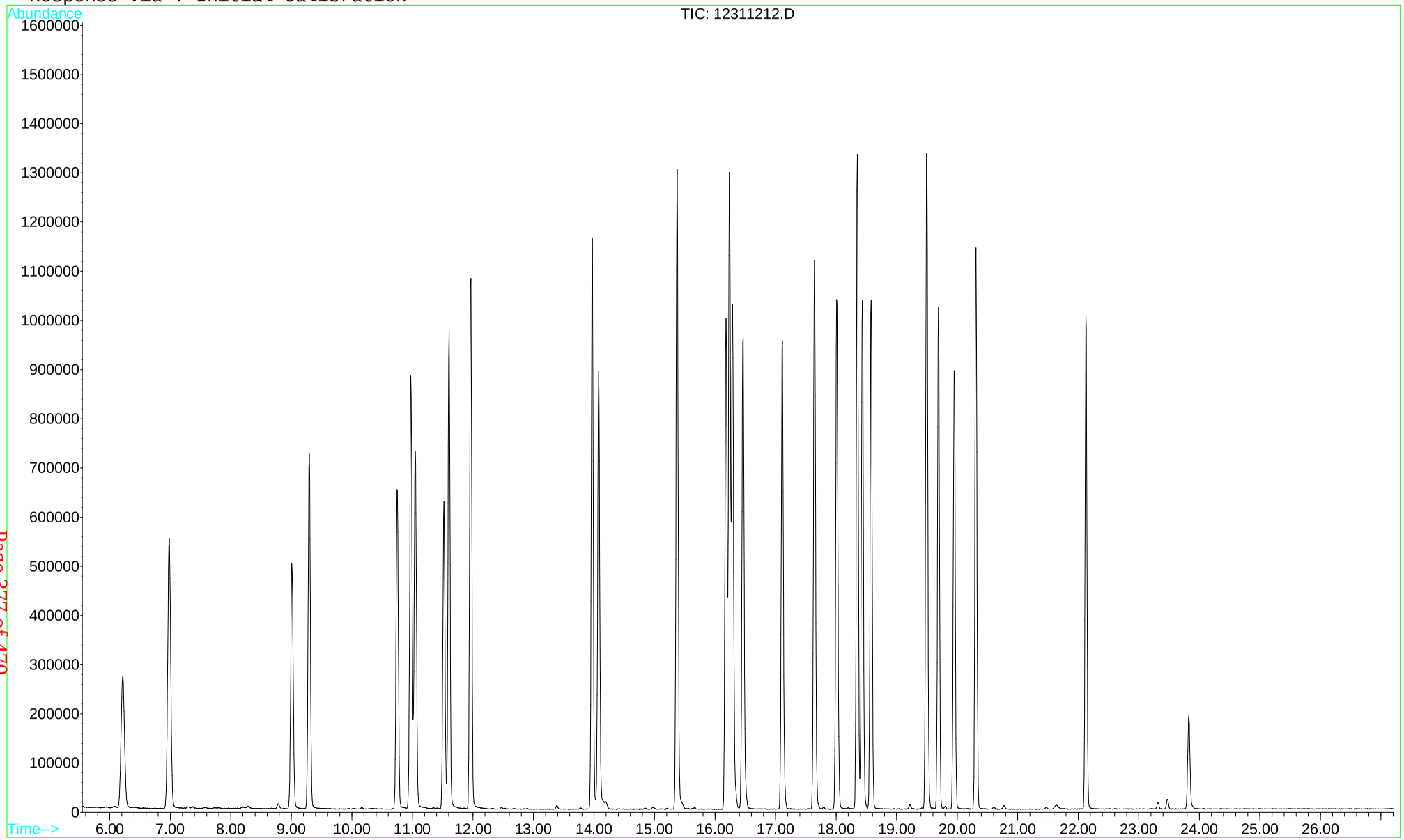
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	6.98	TIC	1907126	31.34	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.30	TIC	1874054	38.32	ug/m3	100
3) C5-C8 Aliphatic HC {3}	10.97	TIC	2314891	43.42	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.05	TIC	1916703	37.68	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.60	TIC	2287083	44.79	ug/m3	100
6) C5-C8 Aliphatic HC {6}	13.97	TIC	2646860	52.51	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	6.98	TIC	12946717m	248.06	ug/m3	
8) C9-C12 Aliphatic HC	15.37	TIC	3160341	58.76	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.23	TIC	1598858m	48.56	ug/m3	
10) C9-C12 Aliphatic HC {3}	18.35	TIC	2941038	65.43	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.49	TIC	3175151	66.92	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.31	TIC	2567799	75.20	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.13	TIC	2181262	85.62	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.37	TIC	15624449m	401.26	ug/m3	
15) C9-C10 Aromatic HC	17.64	120	252828	54.01	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.44	120	262282	53.87	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.58	120	387553	55.26	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.69	120	84827	62.19	ug/m3	100
19) C9-C10 Aromatic HC {5}	19.95	120	290768	55.74	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.69	134	180812	62.44	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	18.01	TIC	1459070m	281.47	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\123112B\12311212.D Vial: 3
Acq On : 1 Jan 2013 10:23 am Operator: RACHEL HILL
Sample : ICV VOA9 123112 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 1 12:29 2013 Quant Results File: 123112V9.RES

Method : C:\HPCHEM\1\METHODS\123112V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Jan 01 12:28:20 2013
Response via : Initial Calibration



Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\010313V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 04 10:58:14 2013
Response via : Initial Calibration

Calibration Files
1 =01031303.D 2 =01031304.D 3 =01031305.D
4 =01031306.D 5 =01031307.D 6 =01031308.D

		Compound	1	2	3	4	5	6	Avg	%RSD
1)	L1	C5-C8 Aliphatic HC	7.677	7.596	7.451	7.278	6.915	6.485	7.042 E4	9.32
2)	L1	C5-C8 Aliphatic HC	6.315	6.270	5.989	6.166	5.434	5.172	5.729 E4	10.65
3)	L1	C5-C8 Aliphatic HC	6.974	6.868	6.681	6.687	5.953	5.695	6.290 E4	10.92
4)	L1	C5-C8 Aliphatic HC	6.511	6.480	6.045	6.395	5.659	5.258	5.896 E4	10.72
5)	L1	C5-C8 Aliphatic HC	6.606	6.604	6.319	6.486	5.744	5.326	5.985 E4	11.84
6)	L1	C5-C8 Aliphatic HC	6.535	6.466	6.126	6.190	5.495	5.059	5.768 E4	13.34
7)	L1	C5-C8 Aliphatic HC	6.731	6.675	6.387	6.503	5.819	5.443	6.074 E4	11.22
8)	L1	C9-C12 Aliphatic HC	7.004	6.887	6.433	6.604	5.772	5.279	6.098 E4	14.24
9)	L1	C9-C12 Aliphatic HC	3.171	3.960	3.725	4.422	3.987	4.160	3.880 E4	10.19
10)	L1	C9-C12 Aliphatic HC	5.780	5.833	5.494	5.600	4.912	4.417	5.137 E4	14.41
11)	L1	C9-C12 Aliphatic HC	5.924	5.811	5.473	5.529	4.820	4.392	5.132 E4	14.55
12)	L1	C9-C12 Aliphatic HC	4.244	4.475	4.153	4.344	3.746	3.366	3.926 E4	13.02
13)	L1	C9-C12 Aliphatic HC	2.905	3.473	3.250	3.397	2.914	2.478	2.962 E4	15.03
14)	L1	C9-C12 Aliphatic HC	4.735	4.982	4.667	4.884	4.266	3.912	4.428 E4	12.13
15)	L1	C9-C10 Aromatic HC	5.396	5.444	5.241	5.308	4.658	4.345	4.906 E3	12.02
16)	L1	C9-C10 Aromatic HC	5.426	5.736	5.355	5.504	4.860	4.586	5.095 E3	10.98
17)	L1	C9-C10 Aromatic HC	7.921	8.193	7.728	7.951	6.990	6.529	7.321 E3	11.61
18)	L1	C9-C10 Aromatic HC	1.416	1.598	1.519	1.530	1.372	1.282	1.411 E3	10.84
19)	L1	C9-C10 Aromatic HC	5.540	6.163	5.854	5.902	5.301	4.968	5.476 E3	10.14
20)	L1	C9-C10 Aromatic HC	3.871	4.281	4.088	4.127	3.642	3.399	3.781 E3	11.64
21)	L1	C9-C10 Aromatic HC	5.910	6.286	5.943	6.042	5.339	5.018	5.588 E3	11.16
22)		C5-C8 Aliphatic	6.731	6.675	6.387	6.503	5.819	5.443	6.074 E4	11.22
23)	L1	non C5-C8	5.449	5.447	5.312	5.162	4.987	4.778	5.089 E4	7.08
24)	L1	non C5-C8 {2}	4.238	4.664	4.487	4.641	3.958	3.834	4.209 E4	9.69
25)	L1	non C5-C8 {3}	2.864	2.889	2.893	2.921	2.941	2.955	2.923 E4	1.56
26)	L1	non C5-C8 {4}	5.708	5.619	5.234	5.727	4.662	4.570	5.115 E4	11.79
27)	L1	non C5-C8 {5}	4.302	4.324	4.333	4.362	4.456	4.501	4.394 E4	1.88
28)	L1	non C5-C8 {6}	5.576	5.874	5.483	5.841	4.955	4.705	5.261 E4	11.02
29)	L1	non C5-C8 - TOTAL	4.121	4.501	4.431	4.682	4.300	4.262	4.342 E4	4.85
30)		C9-C12 Aliphatic	4.735	4.982	4.667	4.884	4.266	3.912	4.428 E4	12.13
31)	L1	non C9-C12	3.892	3.906	4.213	4.140	4.199	4.204	4.100 E4	3.42
32)	L1	non C9-C12 {2}	5.041	5.236	4.597	4.970	4.294	3.785	4.628 E4	10.82
33)	L1	non C9-C12 {3}	5.294	5.368	5.087	5.276	4.536	4.321	4.838 E4	11.41
34)	L1	non C9-C12 {4}	5.101	5.167	4.937	5.066	4.423	4.201	4.679 E4	11.05
35)	L1	non C9-C12 {5}	2.370	2.377	2.459	2.430	2.500	2.586	2.474 E4	3.68
36)	L1	non C9-C12 - TOTAL	3.253	3.424	3.350	3.462	3.162	2.992	3.231 E4	6.10
37)	L1	C9-C10 Aromatic	5.910	6.286	5.943	6.042	5.339	5.018	5.588 E3	11.16
38)	L1	C9-C10 Aromatic {2}	5.910	6.286	5.943	6.042	5.339	5.018	5.588 E3	11.16
39)	L1	C9-C10 Aromatic - T	5.910	6.286	5.943	6.042	5.339	5.018	5.588 E3	11.16
40)	I	Chlorobenzene-d5	----------ISTD----------							
41)	S	4-Bromofluorobenzen	0.091	0.090	0.092	0.091	0.092	0.094	0.092	1.92

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

Compound List Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\010313V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 04 10:58:14 2013
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	6.98	1.000	A	0	A	B
2	L1	C5-C8 Aliphatic HC {2}	TIC	9.29	1.000	A	0	A	B
3	L1	C5-C8 Aliphatic HC {3}	TIC	10.97	1.000	A	0	A	B
4	L1	C5-C8 Aliphatic HC {4}	TIC	11.04	1.000	A	0	A	B
5	L1	C5-C8 Aliphatic HC {5}	TIC	11.60	1.000	A	0	A	B
6	L1	C5-C8 Aliphatic HC {6}	TIC	13.97	1.000	A	0	A	B
7	L1	C5-C8 Aliphatic HC - TOTAL	TIC	6.98	1.000	A	0	A	B
8	L1	C9-C12 Aliphatic HC	TIC	15.37	1.000	A	0	A	B
9	L1	C9-C12 Aliphatic HC {2}	TIC	16.23	1.000	A	0	A	B
10	L1	C9-C12 Aliphatic HC {3}	TIC	18.34	1.000	A	0	A	B
11	L1	C9-C12 Aliphatic HC {4}	TIC	19.49	1.000	A	0	A	B
12	L1	C9-C12 Aliphatic HC {5}	TIC	20.31	1.000	A	0	A	B
13	L1	C9-C12 Aliphatic HC {6}	TIC	22.12	1.000	A	0	A	B
14	L1	C9-C12 Aliphatic HC - TOTAL	TIC	15.37	1.000	A	0	A	B
15	L1	C9-C10 Aromatic HC	120	17.63	1.000	A	0	A	B
16	L1	C9-C10 Aromatic HC {2}	120	18.43	1.000	A	0	A	B
17	L1	C9-C10 Aromatic HC {3}	120	18.57	1.000	A	0	A	B
18	L1	C9-C10 Aromatic HC {4}	120	19.69	1.000	A	0	A	B
19	L1	C9-C10 Aromatic HC {5}	120	19.94	1.000	A	0	A	B
20	L1	C9-C10 Aromatic HC {6}	134	19.69	1.000	A	0	A	B
21	L1	C9-C10 Aromatic HC - TOTAL	TIC	18.01	1.000	A	0	A	B
22		C5-C8 Aliphatic	TIC	6.85	1.000	A	0	A	B
23	L1	non C5-C8	TIC	6.21	1.000	A	0	A	B
24	L1	non C5-C8 {2}	TIC	9.01	1.000	A	0	A	B
25	L1	non C5-C8 {3}	TIC	10.74	1.000	A	0	A	B
26	L1	non C5-C8 {4}	TIC	11.52	1.000	A	0	A	B
27	L1	non C5-C8 {5}	TIC	11.96	1.000	A	0	A	B
28	L1	non C5-C8 {6}	TIC	14.07	1.000	A	0	A	B
29	L1	non C5-C8 - TOTAL	TIC	6.21	1.000	A	0	A	B
30		C9-C12 Aliphatic	TIC	16.21	1.000	A	0	A	B
31	L1	non C9-C12	TIC	16.18	1.000	A	0	A	B
32	L1	non C9-C12 {2}	TIC	16.28	1.000	A	0	A	B
33	L1	non C9-C12 {3}	TIC	16.46	1.000	A	0	A	B
34	L1	non C9-C12 {4}	TIC	17.11	1.000	A	0	A	B
35	L1	non C9-C12 {5}	TIC	18.01	1.000	A	0	A	B
36	L1	non C9-C12 - TOTAL	TIC	16.46	1.000	A	0	A	B
37	L1	C9-C10 Aromatic	120	17.04	1.000	A	0	A	B
38	L1	C9-C10 Aromatic {2}	134	17.04	1.000	A	0	A	B
39	L1	C9-C10 Aromatic - TOTAL	134	17.04	1.000	A	1	A	B
40	I	Chlorobenzene-d5	117	16.18	1.000	A	2	A	B
41	S	4-Bromofluorobenzene	95	18.01	1.113	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

010313V9.M Fri Jan 04 12:00:39 2013

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\010313B\01031313.D Vial: 4
Acq On : 4 Jan 2013 7:14 am Operator: RACHEL HILL
Sample : ICV VOA9 123112 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\010313V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 04 10:58:14 2013
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	31.315	-7.2	99	0.00
2	L1	C5-C8 Aliphatic HC {2}	36.400	41.377	-13.7	104	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	47.310	-13.2	104	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	40.582	-14.6	104	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	48.095	-14.0	103	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	56.339	-15.0	103	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	264.632	-13.1	103	0.00
8	L1	C9-C12 Aliphatic HC	54.600	63.630	-16.5	103	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	59.367	-8.7	107	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	71.572	-16.9	103	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	71.986	-18.4	105	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	84.261	-20.4	106	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	94.227	-22.4	104	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	443.860	-17.4	104	0.00
15	L1	C9-C10 Aromatic HC	51.700	59.757	-15.6	104	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	58.397	-14.1	101	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	60.464	-15.8	104	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	67.777	-15.5	102	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	60.816	-15.6	103	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	68.812	-17.2	104	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	308.212	-15.9	103	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-6.85#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.21#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.01#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.74#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.52#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-11.96#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.07#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.21#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.21#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.18#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.28#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.46#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.11#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.01#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.46#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.04#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.04#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.04#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	104	0.00
41	S	4-Bromofluorobenzene	89.500	86.903	2.9	103	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010313B\01031313.D Vial: 4
Acq On : 4 Jan 2013 7:14 am Operator: RACHEL HILL
Sample : ICV VOA9 123112 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 4 11:52 2013 Quant Results File: 010313V9.RES

Quant Method : C:\HPCHEM\1\METHODS\010313V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 04 10:58:14 2013
Response via : Initial Calibration
DataAcq Meth : 010313V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.18	117	800438	12.50	ug/m3	0.00

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.01	95	512722	86.90	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 97.09%

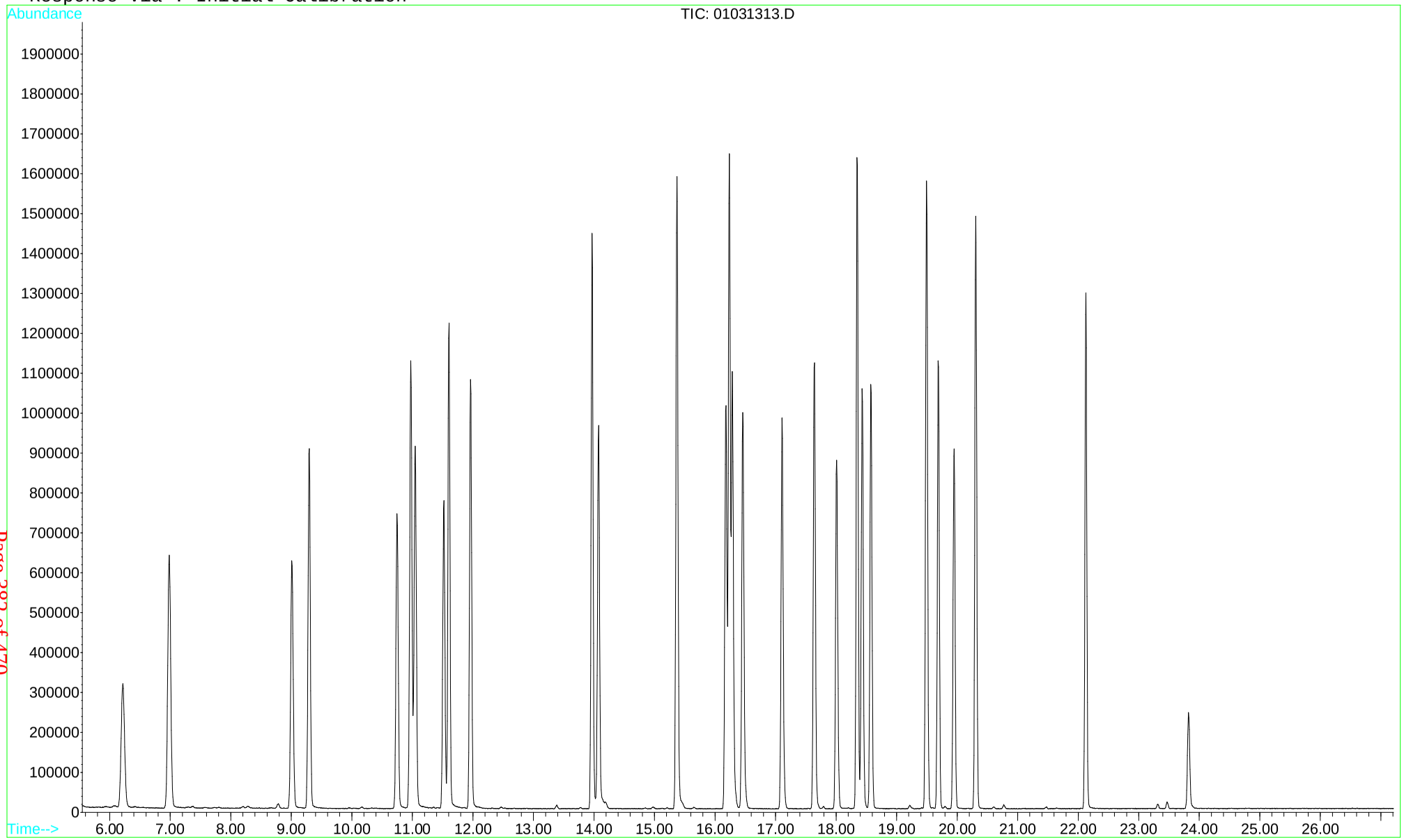
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	6.98	TIC	2205175	31.32	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.30	TIC	2370610	41.38	ug/m3	100
3) C5-C8 Aliphatic HC {3}	10.97	TIC	2975771	47.31	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.05	TIC	2392824	40.58	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.61	TIC	2878364	48.10	ug/m3	100
6) C5-C8 Aliphatic HC {6}	13.97	TIC	3249722	56.34	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	6.98	TIC	16072466m	264.63	ug/m3	
8) C9-C12 Aliphatic HC	15.37	TIC	3880223	63.63	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.24	TIC	2303613m	59.37	ug/m3	
10) C9-C12 Aliphatic HC {3}	18.35	TIC	3676401	71.57	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.49	TIC	3694421	71.99	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.31	TIC	3308236	84.26	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.13	TIC	2791257	94.23	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.37	TIC	19654151m	443.86	ug/m3	
15) C9-C10 Aromatic HC	17.64	120	293193	59.76	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.43	120	297529	58.40	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.57	120	442668	60.46	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.69	120	95658	67.78	ug/m3	100
19) C9-C10 Aromatic HC {5}	19.95	120	333020	60.82	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.69	134	260150	68.81	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	18.01	TIC	1722218m	308.21	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010313B\01031313.D Vial: 4
Acq On : 4 Jan 2013 7:14 am Operator: RACHEL HILL
Sample : ICV VOA9 123112 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 4 11:52 2013 Quant Results File: 010313V9.RES

Method : C:\HPCHEM\1\METHODS\010313V9.M (RTE Integrator)
Title : MASS APH
Last Update : Fri Jan 04 10:58:14 2013
Response via : Initial Calibration



Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\010613V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jan 07 17:03:40 2013
Response via : Initial Calibration

Calibration Files
1 =01061303.D 2 =01061304.D 3 =01061305.D
4 =01061306.D 5 =01061307.D 6 =01061308.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)	L1	C5-C8 Aliphatic HC	2.527	2.531	2.512	2.453	2.402	2.253	2.400	E4	6.55
2)	L1	C5-C8 Aliphatic HC	2.290	2.223	2.247	1.962	2.056	1.799	2.044	E4	10.88
3)	L1	C5-C8 Aliphatic HC	2.505	2.493	2.481	2.192	2.283	1.980	2.256	E4	11.57
4)	L1	C5-C8 Aliphatic HC	2.339	2.245	2.301	2.011	2.070	1.843	2.091	E4	10.08
5)	L1	C5-C8 Aliphatic HC	2.411	2.362	2.348	2.100	2.151	1.882	2.147	E4	11.52
6)	L1	C5-C8 Aliphatic HC	2.409	2.319	2.314	2.034	2.078	1.820	2.095	E4	12.96
7)	L1	C5-C8 Aliphatic HC	2.412	2.358	2.360	2.114	2.165	1.913	2.163	E4	10.74
8)	L1	C9-C12 Aliphatic HC	2.594	2.484	2.462	2.157	2.239	1.907	2.232	E4	13.70
9)	L1	C9-C12 Aliphatic HC	1.211	1.498	1.507	1.379	1.576	1.488	1.451	E4	8.32
10)	L1	C9-C12 Aliphatic HC	2.184	2.121	2.134	1.854	1.907	1.648	1.908	E4	13.61
11)	L1	C9-C12 Aliphatic HC	2.175	2.065	2.072	1.825	1.857	1.600	1.872	E4	13.35
12)	L1	C9-C12 Aliphatic HC	1.634	1.660	1.669	1.483	1.480	1.223	1.481	E4	13.13
13)	L1	C9-C12 Aliphatic HC	1.119	1.291	1.280	1.093	1.149	0.869	1.097	E4	15.46
14)	L1	C9-C12 Aliphatic HC	1.783	1.821	1.821	1.601	1.666	1.417	1.640	E4	11.49
15)	L1	C9-C10 Aromatic HC	1.948	1.894	1.900	1.671	1.723	1.473	1.710	E3	13.18
16)	L1	C9-C10 Aromatic HC	1.940	1.966	1.973	1.740	1.799	1.562	1.779	E3	11.31
17)	L1	C9-C10 Aromatic HC	2.815	2.863	2.852	2.577	2.568	2.223	2.573	E3	11.85
18)	L1	C9-C10 Aromatic HC	5.113	5.557	5.658	4.942	5.074	4.383	4.991	E2	10.89
19)	L1	C9-C10 Aromatic HC	1.982	2.122	2.148	1.926	1.964	1.707	1.925	E3	10.13
20)	L1	C9-C10 Aromatic HC	1.372	1.456	1.505	1.328	1.352	1.168	1.325	E3	11.10
21)	L1	C9-C10 Aromatic HC	2.112	2.172	2.184	1.940	1.974	1.714	1.959	E3	11.37
22)		C5-C8 Aliphatic	2.412	2.358	2.360	2.114	2.165	1.913	2.163	E4	10.74
23)	L1	non C5-C8	1.783	1.778	1.767	1.745	1.689	1.644	1.714	E4	4.36
24)	L1	non C5-C8 {2}	1.620	1.735	1.753	1.494	1.609	1.337	1.550	E4	11.62
25)	L1	non C5-C8 {3}	0.978	0.982	1.024	1.067	1.056	1.078	1.039	E4	4.37
26)	L1	non C5-C8 {4}	2.161	2.115	2.109	1.710	1.900	1.563	1.869	E4	14.52
27)	L1	non C5-C8 {5}	1.431	1.473	1.527	1.602	1.580	1.612	1.553	E4	5.06
28)	L1	non C5-C8 {6}	2.181	2.183	2.198	1.839	2.014	1.665	1.955	E4	13.00
29)	L1	non C5-C8 - TOTAL	1.454	1.600	1.660	1.550	1.650	1.494	1.555	E4	5.43
30)		C9-C12 Aliphatic	1.783	1.821	1.821	1.601	1.666	1.417	1.640	E4	11.49
31)	L1	non C9-C12	1.370	1.345	1.489	1.480	1.452	1.478	1.461	E4	5.95
32)	L1	non C9-C12 {2}	1.975	1.947	1.814	1.728	1.646	1.264	1.739	E4	13.73
33)	L1	non C9-C12 {3}	1.981	1.973	1.991	1.731	1.822	1.576	1.798	E4	11.11
34)	L1	non C9-C12 {4}	1.945	1.908	1.933	1.680	1.776	1.523	1.747	E4	11.39
35)	L1	non C9-C12 {5}	7.978	8.155	8.558	9.107	8.953	9.453	8.873	E3	7.82
36)	L1	non C9-C12 - TOTAL	1.175	1.232	1.263	1.193	1.212	1.063	1.184	E4	5.47
37)	L1	C9-C10 Aromatic	2.112	2.172	2.184	1.940	1.974	1.714	1.959	E3	11.37
38)	L1	C9-C10 Aromatic {2}	2.112	2.172	2.184	1.940	1.974	1.714	1.959	E3	11.37
39)	L1	C9-C10 Aromatic - T	2.112	2.172	2.184	1.940	1.974	1.714	1.959	E3	11.37
40)	I	Chlorobenzene-d5	----------ISTD----------								
41)	S	4-Bromofluorobenzen	0.087	0.088	0.088	0.088	0.088	0.091	0.089		2.30

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

Compound List Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\010613V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jan 07 17:03:40 2013
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	6.98	1.000	A	0	A	B
2	L1	C5-C8 Aliphatic HC {2}	TIC	9.29	1.000	A	0	A	B
3	L1	C5-C8 Aliphatic HC {3}	TIC	10.97	1.000	A	0	A	B
4	L1	C5-C8 Aliphatic HC {4}	TIC	11.04	1.000	A	0	A	B
5	L1	C5-C8 Aliphatic HC {5}	TIC	11.60	1.000	A	0	A	B
6	L1	C5-C8 Aliphatic HC {6}	TIC	13.97	1.000	A	0	A	B
7	L1	C5-C8 Aliphatic HC - TOTAL	TIC	6.98	1.000	A	0	A	B
8	L1	C9-C12 Aliphatic HC	TIC	15.37	1.000	A	0	A	B
9	L1	C9-C12 Aliphatic HC {2}	TIC	16.23	1.000	A	0	A	B
10	L1	C9-C12 Aliphatic HC {3}	TIC	18.34	1.000	A	0	A	B
11	L1	C9-C12 Aliphatic HC {4}	TIC	19.49	1.000	A	0	A	B
12	L1	C9-C12 Aliphatic HC {5}	TIC	20.31	1.000	A	0	A	B
13	L1	C9-C12 Aliphatic HC {6}	TIC	22.12	1.000	A	0	A	B
14	L1	C9-C12 Aliphatic HC - TOTAL	TIC	15.37	1.000	A	0	A	B
15	L1	C9-C10 Aromatic HC	120	17.63	1.000	A	0	A	B
16	L1	C9-C10 Aromatic HC {2}	120	18.43	1.000	A	0	A	B
17	L1	C9-C10 Aromatic HC {3}	120	18.57	1.000	A	0	A	B
18	L1	C9-C10 Aromatic HC {4}	120	19.69	1.000	A	0	A	B
19	L1	C9-C10 Aromatic HC {5}	120	19.94	1.000	A	0	A	B
20	L1	C9-C10 Aromatic HC {6}	134	19.69	1.000	A	0	A	B
21	L1	C9-C10 Aromatic HC - TOTAL	TIC	18.01	1.000	A	0	A	B
22		C5-C8 Aliphatic	TIC	6.85	1.000	A	0	A	B
23	L1	non C5-C8	TIC	6.21	1.000	A	0	A	B
24	L1	non C5-C8 {2}	TIC	9.01	1.000	A	0	A	B
25	L1	non C5-C8 {3}	TIC	10.74	1.000	A	0	A	B
26	L1	non C5-C8 {4}	TIC	11.52	1.000	A	0	A	B
27	L1	non C5-C8 {5}	TIC	11.96	1.000	A	0	A	B
28	L1	non C5-C8 {6}	TIC	14.07	1.000	A	0	A	B
29	L1	non C5-C8 - TOTAL	TIC	6.21	1.000	A	0	A	B
30		C9-C12 Aliphatic	TIC	16.21	1.000	A	0	A	B
31	L1	non C9-C12	TIC	16.18	1.000	A	0	A	B
32	L1	non C9-C12 {2}	TIC	16.28	1.000	A	0	A	B
33	L1	non C9-C12 {3}	TIC	16.46	1.000	A	0	A	B
34	L1	non C9-C12 {4}	TIC	17.11	1.000	A	0	A	B
35	L1	non C9-C12 {5}	TIC	18.01	1.000	A	0	A	B
36	L1	non C9-C12 - TOTAL	TIC	16.46	1.000	A	0	A	B
37	L1	C9-C10 Aromatic	120	17.04	1.000	A	0	A	B
38	L1	C9-C10 Aromatic {2}	134	17.04	1.000	A	0	A	B
39	L1	C9-C10 Aromatic - TOTAL	134	17.04	1.000	A	1	A	B
40	I	Chlorobenzene-d5	117	16.18	1.000	A	2	A	B
41	S	4-Bromofluorobenzene	95	18.01	1.113	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

010613V9.M Tue Jan 08 09:28:44 2013

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\010613B\01061312.D Vial: 3
Acq On : 7 Jan 2013 9:21 am Operator: RACHEL HILL
Sample : ICV VOA9 010613 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\010613V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jan 07 17:03:40 2013
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	31.929	-9.3	104	0.00
2	L1	C5-C8 Aliphatic HC {2}	36.400	36.695	-0.8	93	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	42.017	-0.5	91	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	35.940	-1.5	95	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	42.515	-0.7	92	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	50.924	-3.9	94	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	240.197	-2.6	94	0.00
8	L1	C9-C12 Aliphatic HC	54.600	56.039	-2.6	92	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	47.100	13.7	84	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	64.415	-5.3	95	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	65.348	-7.5	97	-0.01
12	L1	C9-C12 Aliphatic HC {5}	70.000	73.844	-5.5	94	-0.01
13	L1	C9-C12 Aliphatic HC {6}	77.000	82.622	-7.3	91	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	389.572	-3.1	93	0.00
15	L1	C9-C10 Aromatic HC	51.700	53.797	-4.1	94	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	53.501	-4.5	95	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	55.258	-5.9	95	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	63.259	-7.8	97	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	56.245	-6.9	97	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	64.279	-9.5	100	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	283.018	-6.4	96	-0.01
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-6.85#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.21#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.01#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.74#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.52#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-11.96#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.07#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.21#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.21#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.18#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.28#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.46#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.11#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.01#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.46#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.04#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.04#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.04#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	114	0.00
41	S	4-Bromofluorobenzene	89.500	88.899	0.7	114	-0.01

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\010613B\01061312.D Vial: 3
Acq On : 7 Jan 2013 9:21 am Operator: RACHEL HILL
Sample : ICV VOA9 010613 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 9:04 2013 Quant Results File: 010613V9.RES

Quant Method : C:\HPCHEM\1\METHODS\010613V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jan 07 17:03:40 2013
Response via : Initial Calibration
DataAcq Meth : 010613V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.17	117	296856	12.50	ug/m3	0.00

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.00	95	187782	88.90	ug/m3	-0.01

Spiked Amount 89.500 Range 70 - 130 Recovery = 99.33%

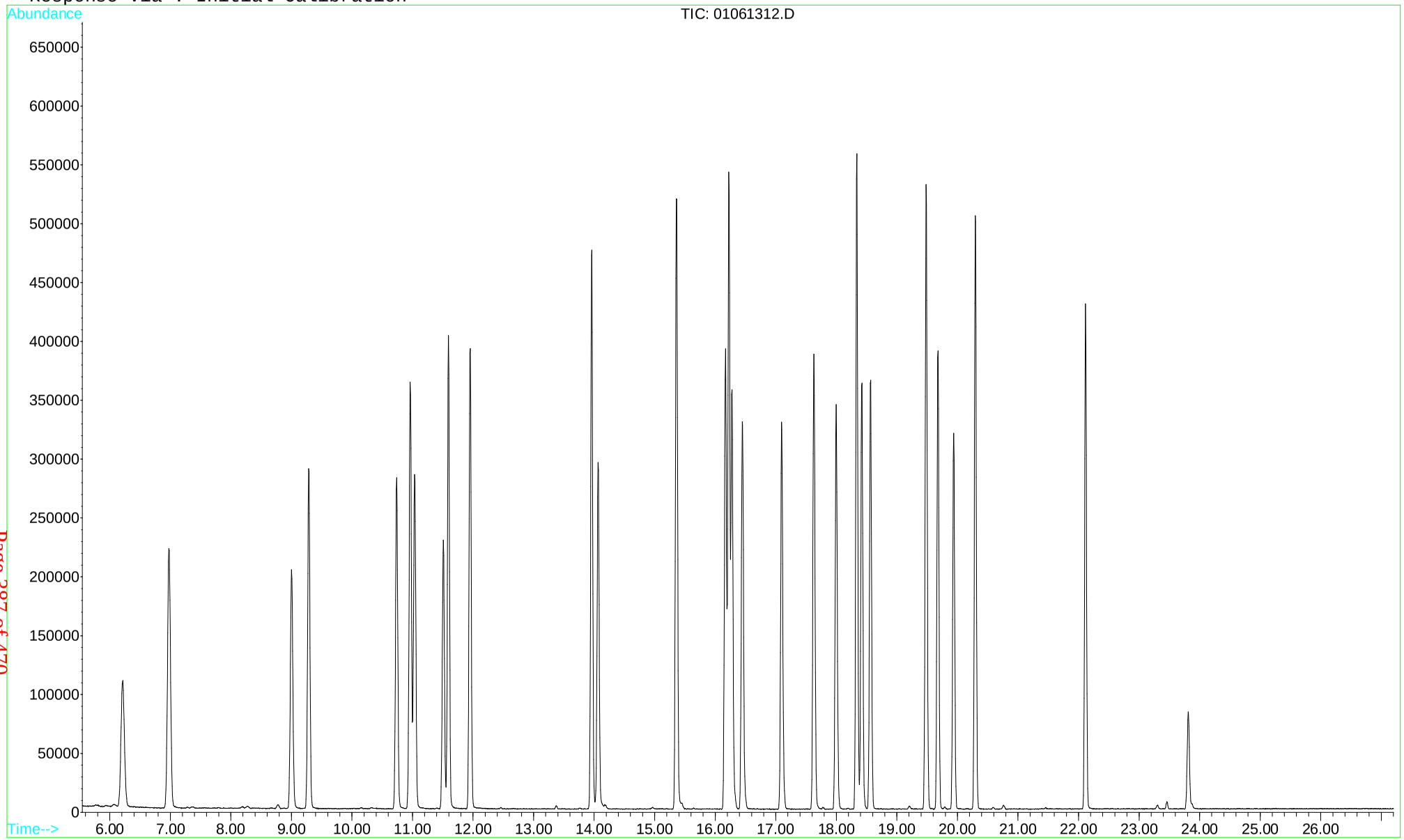
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	6.98	TIC	766212	31.93	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.28	TIC	750153	36.69	ug/m3	100
3) C5-C8 Aliphatic HC {3}	10.96	TIC	947916	42.02	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.03	TIC	751567	35.94	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.59	TIC	912837	42.51	ug/m3	100
6) C5-C8 Aliphatic HC {6}	13.96	TIC	1066620	50.92	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	6.98	TIC	5195305m	240.20	ug/m3	
8) C9-C12 Aliphatic HC	15.36	TIC	1250969	56.04	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.22	TIC	683627m	47.10	ug/m3	
10) C9-C12 Aliphatic HC {3}	18.34	TIC	1228825	64.41	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.48	TIC	1223582	65.35	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.29	TIC	1093665	73.84	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.12	TIC	906668	82.62	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.36	TIC	6387336m	389.57	ug/m3	
15) C9-C10 Aromatic HC	17.63	120	92018	53.80	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.42	120	95159	53.50	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.57	120	142155	55.26	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.68	120	31570	63.26	ug/m3	100
19) C9-C10 Aromatic HC {5}	19.94	120	108294	56.25	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.68	134	85175	64.28	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	18.00	TIC	554371m	283.02	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\010613B\01061312.D Vial: 3
Acq On : 7 Jan 2013 9:21 am Operator: RACHEL HILL
Sample : ICV VOA9 010613 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 8 9:04 2013 Quant Results File: 010613V9.RES

Method : C:\HPCHEM\1\METHODS\010613V9.M (RTE Integrator)
Title : MASS APH
Last Update : Mon Jan 07 17:03:40 2013
Response via : Initial Calibration



Injection Log

Directory: C:\HPCHEM\2\DATA\010313

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	01031301.d	1.	MBLK-010313 TCD-A		3 Jan 2013 11:06
2	1	01031302.d	1.	CCV-010313 TCD-A		3 Jan 2013 11:21
3	1	01031303.d	1.	LCS-010313 TCD		3 Jan 2013 11:39
4	2	01031304.d	1.	CRQL-010313 TCD-A		3 Jan 2013 12:26
5	3	01031305.d	1.	1212437-036B		3 Jan 2013 12:48
6	2	01031306.d	1.	1212437-037B		3 Jan 2013 13:04
7	1	01031307.d	1.	1212437-038B		3 Jan 2013 13:24
8	1	01031308.d	1.	1212437-039B		3 Jan 2013 14:12
9	1	01031309.d	1.	1212437-040B		3 Jan 2013 14:26
10	1	01031310.d	1.	1212722-054B		3 Jan 2013 14:40
11	1	01031311.d	1.	1212722-055B		3 Jan 2013 14:54
12	1	01031312.d	1.	1212722-063B		3 Jan 2013 15:08
13	2	01031313.d	1.	1212722-063BDUP		3 Jan 2013 15:22
14	2	01031314.d	1.	CCV-010313 TCD-B		3 Jan 2013 15:52
15	15	01031315.d	1.	CRQL-010313 TCD-B		3 Jan 2013 16:41

RTI Laboratories

ANALYTICAL RUN Summary

15-Jan-13

RunNo 55105

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1086344	MBLK-010313 TCD-A	ASTM-D2504	MBLK	ıTA\010313\0103	1/3/2013 11:06:0	1	R55105		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	0.011	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
1086345	CCV-010313 TCD-A	ASTM-D2504	CCV	ıTA\010313\0103	1/3/2013 11:21:0	1	R55105		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.573	2.573		2.5	0	0	0.025	0.1	0	103%	85	115	0%	
Carbon Monoxide	A	% v/v	2.672	2.672		2.5	0	0	0.025	0.1	0	107%	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	2.063	2.063		2	0	0	0.025	0.5	0	103%	85	115	0%	
Nitrogen	A	% v/v	2.818	2.818		2.5	0	0	0.025	0.1	0	113%	85	115	0%	
Oxygen	A	% v/v	2.689	2.689		2.5	0	0	0.025	0.1	0	108%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1086346	LCS-010313 TCD	ASTM-D2504	LCS	ıTA\010313\0103	1/3/2013 11:39:0	1	R55105		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	2.58	2.58		2.5	0	2.573	0.025	0.1	0	103%	70	130	0%	
Carbon Monoxide	A	% v/v	2.689	2.689		2.5	0	2.672	0.025	0.1	0	108%	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
1086356	1212722-063BDUP	ASTM-D2504	DUP	ıTA\010313\0103	1/3/2013 3:22:00	1	R55105		0	1E+06	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	% v/v	22.32	22.32		0	0	22.479	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
1086357	CCV-010313 TCD-B	ASTM-D2504	CCV	ıTA\010313\0103	1/3/2013 3:52:00	1	R55105		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.565	2.565		2.5	0	0	0.025	0.1	0	103%	85	115	0%	
Carbon Monoxide	A	% v/v	2.668	2.668		2.5	0	0	0.025	0.1	0	107%	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	2.072	2.072		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	% v/v	2.744	2.744		2.5	0	0	0.025	0.1	0	110%	85	115	0%	
Oxygen	A	% v/v	2.664	2.664		2.5	0	0	0.025	0.1	0	107%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1086358	CRQL-010313 TCD-B	ASTM-D2504	CRQL	ıTA\010313\0103	1/3/2013 4:41:00	1	R55105		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.344	0.344		0.3	0	0	0.025	0.1	0	115%	80	120	0%	
Carbon Monoxide	A	% v/v	0.166	0.166		0.14	0	0	0.025	0.1	0	119%	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	0.106	0.106		0.09	0	0	0.025	0.5	0	118%	80	120	0%	
Nitrogen	A	% v/v	1.621	1.621		1.39	0	0	0.025	0.1	0	117%	80	120	0%	
Oxygen	A	% v/v	0.081	0.081		0.08	0	0	0.025	0.1	0	101%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\010313\01031302.D Vial: 1
Acq On : 3 Jan 2013 11:21 am Operator:
Sample : CCV-010313 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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	2.689	-7.6	0	0.05
2	Nitrogen	2.500	2.818	-12.7	0	0.04
3	Carbon Monoxide	2.500	2.672	-6.9	0	0.06
4	Methane	2.000	2.063	-3.2	0	0.06
5	Carbon dioxide	2.500	2.573	-2.9	0	0.08

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\2\DATA\010313\01031302.D          Vial: 1
Acq On    :  3 Jan 2013  11:21 am                   Operator:
Sample    : CCV-010313 TCD-A                        Inst    : GC/TCD
Misc      :                                         Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title        :
Last Update  : Thu Dec 27 18:13:53 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\2\DATA\010313\01031302.D Vial: 1
Acq On : 3 Jan 2013 11:21 am Operator:
Sample : CCV-010313 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 3 11:37 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	386570	2.689 % v/v
2)	Nitrogen	2.34	478277	2.818 % v/v
3)	Carbon Monoxide	3.04f	429810	2.672 % v/v
4)	Methane	5.66f	289002	2.063 % v/v
5)	Carbon dioxide	9.26f	520900	2.573 % v/v

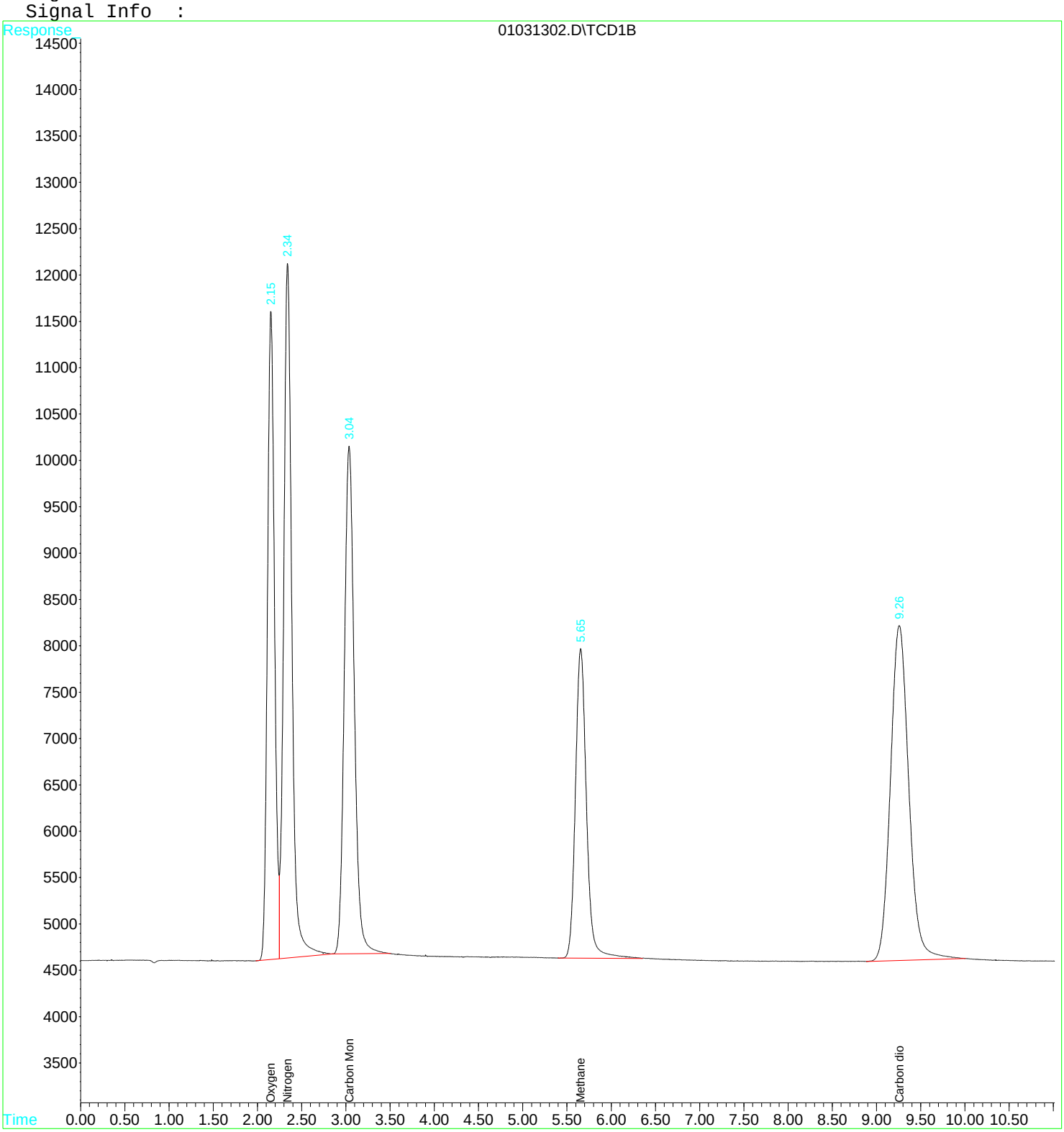
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010313\01031302.D Vial: 1
Acq On : 3 Jan 2013 11:21 am Operator:
Sample : CCV-010313 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 3 11:37 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\010313\01031314.D Vial: 2
Acq On : 3 Jan 2013 3:52 pm Operator:
Sample : CCV-010313 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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	2.664	-6.6	0	0.05
2	Nitrogen	2.500	2.744	-9.8	0	0.04
3	Carbon Monoxide	2.500	2.668	-6.7	0	0.06
4	Methane	2.000	2.072	-3.6	0	0.06
5	Carbon dioxide	2.500	2.565	-2.6	0	0.08

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\2\DATA\010313\01031314.D          Vial: 2
Acq On    :  3 Jan 2013   3:52 pm                   Operator:
Sample    : CCV-010313 TCD-B                        Inst    : GC/TCD
Misc      :                                         Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title        :
Last Update  : Thu Dec 27 18:13:53 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\2\DATA\010313\01031314.D Vial: 2
Acq On : 3 Jan 2013 3:52 pm Operator:
Sample : CCV-010313 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 3 16:03 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	383007	2.664 % v/v
2)	Nitrogen	2.34	465770	2.744 % v/v
3)	Carbon Monoxide	3.04f	429204	2.668 % v/v
4)	Methane	5.66f	290294	2.072 % v/v
5)	Carbon dioxide	9.26f	519202	2.565 % v/v

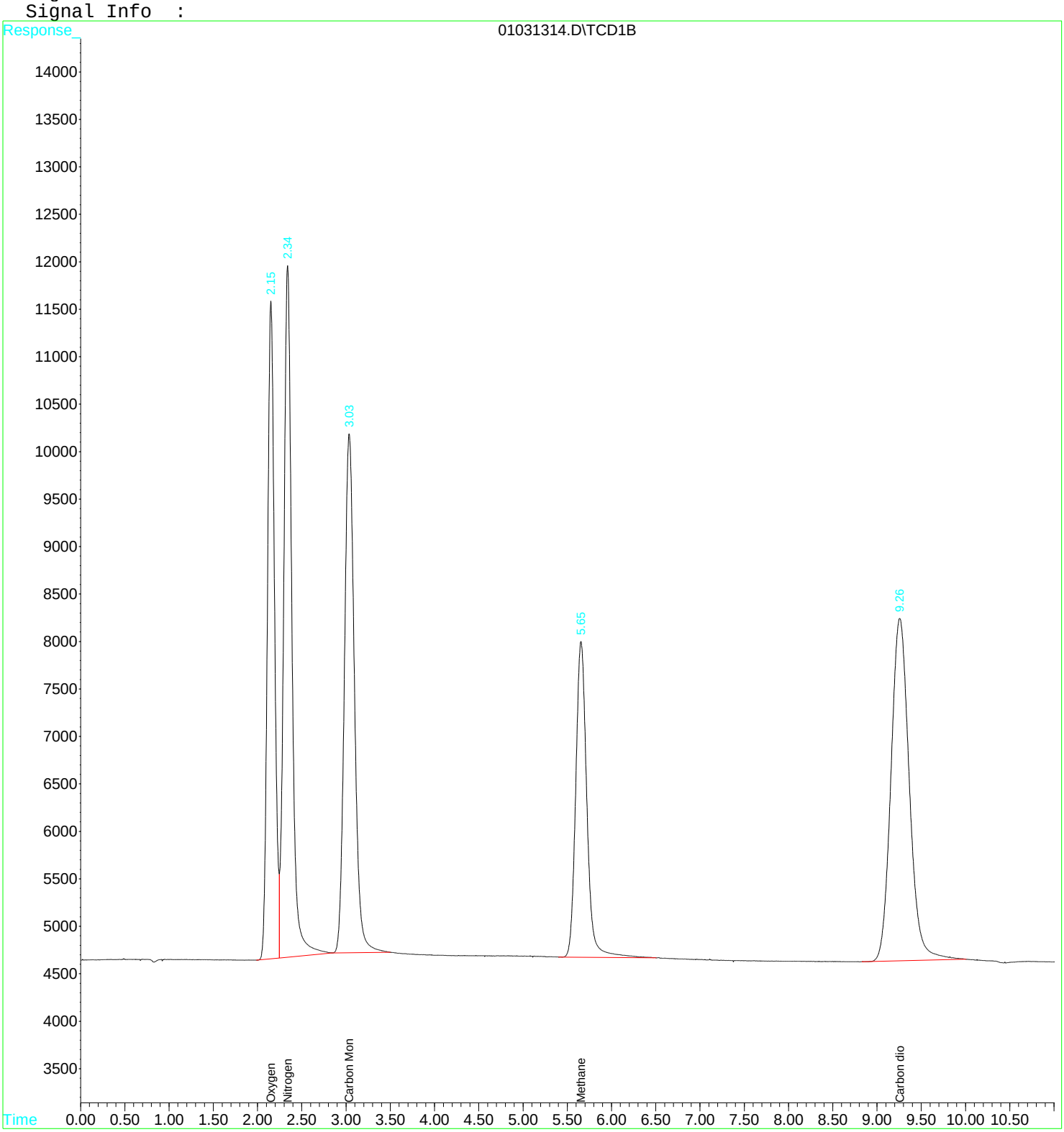
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010313\01031314.D Vial: 2
Acq On : 3 Jan 2013 3:52 pm Operator:
Sample : CCV-010313 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 3 16:03 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Injection Log

Directory: C:\HPCHEM\2\DATA\010413

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	01041301.d	1.	MBLK-010413 TCD-A		4 Jan 2013 10:49
2	2	01041302.d	1.	CCV-010413 TCD-A		4 Jan 2013 11:22
3	1	01041303.d	1.	LCS-010413 TCD		4 Jan 2013 11:36
4	1	01041304.d	1.	CRQL-010413 TCD-A		4 Jan 2013 11:52
5	1	01041305.d	1.	1212722-051B		4 Jan 2013 12:06
6	1	01041306.d	1.	1212722-052B		4 Jan 2013 12:21
7	1	01041307.d	1.	1212722-053B		4 Jan 2013 12:36
8	1	01041308.d	1.	1212722-056B		4 Jan 2013 13:29
9	1	01041309.d	1.	1212722-057B		4 Jan 2013 13:57
10	1	01041310.d	1.	1212722-058B		4 Jan 2013 14:11
11	1	01041311.d	1.	1212722-059B		4 Jan 2013 14:27
12	1	01041312.d	1.	1212722-060B		4 Jan 2013 14:42
13	1	01041313.d	1.	1212722-081B		4 Jan 2013 14:56
14	1	01041314.d	1.	1212722-082B		4 Jan 2013 15:14
15	1	01041315.d	1.	1212722-082BDUP		4 Jan 2013 15:35
16	1	01041316.d	1.	CCV-010413 TCD-B		4 Jan 2013 15:49
17	1	01041317.d	1.	1212722-083B		4 Jan 2013 16:06
18	1	01041318.d	1.	1212722-061B		4 Jan 2013 16:25
19	1	01041319.d	1.	1212722-062B		4 Jan 2013 16:39
20	1	01041320.d	1.	1212722-064B		4 Jan 2013 16:54
21	1	01041321.d	1.	1212722-065B		4 Jan 2013 17:08
22	1	01041322.d	1.	1212722-066B		4 Jan 2013 17:26
23	1	01041323.d	1.	1212722-067B		4 Jan 2013 17:40
24	1	01041324.d	1.	1212722-068B		4 Jan 2013 17:55
25	1	01041325.d	1.	1212722-069B		4 Jan 2013 18:09
26	1	01041326.d	1.	1212722-070B		4 Jan 2013 18:23
27	1	01041327.d	1.	1212722-070BDUP		4 Jan 2013 18:37
28	1	01041328.d	1.	CCV-010413 TCD-C		4 Jan 2013 18:52
29	1	01041329.d	1.	CRQL-010413 TCD-B		4 Jan 2013 19:07

RTI Laboratories

ANALYTICAL RUN Summary

16-Jan-13

RunNo 55205

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1088105	MBLK-010413 TCD-A	ASTM-D2504	MBLK	ıTA\010413\0104	1/4/2013 10:49:0	1	R55205		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	0.016	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Oxygen	A	% v/v	0.007	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
1088106	CCV-010413 TCD-A	ASTM-D2504	CCV	ıTA\010413\0104	1/4/2013 11:22:0	1	R55205		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.563	2.563		2.5	0	0	0.025	0.1	0	103%	85	115	0%	
Carbon Monoxide	A	% v/v	2.675	2.675		2.5	0	0	0.025	0.1	0	107%	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	2.077	2.077		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	% v/v	2.803	2.803		2.5	0	0	0.025	0.1	0	112%	85	115	0%	
Oxygen	A	% v/v	2.688	2.688		2.5	0	0	0.025	0.1	0	108%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1088107	LCS-010413 TCD	ASTM-D2504	LCS	ıTA\010413\0104	1/4/2013 11:36:0	1	R55205		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	2.563	0.025	0.1	0	102%	70	130	0%	
Carbon Monoxide	A	% v/v	2.654	2.654		2.5	0	2.675	0.025	0.1	0	106%	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
1088120	CCV-010413 TCD-B	ASTM-D2504	CCV	ıTA\010413\0104	1/4/2013 3:49:00	1	R55205		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.564	2.564		2.5	0	0	0.025	0.1	0	103%	85	115	0%	
Carbon Monoxide	A	% v/v	2.669	2.669		2.5	0	0	0.025	0.1	0	107%	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	2.058	2.058		2	0	0	0.025	0.5	0	103%	85	115	0%	
Nitrogen	A	% v/v	2.841	2.841		2.5	0	0	0.025	0.1	0	114%	85	115	0%	
Oxygen	A	% v/v	2.685	2.685		2.5	0	0	0.025	0.1	0	107%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1088121	1212722-083B (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\010413\0104	1/4/2013 4:06:00	1	R55205		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.049	0.049		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	82.193	82.193		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	% v/v	22.568	22.568		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
1088122	1212722-061B (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\010413\0104	1/4/2013 4:25:00	1	R55205		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.385	0.385		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	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	83.007	83.007		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
1088130	1212722-070B (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\010413\0104	1/4/2013 6:23:00	1	R55205		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.235	0.235		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	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	81.992	81.992		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	% v/v	22.116	22.116		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
1088131	1212722-070BDUP	ASTM-D2504	DUP	ıTA\010413\0104	1/4/2013 6:37:00	1	R55205		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	0.234	0.234		0	0	0.235	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	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	81.884	81.884		0	0	81.992	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	% v/v	22.087	22.087		0	0	22.116	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
1088132	CCV-010413 TCD-C	ASTM-D2504	CCV	ıTA\010413\0104	1/4/2013 6:52:00	1	R55205		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.596	2.596		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Carbon Monoxide	A	% v/v	2.67	2.67		2.5	0	0	0.025	0.1	0	107%	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	2.078	2.078		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	% v/v	2.748	2.748		2.5	0	0	0.025	0.1	0	110%	85	115	0%	
Oxygen	A	% v/v	2.655	2.655		2.5	0	0	0.025	0.1	0	106%	85	115	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\010413\01041302.D Vial: 2
Acq On : 4 Jan 2013 11:22 am Operator:
Sample : CCV-010413 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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	2.688	-7.5	0	0.05
2	Nitrogen	2.500	2.803	-12.1	0	0.04
3	Carbon Monoxide	2.500	2.675	-7.0	0	0.06
4	Methane	2.000	2.077	-3.8	0	0.06
5	Carbon dioxide	2.500	2.563	-2.5	0	0.08

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\010413\01041302.D Vial: 2
Acq On : 4 Jan 2013 11:22 am Operator:
Sample : CCV-010413 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
09141202.D 122712.M Tue Jan 08 11:15:50 2013

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010413\01041302.D Vial: 2
Acq On : 4 Jan 2013 11:22 am Operator:
Sample : CCV-010413 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 4 11:35 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	386390	2.688 % v/v
2)	Nitrogen	2.34	475725	2.803 % v/v
3)	Carbon Monoxide	3.04f	430334	2.675 % v/v
4)	Methane	5.66f	290912	2.077 % v/v
5)	Carbon dioxide	9.26f	518897	2.563 % v/v

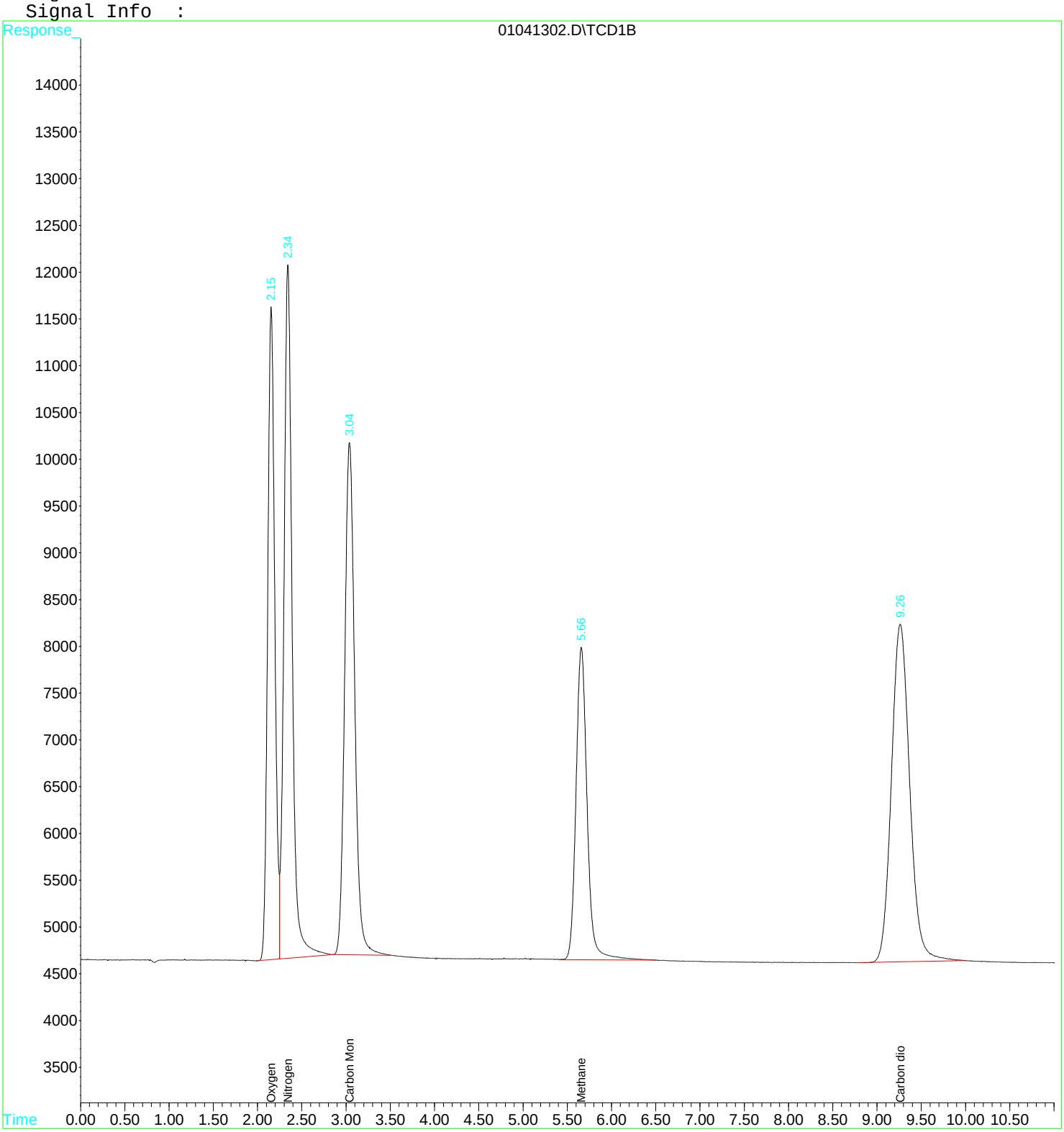
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010413\01041302.D Vial: 2
Acq On : 4 Jan 2013 11:22 am Operator:
Sample : CCV-010413 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 4 11:35 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\010413\01041316.D Vial: 1
Acq On : 4 Jan 2013 3:49 pm Operator:
Sample : CCV-010413 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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	2.685	-7.4	0	0.05
2	Nitrogen	2.500	2.841	-13.6	0	0.04
3	Carbon Monoxide	2.500	2.669	-6.8	0	0.05
4	Methane	2.000	2.058	-2.9	0	0.05
5	Carbon dioxide	2.500	2.564	-2.6	0	0.08

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\010413\01041316.D Vial: 1
Acq On : 4 Jan 2013 3:49 pm Operator:
Sample : CCV-010413 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
09141202.D 122712.M Tue Jan 08 11:16:00 2013

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010413\01041316.D Vial: 1
Acq On : 4 Jan 2013 3:49 pm Operator:
Sample : CCV-010413 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 4 16:02 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	385965	2.685 % v/v
2)	Nitrogen	2.34	482186	2.841 % v/v
3)	Carbon Monoxide	3.03f	429461	2.669 % v/v
4)	Methane	5.65f	288314	2.058 % v/v
5)	Carbon dioxide	9.26f	519029	2.564 % v/v

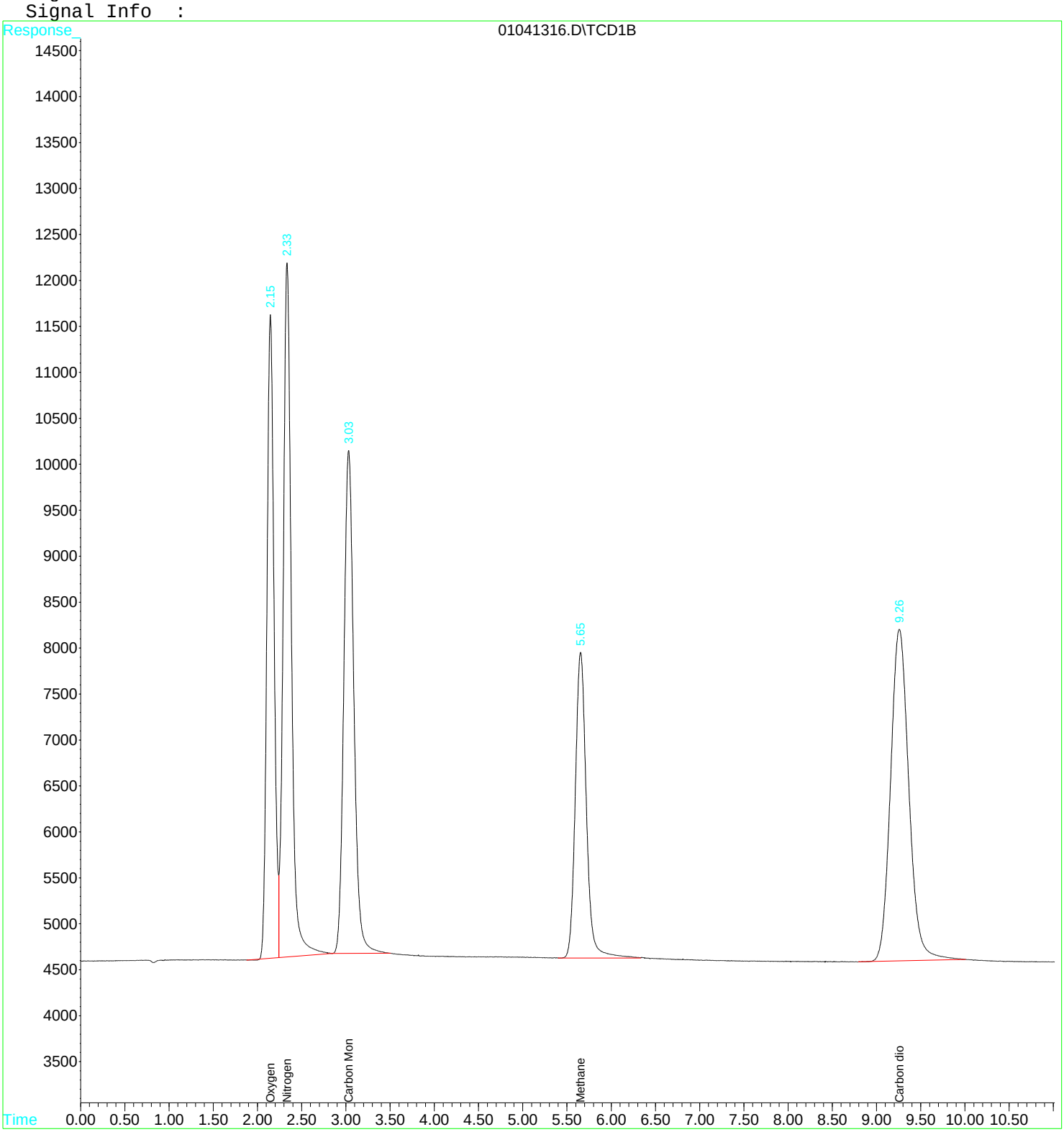
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010413\01041316.D Vial: 1
Acq On : 4 Jan 2013 3:49 pm Operator:
Sample : CCV-010413 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 4 16:02 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\010413\01041328.D Vial: 1
Acq On : 4 Jan 2013 6:52 pm Operator:
Sample : CCV-010413 TCD-C Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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	2.655	-6.2	0	0.06
2	Nitrogen	2.500	2.748	-9.9	0	0.04
3	Carbon Monoxide	2.500	2.670	-6.8	0	0.06
4	Methane	2.000	2.078	-3.9	0	0.06
5	Carbon dioxide	2.500	2.596	-3.8	0	0.08

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\010413\01041328.D Vial: 1
Acq On : 4 Jan 2013 6:52 pm Operator:
Sample : CCV-010413 TCD-C Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
09141202.D 122712.M Tue Jan 08 11:16:10 2013

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010413\01041328.D Vial: 1
Acq On : 4 Jan 2013 6:52 pm Operator:
Sample : CCV-010413 TCD-C Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 4 19:04 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.16	381695	2.655 % v/v
2)	Nitrogen	2.34	466417	2.748 % v/v
3)	Carbon Monoxide	3.04f	429569	2.670 % v/v
4)	Methane	5.66f	291073	2.078 % v/v
5)	Carbon dioxide	9.26f	525478	2.596 % v/v

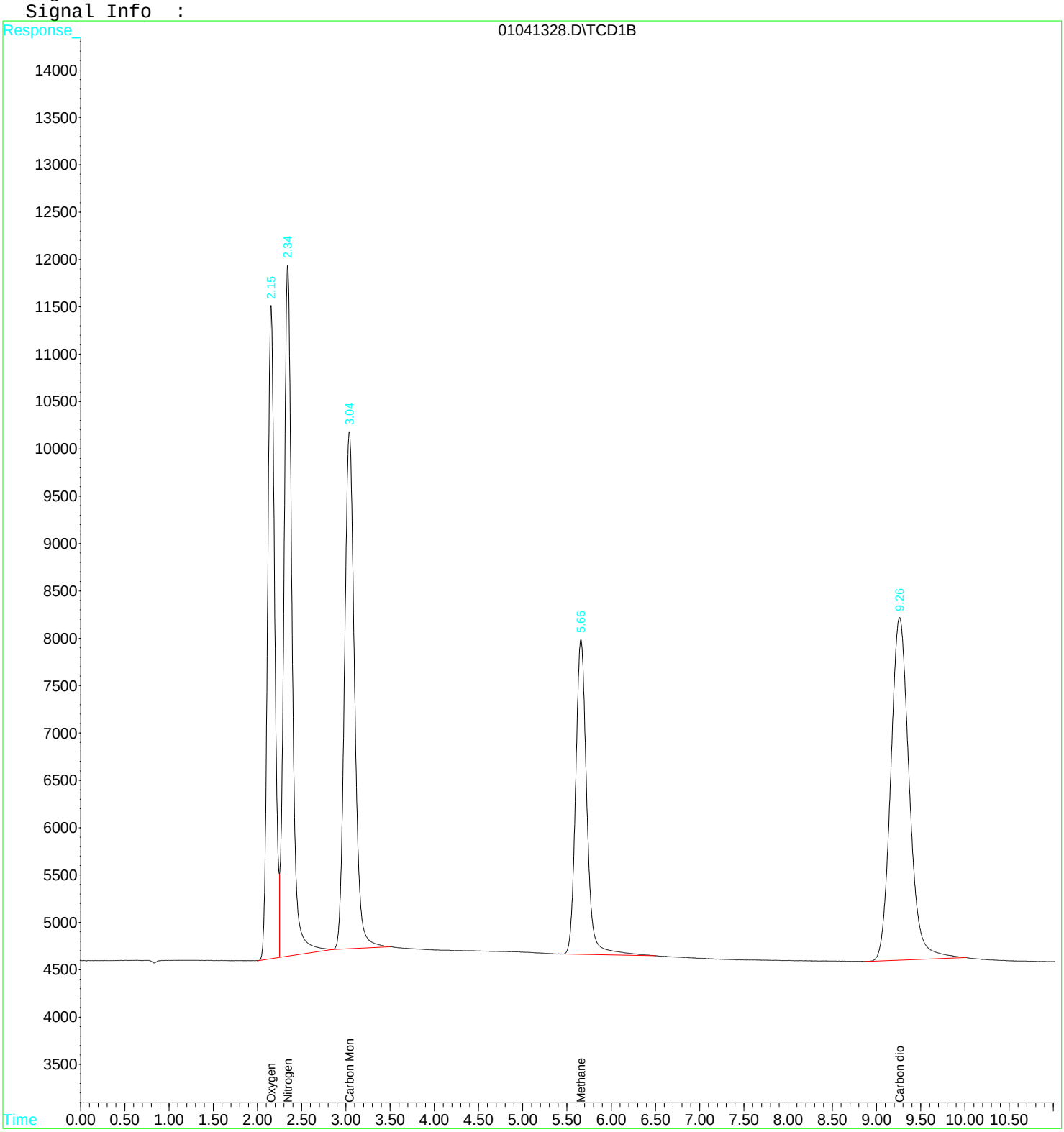
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010413\01041328.D Vial: 1
Acq On : 4 Jan 2013 6:52 pm Operator:
Sample : CCV-010413 TCD-C Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 4 19:04 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Injection Log

Directory: C:\HPCHEM\2\DATA\010713

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	01071301.d	1.	MBLK-010713 TCD-A		7 Jan 2013 11:23
2	1	01071302.d	1.	CCV-010713 TCD-A		7 Jan 2013 11:52
3	1	01071303.d	1.	LCS-010713 TCD		7 Jan 2013 12:10
4	1	01071304.d	1.	CRQL-010713 TCD-A		7 Jan 2013 12:25
5	1	01071305.d	1.	1212722-001B		7 Jan 2013 12:47
6	1	01071306.d	1.	1212722-002B		7 Jan 2013 13:21
7	1	01071307.d	1.	1212722-003B		7 Jan 2013 13:36
8	1	01071308.d	1.	1212722-004B		7 Jan 2013 13:53
9	1	01071309.d	1.	1212722-005B		7 Jan 2013 14:28
10	1	01071310.d	1.	1212722-006B		7 Jan 2013 14:46
11	1	01071311.d	1.	1212722-007B		7 Jan 2013 15:07
12	1	01071312.d	1.	1212722-008B		7 Jan 2013 15:24
13	1	01071313.d	1.	1212722-009B		7 Jan 2013 15:40
14	1	01071314.d	1.	1212722-010B		7 Jan 2013 16:04
15	1	01071315.d	1.	1212722-010BDUP		7 Jan 2013 16:18
16	1	01071316.d	1.	CCV-010713 TCD-B		7 Jan 2013 16:33
17	1	01071317.d	1.	1212722-011B		7 Jan 2013 16:48
18	1	01071318.d	1.	1212722-012B		7 Jan 2013 17:04
19	1	01071319.d	1.	1212722-013B		7 Jan 2013 17:22
20	1	01071320.d	1.	1212722-014B		7 Jan 2013 17:37
21	1	01071321.d	1.	1212722-014BDUP		7 Jan 2013 17:51
22	1	01071322.d	1.	CCV-010713 TCD-C		7 Jan 2013 18:05
23	1	01071323.d	1.	CRQL-010713 TCD-B		7 Jan 2013 18:21

RTI Laboratories

ANALYTICAL RUN Summary

16-Jan-13

RunNo 55208

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1088144	MBLK-010713 TCD-A	ASTM-D2504	MBLK	ıTA\010713\0107	1/7/2013 11:23:0	1	R55208		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
1088145	CCV-010713 TCD-A	ASTM-D2504	CCV	ıTA\010713\0107	1/7/2013 11:52:0	1	R55208		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.615	2.615		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	% v/v	2.713	2.713		2.5	0	0	0.025	0.1	0	109%	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	2.103	2.103		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	% v/v	2.8	2.8		2.5	0	0	0.025	0.1	0	112%	85	115	0%	
Oxygen	A	% v/v	2.697	2.697		2.5	0	0	0.025	0.1	0	108%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1088146	LCS-010713 TCD	ASTM-D2504	LCS	ıTA\010713\0107	1/7/2013 12:10:0	1	R55208		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	2.585	2.585		2.5	0	2.615	0.025	0.1	0	103%	70	130	1%	
Carbon Monoxide	A	% v/v	2.69	2.69		2.5	0	2.713	0.025	0.1	0	108%	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
1088159	CCV-010713 TCD-B	ASTM-D2504	CCV	ıTA\010713\0107	1/7/2013 4:33:00	1	R55208		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.584	2.584		2.5	0	0	0.025	0.1	0	103%	85	115	0%	
Carbon Monoxide	A	% v/v	2.676	2.676		2.5	0	0	0.025	0.1	0	107%	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	2.085	2.085		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	% v/v	2.776	2.776		2.5	0	0	0.025	0.1	0	111%	85	115	0%	
Oxygen	A	% v/v	2.677	2.677		2.5	0	0	0.025	0.1	0	107%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1088160	1212722-011B (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\010713\0107	1/7/2013 4:48:00	1	R55208		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	1.36	1.36		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	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	85.661	85.661		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	% v/v	16.3	16.3		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
1088161	1212722-012B (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\010713\0107	1/7/2013 5:04:00	1	R55208		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.978	0.978		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	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	84.078	84.078		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
1088164	1212722-014BDUP	ASTM-D2504	DUP	ıTA\010713\0107	1/7/2013 5:51:00	1	R55208		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	0.92	0.92		0	0	0.918	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	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	81.966	81.966		0	0	82.164	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	% v/v	21.387	21.387		0	0	21.448	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
1088165	CCV-010713 TCD-C	ASTM-D2504	CCV	ıTA\010713\0107	1/7/2013 6:05:00	1	R55208		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.586	2.586		2.5	0	0	0.025	0.1	0	103%	85	115	0%	
Carbon Monoxide	A	% v/v	2.676	2.676		2.5	0	0	0.025	0.1	0	107%	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	2.074	2.074		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	% v/v	2.74	2.74		2.5	0	0	0.025	0.1	0	110%	85	115	0%	
Oxygen	A	% v/v	2.653	2.653		2.5	0	0	0.025	0.1	0	106%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1088166	CRQL-010713 TCD-B	ASTM-D2504	CRQL	ıTA\010713\0107	1/7/2013 6:21:00	1	R55208		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.318	0.318		0.3	0	0	0.025	0.1	0	106%	80	120	0%	
Carbon Monoxide	A	% v/v	0.149	0.149		0.14	0	0	0.025	0.1	0	106%	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	0.091	0.091		0.09	0	0	0.025	0.5	0	101%	80	120	0%	
Nitrogen	A	% v/v	1.462	1.462		1.39	0	0	0.025	0.1	0	105%	80	120	0%	
Oxygen	A	% v/v	0.08	0.08		0.08	0	0	0.025	0.1	0	100%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\010713\01071302.D Vial: 1
Acq On : 7 Jan 2013 11:52 am Operator:
Sample : CCV-010713 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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	2.697	-7.9	0	0.05
2	Nitrogen	2.500	2.800	-12.0	0	0.04
3	Carbon Monoxide	2.500	2.713	-8.5	0	0.06
4	Methane	2.000	2.103	-5.2	0	0.06
5	Carbon dioxide	2.500	2.615	-4.6	0	0.09

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\010713\01071302.D Vial: 1
Acq On : 7 Jan 2013 11:52 am Operator:
Sample : CCV-010713 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
09141202.D 122712.M Tue Jan 08 11:34:51 2013

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010713\01071302.D Vial: 1
Acq On : 7 Jan 2013 11:52 am Operator:
Sample : CCV-010713 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 7 12:04 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	387646	2.697 % v/v
2)	Nitrogen	2.34	475118	2.800 % v/v
3)	Carbon Monoxide	3.04f	436538	2.713 % v/v
4)	Methane	5.66f	294546	2.103 % v/v
5)	Carbon dioxide	9.27f	529274	2.615 % v/v

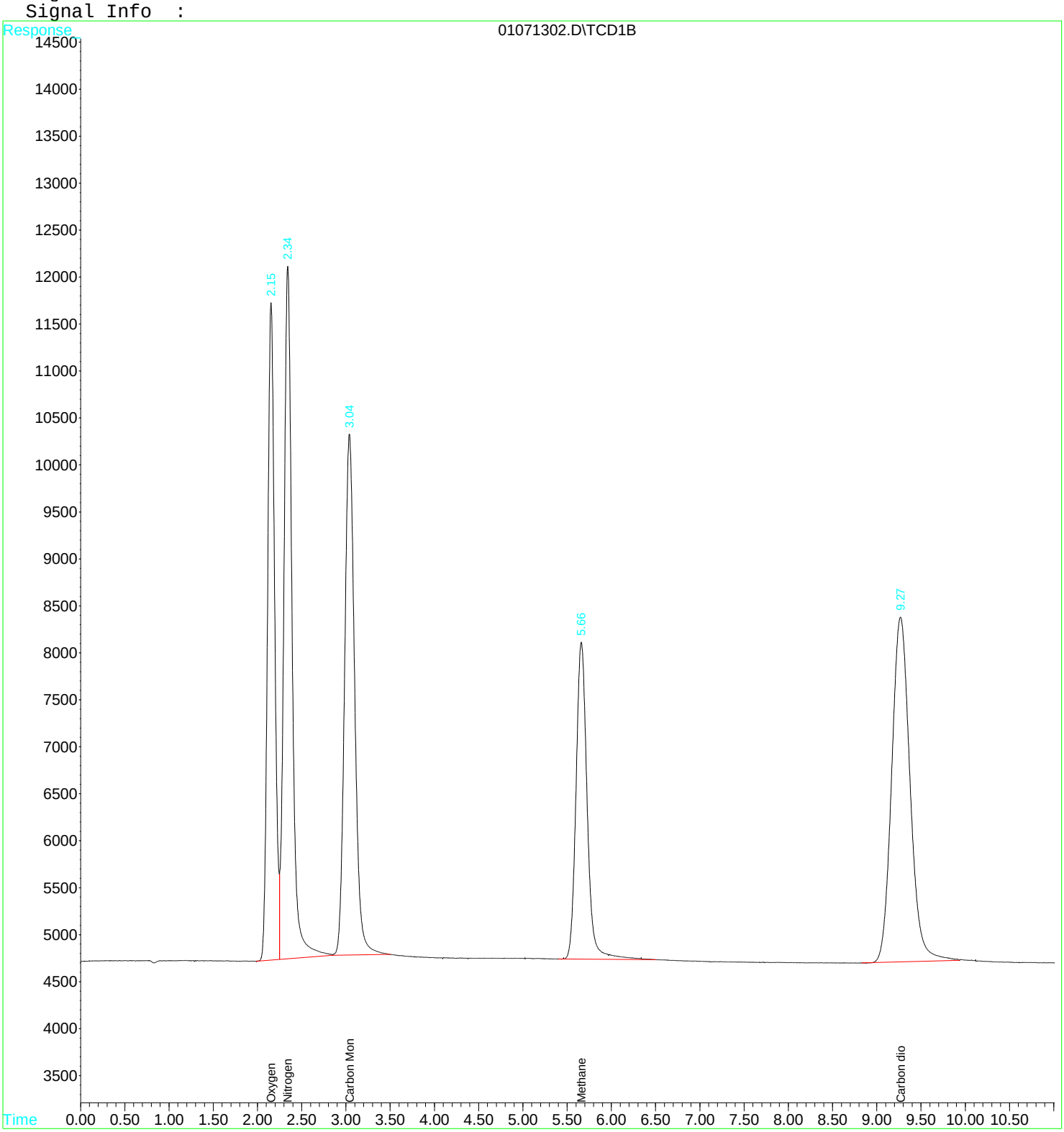
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010713\01071302.D Vial: 1
Acq On : 7 Jan 2013 11:52 am Operator:
Sample : CCV-010713 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 7 12:04 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\010713\01071316.D Vial: 1
Acq On : 7 Jan 2013 4:33 pm Operator:
Sample : CCV-010713 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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	2.677	-7.1	0	0.05
2	Nitrogen	2.500	2.776	-11.0	0	0.04
3	Carbon Monoxide	2.500	2.676	-7.0	0	0.06
4	Methane	2.000	2.085	-4.2	0	0.06
5	Carbon dioxide	2.500	2.584	-3.4	0	0.09

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\010713\01071316.D Vial: 1
Acq On : 7 Jan 2013 4:33 pm Operator:
Sample : CCV-010713 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
09141202.D 122712.M Tue Jan 08 11:35:02 2013

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010713\01071316.D Vial: 1
Acq On : 7 Jan 2013 4:33 pm Operator:
Sample : CCV-010713 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 7 16:47 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	384786	2.677 % v/v
2)	Nitrogen	2.34	471078	2.776 % v/v
3)	Carbon Monoxide	3.04f	430588	2.676 % v/v
4)	Methane	5.66f	292102	2.085 % v/v
5)	Carbon dioxide	9.27f	523173	2.584 % v/v

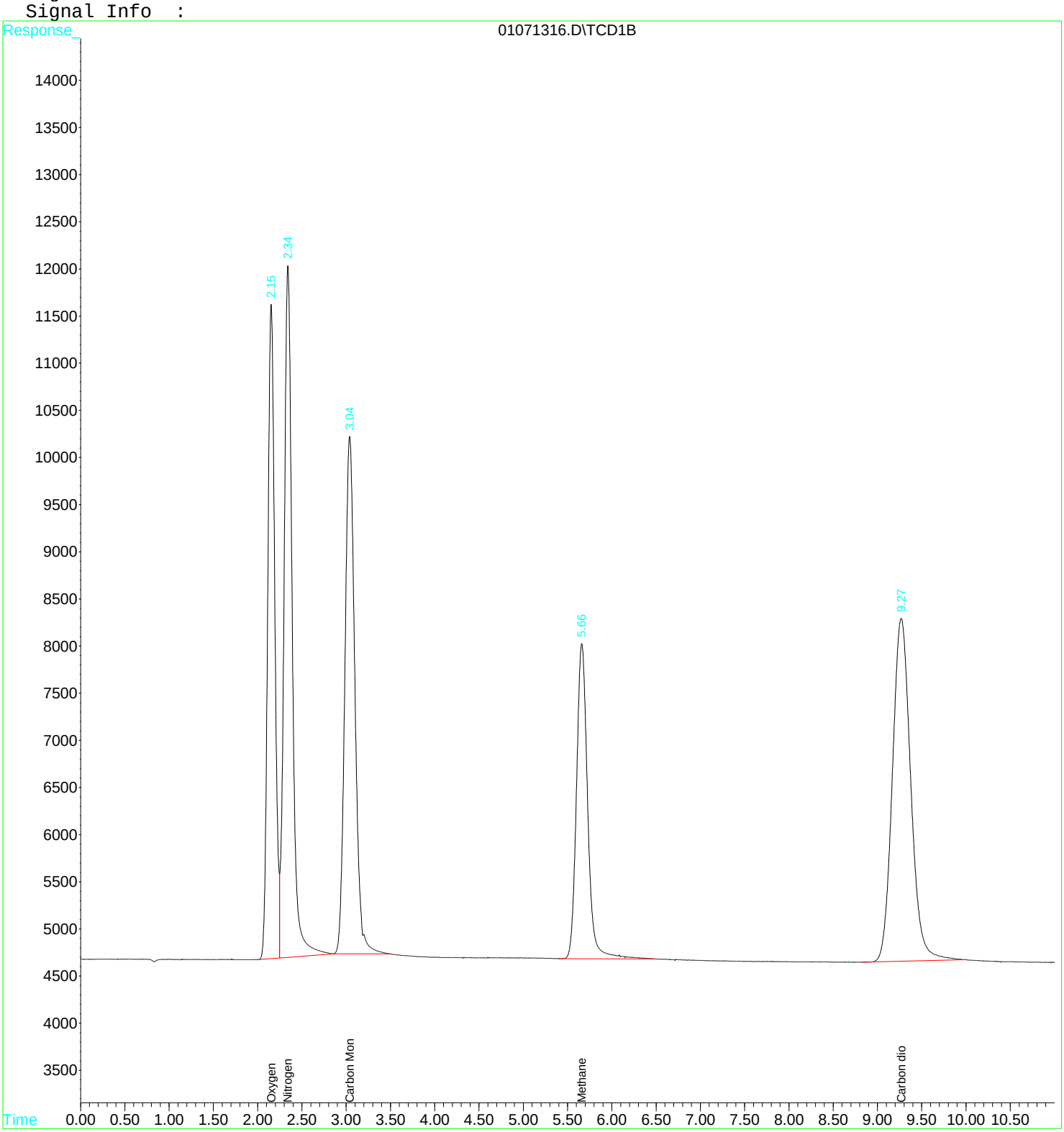
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010713\01071316.D Vial: 1
Acq On : 7 Jan 2013 4:33 pm Operator:
Sample : CCV-010713 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 7 16:47 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\010713\01071322.D Vial: 1
Acq On : 7 Jan 2013 6:05 pm Operator:
Sample : CCV-010713 TCD-C Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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	2.653	-6.1	0	0.05
2	Nitrogen	2.500	2.740	-9.6	0	0.04
3	Carbon Monoxide	2.500	2.676	-7.0	0	0.06
4	Methane	2.000	2.074	-3.7	0	0.06
5	Carbon dioxide	2.500	2.586	-3.4	0	0.09

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\010713\01071322.D Vial: 1
Acq On : 7 Jan 2013 6:05 pm Operator:
Sample : CCV-010713 TCD-C Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
09141202.D 122712.M Tue Jan 08 11:35:15 2013

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010713\01071322.D Vial: 1
Acq On : 7 Jan 2013 6:05 pm Operator:
Sample : CCV-010713 TCD-C Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 7 18:17 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	381348	2.653 % v/v
2)	Nitrogen	2.34	464938	2.740 % v/v
3)	Carbon Monoxide	3.04f	430467	2.676 % v/v
4)	Methane	5.66f	290540	2.074 % v/v
5)	Carbon dioxide	9.27f	523414	2.586 % v/v

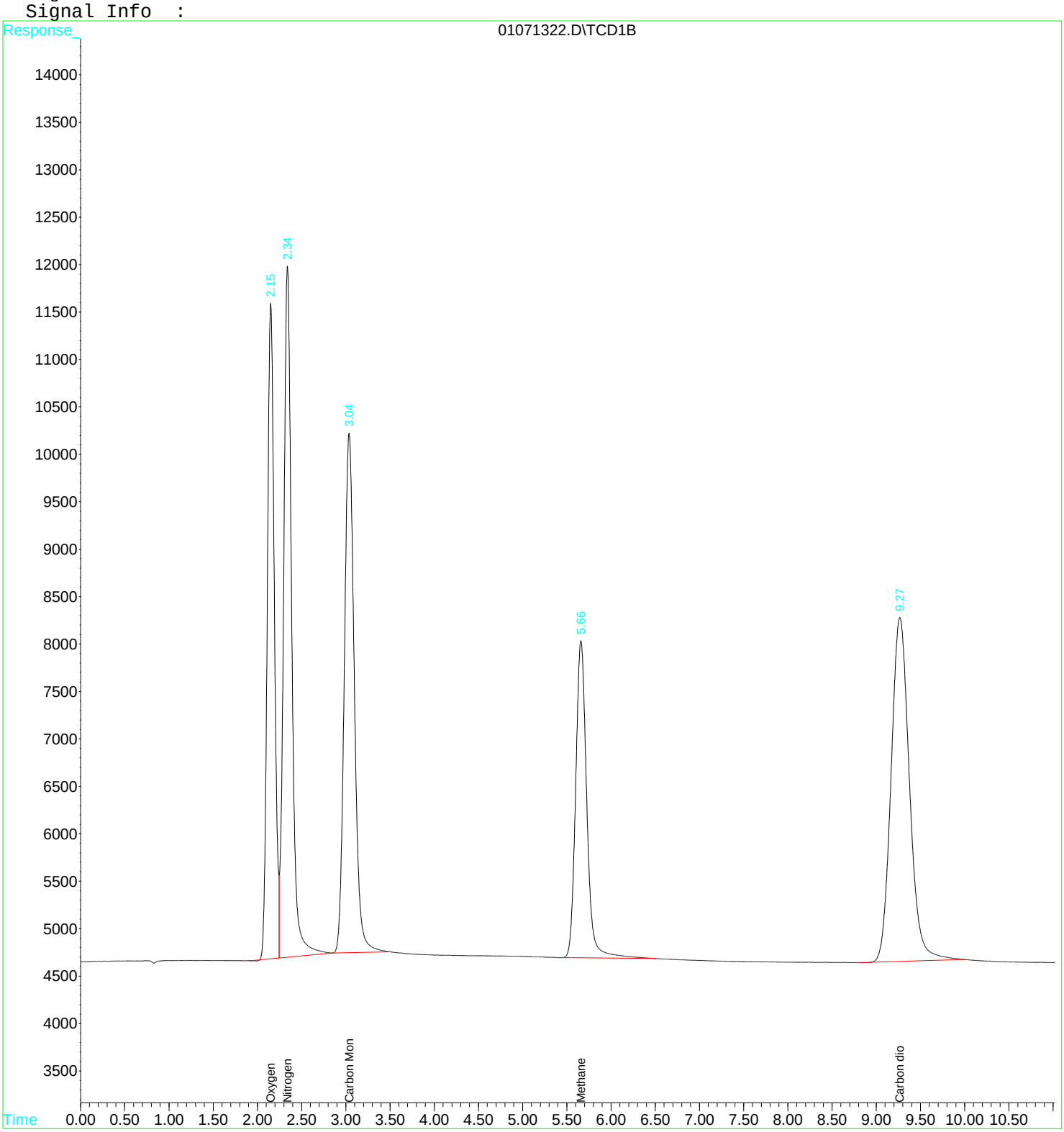
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010713\01071322.D Vial: 1
Acq On : 7 Jan 2013 6:05 pm Operator:
Sample : CCV-010713 TCD-C Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 7 18:17 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Injection Log

Directory: C:\HPCHEM\2\DATA\010813

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	01081301.d	1.	MBLK-010813 TCD-A		8 Jan 2013 11:13
2	1	01081302.d	1.	CCV-010813 TCD-A		8 Jan 2013 11:28
3	1	01081303.d	1.	LCS-010813 TCD		8 Jan 2013 11:43
4	1	01081304.d	1.	CRQL-010813 TCD-A		8 Jan 2013 11:58
5	1	01081305.d	1.	1212722-015B		8 Jan 2013 12:12
6	1	01081306.d	1.	1212722-016B		8 Jan 2013 12:41
7	1	01081307.d	1.	1212722-017B		8 Jan 2013 13:02
8	1	01081308.d	1.	1212722-018B		8 Jan 2013 13:19
9	1	01081309.d	1.	1212722-019B		8 Jan 2013 13:37
10	1	01081310.d	1.	1212722-020B		8 Jan 2013 13:51
11	1	01081311.d	1.	1212722-021B		8 Jan 2013 14:41
12	1	01081312.d	1.	1212722-022B		8 Jan 2013 14:56
13	1	01081313.d	1.	1212722-023B		8 Jan 2013 15:10
14	1	01081314.d	1.	1212722-024B		8 Jan 2013 15:24
15	1	01081315.d	1.	1212722-024BDUP		8 Jan 2013 15:42
16	1	01081316.d	1.	CCV-010813 TCD-B		8 Jan 2013 15:56
17	1	01081317.d	1.	1212722-025B		8 Jan 2013 16:11
18	1	01081318.d	1.	1212722-026B		8 Jan 2013 16:25
19	1	01081319.d	1.	1212722-027B		8 Jan 2013 16:40
20	1	01081320.d	1.	1212722-028B		8 Jan 2013 16:54
21	1	01081321.d	1.	1212722-029B		8 Jan 2013 17:08
22	2	01081322.d	1.	1212722-030B		8 Jan 2013 17:22
23	3	01081323.d	1.	1212722-030BDUP		8 Jan 2013 17:37
24	1	01081324.d	1.	CCV-010813 TCD-C		8 Jan 2013 17:53
25	1	01081325.d	1.	CRQL-010813 TCD-B		8 Jan 2013 18:08

RTI Laboratories

ANALYTICAL RUN Summary

16-Jan-13

RunNo 55229

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1088561	MBLK-010813 TCD-A	ASTM-D2504	MBLK	ıTA\010813\0108	1/8/2013 11:13:0	1	R55229		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
1088562	CCV-010813 TCD-A	ASTM-D2504	CCV	ıTA\010813\0108	1/8/2013 11:28:0	1	R55229		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.571	2.571		2.5	0	0	0.025	0.1	0	103%	85	115	0%	
Carbon Monoxide	A	% v/v	2.673	2.673		2.5	0	0	0.025	0.1	0	107%	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	2.079	2.079		2	0	0	0.025	0.5	0	104%	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	2.666	2.666		2.5	0	0	0.025	0.1	0	107%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1088563	LCS-010813 TCD	ASTM-D2504	LCS	ıTA\010813\0108	1/8/2013 11:43:0	1	R55229		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	2.584	2.584		2.5	0	2.571	0.025	0.1	0	103%	70	130	1%	
Carbon Monoxide	A	% v/v	2.682	2.682		2.5	0	2.673	0.025	0.1	0	107%	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
1088576	CCV-010813 TCD-B	ASTM-D2504	CCV	ıTA\010813\0108	1/8/2013 3:56:00	1	R55229		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.578	2.578		2.5	0	0	0.025	0.1	0	103%	85	115	0%	
Carbon Monoxide	A	% v/v	2.663	2.663		2.5	0	0	0.025	0.1	0	107%	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	2.078	2.078		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	% v/v	2.743	2.743		2.5	0	0	0.025	0.1	0	110%	85	115	0%	
Oxygen	A	% v/v	2.652	2.652		2.5	0	0	0.025	0.1	0	106%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1088577	1212722-025B (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\010813\0108	1/8/2013 4:11:00	1	R55229		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.439	0.439		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	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	82.685	82.685		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	% v/v	21.333	21.333		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
1088578	1212722-026B (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\010813\0108	1/8/2013 4:25:00	1	R55229		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.788	0.788		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	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	83.042	83.042		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
1088583	1212722-030BDUP	ASTM-D2504	DUP	ıTA\010813\0108	1/8/2013 5:37:00	1	R55229		0	1E+06	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Oxygen	A	% v/v	19.094	19.094		0	0	19.079	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
1088584	CCV-010813 TCD-C	ASTM-D2504	CCV	ıTA\010813\0108	1/8/2013 5:53:00	1	R55229		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.617	2.617		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	% v/v	2.71	2.71		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	2.09	2.09		2	0	0	0.025	0.5	0	105%	85	115	0%	
Nitrogen	A	% v/v	2.768	2.768		2.5	0	0	0.025	0.1	0	111%	85	115	0%	
Oxygen	A	% v/v	2.678	2.678		2.5	0	0	0.025	0.1	0	107%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1088585	CRQL-010813 TCD-B	ASTM-D2504	CRQL	ıTA\010813\0108	1/8/2013 6:08:00	1	R55229		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.318	0.318		0.3	0	0	0.025	0.1	0	106%	80	120	0%	
Carbon Monoxide	A	% v/v	0.152	0.152		0.14	0	0	0.025	0.1	0	109%	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	0.091	0.091		0.09	0	0	0.025	0.5	0	101%	80	120	0%	
Nitrogen	A	% v/v	1.458	1.458		1.39	0	0	0.025	0.1	0	105%	80	120	0%	
Oxygen	A	% v/v	0.082	0.082		0.08	0	0	0.025	0.1	0	103%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\010813\01081302.D Vial: 1
Acq On : 8 Jan 2013 11:28 am Operator:
Sample : CCV-010813 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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	2.666	-6.6	0	0.05
2	Nitrogen	2.500	2.757	-10.3	0	0.04
3	Carbon Monoxide	2.500	2.673	-6.9	0	0.06
4	Methane	2.000	2.079	-4.0	0	0.06
5	Carbon dioxide	2.500	2.571	-2.8	0	0.09

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\010813\01081302.D Vial: 1
Acq On : 8 Jan 2013 11:28 am Operator:
Sample : CCV-010813 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
09141202.D 122712.M Tue Jan 08 18:24:38 2013

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010813\01081302.D Vial: 1
Acq On : 8 Jan 2013 11:28 am Operator:
Sample : CCV-010813 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 8 11:39 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	383203	2.666 % v/v
2)	Nitrogen	2.34	467951	2.757 % v/v
3)	Carbon Monoxide	3.04f	429990	2.673 % v/v
4)	Methane	5.66f	291178	2.079 % v/v
5)	Carbon dioxide	9.27f	520495	2.571 % v/v

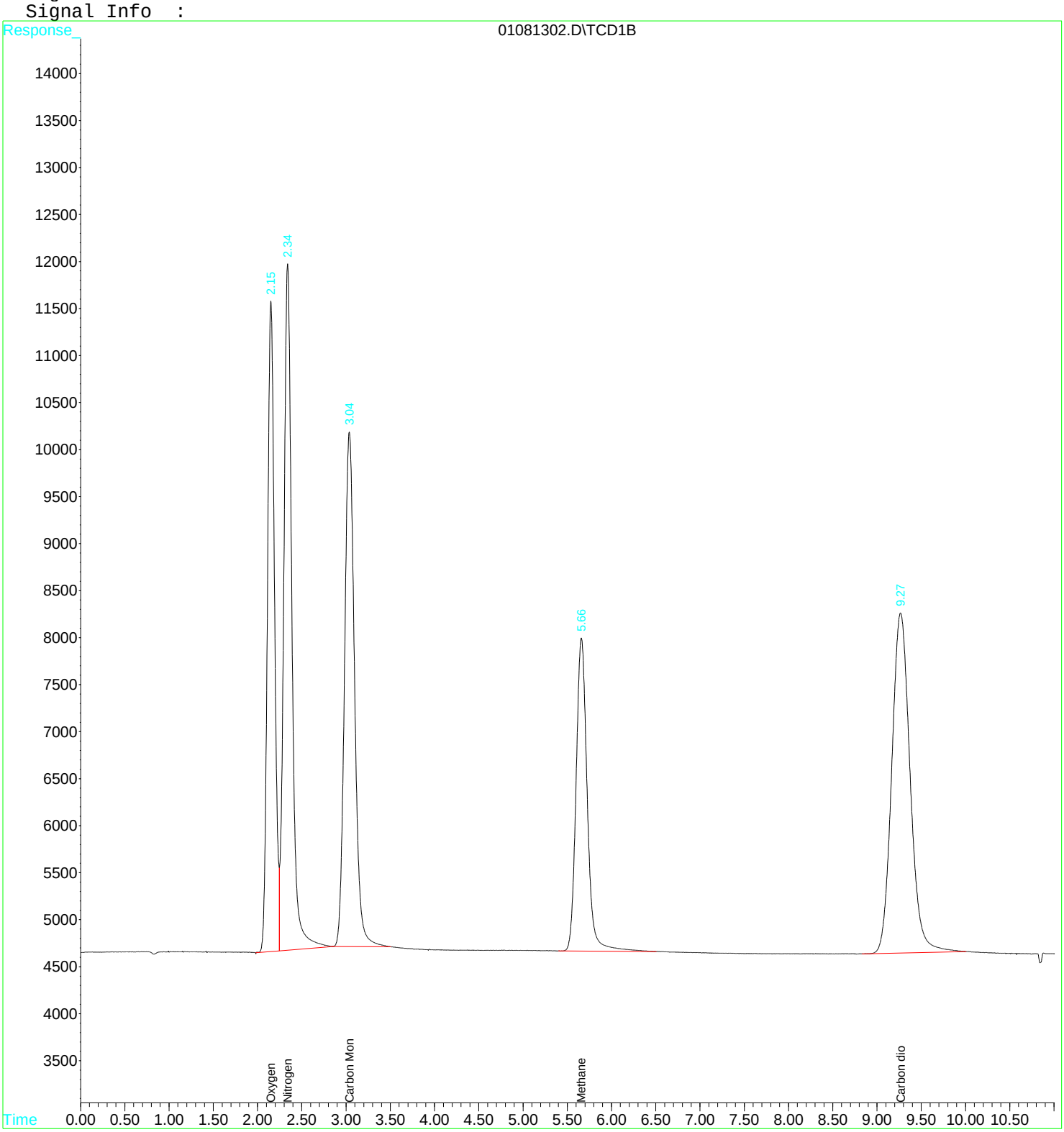
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010813\01081302.D Vial: 1
Acq On : 8 Jan 2013 11:28 am Operator:
Sample : CCV-010813 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 8 11:39 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\010813\01081316.D Vial: 1
Acq On : 8 Jan 2013 3:56 pm Operator:
Sample : CCV-010813 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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	2.652	-6.1	0	0.05
2	Nitrogen	2.500	2.743	-9.7	0	0.04
3	Carbon Monoxide	2.500	2.663	-6.5	0	0.06
4	Methane	2.000	2.078	-3.9	0	0.06
5	Carbon dioxide	2.500	2.578	-3.1	0	0.08

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\010813\01081316.D Vial: 1
Acq On : 8 Jan 2013 3:56 pm Operator:
Sample : CCV-010813 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
09141202.D 122712.M Tue Jan 08 18:24:49 2013

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010813\01081316.D Vial: 1
Acq On : 8 Jan 2013 3:56 pm Operator:
Sample : CCV-010813 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 8 16:45 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	381193	2.652 % v/v
2)	Nitrogen	2.34	465495	2.743 % v/v
3)	Carbon Monoxide	3.04f	428369	2.663 % v/v
4)	Methane	5.66f	291053	2.078 % v/v
5)	Carbon dioxide	9.26f	521961	2.578 % v/v

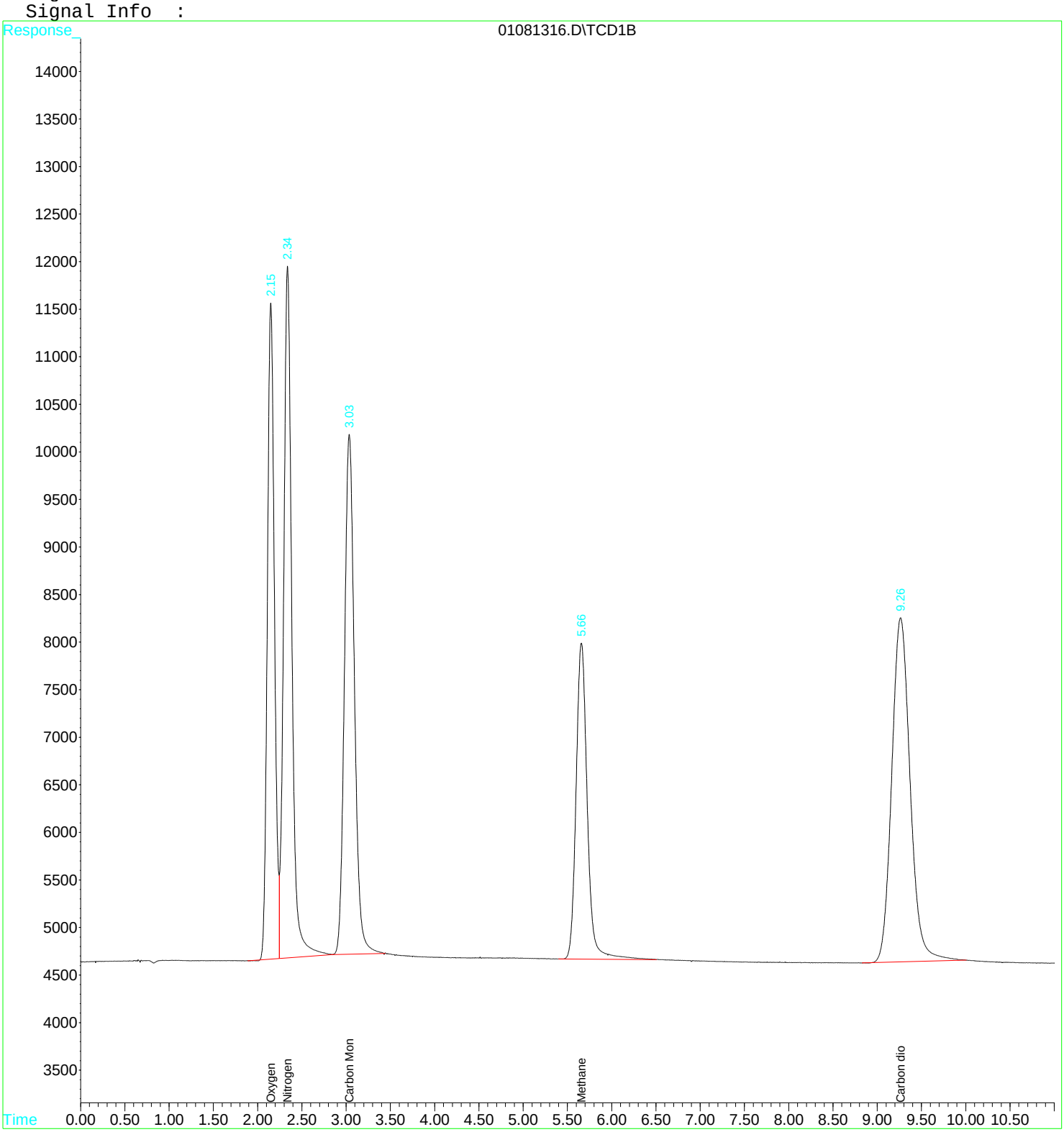
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010813\01081316.D Vial: 1
Acq On : 8 Jan 2013 3:56 pm Operator:
Sample : CCV-010813 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 8 16:45 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\010813\01081324.D Vial: 1
Acq On : 8 Jan 2013 5:53 pm Operator:
Sample : CCV-010813 TCD-C Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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	2.678	-7.1	0	0.06
2	Nitrogen	2.500	2.768	-10.7	0	0.04
3	Carbon Monoxide	2.500	2.710	-8.4	0	0.06
4	Methane	2.000	2.090	-4.5	0	0.06
5	Carbon dioxide	2.500	2.617	-4.7	0	0.08

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\010813\01081324.D Vial: 1
Acq On : 8 Jan 2013 5:53 pm Operator:
Sample : CCV-010813 TCD-C Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
09141202.D 122712.M Tue Jan 08 18:24:59 2013

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010813\01081324.D Vial: 1
Acq On : 8 Jan 2013 5:53 pm Operator:
Sample : CCV-010813 TCD-C Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 8 18:04 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.16	385028	2.678 % v/v
2)	Nitrogen	2.34	469750	2.768 % v/v
3)	Carbon Monoxide	3.04f	436009	2.710 % v/v
4)	Methane	5.66f	292745	2.090 % v/v
5)	Carbon dioxide	9.26f	529751	2.617 % v/v

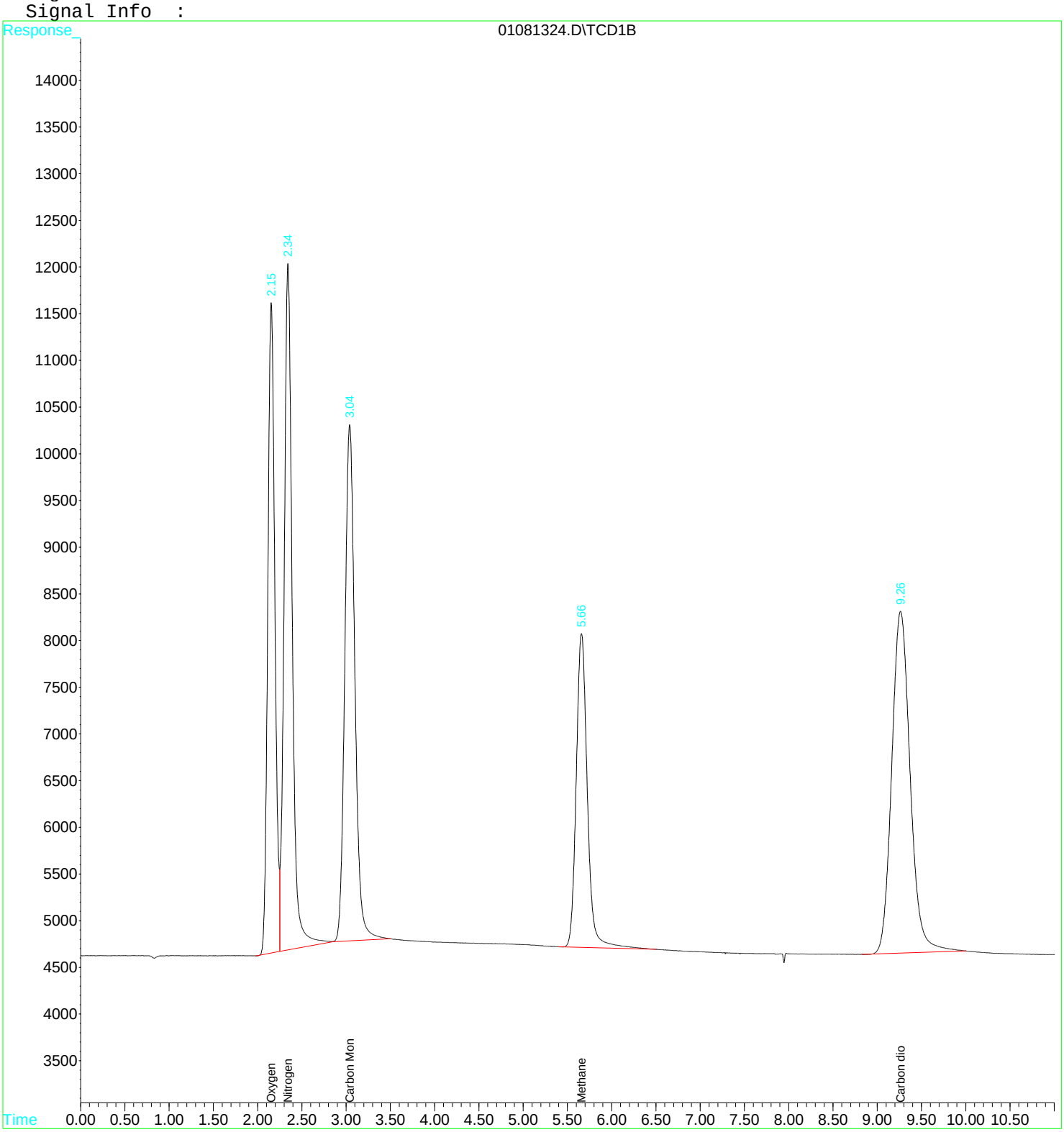
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010813\01081324.D Vial: 1
Acq On : 8 Jan 2013 5:53 pm Operator:
Sample : CCV-010813 TCD-C Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 8 18:04 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Injection Log

Directory: C:\HPCHEM\2\DATA\010913

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	01091301.d	1.	MBLK-010913 TCD-A		9 Jan 2013 11:29
2	1	01091302.d	1.	CCV-010913 TCD-A		9 Jan 2013 11:44
3	1	01091303.d	1.	LCS-010913 TCD		9 Jan 2013 11:58
4	1	01091304.d	1.	CRQL-010913 TCD-A		9 Jan 2013 12:12
5	1	01091305.d	1.	1212722-031B		9 Jan 2013 12:28
6	1	01091306.d	1.	1212722-032B		9 Jan 2013 12:43
7	1	01091307.d	1.	1212722-033B		9 Jan 2013 13:10
8	1	01091308.d	1.	1212722-034B		9 Jan 2013 13:25
9	1	01091309.d	1.	1212722-035B		9 Jan 2013 13:48
10	1	01091310.d	1.	1212722-036B		9 Jan 2013 14:03
11	1	01091311.d	1.	1212722-037B		9 Jan 2013 14:17
12	1	01091312.d	1.	1212722-038B		9 Jan 2013 14:31
13	1	01091313.d	1.	1212722-039B		9 Jan 2013 14:45
14	1	01091314.d	1.	1212722-040B		9 Jan 2013 15:08
15	1	01091315.d	1.	1212722-040BDUP		9 Jan 2013 15:23
16	1	01091316.d	1.	CCV-010913 TCD-B		9 Jan 2013 15:37
17	1	01091317.d	1.	1212722-041B		9 Jan 2013 15:53
18	1	01091318.d	1.	1212722-042B		9 Jan 2013 16:09
19	1	01091319.d	1.	1212722-043B		9 Jan 2013 16:23
20	1	01091320.d	1.	1212722-044B		9 Jan 2013 16:38
21	1	01091321.d	1.	1212722-045B		9 Jan 2013 16:52
22	2	01091322.d	1.	1212722-046B		9 Jan 2013 17:06
23	3	01091323.d	1.	1212722-047B		9 Jan 2013 17:20
24	4	01091324.d	1.	1212722-048B		9 Jan 2013 17:35
25	5	01091325.d	1.	1212722-049B		9 Jan 2013 17:55
26	6	01091326.d	1.	1212722-050B		9 Jan 2013 18:10
27	3	01091327.d	1.	1212722-050BDUP		9 Jan 2013 18:24
28	1	01091328.d	1.	CCV-010913 TCD-C		9 Jan 2013 18:38
29	1	01091329.d	1.	CRQL-010913 TCD-B		9 Jan 2013 18:53

RTI Laboratories

ANALYTICAL RUN Summary

16-Jan-13

RunNo 55282

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1089520	MBLK-010913 TCD-A	ASTM-D2504	MBLK	ıTA\010913\0109	1/9/2013 11:29:0	1	R55282		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	0.013	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Oxygen	A	% v/v	0.009	0		0	0	0	0.025	0.1	0	0%	0	0	0%	MU

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1089521	CCV-010913 TCD-A	ASTM-D2504	CCV	ıTA\010913\0109	1/9/2013 11:44:0	1	R55282		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.559	2.559		2.5	0	0	0.025	0.1	0	102%	85	115	0%	
Carbon Monoxide	A	% v/v	2.667	2.667		2.5	0	0	0.025	0.1	0	107%	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	2.072	2.072		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	% v/v	2.736	2.736		2.5	0	0	0.025	0.1	0	109%	85	115	0%	
Oxygen	A	% v/v	2.649	2.649		2.5	0	0	0.025	0.1	0	106%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1089522	LCS-010913 TCD	ASTM-D2504	LCS	ıTA\010913\0109	1/9/2013 11:58:0	1	R55282		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	2.565	2.565		2.5	0	2.559	0.025	0.1	0	103%	70	130	0%	
Carbon Monoxide	A	% v/v	2.662	2.662		2.5	0	2.667	0.025	0.1	0	106%	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
1089535	CCV-010913 TCD-B	ASTM-D2504	CCV	ıTA\010913\0109	1/9/2013 3:37:00	1	R55282		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.563	2.563		2.5	0	0	0.025	0.1	0	103%	85	115	0%	
Carbon Monoxide	A	% v/v	2.655	2.655		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	2.035	2.035		2	0	0	0.025	0.5	0	102%	85	115	0%	
Nitrogen	A	% v/v	2.78	2.78		2.5	0	0	0.025	0.1	0	111%	85	115	0%	
Oxygen	A	% v/v	2.655	2.655		2.5	0	0	0.025	0.1	0	106%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1089536	1212722-041B (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\010913\0109	1/9/2013 3:53:00	1	R55282		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.633	0.633		0	0	0	0.025	0.1	0	0%	0	0	0%	M
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	81.719	81.719		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	% v/v	22.149	22.149		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
1089537	1212722-042B (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\010913\0109	1/9/2013 4:09:00	1	R55282		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.663	2.663		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	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	81.008	81.008		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
1089545	1212722-050B (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\010913\0109	1/9/2013 6:10:00	1	R55282		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.153	0.153		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	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	83.34	83.34		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	% v/v	21.108	21.108		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
1089546	1212722-050BDUP	ASTM-D2504	DUP	ıTA\010913\0109	1/9/2013 6:24:00	1	R55282		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	0.152	0.152		0	0	0.153	0.025	0.1	0	0%	0	0	1%	M
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	82.932	82.932		0	0	83.34	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	% v/v	21.002	21.002		0	0	21.108	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
1089547	CCV-010913 TCD-C	ASTM-D2504	CCV	ıTA\010913\0109	1/9/2013 6:38:00	1	R55282		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.59	2.59		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Carbon Monoxide	A	% v/v	2.681	2.681		2.5	0	0	0.025	0.1	0	107%	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	2.084	2.084		2	0	0	0.025	0.5	0	104%	85	115	0%	
Nitrogen	A	% v/v	2.756	2.756		2.5	0	0	0.025	0.1	0	110%	85	115	0%	
Oxygen	A	% v/v	2.661	2.661		2.5	0	0	0.025	0.1	0	106%	85	115	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\010913\01091302.D Vial: 1
Acq On : 9 Jan 2013 11:44 am Operator:
Sample : CCV-010913 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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	2.649	-6.0	0	0.05
2	Nitrogen	2.500	2.736	-9.4	0	0.04
3	Carbon Monoxide	2.500	2.667	-6.7	0	0.05
4	Methane	2.000	2.072	-3.6	0	0.06
5	Carbon dioxide	2.500	2.559	-2.4	0	0.08

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\010913\01091302.D Vial: 1
Acq On : 9 Jan 2013 11:44 am Operator:
Sample : CCV-010913 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
09141202.D 122712.M Thu Jan 10 11:13:27 2013

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010913\01091302.D Vial: 1
Acq On : 9 Jan 2013 11:44 am Operator:
Sample : CCV-010913 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 9 11:55 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	380780	2.649 % v/v
2)	Nitrogen	2.34	464422	2.736 % v/v
3)	Carbon Monoxide	3.03f	429048	2.667 % v/v
4)	Methane	5.66f	290271	2.072 % v/v
5)	Carbon dioxide	9.26f	517962	2.559 % v/v

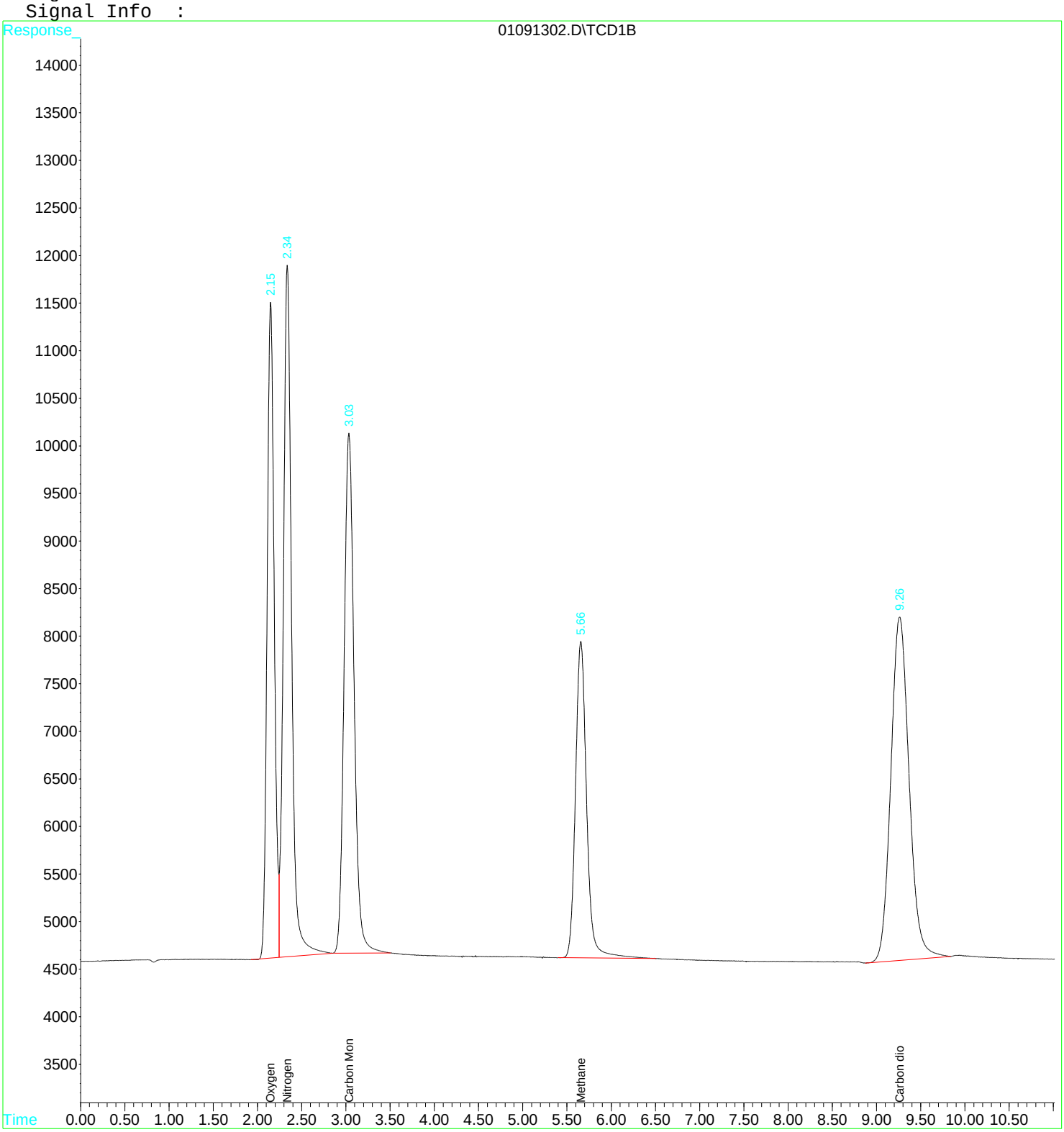
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010913\01091302.D Vial: 1
Acq On : 9 Jan 2013 11:44 am Operator:
Sample : CCV-010913 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 9 11:55 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\010913\01091316.D Vial: 1
Acq On : 9 Jan 2013 3:37 pm Operator:
Sample : CCV-010913 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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	2.655	-6.2	0	0.04
2	Nitrogen	2.500	2.780	-11.2	0	0.03
3	Carbon Monoxide	2.500	2.655	-6.2	0	0.05
4	Methane	2.000	2.035	-1.8	0	0.05
5	Carbon dioxide	2.500	2.563	-2.5	0	0.08

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\010913\01091316.D Vial: 1
Acq On : 9 Jan 2013 3:37 pm Operator:
Sample : CCV-010913 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
09141202.D 122712.M Thu Jan 10 11:14:21 2013

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010913\01091316.D Vial: 1
Acq On : 9 Jan 2013 3:37 pm Operator:
Sample : CCV-010913 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 9 15:51 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	381666	2.655 % v/v
2)	Nitrogen	2.33	471804	2.780 % v/v
3)	Carbon Monoxide	3.03	427217	2.655 % v/v
4)	Methane	5.65f	284975	2.035 % v/v
5)	Carbon dioxide	9.26f	518887	2.563 % v/v

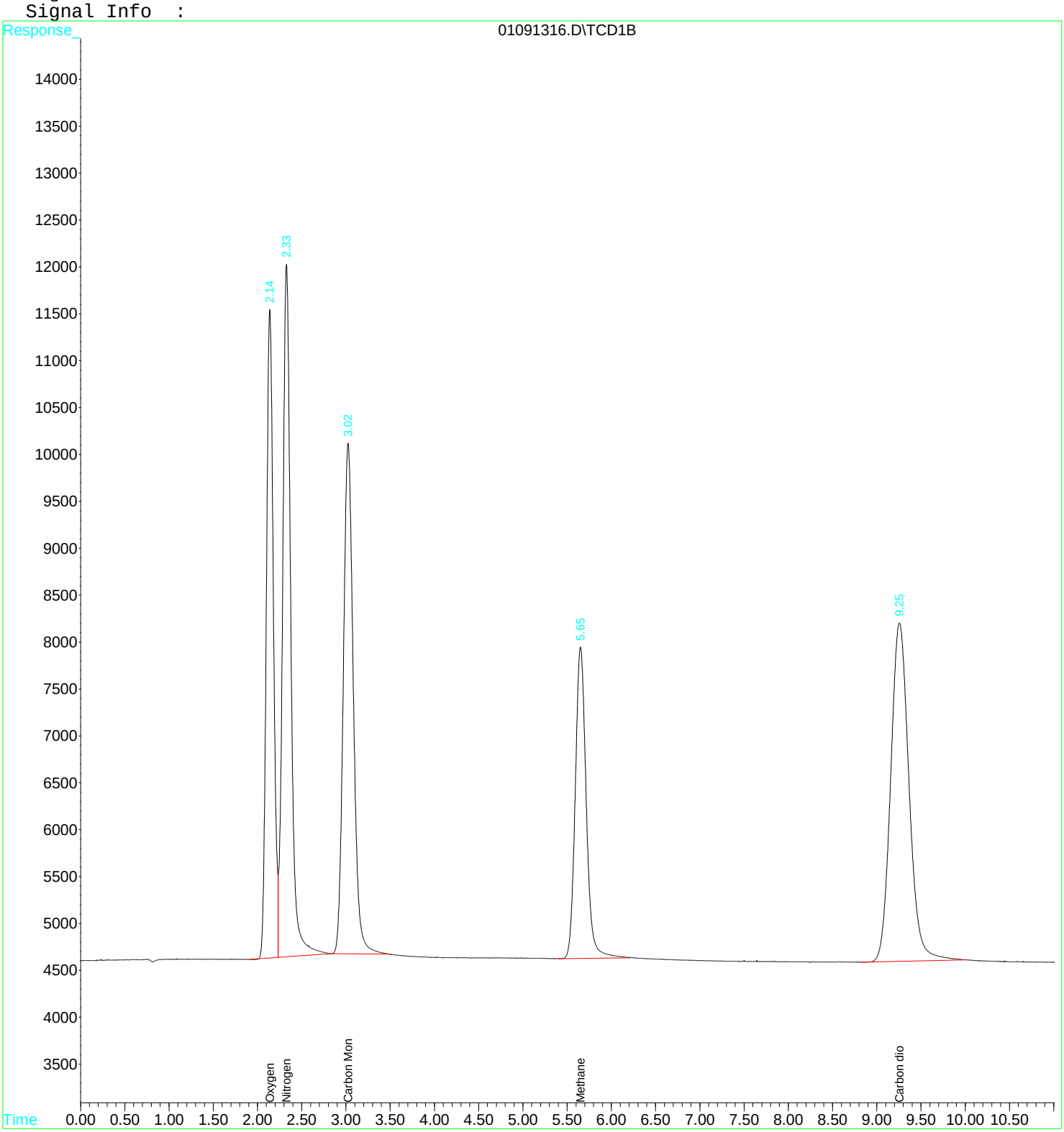
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010913\01091316.D Vial: 1
Acq On : 9 Jan 2013 3:37 pm Operator:
Sample : CCV-010913 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 9 15:51 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\010913\01091328.D Vial: 1
Acq On : 9 Jan 2013 6:38 pm Operator:
Sample : CCV-010913 TCD-C Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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	2.661	-6.4	0	0.05
2	Nitrogen	2.500	2.756	-10.2	0	0.04
3	Carbon Monoxide	2.500	2.681	-7.2	0	0.06
4	Methane	2.000	2.084	-4.2	0	0.06
5	Carbon dioxide	2.500	2.590	-3.6	0	0.08

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\010913\01091328.D Vial: 1
Acq On : 9 Jan 2013 6:38 pm Operator:
Sample : CCV-010913 TCD-C Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
09141202.D 122712.M Thu Jan 10 11:15:54 2013

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010913\01091328.D Vial: 1
Acq On : 9 Jan 2013 6:38 pm Operator:
Sample : CCV-010913 TCD-C Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 9 18:50 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	382578	2.661 % v/v
2)	Nitrogen	2.34	467682	2.756 % v/v
3)	Carbon Monoxide	3.04f	431288	2.681 % v/v
4)	Methane	5.66f	291876	2.084 % v/v
5)	Carbon dioxide	9.26f	524214	2.590 % v/v

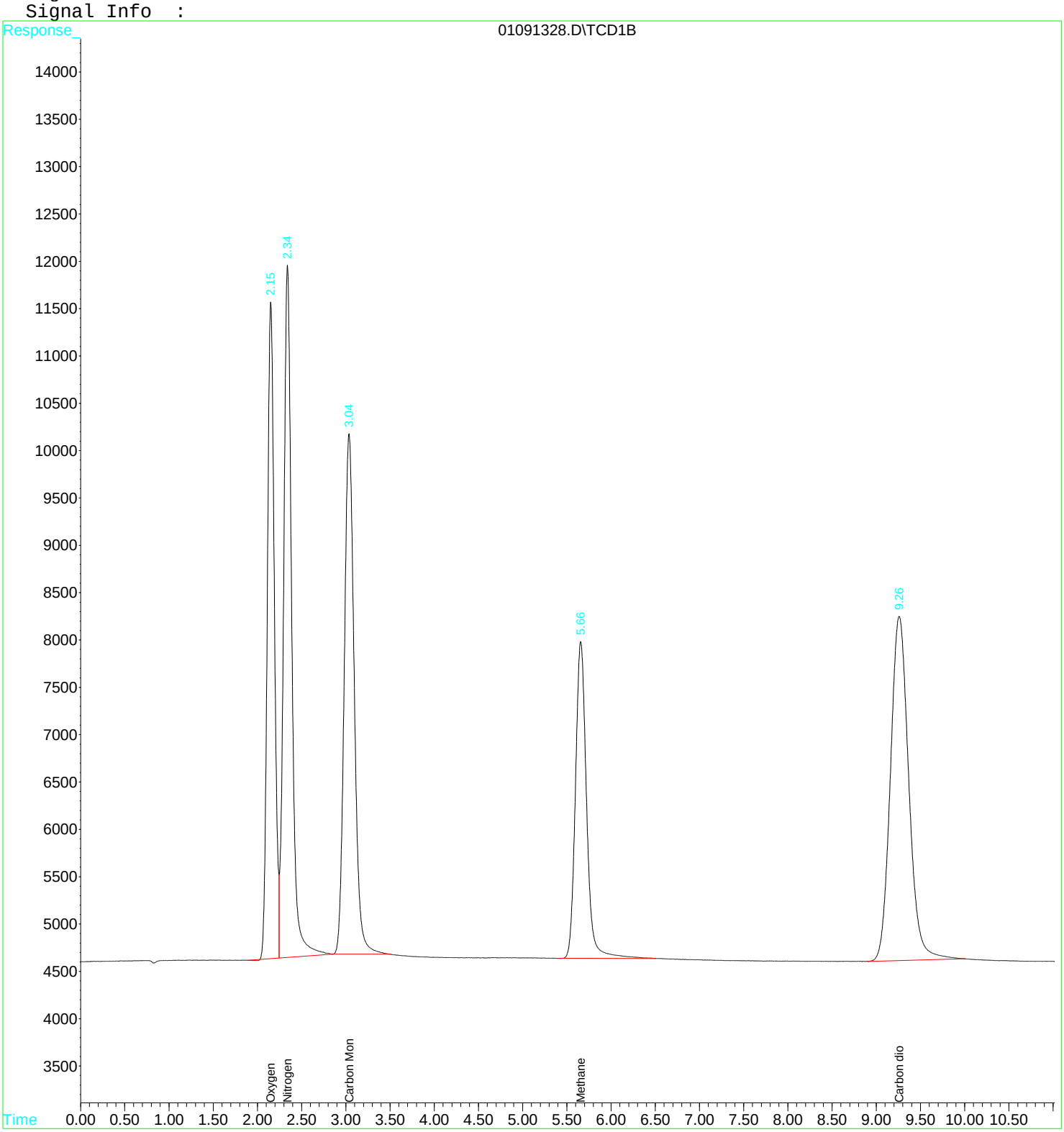
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\010913\01091328.D Vial: 1
Acq On : 9 Jan 2013 6:38 pm Operator:
Sample : CCV-010913 TCD-C Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 9 18:50 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Injection Log

Directory: C:\HPCHEM\2\DATA\011013

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	01101301.d	1.	MBLK-011013 TCD-A		10 Jan 2013 11:21
2	1	01101302.d	1.	CCV-011013 TCD-A		10 Jan 2013 11:39
3	1	01101303.d	1.	LCS-011013 TCD		10 Jan 2013 11:53
4	1	01101304.d	1.	CRQL-011013 TCD-A		10 Jan 2013 12:07
5	1	01101305.d	1.	1212722-071B		10 Jan 2013 12:22
6	1	01101306.d	1.	1212722-072B		10 Jan 2013 12:38
7	1	01101307.d	1.	1212722-073B		10 Jan 2013 12:52
8	1	01101308.d	1.	1212722-074B		10 Jan 2013 13:18
9	1	01101309.d	1.	1212722-075B		10 Jan 2013 13:33
10	1	01101310.d	1.	1212722-076B		10 Jan 2013 13:47
11	1	01101311.d	1.	1212722-077B		10 Jan 2013 14:29
12	1	01101312.d	1.	1212722-078B		10 Jan 2013 14:43
13	1	01101313.d	1.	1212722-079B		10 Jan 2013 14:57
14	1	01101314.d	1.	1212722-080B		10 Jan 2013 15:13
15	1	01101315.d	1.	1212722-080BDUP		10 Jan 2013 15:27
16	1	01101316.d	1.	CCV-011013 TCD-B		10 Jan 2013 15:41
17	1	01101317.d	1.	1212959-001B		10 Jan 2013 15:56
18	1	01101318.d	1.	1212959-002B		10 Jan 2013 16:10
19	1	01101319.d	1.	1212959-003B		10 Jan 2013 16:24
20	1	01101320.d	1.	1212959-004B		10 Jan 2013 16:38
21	1	01101321.d	1.	1212959-005B		10 Jan 2013 16:52
22	2	01101322.d	1.	1212959-006B		10 Jan 2013 17:07
23	3	01101323.d	1.	1212959-007B		10 Jan 2013 17:22
24	4	01101324.d	1.	1212959-008B		10 Jan 2013 17:36
25	5	01101325.d	1.	1212959-009B		10 Jan 2013 17:50
26	6	01101326.d	1.	1212959-010B		10 Jan 2013 18:04
27	3	01101327.d	1.	1212959-010BDUP		10 Jan 2013 18:18
28	1	01101328.d	1.	CCV-011013 TCD-C		10 Jan 2013 18:33
29	1	01101329.d	1.	CRQL-011013 TCD-B		10 Jan 2013 18:47

RTI Laboratories

ANALYTICAL RUN Summary

16-Jan-13

RunNo 55307

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1089984	MBLK-011013 TCD-A	ASTM-D2504	MBLK	ıTA\011013\0110	1/10/2013 11:21:	1	R55307		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	0.013	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
1089985	CCV-011013 TCD-A	ASTM-D2504	CCV	ıTA\011013\0110	1/10/2013 11:39:	1	R55307		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.619	2.619		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	% v/v	2.716	2.716		2.5	0	0	0.025	0.1	0	109%	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	2.113	2.113		2	0	0	0.025	0.5	0	106%	85	115	0%	
Nitrogen	A	% v/v	2.804	2.804		2.5	0	0	0.025	0.1	0	112%	85	115	0%	
Oxygen	A	% v/v	2.708	2.708		2.5	0	0	0.025	0.1	0	108%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1089986	LCS-011013 TCD	ASTM-D2504	LCS	ıTA\011013\0110	1/10/2013 11:53:	1	R55307		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	2.608	2.608		2.5	0	2.619	0.025	0.1	0	104%	70	130	0%	
Carbon Monoxide	A	% v/v	2.714	2.714		2.5	0	2.716	0.025	0.1	0	109%	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
1089999	CCV-011013 TCD-B	ASTM-D2504	CCV	ıTA\011013\0110	1/10/2013 3:41:0	1	R55307		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.589	2.589		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Carbon Monoxide	A	% v/v	2.682	2.682		2.5	0	0	0.025	0.1	0	107%	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	2.085	2.085		2	0	0	0.025	0.5	0	104%	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	2.665	2.665		2.5	0	0	0.025	0.1	0	107%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1090000	1212959-001B (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\011013\0110	1/10/2013 3:56:0	1	R55307		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	6.442	6.442		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	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	84.442	84.442		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	% v/v	13.381	13.381		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
1090001	1212959-002B (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\011013\0110	1/10/2013 4:10:0	1	R55307		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	9.69	9.69		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	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	85.57	85.57		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
1090009	1212959-010B (Container-01 of 01)	ASTM-D2504	SAMP	ıTA\011013\0110	1/10/2013 6:04:0	1	R55307		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.44	0.44		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	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	84.975	84.975		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	% v/v	19.333	19.333		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
1090010	1212959-010BDUP	ASTM-D2504	DUP	ıTA\011013\0110	1/10/2013 6:18:0	1	R55307		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	0.441	0.441		0	0	0.44	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	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	84.926	84.926		0	0	84.975	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	% v/v	19.32	19.32		0	0	19.333	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
1090011	CCV-011013 TCD-C	ASTM-D2504	CCV	ıTA\011013\0110	1/10/2013 6:33:0	1	R55307		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.583	2.583		2.5	0	0	0.025	0.1	0	103%	85	115	0%	
Carbon Monoxide	A	% v/v	2.673	2.673		2.5	0	0	0.025	0.1	0	107%	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	1.997	1.997		2	0	0	0.025	0.5	0	100%	85	115	0%	M
Nitrogen	A	% v/v	2.75	2.75		2.5	0	0	0.025	0.1	0	110%	85	115	0%	
Oxygen	A	% v/v	2.658	2.658		2.5	0	0	0.025	0.1	0	106%	85	115	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\011013\01101302.D Vial: 1
Acq On : 10 Jan 2013 11:39 am Operator:
Sample : CCV-011013 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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	2.708	-8.3	0	0.06
2	Nitrogen	2.500	2.804	-12.2	0	0.05
3	Carbon Monoxide	2.500	2.716	-8.6	0	0.06
4	Methane	2.000	2.113	-5.6	0	0.06
5	Carbon dioxide	2.500	2.619	-4.8	0	0.09

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\011013\01101302.D Vial: 1
Acq On : 10 Jan 2013 11:39 am Operator:
Sample : CCV-011013 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
09141202.D 122712.M Thu Jan 10 18:53:28 2013

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\011013\01101302.D Vial: 1
Acq On : 10 Jan 2013 11:39 am Operator:
Sample : CCV-011013 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 10 11:50 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.16	389322	2.708 % v/v
2)	Nitrogen	2.35	475904	2.804 % v/v
3)	Carbon Monoxide	3.04f	436991	2.716 % v/v
4)	Methane	5.66f	295938	2.113 % v/v
5)	Carbon dioxide	9.27f	530245	2.619 % v/v

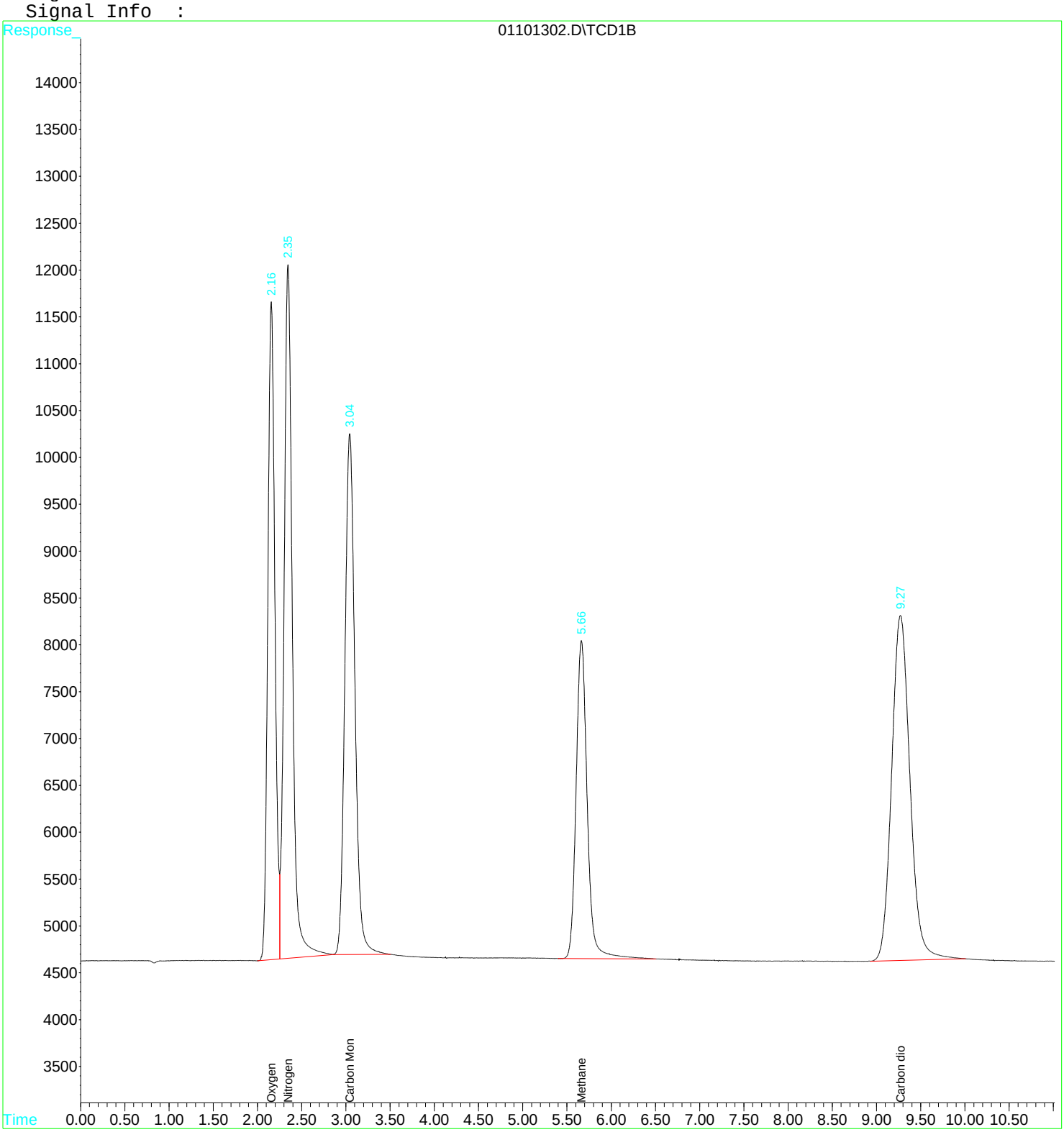
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\011013\01101302.D Vial: 1
Acq On : 10 Jan 2013 11:39 am Operator:
Sample : CCV-011013 TCD-A Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 10 11:50 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\011013\01101316.D Vial: 1
Acq On : 10 Jan 2013 3:41 pm Operator:
Sample : CCV-011013 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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	2.665	-6.6	0	0.05
2	Nitrogen	2.500	2.757	-10.3	0	0.04
3	Carbon Monoxide	2.500	2.682	-7.3	0	0.06
4	Methane	2.000	2.085	-4.2	0	0.06
5	Carbon dioxide	2.500	2.589	-3.6	0	0.09

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\011013\01101316.D Vial: 1
Acq On : 10 Jan 2013 3:41 pm Operator:
Sample : CCV-011013 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
09141202.D 122712.M Thu Jan 10 18:53:43 2013

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\011013\01101316.D Vial: 1
Acq On : 10 Jan 2013 3:41 pm Operator:
Sample : CCV-011013 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 10 15:54 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	383074	2.665 % v/v
2)	Nitrogen	2.34	467925	2.757 % v/v
3)	Carbon Monoxide	3.04f	431446	2.682 % v/v
4)	Methane	5.66f	291987	2.085 % v/v
5)	Carbon dioxide	9.27f	524045	2.589 % v/v

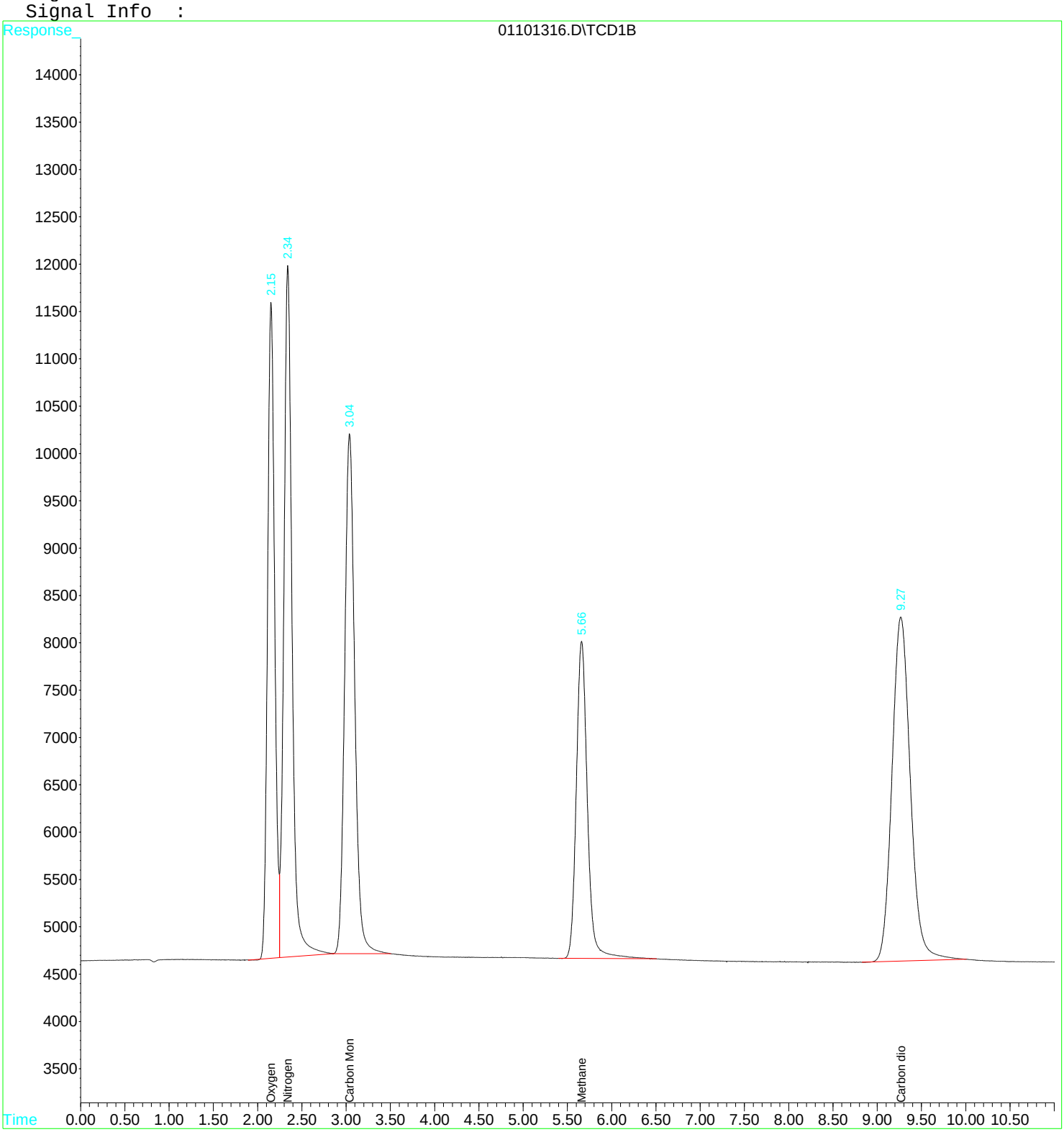
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\011013\01101316.D Vial: 1
Acq On : 10 Jan 2013 3:41 pm Operator:
Sample : CCV-011013 TCD-B Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 10 15:54 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\011013\01101328.D Vial: 1
Acq On : 10 Jan 2013 6:33 pm Operator:
Sample : CCV-011013 TCD-C Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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	2.658	-6.3	0	0.05
2	Nitrogen	2.500	2.750	-10.0	0	0.04
3	Carbon Monoxide	2.500	2.673	-6.9	0	0.06
4	Methane	2.000	1.997	0.1	0	0.06
5	Carbon dioxide	2.500	2.583	-3.3	0	0.09

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\011013\01101328.D Vial: 1
Acq On : 10 Jan 2013 6:33 pm Operator:
Sample : CCV-011013 TCD-C Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
09141202.D 122712.M Thu Jan 10 18:54:29 2013

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\011013\01101328.D Vial: 1
Acq On : 10 Jan 2013 6:33 pm Operator:
Sample : CCV-011013 TCD-C Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 10 18:54 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.15	382087	2.658 % v/v
2)	Nitrogen	2.34	466672	2.750 % v/v
3)	Carbon Monoxide	3.04f	429998	2.673 % v/v
4)	Methane	5.66f	279676	1.997 % v/vm
5)	Carbon dioxide	9.27f	522909	2.583 % v/v

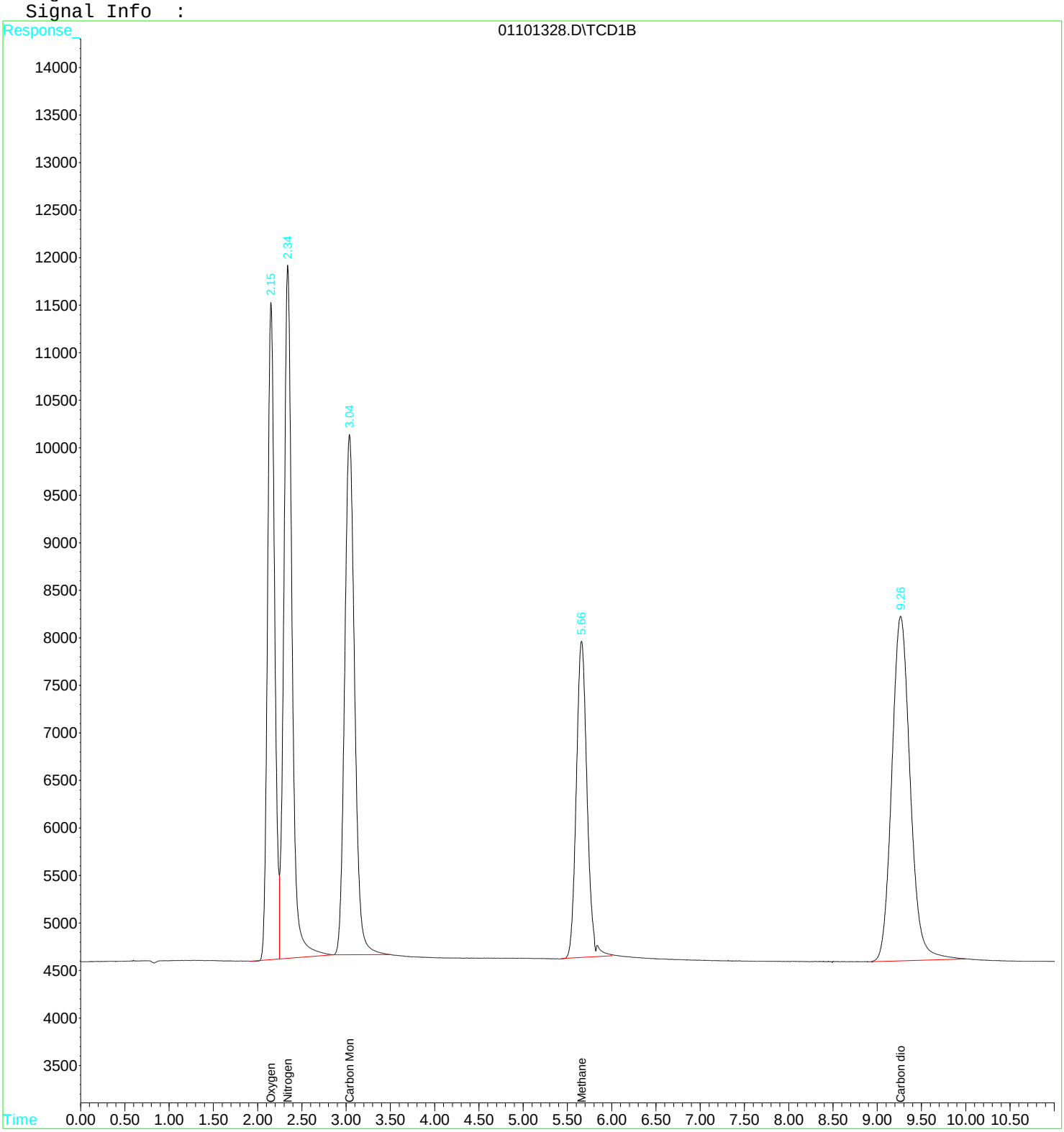
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\011013\01101328.D Vial: 1
Acq On : 10 Jan 2013 6:33 pm Operator:
Sample : CCV-011013 TCD-C Inst : GC/TCD
Misc : Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jan 10 18:54 2013 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Wed Jan 02 16:55:28 2013
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

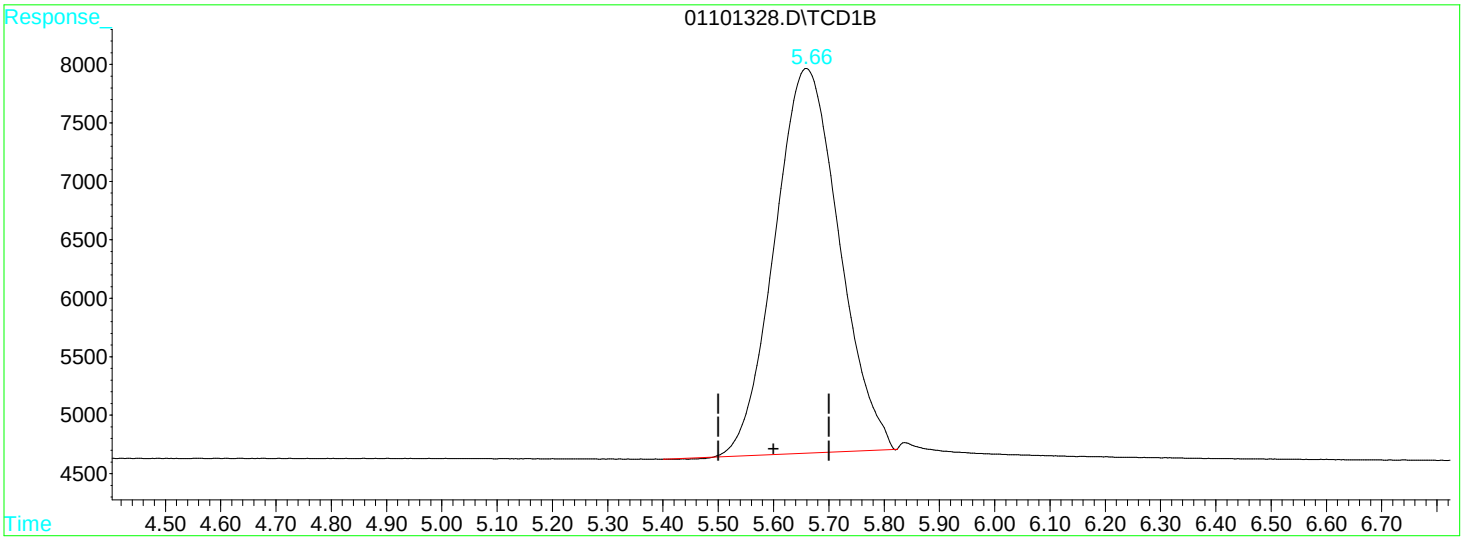
Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\2\DATA\011013\01101328.D          Vial: 1
Acq On    : 10 Jan 2013   6:33 pm                   Operator:
Sample    : CCV-011013 TCD-C                        Inst    : GC/TCD
Misc      :                                         Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Jan 10 18:44 2013  Quant Results File: temp.res

Method       : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title        :
Last Update  : Thu Dec 27 18:13:53 2012
Response via : Multiple Level Calibration
```



QEdit

(4) Methane

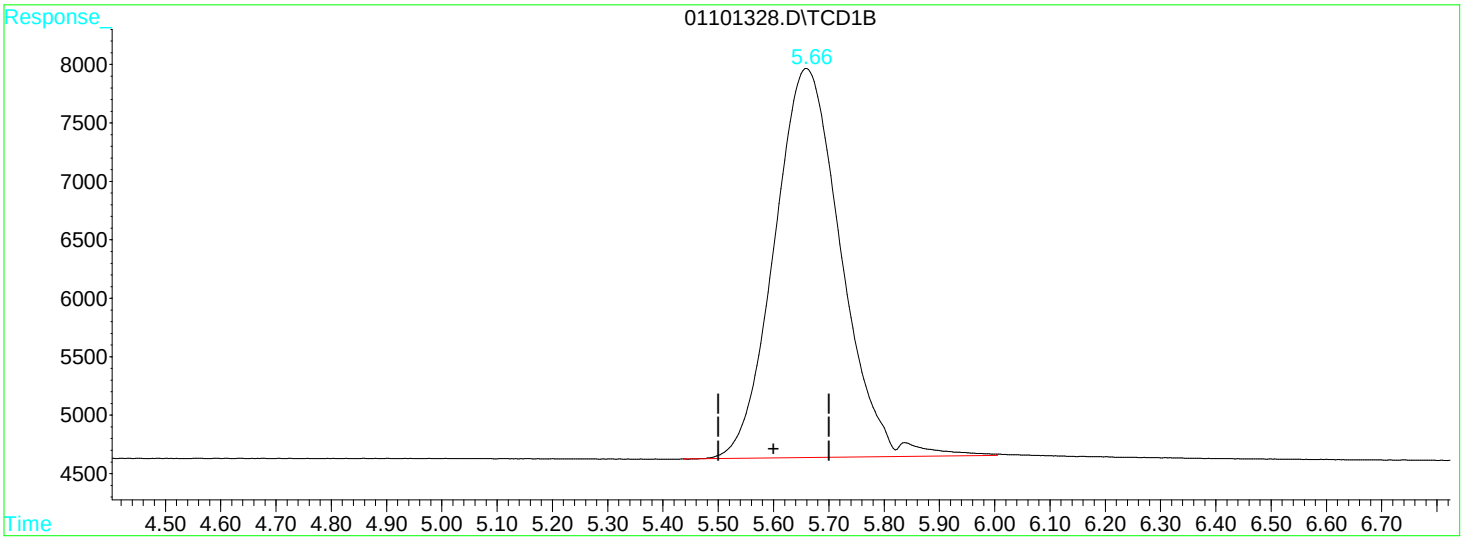
5.66min 1.902% v/v

response 266437

Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\2\DATA\011013\01101328.D          Vial: 1
Acq On    : 10 Jan 2013   6:33 pm                   Operator:
Sample    : CCV-011013 TCD-C                        Inst    : GC/TCD
Misc      :                                         Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Jan 10 18:54 2013  Quant Results File: temp.res

Method       : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title        :
Last Update  : Thu Dec 27 18:13:53 2012
Response via : Multiple Level Calibration
```



(4) Methane

5.66min 1.997% v/v m

response 279676

QEdit

```
Reason for Manual Integration:

Software incorrectly integrated peak.
 -ccr
```

Response Factor Report GC/TCD

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 2012

Calibration Files
1 =12271202.D 2 =12271203.D 3 =12271204.D
4 =12271205.D 5 =12271206.D 6 =12271207.D

	Compound	1	2	3	4	5	6	Avg		%RSD
1)	Oxygen	1.410	1.434	1.387	1.407	1.380	1.419	1.437	E5	5.91
2)	Nitrogen	1.726	1.705	1.684	1.662	1.628	1.708	1.697	E5	2.65
3)	Carbon Monoxide	1.667	1.631	1.610	1.584	1.547	1.614	1.609	E5	2.55
4)	Methane	1.447	1.416	1.401	1.379	1.352	1.409	1.401	E5	2.32
5)	Carbon dioxide	2.098	2.066	2.016	1.985	1.938	2.043	2.024	E5	2.85

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

122712.M Mon Dec 31 12:30:47 2012

Compound List Report GC/TCD

Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 2012
Response via : Initial Calibration
Total Cpnds : 5

PK#	Type	Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1		Oxygen	2.10	1.000	A	A	R
2		Nitrogen	2.30	1.000	A	A	R
3		Carbon Monoxide	2.98	1.000	A	A	R
4		Methane	5.60	1.000	A	A	R
5		Carbon dioxide	9.18	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

122712.M Mon Dec 31 12:30:38 2012

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\122712CA\12271210.D Vial: 10
Acq On : 27 Dec 2012 5:55 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\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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	2.720	-8.8	0	0.04
2	Nitrogen	2.500	2.866	-14.6	0	0.03
3	Carbon Monoxide	2.500	2.697	-7.9	0	0.04
4	Methane	2.000	2.094	-4.7	0	0.04
5	Carbon dioxide	2.500	2.595	-3.8	0	0.05

Evaluate Continuing Calibration Report - Not Founds

Data File : C:\HPCHEM\2\DATA\122712CA\12271210.D Vial: 10
Acq On : 27 Dec 2012 5:55 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\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 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)

(#) = Out of Range SPCC's out = 0 CCC's out = 0
09141202.D 122712.M Mon Dec 31 12:30:21 2012

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\122712CA\12271210.D Vial: 10
Acq On : 27 Dec 2012 5:55 pm Operator:
Sample : ICV STD 1-2 Inst : GC/TCD
Misc : ICV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Dec 27 18:16 2012 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

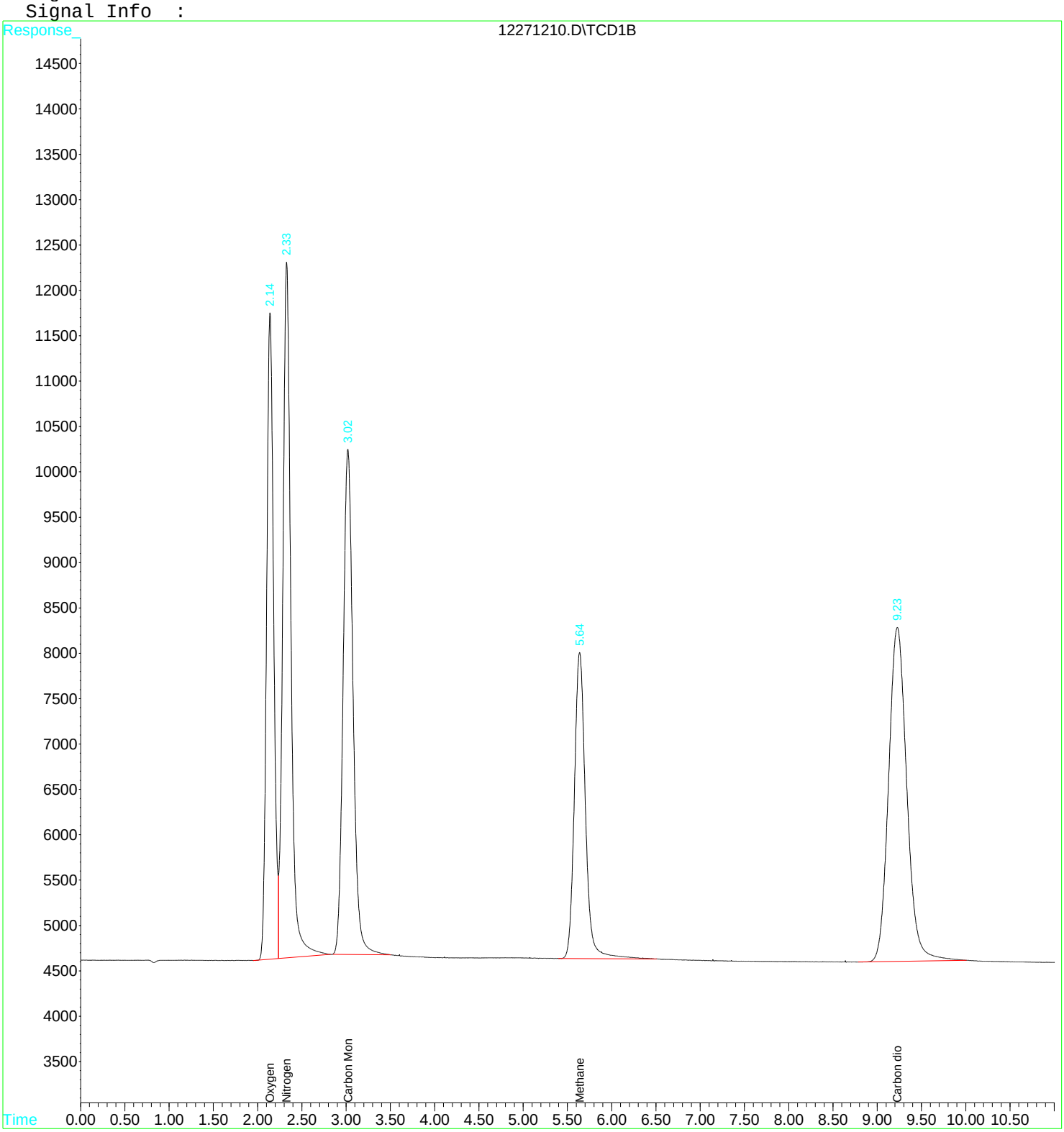
Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.14	391029	2.720 % v/v
2)	Nitrogen	2.33	486424	2.866 % v/v
3)	Carbon Monoxide	3.02	433862	2.697 % v/v
4)	Methane	5.64	293278	2.094 % v/v
5)	Carbon dioxide	9.23	525284	2.595 % v/v

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\122712CA\12271210.D Vial: 10
Acq On : 27 Dec 2012 5:55 pm Operator:
Sample : ICV STD 1-2 Inst : GC/TCD
Misc : ICV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Dec 27 18:16 2012 Quant Results File: 122712.RES

Quant Method : C:\HPCHEM\2\METHODS\122712.M (Chemstation Integrator)
Title :
Last Update : Thu Dec 27 18:13:53 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :