RTI Laboratories, Inc.

Date: *19-Oct.-12*

CLIENT: Shaw Environmental & Infrastructure, Inc.

Project: Kirtland AFB
CO#: 501
Tracking #: 140705-036A
Project No.: 140705
Prime Contract: W912DY-10-D0014
Task Order: 02
Work Order: 1209801

CASE NARRATIVE

SAMPLE RECEIPT:
Samples were received at the RTI Laboratory, Livonia, MI via commercial delivery on 9/19/2012 in good condition. The sample set consisted of 58 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

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 52627:
- Analytical Comments for METHOD EPA_TO15 , SAMPLE 1209801-044A: Cannot run at a lower dilution due to high concentrated non-target analytes

Analytical Sequence ID 52341:
- Sample ID 1209527-012A DUP: The % RPD for n-Hexane (32.8%) is outside the acceptance criteria.

Analytical Sequence ID 52446:
- Sample ID 1209801-017A DUP: The % RPD for m,p-Xylene (26.3%) and Xylenes, total (26.3%) is outside the acceptance criteria due to concentration levels near or below the PQL.

Analytical Sequence ID 52507:
- Sample ID 1209835-035A DUP: The % RPD for Acetone (200%) is outside the acceptance criteria due to concentration levels near or below the PQL.

Analytical Sequence ID 52627:
- Sample ID 1210027-002A DUP: The % RPD for 2-Butanone (200%) is outside the acceptance criteria due to concentration levels near or below the PQL.

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Volatile Organic Compounds Analyses (Cont'd):

All manual integrations were performed to adequately resolve co-eluting compounds and were consistent with laboratory policies and procedures for manual integration. Before and after screen shots of the integrations are enclosed in this data package. Rationale for manual integration is included with the raw data.

Air-Phase Petroleum Hydrocarbons Analyses:

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

Surrogate recoveries were within established control limits.

Fixed Gases (Noncondensable Gases/Light Hydrocarbons) Analyses:

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.

Signed:__ _____for_____Date: October 19, 2012_____
Charles O'Bryan, Director, Quality Management

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RTI Laboratories - Definitions and Acronyms

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

DEFINITIONS:

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

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

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

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

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

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

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

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

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

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

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

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

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

Qual: Qualifier that applies to the analyte reported

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

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

QUALIFIERS:

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

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

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

G: CCB result is greater than the MDL

H: Holding time for preparation or analysis has been exceeded

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

M: Manual Integration used to determine area response

P: Second column RPD exceeds 40%

Q/S: % REC exceeds control limits

R: % RPD exceeds control limits

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

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

1209801

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV101

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

Samples Shipment Date: 13 SEP 2012
Lab Destination: RTI Laboratories
Lab Contact: Mike Truchan
Project Contact: Pamela Moss
Carrier/Waybill No.: UPS/1Z10335E0341883684

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 ☐ Radiological ☐ Unknown

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

1. Relinquished By (Signature/Affiliation) [signature] Date: 9-13-12 Time: 1500
2. Relinquished By (Signature/Affiliation) Date: Time:
3. Relinquished By (Signature/Affiliation) Date: Time:

1. Received By (Signature/Affiliation) [signature] Date: 9-14-12 Time: 10:24
2. Received By (Signature/Affiliation) Date: Time:
3. Received By (Signature/Affiliation) Date: Time:

Comments:

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
									"Hg			
VA1651	SVMW-06-050-GS-VA1651-REG	11 SEP 2012	14:28	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	777	
VA1651	SVMW-06-050-GS-VA1651-REG	11 SEP 2012	14:28	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1668	SVMW-10-050-GS-VA1668-REG	10 SEP 2012	9:56	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	1180	
VA1668	SVMW-10-050-GS-VA1668-REG	10 SEP 2012	9:56	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1669	SVMW-10-100-GS-VA1669-REG	10 SEP 2012	10:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	764	
VA1669	SVMW-10-100-GS-VA1669-REG	10 SEP 2012	10:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1670	SVMW-10-150-GS-VA1670-REG	10 SEP 2012	10:50	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by	-6		N	566	

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV101

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	"Hg Sample Vol	Units	Fil	CID	Condition On Receipt
							MA DEP, VOCs / TPH by TO-15					
VA1670	SVMW-10-150-GS-VA1670-REG	10 SEP 2012	10:50	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1671	SVMW-10-250-GS-VA1671-REG	10 SEP 2012	11:16	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	755	
VA1671	SVMW-10-250-GS-VA1671-REG	10 SEP 2012	11:16	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1677	SVMW-12-150-GS-VA1677-REG	12 SEP 2012	13:55	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	1152	
VA1677	SVMW-12-150-GS-VA1677-REG	12 SEP 2012	13:55	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1678	SVMW-12-250-GS-VA1678-REG	12 SEP 2012	14:29	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	~~1152~~ 530	
VA1678	SVMW-12-250-GS-VA1678-REG	12 SEP 2012	14:29	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1679	SVMW-12-350-GS-VA1679-REG	12 SEP 2012	15:01	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	~~-6~~ -4		N	~~536~~ 729	
VA1679	SVMW-12-350-GS-VA1679-REG	12 SEP 2012	15:01	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1680	SVMW-12-450-GS-VA1680-REG	12 SEP 2012	15:33	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	523	
VA1680	SVMW-12-450-GS-VA1680-REG	12 SEP 2012	15:33	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1681	SVMW-13-150-GS-VA1681-REG	13 SEP 2012	8:50	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	673	
VA1681	SVMW-13-150-GS-VA1681-REG	13 SEP 2012	8:50	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1682	SVMW-13-250-GS-VA1682-REG	13 SEP 2012	9:26	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1682	SVMW-13-250-GS-VA1682-REG	13 SEP 2012	9:26	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	846	
VA1683	SVMW-13-350-GS-VA1683-REG	13 SEP 2012	10:08	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4		N	1176	
VA1683	SVMW-13-350-GS-VA1683-REG	13 SEP 2012	10:08	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1684	SVMW-13-350-GS-VA1684-FD	13 SEP 2012	10:08	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-4		N	1205	
VA1684	SVMW-13-350-GS-VA1684-FD	13 SEP 2012	10:08	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1685	SVMW-13-450-GS-VA1685-REG	13 SEP 2012	10:59	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	775	
VA1685	SVMW-13-450-GS-VA1685-REG	13 SEP 2012	10:59	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1710	SVEW-10-410-GS-VA1710-REG	12 SEP 2012	16:05	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	714	
VA1710	SVEW-10-410-GS-VA1710-REG	12 SEP 2012	16:05	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1711	SVEW-11-410-GS-VA1711-REG	13 SEP 2012	11:48	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	776	
VA1711	SVEW-11-410-GS-VA1711-REG	13 SEP 2012	11:48	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1734	KAFB-106111-025-GS-VA1734-REG	10 SEP 2012	15:24	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	687	
VA1734	KAFB-106111-025-GS-VA1734-REG	10 SEP 2012	15:24	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		

1209801

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV101

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	"Hg Sample Vol	Units	Fil	CID	Condition On Receipt
VA1735	KAFB-106111-050-GS-VA1735-REG	10 SEP 2012	16:03	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	736	
VA1735	KAFB-106111-050-GS-VA1735-REG	10 SEP 2012	16:03	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1736	KAFB-106111-150-GS-VA1736-REG	11 SEP 2012	8:39	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	639	
VA1736	KAFB-106111-150-GS-VA1736-REG	11 SEP 2012	8:39	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1737	KAFB-106111-250-GS-VA1737-REG	11 SEP 2012	9:22	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	660	
VA1737	KAFB-106111-250-GS-VA1737-REG	11 SEP 2012	9:22	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1738	KAFB-106111-350-GS-VA1738-REG	11 SEP 2012	10:08	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1738	KAFB-106111-350-GS-VA1738-REG	11 SEP 2012	10:08	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	668	
VA1739	KAFB-106111-450-GS-VA1739-REG	11 SEP 2012	10:59	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	813	
VA1739	KAFB-106111-450-GS-VA1739-REG	11 SEP 2012	10:59	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1773	KAFB-106117-025-GS-VA1773-REG	12 SEP 2012	8:59	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	828	
VA1773	KAFB-106117-025-GS-VA1773-REG	12 SEP 2012	8:59	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1774	KAFB-106117-050-GS-VA1774-REG	12 SEP 2012	9:34	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	798	
VA1774	KAFB-106117-050-GS-VA1774-REG	12 SEP 2012	9:34	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1775	KAFB-106117-050-GS-VA1775-FD	12 SEP 2012	9:34	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	746	
VA1775	KAFB-106117-050-GS-VA1775-FD	12 SEP 2012	9:34	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1776	KAFB-106117-150-GS-VA1776-REG	12 SEP 2012	10:21	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1776	KAFB-106117-150-GS-VA1776-REG	12 SEP 2012	10:21	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	538	
VA1777	KAFB-106117-250-GS-VA1777-REG	12 SEP 2012	11:09	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	1213	
VA1777	KAFB-106117-250-GS-VA1777-REG	12 SEP 2012	11:09	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1778	KAFB-106117-350-GS-VA1778-REG	12 SEP 2012	11:51	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	1217	
VA1778	KAFB-106117-350-GS-VA1778-REG	12 SEP 2012	11:51	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1779	KAFB-106117-450-GS-VA1779-REG	12 SEP 2012	12:38	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	529	
VA1779	KAFB-106117-450-GS-VA1779-REG	12 SEP 2012	12:38	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1784	KAFB-106118-350-GS-VA1784-REG	10 SEP 2012	9:01	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-10		N	737	
VA1784	KAFB-106118-350-GS-VA1784-REG	10 SEP 2012	9:01	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1785	KAFB-106118-350-GS-VA1785-FD	10 SEP 2012	9:01	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1785	KAFB-106118-350-GS-VA1785-FD	10 SEP 2012	9:01	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	532	

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

1209801

Reference Document No: 140705-SV101

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol (" Hg)	Units	Fil	CID	Condition On Receipt
VA1786	KAFB-106118-450-GS-VA1786-REG	10 SEP 2012	9:46	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	539	
VA1786	KAFB-106118-450-GS-VA1786-REG	10 SEP 2012	9:46	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1787	KAFB-106119-025-GS-VA1787-REG	10 SEP 2012	11:04	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	720	
VA1787	KAFB-106119-025-GS-VA1787-REG	10 SEP 2012	11:04	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1788	KAFB-106119-050-GS-VA1788-REG	10 SEP 2012	11:41	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	613	
VA1788	KAFB-106119-050-GS-VA1788-REG	10 SEP 2012	11:41	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1789	KAFB-106119-150-GS-VA1789-REG	10 SEP 2012	12:19	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	680	
VA1789	KAFB-106119-150-GS-VA1789-REG	10 SEP 2012	12:19	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1790	KAFB-106119-250-GS-VA1790-REG	10 SEP 2012	13:01	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1790	KAFB-106119-250-GS-VA1790-REG	10 SEP 2012	13:01	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	824	
VA1791	KAFB-106119-350-GS-VA1791-REG	10 SEP 2012	13:45	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	712	
VA1791	KAFB-106119-350-GS-VA1791-REG	10 SEP 2012	13:45	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1792	KAFB-106119-450-GS-VA1792-REG	10 SEP 2012	14:32	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	771	
VA1792	KAFB-106119-450-GS-VA1792-REG	10 SEP 2012	14:32	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1813	KAFB-106123-025-GS-VA1813-REG	11 SEP 2012	12:06	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	1160	
VA1813	KAFB-106123-025-GS-VA1813-REG	11 SEP 2012	12:06	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1814	KAFB-106123-050-GS-VA1814-REG	11 SEP 2012	12:48	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	1200	
VA1814	KAFB-106123-050-GS-VA1814-REG	11 SEP 2012	12:48	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1815	KAFB-106123-150-GS-VA1815-REG	11 SEP 2012	13:39	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1815	KAFB-106123-150-GS-VA1815-REG	11 SEP 2012	13:39	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-7		N	794	
VA1816	KAFB-106123-250-GS-VA1816-REG	11 SEP 2012	14:25	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-7		N	738	
VA1816	KAFB-106123-250-GS-VA1816-REG	11 SEP 2012	14:25	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1817	KAFB-106123-350-GS-VA1817-REG	11 SEP 2012	15:03	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	577	
VA1817	KAFB-106123-350-GS-VA1817-REG	11 SEP 2012	15:03	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1818	KAFB-106123-450-GS-VA1818-REG	11 SEP 2012	15:52	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	801	
VA1818	KAFB-106123-450-GS-VA1818-REG	11 SEP 2012	15:52	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1859	KAFB-106130-025-GS-VA1859-REG	10 SEP 2012	13:08	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-7		N	753	
VA1859	KAFB-106130-025-GS-VA1859-REG	10 SEP 2012	13:08	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		

1209801

Shaw™
Shaw E & I, Inc.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-SV101

Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol (" Hg)	Units	Fil	CID	Condition On Receipt
VA1860	KAFB-106130-050-GS-VA1860-REG	10 SEP 2012	13:44	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1860	KAFB-106130-050-GS-VA1860-REG	10 SEP 2012	13:44	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-7		N	1097	
VA1861	KAFB-106130-150-GS-VA1861-REG	10 SEP 2012	14:29	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-7		N	631	
VA1861	KAFB-106130-150-GS-VA1861-REG	10 SEP 2012	14:29	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1862	KAFB-106130-250-GS-VA1862-REG	10 SEP 2012	15:14	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	1198	
VA1862	KAFB-106130-250-GS-VA1862-REG	10 SEP 2012	15:14	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1863	KAFB-106130-350-GS-VA1863-REG	10 SEP 2012	15:57	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	1196	
VA1863	KAFB-106130-350-GS-VA1863-REG	10 SEP 2012	15:57	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1864	KAFB-106130-450-GS-VA1864-REG	11 SEP 2012	8:48	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	781	
VA1864	KAFB-106130-450-GS-VA1864-REG	11 SEP 2012	8:48	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1878	KAFB-106132-450-GS-VA1878-REG	10 SEP 2012	9:08	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1878	KAFB-106132-450-GS-VA1878-REG	10 SEP 2012	9:08	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-5		N	517	
VA1925	KAFB-106140-025-GS-VA1925-REG	11 SEP 2012	9:42	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	716	
VA1925	KAFB-106140-025-GS-VA1925-REG	11 SEP 2012	9:42	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1926	KAFB-106140-050-GS-VA1926-REG	11 SEP 2012	10:31	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	1157	
VA1926	KAFB-106140-050-GS-VA1926-REG	11 SEP 2012	10:31	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1927	KAFB-106140-150-GS-VA1927-REG	11 SEP 2012	11:13	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	765	
VA1927	KAFB-106140-150-GS-VA1927-REG	11 SEP 2012	11:13	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1928	KAFB-106140-250-GS-VA1928-REG	11 SEP 2012	11:52	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	600	
VA1928	KAFB-106140-250-GS-VA1928-REG	11 SEP 2012	11:52	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1929	KAFB-106140-350-GS-VA1929-REG	11 SEP 2012	12:47	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA1929	KAFB-106140-350-GS-VA1929-REG	11 SEP 2012	12:47	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-6		N	559	
VA1930	KAFB-106140-450-GS-VA1930-REG	11 SEP 2012	13:27	1 L BOTTLEVAC	1	None Required	Air Phase Petroleum Hydrocarbons by MA DEP, VOCs / TPH by TO-15	-7		N	844	
VA1930	KAFB-106140-450-GS-VA1930-REG	11 SEP 2012	13:27	1 L Tedlar Bag	1	None Required	Fixed Gases by ASTM D2504			N		
VA8101-TB	FIELDQC-AQ-VA8101-TB-TB	10 SEP 2012	08:00	1 L BOTTLEVAC	1	None Required	VOCs / TPH by TO-15	-26		N	823	

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

20 LBS **1 OF 8**
DWT: 20,14,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4188 3684

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

1209801

REF 1:140705
REF 2:BB010030

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

012

CUSTODY SEAL
DATE 9-13-17
SIGNATURE [illegible]

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

VA1651: 777
VA1668: 1180
VA1669: 764
~~VA1670~~ VA1670: 566
VA1671: 755
VA1859: 753
VA1860: 1097
VA1861: 631
VA1862: 1198
VA1863: 1196
VA1930: 844
VA8101-TB: 823

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

6 LBS **2 OF 8**
DWT: 18,18,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4284 0094

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

1209801

REF 1:140705
REF 2:BB010030

Custody Seal
Intact. AF 9-20-12

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

WS 15.0.16 HP LaserJet 4 30.0A 07/2012

Fold here and place in label pouch

Tedlar
Bags

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

9 LBS **3 OF 8**
DWT: 18,18,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4279 5107

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

1209801

REF 1:140705
REF 2:BB010030

BILLING: P/P

CUSTODY SEAL
DATE: 9-12-14
SIGNATURE: [illegible]

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

tedlar bags -(14)

Va1681 673
Va1682 : 846
Va1683 : 1176
Va1684 : 1205

Va1651	Va1788	Va1860
Va1734	Va1789	Va1861
Va1738	Va1790	Va1863
Va1777	Va1791	Va1864
Va1785	Va1792	Va1878
Va1786	Va1813	Va1927
Va1787	Va1815	

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

20 LBS **4 OF 8**
DWT: 20,14,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4010 4713

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

1209 801

REF 1:140705
REF 2:BB010030

BILLING: P/P

WS 15.0.16 HP Laserjet 4.30.0A 07/2012

CUSTODY SEAL
DATE 9-13-12
SIGNATURE

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

VA1677 : 1152
VA1678 : 530
VA1679 : 729
VA1680 : 523
VA1710 : 714
VA1773 : 828
VA1774 : 798
VA1775 : 746
VA1776 : 538
VA1777 : 1213
VA1778 : 1217
VA1779 : 529

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

20 LBS **5 OF 8**
DWT: 20,14,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4188 4923

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

1209801

REF 1:140705
REF 2:BB010030

BILLING: P/P

WS 15.0.16 HP LaserJet 4 30.0A 07/2012

CUSTODY SEAL
DATE 9-13-12
SIGNATURE DMA

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

Va 1736 : 639
Va 1737 : 660
Va 1738 : 668
Va 1739 : 813
Va 1813 : 1160
Va 1814 : 1200
Va 1815 : 794
Va 1816 : 738
Va 1817 : 577
Va 1818 : 801
Va 1926 : 1157
Va 1927 : 765

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

20 LBS **6 OF 8**
DWT: 20,14,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4061 1737

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

1209801

REF 1:140705
REF 2:BB010030

BILLING: P/P

WS 15.0.16 HP LaserJet 4 3.0A

CUSTODY SEAL
DATE 9-13-17
SIGNATURE

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

6-duds.

VA1685: 775
VA1711: 776
VA1878: 517
VA1925: 716
VA1928: 600
VA1929: 559

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

20 LBS **7 OF 8**
DWT: 20,14,12

MI 482 9-02

UPS GROUND
TRACKING #: 1Z 103 35E 03 4172 1143

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

1209801

REF 1:140705
REF 2:BB010030

BILLING: P/P

07/2012

CUSTODY SEAL
DATE 9-13-17
SIGNATURE

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

300-0

Va1734 : 687
Va1735 : 736
Va1784 : 737
Va1785 : 532
Va1786 : 539
Va1787 : 720
Va1788 : 613
Va1789 : 680
Va1790 : 824
Va1791 : 712
Va1792 : 771
Va 1864 : 781

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:	**1209801**
RCPNo:	**1**	Date and Time Received:	**9/19/2012 12:00:00 PM**	Received by:	**Armando Flores**
Completed By:		Reviewed By:	Kathryn Griffin		
Completed Date:	**9/22/2012 9:47:51 AM**	Reviewed Date:	**9/25/2012 1:53 PM**		

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: **1209801**

Comment: All samples had acceptable "Hg readings upon arrival. CM

Cardboard Box 1 of 8: 1Z10335E0341883684
Cardboard Box 2 of 8: 1Z10335E0342840094
Cardboard Box 3 of 8: 1Z10335E0342795107
Cardboard Box 4 of 8: 1Z10335E0340104713
Cardboard Box 5 of 8: 1Z10335E0341884923
Cardboard Box 6 of 8: 1Z10335E0340611737
Cardboard Box 7 of 8: 1Z10335E0341721143

Client Contacted: Yes ☐ No ☒ NA ☐ Person Contacted:

Contact Mode: Phone ☐ Fax: ☐ Email: ☐ In Person: ☐

Date Contacted: Contacted By:

Regarding:

Client Instructions:

CorrectiveAction:

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By
Cardboard Box 1 of 8	N/A	Good	Yes		9/13/2012 12:00:00 AM	See CoC
Cardboard Box 2 of 8	N/A	Good	Yes		9/13/2012 12:00:00 AM	See CoC
Cardboard Box 3 of 8	N/A	Good	Yes		9/13/2012 12:00:00 AM	See CoC
Cardboard Box 4 of 8	N/A	Good	Yes		9/13/2012 12:00:00 AM	See CoC
Cardboard Box 5 of 8	N/A	Good	Yes		9/13/2012 12:00:00 AM	See CoC
Cardboard Box 6 of 8	N/A	Good	Yes		9/13/2012 12:00:00 AM	See CoC
Cardboard Box 7 of 8	N/A	Good	Yes		9/13/2012 12:00:00 AM	See CoC

SampleID	ContainerID	Type	Vacuum Read (inch Hg)	Orig pH	Adj pH	Req Min pH	Req Max pH
1209801-001A	777	Canister	-6" Hg				
1209801-001B	Container-01 of 01	Canister					
1209801-002A	1180	Canister	-6" Hg				
1209801-002B	Container-01 of 01	Canister					
1209801-003A	764	Canister	-6" Hg				
1209801-003B	Container-01 of 01	Canister					
1209801-004A	566	Canister	-6" Hg				
1209801-004B	Container-01 of 01	Canister					
1209801-005A	755	Canister	-6" Hg				
1209801-005B	Container-01 of 01	Canister					
1209801-006A	1152	Canister	-6" Hg				
1209801-006B	Container-01 of 01	Canister					
1209801-007A	530	Canister	-6" Hg				
1209801-007B	Container-01 of 01	Canister					
1209801-008A	729	Canister	-4" Hg				
1209801-008B	Container-01 of 01	Canister					
1209801-009A	523	Canister	-6" Hg				
1209801-009B	Container-01 of 01	Canister					

1209801-010A	673	Canister	-5" Hg				
1209801-010B	Container-01 of 01	Canister					
1209801-011A	846	Canister	-5" Hg				
1209801-011B	Container-01 of 01	Canister					
1209801-012A	1176	Canister	-4" Hg				
1209801-012B	Container-01 of 01	Canister					
1209801-013A	1205	Canister	-4" Hg				
1209801-013B	Container-01 of 01	Canister					
1209801-014A	775	Canister	-5" Hg				
1209801-014B	Container-01 of 01	Canister					
1209801-015A	714	Canister	-5" Hg				
1209801-015B	Container-01 of 01	Canister					
1209801-016A	776	Canister	-5" Hg				
1209801-016B	Container-01 of 01	Canister					
1209801-017A	687	Canister	-6" Hg				
1209801-017B	Container-01 of 01	Canister					
1209801-018A	736	Canister	-6" Hg				
1209801-018B	Container-01 of 01	Canister					
1209801-019A	639	Canister	-5" Hg				
1209801-019B	Container-01 of 01	Canister					
1209801-020A	660	Canister	-5" Hg				
1209801-020B	Container-01 of 01	Canister					
1209801-021A	668	Canister	-6" Hg				
1209801-021B	Container-01 of 01	Canister					
1209801-022A	813	Canister	-6" Hg				
1209801-022B	Container-01 of 01	Canister					
1209801-023A	828	Canister	-5" Hg				
1209801-023B	Container-01 of 01	Canister					
1209801-024A	798	Canister	-5" Hg				
1209801-024B	Container-01 of 01	Canister					
1209801-025A	746	Canister	-5" Hg				
1209801-025B	Container-01 of 01	Canister					
1209801-026A	538	Canister	-5" Hg				
1209801-026B	Container-01 of 01	Canister					
1209801-027A	1213	Canister	-5" Hg				
1209801-027B	Container-01 of 01	Canister					
1209801-028A	1217	Canister	-6" Hg				
1209801-028B	Container-01 of 01	Canister					
1209801-029A	529	Canister	-6" Hg				
1209801-029B	Container-01 of 01	Canister					
1209801-030A	737	Canister	-10" Hg				
1209801-030B	Container-01 of 01	Canister					
1209801-031A	532	Canister	-6" Hg				
1209801-031B	Container-01 of 01	Canister					
1209801-032A	539	Canister	-6" Hg				
1209801-032B	Container-01 of 01	Canister					
1209801-033A	720	Canister	-6" Hg				
1209801-033B	Container-01 of 01	Canister					
1209801-034A	613	Canister	-6" Hg				

1209801-034B	Container-01 of 01	Canister					
1209801-035A	680	Canister	-6" Hg				
1209801-035B	Container-01 of 01	Canister					
1209801-036A	824	Canister	-6" Hg				
1209801-036B	Container-01 of 01	Canister					
1209801-037A	712	Canister	-6" Hg				
1209801-037B	Container-01 of 01	Canister					
1209801-038A	771	Canister	-6" Hg				
1209801-038B	Container-01 of 01	Canister					
1209801-039A	1160	Canister	-6" Hg				
1209801-039B	Container-01 of 01	Canister					
1209801-040A	1200	Canister	-6" Hg				
1209801-040B	Container-01 of 01	Canister					
1209801-041A	794	Canister	-7" Hg				
1209801-041B	Container-01 of 01	Canister					
1209801-042A	738	Canister	-7" Hg				
1209801-042B	Container-01 of 01	Canister					
1209801-043A	577	Canister	-6" Hg				
1209801-043B	Container-01 of 01	Canister					
1209801-044A	801	Canister	-6" Hg				
1209801-044B	Container-01 of 01	Canister					
1209801-045A	753	Canister	-7" Hg				
1209801-045B	Container-01 of 01	Canister					
1209801-046A	1097	Canister	-7" Hg				
1209801-046B	Container-01 of 01	Canister					
1209801-047A	631	Canister	-7" Hg				
1209801-047B	Container-01 of 01	Canister					
1209801-048A	1198	Canister	-6" Hg				
1209801-048B	Container-01 of 01	Canister					
1209801-049A	1196	Canister	-6" Hg				
1209801-049B	Container-01 of 01	Canister					
1209801-050A	781	Canister	-5" Hg				
1209801-050B	Container-01 of 01	Canister					
1209801-051A	517	Canister	-5" Hg				
1209801-051B	Container-01 of 01	Canister					
1209801-052A	716	Canister	-6" Hg				
1209801-052B	Container-01 of 01	Canister					
1209801-053A	1157	Canister	-6" Hg				
1209801-053B	Container-01 of 01	Canister					
1209801-054A	765	Canister	-6" Hg				
1209801-054B	Container-01 of 01	Canister					
1209801-055A	600	Canister	-6" Hg				
1209801-055B	Container-01 of 01	Canister					
1209801-056A	559	Canister	-6" Hg				
1209801-056B	Container-01 of 01	Canister					
1209801-057A	844	Canister	-7" Hg				
1209801-057B	Container-01 of 01	Canister					
1209801-058A	823	Canister	-26" Hg				

RTI Laboratories - Workorder Sample Summary

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1209801-001A	VA1651		9/11/2012 2:28 PM	9/19/2012 12:00 PM	Air
1209801-001B	VA1651		9/11/2012 2:28 PM	9/19/2012 12:00 PM	Air
1209801-002A	VA1668		9/10/2012 9:56 AM	9/19/2012 12:00 PM	Air
1209801-002B	VA1668		9/10/2012 9:56 AM	9/19/2012 12:00 PM	Air
1209801-003A	VA1669		9/10/2012 10:22 AM	9/19/2012 12:00 PM	Air
1209801-003B	VA1669		9/10/2012 10:22 AM	9/19/2012 12:00 PM	Air
1209801-004A	VA1670		9/10/2012 10:50 AM	9/19/2012 12:00 PM	Air
1209801-004B	VA1670		9/10/2012 10:50 AM	9/19/2012 12:00 PM	Air
1209801-005A	VA1671		9/10/2012 11:16 AM	9/19/2012 12:00 PM	Air
1209801-005B	VA1671		9/10/2012 11:16 AM	9/19/2012 12:00 PM	Air
1209801-006A	VA1677		9/12/2012 1:55 PM	9/19/2012 12:00 PM	Air
1209801-006B	VA1677		9/12/2012 1:55 PM	9/19/2012 12:00 PM	Air
1209801-007A	VA1678		9/12/2012 2:29 PM	9/19/2012 12:00 PM	Air
1209801-007B	VA1678		9/12/2012 2:29 PM	9/19/2012 12:00 PM	Air
1209801-008A	VA1679		9/12/2012 3:01 PM	9/19/2012 12:00 PM	Air
1209801-008B	VA1679		9/12/2012 3:01 PM	9/19/2012 12:00 PM	Air
1209801-009A	VA1680		9/12/2012 3:33 PM	9/19/2012 12:00 PM	Air
1209801-009B	VA1680		9/12/2012 3:33 PM	9/19/2012 12:00 PM	Air
1209801-010A	VA1681		9/13/2012 8:50 AM	9/19/2012 12:00 PM	Air
1209801-010B	VA1681		9/13/2012 8:50 AM	9/19/2012 12:00 PM	Air
1209801-011A	VA1682		9/13/2012 9:26 AM	9/19/2012 12:00 PM	Air
1209801-011B	VA1682		9/13/2012 9:26 AM	9/19/2012 12:00 PM	Air
1209801-012A	VA1683		9/13/2012 10:08 AM	9/19/2012 12:00 PM	Air
1209801-012B	VA1683		9/13/2012 10:08 AM	9/19/2012 12:00 PM	Air
1209801-013A	VA1684		9/13/2012 10:08 AM	9/19/2012 12:00 PM	Air
1209801-013B	VA1684		9/13/2012 10:08 AM	9/19/2012 12:00 PM	Air
1209801-014A	VA1685		9/13/2012 10:59 AM	9/19/2012 12:00 PM	Air
1209801-014B	VA1685		9/13/2012 10:59 AM	9/19/2012 12:00 PM	Air
1209801-015A	VA1710		9/12/2012 4:05 PM	9/19/2012 12:00 PM	Air
1209801-015B	VA1710		9/12/2012 4:05 PM	9/19/2012 12:00 PM	Air
1209801-016A	VA1711		9/13/2012 11:48 AM	9/19/2012 12:00 PM	Air
1209801-016B	VA1711		9/13/2012 11:48 AM	9/19/2012 12:00 PM	Air
1209801-017A	VA1734		9/10/2012 3:24 PM	9/19/2012 12:00 PM	Air
1209801-017B	VA1734		9/10/2012 3:24 PM	9/19/2012 12:00 PM	Air
1209801-018A	VA1735		9/10/2012 4:03 PM	9/19/2012 12:00 PM	Air
1209801-018B	VA1735		9/10/2012 4:03 PM	9/19/2012 12:00 PM	Air
1209801-019A	VA1736		9/11/2012 8:39 AM	9/19/2012 12:00 PM	Air
1209801-019B	VA1736		9/11/2012 8:39 AM	9/19/2012 12:00 PM	Air
1209801-020A	VA1737		9/11/2012 9:22 AM	9/19/2012 12:00 PM	Air
1209801-020B	VA1737		9/11/2012 9:22 AM	9/19/2012 12:00 PM	Air
1209801-021A	VA1738		9/11/2012 10:08 AM	9/19/2012 12:00 PM	Air
1209801-021B	VA1738		9/11/2012 10:08 AM	9/19/2012 12:00 PM	Air
1209801-022A	VA1739		9/11/2012 10:59 AM	9/19/2012 12:00 PM	Air
1209801-022B	VA1739		9/11/2012 10:59 AM	9/19/2012 12:00 PM	Air
1209801-023A	VA1773		9/12/2012 8:59 AM	9/19/2012 12:00 PM	Air

RTI Laboratories - Workorder Sample Summary

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1209801-023B	VA1773		9/12/2012 8:59 AM	9/19/2012 12:00 PM	Air
1209801-024A	VA1774		9/12/2012 9:34 AM	9/19/2012 12:00 PM	Air
1209801-024B	VA1774		9/12/2012 9:34 AM	9/19/2012 12:00 PM	Air
1209801-025A	VA1775		9/12/2012 9:34 AM	9/19/2012 12:00 PM	Air
1209801-025B	VA1775		9/12/2012 9:34 AM	9/19/2012 12:00 PM	Air
1209801-026A	VA1776		9/12/2012 10:21 AM	9/19/2012 12:00 PM	Air
1209801-026B	VA1776		9/12/2012 10:21 AM	9/19/2012 12:00 PM	Air
1209801-027A	VA1777		9/12/2012 11:09 AM	9/19/2012 12:00 PM	Air
1209801-027B	VA1777		9/12/2012 11:09 AM	9/19/2012 12:00 PM	Air
1209801-028A	VA1778		9/12/2012 11:51 AM	9/19/2012 12:00 PM	Air
1209801-028B	VA1778		9/12/2012 11:51 AM	9/19/2012 12:00 PM	Air
1209801-029A	VA1779		9/12/2012 12:38 PM	9/19/2012 12:00 PM	Air
1209801-029B	VA1779		9/12/2012 12:38 PM	9/19/2012 12:00 PM	Air
1209801-030A	VA1784		9/10/2012 9:01 AM	9/19/2012 12:00 PM	Air
1209801-030B	VA1784		9/10/2012 9:01 AM	9/19/2012 12:00 PM	Air
1209801-031A	VA1785		9/10/2012 9:01 AM	9/19/2012 12:00 PM	Air
1209801-031B	VA1785		9/10/2012 9:01 AM	9/19/2012 12:00 PM	Air
1209801-032A	VA1786		9/10/2012 9:46 AM	9/19/2012 12:00 PM	Air
1209801-032B	VA1786		9/10/2012 9:46 AM	9/19/2012 12:00 PM	Air
1209801-033A	VA1787		9/10/2012 11:04 AM	9/19/2012 12:00 PM	Air
1209801-033B	VA1787		9/10/2012 11:04 AM	9/19/2012 12:00 PM	Air
1209801-034A	VA1788		9/10/2012 11:41 AM	9/19/2012 12:00 PM	Air
1209801-034B	VA1788		9/10/2012 11:41 AM	9/19/2012 12:00 PM	Air
1209801-035A	VA1789		9/10/2012 12:19 PM	9/19/2012 12:00 PM	Air
1209801-035B	VA1789		9/10/2012 12:19 PM	9/19/2012 12:00 PM	Air
1209801-036A	VA1790		9/10/2012 1:01 PM	9/19/2012 12:00 PM	Air
1209801-036B	VA1790		9/10/2012 1:01 PM	9/19/2012 12:00 PM	Air
1209801-037A	VA1791		9/10/2012 1:45 PM	9/19/2012 12:00 PM	Air
1209801-037B	VA1791		9/10/2012 1:45 PM	9/19/2012 12:00 PM	Air
1209801-038A	VA1792		9/10/2012 2:32 PM	9/19/2012 12:00 PM	Air
1209801-038B	VA1792		9/10/2012 2:32 PM	9/19/2012 12:00 PM	Air
1209801-039A	VA1813		9/11/2012 12:06 PM	9/19/2012 12:00 PM	Air
1209801-039B	VA1813		9/11/2012 12:06 PM	9/19/2012 12:00 PM	Air
1209801-040A	VA1814		9/11/2012 12:48 PM	9/19/2012 12:00 PM	Air
1209801-040B	VA1814		9/11/2012 12:48 PM	9/19/2012 12:00 PM	Air
1209801-041A	VA1815		9/11/2012 1:39 PM	9/19/2012 12:00 PM	Air
1209801-041B	VA1815		9/11/2012 1:39 PM	9/19/2012 12:00 PM	Air
1209801-042A	VA1816		9/11/2012 2:25 PM	9/19/2012 12:00 PM	Air
1209801-042B	VA1816		9/11/2012 2:25 PM	9/19/2012 12:00 PM	Air
1209801-043A	VA1817		9/11/2012 3:03 PM	9/19/2012 12:00 PM	Air
1209801-043B	VA1817		9/11/2012 3:03 PM	9/19/2012 12:00 PM	Air
1209801-044A	VA1818		9/11/2012 3:52 PM	9/19/2012 12:00 PM	Air
1209801-044B	VA1818		9/11/2012 3:52 PM	9/19/2012 12:00 PM	Air
1209801-045A	VA1859		9/10/2012 1:08 PM	9/19/2012 12:00 PM	Air
1209801-045B	VA1859		9/10/2012 1:08 PM	9/19/2012 12:00 PM	Air

RTI Laboratories - Workorder Sample Summary

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Lab Sample ID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1209801-046A	VA1860		9/10/2012 1:44 PM	9/19/2012 12:00 PM	Air
1209801-046B	VA1860		9/10/2012 1:44 PM	9/19/2012 12:00 PM	Air
1209801-047A	VA1861		9/10/2012 2:29 PM	9/19/2012 12:00 PM	Air
1209801-047B	VA1861		9/10/2012 2:29 PM	9/19/2012 12:00 PM	Air
1209801-048A	VA1862		9/10/2012 3:14 PM	9/19/2012 12:00 PM	Air
1209801-048B	VA1862		9/10/2012 3:14 PM	9/19/2012 12:00 PM	Air
1209801-049A	VA1863		9/10/2012 3:57 PM	9/19/2012 12:00 PM	Air
1209801-049B	VA1863		9/10/2012 3:57 PM	9/19/2012 12:00 PM	Air
1209801-050A	VA1864		9/11/2012 8:48 AM	9/19/2012 12:00 PM	Air
1209801-050B	VA1864		9/11/2012 8:48 AM	9/19/2012 12:00 PM	Air
1209801-051A	VA1878		9/10/2012 9:08 AM	9/19/2012 12:00 PM	Air
1209801-051B	VA1878		9/10/2012 9:08 AM	9/19/2012 12:00 PM	Air
1209801-052A	VA1925		9/11/2012 9:42 AM	9/19/2012 12:00 PM	Air
1209801-052B	VA1925		9/11/2012 9:42 AM	9/19/2012 12:00 PM	Air
1209801-053A	VA1926		9/11/2012 10:31 AM	9/19/2012 12:00 PM	Air
1209801-053B	VA1926		9/11/2012 10:31 AM	9/19/2012 12:00 PM	Air
1209801-054A	VA1927		9/11/2012 11:13 AM	9/19/2012 12:00 PM	Air
1209801-054B	VA1927		9/11/2012 11:13 AM	9/19/2012 12:00 PM	Air
1209801-055A	VA1928		9/11/2012 11:52 AM	9/19/2012 12:00 PM	Air
1209801-055B	VA1928		9/11/2012 11:52 AM	9/19/2012 12:00 PM	Air
1209801-056A	VA1929		9/11/2012 12:47 PM	9/19/2012 12:00 PM	Air
1209801-056B	VA1929		9/11/2012 12:47 PM	9/19/2012 12:00 PM	Air
1209801-057A	VA1930		9/11/2012 1:27 PM	9/19/2012 12:00 PM	Air
1209801-057B	VA1930		9/11/2012 1:27 PM	9/19/2012 12:00 PM	Air
1209801-058A	VA8101-TB		9/10/2012 8:00 AM	9/19/2012 12:00 PM	Air

RTI Laboratories - DATES REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1209801-001A	VA1651	9/11/2012 2:28 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/25/2012 11:41 PM
				EPA_TO15-Volatile Organic Compounds			9/26/2012 2:07 AM
1209801-001B	VA1651	9/11/2012 2:28 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/4/2012 1:34 PM
1209801-002A	VA1668	9/10/2012 9:56 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/26/2012 12:25 AM
				EPA_TO15-Volatile Organic Compounds			9/26/2012 2:49 AM
1209801-002B	VA1668	9/10/2012 9:56 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/4/2012 1:48 PM
1209801-003A	VA1669	9/10/2012 10:22 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/26/2012 2:12 PM
				EPA_TO15-Volatile Organic Compounds			9/26/2012 3:30 AM
1209801-003B	VA1669	9/10/2012 10:22 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/4/2012 2:03 PM
1209801-004A	VA1670	9/10/2012 10:50 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/26/2012 2:35 AM
				EPA_TO15-Volatile Organic Compounds			9/26/2012 4:11 AM
1209801-004B	VA1670	9/10/2012 10:50 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/4/2012 2:20 PM
1209801-005A	VA1671	9/10/2012 11:16 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/26/2012 3:19 AM
				EPA_TO15-Volatile Organic Compounds			9/26/2012 1:34 PM
1209801-005B	VA1671	9/10/2012 11:16 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/4/2012 3:05 PM
1209801-006A	VA1677	9/12/2012 1:55 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/26/2012 4:04 AM
				EPA_TO15-Volatile Organic Compounds			9/26/2012 5:37 AM

RTI Laboratories - DATES REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1209801-006B	VA1677	9/12/2012 1:55 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/4/2012 5:24 PM
1209801-007A	VA1678	9/12/2012 2:29 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/26/2012 4:49 AM
				EPA_TO15-Volatile Organic Compounds			9/26/2012 4:29 PM
1209801-007B	VA1678	9/12/2012 2:29 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/4/2012 3:37 PM
1209801-008A	VA1679	9/12/2012 3:01 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/26/2012 5:38 AM
				EPA_TO15-Volatile Organic Compounds			9/26/2012 2:59 PM
1209801-008B	VA1679	9/12/2012 3:01 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/4/2012 4:30 PM
1209801-009A	VA1680	9/12/2012 3:33 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/26/2012 6:27 AM
				EPA_TO15-Volatile Organic Compounds			9/26/2012 3:40 PM
1209801-009B	VA1680	9/12/2012 3:33 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/4/2012 4:46 PM
1209801-010A	VA1681	9/13/2012 8:50 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/26/2012 3:38 PM
				EPA_TO15-Volatile Organic Compounds			9/26/2012 5:18 PM
1209801-010B	VA1681	9/13/2012 8:50 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/4/2012 5:09 PM
1209801-011A	VA1682	9/13/2012 9:26 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/26/2012 5:08 PM
				EPA_TO15-Volatile Organic Compounds			9/26/2012 5:59 PM
1209801-011B	VA1682	9/13/2012 9:26 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/5/2012 11:11 AM

RTI Laboratories - DATES REPORT

WO#: 1209801

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Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1209801-012A	VA1683	9/13/2012 10:08 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/27/2012 12:30 AM
				EPA_TO15-Volatile Organic Compounds			9/27/2012 1:06 PM
1209801-012B	VA1683	9/13/2012 10:08 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/5/2012 11:27 AM
1209801-013A	VA1684	9/13/2012 10:08 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/27/2012 1:19 AM
				EPA_TO15-Volatile Organic Compounds			9/27/2012 1:48 PM
1209801-013B	VA1684	9/13/2012 10:08 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/5/2012 11:44 AM
1209801-014A	VA1685	9/13/2012 10:59 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/27/2012 2:08 AM
				EPA_TO15-Volatile Organic Compounds			9/26/2012 11:50 PM
1209801-014B	VA1685	9/13/2012 10:59 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/5/2012 12:01 PM
1209801-015A	VA1710	9/12/2012 4:05 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/27/2012 4:41 PM
				EPA_TO15-Volatile Organic Compounds			9/27/2012 12:38 AM
1209801-015B	VA1710	9/12/2012 4:05 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/5/2012 12:18 PM
1209801-016A	VA1711	9/13/2012 11:48 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/27/2012 6:13 PM
				EPA_TO15-Volatile Organic Compounds			9/27/2012 1:26 AM
1209801-016B	VA1711	9/13/2012 11:48 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/5/2012 12:46 PM
1209801-017A	VA1734	9/10/2012 3:24 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/27/2012 3:13 PM
				EPA_TO15-Volatile Organic Compounds			9/27/2012 6:41 PM
				EPA_TO15-Volatile Organic Compounds			9/29/2012 2:54 AM

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Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1209801-017B	VA1734	9/10/2012 3:24 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/5/2012 1:01 PM
1209801-018A	VA1735	9/10/2012 4:03 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/27/2012 3:56 PM
				EPA_TO15-Volatile Organic Compounds			9/27/2012 8:04 PM
				EPA_TO15-Volatile Organic Compounds			9/29/2012 2:06 AM
1209801-018B	VA1735	9/10/2012 4:03 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/5/2012 1:21 PM
1209801-019A	VA1736	9/11/2012 8:39 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/27/2012 2:25 PM
				EPA_TO15-Volatile Organic Compounds			9/27/2012 8:52 PM
1209801-019B	VA1736	9/11/2012 8:39 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/5/2012 1:42 PM
1209801-020A	VA1737	9/11/2012 9:22 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/28/2012 12:56 PM
				EPA_TO15-Volatile Organic Compounds			9/28/2012 1:54 AM
1209801-020B	VA1737	9/11/2012 9:22 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/5/2012 1:57 PM
1209801-021A	VA1738	9/11/2012 10:08 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/27/2012 8:37 PM
				EPA_TO15-Volatile Organic Compounds			9/27/2012 9:40 PM
1209801-021B	VA1738	9/11/2012 10:08 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/5/2012 3:17 PM
1209801-022A	VA1739	9/11/2012 10:59 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/27/2012 9:20 PM
				EPA_TO15-Volatile Organic Compounds			9/27/2012 10:28 PM
				EPA_TO15-Volatile Organic Compounds			9/29/2012 1:18 AM

RTI Laboratories - DATES REPORT

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Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1209801-022B	VA1739	9/11/2012 10:59 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/5/2012 3:32 PM
1209801-023A	VA1773	9/12/2012 8:59 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/28/2012 5:15 PM
				EPA_TO15-Volatile Organic Compounds			9/28/2012 2:36 AM
1209801-023B	VA1773	9/12/2012 8:59 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/5/2012 3:48 PM
1209801-024A	VA1774	9/12/2012 9:34 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/28/2012 2:24 PM
				EPA_TO15-Volatile Organic Compounds			9/29/2012 12:34 AM
1209801-024B	VA1774	9/12/2012 9:34 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/5/2012 4:07 PM
1209801-025A	VA1775	9/12/2012 9:34 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/28/2012 3:07 PM
				EPA_TO15-Volatile Organic Compounds			9/28/2012 11:52 PM
1209801-025B	VA1775	9/12/2012 9:34 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/5/2012 4:23 PM
1209801-026A	VA1776	9/12/2012 10:21 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/29/2012 1:31 AM
				EPA_TO15-Volatile Organic Compounds			9/28/2012 3:17 AM
1209801-026B	VA1776	9/12/2012 10:21 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/5/2012 4:37 PM
1209801-027A	VA1777	9/12/2012 11:09 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/28/2012 3:50 PM
				EPA_TO15-Volatile Organic Compounds			9/28/2012 11:11 PM
1209801-027B	VA1777	9/12/2012 11:09 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/5/2012 4:53 PM

RTI Laboratories - DATES REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1209801-028A	VA1778	9/12/2012 11:51 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/28/2012 4:33 PM
				EPA_TO15-Volatile Organic Compounds			9/28/2012 9:45 PM
1209801-028B	VA1778	9/12/2012 11:51 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/8/2012 12:18 PM
1209801-029A	VA1779	9/12/2012 12:38 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/2/2012 5:03 PM
				EPA_TO15-Volatile Organic Compounds			10/1/2012 5:37 PM
1209801-029B	VA1779	9/12/2012 12:38 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/8/2012 12:40 PM
1209801-030A	VA1784	9/10/2012 9:01 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/2/2012 5:48 PM
				EPA_TO15-Volatile Organic Compounds			10/1/2012 9:04 PM
1209801-030B	VA1784	9/10/2012 9:01 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/8/2012 1:00 PM
1209801-031A	VA1785	9/10/2012 9:01 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/2/2012 6:35 PM
				EPA_TO15-Volatile Organic Compounds			10/1/2012 9:45 PM
1209801-031B	VA1785	9/10/2012 9:01 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/8/2012 1:15 PM
1209801-032A	VA1786	9/10/2012 9:46 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			9/29/2012 4:41 AM
				EPA_TO15-Volatile Organic Compounds			10/1/2012 10:27 PM
1209801-032B	VA1786	9/10/2012 9:46 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/8/2012 1:44 PM
1209801-033A	VA1787	9/10/2012 11:04 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/3/2012 12:42 PM
				EPA_TO15-Volatile Organic Compounds			10/1/2012 11:08 PM

RTI Laboratories - DATES REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1209801-033B	VA1787	9/10/2012 11:04 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/8/2012 2:27 PM
1209801-034A	VA1788	9/10/2012 11:41 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/3/2012 1:27 PM
				EPA_TO15-Volatile Organic Compounds			10/1/2012 11:49 PM
1209801-034B	VA1788	9/10/2012 11:41 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/8/2012 2:43 PM
1209801-035A	VA1789	9/10/2012 12:19 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/2/2012 8:53 PM
				EPA_TO15-Volatile Organic Compounds			9/29/2012 3:39 AM
1209801-035B	VA1789	9/10/2012 12:19 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/8/2012 2:59 PM
1209801-036A	VA1790	9/10/2012 1:01 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/2/2012 10:28 PM
				EPA_TO15-Volatile Organic Compounds			10/2/2012 12:37 AM
1209801-036B	VA1790	9/10/2012 1:01 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/8/2012 3:36 PM
1209801-037A	VA1791	9/10/2012 1:45 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/2/2012 11:13 PM
				EPA_TO15-Volatile Organic Compounds			10/2/2012 1:22 AM
1209801-037B	VA1791	9/10/2012 1:45 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/8/2012 3:53 PM
1209801-038A	VA1792	9/10/2012 2:32 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/3/2012 12:00 AM
				EPA_TO15-Volatile Organic Compounds			10/1/2012 2:39 PM
1209801-038B	VA1792	9/10/2012 2:32 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/9/2012 10:56 AM

RTI Laboratories - DATES REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1209801-039A	VA1813	9/11/2012 12:06 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/3/2012 2:11 PM
				EPA_TO15-Volatile Organic Compounds			10/1/2012 4:12 PM
1209801-039B	VA1813	9/11/2012 12:06 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/9/2012 11:12 AM
1209801-040A	VA1814	9/11/2012 12:48 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/3/2012 3:40 PM
				EPA_TO15-Volatile Organic Compounds			10/2/2012 2:10 AM
1209801-040B	VA1814	9/11/2012 12:48 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/9/2012 11:26 AM
1209801-041A	VA1815	9/11/2012 1:39 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/3/2012 4:26 PM
				EPA_TO15-Volatile Organic Compounds			10/2/2012 2:57 AM
1209801-041B	VA1815	9/11/2012 1:39 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/9/2012 11:41 AM
1209801-042A	VA1816	9/11/2012 2:25 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/4/2012 3:48 AM
				EPA_TO15-Volatile Organic Compounds			10/2/2012 4:58 PM
1209801-042B	VA1816	9/11/2012 2:25 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/9/2012 11:56 AM
1209801-043A	VA1817	9/11/2012 3:03 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/4/2012 4:32 AM
				EPA_TO15-Volatile Organic Compounds			10/2/2012 4:27 AM
1209801-043B	VA1817	9/11/2012 3:03 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/9/2012 12:25 PM
1209801-044A	VA1818	9/11/2012 3:52 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/3/2012 4:07 AM
				EPA_TO15-Volatile Organic Compounds			10/1/2012 6:19 PM

RTI Laboratories - DATES REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1209801-044B	VA1818	9/11/2012 3:52 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/9/2012 12:51 PM
1209801-045A	VA1859	9/10/2012 1:08 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/3/2012 4:53 AM
				EPA_TO15-Volatile Organic Compounds			10/1/2012 7:00 PM
1209801-045B	VA1859	9/10/2012 1:08 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/9/2012 1:06 PM
1209801-046A	VA1860	9/10/2012 1:44 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/3/2012 5:38 AM
				EPA_TO15-Volatile Organic Compounds			10/1/2012 7:41 PM
1209801-046B	VA1860	9/10/2012 1:44 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/9/2012 1:21 PM
1209801-047A	VA1861	9/10/2012 2:29 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/3/2012 6:23 AM
				EPA_TO15-Volatile Organic Compounds			10/1/2012 8:23 PM
1209801-047B	VA1861	9/10/2012 2:29 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/9/2012 1:51 PM
1209801-048A	VA1862	9/10/2012 3:14 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/3/2012 6:44 PM
				EPA_TO15-Volatile Organic Compounds			10/2/2012 6:21 PM
1209801-048B	VA1862	9/10/2012 3:14 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/9/2012 3:02 PM
1209801-049A	VA1863	9/10/2012 3:57 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/3/2012 7:30 PM
				EPA_TO15-Volatile Organic Compounds			10/2/2012 7:02 PM
1209801-049B	VA1863	9/10/2012 3:57 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/9/2012 3:17 PM

RTI Laboratories - DATES REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1209801-050A	VA1864	9/11/2012 8:48 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/3/2012 8:16 PM
				EPA_TO15-Volatile Organic Compounds			10/3/2012 4:03 AM
1209801-050B	VA1864	9/11/2012 8:48 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/9/2012 3:47 PM
1209801-051A	VA1878	9/10/2012 9:08 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/4/2012 12:00 AM
				EPA_TO15-Volatile Organic Compounds			10/3/2012 2:11 PM
1209801-051B	VA1878	9/10/2012 9:08 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/9/2012 4:03 PM
1209801-052A	VA1925	9/11/2012 9:42 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/4/2012 12:46 AM
				EPA_TO15-Volatile Organic Compounds			10/2/2012 9:06 PM
				EPA_TO15-Volatile Organic Compounds			10/3/2012 5:34 AM
1209801-052B	VA1925	9/11/2012 9:42 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/9/2012 4:18 PM
1209801-053A	VA1926	9/11/2012 10:31 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/4/2012 2:18 AM
				EPA_TO15-Volatile Organic Compounds			10/2/2012 9:48 PM
				EPA_TO15-Volatile Organic Compounds			10/3/2012 6:22 AM
1209801-053B	VA1926	9/11/2012 10:31 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/9/2012 4:33 PM
1209801-054A	VA1927	9/11/2012 11:13 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/4/2012 3:04 AM
				EPA_TO15-Volatile Organic Compounds			10/2/2012 10:29 PM
				EPA_TO15-Volatile Organic Compounds			10/3/2012 7:10 AM
1209801-054B	VA1927	9/11/2012 11:13 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/9/2012 4:47 PM

RTI Laboratories - DATES REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
1209801-055A	VA1928	9/11/2012 11:52 AM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/4/2012 5:18 AM
				EPA_TO15-Volatile Organic Compounds			10/2/2012 11:10 PM
				EPA_TO15-Volatile Organic Compounds			10/3/2012 7:58 AM
1209801-055B	VA1928	9/11/2012 11:52 AM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/9/2012 5:02 PM
1209801-056A	VA1929	9/11/2012 12:47 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/4/2012 6:02 AM
				EPA_TO15-Volatile Organic Compounds			10/2/2012 11:52 PM
1209801-056B	VA1929	9/11/2012 12:47 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/9/2012 5:18 PM
1209801-057A	VA1930	9/11/2012 1:27 PM	Air				
				MA_APH-Air-Phase Petroleum Hydrocarbons			10/4/2012 1:32 AM
				EPA_TO15-Volatile Organic Compounds			10/3/2012 12:33 AM
1209801-057B	VA1930	9/11/2012 1:27 PM	Air				
				ASTM-D2504-Noncondensable Gases and Light Hydrocarbons			10/9/2012 5:33 PM
1209801-058A	VA8101-TB	9/10/2012 8:00 AM	Air				
				EPA_TO15-Volatile Organic Compounds			10/2/2012 5:11 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 2:28:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-001	**Matrix:**	Air
Client Sample ID:	VA1651		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	1.9	0.10		% v/v	1	10/4/2012 1:34 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/4/2012 1:34 PM
Methane	ND	0.50	U	% v/v	1	10/4/2012 1:34 PM
Nitrogen	80	0.10		% v/v	1	10/4/2012 1:34 PM
Oxygen	20	0.10		% v/v	1	10/4/2012 1:34 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	9/26/2012 2:07 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	9/26/2012 2:07 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	9/26/2012 2:07 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	9/26/2012 2:07 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	9/26/2012 2:07 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	9/26/2012 2:07 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	9/26/2012 2:07 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	9/26/2012 2:07 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	9/26/2012 2:07 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	9/26/2012 2:07 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	9/26/2012 2:07 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	9/26/2012 2:07 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	9/26/2012 2:07 AM
1,3-Butadiene	ND	800	U	ppbv	800	9/26/2012 2:07 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	9/26/2012 2:07 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	9/26/2012 2:07 AM
2-Butanone	900	800		ppbv	800	9/26/2012 2:07 AM
2-Hexanone	ND	800	U	ppbv	800	9/26/2012 2:07 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Acetone	1,600	800		ppbv	800	9/26/2012 2:07 AM
Benzene	5,500	800		ppbv	800	9/26/2012 2:07 AM
Benzyl chloride	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Bromodichloromethane	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Bromoform	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Bromomethane	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Carbon disulfide	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Carbon tetrachloride	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Chlorobenzene	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Chlorodibromomethane	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Chloroethane	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Chloroform	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Chloromethane	ND	800	U	ppbv	800	9/26/2012 2:07 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	9/26/2012 2:07 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	9/26/2012 2:07 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 2:28:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-001	**Matrix:**	Air
Client Sample ID:	VA1651		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	17,000	1,600		ppbv	800	9/26/2012 2:07 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Ethyl acetate	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Ethylbenzene	1,900	1,600		ppbv	800	9/26/2012 2:07 AM
Heptane	16,000	800		ppbv	800	9/26/2012 2:07 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	9/26/2012 2:07 AM
m,p-Xylene	5,200	1,600		ppbv	800	9/26/2012 2:07 AM
Methylene chloride	ND	4,000	U	ppbv	800	9/26/2012 2:07 AM
n-Hexane	9,000	1,600		ppbv	800	9/26/2012 2:07 AM
Naphthalene	ND	800	U	ppbv	800	9/26/2012 2:07 AM
o-Xylene	1,400	800		ppbv	800	9/26/2012 2:07 AM
Propylene	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Styrene	ND	800	U	ppbv	800	9/26/2012 2:07 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Tetrachloroethene	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Tetrahydrofuran	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Toluene	25,000	800		ppbv	800	9/26/2012 2:07 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	9/26/2012 2:07 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Trichloroethene	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Vinyl acetate	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Vinyl chloride	ND	800	U	ppbv	800	9/26/2012 2:07 AM
Xylenes, Total	6,700	2,400		ppbv	800	9/26/2012 2:07 AM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	800	9/26/2012 2:07 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,500,000	190,000		µg/m³	1600	9/25/2012 11:41 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	9/25/2012 11:41 PM
C9-C12 Aliphatic Hydrocarbons	77,000	300,000	J	µg/m³	1600	9/25/2012 11:41 PM
Surr: 4-Bromofluorobenzene	93.9	70-130		%REC	1600	9/25/2012 11:41 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 9:56:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-002	**Matrix:**	Air
Client Sample ID:	VA1668		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	7.9	0.10		% v/v	1	10/4/2012 1:48 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/4/2012 1:48 PM
Methane	ND	0.50	U	% v/v	1	10/4/2012 1:48 PM
Nitrogen	82	0.10		% v/v	1	10/4/2012 1:48 PM
Oxygen	10	0.10		% v/v	1	10/4/2012 1:48 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
1,1,2,2-Tetrachloroethane	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
1,1,2-Trichloroethane	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
1,1-Dichloroethane	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
1,1-Dichloroethene	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
1,2,4-Trichlorobenzene	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
1,2,4-Trimethylbenzene	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
1,2-Dibromoethane	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
1,2-Dichlorobenzene	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
1,2-Dichloroethane	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
1,2-Dichloropropane	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
1,3,5-Trimethylbenzene	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
1,3-Butadiene	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
1,3-Dichlorobenzene	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
1,4-Dichlorobenzene	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
2-Butanone	140,000	80,000		ppbv	80000	9/26/2012 2:49 AM
2-Hexanone	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
4-Methyl-2-pentanone	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Acetone	710,000	80,000		ppbv	80000	9/26/2012 2:49 AM
Benzene	390,000	80,000		ppbv	80000	9/26/2012 2:49 AM
Benzyl chloride	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Bromodichloromethane	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Bromoform	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Bromomethane	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Carbon disulfide	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Carbon tetrachloride	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Chlorobenzene	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Chlorodibromomethane	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Chloroethane	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Chloroform	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Chloromethane	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
cis-1,2-Dichloroethene	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
cis-1,3-dichloropropene	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 9:56:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-002	**Matrix:**	Air
Client Sample ID:	VA1668		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,000,000	160,000		ppbv	80000	9/26/2012 2:49 AM
Dichlorodifluoromethane	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Ethyl acetate	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Ethylbenzene	ND	160,000	U	ppbv	80000	9/26/2012 2:49 AM
Heptane	1,300,000	80,000		ppbv	80000	9/26/2012 2:49 AM
Hexachlorobutadiene	ND	160,000	U	ppbv	80000	9/26/2012 2:49 AM
m,p-Xylene	ND	160,000	U	ppbv	80000	9/26/2012 2:49 AM
Methylene chloride	ND	400,000	U	ppbv	80000	9/26/2012 2:49 AM
n-Hexane	1,400,000	160,000		ppbv	80000	9/26/2012 2:49 AM
Naphthalene	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
o-Xylene	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Propylene	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Styrene	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
tert-Butyl Methyl Ether	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Tetrachloroethene	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Tetrahydrofuran	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Toluene	660,000	80,000		ppbv	80000	9/26/2012 2:49 AM
trans-1,2-Dichloroethene	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
trans-1,3-dichloropropene	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Trichloroethene	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Trichlorofluoromethane	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Vinyl acetate	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Vinyl chloride	ND	80,000	U	ppbv	80000	9/26/2012 2:49 AM
Xylenes, Total	ND	240,000	U	ppbv	80000	9/26/2012 2:49 AM
Surr: 4-Bromofluorobenzene	98.5	70-130		%REC	80000	9/26/2012 2:49 AM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	130,000,000	19,000,000		µg/m³	160000	9/26/2012 12:25 AM
C9-C10 Aromatic Hydrocarbons	ND	21,000,000	U	µg/m³	160000	9/26/2012 12:25 AM
C9-C12 Aliphatic Hydrocarbons	ND	30,000,000	U	µg/m³	160000	9/26/2012 12:25 AM
Surr: 4-Bromofluorobenzene	93.4	70-130		%REC	160000	9/26/2012 12:25 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 10:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-003	**Matrix:**	Air
Client Sample ID:	VA1669		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	10	0.10		% v/v	1	10/4/2012 2:03 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/4/2012 2:03 PM
Methane	ND	0.50	U	% v/v	1	10/4/2012 2:03 PM
Nitrogen	84	0.10		% v/v	1	10/4/2012 2:03 PM
Oxygen	3.7	0.10		% v/v	1	10/4/2012 2:03 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
1,1,2,2-Tetrachloroethane	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
1,1,2-Trichloroethane	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
1,1-Dichloroethane	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
1,1-Dichloroethene	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
1,2,4-Trichlorobenzene	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
1,2,4-Trimethylbenzene	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
1,2-Dibromoethane	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
1,2-Dichlorobenzene	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
1,2-Dichloroethane	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
1,2-Dichloropropane	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
1,3,5-Trimethylbenzene	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
1,3-Butadiene	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
1,3-Dichlorobenzene	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
1,4-Dichlorobenzene	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
2-Butanone	290,000	80,000		ppbv	80000	9/26/2012 3:30 AM
2-Hexanone	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
4-Methyl-2-pentanone	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Acetone	1,200,000	80,000		ppbv	80000	9/26/2012 3:30 AM
Benzene	460,000	80,000		ppbv	80000	9/26/2012 3:30 AM
Benzyl chloride	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Bromodichloromethane	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Bromoform	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Bromomethane	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Carbon disulfide	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Carbon tetrachloride	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Chlorobenzene	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Chlorodibromomethane	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Chloroethane	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Chloroform	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Chloromethane	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
cis-1,2-Dichloroethene	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
cis-1,3-dichloropropene	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 10:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-003	**Matrix:**	Air
Client Sample ID:	VA1669		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,900,000	160,000		ppbv	80000	9/26/2012 3:30 AM
Dichlorodifluoromethane	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Ethyl acetate	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Ethylbenzene	ND	160,000	U	ppbv	80000	9/26/2012 3:30 AM
Heptane	1,100,000	80,000		ppbv	80000	9/26/2012 3:30 AM
Hexachlorobutadiene	ND	160,000	U	ppbv	80000	9/26/2012 3:30 AM
m,p-Xylene	ND	160,000	U	ppbv	80000	9/26/2012 3:30 AM
Methylene chloride	ND	400,000	U	ppbv	80000	9/26/2012 3:30 AM
n-Hexane	2,000,000	160,000		ppbv	80000	9/26/2012 3:30 AM
Naphthalene	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
o-Xylene	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Propylene	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Styrene	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
tert-Butyl Methyl Ether	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Tetrachloroethene	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Tetrahydrofuran	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Toluene	590,000	80,000		ppbv	80000	9/26/2012 3:30 AM
trans-1,2-Dichloroethene	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
trans-1,3-dichloropropene	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Trichloroethene	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Trichlorofluoromethane	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Vinyl acetate	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Vinyl chloride	ND	80,000	U	ppbv	80000	9/26/2012 3:30 AM
Xylenes, Total	ND	240,000	U	ppbv	80000	9/26/2012 3:30 AM
Surr: 4-Bromofluorobenzene	98.6	70-130		%REC	80000	9/26/2012 3:30 AM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	120,000,000	19,000,000		µg/m³	160000	9/26/2012 2:12 PM
C9-C10 Aromatic Hydrocarbons	ND	21,000,000	U	µg/m³	160000	9/26/2012 2:12 PM
C9-C12 Aliphatic Hydrocarbons	ND	30,000,000	U	µg/m³	160000	9/26/2012 2:12 PM
Surr: 4-Bromofluorobenzene	97.9	70-130		%REC	160000	9/26/2012 2:12 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 10:50:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-004	**Matrix:**	Air
Client Sample ID:	VA1670		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	5.9	0.10		% v/v	1	10/4/2012 2:20 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/4/2012 2:20 PM
Methane	ND	0.50	U	% v/v	1	10/4/2012 2:20 PM
Nitrogen	85	0.10		% v/v	1	10/4/2012 2:20 PM
Oxygen	7.8	0.10		% v/v	1	10/4/2012 2:20 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
1,1,2,2-Tetrachloroethane	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
1,1,2-Trichloroethane	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
1,1-Dichloroethane	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
1,1-Dichloroethene	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
1,2,4-Trichlorobenzene	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
1,2,4-Trimethylbenzene	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
1,2-Dibromoethane	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
1,2-Dichlorobenzene	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
1,2-Dichloroethane	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
1,2-Dichloropropane	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
1,3,5-Trimethylbenzene	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
1,3-Butadiene	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
1,3-Dichlorobenzene	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
1,4-Dichlorobenzene	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
2-Butanone	54,000	40,000		ppbv	40000	9/26/2012 4:11 AM
2-Hexanone	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
4-Methyl-2-pentanone	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Acetone	320,000	40,000		ppbv	40000	9/26/2012 4:11 AM
Benzene	170,000	40,000		ppbv	40000	9/26/2012 4:11 AM
Benzyl chloride	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Bromodichloromethane	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Bromoform	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Bromomethane	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Carbon disulfide	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Carbon tetrachloride	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Chlorobenzene	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Chlorodibromomethane	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Chloroethane	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Chloroform	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Chloromethane	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
cis-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
cis-1,3-dichloropropene	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 10:50:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-004	**Matrix:**	Air
Client Sample ID:	VA1670		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	620,000	80,000		ppbv	40000	9/26/2012 4:11 AM
Dichlorodifluoromethane	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Ethyl acetate	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Ethylbenzene	ND	80,000	U	ppbv	40000	9/26/2012 4:11 AM
Heptane	390,000	40,000		ppbv	40000	9/26/2012 4:11 AM
Hexachlorobutadiene	ND	80,000	U	ppbv	40000	9/26/2012 4:11 AM
m,p-Xylene	ND	80,000	U	ppbv	40000	9/26/2012 4:11 AM
Methylene chloride	ND	200,000	U	ppbv	40000	9/26/2012 4:11 AM
n-Hexane	810,000	80,000		ppbv	40000	9/26/2012 4:11 AM
Naphthalene	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
o-Xylene	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Propylene	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Styrene	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
tert-Butyl Methyl Ether	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Tetrachloroethene	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Tetrahydrofuran	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Toluene	210,000	40,000		ppbv	40000	9/26/2012 4:11 AM
trans-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
trans-1,3-dichloropropene	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Trichloroethene	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Trichlorofluoromethane	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Vinyl acetate	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Vinyl chloride	ND	40,000	U	ppbv	40000	9/26/2012 4:11 AM
Xylenes, Total	ND	120,000	U	ppbv	40000	9/26/2012 4:11 AM
Surr: 4-Bromofluorobenzene	97.8	70-130		%REC	40000	9/26/2012 4:11 AM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	58,000,000	9,400,000		µg/m³	80000	9/26/2012 2:35 AM
C9-C10 Aromatic Hydrocarbons	ND	11,000,000	U	µg/m³	80000	9/26/2012 2:35 AM
C9-C12 Aliphatic Hydrocarbons	ND	15,000,000	U	µg/m³	80000	9/26/2012 2:35 AM
Surr: 4-Bromofluorobenzene	94.1	70-130		%REC	80000	9/26/2012 2:35 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 11:16:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-005	**Matrix:**	Air
Client Sample ID:	VA1671		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	1.3	0.10		% v/v	1	10/4/2012 3:05 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/4/2012 3:05 PM
Methane	ND	0.50	U	% v/v	1	10/4/2012 3:05 PM
Nitrogen	83	0.10		% v/v	1	10/4/2012 3:05 PM
Oxygen	18	0.10		% v/v	1	10/4/2012 3:05 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	9/26/2012 1:34 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	9/26/2012 1:34 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	9/26/2012 1:34 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	9/26/2012 1:34 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	9/26/2012 1:34 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	9/26/2012 1:34 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	9/26/2012 1:34 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	9/26/2012 1:34 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	9/26/2012 1:34 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	9/26/2012 1:34 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	9/26/2012 1:34 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	9/26/2012 1:34 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	9/26/2012 1:34 PM
1,3-Butadiene	ND	800	U	ppbv	800	9/26/2012 1:34 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	9/26/2012 1:34 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	9/26/2012 1:34 PM
2-Butanone	2,600	800		ppbv	800	9/26/2012 1:34 PM
2-Hexanone	ND	800	U	ppbv	800	9/26/2012 1:34 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Acetone	3,800	800		ppbv	800	9/26/2012 1:34 PM
Benzene	9,000	800		ppbv	800	9/26/2012 1:34 PM
Benzyl chloride	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Bromodichloromethane	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Bromoform	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Bromomethane	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Carbon disulfide	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Carbon tetrachloride	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Chlorobenzene	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Chlorodibromomethane	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Chloroethane	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Chloroform	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Chloromethane	ND	800	U	ppbv	800	9/26/2012 1:34 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	9/26/2012 1:34 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	9/26/2012 1:34 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 11:16:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-005	**Matrix:**	Air
Client Sample ID:	VA1671		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	27,000	1,600		ppbv	800	9/26/2012 1:34 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Ethyl acetate	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Ethylbenzene	3,000	1,600		ppbv	800	9/26/2012 1:34 PM
Heptane	23,000	800		ppbv	800	9/26/2012 1:34 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	9/26/2012 1:34 PM
m,p-Xylene	11,000	1,600		ppbv	800	9/26/2012 1:34 PM
Methylene chloride	ND	4,000	U	ppbv	800	9/26/2012 1:34 PM
n-Hexane	24,000	1,600		ppbv	800	9/26/2012 1:34 PM
Naphthalene	ND	800	U	ppbv	800	9/26/2012 1:34 PM
o-Xylene	3,200	800		ppbv	800	9/26/2012 1:34 PM
Propylene	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Styrene	ND	800	U	ppbv	800	9/26/2012 1:34 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Tetrachloroethene	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Tetrahydrofuran	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Toluene	30,000	800		ppbv	800	9/26/2012 1:34 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	9/26/2012 1:34 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Trichloroethene	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Vinyl acetate	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Vinyl chloride	ND	800	U	ppbv	800	9/26/2012 1:34 PM
Xylenes, Total	14,000	2,400		ppbv	800	9/26/2012 1:34 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	800	9/26/2012 1:34 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,200,000	940,000		µg/m³	8000	9/26/2012 3:19 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	9/26/2012 3:19 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	9/26/2012 3:19 AM
Surr: 4-Bromofluorobenzene	94.1	70-130		%REC	8000	9/26/2012 3:19 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 1:55:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-006	**Matrix:**	Air
Client Sample ID:	VA1677		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.14	0.10		% v/v	1	10/4/2012 5:24 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/4/2012 5:24 PM
Methane	ND	0.50	U	% v/v	1	10/4/2012 5:24 PM
Nitrogen	81	0.10		% v/v	1	10/4/2012 5:24 PM
Oxygen	21	0.10		% v/v	1	10/4/2012 5:24 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	9/26/2012 5:37 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	9/26/2012 5:37 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	9/26/2012 5:37 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	9/26/2012 5:37 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	9/26/2012 5:37 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	9/26/2012 5:37 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	9/26/2012 5:37 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	9/26/2012 5:37 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	9/26/2012 5:37 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	9/26/2012 5:37 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	9/26/2012 5:37 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	9/26/2012 5:37 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	9/26/2012 5:37 AM
1,3-Butadiene	ND	800	U	ppbv	800	9/26/2012 5:37 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	9/26/2012 5:37 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	9/26/2012 5:37 AM
2-Butanone	ND	800	U	ppbv	800	9/26/2012 5:37 AM
2-Hexanone	ND	800	U	ppbv	800	9/26/2012 5:37 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Acetone	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Benzene	2,800	800		ppbv	800	9/26/2012 5:37 AM
Benzyl chloride	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Bromodichloromethane	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Bromoform	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Bromomethane	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Carbon disulfide	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Carbon tetrachloride	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Chlorobenzene	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Chlorodibromomethane	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Chloroethane	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Chloroform	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Chloromethane	ND	800	U	ppbv	800	9/26/2012 5:37 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	9/26/2012 5:37 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	9/26/2012 5:37 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 1:55:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-006	**Matrix:**	Air
Client Sample ID:	VA1677		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	6,200	1,600		ppbv	800	9/26/2012 5:37 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Ethyl acetate	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Ethylbenzene	ND	1,600	U	ppbv	800	9/26/2012 5:37 AM
Heptane	6,200	800		ppbv	800	9/26/2012 5:37 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	9/26/2012 5:37 AM
m,p-Xylene	1,100	1,600	J	ppbv	800	9/26/2012 5:37 AM
Methylene chloride	ND	4,000	U	ppbv	800	9/26/2012 5:37 AM
n-Hexane	7,700	1,600		ppbv	800	9/26/2012 5:37 AM
Naphthalene	ND	800	U	ppbv	800	9/26/2012 5:37 AM
o-Xylene	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Propylene	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Styrene	ND	800	U	ppbv	800	9/26/2012 5:37 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Tetrachloroethene	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Tetrahydrofuran	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Toluene	5,200	800		ppbv	800	9/26/2012 5:37 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	9/26/2012 5:37 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Trichloroethene	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Vinyl acetate	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Vinyl chloride	ND	800	U	ppbv	800	9/26/2012 5:37 AM
Xylenes, Total	1,100	2,400	J	ppbv	800	9/26/2012 5:37 AM
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	800	9/26/2012 5:37 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	710,000	94,000		µg/m³	800	9/26/2012 4:04 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	9/26/2012 4:04 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	9/26/2012 4:04 AM
Surr: 4-Bromofluorobenzene	96.2	70-130		%REC	800	9/26/2012 4:04 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 2:29:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-007	**Matrix:**	Air
Client Sample ID:	VA1678		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.15	0.10		% v/v	1	10/4/2012 3:37 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/4/2012 3:37 PM
Methane	ND	0.50	U	% v/v	1	10/4/2012 3:37 PM
Nitrogen	81	0.10		% v/v	1	10/4/2012 3:37 PM
Oxygen	21	0.10		% v/v	1	10/4/2012 3:37 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	9/26/2012 4:29 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	9/26/2012 4:29 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	9/26/2012 4:29 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	9/26/2012 4:29 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	9/26/2012 4:29 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	9/26/2012 4:29 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	9/26/2012 4:29 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	9/26/2012 4:29 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	9/26/2012 4:29 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	9/26/2012 4:29 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	9/26/2012 4:29 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	9/26/2012 4:29 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	9/26/2012 4:29 PM
1,3-Butadiene	ND	400	U	ppbv	400	9/26/2012 4:29 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	9/26/2012 4:29 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	9/26/2012 4:29 PM
2-Butanone	ND	400	U	ppbv	400	9/26/2012 4:29 PM
2-Hexanone	ND	400	U	ppbv	400	9/26/2012 4:29 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Acetone	720	400		ppbv	400	9/26/2012 4:29 PM
Benzene	2,700	400		ppbv	400	9/26/2012 4:29 PM
Benzyl chloride	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Bromodichloromethane	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Bromoform	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Bromomethane	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Carbon disulfide	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Carbon tetrachloride	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Chlorobenzene	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Chlorodibromomethane	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Chloroethane	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Chloroform	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Chloromethane	ND	400	U	ppbv	400	9/26/2012 4:29 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	9/26/2012 4:29 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	9/26/2012 4:29 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 2:29:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-007	**Matrix:**	Air
Client Sample ID:	VA1678		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	4,900	800		ppbv	400	9/26/2012 4:29 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Ethyl acetate	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Ethylbenzene	ND	800	U	ppbv	400	9/26/2012 4:29 PM
Heptane	4,100	400		ppbv	400	9/26/2012 4:29 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	9/26/2012 4:29 PM
m,p-Xylene	950	800		ppbv	400	9/26/2012 4:29 PM
Methylene chloride	ND	2,000	U	ppbv	400	9/26/2012 4:29 PM
n-Hexane	5,400	800		ppbv	400	9/26/2012 4:29 PM
Naphthalene	ND	400	U	ppbv	400	9/26/2012 4:29 PM
o-Xylene	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Propylene	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Styrene	ND	400	U	ppbv	400	9/26/2012 4:29 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Tetrachloroethene	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Tetrahydrofuran	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Toluene	4,100	400		ppbv	400	9/26/2012 4:29 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	9/26/2012 4:29 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Trichloroethene	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Vinyl acetate	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Vinyl chloride	ND	400	U	ppbv	400	9/26/2012 4:29 PM
Xylenes, Total	950	1,200	J	ppbv	400	9/26/2012 4:29 PM
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	400	9/26/2012 4:29 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	500,000	94,000		µg/m³	800	9/26/2012 4:49 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	9/26/2012 4:49 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	9/26/2012 4:49 AM
Surr: 4-Bromofluorobenzene	96.7	70-130		%REC	800	9/26/2012 4:49 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 3:01:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-008	**Matrix:**	Air
Client Sample ID:	VA1679		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.20	0.10		% v/v	1	10/4/2012 4:30 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/4/2012 4:30 PM
Methane	ND	0.50	U	% v/v	1	10/4/2012 4:30 PM
Nitrogen	81	0.10		% v/v	1	10/4/2012 4:30 PM
Oxygen	21	0.10		% v/v	1	10/4/2012 4:30 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	9/26/2012 2:59 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	9/26/2012 2:59 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	9/26/2012 2:59 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	9/26/2012 2:59 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	9/26/2012 2:59 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	9/26/2012 2:59 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	9/26/2012 2:59 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	9/26/2012 2:59 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	9/26/2012 2:59 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	9/26/2012 2:59 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	9/26/2012 2:59 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	9/26/2012 2:59 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	9/26/2012 2:59 PM
1,3-Butadiene	ND	40	U	ppbv	40	9/26/2012 2:59 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	9/26/2012 2:59 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	9/26/2012 2:59 PM
2-Butanone	ND	40	U	ppbv	40	9/26/2012 2:59 PM
2-Hexanone	ND	40	U	ppbv	40	9/26/2012 2:59 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Acetone	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Benzene	590	40		ppbv	40	9/26/2012 2:59 PM
Benzyl chloride	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Bromodichloromethane	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Bromoform	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Bromomethane	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Carbon disulfide	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Carbon tetrachloride	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Chlorobenzene	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Chlorodibromomethane	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Chloroethane	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Chloroform	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Chloromethane	ND	40	U	ppbv	40	9/26/2012 2:59 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	9/26/2012 2:59 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	9/26/2012 2:59 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 3:01:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-008	**Matrix:**	Air
Client Sample ID:	VA1679		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,200	80		ppbv	40	9/26/2012 2:59 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Ethyl acetate	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Ethylbenzene	100	80		ppbv	40	9/26/2012 2:59 PM
Heptane	1,100	40		ppbv	40	9/26/2012 2:59 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	9/26/2012 2:59 PM
m,p-Xylene	360	80		ppbv	40	9/26/2012 2:59 PM
Methylene chloride	ND	200	U	ppbv	40	9/26/2012 2:59 PM
n-Hexane	1,200	80		ppbv	40	9/26/2012 2:59 PM
Naphthalene	ND	40	U	ppbv	40	9/26/2012 2:59 PM
o-Xylene	110	40		ppbv	40	9/26/2012 2:59 PM
Propylene	98	40		ppbv	40	9/26/2012 2:59 PM
Styrene	ND	40	U	ppbv	40	9/26/2012 2:59 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Tetrachloroethene	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Tetrahydrofuran	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Toluene	1,300	40		ppbv	40	9/26/2012 2:59 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	9/26/2012 2:59 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Trichloroethene	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Vinyl acetate	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Vinyl chloride	ND	40	U	ppbv	40	9/26/2012 2:59 PM
Xylenes, Total	470	120		ppbv	40	9/26/2012 2:59 PM
Surr: 4-Bromofluorobenzene	99.1	70-130		%REC	40	9/26/2012 2:59 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	250,000	47,000		µg/m³	400	9/26/2012 5:38 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	9/26/2012 5:38 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	9/26/2012 5:38 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	400	9/26/2012 5:38 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 3:33:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-009	**Matrix:**	Air
Client Sample ID:	VA1680		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.12	0.10		% v/v	1	10/4/2012 4:46 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/4/2012 4:46 PM
Methane	ND	0.50	U	% v/v	1	10/4/2012 4:46 PM
Nitrogen	81	0.10		% v/v	1	10/4/2012 4:46 PM
Oxygen	21	0.10		% v/v	1	10/4/2012 4:46 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	9/26/2012 3:40 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	9/26/2012 3:40 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	9/26/2012 3:40 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	9/26/2012 3:40 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	9/26/2012 3:40 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	9/26/2012 3:40 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	9/26/2012 3:40 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	9/26/2012 3:40 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	9/26/2012 3:40 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	9/26/2012 3:40 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	9/26/2012 3:40 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	9/26/2012 3:40 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	9/26/2012 3:40 PM
1,3-Butadiene	ND	40	U	ppbv	40	9/26/2012 3:40 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	9/26/2012 3:40 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	9/26/2012 3:40 PM
2-Butanone	ND	40	U	ppbv	40	9/26/2012 3:40 PM
2-Hexanone	ND	40	U	ppbv	40	9/26/2012 3:40 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Acetone	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Benzene	580	40		ppbv	40	9/26/2012 3:40 PM
Benzyl chloride	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Bromodichloromethane	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Bromoform	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Bromomethane	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Carbon disulfide	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Carbon tetrachloride	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Chlorobenzene	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Chlorodibromomethane	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Chloroethane	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Chloroform	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Chloromethane	ND	40	U	ppbv	40	9/26/2012 3:40 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	9/26/2012 3:40 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	9/26/2012 3:40 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 3:33:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-009	**Matrix:**	Air
Client Sample ID:	VA1680		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,100	80		ppbv	40	9/26/2012 3:40 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Ethyl acetate	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Ethylbenzene	86	80		ppbv	40	9/26/2012 3:40 PM
Heptane	1,000	40		ppbv	40	9/26/2012 3:40 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	9/26/2012 3:40 PM
m,p-Xylene	290	80		ppbv	40	9/26/2012 3:40 PM
Methylene chloride	ND	200	U	ppbv	40	9/26/2012 3:40 PM
n-Hexane	1,200	80		ppbv	40	9/26/2012 3:40 PM
Naphthalene	ND	40	U	ppbv	40	9/26/2012 3:40 PM
o-Xylene	85	40		ppbv	40	9/26/2012 3:40 PM
Propylene	58	40		ppbv	40	9/26/2012 3:40 PM
Styrene	ND	40	U	ppbv	40	9/26/2012 3:40 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Tetrachloroethene	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Tetrahydrofuran	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Toluene	1,100	40		ppbv	40	9/26/2012 3:40 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	9/26/2012 3:40 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Trichloroethene	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Vinyl acetate	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Vinyl chloride	ND	40	U	ppbv	40	9/26/2012 3:40 PM
Xylenes, Total	380	120		ppbv	40	9/26/2012 3:40 PM
Surr: 4-Bromofluorobenzene	99.3	70-130		%REC	40	9/26/2012 3:40 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	240,000	47,000		µg/m³	400	9/26/2012 6:27 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	9/26/2012 6:27 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	9/26/2012 6:27 AM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	400	9/26/2012 6:27 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/13/2012 8:50:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-010	**Matrix:**	Air
Client Sample ID:	VA1681		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.93	0.10		% v/v	1	10/4/2012 5:09 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/4/2012 5:09 PM
Methane	ND	0.50	U	% v/v	1	10/4/2012 5:09 PM
Nitrogen	84	0.10		% v/v	1	10/4/2012 5:09 PM
Oxygen	18	0.10		% v/v	1	10/4/2012 5:09 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	9/26/2012 5:18 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	9/26/2012 5:18 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	9/26/2012 5:18 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	9/26/2012 5:18 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	9/26/2012 5:18 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	9/26/2012 5:18 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	9/26/2012 5:18 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	9/26/2012 5:18 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	9/26/2012 5:18 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	9/26/2012 5:18 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	9/26/2012 5:18 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	9/26/2012 5:18 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	9/26/2012 5:18 PM
1,3-Butadiene	ND	800	U	ppbv	800	9/26/2012 5:18 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	9/26/2012 5:18 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	9/26/2012 5:18 PM
2-Butanone	ND	800	U	ppbv	800	9/26/2012 5:18 PM
2-Hexanone	ND	800	U	ppbv	800	9/26/2012 5:18 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Acetone	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Benzene	5,600	800		ppbv	800	9/26/2012 5:18 PM
Benzyl chloride	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Bromodichloromethane	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Bromoform	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Bromomethane	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Carbon disulfide	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Carbon tetrachloride	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Chlorobenzene	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Chlorodibromomethane	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Chloroethane	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Chloroform	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Chloromethane	ND	800	U	ppbv	800	9/26/2012 5:18 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	9/26/2012 5:18 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	9/26/2012 5:18 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/13/2012 8:50:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-010	**Matrix:**	Air
Client Sample ID:	VA1681		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	34,000	1,600		ppbv	800	9/26/2012 5:18 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Ethyl acetate	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Ethylbenzene	ND	1,600	U	ppbv	800	9/26/2012 5:18 PM
Heptane	12,000	800		ppbv	800	9/26/2012 5:18 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	9/26/2012 5:18 PM
m,p-Xylene	ND	1,600	U	ppbv	800	9/26/2012 5:18 PM
Methylene chloride	ND	4,000	U	ppbv	800	9/26/2012 5:18 PM
n-Hexane	19,000	1,600		ppbv	800	9/26/2012 5:18 PM
Naphthalene	ND	800	U	ppbv	800	9/26/2012 5:18 PM
o-Xylene	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Propylene	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Styrene	ND	800	U	ppbv	800	9/26/2012 5:18 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Tetrachloroethene	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Tetrahydrofuran	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Toluene	7,400	800		ppbv	800	9/26/2012 5:18 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	9/26/2012 5:18 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Trichloroethene	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Vinyl acetate	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Vinyl chloride	ND	800	U	ppbv	800	9/26/2012 5:18 PM
Xylenes, Total	ND	2,400	U	ppbv	800	9/26/2012 5:18 PM
Surr: 4-Bromofluorobenzene	99.0	70-130		%REC	800	9/26/2012 5:18 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,200,000	940,000		µg/m³	8000	9/26/2012 3:38 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	9/26/2012 3:38 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	9/26/2012 3:38 PM
Surr: 4-Bromofluorobenzene	96.5	70-130		%REC	8000	9/26/2012 3:38 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/13/2012 9:26:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-011	**Matrix:**	Air
Client Sample ID:	VA1682		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.49	0.10		% v/v	1	10/5/2012 11:11 AM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/5/2012 11:11 AM
Methane	ND	0.50	U	% v/v	1	10/5/2012 11:11 AM
Nitrogen	80	0.10		% v/v	1	10/5/2012 11:11 AM
Oxygen	20	0.10		% v/v	1	10/5/2012 11:11 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	9/26/2012 5:59 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	9/26/2012 5:59 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	9/26/2012 5:59 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	9/26/2012 5:59 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	9/26/2012 5:59 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	9/26/2012 5:59 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	9/26/2012 5:59 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	9/26/2012 5:59 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	9/26/2012 5:59 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	9/26/2012 5:59 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	9/26/2012 5:59 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	9/26/2012 5:59 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	9/26/2012 5:59 PM
1,3-Butadiene	ND	40	U	ppbv	40	9/26/2012 5:59 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	9/26/2012 5:59 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	9/26/2012 5:59 PM
2-Butanone	ND	40	U	ppbv	40	9/26/2012 5:59 PM
2-Hexanone	ND	40	U	ppbv	40	9/26/2012 5:59 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Acetone	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Benzene	230	40		ppbv	40	9/26/2012 5:59 PM
Benzyl chloride	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Bromodichloromethane	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Bromoform	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Bromomethane	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Carbon disulfide	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Carbon tetrachloride	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Chlorobenzene	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Chlorodibromomethane	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Chloroethane	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Chloroform	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Chloromethane	ND	40	U	ppbv	40	9/26/2012 5:59 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	9/26/2012 5:59 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	9/26/2012 5:59 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/13/2012 9:26:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-011	**Matrix:**	Air
Client Sample ID:	VA1682		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	450	80		ppbv	40	9/26/2012 5:59 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Ethyl acetate	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Ethylbenzene	ND	80	U	ppbv	40	9/26/2012 5:59 PM
Heptane	440	40		ppbv	40	9/26/2012 5:59 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	9/26/2012 5:59 PM
m,p-Xylene	100	80		ppbv	40	9/26/2012 5:59 PM
Methylene chloride	ND	200	U	ppbv	40	9/26/2012 5:59 PM
n-Hexane	430	80		ppbv	40	9/26/2012 5:59 PM
Naphthalene	ND	40	U	ppbv	40	9/26/2012 5:59 PM
o-Xylene	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Propylene	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Styrene	ND	40	U	ppbv	40	9/26/2012 5:59 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Tetrachloroethene	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Tetrahydrofuran	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Toluene	560	40		ppbv	40	9/26/2012 5:59 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	9/26/2012 5:59 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Trichloroethene	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Vinyl acetate	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Vinyl chloride	ND	40	U	ppbv	40	9/26/2012 5:59 PM
Xylenes, Total	100	120	J	ppbv	40	9/26/2012 5:59 PM
Surr: 4-Bromofluorobenzene	98.4	70-130		%REC	40	9/26/2012 5:59 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	33,000	4,700		µg/m³	40	9/26/2012 5:08 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	9/26/2012 5:08 PM
C9-C12 Aliphatic Hydrocarbons	2,100	7,600	J	µg/m³	40	9/26/2012 5:08 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	40	9/26/2012 5:08 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/13/2012 10:08:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-012	**Matrix:**	Air
Client Sample ID:	VA1683		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.65	0.10		% v/v	1	10/5/2012 11:27 AM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/5/2012 11:27 AM
Methane	ND	0.50	U	% v/v	1	10/5/2012 11:27 AM
Nitrogen	79	0.10		% v/v	1	10/5/2012 11:27 AM
Oxygen	20	0.10		% v/v	1	10/5/2012 11:27 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	9/27/2012 1:06 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	9/27/2012 1:06 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	9/27/2012 1:06 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	9/27/2012 1:06 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	9/27/2012 1:06 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	9/27/2012 1:06 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	9/27/2012 1:06 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	9/27/2012 1:06 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	9/27/2012 1:06 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	9/27/2012 1:06 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	9/27/2012 1:06 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	9/27/2012 1:06 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	9/27/2012 1:06 PM
1,3-Butadiene	ND	40	U	ppbv	40	9/27/2012 1:06 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	9/27/2012 1:06 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	9/27/2012 1:06 PM
2-Butanone	ND	40	U	ppbv	40	9/27/2012 1:06 PM
2-Hexanone	ND	40	U	ppbv	40	9/27/2012 1:06 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Acetone	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Benzene	200	40		ppbv	40	9/27/2012 1:06 PM
Benzyl chloride	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Bromodichloromethane	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Bromoform	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Bromomethane	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Carbon disulfide	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Carbon tetrachloride	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Chlorobenzene	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Chlorodibromomethane	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Chloroethane	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Chloroform	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Chloromethane	ND	40	U	ppbv	40	9/27/2012 1:06 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	9/27/2012 1:06 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	9/27/2012 1:06 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/13/2012 10:08:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-012	**Matrix:**	Air
Client Sample ID:	VA1683		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	330	80		ppbv	40	9/27/2012 1:06 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Ethyl acetate	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Ethylbenzene	ND	80	U	ppbv	40	9/27/2012 1:06 PM
Heptane	330	40		ppbv	40	9/27/2012 1:06 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	9/27/2012 1:06 PM
m,p-Xylene	93	80		ppbv	40	9/27/2012 1:06 PM
Methylene chloride	ND	200	U	ppbv	40	9/27/2012 1:06 PM
n-Hexane	330	80		ppbv	40	9/27/2012 1:06 PM
Naphthalene	ND	40	U	ppbv	40	9/27/2012 1:06 PM
o-Xylene	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Propylene	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Styrene	ND	40	U	ppbv	40	9/27/2012 1:06 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Tetrachloroethene	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Tetrahydrofuran	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Toluene	450	40		ppbv	40	9/27/2012 1:06 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	9/27/2012 1:06 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Trichloroethene	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Vinyl acetate	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Vinyl chloride	ND	40	U	ppbv	40	9/27/2012 1:06 PM
Xylenes, Total	93	120	J	ppbv	40	9/27/2012 1:06 PM
Surr: 4-Bromofluorobenzene	97.0	70-130		%REC	40	9/27/2012 1:06 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	140,000	47,000		µg/m³	400	9/27/2012 12:30 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	9/27/2012 12:30 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	9/27/2012 12:30 AM
Surr: 4-Bromofluorobenzene	99.0	70-130		%REC	400	9/27/2012 12:30 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/13/2012 10:08:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-013	**Matrix:**	Air
Client Sample ID:	VA1684		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.46	0.10		% v/v	1	10/5/2012 11:44 AM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/5/2012 11:44 AM
Methane	ND	0.50	U	% v/v	1	10/5/2012 11:44 AM
Nitrogen	79	0.10		% v/v	1	10/5/2012 11:44 AM
Oxygen	20	0.10		% v/v	1	10/5/2012 11:44 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	9/27/2012 1:48 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	9/27/2012 1:48 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	9/27/2012 1:48 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	9/27/2012 1:48 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	9/27/2012 1:48 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	9/27/2012 1:48 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	9/27/2012 1:48 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	9/27/2012 1:48 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	9/27/2012 1:48 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	9/27/2012 1:48 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	9/27/2012 1:48 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	9/27/2012 1:48 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	9/27/2012 1:48 PM
1,3-Butadiene	ND	40	U	ppbv	40	9/27/2012 1:48 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	9/27/2012 1:48 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	9/27/2012 1:48 PM
2-Butanone	ND	40	U	ppbv	40	9/27/2012 1:48 PM
2-Hexanone	ND	40	U	ppbv	40	9/27/2012 1:48 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Acetone	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Benzene	240	40		ppbv	40	9/27/2012 1:48 PM
Benzyl chloride	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Bromodichloromethane	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Bromoform	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Bromomethane	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Carbon disulfide	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Carbon tetrachloride	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Chlorobenzene	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Chlorodibromomethane	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Chloroethane	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Chloroform	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Chloromethane	ND	40	U	ppbv	40	9/27/2012 1:48 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	9/27/2012 1:48 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	9/27/2012 1:48 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/13/2012 10:08:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-013	**Matrix:**	Air
Client Sample ID:	VA1684		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	500	80		ppbv	40	9/27/2012 1:48 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Ethyl acetate	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Ethylbenzene	ND	80	U	ppbv	40	9/27/2012 1:48 PM
Heptane	440	40		ppbv	40	9/27/2012 1:48 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	9/27/2012 1:48 PM
m,p-Xylene	110	80		ppbv	40	9/27/2012 1:48 PM
Methylene chloride	ND	200	U	ppbv	40	9/27/2012 1:48 PM
n-Hexane	500	80		ppbv	40	9/27/2012 1:48 PM
Naphthalene	ND	40	U	ppbv	40	9/27/2012 1:48 PM
o-Xylene	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Propylene	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Styrene	ND	40	U	ppbv	40	9/27/2012 1:48 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Tetrachloroethene	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Tetrahydrofuran	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Toluene	550	40		ppbv	40	9/27/2012 1:48 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	9/27/2012 1:48 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Trichloroethene	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Vinyl acetate	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Vinyl chloride	ND	40	U	ppbv	40	9/27/2012 1:48 PM
Xylenes, Total	110	120	J	ppbv	40	9/27/2012 1:48 PM
Surr: 4-Bromofluorobenzene	97.0	70-130		%REC	40	9/27/2012 1:48 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	120,000	47,000		µg/m³	400	9/27/2012 1:19 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	9/27/2012 1:19 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	9/27/2012 1:19 AM
Surr: 4-Bromofluorobenzene	99.7	70-130		%REC	400	9/27/2012 1:19 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/13/2012 10:59:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-014	**Matrix:**	Air
Client Sample ID:	VA1685		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.51	0.10		% v/v	1	10/5/2012 12:01 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/5/2012 12:01 PM
Methane	ND	0.50	U	% v/v	1	10/5/2012 12:01 PM
Nitrogen	80	0.10		% v/v	1	10/5/2012 12:01 PM
Oxygen	19	0.10		% v/v	1	10/5/2012 12:01 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	9/26/2012 11:50 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	9/26/2012 11:50 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	9/26/2012 11:50 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	9/26/2012 11:50 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	9/26/2012 11:50 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	9/26/2012 11:50 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	9/26/2012 11:50 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	9/26/2012 11:50 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	9/26/2012 11:50 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	9/26/2012 11:50 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	9/26/2012 11:50 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	9/26/2012 11:50 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	9/26/2012 11:50 PM
1,3-Butadiene	ND	400	U	ppbv	400	9/26/2012 11:50 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	9/26/2012 11:50 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	9/26/2012 11:50 PM
2-Butanone	ND	400	U	ppbv	400	9/26/2012 11:50 PM
2-Hexanone	ND	400	U	ppbv	400	9/26/2012 11:50 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Acetone	640	400		ppbv	400	9/26/2012 11:50 PM
Benzene	5,500	400		ppbv	400	9/26/2012 11:50 PM
Benzyl chloride	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Bromodichloromethane	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Bromoform	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Bromomethane	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Carbon disulfide	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Carbon tetrachloride	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Chlorobenzene	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Chlorodibromomethane	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Chloroethane	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Chloroform	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Chloromethane	ND	400	U	ppbv	400	9/26/2012 11:50 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	9/26/2012 11:50 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	9/26/2012 11:50 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/13/2012 10:59:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-014	**Matrix:**	Air
Client Sample ID:	VA1685		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	2,700	800		ppbv	400	9/26/2012 11:50 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Ethyl acetate	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Ethylbenzene	ND	800	U	ppbv	400	9/26/2012 11:50 PM
Heptane	1,000	400		ppbv	400	9/26/2012 11:50 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	9/26/2012 11:50 PM
m,p-Xylene	ND	800	U	ppbv	400	9/26/2012 11:50 PM
Methylene chloride	980	2,000	J	ppbv	400	9/26/2012 11:50 PM
n-Hexane	2,100	800		ppbv	400	9/26/2012 11:50 PM
Naphthalene	ND	400	U	ppbv	400	9/26/2012 11:50 PM
o-Xylene	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Propylene	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Styrene	ND	400	U	ppbv	400	9/26/2012 11:50 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Tetrachloroethene	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Tetrahydrofuran	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Toluene	1,600	400		ppbv	400	9/26/2012 11:50 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	9/26/2012 11:50 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Trichloroethene	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Vinyl acetate	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Vinyl chloride	ND	400	U	ppbv	400	9/26/2012 11:50 PM
Xylenes, Total	ND	1,200	U	ppbv	400	9/26/2012 11:50 PM
Surr: 4-Bromofluorobenzene	95.9	70-130		%REC	400	9/26/2012 11:50 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	290,000	47,000		µg/m³	400	9/27/2012 2:08 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	9/27/2012 2:08 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	9/27/2012 2:08 AM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	400	9/27/2012 2:08 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 4:05:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-015	**Matrix:**	Air
Client Sample ID:	VA1710		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.15	0.10		% v/v	1	10/5/2012 12:18 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/5/2012 12:18 PM
Methane	ND	0.50	U	% v/v	1	10/5/2012 12:18 PM
Nitrogen	79	0.10		% v/v	1	10/5/2012 12:18 PM
Oxygen	21	0.10		% v/v	1	10/5/2012 12:18 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	9/27/2012 12:38 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	9/27/2012 12:38 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	9/27/2012 12:38 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	9/27/2012 12:38 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	9/27/2012 12:38 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	9/27/2012 12:38 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	9/27/2012 12:38 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	9/27/2012 12:38 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	9/27/2012 12:38 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	9/27/2012 12:38 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	9/27/2012 12:38 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	9/27/2012 12:38 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	9/27/2012 12:38 AM
1,3-Butadiene	ND	400	U	ppbv	400	9/27/2012 12:38 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	9/27/2012 12:38 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	9/27/2012 12:38 AM
2-Butanone	ND	400	U	ppbv	400	9/27/2012 12:38 AM
2-Hexanone	ND	400	U	ppbv	400	9/27/2012 12:38 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Acetone	1,500	400		ppbv	400	9/27/2012 12:38 AM
Benzene	1,600	400		ppbv	400	9/27/2012 12:38 AM
Benzyl chloride	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Bromodichloromethane	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Bromoform	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Bromomethane	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Carbon disulfide	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Carbon tetrachloride	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Chlorobenzene	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Chlorodibromomethane	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Chloroethane	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Chloroform	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Chloromethane	ND	400	U	ppbv	400	9/27/2012 12:38 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	9/27/2012 12:38 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	9/27/2012 12:38 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 4:05:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-015	**Matrix:**	Air
Client Sample ID:	VA1710		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	5,100	800		ppbv	400	9/27/2012 12:38 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Ethyl acetate	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Ethylbenzene	ND	800	U	ppbv	400	9/27/2012 12:38 AM
Heptane	2,000	400		ppbv	400	9/27/2012 12:38 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	9/27/2012 12:38 AM
m,p-Xylene	520	800	J	ppbv	400	9/27/2012 12:38 AM
Methylene chloride	1,500	2,000	J	ppbv	400	9/27/2012 12:38 AM
n-Hexane	5,700	800		ppbv	400	9/27/2012 12:38 AM
Naphthalene	ND	400	U	ppbv	400	9/27/2012 12:38 AM
o-Xylene	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Propylene	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Styrene	ND	400	U	ppbv	400	9/27/2012 12:38 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Tetrachloroethene	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Tetrahydrofuran	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Toluene	3,500	400		ppbv	400	9/27/2012 12:38 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	9/27/2012 12:38 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Trichloroethene	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Vinyl acetate	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Vinyl chloride	ND	400	U	ppbv	400	9/27/2012 12:38 AM
Xylenes, Total	520	1,200	J	ppbv	400	9/27/2012 12:38 AM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	400	9/27/2012 12:38 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	820,000	94,000		µg/m³	800	9/27/2012 4:41 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	9/27/2012 4:41 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	9/27/2012 4:41 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	800	9/27/2012 4:41 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/13/2012 11:48:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-016	**Matrix:**	Air
Client Sample ID:	VA1711		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.47	0.10		% v/v	1	10/5/2012 12:46 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/5/2012 12:46 PM
Methane	ND	0.50	U	% v/v	1	10/5/2012 12:46 PM
Nitrogen	81	0.10		% v/v	1	10/5/2012 12:46 PM
Oxygen	19	0.10		% v/v	1	10/5/2012 12:46 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	9/27/2012 1:26 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	9/27/2012 1:26 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	9/27/2012 1:26 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	9/27/2012 1:26 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	9/27/2012 1:26 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	9/27/2012 1:26 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	9/27/2012 1:26 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	9/27/2012 1:26 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	9/27/2012 1:26 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	9/27/2012 1:26 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	9/27/2012 1:26 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	9/27/2012 1:26 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	9/27/2012 1:26 AM
1,3-Butadiene	ND	400	U	ppbv	400	9/27/2012 1:26 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	9/27/2012 1:26 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	9/27/2012 1:26 AM
2-Butanone	ND	400	U	ppbv	400	9/27/2012 1:26 AM
2-Hexanone	ND	400	U	ppbv	400	9/27/2012 1:26 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Acetone	910	400		ppbv	400	9/27/2012 1:26 AM
Benzene	1,200	400		ppbv	400	9/27/2012 1:26 AM
Benzyl chloride	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Bromodichloromethane	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Bromoform	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Bromomethane	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Carbon disulfide	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Carbon tetrachloride	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Chlorobenzene	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Chlorodibromomethane	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Chloroethane	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Chloroform	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Chloromethane	ND	400	U	ppbv	400	9/27/2012 1:26 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	9/27/2012 1:26 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	9/27/2012 1:26 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/13/2012 11:48:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-016	**Matrix:**	Air
Client Sample ID:	VA1711		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	11,000	800		ppbv	400	9/27/2012 1:26 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Ethyl acetate	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Ethylbenzene	ND	800	U	ppbv	400	9/27/2012 1:26 AM
Heptane	4,800	400		ppbv	400	9/27/2012 1:26 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	9/27/2012 1:26 AM
m,p-Xylene	ND	800	U	ppbv	400	9/27/2012 1:26 AM
Methylene chloride	1,400	2,000	J	ppbv	400	9/27/2012 1:26 AM
n-Hexane	9,500	800		ppbv	400	9/27/2012 1:26 AM
Naphthalene	ND	400	U	ppbv	400	9/27/2012 1:26 AM
o-Xylene	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Propylene	420	400		ppbv	400	9/27/2012 1:26 AM
Styrene	ND	400	U	ppbv	400	9/27/2012 1:26 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Tetrachloroethene	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Tetrahydrofuran	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Toluene	2,700	400		ppbv	400	9/27/2012 1:26 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	9/27/2012 1:26 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Trichloroethene	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Vinyl acetate	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Vinyl chloride	ND	400	U	ppbv	400	9/27/2012 1:26 AM
Xylenes, Total	ND	1,200	U	ppbv	400	9/27/2012 1:26 AM
Surr: 4-Bromofluorobenzene	96.3	70-130		%REC	400	9/27/2012 1:26 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	770,000	94,000		µg/m³	800	9/27/2012 6:13 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	9/27/2012 6:13 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	9/27/2012 6:13 PM
Surr: 4-Bromofluorobenzene	98.2	70-130		%REC	800	9/27/2012 6:13 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 3:24:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-017	**Matrix:**	Air
Client Sample ID:	VA1734		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.56	0.10		% v/v	1	10/5/2012 1:01 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/5/2012 1:01 PM
Methane	ND	0.50	U	% v/v	1	10/5/2012 1:01 PM
Nitrogen	78	0.10		% v/v	1	10/5/2012 1:01 PM
Oxygen	21	0.10		% v/v	1	10/5/2012 1:01 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	9/27/2012 6:41 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	9/27/2012 6:41 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	9/27/2012 6:41 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	9/27/2012 6:41 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	9/27/2012 6:41 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	9/27/2012 6:41 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	9/27/2012 6:41 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	9/27/2012 6:41 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	9/27/2012 6:41 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	9/27/2012 6:41 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	9/27/2012 6:41 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	9/27/2012 6:41 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	9/27/2012 6:41 PM
1,3-Butadiene	ND	40	U	ppbv	40	9/27/2012 6:41 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	9/27/2012 6:41 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	9/27/2012 6:41 PM
2-Butanone	ND	40	U	ppbv	40	9/27/2012 6:41 PM
2-Hexanone	ND	40	U	ppbv	40	9/27/2012 6:41 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Acetone	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Benzene	950	40		ppbv	40	9/27/2012 6:41 PM
Benzyl chloride	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Bromodichloromethane	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Bromoform	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Bromomethane	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Carbon disulfide	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Carbon tetrachloride	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Chlorobenzene	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Chlorodibromomethane	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Chloroethane	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Chloroform	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Chloromethane	ND	40	U	ppbv	40	9/27/2012 6:41 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	9/27/2012 6:41 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	9/27/2012 6:41 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 3:24:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-017	**Matrix:**	Air
Client Sample ID:	VA1734		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	590	80		ppbv	40	9/27/2012 6:41 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Ethyl acetate	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Ethylbenzene	ND	80	U	ppbv	40	9/27/2012 6:41 PM
Heptane	270	40		ppbv	40	9/27/2012 6:41 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	9/27/2012 6:41 PM
m,p-Xylene	130	80		ppbv	40	9/27/2012 6:41 PM
Methylene chloride	ND	200	U	ppbv	40	9/27/2012 6:41 PM
n-Hexane	290	80		ppbv	40	9/27/2012 6:41 PM
Naphthalene	ND	40	U	ppbv	40	9/27/2012 6:41 PM
o-Xylene	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Propylene	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Styrene	ND	40	U	ppbv	40	9/27/2012 6:41 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Tetrachloroethene	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Tetrahydrofuran	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Toluene	3,400	400		ppbv	400	9/29/2012 2:54 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	9/27/2012 6:41 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Trichloroethene	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Vinyl acetate	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Vinyl chloride	ND	40	U	ppbv	40	9/27/2012 6:41 PM
Xylenes, Total	130	120		ppbv	40	9/27/2012 6:41 PM
Surr: 4-Bromofluorobenzene	96.8	70-130		%REC	40	9/27/2012 6:41 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	30,000	4,700		µg/m³	40	9/27/2012 3:13 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	9/27/2012 3:13 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	9/27/2012 3:13 PM
Surr: 4-Bromofluorobenzene	99.7	70-130		%REC	40	9/27/2012 3:13 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 4:03:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-018	**Matrix:**	Air
Client Sample ID:	VA1735		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	1.5	0.10		% v/v	1	10/5/2012 1:21 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/5/2012 1:21 PM
Methane	ND	0.50	U	% v/v	1	10/5/2012 1:21 PM
Nitrogen	79	0.10		% v/v	1	10/5/2012 1:21 PM
Oxygen	20	0.10		% v/v	1	10/5/2012 1:21 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	9/27/2012 8:04 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	9/27/2012 8:04 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	9/27/2012 8:04 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	9/27/2012 8:04 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	9/27/2012 8:04 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	9/27/2012 8:04 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	9/27/2012 8:04 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	9/27/2012 8:04 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	9/27/2012 8:04 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	9/27/2012 8:04 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	9/27/2012 8:04 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	9/27/2012 8:04 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	9/27/2012 8:04 PM
1,3-Butadiene	ND	40	U	ppbv	40	9/27/2012 8:04 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	9/27/2012 8:04 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	9/27/2012 8:04 PM
2-Butanone	ND	40	U	ppbv	40	9/27/2012 8:04 PM
2-Hexanone	ND	40	U	ppbv	40	9/27/2012 8:04 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Acetone	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Benzene	550	40		ppbv	40	9/27/2012 8:04 PM
Benzyl chloride	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Bromodichloromethane	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Bromoform	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Bromomethane	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Carbon disulfide	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Carbon tetrachloride	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Chlorobenzene	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Chlorodibromomethane	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Chloroethane	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Chloroform	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Chloromethane	ND	40	U	ppbv	40	9/27/2012 8:04 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	9/27/2012 8:04 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	9/27/2012 8:04 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 4:03:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-018	**Matrix:**	Air
Client Sample ID:	VA1735		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	330	80		ppbv	40	9/27/2012 8:04 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Ethyl acetate	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Ethylbenzene	ND	80	U	ppbv	40	9/27/2012 8:04 PM
Heptane	160	40		ppbv	40	9/27/2012 8:04 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	9/27/2012 8:04 PM
m,p-Xylene	110	80		ppbv	40	9/27/2012 8:04 PM
Methylene chloride	ND	200	U	ppbv	40	9/27/2012 8:04 PM
n-Hexane	160	80		ppbv	40	9/27/2012 8:04 PM
Naphthalene	ND	40	U	ppbv	40	9/27/2012 8:04 PM
o-Xylene	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Propylene	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Styrene	ND	40	U	ppbv	40	9/27/2012 8:04 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Tetrachloroethene	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Tetrahydrofuran	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Toluene	2,700	400		ppbv	400	9/29/2012 2:06 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	9/27/2012 8:04 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Trichloroethene	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Vinyl acetate	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Vinyl chloride	ND	40	U	ppbv	40	9/27/2012 8:04 PM
Xylenes, Total	110	120	J	ppbv	40	9/27/2012 8:04 PM
Surr: 4-Bromofluorobenzene	97.0	70-130		%REC	40	9/27/2012 8:04 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	24,000	4,700		µg/m³	40	9/27/2012 3:56 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	9/27/2012 3:56 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	9/27/2012 3:56 PM
Surr: 4-Bromofluorobenzene	99.5	70-130		%REC	40	9/27/2012 3:56 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 8:39:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-019	**Matrix:**	Air
Client Sample ID:	VA1736		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	1.4	0.10		% v/v	1	10/5/2012 1:42 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/5/2012 1:42 PM
Methane	ND	0.50	U	% v/v	1	10/5/2012 1:42 PM
Nitrogen	80	0.10		% v/v	1	10/5/2012 1:42 PM
Oxygen	19	0.10		% v/v	1	10/5/2012 1:42 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	9/27/2012 8:52 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	9/27/2012 8:52 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	9/27/2012 8:52 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	9/27/2012 8:52 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	9/27/2012 8:52 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	9/27/2012 8:52 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	9/27/2012 8:52 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	9/27/2012 8:52 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	9/27/2012 8:52 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	9/27/2012 8:52 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	9/27/2012 8:52 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	9/27/2012 8:52 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	9/27/2012 8:52 PM
1,3-Butadiene	ND	400	U	ppbv	400	9/27/2012 8:52 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	9/27/2012 8:52 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	9/27/2012 8:52 PM
2-Butanone	ND	400	U	ppbv	400	9/27/2012 8:52 PM
2-Hexanone	ND	400	U	ppbv	400	9/27/2012 8:52 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Acetone	2,500	400		ppbv	400	9/27/2012 8:52 PM
Benzene	1,100	400		ppbv	400	9/27/2012 8:52 PM
Benzyl chloride	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Bromodichloromethane	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Bromoform	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Bromomethane	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Carbon disulfide	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Carbon tetrachloride	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Chlorobenzene	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Chlorodibromomethane	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Chloroethane	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Chloroform	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Chloromethane	ND	400	U	ppbv	400	9/27/2012 8:52 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	9/27/2012 8:52 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	9/27/2012 8:52 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 8:39:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-019	**Matrix:**	Air
Client Sample ID:	VA1736		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	8,900	800		ppbv	400	9/27/2012 8:52 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Ethyl acetate	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Ethylbenzene	ND	800	U	ppbv	400	9/27/2012 8:52 PM
Heptane	1,300	400		ppbv	400	9/27/2012 8:52 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	9/27/2012 8:52 PM
m,p-Xylene	ND	800	U	ppbv	400	9/27/2012 8:52 PM
Methylene chloride	2,500	2,000		ppbv	400	9/27/2012 8:52 PM
n-Hexane	4,300	800		ppbv	400	9/27/2012 8:52 PM
Naphthalene	ND	400	U	ppbv	400	9/27/2012 8:52 PM
o-Xylene	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Propylene	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Styrene	ND	400	U	ppbv	400	9/27/2012 8:52 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Tetrachloroethene	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Tetrahydrofuran	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Toluene	1,800	400		ppbv	400	9/27/2012 8:52 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	9/27/2012 8:52 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Trichloroethene	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Vinyl acetate	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Vinyl chloride	ND	400	U	ppbv	400	9/27/2012 8:52 PM
Xylenes, Total	ND	1,200	U	ppbv	400	9/27/2012 8:52 PM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	400	9/27/2012 8:52 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	430,000	47,000		µg/m³	400	9/27/2012 2:25 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	9/27/2012 2:25 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	9/27/2012 2:25 PM
Surr: 4-Bromofluorobenzene	98.3	70-130		%REC	400	9/27/2012 2:25 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 9:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-020	**Matrix:**	Air
Client Sample ID:	VA1737		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.51	0.10		% v/v	1	10/5/2012 1:57 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/5/2012 1:57 PM
Methane	ND	0.50	U	% v/v	1	10/5/2012 1:57 PM
Nitrogen	78	0.10		% v/v	1	10/5/2012 1:57 PM
Oxygen	20	0.10		% v/v	1	10/5/2012 1:57 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	9/28/2012 1:54 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	9/28/2012 1:54 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	9/28/2012 1:54 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	9/28/2012 1:54 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	9/28/2012 1:54 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	9/28/2012 1:54 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	9/28/2012 1:54 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	9/28/2012 1:54 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	9/28/2012 1:54 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	9/28/2012 1:54 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	9/28/2012 1:54 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	9/28/2012 1:54 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	9/28/2012 1:54 AM
1,3-Butadiene	ND	40	U	ppbv	40	9/28/2012 1:54 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	9/28/2012 1:54 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	9/28/2012 1:54 AM
2-Butanone	ND	40	U	ppbv	40	9/28/2012 1:54 AM
2-Hexanone	ND	40	U	ppbv	40	9/28/2012 1:54 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Acetone	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Benzene	420	40		ppbv	40	9/28/2012 1:54 AM
Benzyl chloride	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Bromodichloromethane	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Bromoform	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Bromomethane	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Carbon disulfide	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Carbon tetrachloride	140	40		ppbv	40	9/28/2012 1:54 AM
Chlorobenzene	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Chlorodibromomethane	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Chloroethane	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Chloroform	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Chloromethane	ND	40	U	ppbv	40	9/28/2012 1:54 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	9/28/2012 1:54 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	9/28/2012 1:54 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 9:22:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-020	**Matrix:**	Air
Client Sample ID:	VA1737		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	260	80		ppbv	40	9/28/2012 1:54 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Ethyl acetate	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Ethylbenzene	ND	80	U	ppbv	40	9/28/2012 1:54 AM
Heptane	110	40		ppbv	40	9/28/2012 1:54 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	9/28/2012 1:54 AM
m,p-Xylene	66	80	J	ppbv	40	9/28/2012 1:54 AM
Methylene chloride	ND	200	U	ppbv	40	9/28/2012 1:54 AM
n-Hexane	120	80		ppbv	40	9/28/2012 1:54 AM
Naphthalene	ND	40	U	ppbv	40	9/28/2012 1:54 AM
o-Xylene	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Propylene	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Styrene	ND	40	U	ppbv	40	9/28/2012 1:54 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Tetrachloroethene	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Tetrahydrofuran	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Toluene	1,100	40		ppbv	40	9/28/2012 1:54 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	9/28/2012 1:54 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Trichloroethene	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Vinyl acetate	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Vinyl chloride	ND	40	U	ppbv	40	9/28/2012 1:54 AM
Xylenes, Total	66	120	J	ppbv	40	9/28/2012 1:54 AM
Surr: 4-Bromofluorobenzene	96.7	70-130		%REC	40	9/28/2012 1:54 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	13,000	4,700		µg/m³	40	9/28/2012 12:56 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	9/28/2012 12:56 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	9/28/2012 12:56 PM
Surr: 4-Bromofluorobenzene	99.3	70-130		%REC	40	9/28/2012 12:56 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 10:08:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-021	**Matrix:**	Air
Client Sample ID:	VA1738		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.74	0.10		% v/v	1	10/5/2012 3:17 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/5/2012 3:17 PM
Methane	ND	0.50	U	% v/v	1	10/5/2012 3:17 PM
Nitrogen	79	0.10		% v/v	1	10/5/2012 3:17 PM
Oxygen	20	0.10		% v/v	1	10/5/2012 3:17 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	9/27/2012 9:40 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	9/27/2012 9:40 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	9/27/2012 9:40 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	9/27/2012 9:40 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	9/27/2012 9:40 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	9/27/2012 9:40 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	9/27/2012 9:40 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	9/27/2012 9:40 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	9/27/2012 9:40 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	9/27/2012 9:40 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	9/27/2012 9:40 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	9/27/2012 9:40 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	9/27/2012 9:40 PM
1,3-Butadiene	ND	400	U	ppbv	400	9/27/2012 9:40 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	9/27/2012 9:40 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	9/27/2012 9:40 PM
2-Butanone	ND	400	U	ppbv	400	9/27/2012 9:40 PM
2-Hexanone	ND	400	U	ppbv	400	9/27/2012 9:40 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Acetone	710	400		ppbv	400	9/27/2012 9:40 PM
Benzene	3,300	400		ppbv	400	9/27/2012 9:40 PM
Benzyl chloride	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Bromodichloromethane	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Bromoform	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Bromomethane	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Carbon disulfide	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Carbon tetrachloride	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Chlorobenzene	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Chlorodibromomethane	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Chloroethane	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Chloroform	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Chloromethane	ND	400	U	ppbv	400	9/27/2012 9:40 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	9/27/2012 9:40 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	9/27/2012 9:40 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 10:08:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-021	**Matrix:**	Air
Client Sample ID:	VA1738		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	5,700	800		ppbv	400	9/27/2012 9:40 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Ethyl acetate	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Ethylbenzene	ND	800	U	ppbv	400	9/27/2012 9:40 PM
Heptane	850	400		ppbv	400	9/27/2012 9:40 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	9/27/2012 9:40 PM
m,p-Xylene	ND	800	U	ppbv	400	9/27/2012 9:40 PM
Methylene chloride	1,000	2,000	J	ppbv	400	9/27/2012 9:40 PM
n-Hexane	2,200	800		ppbv	400	9/27/2012 9:40 PM
Naphthalene	ND	400	U	ppbv	400	9/27/2012 9:40 PM
o-Xylene	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Propylene	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Styrene	ND	400	U	ppbv	400	9/27/2012 9:40 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Tetrachloroethene	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Tetrahydrofuran	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Toluene	5,400	400		ppbv	400	9/27/2012 9:40 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	9/27/2012 9:40 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Trichloroethene	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Vinyl acetate	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Vinyl chloride	ND	400	U	ppbv	400	9/27/2012 9:40 PM
Xylenes, Total	ND	1,200	U	ppbv	400	9/27/2012 9:40 PM
Surr: 4-Bromofluorobenzene	95.0	70-130		%REC	400	9/27/2012 9:40 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	330,000	47,000		µg/m³	400	9/27/2012 8:37 PM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	9/27/2012 8:37 PM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	9/27/2012 8:37 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	400	9/27/2012 8:37 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 10:59:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-022	**Matrix:**	Air
Client Sample ID:	VA1739		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.36	0.10		% v/v	1	10/5/2012 3:32 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/5/2012 3:32 PM
Methane	ND	0.50	U	% v/v	1	10/5/2012 3:32 PM
Nitrogen	78	0.10		% v/v	1	10/5/2012 3:32 PM
Oxygen	20	0.10		% v/v	1	10/5/2012 3:32 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	9/27/2012 10:28 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	9/27/2012 10:28 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	9/27/2012 10:28 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	9/27/2012 10:28 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	9/27/2012 10:28 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	9/27/2012 10:28 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	9/27/2012 10:28 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	9/27/2012 10:28 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	9/27/2012 10:28 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	9/27/2012 10:28 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	9/27/2012 10:28 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	9/27/2012 10:28 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	9/27/2012 10:28 PM
1,3-Butadiene	ND	400	U	ppbv	400	9/27/2012 10:28 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	9/27/2012 10:28 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	9/27/2012 10:28 PM
2-Butanone	ND	400	U	ppbv	400	9/27/2012 10:28 PM
2-Hexanone	ND	400	U	ppbv	400	9/27/2012 10:28 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Acetone	1,000	400		ppbv	400	9/27/2012 10:28 PM
Benzene	16,000	400		ppbv	400	9/27/2012 10:28 PM
Benzyl chloride	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Bromodichloromethane	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Bromoform	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Bromomethane	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Carbon disulfide	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Carbon tetrachloride	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Chlorobenzene	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Chlorodibromomethane	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Chloroethane	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Chloroform	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Chloromethane	ND	400	U	ppbv	400	9/27/2012 10:28 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	9/27/2012 10:28 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	9/27/2012 10:28 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 10:59:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-022	**Matrix:**	Air
Client Sample ID:	VA1739		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	18,000	800		ppbv	400	9/27/2012 10:28 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Ethyl acetate	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Ethylbenzene	490	800	J	ppbv	400	9/27/2012 10:28 PM
Heptane	7,100	400		ppbv	400	9/27/2012 10:28 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	9/27/2012 10:28 PM
m,p-Xylene	1,200	800		ppbv	400	9/27/2012 10:28 PM
Methylene chloride	960	2,000	J	ppbv	400	9/27/2012 10:28 PM
n-Hexane	20,000	800		ppbv	400	9/27/2012 10:28 PM
Naphthalene	ND	400	U	ppbv	400	9/27/2012 10:28 PM
o-Xylene	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Propylene	1,100	400		ppbv	400	9/27/2012 10:28 PM
Styrene	ND	400	U	ppbv	400	9/27/2012 10:28 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Tetrachloroethene	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Tetrahydrofuran	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Toluene	23,000	800		ppbv	800	9/29/2012 1:18 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	9/27/2012 10:28 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Trichloroethene	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Vinyl acetate	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Vinyl chloride	ND	400	U	ppbv	400	9/27/2012 10:28 PM
Xylenes, Total	1,200	1,200		ppbv	400	9/27/2012 10:28 PM
Surr: 4-Bromofluorobenzene	94.9	70-130		%REC	400	9/27/2012 10:28 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,200,000	190,000		µg/m³	1600	9/27/2012 9:20 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	9/27/2012 9:20 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	9/27/2012 9:20 PM
Surr: 4-Bromofluorobenzene	98.9	70-130		%REC	1600	9/27/2012 9:20 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 8:59:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-023	**Matrix:**	Air
Client Sample ID:	VA1773		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	1.0	0.10		% v/v	1	10/5/2012 3:48 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/5/2012 3:48 PM
Methane	ND	0.50	U	% v/v	1	10/5/2012 3:48 PM
Nitrogen	78	0.10		% v/v	1	10/5/2012 3:48 PM
Oxygen	21	0.10		% v/v	1	10/5/2012 3:48 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	9/28/2012 2:36 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	9/28/2012 2:36 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	9/28/2012 2:36 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	9/28/2012 2:36 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	9/28/2012 2:36 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	9/28/2012 2:36 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	9/28/2012 2:36 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	9/28/2012 2:36 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	9/28/2012 2:36 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	9/28/2012 2:36 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	9/28/2012 2:36 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	9/28/2012 2:36 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	9/28/2012 2:36 AM
1,3-Butadiene	ND	40	U	ppbv	40	9/28/2012 2:36 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	9/28/2012 2:36 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	9/28/2012 2:36 AM
2-Butanone	ND	40	U	ppbv	40	9/28/2012 2:36 AM
2-Hexanone	ND	40	U	ppbv	40	9/28/2012 2:36 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Acetone	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Benzene	260	40		ppbv	40	9/28/2012 2:36 AM
Benzyl chloride	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Bromodichloromethane	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Bromoform	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Bromomethane	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Carbon disulfide	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Carbon tetrachloride	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Chlorobenzene	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Chlorodibromomethane	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Chloroethane	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Chloroform	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Chloromethane	ND	40	U	ppbv	40	9/28/2012 2:36 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	9/28/2012 2:36 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	9/28/2012 2:36 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 8:59:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-023	**Matrix:**	Air
Client Sample ID:	VA1773		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	240	80		ppbv	40	9/28/2012 2:36 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Ethyl acetate	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Ethylbenzene	ND	80	U	ppbv	40	9/28/2012 2:36 AM
Heptane	130	40		ppbv	40	9/28/2012 2:36 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	9/28/2012 2:36 AM
m,p-Xylene	69	80	J	ppbv	40	9/28/2012 2:36 AM
Methylene chloride	ND	200	U	ppbv	40	9/28/2012 2:36 AM
n-Hexane	240	80		ppbv	40	9/28/2012 2:36 AM
Naphthalene	ND	40	U	ppbv	40	9/28/2012 2:36 AM
o-Xylene	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Propylene	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Styrene	ND	40	U	ppbv	40	9/28/2012 2:36 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Tetrachloroethene	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Tetrahydrofuran	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Toluene	970	40		ppbv	40	9/28/2012 2:36 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	9/28/2012 2:36 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Trichloroethene	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Vinyl acetate	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Vinyl chloride	ND	40	U	ppbv	40	9/28/2012 2:36 AM
Xylenes, Total	69	120	J	ppbv	40	9/28/2012 2:36 AM
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	40	9/28/2012 2:36 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	14,000	4,700		µg/m³	40	9/28/2012 5:15 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	9/28/2012 5:15 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	9/28/2012 5:15 PM
Surr: 4-Bromofluorobenzene	99.8	70-130		%REC	40	9/28/2012 5:15 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 9:34:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-024	**Matrix:**	Air
Client Sample ID:	VA1774		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	1.6	0.10		% v/v	1	10/5/2012 4:07 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/5/2012 4:07 PM
Methane	ND	0.50	U	% v/v	1	10/5/2012 4:07 PM
Nitrogen	78	0.10		% v/v	1	10/5/2012 4:07 PM
Oxygen	21	0.10		% v/v	1	10/5/2012 4:07 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	9/29/2012 12:34 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	9/29/2012 12:34 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	9/29/2012 12:34 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	9/29/2012 12:34 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	9/29/2012 12:34 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	9/29/2012 12:34 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	9/29/2012 12:34 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	9/29/2012 12:34 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	9/29/2012 12:34 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	9/29/2012 12:34 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	9/29/2012 12:34 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	9/29/2012 12:34 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	9/29/2012 12:34 AM
1,3-Butadiene	ND	40	U	ppbv	40	9/29/2012 12:34 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	9/29/2012 12:34 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	9/29/2012 12:34 AM
2-Butanone	ND	40	U	ppbv	40	9/29/2012 12:34 AM
2-Hexanone	ND	40	U	ppbv	40	9/29/2012 12:34 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Acetone	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Benzene	170	40		ppbv	40	9/29/2012 12:34 AM
Benzyl chloride	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Bromodichloromethane	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Bromoform	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Bromomethane	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Carbon disulfide	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Carbon tetrachloride	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Chlorobenzene	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Chlorodibromomethane	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Chloroethane	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Chloroform	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Chloromethane	ND	40	U	ppbv	40	9/29/2012 12:34 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	9/29/2012 12:34 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	9/29/2012 12:34 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 9:34:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-024	**Matrix:**	Air
Client Sample ID:	VA1774		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	180	80		ppbv	40	9/29/2012 12:34 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Ethyl acetate	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Ethylbenzene	ND	80	U	ppbv	40	9/29/2012 12:34 AM
Heptane	90	40		ppbv	40	9/29/2012 12:34 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	9/29/2012 12:34 AM
m,p-Xylene	ND	80	U	ppbv	40	9/29/2012 12:34 AM
Methylene chloride	ND	200	U	ppbv	40	9/29/2012 12:34 AM
n-Hexane	170	80		ppbv	40	9/29/2012 12:34 AM
Naphthalene	ND	40	U	ppbv	40	9/29/2012 12:34 AM
o-Xylene	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Propylene	45	40		ppbv	40	9/29/2012 12:34 AM
Styrene	ND	40	U	ppbv	40	9/29/2012 12:34 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Tetrachloroethene	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Tetrahydrofuran	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Toluene	540	40		ppbv	40	9/29/2012 12:34 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	9/29/2012 12:34 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Trichloroethene	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Vinyl acetate	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Vinyl chloride	ND	40	U	ppbv	40	9/29/2012 12:34 AM
Xylenes, Total	ND	120	U	ppbv	40	9/29/2012 12:34 AM
Surr: 4-Bromofluorobenzene	96.0	70-130		%REC	40	9/29/2012 12:34 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	21,000	4,700		µg/m³	40	9/28/2012 2:24 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	9/28/2012 2:24 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	9/28/2012 2:24 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	40	9/28/2012 2:24 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 9:34:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-025	**Matrix:**	Air
Client Sample ID:	VA1775		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	1.0	0.10		% v/v	1	10/5/2012 4:23 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/5/2012 4:23 PM
Methane	ND	0.50	U	% v/v	1	10/5/2012 4:23 PM
Nitrogen	77	0.10		% v/v	1	10/5/2012 4:23 PM
Oxygen	21	0.10		% v/v	1	10/5/2012 4:23 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	9/28/2012 11:52 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	9/28/2012 11:52 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	9/28/2012 11:52 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	9/28/2012 11:52 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	9/28/2012 11:52 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	9/28/2012 11:52 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	9/28/2012 11:52 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	9/28/2012 11:52 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	9/28/2012 11:52 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	9/28/2012 11:52 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	9/28/2012 11:52 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	9/28/2012 11:52 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	9/28/2012 11:52 PM
1,3-Butadiene	ND	40	U	ppbv	40	9/28/2012 11:52 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	9/28/2012 11:52 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	9/28/2012 11:52 PM
2-Butanone	ND	40	U	ppbv	40	9/28/2012 11:52 PM
2-Hexanone	ND	40	U	ppbv	40	9/28/2012 11:52 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Acetone	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Benzene	210	40		ppbv	40	9/28/2012 11:52 PM
Benzyl chloride	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Bromodichloromethane	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Bromoform	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Bromomethane	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Carbon disulfide	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Carbon tetrachloride	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Chlorobenzene	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Chlorodibromomethane	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Chloroethane	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Chloroform	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Chloromethane	ND	40	U	ppbv	40	9/28/2012 11:52 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	9/28/2012 11:52 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	9/28/2012 11:52 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 9:34:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-025	**Matrix:**	Air
Client Sample ID:	VA1775		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	260	80		ppbv	40	9/28/2012 11:52 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Ethyl acetate	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Ethylbenzene	ND	80	U	ppbv	40	9/28/2012 11:52 PM
Heptane	120	40		ppbv	40	9/28/2012 11:52 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	9/28/2012 11:52 PM
m,p-Xylene	50	80	J	ppbv	40	9/28/2012 11:52 PM
Methylene chloride	ND	200	U	ppbv	40	9/28/2012 11:52 PM
n-Hexane	230	80		ppbv	40	9/28/2012 11:52 PM
Naphthalene	ND	40	U	ppbv	40	9/28/2012 11:52 PM
o-Xylene	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Propylene	110	40		ppbv	40	9/28/2012 11:52 PM
Styrene	ND	40	U	ppbv	40	9/28/2012 11:52 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Tetrachloroethene	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Tetrahydrofuran	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Toluene	660	40		ppbv	40	9/28/2012 11:52 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	9/28/2012 11:52 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Trichloroethene	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Vinyl acetate	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Vinyl chloride	ND	40	U	ppbv	40	9/28/2012 11:52 PM
Xylenes, Total	50	120	J	ppbv	40	9/28/2012 11:52 PM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	40	9/28/2012 11:52 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	29,000	4,700		µg/m³	40	9/28/2012 3:07 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	9/28/2012 3:07 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	9/28/2012 3:07 PM
Surr: 4-Bromofluorobenzene	99.9	70-130		%REC	40	9/28/2012 3:07 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 10:21:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-026	**Matrix:**	Air
Client Sample ID:	VA1776		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	1.6	0.10		% v/v	1	10/5/2012 4:37 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/5/2012 4:37 PM
Methane	ND	0.50	U	% v/v	1	10/5/2012 4:37 PM
Nitrogen	79	0.10		% v/v	1	10/5/2012 4:37 PM
Oxygen	18	0.10		% v/v	1	10/5/2012 4:37 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	9/28/2012 3:17 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	9/28/2012 3:17 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	9/28/2012 3:17 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	9/28/2012 3:17 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	9/28/2012 3:17 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	9/28/2012 3:17 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	9/28/2012 3:17 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	9/28/2012 3:17 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	9/28/2012 3:17 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	9/28/2012 3:17 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	9/28/2012 3:17 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	9/28/2012 3:17 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	9/28/2012 3:17 AM
1,3-Butadiene	ND	40	U	ppbv	40	9/28/2012 3:17 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	9/28/2012 3:17 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	9/28/2012 3:17 AM
2-Butanone	ND	40	U	ppbv	40	9/28/2012 3:17 AM
2-Hexanone	ND	40	U	ppbv	40	9/28/2012 3:17 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Acetone	110	40		ppbv	40	9/28/2012 3:17 AM
Benzene	170	40		ppbv	40	9/28/2012 3:17 AM
Benzyl chloride	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Bromodichloromethane	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Bromoform	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Bromomethane	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Carbon disulfide	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Carbon tetrachloride	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Chlorobenzene	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Chlorodibromomethane	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Chloroethane	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Chloroform	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Chloromethane	ND	40	U	ppbv	40	9/28/2012 3:17 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	9/28/2012 3:17 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	9/28/2012 3:17 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 10:21:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-026	**Matrix:**	Air
Client Sample ID:	VA1776		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	160	80		ppbv	40	9/28/2012 3:17 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Ethyl acetate	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Ethylbenzene	ND	80	U	ppbv	40	9/28/2012 3:17 AM
Heptane	93	40		ppbv	40	9/28/2012 3:17 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	9/28/2012 3:17 AM
m,p-Xylene	54	80	J	ppbv	40	9/28/2012 3:17 AM
Methylene chloride	ND	200	U	ppbv	40	9/28/2012 3:17 AM
n-Hexane	150	80		ppbv	40	9/28/2012 3:17 AM
Naphthalene	ND	40	U	ppbv	40	9/28/2012 3:17 AM
o-Xylene	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Propylene	90	40		ppbv	40	9/28/2012 3:17 AM
Styrene	ND	40	U	ppbv	40	9/28/2012 3:17 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Tetrachloroethene	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Tetrahydrofuran	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Toluene	710	40		ppbv	40	9/28/2012 3:17 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	9/28/2012 3:17 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Trichloroethene	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Vinyl acetate	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Vinyl chloride	ND	40	U	ppbv	40	9/28/2012 3:17 AM
Xylenes, Total	54	120	J	ppbv	40	9/28/2012 3:17 AM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	40	9/28/2012 3:17 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	7,900	940		µg/m³	8	9/29/2012 1:31 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	9/29/2012 1:31 AM
C9-C12 Aliphatic Hydrocarbons	510	1,500	J	µg/m³	8	9/29/2012 1:31 AM
Surr: 4-Bromofluorobenzene	96.7	70-130		%REC	8	9/29/2012 1:31 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 11:09:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-027	**Matrix:**	Air
Client Sample ID:	VA1777		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.54	0.10		% v/v	1	10/5/2012 4:53 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/5/2012 4:53 PM
Methane	ND	0.50	U	% v/v	1	10/5/2012 4:53 PM
Nitrogen	79	0.10		% v/v	1	10/5/2012 4:53 PM
Oxygen	20	0.10		% v/v	1	10/5/2012 4:53 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	9/28/2012 11:11 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	9/28/2012 11:11 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	9/28/2012 11:11 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	9/28/2012 11:11 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	9/28/2012 11:11 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	9/28/2012 11:11 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	9/28/2012 11:11 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	9/28/2012 11:11 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	9/28/2012 11:11 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	9/28/2012 11:11 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	9/28/2012 11:11 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	9/28/2012 11:11 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	9/28/2012 11:11 PM
1,3-Butadiene	ND	40	U	ppbv	40	9/28/2012 11:11 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	9/28/2012 11:11 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	9/28/2012 11:11 PM
2-Butanone	ND	40	U	ppbv	40	9/28/2012 11:11 PM
2-Hexanone	ND	40	U	ppbv	40	9/28/2012 11:11 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Acetone	70	40		ppbv	40	9/28/2012 11:11 PM
Benzene	980	40		ppbv	40	9/28/2012 11:11 PM
Benzyl chloride	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Bromodichloromethane	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Bromoform	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Bromomethane	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Carbon disulfide	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Carbon tetrachloride	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Chlorobenzene	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Chlorodibromomethane	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Chloroethane	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Chloroform	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Chloromethane	ND	40	U	ppbv	40	9/28/2012 11:11 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	9/28/2012 11:11 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	9/28/2012 11:11 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 11:09:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-027	**Matrix:**	Air
Client Sample ID:	VA1777		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	350	80		ppbv	40	9/28/2012 11:11 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Ethyl acetate	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Ethylbenzene	ND	80	U	ppbv	40	9/28/2012 11:11 PM
Heptane	150	40		ppbv	40	9/28/2012 11:11 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	9/28/2012 11:11 PM
m,p-Xylene	86	80		ppbv	40	9/28/2012 11:11 PM
Methylene chloride	ND	200	U	ppbv	40	9/28/2012 11:11 PM
n-Hexane	260	80		ppbv	40	9/28/2012 11:11 PM
Naphthalene	ND	40	U	ppbv	40	9/28/2012 11:11 PM
o-Xylene	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Propylene	280	40		ppbv	40	9/28/2012 11:11 PM
Styrene	ND	40	U	ppbv	40	9/28/2012 11:11 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Tetrachloroethene	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Tetrahydrofuran	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Toluene	1,300	40		ppbv	40	9/28/2012 11:11 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	9/28/2012 11:11 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Trichloroethene	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Vinyl acetate	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Vinyl chloride	ND	40	U	ppbv	40	9/28/2012 11:11 PM
Xylenes, Total	86	120	J	ppbv	40	9/28/2012 11:11 PM
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	40	9/28/2012 11:11 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	21,000	4,700		µg/m³	40	9/28/2012 3:50 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	9/28/2012 3:50 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	9/28/2012 3:50 PM
Surr: 4-Bromofluorobenzene	99.3	70-130		%REC	40	9/28/2012 3:50 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 11:51:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-028	**Matrix:**	Air
Client Sample ID:	VA1778		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	1.4	0.10		% v/v	1	10/8/2012 12:18 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/8/2012 12:18 PM
Methane	ND	0.50	U	% v/v	1	10/8/2012 12:18 PM
Nitrogen	80	0.10		% v/v	1	10/8/2012 12:18 PM
Oxygen	19	0.10		% v/v	1	10/8/2012 12:18 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	9/28/2012 9:45 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	9/28/2012 9:45 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	9/28/2012 9:45 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	9/28/2012 9:45 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	9/28/2012 9:45 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	9/28/2012 9:45 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	9/28/2012 9:45 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	9/28/2012 9:45 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	9/28/2012 9:45 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	9/28/2012 9:45 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	9/28/2012 9:45 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	9/28/2012 9:45 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	9/28/2012 9:45 PM
1,3-Butadiene	ND	800	U	ppbv	800	9/28/2012 9:45 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	9/28/2012 9:45 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	9/28/2012 9:45 PM
2-Butanone	1,200	800		ppbv	800	9/28/2012 9:45 PM
2-Hexanone	ND	800	U	ppbv	800	9/28/2012 9:45 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Acetone	3,800	800		ppbv	800	9/28/2012 9:45 PM
Benzene	3,200	800		ppbv	800	9/28/2012 9:45 PM
Benzyl chloride	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Bromodichloromethane	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Bromoform	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Bromomethane	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Carbon disulfide	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Carbon tetrachloride	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Chlorobenzene	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Chlorodibromomethane	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Chloroethane	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Chloroform	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Chloromethane	ND	800	U	ppbv	800	9/28/2012 9:45 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	9/28/2012 9:45 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	9/28/2012 9:45 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 11:51:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-028	**Matrix:**	Air
Client Sample ID:	VA1778		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	22,000	1,600		ppbv	800	9/28/2012 9:45 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Ethyl acetate	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Ethylbenzene	2,000	1,600		ppbv	800	9/28/2012 9:45 PM
Heptane	29,000	800		ppbv	800	9/28/2012 9:45 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	9/28/2012 9:45 PM
m,p-Xylene	7,500	1,600		ppbv	800	9/28/2012 9:45 PM
Methylene chloride	ND	4,000	U	ppbv	800	9/28/2012 9:45 PM
n-Hexane	14,000	1,600		ppbv	800	9/28/2012 9:45 PM
Naphthalene	ND	800	U	ppbv	800	9/28/2012 9:45 PM
o-Xylene	2,500	800		ppbv	800	9/28/2012 9:45 PM
Propylene	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Styrene	ND	800	U	ppbv	800	9/28/2012 9:45 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Tetrachloroethene	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Tetrahydrofuran	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Toluene	12,000	800		ppbv	800	9/28/2012 9:45 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	9/28/2012 9:45 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Trichloroethene	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Vinyl acetate	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Vinyl chloride	ND	800	U	ppbv	800	9/28/2012 9:45 PM
Xylenes, Total	9,900	2,400		ppbv	800	9/28/2012 9:45 PM
Surr: 4-Bromofluorobenzene	99.2	70-130		%REC	800	9/28/2012 9:45 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,700,000	940,000		µg/m³	8000	9/28/2012 4:33 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	9/28/2012 4:33 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	9/28/2012 4:33 PM
Surr: 4-Bromofluorobenzene	96.7	70-130		%REC	8000	9/28/2012 4:33 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 12:38:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-029	**Matrix:**	Air
Client Sample ID:	VA1779		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	1.9	0.10		% v/v	1	10/8/2012 12:40 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/8/2012 12:40 PM
Methane	ND	0.50	U	% v/v	1	10/8/2012 12:40 PM
Nitrogen	80	0.10		% v/v	1	10/8/2012 12:40 PM
Oxygen	18	0.10		% v/v	1	10/8/2012 12:40 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
1,1,2,2-Tetrachloroethane	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
1,1,2-Trichloroethane	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
1,1-Dichloroethane	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
1,1-Dichloroethene	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
1,2,4-Trichlorobenzene	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
1,2,4-Trimethylbenzene	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
1,2-Dibromoethane	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
1,2-Dichlorobenzene	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
1,2-Dichloroethane	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
1,2-Dichloropropane	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
1,3,5-Trimethylbenzene	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
1,3-Butadiene	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
1,3-Dichlorobenzene	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
1,4-Dichlorobenzene	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
2-Butanone	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
2-Hexanone	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
4-Methyl-2-pentanone	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Acetone	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Benzene	60,000	40,000		ppbv	40000	10/1/2012 5:37 PM
Benzyl chloride	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Bromodichloromethane	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Bromoform	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Bromomethane	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Carbon disulfide	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Carbon tetrachloride	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Chlorobenzene	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Chlorodibromomethane	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Chloroethane	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Chloroform	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Chloromethane	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
cis-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
cis-1,3-dichloropropene	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/12/2012 12:38:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-029	**Matrix:**	Air
Client Sample ID:	VA1779		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	300,000	80,000		ppbv	40000	10/1/2012 5:37 PM
Dichlorodifluoromethane	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Ethyl acetate	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Ethylbenzene	ND	80,000	U	ppbv	40000	10/1/2012 5:37 PM
Heptane	170,000	40,000		ppbv	40000	10/1/2012 5:37 PM
Hexachlorobutadiene	ND	80,000	U	ppbv	40000	10/1/2012 5:37 PM
m,p-Xylene	ND	80,000	U	ppbv	40000	10/1/2012 5:37 PM
Methylene chloride	ND	200,000	U	ppbv	40000	10/1/2012 5:37 PM
n-Hexane	390,000	80,000		ppbv	40000	10/1/2012 5:37 PM
Naphthalene	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
o-Xylene	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Propylene	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Styrene	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
tert-Butyl Methyl Ether	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Tetrachloroethene	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Tetrahydrofuran	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Toluene	59,000	40,000		ppbv	40000	10/1/2012 5:37 PM
trans-1,2-Dichloroethene	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
trans-1,3-dichloropropene	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Trichloroethene	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Trichlorofluoromethane	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Vinyl acetate	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Vinyl chloride	ND	40,000	U	ppbv	40000	10/1/2012 5:37 PM
Xylenes, Total	ND	120,000	U	ppbv	40000	10/1/2012 5:37 PM
Surr: 4-Bromofluorobenzene	97.2	70-130		%REC	40000	10/1/2012 5:37 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	16,000,000	4,700,000		µg/m³	40000	10/2/2012 5:03 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300,000	U	µg/m³	40000	10/2/2012 5:03 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600,000	U	µg/m³	40000	10/2/2012 5:03 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	40000	10/2/2012 5:03 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 9:01:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-030	**Matrix:**	Air
Client Sample ID:	VA1784		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.21	0.10		% v/v	1	10/8/2012 1:00 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/8/2012 1:00 PM
Methane	ND	0.50	U	% v/v	1	10/8/2012 1:00 PM
Nitrogen	79	0.10		% v/v	1	10/8/2012 1:00 PM
Oxygen	21	0.10		% v/v	1	10/8/2012 1:00 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/1/2012 9:04 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/1/2012 9:04 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	10/1/2012 9:04 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/1/2012 9:04 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/1/2012 9:04 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/1/2012 9:04 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/1/2012 9:04 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	10/1/2012 9:04 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/1/2012 9:04 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/1/2012 9:04 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/1/2012 9:04 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/1/2012 9:04 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	10/1/2012 9:04 PM
1,3-Butadiene	ND	40	U	ppbv	40	10/1/2012 9:04 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/1/2012 9:04 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/1/2012 9:04 PM
2-Butanone	ND	40	U	ppbv	40	10/1/2012 9:04 PM
2-Hexanone	ND	40	U	ppbv	40	10/1/2012 9:04 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Acetone	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Benzene	110	40		ppbv	40	10/1/2012 9:04 PM
Benzyl chloride	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Bromodichloromethane	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Bromoform	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Bromomethane	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Carbon disulfide	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Carbon tetrachloride	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Chlorobenzene	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Chlorodibromomethane	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Chloroethane	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Chloroform	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Chloromethane	ND	40	U	ppbv	40	10/1/2012 9:04 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/1/2012 9:04 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/1/2012 9:04 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 9:01:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-030	**Matrix:**	Air
Client Sample ID:	VA1784		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	180	80		ppbv	40	10/1/2012 9:04 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Ethyl acetate	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Ethylbenzene	ND	80	U	ppbv	40	10/1/2012 9:04 PM
Heptane	55	40		ppbv	40	10/1/2012 9:04 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/1/2012 9:04 PM
m,p-Xylene	ND	80	U	ppbv	40	10/1/2012 9:04 PM
Methylene chloride	ND	200	U	ppbv	40	10/1/2012 9:04 PM
n-Hexane	130	80		ppbv	40	10/1/2012 9:04 PM
Naphthalene	ND	40	U	ppbv	40	10/1/2012 9:04 PM
o-Xylene	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Propylene	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Styrene	ND	40	U	ppbv	40	10/1/2012 9:04 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Tetrachloroethene	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Tetrahydrofuran	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Toluene	140	40		ppbv	40	10/1/2012 9:04 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/1/2012 9:04 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Trichloroethene	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Vinyl acetate	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Vinyl chloride	ND	40	U	ppbv	40	10/1/2012 9:04 PM
Xylenes, Total	ND	120	U	ppbv	40	10/1/2012 9:04 PM
Surr: 4-Bromofluorobenzene	97.0	70-130		%REC	40	10/1/2012 9:04 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	17,000	4,700		µg/m³	40	10/2/2012 5:48 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	10/2/2012 5:48 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	10/2/2012 5:48 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	40	10/2/2012 5:48 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 9:01:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-031	**Matrix:**	Air
Client Sample ID:	VA1785		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.15	0.10		% v/v	1	10/8/2012 1:15 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/8/2012 1:15 PM
Methane	ND	0.50	U	% v/v	1	10/8/2012 1:15 PM
Nitrogen	78	0.10		% v/v	1	10/8/2012 1:15 PM
Oxygen	21	0.10		% v/v	1	10/8/2012 1:15 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/1/2012 9:45 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/1/2012 9:45 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	10/1/2012 9:45 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/1/2012 9:45 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/1/2012 9:45 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/1/2012 9:45 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/1/2012 9:45 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	10/1/2012 9:45 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/1/2012 9:45 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/1/2012 9:45 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/1/2012 9:45 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/1/2012 9:45 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	10/1/2012 9:45 PM
1,3-Butadiene	ND	40	U	ppbv	40	10/1/2012 9:45 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/1/2012 9:45 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/1/2012 9:45 PM
2-Butanone	ND	40	U	ppbv	40	10/1/2012 9:45 PM
2-Hexanone	ND	40	U	ppbv	40	10/1/2012 9:45 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Acetone	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Benzene	120	40		ppbv	40	10/1/2012 9:45 PM
Benzyl chloride	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Bromodichloromethane	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Bromoform	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Bromomethane	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Carbon disulfide	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Carbon tetrachloride	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Chlorobenzene	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Chlorodibromomethane	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Chloroethane	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Chloroform	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Chloromethane	ND	40	U	ppbv	40	10/1/2012 9:45 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/1/2012 9:45 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/1/2012 9:45 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 9:01:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-031	**Matrix:**	Air
Client Sample ID:	VA1785		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	150	80		ppbv	40	10/1/2012 9:45 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Ethyl acetate	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Ethylbenzene	ND	80	U	ppbv	40	10/1/2012 9:45 PM
Heptane	43	40		ppbv	40	10/1/2012 9:45 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/1/2012 9:45 PM
m,p-Xylene	ND	80	U	ppbv	40	10/1/2012 9:45 PM
Methylene chloride	ND	200	U	ppbv	40	10/1/2012 9:45 PM
n-Hexane	85	80		ppbv	40	10/1/2012 9:45 PM
Naphthalene	ND	40	U	ppbv	40	10/1/2012 9:45 PM
o-Xylene	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Propylene	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Styrene	ND	40	U	ppbv	40	10/1/2012 9:45 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Tetrachloroethene	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Tetrahydrofuran	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Toluene	210	40		ppbv	40	10/1/2012 9:45 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/1/2012 9:45 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Trichloroethene	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Vinyl acetate	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Vinyl chloride	ND	40	U	ppbv	40	10/1/2012 9:45 PM
Xylenes, Total	ND	120	U	ppbv	40	10/1/2012 9:45 PM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	40	10/1/2012 9:45 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	14,000	4,700		µg/m³	40	10/2/2012 6:35 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	10/2/2012 6:35 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	10/2/2012 6:35 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	40	10/2/2012 6:35 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 9:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-032	**Matrix:**	Air
Client Sample ID:	VA1786		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.25	0.10		% v/v	1	10/8/2012 1:44 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/8/2012 1:44 PM
Methane	ND	0.50	U	% v/v	1	10/8/2012 1:44 PM
Nitrogen	79	0.10		% v/v	1	10/8/2012 1:44 PM
Oxygen	21	0.10		% v/v	1	10/8/2012 1:44 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/1/2012 10:27 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/1/2012 10:27 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	10/1/2012 10:27 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/1/2012 10:27 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/1/2012 10:27 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/1/2012 10:27 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/1/2012 10:27 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	10/1/2012 10:27 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/1/2012 10:27 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/1/2012 10:27 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/1/2012 10:27 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/1/2012 10:27 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	10/1/2012 10:27 PM
1,3-Butadiene	ND	40	U	ppbv	40	10/1/2012 10:27 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/1/2012 10:27 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/1/2012 10:27 PM
2-Butanone	ND	40	U	ppbv	40	10/1/2012 10:27 PM
2-Hexanone	ND	40	U	ppbv	40	10/1/2012 10:27 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Acetone	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Benzene	350	40		ppbv	40	10/1/2012 10:27 PM
Benzyl chloride	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Bromodichloromethane	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Bromoform	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Bromomethane	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Carbon disulfide	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Carbon tetrachloride	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Chlorobenzene	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Chlorodibromomethane	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Chloroethane	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Chloroform	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Chloromethane	ND	40	U	ppbv	40	10/1/2012 10:27 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/1/2012 10:27 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/1/2012 10:27 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 9:46:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-032	**Matrix:**	Air
Client Sample ID:	VA1786		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	280	80		ppbv	40	10/1/2012 10:27 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Ethyl acetate	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Ethylbenzene	ND	80	U	ppbv	40	10/1/2012 10:27 PM
Heptane	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/1/2012 10:27 PM
m,p-Xylene	ND	80	U	ppbv	40	10/1/2012 10:27 PM
Methylene chloride	ND	200	U	ppbv	40	10/1/2012 10:27 PM
n-Hexane	83	80		ppbv	40	10/1/2012 10:27 PM
Naphthalene	ND	40	U	ppbv	40	10/1/2012 10:27 PM
o-Xylene	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Propylene	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Styrene	ND	40	U	ppbv	40	10/1/2012 10:27 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Tetrachloroethene	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Tetrahydrofuran	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Toluene	870	40		ppbv	40	10/1/2012 10:27 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/1/2012 10:27 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Trichloroethene	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Vinyl acetate	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Vinyl chloride	ND	40	U	ppbv	40	10/1/2012 10:27 PM
Xylenes, Total	ND	120	U	ppbv	40	10/1/2012 10:27 PM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	40	10/1/2012 10:27 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	170,000	47,000		µg/m³	400	9/29/2012 4:41 AM
C9-C10 Aromatic Hydrocarbons	ND	53,000	U	µg/m³	400	9/29/2012 4:41 AM
C9-C12 Aliphatic Hydrocarbons	ND	76,000	U	µg/m³	400	9/29/2012 4:41 AM
Surr: 4-Bromofluorobenzene	98.7	70-130		%REC	400	9/29/2012 4:41 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 11:04:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-033	**Matrix:**	Air
Client Sample ID:	VA1787		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.37	0.10		% v/v	1	10/8/2012 2:27 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/8/2012 2:27 PM
Methane	ND	0.50	U	% v/v	1	10/8/2012 2:27 PM
Nitrogen	79	0.10		% v/v	1	10/8/2012 2:27 PM
Oxygen	21	0.10		% v/v	1	10/8/2012 2:27 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/1/2012 11:08 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/1/2012 11:08 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	10/1/2012 11:08 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/1/2012 11:08 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/1/2012 11:08 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/1/2012 11:08 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/1/2012 11:08 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	10/1/2012 11:08 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/1/2012 11:08 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/1/2012 11:08 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/1/2012 11:08 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/1/2012 11:08 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	10/1/2012 11:08 PM
1,3-Butadiene	ND	40	U	ppbv	40	10/1/2012 11:08 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/1/2012 11:08 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/1/2012 11:08 PM
2-Butanone	ND	40	U	ppbv	40	10/1/2012 11:08 PM
2-Hexanone	ND	40	U	ppbv	40	10/1/2012 11:08 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Acetone	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Benzene	91	40		ppbv	40	10/1/2012 11:08 PM
Benzyl chloride	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Bromodichloromethane	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Bromoform	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Bromomethane	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Carbon disulfide	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Carbon tetrachloride	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Chlorobenzene	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Chlorodibromomethane	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Chloroethane	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Chloroform	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Chloromethane	ND	40	U	ppbv	40	10/1/2012 11:08 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/1/2012 11:08 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/1/2012 11:08 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 11:04:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-033	**Matrix:**	Air
Client Sample ID:	VA1787		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	100	80		ppbv	40	10/1/2012 11:08 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Ethyl acetate	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Ethylbenzene	ND	80	U	ppbv	40	10/1/2012 11:08 PM
Heptane	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/1/2012 11:08 PM
m,p-Xylene	ND	80	U	ppbv	40	10/1/2012 11:08 PM
Methylene chloride	ND	200	U	ppbv	40	10/1/2012 11:08 PM
n-Hexane	54	80	J	ppbv	40	10/1/2012 11:08 PM
Naphthalene	ND	40	U	ppbv	40	10/1/2012 11:08 PM
o-Xylene	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Propylene	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Styrene	ND	40	U	ppbv	40	10/1/2012 11:08 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Tetrachloroethene	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Tetrahydrofuran	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Toluene	290	40		ppbv	40	10/1/2012 11:08 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/1/2012 11:08 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Trichloroethene	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Vinyl acetate	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Vinyl chloride	ND	40	U	ppbv	40	10/1/2012 11:08 PM
Xylenes, Total	ND	120	U	ppbv	40	10/1/2012 11:08 PM
Surr: 4-Bromofluorobenzene	95.5	70-130		%REC	40	10/1/2012 11:08 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	4,600	940		µg/m³	8	10/3/2012 12:42 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	10/3/2012 12:42 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500	U	µg/m³	8	10/3/2012 12:42 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	8	10/3/2012 12:42 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 11:41:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-034	**Matrix:**	Air
Client Sample ID:	VA1788		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.89	0.10		% v/v	1	10/8/2012 2:43 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/8/2012 2:43 PM
Methane	ND	0.50	U	% v/v	1	10/8/2012 2:43 PM
Nitrogen	78	0.10		% v/v	1	10/8/2012 2:43 PM
Oxygen	21	0.10		% v/v	1	10/8/2012 2:43 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/1/2012 11:49 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/1/2012 11:49 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	10/1/2012 11:49 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/1/2012 11:49 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/1/2012 11:49 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/1/2012 11:49 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/1/2012 11:49 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	10/1/2012 11:49 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/1/2012 11:49 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/1/2012 11:49 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/1/2012 11:49 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/1/2012 11:49 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	10/1/2012 11:49 PM
1,3-Butadiene	ND	40	U	ppbv	40	10/1/2012 11:49 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/1/2012 11:49 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/1/2012 11:49 PM
2-Butanone	ND	40	U	ppbv	40	10/1/2012 11:49 PM
2-Hexanone	ND	40	U	ppbv	40	10/1/2012 11:49 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Acetone	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Benzene	62	40		ppbv	40	10/1/2012 11:49 PM
Benzyl chloride	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Bromodichloromethane	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Bromoform	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Bromomethane	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Carbon disulfide	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Carbon tetrachloride	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Chlorobenzene	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Chlorodibromomethane	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Chloroethane	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Chloroform	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Chloromethane	ND	40	U	ppbv	40	10/1/2012 11:49 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/1/2012 11:49 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/1/2012 11:49 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 11:41:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-034	**Matrix:**	Air
Client Sample ID:	VA1788		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	88	80		ppbv	40	10/1/2012 11:49 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Ethyl acetate	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Ethylbenzene	ND	80	U	ppbv	40	10/1/2012 11:49 PM
Heptane	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/1/2012 11:49 PM
m,p-Xylene	ND	80	U	ppbv	40	10/1/2012 11:49 PM
Methylene chloride	ND	200	U	ppbv	40	10/1/2012 11:49 PM
n-Hexane	43	80	J	ppbv	40	10/1/2012 11:49 PM
Naphthalene	ND	40	U	ppbv	40	10/1/2012 11:49 PM
o-Xylene	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Propylene	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Styrene	ND	40	U	ppbv	40	10/1/2012 11:49 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Tetrachloroethene	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Tetrahydrofuran	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Toluene	200	40		ppbv	40	10/1/2012 11:49 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/1/2012 11:49 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Trichloroethene	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Vinyl acetate	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Vinyl chloride	ND	40	U	ppbv	40	10/1/2012 11:49 PM
Xylenes, Total	ND	120	U	ppbv	40	10/1/2012 11:49 PM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	40	10/1/2012 11:49 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	5,700	940		µg/m³	8	10/3/2012 1:27 PM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	10/3/2012 1:27 PM
C9-C12 Aliphatic Hydrocarbons	ND	1,500	U	µg/m³	8	10/3/2012 1:27 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	8	10/3/2012 1:27 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 12:19:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-035	**Matrix:**	Air
Client Sample ID:	VA1789		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons	**Method: ASTM-D2504**					**Analyst: JH5**
Carbon dioxide	3.3	0.10		% v/v	1	10/8/2012 2:59 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/8/2012 2:59 PM
Methane	ND	0.50	U	% v/v	1	10/8/2012 2:59 PM
Nitrogen	81	0.10		% v/v	1	10/8/2012 2:59 PM
Oxygen	14	0.10		% v/v	1	10/8/2012 2:59 PM
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RD2**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	9/29/2012 3:39 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	9/29/2012 3:39 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	9/29/2012 3:39 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	9/29/2012 3:39 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	9/29/2012 3:39 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	9/29/2012 3:39 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	9/29/2012 3:39 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	9/29/2012 3:39 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	9/29/2012 3:39 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	9/29/2012 3:39 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	9/29/2012 3:39 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	9/29/2012 3:39 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	9/29/2012 3:39 AM
1,3-Butadiene	ND	800	U	ppbv	800	9/29/2012 3:39 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	9/29/2012 3:39 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	9/29/2012 3:39 AM
2-Butanone	ND	800	U	ppbv	800	9/29/2012 3:39 AM
2-Hexanone	ND	800	U	ppbv	800	9/29/2012 3:39 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Acetone	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Benzene	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Benzyl chloride	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Bromodichloromethane	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Bromoform	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Bromomethane	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Carbon disulfide	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Carbon tetrachloride	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Chlorobenzene	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Chlorodibromomethane	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Chloroethane	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Chloroform	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Chloromethane	ND	800	U	ppbv	800	9/29/2012 3:39 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	9/29/2012 3:39 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	9/29/2012 3:39 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 12:19:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-035	**Matrix:**	Air
Client Sample ID:	VA1789		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	24,000	1,600		ppbv	800	9/29/2012 3:39 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Ethyl acetate	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Ethylbenzene	ND	1,600	U	ppbv	800	9/29/2012 3:39 AM
Heptane	6,200	800		ppbv	800	9/29/2012 3:39 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	9/29/2012 3:39 AM
m,p-Xylene	ND	1,600	U	ppbv	800	9/29/2012 3:39 AM
Methylene chloride	ND	4,000	U	ppbv	800	9/29/2012 3:39 AM
n-Hexane	17,000	1,600		ppbv	800	9/29/2012 3:39 AM
Naphthalene	ND	800	U	ppbv	800	9/29/2012 3:39 AM
o-Xylene	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Propylene	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Styrene	ND	800	U	ppbv	800	9/29/2012 3:39 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Tetrachloroethene	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Tetrahydrofuran	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Toluene	ND	800	U	ppbv	800	9/29/2012 3:39 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	9/29/2012 3:39 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Trichloroethene	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Vinyl acetate	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Vinyl chloride	ND	800	U	ppbv	800	9/29/2012 3:39 AM
Xylenes, Total	ND	2,400	U	ppbv	800	9/29/2012 3:39 AM
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	800	9/29/2012 3:39 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	840,000	94,000		µg/m³	800	10/2/2012 8:53 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	10/2/2012 8:53 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	10/2/2012 8:53 PM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	800	10/2/2012 8:53 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 1:01:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-036	**Matrix:**	Air
Client Sample ID:	VA1790		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.87	0.10		% v/v	1	10/8/2012 3:36 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/8/2012 3:36 PM
Methane	ND	0.50	U	% v/v	1	10/8/2012 3:36 PM
Nitrogen	81	0.10		% v/v	1	10/8/2012 3:36 PM
Oxygen	18	0.10		% v/v	1	10/8/2012 3:36 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	10/2/2012 12:37 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	10/2/2012 12:37 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	10/2/2012 12:37 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	10/2/2012 12:37 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	10/2/2012 12:37 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	10/2/2012 12:37 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	10/2/2012 12:37 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	10/2/2012 12:37 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	10/2/2012 12:37 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	10/2/2012 12:37 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	10/2/2012 12:37 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	10/2/2012 12:37 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	10/2/2012 12:37 AM
1,3-Butadiene	ND	400	U	ppbv	400	10/2/2012 12:37 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	10/2/2012 12:37 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	10/2/2012 12:37 AM
2-Butanone	ND	400	U	ppbv	400	10/2/2012 12:37 AM
2-Hexanone	ND	400	U	ppbv	400	10/2/2012 12:37 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Acetone	2,700	400		ppbv	400	10/2/2012 12:37 AM
Benzene	12,000	400		ppbv	400	10/2/2012 12:37 AM
Benzyl chloride	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Bromodichloromethane	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Bromoform	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Bromomethane	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Carbon disulfide	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Carbon tetrachloride	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Chlorobenzene	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Chlorodibromomethane	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Chloroethane	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Chloroform	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Chloromethane	ND	400	U	ppbv	400	10/2/2012 12:37 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	10/2/2012 12:37 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	10/2/2012 12:37 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 1:01:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-036	**Matrix:**	Air
Client Sample ID:	VA1790		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	7,000	800		ppbv	400	10/2/2012 12:37 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Ethyl acetate	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Ethylbenzene	ND	800	U	ppbv	400	10/2/2012 12:37 AM
Heptane	1,900	400		ppbv	400	10/2/2012 12:37 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	10/2/2012 12:37 AM
m,p-Xylene	ND	800	U	ppbv	400	10/2/2012 12:37 AM
Methylene chloride	2,200	2,000		ppbv	400	10/2/2012 12:37 AM
n-Hexane	6,600	800		ppbv	400	10/2/2012 12:37 AM
Naphthalene	ND	400	U	ppbv	400	10/2/2012 12:37 AM
o-Xylene	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Propylene	490	400		ppbv	400	10/2/2012 12:37 AM
Styrene	ND	400	U	ppbv	400	10/2/2012 12:37 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Tetrachloroethene	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Tetrahydrofuran	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Toluene	13,000	400		ppbv	400	10/2/2012 12:37 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	10/2/2012 12:37 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Trichloroethene	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Vinyl acetate	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Vinyl chloride	ND	400	U	ppbv	400	10/2/2012 12:37 AM
Xylenes, Total	ND	1,200	U	ppbv	400	10/2/2012 12:37 AM
Surr: 4-Bromofluorobenzene	96.6	70-130		%REC	400	10/2/2012 12:37 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	430,000	94,000		µg/m³	800	10/2/2012 10:28 PM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	10/2/2012 10:28 PM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	10/2/2012 10:28 PM
Surr: 4-Bromofluorobenzene	108	70-130		%REC	800	10/2/2012 10:28 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 1:45:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-037	**Matrix:**	Air
Client Sample ID:	VA1791		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.40	0.10		% v/v	1	10/8/2012 3:53 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/8/2012 3:53 PM
Methane	ND	0.50	U	% v/v	1	10/8/2012 3:53 PM
Nitrogen	80	0.10		% v/v	1	10/8/2012 3:53 PM
Oxygen	19	0.10		% v/v	1	10/8/2012 3:53 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	10/2/2012 1:22 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	10/2/2012 1:22 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	10/2/2012 1:22 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	10/2/2012 1:22 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	10/2/2012 1:22 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	10/2/2012 1:22 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	10/2/2012 1:22 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	10/2/2012 1:22 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	10/2/2012 1:22 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	10/2/2012 1:22 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	10/2/2012 1:22 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	10/2/2012 1:22 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	10/2/2012 1:22 AM
1,3-Butadiene	ND	800	U	ppbv	800	10/2/2012 1:22 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	10/2/2012 1:22 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	10/2/2012 1:22 AM
2-Butanone	ND	800	U	ppbv	800	10/2/2012 1:22 AM
2-Hexanone	ND	800	U	ppbv	800	10/2/2012 1:22 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Acetone	5,500	800		ppbv	800	10/2/2012 1:22 AM
Benzene	21,000	800		ppbv	800	10/2/2012 1:22 AM
Benzyl chloride	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Bromodichloromethane	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Bromoform	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Bromomethane	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Carbon disulfide	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Carbon tetrachloride	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Chlorobenzene	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Chlorodibromomethane	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Chloroethane	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Chloroform	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Chloromethane	ND	800	U	ppbv	800	10/2/2012 1:22 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	10/2/2012 1:22 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	10/2/2012 1:22 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 1:45:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-037	**Matrix:**	Air
Client Sample ID:	VA1791		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	19,000	1,600		ppbv	800	10/2/2012 1:22 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Ethyl acetate	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Ethylbenzene	ND	1,600	U	ppbv	800	10/2/2012 1:22 AM
Heptane	6,000	800		ppbv	800	10/2/2012 1:22 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	10/2/2012 1:22 AM
m,p-Xylene	ND	1,600	U	ppbv	800	10/2/2012 1:22 AM
Methylene chloride	3,900	4,000	J	ppbv	800	10/2/2012 1:22 AM
n-Hexane	15,000	1,600		ppbv	800	10/2/2012 1:22 AM
Naphthalene	ND	800	U	ppbv	800	10/2/2012 1:22 AM
o-Xylene	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Propylene	1,200	800		ppbv	800	10/2/2012 1:22 AM
Styrene	ND	800	U	ppbv	800	10/2/2012 1:22 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Tetrachloroethene	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Tetrahydrofuran	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Toluene	35,000	800		ppbv	800	10/2/2012 1:22 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	10/2/2012 1:22 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Trichloroethene	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Vinyl acetate	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Vinyl chloride	ND	800	U	ppbv	800	10/2/2012 1:22 AM
Xylenes, Total	ND	2,400	U	ppbv	800	10/2/2012 1:22 AM
Surr: 4-Bromofluorobenzene	98.6	70-130		%REC	800	10/2/2012 1:22 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	960,000	190,000		µg/m³	1600	10/2/2012 11:13 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	10/2/2012 11:13 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	10/2/2012 11:13 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1600	10/2/2012 11:13 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 2:32:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-038	**Matrix:**	Air
Client Sample ID:	VA1792		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.27	0.10		% v/v	1	10/9/2012 10:56 AM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/9/2012 10:56 AM
Methane	ND	0.50	U	% v/v	1	10/9/2012 10:56 AM
Nitrogen	80	0.10		% v/v	1	10/9/2012 10:56 AM
Oxygen	21	0.10		% v/v	1	10/9/2012 10:56 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	10/1/2012 2:39 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	10/1/2012 2:39 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	10/1/2012 2:39 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	10/1/2012 2:39 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	10/1/2012 2:39 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	10/1/2012 2:39 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	10/1/2012 2:39 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	10/1/2012 2:39 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	10/1/2012 2:39 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	10/1/2012 2:39 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	10/1/2012 2:39 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	10/1/2012 2:39 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	10/1/2012 2:39 PM
1,3-Butadiene	ND	800	U	ppbv	800	10/1/2012 2:39 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	10/1/2012 2:39 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	10/1/2012 2:39 PM
2-Butanone	ND	800	U	ppbv	800	10/1/2012 2:39 PM
2-Hexanone	ND	800	U	ppbv	800	10/1/2012 2:39 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Acetone	3,300	800		ppbv	800	10/1/2012 2:39 PM
Benzene	5,200	800		ppbv	800	10/1/2012 2:39 PM
Benzyl chloride	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Bromodichloromethane	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Bromoform	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Bromomethane	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Carbon disulfide	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Carbon tetrachloride	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Chlorobenzene	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Chlorodibromomethane	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Chloroethane	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Chloroform	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Chloromethane	ND	800	U	ppbv	800	10/1/2012 2:39 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	10/1/2012 2:39 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	10/1/2012 2:39 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 2:32:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-038	**Matrix:**	Air
Client Sample ID:	VA1792		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	3,800	1,600		ppbv	800	10/1/2012 2:39 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Ethyl acetate	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Ethylbenzene	ND	1,600	U	ppbv	800	10/1/2012 2:39 PM
Heptane	1,100	800		ppbv	800	10/1/2012 2:39 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	10/1/2012 2:39 PM
m,p-Xylene	ND	1,600	U	ppbv	800	10/1/2012 2:39 PM
Methylene chloride	3,000	4,000	J	ppbv	800	10/1/2012 2:39 PM
n-Hexane	3,600	1,600		ppbv	800	10/1/2012 2:39 PM
Naphthalene	ND	800	U	ppbv	800	10/1/2012 2:39 PM
o-Xylene	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Propylene	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Styrene	ND	800	U	ppbv	800	10/1/2012 2:39 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Tetrachloroethene	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Tetrahydrofuran	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Toluene	14,000	800		ppbv	800	10/1/2012 2:39 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	10/1/2012 2:39 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Trichloroethene	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Vinyl acetate	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Vinyl chloride	ND	800	U	ppbv	800	10/1/2012 2:39 PM
Xylenes, Total	ND	2,400	U	ppbv	800	10/1/2012 2:39 PM
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	800	10/1/2012 2:39 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	340,000	94,000		µg/m³	800	10/3/2012 12:00 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	10/3/2012 12:00 AM
C9-C12 Aliphatic Hydrocarbons	ND	150,000	U	µg/m³	800	10/3/2012 12:00 AM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	800	10/3/2012 12:00 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 12:06:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-039	**Matrix:**	Air
Client Sample ID:	VA1813		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.74	0.10		% v/v	1	10/9/2012 11:12 AM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/9/2012 11:12 AM
Methane	ND	0.50	U	% v/v	1	10/9/2012 11:12 AM
Nitrogen	79	0.10		% v/v	1	10/9/2012 11:12 AM
Oxygen	21	0.10		% v/v	1	10/9/2012 11:12 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	10/1/2012 4:12 PM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	10/1/2012 4:12 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	10/1/2012 4:12 PM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	10/1/2012 4:12 PM
1,1-Dichloroethane	ND	400	U	ppbv	400	10/1/2012 4:12 PM
1,1-Dichloroethene	ND	400	U	ppbv	400	10/1/2012 4:12 PM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	10/1/2012 4:12 PM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	10/1/2012 4:12 PM
1,2-Dibromoethane	ND	400	U	ppbv	400	10/1/2012 4:12 PM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	10/1/2012 4:12 PM
1,2-Dichloroethane	ND	400	U	ppbv	400	10/1/2012 4:12 PM
1,2-Dichloropropane	ND	400	U	ppbv	400	10/1/2012 4:12 PM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	10/1/2012 4:12 PM
1,3-Butadiene	ND	400	U	ppbv	400	10/1/2012 4:12 PM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	10/1/2012 4:12 PM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	10/1/2012 4:12 PM
2-Butanone	ND	400	U	ppbv	400	10/1/2012 4:12 PM
2-Hexanone	ND	400	U	ppbv	400	10/1/2012 4:12 PM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Acetone	3,500	400		ppbv	400	10/1/2012 4:12 PM
Benzene	1,300	400		ppbv	400	10/1/2012 4:12 PM
Benzyl chloride	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Bromodichloromethane	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Bromoform	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Bromomethane	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Carbon disulfide	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Carbon tetrachloride	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Chlorobenzene	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Chlorodibromomethane	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Chloroethane	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Chloroform	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Chloromethane	ND	400	U	ppbv	400	10/1/2012 4:12 PM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	10/1/2012 4:12 PM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	10/1/2012 4:12 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 12:06:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-039	**Matrix:**	Air
Client Sample ID:	VA1813		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	900	800		ppbv	400	10/1/2012 4:12 PM
Dichlorodifluoromethane	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Ethyl acetate	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Ethylbenzene	ND	800	U	ppbv	400	10/1/2012 4:12 PM
Heptane	460	400		ppbv	400	10/1/2012 4:12 PM
Hexachlorobutadiene	ND	800	U	ppbv	400	10/1/2012 4:12 PM
m,p-Xylene	ND	800	U	ppbv	400	10/1/2012 4:12 PM
Methylene chloride	4,900	2,000		ppbv	400	10/1/2012 4:12 PM
n-Hexane	3,000	800		ppbv	400	10/1/2012 4:12 PM
Naphthalene	ND	400	U	ppbv	400	10/1/2012 4:12 PM
o-Xylene	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Propylene	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Styrene	ND	400	U	ppbv	400	10/1/2012 4:12 PM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Tetrachloroethene	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Tetrahydrofuran	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Toluene	4,100	400		ppbv	400	10/1/2012 4:12 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	10/1/2012 4:12 PM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Trichloroethene	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Trichlorofluoromethane	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Vinyl acetate	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Vinyl chloride	ND	400	U	ppbv	400	10/1/2012 4:12 PM
Xylenes, Total	ND	1,200	U	ppbv	400	10/1/2012 4:12 PM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	400	10/1/2012 4:12 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	27,000	4,700		µg/m³	40	10/3/2012 2:11 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	10/3/2012 2:11 PM
C9-C12 Aliphatic Hydrocarbons	1,700	7,600	J	µg/m³	40	10/3/2012 2:11 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	40	10/3/2012 2:11 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 12:48:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-040	**Matrix:**	Air
Client Sample ID:	VA1814		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.98	0.10		% v/v	1	10/9/2012 11:26 AM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/9/2012 11:26 AM
Methane	ND	0.50	U	% v/v	1	10/9/2012 11:26 AM
Nitrogen	80	0.10		% v/v	1	10/9/2012 11:26 AM
Oxygen	20	0.10		% v/v	1	10/9/2012 11:26 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	10/2/2012 2:10 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	10/2/2012 2:10 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	10/2/2012 2:10 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	10/2/2012 2:10 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	10/2/2012 2:10 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	10/2/2012 2:10 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	10/2/2012 2:10 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	10/2/2012 2:10 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	10/2/2012 2:10 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	10/2/2012 2:10 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	10/2/2012 2:10 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	10/2/2012 2:10 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	10/2/2012 2:10 AM
1,3-Butadiene	ND	400	U	ppbv	400	10/2/2012 2:10 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	10/2/2012 2:10 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	10/2/2012 2:10 AM
2-Butanone	ND	400	U	ppbv	400	10/2/2012 2:10 AM
2-Hexanone	ND	400	U	ppbv	400	10/2/2012 2:10 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Acetone	930	400		ppbv	400	10/2/2012 2:10 AM
Benzene	840	400		ppbv	400	10/2/2012 2:10 AM
Benzyl chloride	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Bromodichloromethane	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Bromoform	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Bromomethane	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Carbon disulfide	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Carbon tetrachloride	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Chlorobenzene	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Chlorodibromomethane	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Chloroethane	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Chloroform	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Chloromethane	ND	400	U	ppbv	400	10/2/2012 2:10 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	10/2/2012 2:10 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	10/2/2012 2:10 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 12:48:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-040	**Matrix:**	Air
Client Sample ID:	VA1814		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	610	800	J	ppbv	400	10/2/2012 2:10 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Ethyl acetate	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Ethylbenzene	ND	800	U	ppbv	400	10/2/2012 2:10 AM
Heptane	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	10/2/2012 2:10 AM
m,p-Xylene	ND	800	U	ppbv	400	10/2/2012 2:10 AM
Methylene chloride	ND	2,000	U	ppbv	400	10/2/2012 2:10 AM
n-Hexane	760	800	J	ppbv	400	10/2/2012 2:10 AM
Naphthalene	ND	400	U	ppbv	400	10/2/2012 2:10 AM
o-Xylene	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Propylene	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Styrene	ND	400	U	ppbv	400	10/2/2012 2:10 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Tetrachloroethene	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Tetrahydrofuran	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Toluene	2,900	400		ppbv	400	10/2/2012 2:10 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	10/2/2012 2:10 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Trichloroethene	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Vinyl acetate	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Vinyl chloride	ND	400	U	ppbv	400	10/2/2012 2:10 AM
Xylenes, Total	ND	1,200	U	ppbv	400	10/2/2012 2:10 AM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	400	10/2/2012 2:10 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	16,000	4,700		µg/m³	40	10/3/2012 3:40 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	10/3/2012 3:40 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	10/3/2012 3:40 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	40	10/3/2012 3:40 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 1:39:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-041	**Matrix:**	Air
Client Sample ID:	VA1815		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.18	0.10		% v/v	1	10/9/2012 11:41 AM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/9/2012 11:41 AM
Methane	ND	0.50	U	% v/v	1	10/9/2012 11:41 AM
Nitrogen	80	0.10		% v/v	1	10/9/2012 11:41 AM
Oxygen	20	0.10		% v/v	1	10/9/2012 11:41 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	10/2/2012 2:57 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	10/2/2012 2:57 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	10/2/2012 2:57 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	10/2/2012 2:57 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	10/2/2012 2:57 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	10/2/2012 2:57 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	10/2/2012 2:57 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	10/2/2012 2:57 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	10/2/2012 2:57 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	10/2/2012 2:57 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	10/2/2012 2:57 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	10/2/2012 2:57 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	10/2/2012 2:57 AM
1,3-Butadiene	ND	400	U	ppbv	400	10/2/2012 2:57 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	10/2/2012 2:57 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	10/2/2012 2:57 AM
2-Butanone	ND	400	U	ppbv	400	10/2/2012 2:57 AM
2-Hexanone	ND	400	U	ppbv	400	10/2/2012 2:57 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Acetone	1,800	400		ppbv	400	10/2/2012 2:57 AM
Benzene	740	400		ppbv	400	10/2/2012 2:57 AM
Benzyl chloride	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Bromodichloromethane	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Bromoform	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Bromomethane	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Carbon disulfide	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Carbon tetrachloride	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Chlorobenzene	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Chlorodibromomethane	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Chloroethane	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Chloroform	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Chloromethane	ND	400	U	ppbv	400	10/2/2012 2:57 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	10/2/2012 2:57 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	10/2/2012 2:57 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 1:39:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-041	**Matrix:**	Air
Client Sample ID:	VA1815		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	640	800	J	ppbv	400	10/2/2012 2:57 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Ethyl acetate	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Ethylbenzene	ND	800	U	ppbv	400	10/2/2012 2:57 AM
Heptane	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	10/2/2012 2:57 AM
m,p-Xylene	ND	800	U	ppbv	400	10/2/2012 2:57 AM
Methylene chloride	1,500	2,000	J	ppbv	400	10/2/2012 2:57 AM
n-Hexane	1,400	800		ppbv	400	10/2/2012 2:57 AM
Naphthalene	ND	400	U	ppbv	400	10/2/2012 2:57 AM
o-Xylene	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Propylene	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Styrene	ND	400	U	ppbv	400	10/2/2012 2:57 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Tetrachloroethene	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Tetrahydrofuran	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Toluene	2,400	400		ppbv	400	10/2/2012 2:57 AM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	10/2/2012 2:57 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Trichloroethene	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Vinyl acetate	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Vinyl chloride	ND	400	U	ppbv	400	10/2/2012 2:57 AM
Xylenes, Total	ND	1,200	U	ppbv	400	10/2/2012 2:57 AM
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	400	10/2/2012 2:57 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	17,000	4,700		µg/m³	40	10/3/2012 4:26 PM
C9-C10 Aromatic Hydrocarbons	ND	5,300	U	µg/m³	40	10/3/2012 4:26 PM
C9-C12 Aliphatic Hydrocarbons	ND	7,600	U	µg/m³	40	10/3/2012 4:26 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	40	10/3/2012 4:26 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 2:25:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-042	**Matrix:**	Air
Client Sample ID:	VA1816		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.055	0.10	J	% v/v	1	10/9/2012 11:56 AM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/9/2012 11:56 AM
Methane	ND	0.50	U	% v/v	1	10/9/2012 11:56 AM
Nitrogen	79	0.10		% v/v	1	10/9/2012 11:56 AM
Oxygen	21	0.10		% v/v	1	10/9/2012 11:56 AM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/2/2012 4:58 PM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/2/2012 4:58 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	10/2/2012 4:58 PM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/2/2012 4:58 PM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/2/2012 4:58 PM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/2/2012 4:58 PM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/2/2012 4:58 PM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	10/2/2012 4:58 PM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/2/2012 4:58 PM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/2/2012 4:58 PM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/2/2012 4:58 PM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/2/2012 4:58 PM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	10/2/2012 4:58 PM
1,3-Butadiene	ND	40	U	ppbv	40	10/2/2012 4:58 PM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/2/2012 4:58 PM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/2/2012 4:58 PM
2-Butanone	ND	40	U	ppbv	40	10/2/2012 4:58 PM
2-Hexanone	ND	40	U	ppbv	40	10/2/2012 4:58 PM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Acetone	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Benzene	200	40		ppbv	40	10/2/2012 4:58 PM
Benzyl chloride	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Bromodichloromethane	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Bromoform	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Bromomethane	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Carbon disulfide	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Carbon tetrachloride	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Chlorobenzene	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Chlorodibromomethane	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Chloroethane	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Chloroform	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Chloromethane	ND	40	U	ppbv	40	10/2/2012 4:58 PM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/2/2012 4:58 PM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/2/2012 4:58 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 2:25:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-042	**Matrix:**	Air
Client Sample ID:	VA1816		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	170	80		ppbv	40	10/2/2012 4:58 PM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Ethyl acetate	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Ethylbenzene	ND	80	U	ppbv	40	10/2/2012 4:58 PM
Heptane	76	40		ppbv	40	10/2/2012 4:58 PM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/2/2012 4:58 PM
m,p-Xylene	ND	80	U	ppbv	40	10/2/2012 4:58 PM
Methylene chloride	ND	200	U	ppbv	40	10/2/2012 4:58 PM
n-Hexane	100	80		ppbv	40	10/2/2012 4:58 PM
Naphthalene	ND	40	U	ppbv	40	10/2/2012 4:58 PM
o-Xylene	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Propylene	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Styrene	ND	40	U	ppbv	40	10/2/2012 4:58 PM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Tetrachloroethene	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Tetrahydrofuran	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Toluene	610	40		ppbv	40	10/2/2012 4:58 PM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/2/2012 4:58 PM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Trichloroethene	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Vinyl acetate	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Vinyl chloride	ND	40	U	ppbv	40	10/2/2012 4:58 PM
Xylenes, Total	ND	120	U	ppbv	40	10/2/2012 4:58 PM
Surr: 4-Bromofluorobenzene	99.3	70-130		%REC	40	10/2/2012 4:58 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	6,500	940		µg/m³	8	10/4/2012 3:48 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	10/4/2012 3:48 AM
C9-C12 Aliphatic Hydrocarbons	230	1,500	J	µg/m³	8	10/4/2012 3:48 AM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	8	10/4/2012 3:48 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 3:03:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-043	**Matrix:**	Air
Client Sample ID:	VA1817		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.57	0.10		% v/v	1	10/9/2012 12:25 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/9/2012 12:25 PM
Methane	ND	0.50	U	% v/v	1	10/9/2012 12:25 PM
Nitrogen	81	0.10		% v/v	1	10/9/2012 12:25 PM
Oxygen	21	0.10		% v/v	1	10/9/2012 12:25 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	40	U	ppbv	40	10/2/2012 4:27 AM
1,1,2,2-Tetrachloroethane	ND	40	U	ppbv	40	10/2/2012 4:27 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40	U	ppbv	40	10/2/2012 4:27 AM
1,1,2-Trichloroethane	ND	40	U	ppbv	40	10/2/2012 4:27 AM
1,1-Dichloroethane	ND	40	U	ppbv	40	10/2/2012 4:27 AM
1,1-Dichloroethene	ND	40	U	ppbv	40	10/2/2012 4:27 AM
1,2,4-Trichlorobenzene	ND	40	U	ppbv	40	10/2/2012 4:27 AM
1,2,4-Trimethylbenzene	ND	40	U	ppbv	40	10/2/2012 4:27 AM
1,2-Dibromoethane	ND	40	U	ppbv	40	10/2/2012 4:27 AM
1,2-Dichlorobenzene	ND	40	U	ppbv	40	10/2/2012 4:27 AM
1,2-Dichloroethane	ND	40	U	ppbv	40	10/2/2012 4:27 AM
1,2-Dichloropropane	ND	40	U	ppbv	40	10/2/2012 4:27 AM
1,3,5-Trimethylbenzene	ND	40	U	ppbv	40	10/2/2012 4:27 AM
1,3-Butadiene	ND	40	U	ppbv	40	10/2/2012 4:27 AM
1,3-Dichlorobenzene	ND	40	U	ppbv	40	10/2/2012 4:27 AM
1,4-Dichlorobenzene	ND	40	U	ppbv	40	10/2/2012 4:27 AM
2-Butanone	ND	40	U	ppbv	40	10/2/2012 4:27 AM
2-Hexanone	ND	40	U	ppbv	40	10/2/2012 4:27 AM
4-Methyl-2-pentanone	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Acetone	90	40		ppbv	40	10/2/2012 4:27 AM
Benzene	100	40		ppbv	40	10/2/2012 4:27 AM
Benzyl chloride	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Bromodichloromethane	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Bromoform	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Bromomethane	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Carbon disulfide	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Carbon tetrachloride	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Chlorobenzene	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Chlorodibromomethane	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Chloroethane	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Chloroform	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Chloromethane	ND	40	U	ppbv	40	10/2/2012 4:27 AM
cis-1,2-Dichloroethene	ND	40	U	ppbv	40	10/2/2012 4:27 AM
cis-1,3-dichloropropene	ND	40	U	ppbv	40	10/2/2012 4:27 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 3:03:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-043	**Matrix:**	Air
Client Sample ID:	VA1817		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	88	80		ppbv	40	10/2/2012 4:27 AM
Dichlorodifluoromethane	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Ethyl acetate	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Ethylbenzene	ND	80	U	ppbv	40	10/2/2012 4:27 AM
Heptane	43	40		ppbv	40	10/2/2012 4:27 AM
Hexachlorobutadiene	ND	80	U	ppbv	40	10/2/2012 4:27 AM
m,p-Xylene	ND	80	U	ppbv	40	10/2/2012 4:27 AM
Methylene chloride	ND	200	U	ppbv	40	10/2/2012 4:27 AM
n-Hexane	64	80	J	ppbv	40	10/2/2012 4:27 AM
Naphthalene	ND	40	U	ppbv	40	10/2/2012 4:27 AM
o-Xylene	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Propylene	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Styrene	ND	40	U	ppbv	40	10/2/2012 4:27 AM
tert-Butyl Methyl Ether	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Tetrachloroethene	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Tetrahydrofuran	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Toluene	410	40		ppbv	40	10/2/2012 4:27 AM
trans-1,2-Dichloroethene	ND	40	U	ppbv	40	10/2/2012 4:27 AM
trans-1,3-dichloropropene	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Trichloroethene	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Trichlorofluoromethane	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Vinyl acetate	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Vinyl chloride	ND	40	U	ppbv	40	10/2/2012 4:27 AM
Xylenes, Total	ND	120	U	ppbv	40	10/2/2012 4:27 AM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	40	10/2/2012 4:27 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	4,300	940		µg/m³	8	10/4/2012 4:32 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100	U	µg/m³	8	10/4/2012 4:32 AM
C9-C12 Aliphatic Hydrocarbons	350	1,500	J	µg/m³	8	10/4/2012 4:32 AM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	8	10/4/2012 4:32 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 3:52:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-044	**Matrix:**	Air
Client Sample ID:	VA1818		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.30	0.10		% v/v	1	10/9/2012 12:51 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/9/2012 12:51 PM
Methane	ND	0.50	U	% v/v	1	10/9/2012 12:51 PM
Nitrogen	82	0.10		% v/v	1	10/9/2012 12:51 PM
Oxygen	19	0.10		% v/v	1	10/9/2012 12:51 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
2-Butanone	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
2-Hexanone	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Acetone	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Benzene	12,000	8,000		ppbv	8000	10/1/2012 6:19 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Bromoform	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Bromomethane	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Chloroethane	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Chloroform	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Chloromethane	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 3:52:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-044	**Matrix:**	Air
Client Sample ID:	VA1818		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	37,000	16,000		ppbv	8000	10/1/2012 6:19 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	10/1/2012 6:19 PM
Heptane	9,000	8,000		ppbv	8000	10/1/2012 6:19 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	10/1/2012 6:19 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	10/1/2012 6:19 PM
Methylene chloride	ND	40,000	U	ppbv	8000	10/1/2012 6:19 PM
n-Hexane	39,000	16,000		ppbv	8000	10/1/2012 6:19 PM
Naphthalene	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
o-Xylene	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Propylene	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Styrene	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Toluene	19,000	8,000		ppbv	8000	10/1/2012 6:19 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Trichloroethene	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	10/1/2012 6:19 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	10/1/2012 6:19 PM
Surr: 4-Bromofluorobenzene	97.7	70-130		%REC	8000	10/1/2012 6:19 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	5,500,000	940,000		µg/m³	8000	10/3/2012 4:07 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	10/3/2012 4:07 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	10/3/2012 4:07 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	8000	10/3/2012 4:07 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 1:08:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-045	**Matrix:**	Air
Client Sample ID:	VA1859		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.14	0.10		% v/v	1	10/9/2012 1:06 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/9/2012 1:06 PM
Methane	ND	0.50	U	% v/v	1	10/9/2012 1:06 PM
Nitrogen	79	0.10		% v/v	1	10/9/2012 1:06 PM
Oxygen	21	0.10		% v/v	1	10/9/2012 1:06 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
2-Butanone	9,100	8,000		ppbv	8000	10/1/2012 7:00 PM
2-Hexanone	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Acetone	15,000	8,000		ppbv	8000	10/1/2012 7:00 PM
Benzene	53,000	8,000		ppbv	8000	10/1/2012 7:00 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Bromoform	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Bromomethane	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Chloroethane	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Chloroform	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Chloromethane	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 1:08:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-045	**Matrix:**	Air
Client Sample ID:	VA1859		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	150,000	16,000		ppbv	8000	10/1/2012 7:00 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	10/1/2012 7:00 PM
Heptane	160,000	8,000		ppbv	8000	10/1/2012 7:00 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	10/1/2012 7:00 PM
m,p-Xylene	20,000	16,000		ppbv	8000	10/1/2012 7:00 PM
Methylene chloride	ND	40,000	U	ppbv	8000	10/1/2012 7:00 PM
n-Hexane	97,000	16,000		ppbv	8000	10/1/2012 7:00 PM
Naphthalene	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
o-Xylene	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Propylene	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Styrene	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Toluene	180,000	8,000		ppbv	8000	10/1/2012 7:00 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Trichloroethene	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	10/1/2012 7:00 PM
Xylenes, Total	20,000	24,000	J	ppbv	8000	10/1/2012 7:00 PM
Surr: 4-Bromofluorobenzene	97.0	70-130		%REC	8000	10/1/2012 7:00 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	6,900,000	940,000		µg/m³	8000	10/3/2012 4:53 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	10/3/2012 4:53 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	10/3/2012 4:53 AM
Surr: 4-Bromofluorobenzene	98.8	70-130		%REC	8000	10/3/2012 4:53 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 1:44:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-046	**Matrix:**	Air
Client Sample ID:	VA1860		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.14	0.10		% v/v	1	10/9/2012 1:21 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/9/2012 1:21 PM
Methane	ND	0.50	U	% v/v	1	10/9/2012 1:21 PM
Nitrogen	79	0.10		% v/v	1	10/9/2012 1:21 PM
Oxygen	21	0.10		% v/v	1	10/9/2012 1:21 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
2-Butanone	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
2-Hexanone	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Acetone	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Benzene	25,000	8,000		ppbv	8000	10/1/2012 7:41 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Bromoform	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Bromomethane	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Chloroethane	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Chloroform	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Chloromethane	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 1:44:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-046	**Matrix:**	Air
Client Sample ID:	VA1860		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	74,000	16,000		ppbv	8000	10/1/2012 7:41 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	10/1/2012 7:41 PM
Heptane	86,000	8,000		ppbv	8000	10/1/2012 7:41 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	10/1/2012 7:41 PM
m,p-Xylene	14,000	16,000	J	ppbv	8000	10/1/2012 7:41 PM
Methylene chloride	ND	40,000	U	ppbv	8000	10/1/2012 7:41 PM
n-Hexane	44,000	16,000		ppbv	8000	10/1/2012 7:41 PM
Naphthalene	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
o-Xylene	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Propylene	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Styrene	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Toluene	110,000	8,000		ppbv	8000	10/1/2012 7:41 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Trichloroethene	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	10/1/2012 7:41 PM
Xylenes, Total	14,000	24,000	J	ppbv	8000	10/1/2012 7:41 PM
Surr: 4-Bromofluorobenzene	97.1	70-130		%REC	8000	10/1/2012 7:41 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	4,700,000	940,000		µg/m³	8000	10/3/2012 5:38 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	10/3/2012 5:38 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	10/3/2012 5:38 AM
Surr: 4-Bromofluorobenzene	96.9	70-130		%REC	8000	10/3/2012 5:38 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 2:29:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-047	**Matrix:**	Air
Client Sample ID:	VA1861		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.21	0.10		% v/v	1	10/9/2012 1:51 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/9/2012 1:51 PM
Methane	ND	0.50	U	% v/v	1	10/9/2012 1:51 PM
Nitrogen	82	0.10		% v/v	1	10/9/2012 1:51 PM
Oxygen	20	0.10		% v/v	1	10/9/2012 1:51 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
2-Butanone	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
2-Hexanone	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Acetone	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Benzene	21,000	8,000		ppbv	8000	10/1/2012 8:23 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Bromoform	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Bromomethane	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Chloroethane	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Chloroform	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Chloromethane	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 2:29:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-047	**Matrix:**	Air
Client Sample ID:	VA1861		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	59,000	16,000		ppbv	8000	10/1/2012 8:23 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	10/1/2012 8:23 PM
Heptane	75,000	8,000		ppbv	8000	10/1/2012 8:23 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	10/1/2012 8:23 PM
m,p-Xylene	16,000	16,000	J	ppbv	8000	10/1/2012 8:23 PM
Methylene chloride	ND	40,000	U	ppbv	8000	10/1/2012 8:23 PM
n-Hexane	36,000	16,000		ppbv	8000	10/1/2012 8:23 PM
Naphthalene	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
o-Xylene	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Propylene	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Styrene	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Toluene	100,000	8,000		ppbv	8000	10/1/2012 8:23 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Trichloroethene	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	10/1/2012 8:23 PM
Xylenes, Total	16,000	24,000	J	ppbv	8000	10/1/2012 8:23 PM
Surr: 4-Bromofluorobenzene	96.7	70-130		%REC	8000	10/1/2012 8:23 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	4,200,000	940,000		µg/m³	8000	10/3/2012 6:23 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	10/3/2012 6:23 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	10/3/2012 6:23 AM
Surr: 4-Bromofluorobenzene	99.5	70-130		%REC	8000	10/3/2012 6:23 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 3:14:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-048	**Matrix:**	Air
Client Sample ID:	VA1862		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.16	0.10		% v/v	1	10/9/2012 3:02 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/9/2012 3:02 PM
Methane	ND	0.50	U	% v/v	1	10/9/2012 3:02 PM
Nitrogen	80	0.10		% v/v	1	10/9/2012 3:02 PM
Oxygen	21	0.10		% v/v	1	10/9/2012 3:02 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
2-Butanone	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
2-Hexanone	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Acetone	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Benzene	13,000	8,000		ppbv	8000	10/2/2012 6:21 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Bromoform	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Bromomethane	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Chloroethane	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Chloroform	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Chloromethane	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 3:14:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-048	**Matrix:**	Air
Client Sample ID:	VA1862		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	34,000	16,000		ppbv	8000	10/2/2012 6:21 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	10/2/2012 6:21 PM
Heptane	43,000	8,000		ppbv	8000	10/2/2012 6:21 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	10/2/2012 6:21 PM
m,p-Xylene	8,500	16,000	J	ppbv	8000	10/2/2012 6:21 PM
Methylene chloride	ND	40,000	U	ppbv	8000	10/2/2012 6:21 PM
n-Hexane	23,000	16,000		ppbv	8000	10/2/2012 6:21 PM
Naphthalene	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
o-Xylene	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Propylene	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Styrene	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Toluene	54,000	8,000		ppbv	8000	10/2/2012 6:21 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Trichloroethene	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	10/2/2012 6:21 PM
Xylenes, Total	8,500	24,000	J	ppbv	8000	10/2/2012 6:21 PM
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	8000	10/2/2012 6:21 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,600,000	190,000		µg/m³	1600	10/3/2012 6:44 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	10/3/2012 6:44 PM
C9-C12 Aliphatic Hydrocarbons	72,000	300,000	J	µg/m³	1600	10/3/2012 6:44 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1600	10/3/2012 6:44 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 3:57:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-049	**Matrix:**	Air
Client Sample ID:	VA1863		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.062	0.10	J	% v/v	1	10/9/2012 3:17 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/9/2012 3:17 PM
Methane	ND	0.50	U	% v/v	1	10/9/2012 3:17 PM
Nitrogen	79	0.10		% v/v	1	10/9/2012 3:17 PM
Oxygen	22	0.10		% v/v	1	10/9/2012 3:17 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
2-Butanone	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
2-Hexanone	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Acetone	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Benzene	9,200	8,000		ppbv	8000	10/2/2012 7:02 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Bromoform	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Bromomethane	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Chloroethane	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Chloroform	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Chloromethane	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 3:57:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-049	**Matrix:**	Air
Client Sample ID:	VA1863		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	26,000	16,000		ppbv	8000	10/2/2012 7:02 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	10/2/2012 7:02 PM
Heptane	32,000	8,000		ppbv	8000	10/2/2012 7:02 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	10/2/2012 7:02 PM
m,p-Xylene	ND	16,000	U	ppbv	8000	10/2/2012 7:02 PM
Methylene chloride	ND	40,000	U	ppbv	8000	10/2/2012 7:02 PM
n-Hexane	17,000	16,000		ppbv	8000	10/2/2012 7:02 PM
Naphthalene	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
o-Xylene	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Propylene	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Styrene	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Toluene	42,000	8,000		ppbv	8000	10/2/2012 7:02 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Trichloroethene	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	10/2/2012 7:02 PM
Xylenes, Total	ND	24,000	U	ppbv	8000	10/2/2012 7:02 PM
Surr: 4-Bromofluorobenzene	97.6	70-130		%REC	8000	10/2/2012 7:02 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,300,000	190,000		µg/m³	1600	10/3/2012 7:30 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	10/3/2012 7:30 PM
C9-C12 Aliphatic Hydrocarbons	78,000	300,000	J	µg/m³	1600	10/3/2012 7:30 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1600	10/3/2012 7:30 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 8:48:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-050	**Matrix:**	Air
Client Sample ID:	VA1864		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.52	0.10		% v/v	1	10/9/2012 3:47 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/9/2012 3:47 PM
Methane	ND	0.50	U	% v/v	1	10/9/2012 3:47 PM
Nitrogen	82	0.10		% v/v	1	10/9/2012 3:47 PM
Oxygen	19	0.10		% v/v	1	10/9/2012 3:47 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	10/3/2012 4:03 AM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	10/3/2012 4:03 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	10/3/2012 4:03 AM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	10/3/2012 4:03 AM
1,1-Dichloroethane	ND	800	U	ppbv	800	10/3/2012 4:03 AM
1,1-Dichloroethene	ND	800	U	ppbv	800	10/3/2012 4:03 AM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	10/3/2012 4:03 AM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	10/3/2012 4:03 AM
1,2-Dibromoethane	ND	800	U	ppbv	800	10/3/2012 4:03 AM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	10/3/2012 4:03 AM
1,2-Dichloroethane	ND	800	U	ppbv	800	10/3/2012 4:03 AM
1,2-Dichloropropane	ND	800	U	ppbv	800	10/3/2012 4:03 AM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	10/3/2012 4:03 AM
1,3-Butadiene	ND	800	U	ppbv	800	10/3/2012 4:03 AM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	10/3/2012 4:03 AM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	10/3/2012 4:03 AM
2-Butanone	990	800		ppbv	800	10/3/2012 4:03 AM
2-Hexanone	ND	800	U	ppbv	800	10/3/2012 4:03 AM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Acetone	1,600	800		ppbv	800	10/3/2012 4:03 AM
Benzene	11,000	800		ppbv	800	10/3/2012 4:03 AM
Benzyl chloride	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Bromodichloromethane	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Bromoform	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Bromomethane	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Carbon disulfide	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Carbon tetrachloride	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Chlorobenzene	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Chlorodibromomethane	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Chloroethane	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Chloroform	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Chloromethane	ND	800	U	ppbv	800	10/3/2012 4:03 AM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	10/3/2012 4:03 AM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	10/3/2012 4:03 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 8:48:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-050	**Matrix:**	Air
Client Sample ID:	VA1864		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	20,000	1,600		ppbv	800	10/3/2012 4:03 AM
Dichlorodifluoromethane	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Ethyl acetate	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Ethylbenzene	1,500	1,600	J	ppbv	800	10/3/2012 4:03 AM
Heptane	20,000	800		ppbv	800	10/3/2012 4:03 AM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	10/3/2012 4:03 AM
m,p-Xylene	4,100	1,600		ppbv	800	10/3/2012 4:03 AM
Methylene chloride	ND	4,000	U	ppbv	800	10/3/2012 4:03 AM
n-Hexane	14,000	1,600		ppbv	800	10/3/2012 4:03 AM
Naphthalene	ND	800	U	ppbv	800	10/3/2012 4:03 AM
o-Xylene	1,100	800		ppbv	800	10/3/2012 4:03 AM
Propylene	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Styrene	ND	800	U	ppbv	800	10/3/2012 4:03 AM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Tetrachloroethene	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Tetrahydrofuran	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Toluene	29,000	800		ppbv	800	10/3/2012 4:03 AM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	10/3/2012 4:03 AM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Trichloroethene	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Trichlorofluoromethane	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Vinyl acetate	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Vinyl chloride	ND	800	U	ppbv	800	10/3/2012 4:03 AM
Xylenes, Total	5,200	2,400		ppbv	800	10/3/2012 4:03 AM
Surr: 4-Bromofluorobenzene	99.9	70-130		%REC	800	10/3/2012 4:03 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,300,000	190,000		µg/m³	1600	10/3/2012 8:16 PM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	10/3/2012 8:16 PM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	10/3/2012 8:16 PM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1600	10/3/2012 8:16 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 9:08:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-051	**Matrix:**	Air
Client Sample ID:	VA1878		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.79	0.10		% v/v	1	10/9/2012 4:03 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/9/2012 4:03 PM
Methane	ND	0.50	U	% v/v	1	10/9/2012 4:03 PM
Nitrogen	81	0.10		% v/v	1	10/9/2012 4:03 PM
Oxygen	19	0.10		% v/v	1	10/9/2012 4:03 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	800	U	ppbv	800	10/3/2012 2:11 PM
1,1,2,2-Tetrachloroethane	ND	800	U	ppbv	800	10/3/2012 2:11 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	800	U	ppbv	800	10/3/2012 2:11 PM
1,1,2-Trichloroethane	ND	800	U	ppbv	800	10/3/2012 2:11 PM
1,1-Dichloroethane	ND	800	U	ppbv	800	10/3/2012 2:11 PM
1,1-Dichloroethene	ND	800	U	ppbv	800	10/3/2012 2:11 PM
1,2,4-Trichlorobenzene	ND	800	U	ppbv	800	10/3/2012 2:11 PM
1,2,4-Trimethylbenzene	ND	800	U	ppbv	800	10/3/2012 2:11 PM
1,2-Dibromoethane	ND	800	U	ppbv	800	10/3/2012 2:11 PM
1,2-Dichlorobenzene	ND	800	U	ppbv	800	10/3/2012 2:11 PM
1,2-Dichloroethane	ND	800	U	ppbv	800	10/3/2012 2:11 PM
1,2-Dichloropropane	ND	800	U	ppbv	800	10/3/2012 2:11 PM
1,3,5-Trimethylbenzene	ND	800	U	ppbv	800	10/3/2012 2:11 PM
1,3-Butadiene	ND	800	U	ppbv	800	10/3/2012 2:11 PM
1,3-Dichlorobenzene	ND	800	U	ppbv	800	10/3/2012 2:11 PM
1,4-Dichlorobenzene	ND	800	U	ppbv	800	10/3/2012 2:11 PM
2-Butanone	ND	800	U	ppbv	800	10/3/2012 2:11 PM
2-Hexanone	ND	800	U	ppbv	800	10/3/2012 2:11 PM
4-Methyl-2-pentanone	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Acetone	1,000	800		ppbv	800	10/3/2012 2:11 PM
Benzene	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Benzyl chloride	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Bromodichloromethane	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Bromoform	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Bromomethane	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Carbon disulfide	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Carbon tetrachloride	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Chlorobenzene	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Chlorodibromomethane	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Chloroethane	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Chloroform	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Chloromethane	ND	800	U	ppbv	800	10/3/2012 2:11 PM
cis-1,2-Dichloroethene	ND	800	U	ppbv	800	10/3/2012 2:11 PM
cis-1,3-dichloropropene	ND	800	U	ppbv	800	10/3/2012 2:11 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 9:08:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-051	**Matrix:**	Air
Client Sample ID:	VA1878		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	1,600	1,600	J	ppbv	800	10/3/2012 2:11 PM
Dichlorodifluoromethane	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Ethyl acetate	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Ethylbenzene	ND	1,600	U	ppbv	800	10/3/2012 2:11 PM
Heptane	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Hexachlorobutadiene	ND	1,600	U	ppbv	800	10/3/2012 2:11 PM
m,p-Xylene	ND	1,600	U	ppbv	800	10/3/2012 2:11 PM
Methylene chloride	ND	4,000	U	ppbv	800	10/3/2012 2:11 PM
n-Hexane	1,500	1,600	J	ppbv	800	10/3/2012 2:11 PM
Naphthalene	ND	800	U	ppbv	800	10/3/2012 2:11 PM
o-Xylene	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Propylene	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Styrene	ND	800	U	ppbv	800	10/3/2012 2:11 PM
tert-Butyl Methyl Ether	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Tetrachloroethene	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Tetrahydrofuran	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Toluene	ND	800	U	ppbv	800	10/3/2012 2:11 PM
trans-1,2-Dichloroethene	ND	800	U	ppbv	800	10/3/2012 2:11 PM
trans-1,3-dichloropropene	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Trichloroethene	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Trichlorofluoromethane	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Vinyl acetate	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Vinyl chloride	ND	800	U	ppbv	800	10/3/2012 2:11 PM
Xylenes, Total	ND	2,400	U	ppbv	800	10/3/2012 2:11 PM
Surr: 4-Bromofluorobenzene	96.9	70-130		%REC	800	10/3/2012 2:11 PM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	1,100,000	190,000		µg/m³	1600	10/4/2012 12:00 AM
C9-C10 Aromatic Hydrocarbons	ND	210,000	U	µg/m³	1600	10/4/2012 12:00 AM
C9-C12 Aliphatic Hydrocarbons	ND	300,000	U	µg/m³	1600	10/4/2012 12:00 AM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1600	10/4/2012 12:00 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 9:42:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-052	**Matrix:**	Air
Client Sample ID:	VA1925		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.16	0.10		% v/v	1	10/9/2012 4:18 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/9/2012 4:18 PM
Methane	ND	0.50	U	% v/v	1	10/9/2012 4:18 PM
Nitrogen	79	0.10		% v/v	1	10/9/2012 4:18 PM
Oxygen	21	0.10		% v/v	1	10/9/2012 4:18 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	10/3/2012 5:34 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	10/3/2012 5:34 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	10/3/2012 5:34 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	10/3/2012 5:34 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	10/3/2012 5:34 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	10/3/2012 5:34 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	10/3/2012 5:34 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	10/3/2012 5:34 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	10/3/2012 5:34 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	10/3/2012 5:34 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	10/3/2012 5:34 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	10/3/2012 5:34 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	10/3/2012 5:34 AM
1,3-Butadiene	ND	400	U	ppbv	400	10/3/2012 5:34 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	10/3/2012 5:34 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	10/3/2012 5:34 AM
2-Butanone	1,200	400		ppbv	400	10/3/2012 5:34 AM
2-Hexanone	ND	400	U	ppbv	400	10/3/2012 5:34 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Acetone	2,600	400		ppbv	400	10/3/2012 5:34 AM
Benzene	6,700	400		ppbv	400	10/3/2012 5:34 AM
Benzyl chloride	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Bromodichloromethane	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Bromoform	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Bromomethane	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Carbon disulfide	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Carbon tetrachloride	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Chlorobenzene	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Chlorodibromomethane	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Chloroethane	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Chloroform	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Chloromethane	ND	400	U	ppbv	400	10/3/2012 5:34 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	10/3/2012 5:34 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	10/3/2012 5:34 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 9:42:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-052	**Matrix:**	Air
Client Sample ID:	VA1925		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	14,000	800		ppbv	400	10/3/2012 5:34 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Ethyl acetate	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Ethylbenzene	1,800	800		ppbv	400	10/3/2012 5:34 AM
Heptane	16,000	400		ppbv	400	10/3/2012 5:34 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	10/3/2012 5:34 AM
m,p-Xylene	4,900	800		ppbv	400	10/3/2012 5:34 AM
Methylene chloride	1,100	2,000	J	ppbv	400	10/3/2012 5:34 AM
n-Hexane	9,600	800		ppbv	400	10/3/2012 5:34 AM
Naphthalene	ND	400	U	ppbv	400	10/3/2012 5:34 AM
o-Xylene	1,300	400		ppbv	400	10/3/2012 5:34 AM
Propylene	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Styrene	ND	400	U	ppbv	400	10/3/2012 5:34 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Tetrachloroethene	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Tetrahydrofuran	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Toluene	23,000	8,000		ppbv	8000	10/2/2012 9:06 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	10/3/2012 5:34 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Trichloroethene	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Vinyl acetate	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Vinyl chloride	ND	400	U	ppbv	400	10/3/2012 5:34 AM
Xylenes, Total	6,300	1,200		ppbv	400	10/3/2012 5:34 AM
Surr: 4-Bromofluorobenzene	99.0	70-130		%REC	400	10/3/2012 5:34 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	720,000	94,000		µg/m³	800	10/4/2012 12:46 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	10/4/2012 12:46 AM
C9-C12 Aliphatic Hydrocarbons	62,000	150,000	J	µg/m³	800	10/4/2012 12:46 AM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	800	10/4/2012 12:46 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 10:31:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-053	**Matrix:**	Air
Client Sample ID:	VA1926		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.12	0.10		% v/v	1	10/9/2012 4:33 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/9/2012 4:33 PM
Methane	ND	0.50	U	% v/v	1	10/9/2012 4:33 PM
Nitrogen	78	0.10		% v/v	1	10/9/2012 4:33 PM
Oxygen	21	0.10		% v/v	1	10/9/2012 4:33 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	10/3/2012 6:22 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	10/3/2012 6:22 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	10/3/2012 6:22 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	10/3/2012 6:22 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	10/3/2012 6:22 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	10/3/2012 6:22 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	10/3/2012 6:22 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	10/3/2012 6:22 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	10/3/2012 6:22 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	10/3/2012 6:22 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	10/3/2012 6:22 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	10/3/2012 6:22 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	10/3/2012 6:22 AM
1,3-Butadiene	ND	400	U	ppbv	400	10/3/2012 6:22 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	10/3/2012 6:22 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	10/3/2012 6:22 AM
2-Butanone	1,100	400		ppbv	400	10/3/2012 6:22 AM
2-Hexanone	ND	400	U	ppbv	400	10/3/2012 6:22 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Acetone	2,600	400		ppbv	400	10/3/2012 6:22 AM
Benzene	5,600	400		ppbv	400	10/3/2012 6:22 AM
Benzyl chloride	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Bromodichloromethane	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Bromoform	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Bromomethane	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Carbon disulfide	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Carbon tetrachloride	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Chlorobenzene	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Chlorodibromomethane	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Chloroethane	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Chloroform	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Chloromethane	ND	400	U	ppbv	400	10/3/2012 6:22 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	10/3/2012 6:22 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	10/3/2012 6:22 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 10:31:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-053	**Matrix:**	Air
Client Sample ID:	VA1926		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	13,000	800		ppbv	400	10/3/2012 6:22 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Ethyl acetate	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Ethylbenzene	1,800	800		ppbv	400	10/3/2012 6:22 AM
Heptane	15,000	400		ppbv	400	10/3/2012 6:22 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	10/3/2012 6:22 AM
m,p-Xylene	5,100	800		ppbv	400	10/3/2012 6:22 AM
Methylene chloride	4,300	2,000		ppbv	400	10/3/2012 6:22 AM
n-Hexane	10,000	800		ppbv	400	10/3/2012 6:22 AM
Naphthalene	ND	400	U	ppbv	400	10/3/2012 6:22 AM
o-Xylene	1,400	400		ppbv	400	10/3/2012 6:22 AM
Propylene	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Styrene	ND	400	U	ppbv	400	10/3/2012 6:22 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Tetrachloroethene	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Tetrahydrofuran	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Toluene	25,000	8,000		ppbv	8000	10/2/2012 9:48 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	10/3/2012 6:22 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Trichloroethene	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Vinyl acetate	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Vinyl chloride	ND	400	U	ppbv	400	10/3/2012 6:22 AM
Xylenes, Total	6,500	1,200		ppbv	400	10/3/2012 6:22 AM
Surr: 4-Bromofluorobenzene	99.4	70-130		%REC	400	10/3/2012 6:22 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	660,000	94,000		µg/m³	800	10/4/2012 2:18 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	10/4/2012 2:18 AM
C9-C12 Aliphatic Hydrocarbons	57,000	150,000	J	µg/m³	800	10/4/2012 2:18 AM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	800	10/4/2012 2:18 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 11:13:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-054	**Matrix:**	Air
Client Sample ID:	VA1927		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.072	0.10	J	% v/v	1	10/9/2012 4:47 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/9/2012 4:47 PM
Methane	ND	0.50	U	% v/v	1	10/9/2012 4:47 PM
Nitrogen	79	0.10		% v/v	1	10/9/2012 4:47 PM
Oxygen	21	0.10		% v/v	1	10/9/2012 4:47 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	10/3/2012 7:10 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	10/3/2012 7:10 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	10/3/2012 7:10 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	10/3/2012 7:10 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	10/3/2012 7:10 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	10/3/2012 7:10 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	10/3/2012 7:10 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	10/3/2012 7:10 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	10/3/2012 7:10 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	10/3/2012 7:10 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	10/3/2012 7:10 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	10/3/2012 7:10 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	10/3/2012 7:10 AM
1,3-Butadiene	ND	400	U	ppbv	400	10/3/2012 7:10 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	10/3/2012 7:10 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	10/3/2012 7:10 AM
2-Butanone	1,300	400		ppbv	400	10/3/2012 7:10 AM
2-Hexanone	ND	400	U	ppbv	400	10/3/2012 7:10 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Acetone	2,000	400		ppbv	400	10/3/2012 7:10 AM
Benzene	6,800	400		ppbv	400	10/3/2012 7:10 AM
Benzyl chloride	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Bromodichloromethane	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Bromoform	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Bromomethane	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Carbon disulfide	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Carbon tetrachloride	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Chlorobenzene	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Chlorodibromomethane	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Chloroethane	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Chloroform	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Chloromethane	ND	400	U	ppbv	400	10/3/2012 7:10 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	10/3/2012 7:10 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	10/3/2012 7:10 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 11:13:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-054	**Matrix:**	Air
Client Sample ID:	VA1927		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	16,000	800		ppbv	400	10/3/2012 7:10 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Ethyl acetate	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Ethylbenzene	1,900	800		ppbv	400	10/3/2012 7:10 AM
Heptane	16,000	400		ppbv	400	10/3/2012 7:10 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	10/3/2012 7:10 AM
m,p-Xylene	5,500	800		ppbv	400	10/3/2012 7:10 AM
Methylene chloride	ND	2,000	U	ppbv	400	10/3/2012 7:10 AM
n-Hexane	10,000	800		ppbv	400	10/3/2012 7:10 AM
Naphthalene	ND	400	U	ppbv	400	10/3/2012 7:10 AM
o-Xylene	1,400	400		ppbv	400	10/3/2012 7:10 AM
Propylene	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Styrene	ND	400	U	ppbv	400	10/3/2012 7:10 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Tetrachloroethene	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Tetrahydrofuran	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Toluene	27,000	8,000		ppbv	8000	10/2/2012 10:29 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	10/3/2012 7:10 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Trichloroethene	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Vinyl acetate	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Vinyl chloride	ND	400	U	ppbv	400	10/3/2012 7:10 AM
Xylenes, Total	6,900	1,200		ppbv	400	10/3/2012 7:10 AM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	400	10/3/2012 7:10 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	460,000	94,000		µg/m³	800	10/4/2012 3:04 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	10/4/2012 3:04 AM
C9-C12 Aliphatic Hydrocarbons	38,000	150,000	J	µg/m³	800	10/4/2012 3:04 AM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	800	10/4/2012 3:04 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 11:52:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-055	**Matrix:**	Air
Client Sample ID:	VA1928		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.12	0.10		% v/v	1	10/9/2012 5:02 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/9/2012 5:02 PM
Methane	ND	0.50	U	% v/v	1	10/9/2012 5:02 PM
Nitrogen	79	0.10		% v/v	1	10/9/2012 5:02 PM
Oxygen	21	0.10		% v/v	1	10/9/2012 5:02 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	400	U	ppbv	400	10/3/2012 7:58 AM
1,1,2,2-Tetrachloroethane	ND	400	U	ppbv	400	10/3/2012 7:58 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	U	ppbv	400	10/3/2012 7:58 AM
1,1,2-Trichloroethane	ND	400	U	ppbv	400	10/3/2012 7:58 AM
1,1-Dichloroethane	ND	400	U	ppbv	400	10/3/2012 7:58 AM
1,1-Dichloroethene	ND	400	U	ppbv	400	10/3/2012 7:58 AM
1,2,4-Trichlorobenzene	ND	400	U	ppbv	400	10/3/2012 7:58 AM
1,2,4-Trimethylbenzene	ND	400	U	ppbv	400	10/3/2012 7:58 AM
1,2-Dibromoethane	ND	400	U	ppbv	400	10/3/2012 7:58 AM
1,2-Dichlorobenzene	ND	400	U	ppbv	400	10/3/2012 7:58 AM
1,2-Dichloroethane	ND	400	U	ppbv	400	10/3/2012 7:58 AM
1,2-Dichloropropane	ND	400	U	ppbv	400	10/3/2012 7:58 AM
1,3,5-Trimethylbenzene	ND	400	U	ppbv	400	10/3/2012 7:58 AM
1,3-Butadiene	ND	400	U	ppbv	400	10/3/2012 7:58 AM
1,3-Dichlorobenzene	ND	400	U	ppbv	400	10/3/2012 7:58 AM
1,4-Dichlorobenzene	ND	400	U	ppbv	400	10/3/2012 7:58 AM
2-Butanone	790	400		ppbv	400	10/3/2012 7:58 AM
2-Hexanone	ND	400	U	ppbv	400	10/3/2012 7:58 AM
4-Methyl-2-pentanone	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Acetone	2,900	400		ppbv	400	10/3/2012 7:58 AM
Benzene	4,800	400		ppbv	400	10/3/2012 7:58 AM
Benzyl chloride	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Bromodichloromethane	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Bromoform	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Bromomethane	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Carbon disulfide	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Carbon tetrachloride	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Chlorobenzene	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Chlorodibromomethane	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Chloroethane	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Chloroform	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Chloromethane	ND	400	U	ppbv	400	10/3/2012 7:58 AM
cis-1,2-Dichloroethene	ND	400	U	ppbv	400	10/3/2012 7:58 AM
cis-1,3-dichloropropene	ND	400	U	ppbv	400	10/3/2012 7:58 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 11:52:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-055	**Matrix:**	Air
Client Sample ID:	VA1928		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	11,000	800		ppbv	400	10/3/2012 7:58 AM
Dichlorodifluoromethane	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Ethyl acetate	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Ethylbenzene	1,500	800		ppbv	400	10/3/2012 7:58 AM
Heptane	13,000	400		ppbv	400	10/3/2012 7:58 AM
Hexachlorobutadiene	ND	800	U	ppbv	400	10/3/2012 7:58 AM
m,p-Xylene	4,100	800		ppbv	400	10/3/2012 7:58 AM
Methylene chloride	2,200	2,000		ppbv	400	10/3/2012 7:58 AM
n-Hexane	7,500	800		ppbv	400	10/3/2012 7:58 AM
Naphthalene	ND	400	U	ppbv	400	10/3/2012 7:58 AM
o-Xylene	1,100	400		ppbv	400	10/3/2012 7:58 AM
Propylene	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Styrene	ND	400	U	ppbv	400	10/3/2012 7:58 AM
tert-Butyl Methyl Ether	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Tetrachloroethene	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Tetrahydrofuran	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Toluene	18,000	8,000		ppbv	8000	10/2/2012 11:10 PM
trans-1,2-Dichloroethene	ND	400	U	ppbv	400	10/3/2012 7:58 AM
trans-1,3-dichloropropene	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Trichloroethene	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Trichlorofluoromethane	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Vinyl acetate	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Vinyl chloride	ND	400	U	ppbv	400	10/3/2012 7:58 AM
Xylenes, Total	5,200	1,200		ppbv	400	10/3/2012 7:58 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	400	10/3/2012 7:58 AM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	530,000	94,000		µg/m³	800	10/4/2012 5:18 AM
C9-C10 Aromatic Hydrocarbons	ND	110,000	U	µg/m³	800	10/4/2012 5:18 AM
C9-C12 Aliphatic Hydrocarbons	37,000	150,000	J	µg/m³	800	10/4/2012 5:18 AM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	800	10/4/2012 5:18 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 12:47:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-056	**Matrix:**	Air
Client Sample ID:	VA1929		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.19	0.10		% v/v	1	10/9/2012 5:18 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/9/2012 5:18 PM
Methane	ND	0.50	U	% v/v	1	10/9/2012 5:18 PM
Nitrogen	80	0.10		% v/v	1	10/9/2012 5:18 PM
Oxygen	20	0.10		% v/v	1	10/9/2012 5:18 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
1,3-Butadiene	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
2-Butanone	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
2-Hexanone	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Acetone	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Benzene	15,000	8,000		ppbv	8000	10/2/2012 11:52 PM
Benzyl chloride	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Bromodichloromethane	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Bromoform	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Bromomethane	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Carbon disulfide	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Chlorobenzene	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Chloroethane	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Chloroform	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Chloromethane	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 12:47:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-056	**Matrix:**	Air
Client Sample ID:	VA1929		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	58,000	16,000		ppbv	8000	10/2/2012 11:52 PM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Ethyl acetate	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Ethylbenzene	ND	16,000	U	ppbv	8000	10/2/2012 11:52 PM
Heptane	49,000	8,000		ppbv	8000	10/2/2012 11:52 PM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	10/2/2012 11:52 PM
m,p-Xylene	11,000	16,000	J	ppbv	8000	10/2/2012 11:52 PM
Methylene chloride	ND	40,000	U	ppbv	8000	10/2/2012 11:52 PM
n-Hexane	34,000	16,000		ppbv	8000	10/2/2012 11:52 PM
Naphthalene	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
o-Xylene	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Propylene	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Styrene	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Tetrachloroethene	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Toluene	66,000	8,000		ppbv	8000	10/2/2012 11:52 PM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Trichloroethene	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Vinyl acetate	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Vinyl chloride	ND	8,000	U	ppbv	8000	10/2/2012 11:52 PM
Xylenes, Total	11,000	24,000	J	ppbv	8000	10/2/2012 11:52 PM
Surr: 4-Bromofluorobenzene	97.6	70-130		%REC	8000	10/2/2012 11:52 PM
Mass APH Air	**Method:**					**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	3,800,000	940,000		µg/m³	8000	10/4/2012 6:02 AM
C9-C10 Aromatic Hydrocarbons	ND	1,100,000	U	µg/m³	8000	10/4/2012 6:02 AM
C9-C12 Aliphatic Hydrocarbons	ND	1,500,000	U	µg/m³	8000	10/4/2012 6:02 AM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	8000	10/4/2012 6:02 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 1:27:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-057	**Matrix:**	Air
Client Sample ID:	VA1930		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Noncondensable Gases and Light Hydrocarbons		**Method: ASTM-D2504**				**Analyst: JH5**
Carbon dioxide	0.55	0.10		% v/v	1	10/9/2012 5:33 PM
Carbon Monoxide	ND	0.10	U	% v/v	1	10/9/2012 5:33 PM
Methane	ND	0.50	U	% v/v	1	10/9/2012 5:33 PM
Nitrogen	80	0.10		% v/v	1	10/9/2012 5:33 PM
Oxygen	19	0.10		% v/v	1	10/9/2012 5:33 PM
Volatile Organic Compounds		**Method: TO-15**				**Analyst: RD2**
1,1,1-Trichloroethane	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
1,1,2,2-Tetrachloroethane	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
1,1,2-Trichloroethane	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
1,1-Dichloroethane	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
1,1-Dichloroethene	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
1,2,4-Trichlorobenzene	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
1,2,4-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
1,2-Dibromoethane	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
1,2-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
1,2-Dichloroethane	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
1,2-Dichloropropane	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
1,3,5-Trimethylbenzene	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
1,3-Butadiene	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
1,3-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
1,4-Dichlorobenzene	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
2-Butanone	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
2-Hexanone	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
4-Methyl-2-pentanone	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Acetone	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Benzene	13,000	8,000		ppbv	8000	10/3/2012 12:33 AM
Benzyl chloride	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Bromodichloromethane	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Bromoform	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Bromomethane	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Carbon disulfide	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Carbon tetrachloride	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Chlorobenzene	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Chlorodibromomethane	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Chloroethane	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Chloroform	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Chloromethane	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
cis-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
cis-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/11/2012 1:27:00 PM
Project:	Kirtland AFB		
Lab ID:	1209801-057	**Matrix:**	Air
Client Sample ID:	VA1930		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Cyclohexane	75,000	16,000		ppbv	8000	10/3/2012 12:33 AM
Dichlorodifluoromethane	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Ethyl acetate	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Ethylbenzene	ND	16,000	U	ppbv	8000	10/3/2012 12:33 AM
Heptane	50,000	8,000		ppbv	8000	10/3/2012 12:33 AM
Hexachlorobutadiene	ND	16,000	U	ppbv	8000	10/3/2012 12:33 AM
m,p-Xylene	9,400	16,000	J	ppbv	8000	10/3/2012 12:33 AM
Methylene chloride	ND	40,000	U	ppbv	8000	10/3/2012 12:33 AM
n-Hexane	53,000	16,000		ppbv	8000	10/3/2012 12:33 AM
Naphthalene	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
o-Xylene	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Propylene	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Styrene	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
tert-Butyl Methyl Ether	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Tetrachloroethene	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Tetrahydrofuran	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Toluene	60,000	8,000		ppbv	8000	10/3/2012 12:33 AM
trans-1,2-Dichloroethene	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
trans-1,3-dichloropropene	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Trichloroethene	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Trichlorofluoromethane	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Vinyl acetate	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Vinyl chloride	ND	8,000	U	ppbv	8000	10/3/2012 12:33 AM
Xylenes, Total	9,400	24,000	J	ppbv	8000	10/3/2012 12:33 AM
Surr: 4-Bromofluorobenzene	97.2	70-130		%REC	8000	10/3/2012 12:33 AM
Mass APH Air		**Method:**				**Analyst: RD2**
Air-Phase Petroleum Hydrocarbons						
C5-C8 Aliphatic Hydrocarbons	14,000,000	2,300,000		µg/m³	20000	10/4/2012 1:32 AM
C9-C10 Aromatic Hydrocarbons	ND	2,700,000	U	µg/m³	20000	10/4/2012 1:32 AM
C9-C12 Aliphatic Hydrocarbons	ND	3,800,000	U	µg/m³	20000	10/4/2012 1:32 AM
Surr: 4-Bromofluorobenzene	99.4	70-130		%REC	20000	10/4/2012 1:32 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-058	**Matrix:**	Air
Client Sample ID:	VA8101-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds	**Method: TO-15**					**Analyst: RD2**
1,1,1-Trichloroethane	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
1,1,2,2-Tetrachloroethane	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
1,1,2-Trichloroethane	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
1,1-Dichloroethane	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
1,1-Dichloroethene	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
1,2,4-Trichlorobenzene	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
1,2,4-Trimethylbenzene	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
1,2-Dibromoethane	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
1,2-Dichlorobenzene	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
1,2-Dichloroethane	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
1,2-Dichloropropane	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
1,3,5-Trimethylbenzene	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
1,3-Butadiene	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
1,3-Dichlorobenzene	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
1,4-Dichlorobenzene	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
2-Butanone	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
2-Hexanone	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
4-Methyl-2-pentanone	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Acetone	17	4.0		ppbv	4	10/2/2012 5:11 AM
Benzene	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Benzyl chloride	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Bromodichloromethane	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Bromoform	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Bromomethane	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Carbon disulfide	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Carbon tetrachloride	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Chlorobenzene	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Chlorodibromomethane	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Chloroethane	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Chloroform	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Chloromethane	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
cis-1,2-Dichloroethene	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
cis-1,3-dichloropropene	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Cyclohexane	7.6	8.0	J	ppbv	4	10/2/2012 5:11 AM
Dichlorodifluoromethane	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Ethyl acetate	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Ethylbenzene	ND	8.0	U	ppbv	4	10/2/2012 5:11 AM
Heptane	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Hexachlorobutadiene	ND	8.0	U	ppbv	4	10/2/2012 5:11 AM
m,p-Xylene	ND	8.0	U	ppbv	4	10/2/2012 5:11 AM
Methylene chloride	9.0	20	J	ppbv	4	10/2/2012 5:11 AM

RTI Laboratories - Analytical Report

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client:	Shaw Environmental & Infrastructure, Inc	**Collection Date:**	9/10/2012 8:00:00 AM
Project:	Kirtland AFB		
Lab ID:	1209801-058	**Matrix:**	Air
Client Sample ID:	VA8101-TB		

Analysis	Result	RL	Qual	Units	DF	Date Analyzed
n-Hexane	11	8.0		ppbv	4	10/2/2012 5:11 AM
Naphthalene	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
o-Xylene	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Propylene	54	4.0		ppbv	4	10/2/2012 5:11 AM
Styrene	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
tert-Butyl Methyl Ether	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Tetrachloroethene	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Tetrahydrofuran	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Toluene	5.1	4.0		ppbv	4	10/2/2012 5:11 AM
trans-1,2-Dichloroethene	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
trans-1,3-dichloropropene	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Trichloroethene	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Trichlorofluoromethane	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Vinyl acetate	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Vinyl chloride	ND	4.0	U	ppbv	4	10/2/2012 5:11 AM
Xylenes, Total	ND	12	U	ppbv	4	10/2/2012 5:11 AM
Surr: 4-Bromofluorobenzene	95.8	70-130		%REC	4	10/2/2012 5:11 AM

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52334**

Sample ID:	**CCV VOA9 092512**	Samp Type:	**CCV**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52334**
Client ID:	**CCV**	Batch ID:	**R52334**	TestNo:	**MA_APH**			Analysis Date:	**9/25/2012**	SeqNo:	**1025999**

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		95.8	70	130				

Sample ID:	**MBLK VOA9 092512**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52334**
Client ID:	**PBW**	Batch ID:	**R52334**	TestNo:	**MA_APH**			Analysis Date:	**9/25/2012**	SeqNo:	**1026001**

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	82		89.50		91.4	70	130				

Sample ID:	**1209801-002ADUP**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52334**
Client ID:	**VA1668**	Batch ID:	**R52334**	TestNo:	**MA_APH**			Analysis Date:	**9/26/2012**	SeqNo:	**1026005**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	120,000,000	19,000,000						128,400,000	9.34	30	
C9-C10 Aromatic Hydrocarbons	ND	21,000,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	30,000,000						0	0	30	U
Surr: 4-Bromofluorobenzene	13,000,000		14,320,000		93.7	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R52341**

Sample ID:	**CCV VOA1 092512**	Samp Type:	**CCV**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52341**
Client ID:	**CCV**	Batch ID:	**R52341**	TestNo:	**TO-15**			Analysis Date:	**9/25/2012**	SeqNo:	**1026175**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	9.6	1.0	9.600	0	99.7	70	130				
1,1,2,2-Tetrachloroethane	10	1.0	10.00	0	100	70	130				
1,1,2-Trichloro-1,2,2-trifluoroethane	11	1.0	9.800	0	111	70	130				
1,1,2-Trichloroethane	9.6	1.0	9.800	0	97.7	70	130				
1,1-Dichloroethane	9.5	1.0	9.700	0	97.7	70	130				
1,1-Dichloroethene	11	1.0	9.900	0	110	70	130				
1,2,4-Trichlorobenzene	9.3	1.0	9.100	0	102	70	130				
1,2,4-Trimethylbenzene	10	1.0	9.800	0	102	70	130				
1,2-Dibromoethane	9.5	1.0	9.600	0	99.1	70	130				
1,2-Dichlorobenzene	9.6	1.0	9.700	0	99.2	70	130				
1,2-Dichloroethane	9.2	1.0	9.700	0	94.4	70	130				
1,2-Dichloropropane	9.3	1.0	9.800	0	95.2	70	130				
1,3,5-Trimethylbenzene	9.7	1.0	9.700	0	99.8	70	130				
1,3-Butadiene	8.4	1.0	9.800	0	85.6	70	130				
1,3-Dichlorobenzene	9.8	1.0	9.700	0	101	70	130				
1,4-Dichlorobenzene	9.8	1.0	9.600	0	102	70	130				
2-Butanone	9.6	1.0	9.900	0	97.5	70	130				
2-Hexanone	9.7	1.0	9.800	0	99.4	70	130				
4-Methyl-2-pentanone	10	1.0	10.00	0	100	70	130				
Acetone	9.3	1.0	10.00	0	93.3	70	130				
Benzene	9.2	1.0	9.600	0	95.9	70	130				
Benzyl chloride	10	1.0	9.700	0	106	70	130				
Bromodichloromethane	9.8	1.0	9.600	0	102	70	130				
Bromoform	9.7	1.0	9.600	0	101	70	130				
Bromomethane	9.9	1.0	9.300	0	107	70	130				
Carbon disulfide	12	1.0	9.700	0	123	70	130				
Carbon tetrachloride	9.4	1.0	9.500	0	98.7	70	130				
Chlorobenzene	9.9	1.0	9.900	0	100	70	130				
Chlorodibromomethane	9.8	1.0	9.200	0	107	70	130				
Chloroethane	9.6	1.0	9.800	0	98.4	70	130				
Chloroform	9.7	1.0	9.400	0	103	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52341**

Sample ID:	**CCV VOA1 092512**	Samp Type:	**CCV**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52341**
Client ID:	**CCV**	Batch ID:	**R52341**	TestNo:	**TO-15**			Analysis Date:	**9/25/2012**	SeqNo:	**1026175**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	9.3	1.0	9.800	0	94.9	70	130				
cis-1,2-Dichloroethene	10	1.0	9.800	0	102	70	130				
cis-1,3-dichloropropene	9.0	1.0	9.500	0	94.3	70	130				
Cyclohexane	10	2.0	9.800	0	107	70	130				
Dichlorodifluoromethane	9.7	1.0	9.200	0	105	70	130				
Ethyl acetate	9.4	1.0	9.800	0	96.0	70	130				
Ethylbenzene	9.7	2.0	9.800	0	99.1	70	130				
Heptane	10	1.0	9.900	0	104	70	130				
Hexachlorobutadiene	8.9	2.0	9.400	0	94.6	70	130				
m,p-Xylene	20	2.0	19.20	0	103	70	130				
Methylene chloride	9.9	5.0	10.00	0	98.6	70	130				
n-Hexane	10	2.0	10.10	0	102	70	130				
Naphthalene	9.3	1.0	9.200	0	102	70	130				
o-Xylene	10	1.0	10.00	0	102	70	130				
Propylene	10	1.0	10.20	0	97.6	70	130				
Styrene	10	1.0	9.800	0	103	70	130				
tert-Butyl Methyl Ether	9.2	1.0	9.900	0	93.3	70	130				
Tetrachloroethene	9.8	1.0	9.600	0	103	70	130				
Tetrahydrofuran	9.3	1.0	10.00	0	93.4	70	130				
Toluene	10	1.0	9.800	0	107	70	130				
trans-1,2-Dichloroethene	11	1.0	9.800	0	109	70	130				
trans-1,3-dichloropropene	9.6	1.0	9.100	0	105	70	130				
Trichloroethene	9.9	1.0	9.600	0	103	70	130				
Trichlorofluoromethane	9.9	1.0	9.600	0	103	70	130				
Vinyl acetate	9.1	1.0	9.900	0	92.3	70	130				
Vinyl chloride	7.9	1.0	9.400	0	83.9	70	130				
Xylenes, Total	30	3.0	29.20	0	103	70	130				
Surr: 4-Bromofluorobenzene	13		12.50		101	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52341**

Sample ID:	**MBLK/CC_23 VOA1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52341**
Client ID:	**PBW**	Batch ID:	**R52341**	TestNo:	**TO-15**			Analysis Date:	**9/25/2012**	SeqNo:	**1026177**

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#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52341**

Sample ID:	**MBLK/CC_23 VOA1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52341**
Client ID:	**PBW**	Batch ID:	**R52341**	TestNo:	**TO-15**			Analysis Date:	**9/25/2012**	SeqNo:	**1026177**

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		95.5	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52341**

Sample ID:	**1209527-012Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52341**
Client ID:	**ZZZZZZ**	Batch ID:	**R52341**	TestNo:	**TO-15**			Analysis Date:	**9/26/2012**	SeqNo:	**1026186**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	40						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	40						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40						0	0	25	U
1,1,2-Trichloroethane	ND	40						0	0	25	U
1,1-Dichloroethane	ND	40						0	0	25	U
1,1-Dichloroethene	ND	40						0	0	25	U
1,2,4-Trichlorobenzene	ND	40						0	0	25	U
1,2,4-Trimethylbenzene	ND	40						0	0	25	U
1,2-Dibromoethane	ND	40						0	0	25	U
1,2-Dichlorobenzene	ND	40						0	0	25	U
1,2-Dichloroethane	ND	40						0	0	25	U
1,2-Dichloropropane	ND	40						0	0	25	U
1,3,5-Trimethylbenzene	ND	40						0	0	25	U
1,3-Butadiene	ND	40						0	0	25	U
1,3-Dichlorobenzene	ND	40						0	0	25	U
1,4-Dichlorobenzene	ND	40						0	0	25	U
2-Butanone	ND	40						0	0	25	U
2-Hexanone	ND	40						0	0	25	U
4-Methyl-2-pentanone	ND	40						0	0	25	U
Acetone	ND	40						0	0	25	U
Benzene	99	40						83.20	17.5	25	
Benzyl chloride	ND	40						0	0	25	U
Bromodichloromethane	ND	40						0	0	25	U
Bromoform	ND	40						0	0	25	U
Bromomethane	ND	40						0	0	25	U
Carbon disulfide	ND	40						0	0	25	U
Carbon tetrachloride	ND	40						0	0	25	U
Chlorobenzene	ND	40						0	0	25	U
Chlorodibromomethane	ND	40						0	0	25	U
Chloroethane	ND	40						0	0	25	U
Chloroform	ND	40						0	0	25	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52341**

Sample ID:	**1209527-012Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52341**
Client ID:	**ZZZZZZ**	Batch ID:	**R52341**	TestNo:	**TO-15**			Analysis Date:	**9/26/2012**	SeqNo:	**1026186**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	40						0	0	25	U
cis-1,2-Dichloroethene	ND	40						0	0	25	U
cis-1,3-dichloropropene	ND	40						0	0	25	U
Cyclohexane	550	80						482.4	13.5	25	
Dichlorodifluoromethane	ND	40						0	0	25	U
Ethyl acetate	ND	40						0	0	25	U
Ethylbenzene	63	80						63.20	0.635	25	J
Heptane	460	40						434.4	5.29	25	
Hexachlorobutadiene	ND	80						0	0	25	U
m,p-Xylene	170	80						176.0	1.14	25	
Methylene chloride	ND	200						0	0	25	U
n-Hexane	110	80						80.40	32.8	25	R
Naphthalene	ND	40						0	0	25	U
o-Xylene	62	40						64.40	3.15	25	
Propylene	ND	40						0	0	25	U
Styrene	ND	40						0	0	25	U
tert-Butyl Methyl Ether	ND	40						0	0	25	U
Tetrachloroethene	ND	40						0	0	25	U
Tetrahydrofuran	ND	40						0	0	25	U
Toluene	670	40						645.6	3.71	25	
trans-1,2-Dichloroethene	ND	40						0	0	25	U
trans-1,3-dichloropropene	ND	40						0	0	25	U
Trichloroethene	ND	40						0	0	25	U
Trichlorofluoromethane	ND	40						0	0	25	U
Vinyl acetate	ND	40						0	0	25	U
Vinyl chloride	ND	40						0	0	25	U
Xylenes, Total	240	120						240.4	1.68	25	
Surr: 4-Bromofluorobenzene	500		500.0		99.0	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52384**

Sample ID:	**CCV VOA9 092612**	Samp Type:	**CCV**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52384**
Client ID:	**CCV**	Batch ID:	**R52384**	TestNo:	**MA_APH**			Analysis Date:	**9/26/2012**	SeqNo:	**1026963**

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		95.1	70	130				

Sample ID:	**MBLK VOA9 092612**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52384**
Client ID:	**PBW**	Batch ID:	**R52384**	TestNo:	**MA_APH**			Analysis Date:	**9/26/2012**	SeqNo:	**1026965**

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		93.6	70	130				

Sample ID:	**1209801-003Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52384**
Client ID:	**VA1669**	Batch ID:	**R52384**	TestNo:	**MA_APH**			Analysis Date:	**9/26/2012**	SeqNo:	**1026967**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	130,000,000	19,000,000						116,000,000	10.9	30	
C9-C10 Aromatic Hydrocarbons	ND	21,000,000						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	ND	30,000,000						0	0	30	U
Surr: 4-Bromofluorobenzene	14,000,000		14,320,000		98.9	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52404**

Sample ID:	**CCV VOA1 092612**	Samp Type:	**CCV**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52404**
Client ID:	**CCV**	Batch ID:	**R52404**	TestNo:	**TO-15**			Analysis Date:	**9/26/2012**	SeqNo:	**1027318**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	8.4	1.0	9.600	0	87.4	70	130				
1,1,2,2-Tetrachloroethane	9.0	1.0	10.00	0	89.5	70	130				
1,1,2-Trichloro-1,2,2-trifluoroethane	9.4	1.0	9.800	0	95.9	70	130				
1,1,2-Trichloroethane	8.5	1.0	9.800	0	86.3	70	130				
1,1-Dichloroethane	8.2	1.0	9.700	0	84.7	70	130				
1,1-Dichloroethene	9.7	1.0	9.900	0	97.8	70	130				
1,2,4-Trichlorobenzene	7.3	1.0	9.100	0	79.8	70	130				
1,2,4-Trimethylbenzene	8.9	1.0	9.800	0	90.7	70	130				
1,2-Dibromoethane	8.3	1.0	9.600	0	86.9	70	130				
1,2-Dichlorobenzene	8.2	1.0	9.700	0	84.6	70	130				
1,2-Dichloroethane	8.2	1.0	9.700	0	84.1	70	130				
1,2-Dichloropropane	8.3	1.0	9.800	0	85.0	70	130				
1,3,5-Trimethylbenzene	8.7	1.0	9.700	0	89.9	70	130				
1,3-Butadiene	7.0	1.0	9.800	0	71.0	70	130				
1,3-Dichlorobenzene	8.4	1.0	9.700	0	86.2	70	130				
1,4-Dichlorobenzene	8.3	1.0	9.600	0	86.4	70	130				
2-Butanone	8.6	1.0	9.900	0	86.9	70	130				
2-Hexanone	9.6	1.0	9.800	0	97.9	70	130				
4-Methyl-2-pentanone	9.3	1.0	10.00	0	92.6	70	130				
Acetone	8.7	1.0	10.00	0	86.6	70	130				
Benzene	7.8	1.0	9.600	0	81.4	70	130				
Benzyl chloride	8.4	1.0	9.700	0	86.4	70	130				
Bromodichloromethane	8.8	1.0	9.600	0	91.4	70	130				
Bromoform	8.4	1.0	9.600	0	87.1	70	130				
Bromomethane	8.4	1.0	9.300	0	90.4	70	130				
Carbon disulfide	10	1.0	9.700	0	106	70	130				
Carbon tetrachloride	8.1	1.0	9.500	0	85.3	70	130				
Chlorobenzene	8.9	1.0	9.900	0	89.8	70	130				
Chlorodibromomethane	8.6	1.0	9.200	0	94.0	70	130				
Chloroethane	8.3	1.0	9.800	0	85.0	70	130				
Chloroform	8.8	1.0	9.400	0	94.0	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R52404**

Sample ID:	**CCV VOA1 092612**	Samp Type:	**CCV**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52404**
Client ID:	**CCV**	Batch ID:	**R52404**	TestNo:	**TO-15**			Analysis Date:	**9/26/2012**	SeqNo:	**1027318**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	9.1	1.0	9.800	0	92.8	70	130				
cis-1,2-Dichloroethene	8.5	1.0	9.800	0	86.8	70	130				
cis-1,3-dichloropropene	7.6	1.0	9.500	0	80.5	70	130				
Cyclohexane	9.7	2.0	9.800	0	99.0	70	130				
Dichlorodifluoromethane	8.6	1.0	9.200	0	92.9	70	130				
Ethyl acetate	9.0	1.0	9.800	0	91.9	70	130				
Ethylbenzene	8.8	2.0	9.800	0	89.9	70	130				
Heptane	10	1.0	9.900	0	103	70	130				
Hexachlorobutadiene	7.7	2.0	9.400	0	81.9	70	130				
m,p-Xylene	19	2.0	19.20	0	97.5	70	130				
Methylene chloride	9.3	5.0	10.00	0	93.1	70	130				
n-Hexane	9.4	2.0	10.10	0	93.4	70	130				
Naphthalene	7.3	1.0	9.200	0	79.5	70	130				
o-Xylene	9.3	1.0	10.00	0	93.2	70	130				
Propylene	9.5	1.0	10.20	0	93.3	70	130				
Styrene	9.2	1.0	9.800	0	94.2	70	130				
tert-Butyl Methyl Ether	7.6	1.0	9.900	0	76.9	70	130				
Tetrachloroethene	8.9	1.0	9.600	0	92.4	70	130				
Tetrahydrofuran	9.2	1.0	10.00	0	91.6	70	130				
Toluene	9.3	1.0	9.800	0	95.3	70	130				
trans-1,2-Dichloroethene	9.3	1.0	9.800	0	94.9	70	130				
trans-1,3-dichloropropene	8.3	1.0	9.100	0	91.4	70	130				
Trichloroethene	8.6	1.0	9.600	0	89.9	70	130				
Trichlorofluoromethane	8.7	1.0	9.600	0	90.7	70	130				
Vinyl acetate	8.2	1.0	9.900	0	82.6	70	130				
Vinyl chloride	8.2	1.0	9.400	0	87.0	70	130				
Xylenes, Total	28	3.0	29.20	0	96.0	70	130				
Surr: 4-Bromofluorobenzene	12		12.50		98.3	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52404**

Sample ID:	**MBLK/CC_33 VOA1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52404**
Client ID:	**PBW**	Batch ID:	**R52404**	TestNo:	**TO-15**			Analysis Date:	**9/26/2012**	SeqNo:	**1027320**

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#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52404**

Sample ID:	**MBLK/CC_33 VOA1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52404**
Client ID:	**PBW**	Batch ID:	**R52404**	TestNo:	**TO-15**			Analysis Date:	**9/26/2012**	SeqNo:	**1027320**

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		94.5	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52404**

Sample ID:	**1209801-005Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52404**
Client ID:	**VA1671**	Batch ID:	**R52404**	TestNo:	**TO-15**			Analysis Date:	**9/26/2012**	SeqNo:	**1027323**

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	2,900	800						2,576	12.5	25	
2-Hexanone	ND	800						0	0	25	U
4-Methyl-2-pentanone	ND	800						0	0	25	U
Acetone	4,500	800						3,824	16.7	25	
Benzene	9,300	800						8,952	3.94	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#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52404**

Sample ID:	**1209801-005Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52404**
Client ID:	**VA1671**	Batch ID:	**R52404**	TestNo:	**TO-15**			Analysis Date:	**9/26/2012**	SeqNo:	**1027323**

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	28,000	1,600						27,320	4.05	25	
Dichlorodifluoromethane	ND	800						0	0	25	U
Ethyl acetate	ND	800						0	0	25	U
Ethylbenzene	3,100	1,600						2,968	3.70	25	
Heptane	24,000	800						22,840	4.22	25	
Hexachlorobutadiene	ND	1,600						0	0	25	U
m,p-Xylene	11,000	1,600						10,880	4.32	25	
Methylene chloride	ND	4,000						0	0	25	U
n-Hexane	25,000	1,600						23,650	5.49	25	
Naphthalene	ND	800						0	0	25	U
o-Xylene	3,400	800						3,216	5.33	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						30,130	4.16	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	15,000	2,400						14,100	4.55	25	
Surr: 4-Bromofluorobenzene	11,000		10,000		106	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52434**

Sample ID:	**CCV VOA9 092712**	Samp Type:	**CCV**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52434**
Client ID:	**CCV**	Batch ID:	**R52434**	TestNo:	**MA_APH**			Analysis Date:	**9/27/2012**	SeqNo:	**1027982**

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	90		89.50		100	70	130				

Sample ID:	**MBLK VOA9 092712**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52434**
Client ID:	**PBW**	Batch ID:	**R52434**	TestNo:	**MA_APH**			Analysis Date:	**9/27/2012**	SeqNo:	**1027984**

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:	**1209801-016Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52434**
Client ID:	**VA1711**	Batch ID:	**R52434**	TestNo:	**MA_APH**			Analysis Date:	**9/27/2012**	SeqNo:	**1027996**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	720,000	94,000						772,200	7.40	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	72,000		71,600		101	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R52446**

Sample ID:	**CCV VOA1 092712**	Samp Type:	**CCV**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52446**
Client ID:	**CCV**	Batch ID:	**R52446**	TestNo:	**TO-15**			Analysis Date:	**9/27/2012**	SeqNo:	**1028117**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	9.3	1.0	9.600	0	97.0	70	130				
1,1,2,2-Tetrachloroethane	9.8	1.0	10.00	0	98.1	70	130				
1,1,2-Trichloro-1,2,2-trifluoroethane	10	1.0	9.800	0	107	70	130				
1,1,2-Trichloroethane	9.4	1.0	9.800	0	95.8	70	130				
1,1-Dichloroethane	9.4	1.0	9.700	0	96.6	70	130				
1,1-Dichloroethene	11	1.0	9.900	0	107	70	130				
1,2,4-Trichlorobenzene	8.0	1.0	9.100	0	87.8	70	130				
1,2,4-Trimethylbenzene	9.6	1.0	9.800	0	98.2	70	130				
1,2-Dibromoethane	9.2	1.0	9.600	0	96.2	70	130				
1,2-Dichlorobenzene	9.0	1.0	9.700	0	92.3	70	130				
1,2-Dichloroethane	9.2	1.0	9.700	0	94.4	70	130				
1,2-Dichloropropane	9.4	1.0	9.800	0	95.8	70	130				
1,3,5-Trimethylbenzene	9.5	1.0	9.700	0	98.2	70	130				
1,3-Butadiene	8.8	1.0	9.800	0	90.1	70	130				
1,3-Dichlorobenzene	9.1	1.0	9.700	0	93.6	70	130				
1,4-Dichlorobenzene	9.1	1.0	9.600	0	94.5	70	130				
2-Butanone	10	1.0	9.900	0	105	70	130				
2-Hexanone	10	1.0	9.800	0	107	70	130				
4-Methyl-2-pentanone	10	1.0	10.00	0	102	70	130				
Acetone	10	1.0	10.00	0	102	70	130				
Benzene	9.1	1.0	9.600	0	94.7	70	130				
Benzyl chloride	9.2	1.0	9.700	0	94.8	70	130				
Bromodichloromethane	9.4	1.0	9.600	0	98.4	70	130				
Bromoform	9.1	1.0	9.600	0	94.8	70	130				
Bromomethane	9.1	1.0	9.300	0	98.3	70	130				
Carbon disulfide	11	1.0	9.700	0	117	70	130				
Carbon tetrachloride	9.0	1.0	9.500	0	94.2	70	130				
Chlorobenzene	9.7	1.0	9.900	0	97.8	70	130				
Chlorodibromomethane	9.4	1.0	9.200	0	102	70	130				
Chloroethane	9.3	1.0	9.800	0	94.5	70	130				
Chloroform	9.7	1.0	9.400	0	103	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52446**

Sample ID:	**CCV VOA1 092712**	Samp Type:	**CCV**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52446**
Client ID:	**CCV**	Batch ID:	**R52446**	TestNo:	**TO-15**			Analysis Date:	**9/27/2012**	SeqNo:	**1028117**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	11	1.0	9.800	0	108	70	130				
cis-1,2-Dichloroethene	9.7	1.0	9.800	0	98.8	70	130				
cis-1,3-dichloropropene	8.5	1.0	9.500	0	89.6	70	130				
Cyclohexane	11	2.0	9.800	0	113	70	130				
Dichlorodifluoromethane	9.1	1.0	9.200	0	98.7	70	130				
Ethyl acetate	10	1.0	9.800	0	105	70	130				
Ethylbenzene	9.7	2.0	9.800	0	99.0	70	130				
Heptane	11	1.0	9.900	0	114	70	130				
Hexachlorobutadiene	8.0	2.0	9.400	0	85.6	70	130				
m,p-Xylene	20	2.0	19.20	0	107	70	130				
Methylene chloride	11	5.0	10.00	0	107	70	130				
n-Hexane	11	2.0	10.10	0	107	70	130				
Naphthalene	7.9	1.0	9.200	0	85.4	70	130				
o-Xylene	10	1.0	10.00	0	101	70	130				
Propylene	11	1.0	10.20	0	104	70	130				
Styrene	10	1.0	9.800	0	102	70	130				
tert-Butyl Methyl Ether	8.7	1.0	9.900	0	88.3	70	130				
Tetrachloroethene	9.6	1.0	9.600	0	99.6	70	130				
Tetrahydrofuran	11	1.0	10.00	0	108	70	130				
Toluene	10	1.0	9.800	0	105	70	130				
trans-1,2-Dichloroethene	10	1.0	9.800	0	107	70	130				
trans-1,3-dichloropropene	9.2	1.0	9.100	0	101	70	130				
Trichloroethene	9.5	1.0	9.600	0	98.5	70	130				
Trichlorofluoromethane	9.2	1.0	9.600	0	95.7	70	130				
Vinyl acetate	9.8	1.0	9.900	0	99.4	70	130				
Vinyl chloride	9.8	1.0	9.400	0	104	70	130				
Xylenes, Total	31	3.0	29.20	0	105	70	130				
Surr: 4-Bromofluorobenzene	12		12.50		98.4	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52446**

Sample ID:	**MBLK/CC_8 VOA1 0**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52446**
Client ID:	**PBW**	Batch ID:	**R52446**	TestNo:	**TO-15**			Analysis Date:	**9/27/2012**	SeqNo:	**1028119**

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#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52446**

Sample ID:	**MBLK/CC_8 VOA1 0**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52446**
Client ID:	**PBW**	Batch ID:	**R52446**	TestNo:	**TO-15**			Analysis Date:	**9/27/2012**	SeqNo:	**1028119**

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		93.6	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52446**

Sample ID:	**1209801-017Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52446**
Client ID:	**VA1734**	Batch ID:	**R52446**	TestNo:	**TO-15**			Analysis Date:	**9/27/2012**	SeqNo:	**1028129**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	40						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	40						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40						0	0	25	U
1,1,2-Trichloroethane	ND	40						0	0	25	U
1,1-Dichloroethane	ND	40						0	0	25	U
1,1-Dichloroethene	ND	40						0	0	25	U
1,2,4-Trichlorobenzene	ND	40						0	0	25	U
1,2,4-Trimethylbenzene	ND	40						0	0	25	U
1,2-Dibromoethane	ND	40						0	0	25	U
1,2-Dichlorobenzene	ND	40						0	0	25	U
1,2-Dichloroethane	ND	40						0	0	25	U
1,2-Dichloropropane	ND	40						0	0	25	U
1,3,5-Trimethylbenzene	ND	40						0	0	25	U
1,3-Butadiene	ND	40						0	0	25	U
1,3-Dichlorobenzene	ND	40						0	0	25	U
1,4-Dichlorobenzene	ND	40						0	0	25	U
2-Butanone	ND	40						0	0	25	U
2-Hexanone	ND	40						0	0	25	U
4-Methyl-2-pentanone	ND	40						0	0	25	U
Acetone	ND	40						0	0	25	U
Benzene	780	40						948.4	19.5	25	
Benzyl chloride	ND	40						0	0	25	U
Bromodichloromethane	ND	40						0	0	25	U
Bromoform	ND	40						0	0	25	U
Bromomethane	ND	40						0	0	25	U
Carbon disulfide	ND	40						0	0	25	U
Carbon tetrachloride	ND	40						0	0	25	U
Chlorobenzene	ND	40						0	0	25	U
Chlorodibromomethane	ND	40						0	0	25	U
Chloroethane	ND	40						0	0	25	U
Chloroform	ND	40						0	0	25	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52446**

Sample ID:	**1209801-017Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52446**
Client ID:	**VA1734**	Batch ID:	**R52446**	TestNo:	**TO-15**			Analysis Date:	**9/27/2012**	SeqNo:	**1028129**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	40						0	0	25	U
cis-1,2-Dichloroethene	ND	40						0	0	25	U
cis-1,3-dichloropropene	ND	40						0	0	25	U
Cyclohexane	500	80						585.2	15.6	25	
Dichlorodifluoromethane	ND	40						0	0	25	U
Ethyl acetate	ND	40						0	0	25	U
Ethylbenzene	ND	80						0	0	25	U
Heptane	210	40						266.4	24.2	25	
Hexachlorobutadiene	ND	80						0	0	25	U
m,p-Xylene	100	80						132.4	26.3	25	R
Methylene chloride	ND	200						0	0	25	U
n-Hexane	250	80						292.0	16.3	25	
Naphthalene	ND	40						0	0	25	U
o-Xylene	ND	40						0	0	25	U
Propylene	ND	40						0	0	25	U
Styrene	ND	40						0	0	25	U
tert-Butyl Methyl Ether	ND	40						0	0	25	U
Tetrachloroethene	ND	40						0	0	25	U
Tetrahydrofuran	ND	40						0	0	25	U
Toluene	2,300	40						2,805	21.1	25	E
trans-1,2-Dichloroethene	ND	40						0	0	25	U
trans-1,3-dichloropropene	ND	40						0	0	25	U
Trichloroethene	ND	40						0	0	25	U
Trichlorofluoromethane	ND	40						0	0	25	U
Vinyl acetate	ND	40						0	0	25	U
Vinyl chloride	ND	40						0	0	25	U
Xylenes, Total	100	120						132.4	26.3	25	JR
Surr: 4-Bromofluorobenzene	480		500.0		96.8	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52495**

Sample ID:	**CCV VOA9 092812**	Samp Type:	**CCV**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52495**
Client ID:	**CCV**	Batch ID:	**R52495**	TestNo:	**MA_APH**			Analysis Date:	**9/28/2012**	SeqNo:	**1029680**

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	89		89.50		99.8	70	130				

Sample ID:	**MBLK VOA9 092812**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52495**
Client ID:	**PBW**	Batch ID:	**R52495**	TestNo:	**MA_APH**			Analysis Date:	**9/28/2012**	SeqNo:	**1029682**

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		96.0	70	130				

Sample ID:	**1209801-026ADUP**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52495**
Client ID:	**VA1776**	Batch ID:	**R52495**	TestNo:	**MA_APH**			Analysis Date:	**9/29/2012**	SeqNo:	**1029692**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	8,300	940						7,896	4.38	30	
C9-C10 Aromatic Hydrocarbons	ND	1,100						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	520	1,500						512.8	0.978	30	J
Surr: 4-Bromofluorobenzene	670		716.0		93.9	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52507**

Sample ID:	**CCV VOA1 092812**	Samp Type:	**CCV**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52507**
Client ID:	**CCV**	Batch ID:	**R52507**	TestNo:	**TO-15**			Analysis Date:	**9/28/2012**	SeqNo:	**1029824**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	9.2	1.0	9.600	0	95.8	70	130				
1,1,2,2-Tetrachloroethane	10	1.0	10.00	0	101	70	130				
1,1,2-Trichloro-1,2,2-trifluoroethane	10	1.0	9.800	0	103	70	130				
1,1,2-Trichloroethane	9.7	1.0	9.800	0	98.8	70	130				
1,1-Dichloroethane	9.1	1.0	9.700	0	93.7	70	130				
1,1-Dichloroethene	10	1.0	9.900	0	103	70	130				
1,2,4-Trichlorobenzene	9.4	1.0	9.100	0	104	70	130				
1,2,4-Trimethylbenzene	10	1.0	9.800	0	102	70	130				
1,2-Dibromoethane	9.6	1.0	9.600	0	100	70	130				
1,2-Dichlorobenzene	9.5	1.0	9.700	0	97.7	70	130				
1,2-Dichloroethane	9.1	1.0	9.700	0	93.8	70	130				
1,2-Dichloropropane	9.6	1.0	9.800	0	97.8	70	130				
1,3,5-Trimethylbenzene	9.9	1.0	9.700	0	102	70	130				
1,3-Butadiene	7.7	1.0	9.800	0	78.7	70	130				
1,3-Dichlorobenzene	9.7	1.0	9.700	0	99.9	70	130				
1,4-Dichlorobenzene	9.6	1.0	9.600	0	100	70	130				
2-Butanone	9.9	1.0	9.900	0	99.6	70	130				
2-Hexanone	11	1.0	9.800	0	111	70	130				
4-Methyl-2-pentanone	10	1.0	10.00	0	104	70	130				
Acetone	9.8	1.0	10.00	0	98.0	70	130				
Benzene	9.0	1.0	9.600	0	93.5	70	130				
Benzyl chloride	10	1.0	9.700	0	103	70	130				
Bromodichloromethane	9.7	1.0	9.600	0	101	70	130				
Bromoform	9.6	1.0	9.600	0	99.5	70	130				
Bromomethane	9.2	1.0	9.300	0	98.5	70	130				
Carbon disulfide	11	1.0	9.700	0	114	70	130				
Carbon tetrachloride	9.0	1.0	9.500	0	94.9	70	130				
Chlorobenzene	10	1.0	9.900	0	101	70	130				
Chlorodibromomethane	9.9	1.0	9.200	0	107	70	130				
Chloroethane	9.0	1.0	9.800	0	91.9	70	130				
Chloroform	9.5	1.0	9.400	0	101	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52507**

Sample ID:	**CCV VOA1 092812**	Samp Type:	**CCV**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52507**
Client ID:	**CCV**	Batch ID:	**R52507**	TestNo:	**TO-15**			Analysis Date:	**9/28/2012**	SeqNo:	**1029824**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	10	1.0	9.800	0	102	70	130				
cis-1,2-Dichloroethene	9.5	1.0	9.800	0	96.9	70	130				
cis-1,3-dichloropropene	8.8	1.0	9.500	0	93.1	70	130				
Cyclohexane	10	2.0	9.800	0	107	70	130				
Dichlorodifluoromethane	9.1	1.0	9.200	0	98.8	70	130				
Ethyl acetate	10	1.0	9.800	0	103	70	130				
Ethylbenzene	9.9	2.0	9.800	0	101	70	130				
Heptane	11	1.0	9.900	0	112	70	130				
Hexachlorobutadiene	8.9	2.0	9.400	0	94.3	70	130				
m,p-Xylene	21	2.0	19.20	0	109	70	130				
Methylene chloride	9.9	5.0	10.00	0	98.8	70	130				
n-Hexane	10	2.0	10.10	0	101	70	130				
Naphthalene	9.5	1.0	9.200	0	103	70	130				
o-Xylene	10	1.0	10.00	0	104	70	130				
Propylene	10	1.0	10.20	0	98.6	70	130				
Styrene	10	1.0	9.800	0	106	70	130				
tert-Butyl Methyl Ether	9.0	1.0	9.900	0	90.6	70	130				
Tetrachloroethene	9.9	1.0	9.600	0	103	70	130				
Tetrahydrofuran	10	1.0	10.00	0	104	70	130				
Toluene	11	1.0	9.800	0	109	70	130				
trans-1,2-Dichloroethene	10	1.0	9.800	0	102	70	130				
trans-1,3-dichloropropene	9.6	1.0	9.100	0	105	70	130				
Trichloroethene	9.8	1.0	9.600	0	102	70	130				
Trichlorofluoromethane	9.2	1.0	9.600	0	95.9	70	130				
Vinyl acetate	9.6	1.0	9.900	0	97.2	70	130				
Vinyl chloride	8.7	1.0	9.400	0	92.4	70	130				
Xylenes, Total	31	3.0	29.20	0	107	70	130				
Surr: 4-Bromofluorobenzene	12		12.50		97.1	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52507**

Sample ID:	**MBLK/CC_35 VOA1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52507**
Client ID:	**PBW**	Batch ID:	**R52507**	TestNo:	**TO-15**			Analysis Date:	**9/28/2012**	SeqNo:	**1029826**

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#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52507**

Sample ID:	**MBLK/CC_35 VOA1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52507**
Client ID:	**PBW**	Batch ID:	**R52507**	TestNo:	**TO-15**			Analysis Date:	**9/28/2012**	SeqNo:	**1029826**

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		94.5	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52507**

Sample ID:	**1209801-035ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52507**
Client ID:	**VA1789**	Batch ID:	**R52507**	TestNo:	**TO-15**			Analysis Date:	**9/29/2012**	SeqNo:	**1029835**

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	820	800						0	200	25	R
Benzene	ND	800						0	0	25	U
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#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52507**

Sample ID:	**1209801-035ADUP**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52507**
Client ID:	**VA1789**	Batch ID:	**R52507**	TestNo:	**TO-15**			Analysis Date:	**9/29/2012**	SeqNo:	**1029835**

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	26,000	1,600						24,170	7.49	25	
Dichlorodifluoromethane	ND	800						0	0	25	U
Ethyl acetate	ND	800						0	0	25	U
Ethylbenzene	ND	1,600						0	0	25	U
Heptane	7,100	800						6,216	12.8	25	
Hexachlorobutadiene	ND	1,600						0	0	25	U
m,p-Xylene	ND	1,600						0	0	25	U
Methylene chloride	ND	4,000						0	0	25	U
n-Hexane	19,000	1,600						17,340	7.76	25	
Naphthalene	ND	800						0	0	25	U
o-Xylene	ND	800						0	0	25	U
Propylene	ND	800						0	0	25	U
Styrene	ND	800						0	0	25	U
tert-Butyl Methyl Ether	ND	800						0	0	25	U
Tetrachloroethene	ND	800						0	0	25	U
Tetrahydrofuran	ND	800						0	0	25	U
Toluene	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	ND	2,400						0	0	25	U
Surr: 4-Bromofluorobenzene	9,700		10,000		96.9	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R52540**

Sample ID:	**CCV VOA1 100112**	Samp Type:	**CCV**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52540**
Client ID:	**CCV**	Batch ID:	**R52540**	TestNo:	**TO-15**			Analysis Date:	**10/1/2012**	SeqNo:	**1030633**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	9.6	1.0	9.600	0	100	70	130				
1,1,2,2-Tetrachloroethane	11	1.0	10.00	0	106	70	130				
1,1,2-Trichloro-1,2,2-trifluoroethane	11	1.0	9.800	0	108	70	130				
1,1,2-Trichloroethane	9.9	1.0	9.800	0	101	70	130				
1,1-Dichloroethane	9.6	1.0	9.700	0	98.5	70	130				
1,1-Dichloroethene	11	1.0	9.900	0	109	70	130				
1,2,4-Trichlorobenzene	9.6	1.0	9.100	0	106	70	130				
1,2,4-Trimethylbenzene	11	1.0	9.800	0	108	70	130				
1,2-Dibromoethane	10	1.0	9.600	0	104	70	130				
1,2-Dichlorobenzene	10	1.0	9.700	0	105	70	130				
1,2-Dichloroethane	9.5	1.0	9.700	0	97.6	70	130				
1,2-Dichloropropane	9.9	1.0	9.800	0	101	70	130				
1,3,5-Trimethylbenzene	10	1.0	9.700	0	108	70	130				
1,3-Butadiene	8.4	1.0	9.800	0	85.4	70	130				
1,3-Dichlorobenzene	10	1.0	9.700	0	106	70	130				
1,4-Dichlorobenzene	10	1.0	9.600	0	108	70	130				
2-Butanone	10	1.0	9.900	0	101	70	130				
2-Hexanone	11	1.0	9.800	0	117	70	130				
4-Methyl-2-pentanone	11	1.0	10.00	0	109	70	130				
Acetone	10	1.0	10.00	0	105	70	130				
Benzene	9.3	1.0	9.600	0	96.7	70	130				
Benzyl chloride	11	1.0	9.700	0	111	70	130				
Bromodichloromethane	10	1.0	9.600	0	105	70	130				
Bromoform	10	1.0	9.600	0	105	70	130				
Bromomethane	9.4	1.0	9.300	0	101	70	130				
Carbon disulfide	12	1.0	9.700	0	119	70	130				
Carbon tetrachloride	9.4	1.0	9.500	0	98.6	70	130				
Chlorobenzene	10	1.0	9.900	0	104	70	130				
Chlorodibromomethane	10	1.0	9.200	0	112	70	130				
Chloroethane	9.3	1.0	9.800	0	94.9	70	130				
Chloroform	10	1.0	9.400	0	107	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52540**

Sample ID:	**CCV VOA1 100112**	Samp Type:	**CCV**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52540**
Client ID:	**CCV**	Batch ID:	**R52540**	TestNo:	**TO-15**			Analysis Date:	**10/1/2012**	SeqNo:	**1030633**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	10	1.0	9.800	0	106	70	130				
cis-1,2-Dichloroethene	10	1.0	9.800	0	102	70	130				
cis-1,3-dichloropropene	9.1	1.0	9.500	0	95.6	70	130				
Cyclohexane	11	2.0	9.800	0	115	70	130				
Dichlorodifluoromethane	9.4	1.0	9.200	0	102	70	130				
Ethyl acetate	10	1.0	9.800	0	105	70	130				
Ethylbenzene	10	2.0	9.800	0	105	70	130				
Heptane	12	1.0	9.900	0	121	70	130				
Hexachlorobutadiene	9.0	2.0	9.400	0	95.6	70	130				
m,p-Xylene	22	2.0	19.20	0	114	70	130				
Methylene chloride	11	5.0	10.00	0	107	70	130				
n-Hexane	11	2.0	10.10	0	107	70	130				
Naphthalene	9.6	1.0	9.200	0	104	70	130				
o-Xylene	11	1.0	10.00	0	108	70	130				
Propylene	11	1.0	10.20	0	106	70	130				
Styrene	11	1.0	9.800	0	111	70	130				
tert-Butyl Methyl Ether	9.2	1.0	9.900	0	92.4	70	130				
Tetrachloroethene	10	1.0	9.600	0	106	70	130				
Tetrahydrofuran	11	1.0	10.00	0	111	70	130				
Toluene	11	1.0	9.800	0	113	70	130				
trans-1,2-Dichloroethene	11	1.0	9.800	0	108	70	130				
trans-1,3-dichloropropene	9.9	1.0	9.100	0	109	70	130				
Trichloroethene	10	1.0	9.600	0	104	70	130				
Trichlorofluoromethane	9.6	1.0	9.600	0	99.7	70	130				
Vinyl acetate	10	1.0	9.900	0	103	70	130				
Vinyl chloride	9.1	1.0	9.400	0	96.6	70	130				
Xylenes, Total	33	3.0	29.20	0	112	70	130				
Surr: 4-Bromofluorobenzene	12		12.50		99.5	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52540**

Sample ID:	**MBLK/CC_4 VOA1 1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52540**
Client ID:	**PBW**	Batch ID:	**R52540**	TestNo:	**TO-15**			Analysis Date:	**10/1/2012**	SeqNo:	**1030635**

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#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52540**

Sample ID:	**MBLK/CC_4 VOA1 1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52540**
Client ID:	**PBW**	Batch ID:	**R52540**	TestNo:	**TO-15**			Analysis Date:	**10/1/2012**	SeqNo:	**1030635**

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		94.5	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52540**

Sample ID:	**1209801-038Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52540**
Client ID:	**VA1792**	Batch ID:	**R52540**	TestNo:	**TO-15**			Analysis Date:	**10/1/2012**	SeqNo:	**1030637**

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	3,700	800						3,320	9.85	25	
Benzene	5,600	800						5,184	7.86	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#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52540**

Sample ID:	**1209801-038Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52540**
Client ID:	**VA1792**	Batch ID:	**R52540**	TestNo:	**TO-15**			Analysis Date:	**10/1/2012**	SeqNo:	**1030637**

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	4,200	1,600						3,832	9.16	25	
Dichlorodifluoromethane	ND	800						0	0	25	U
Ethyl acetate	ND	800						0	0	25	U
Ethylbenzene	ND	1,600						0	0	25	U
Heptane	1,100	800						1,072	6.50	25	
Hexachlorobutadiene	ND	1,600						0	0	25	U
m,p-Xylene	ND	1,600						0	0	25	U
Methylene chloride	3,100	4,000						3,016	4.16	25	J
n-Hexane	3,900	1,600						3,600	7.07	25	
Naphthalene	ND	800						0	0	25	U
o-Xylene	ND	800						0	0	25	U
Propylene	ND	800						0	0	25	U
Styrene	ND	800						0	0	25	U
tert-Butyl Methyl Ether	ND	800						0	0	25	U
Tetrachloroethene	ND	800						0	0	25	U
Tetrahydrofuran	ND	800						0	0	25	U
Toluene	15,000	800						13,670	7.76	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	ND	2,400						0	0	25	U
Surr: 4-Bromofluorobenzene	9,700		10,000		96.8	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52572**

Sample ID:	**CCV VOA9 100212**	Samp Type:	**CCV**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52572**
Client ID:	**CCV**	Batch ID:	**R52572**	TestNo:	**MA_APH**			Analysis Date:	**10/2/2012**	SeqNo:	**1031451**

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	91		89.50		101	70	130				

Sample ID:	**MBLK VOA9 100212**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52572**
Client ID:	**PBW**	Batch ID:	**R52572**	TestNo:	**MA_APH**			Analysis Date:	**10/2/2012**	SeqNo:	**1031453**

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	89		89.50		99.9	70	130				

Sample ID:	**1209801-035Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52572**
Client ID:	**VA1789**	Batch ID:	**R52572**	TestNo:	**MA_APH**			Analysis Date:	**10/2/2012**	SeqNo:	**1031458**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	860,000	94,000						841,600	2.59	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	74,000		71,600		103	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R52584**

Sample ID:	**CCV VOA1 100212**	Samp Type:	**CCV**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52584**
Client ID:	**CCV**	Batch ID:	**R52584**	TestNo:	**TO-15**			Analysis Date:	**10/2/2012**	SeqNo:	**1031796**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	9.4	1.0	9.600	0	97.5	70	130				
1,1,2,2-Tetrachloroethane	9.5	1.0	10.00	0	95.1	70	130				
1,1,2-Trichloro-1,2,2-trifluoroethane	10	1.0	9.800	0	107	70	130				
1,1,2-Trichloroethane	9.0	1.0	9.800	0	91.5	70	130				
1,1-Dichloroethane	9.6	1.0	9.700	0	98.9	70	130				
1,1-Dichloroethene	11	1.0	9.900	0	108	70	130				
1,2,4-Trichlorobenzene	8.4	1.0	9.100	0	92.9	70	130				
1,2,4-Trimethylbenzene	9.3	1.0	9.800	0	94.8	70	130				
1,2-Dibromoethane	8.9	1.0	9.600	0	92.5	70	130				
1,2-Dichlorobenzene	8.9	1.0	9.700	0	91.6	70	130				
1,2-Dichloroethane	8.9	1.0	9.700	0	91.3	70	130				
1,2-Dichloropropane	9.1	1.0	9.800	0	92.6	70	130				
1,3,5-Trimethylbenzene	9.1	1.0	9.700	0	94.1	70	130				
1,3-Butadiene	8.4	1.0	9.800	0	85.9	70	130				
1,3-Dichlorobenzene	9.0	1.0	9.700	0	92.7	70	130				
1,4-Dichlorobenzene	8.9	1.0	9.600	0	92.7	70	130				
2-Butanone	10	1.0	9.900	0	103	70	130				
2-Hexanone	10	1.0	9.800	0	105	70	130				
4-Methyl-2-pentanone	9.8	1.0	10.00	0	97.5	70	130				
Acetone	10	1.0	10.00	0	101	70	130				
Benzene	8.8	1.0	9.600	0	91.9	70	130				
Benzyl chloride	9.1	1.0	9.700	0	93.8	70	130				
Bromodichloromethane	9.2	1.0	9.600	0	95.5	70	130				
Bromoform	8.8	1.0	9.600	0	91.1	70	130				
Bromomethane	9.2	1.0	9.300	0	98.5	70	130				
Carbon disulfide	11	1.0	9.700	0	116	70	130				
Carbon tetrachloride	9.0	1.0	9.500	0	94.2	70	130				
Chlorobenzene	9.3	1.0	9.900	0	93.5	70	130				
Chlorodibromomethane	9.0	1.0	9.200	0	98.0	70	130				
Chloroethane	9.1	1.0	9.800	0	93.3	70	130				
Chloroform	9.7	1.0	9.400	0	103	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52584**

Sample ID:	**CCV VOA1 100212**	Samp Type:	**CCV**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52584**
Client ID:	**CCV**	Batch ID:	**R52584**	TestNo:	**TO-15**			Analysis Date:	**10/2/2012**	SeqNo:	**1031796**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	10	1.0	9.800	0	106	70	130				
cis-1,2-Dichloroethene	9.8	1.0	9.800	0	100	70	130				
cis-1,3-dichloropropene	8.2	1.0	9.500	0	86.1	70	130				
Cyclohexane	12	2.0	9.800	0	117	70	130				
Dichlorodifluoromethane	9.2	1.0	9.200	0	101	70	130				
Ethyl acetate	9.9	1.0	9.800	0	101	70	130				
Ethylbenzene	9.2	2.0	9.800	0	94.3	70	130				
Heptane	11	1.0	9.900	0	114	70	130				
Hexachlorobutadiene	8.2	2.0	9.400	0	87.0	70	130				
m,p-Xylene	20	2.0	19.20	0	103	70	130				
Methylene chloride	11	5.0	10.00	0	112	70	130				
n-Hexane	11	2.0	10.10	0	111	70	130				
Naphthalene	8.5	1.0	9.200	0	92.4	70	130				
o-Xylene	9.8	1.0	10.00	0	97.5	70	130				
Propylene	11	1.0	10.20	0	107	70	130				
Styrene	9.7	1.0	9.800	0	99.0	70	130				
tert-Butyl Methyl Ether	8.2	1.0	9.900	0	82.4	70	130				
Tetrachloroethene	9.3	1.0	9.600	0	97.2	70	130				
Tetrahydrofuran	10	1.0	10.00	0	104	70	130				
Toluene	9.9	1.0	9.800	0	101	70	130				
trans-1,2-Dichloroethene	11	1.0	9.800	0	111	70	130				
trans-1,3-dichloropropene	8.8	1.0	9.100	0	96.7	70	130				
Trichloroethene	9.2	1.0	9.600	0	95.6	70	130				
Trichlorofluoromethane	9.2	1.0	9.600	0	96.0	70	130				
Vinyl acetate	9.4	1.0	9.900	0	94.8	70	130				
Vinyl chloride	9.1	1.0	9.400	0	97.0	70	130				
Xylenes, Total	29	3.0	29.20	0	101	70	130				
Surr: 4-Bromofluorobenzene	12		12.50		97.7	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52584**

Sample ID:	**MBLK/CC_25 VOA1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52584**
Client ID:	**PBW**	Batch ID:	**R52584**	TestNo:	**TO-15**			Analysis Date:	**10/2/2012**	SeqNo:	**1031798**

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#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52584**

Sample ID:	**MBLK/CC_25 VOA1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52584**
Client ID:	**PBW**	Batch ID:	**R52584**	TestNo:	**TO-15**			Analysis Date:	**10/2/2012**	SeqNo:	**1031798**

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		94.6	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52584**

Sample ID:	**1209801-042Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52584**
Client ID:	**VA1816**	Batch ID:	**R52584**	TestNo:	**TO-15**			Analysis Date:	**10/2/2012**	SeqNo:	**1031800**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	40						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	40						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	40						0	0	25	U
1,1,2-Trichloroethane	ND	40						0	0	25	U
1,1-Dichloroethane	ND	40						0	0	25	U
1,1-Dichloroethene	ND	40						0	0	25	U
1,2,4-Trichlorobenzene	ND	40						0	0	25	U
1,2,4-Trimethylbenzene	ND	40						0	0	25	U
1,2-Dibromoethane	ND	40						0	0	25	U
1,2-Dichlorobenzene	ND	40						0	0	25	U
1,2-Dichloroethane	ND	40						0	0	25	U
1,2-Dichloropropane	ND	40						0	0	25	U
1,3,5-Trimethylbenzene	ND	40						0	0	25	U
1,3-Butadiene	ND	40						0	0	25	U
1,3-Dichlorobenzene	ND	40						0	0	25	U
1,4-Dichlorobenzene	ND	40						0	0	25	U
2-Butanone	ND	40						0	0	25	U
2-Hexanone	ND	40						0	0	25	U
4-Methyl-2-pentanone	ND	40						0	0	25	U
Acetone	ND	40						0	0	25	U
Benzene	210	40						198.8	3.56	25	
Benzyl chloride	ND	40						0	0	25	U
Bromodichloromethane	ND	40						0	0	25	U
Bromoform	ND	40						0	0	25	U
Bromomethane	ND	40						0	0	25	U
Carbon disulfide	ND	40						0	0	25	U
Carbon tetrachloride	ND	40						0	0	25	U
Chlorobenzene	ND	40						0	0	25	U
Chlorodibromomethane	ND	40						0	0	25	U
Chloroethane	ND	40						0	0	25	U
Chloroform	ND	40						0	0	25	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52584**

Sample ID:	**1209801-042Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52584**
Client ID:	**VA1816**	Batch ID:	**R52584**	TestNo:	**TO-15**			Analysis Date:	**10/2/2012**	SeqNo:	**1031800**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	40						0	0	25	U
cis-1,2-Dichloroethene	ND	40						0	0	25	U
cis-1,3-dichloropropene	ND	40						0	0	25	U
Cyclohexane	170	80						166.0	3.08	25	
Dichlorodifluoromethane	ND	40						0	0	25	U
Ethyl acetate	ND	40						0	0	25	U
Ethylbenzene	ND	80						0	0	25	U
Heptane	77	40						75.60	1.57	25	
Hexachlorobutadiene	ND	80						0	0	25	U
m,p-Xylene	ND	80						0	0	25	U
Methylene chloride	ND	200						0	0	25	U
n-Hexane	100	80						104.8	0	25	
Naphthalene	ND	40						0	0	25	U
o-Xylene	ND	40						0	0	25	U
Propylene	ND	40						0	0	25	U
Styrene	ND	40						0	0	25	U
tert-Butyl Methyl Ether	ND	40						0	0	25	U
Tetrachloroethene	ND	40						0	0	25	U
Tetrahydrofuran	ND	40						0	0	25	U
Toluene	600	40						607.6	0.860	25	
trans-1,2-Dichloroethene	ND	40						0	0	25	U
trans-1,3-dichloropropene	ND	40						0	0	25	U
Trichloroethene	ND	40						0	0	25	U
Trichlorofluoromethane	ND	40						0	0	25	U
Vinyl acetate	ND	40						0	0	25	U
Vinyl chloride	ND	40						0	0	25	U
Xylenes, Total	ND	120						0	0	25	U
Surr: 4-Bromofluorobenzene	490		500.0		97.7	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52627**

Sample ID:	**CCV VOA1 100312**	Samp Type:	**CCV**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52627**
Client ID:	**CCV**	Batch ID:	**R52627**	TestNo:	**TO-15**			Analysis Date:	**10/3/2012**	SeqNo:	**1032857**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	8.9	1.0	9.600	0	93.1	70	130				
1,1,2,2-Tetrachloroethane	9.3	1.0	10.00	0	93.0	70	130				
1,1,2-Trichloro-1,2,2-trifluoroethane	9.5	1.0	9.800	0	96.7	70	130				
1,1,2-Trichloroethane	9.0	1.0	9.800	0	91.7	70	130				
1,1-Dichloroethane	8.5	1.0	9.700	0	87.5	70	130				
1,1-Dichloroethene	10	1.0	9.900	0	101	70	130				
1,2,4-Trichlorobenzene	7.9	1.0	9.100	0	86.5	70	130				
1,2,4-Trimethylbenzene	9.4	1.0	9.800	0	96.2	70	130				
1,2-Dibromoethane	9.0	1.0	9.600	0	94.2	70	130				
1,2-Dichlorobenzene	9.1	1.0	9.700	0	93.6	70	130				
1,2-Dichloroethane	8.8	1.0	9.700	0	90.3	70	130				
1,2-Dichloropropane	9.1	1.0	9.800	0	92.8	70	130				
1,3,5-Trimethylbenzene	9.3	1.0	9.700	0	96.1	70	130				
1,3-Butadiene	7.1	1.0	9.800	0	72.8	70	130				
1,3-Dichlorobenzene	9.3	1.0	9.700	0	96.1	70	130				
1,4-Dichlorobenzene	9.2	1.0	9.600	0	96.0	70	130				
2-Butanone	9.0	1.0	9.900	0	91.4	70	130				
2-Hexanone	9.7	1.0	9.800	0	99.4	70	130				
4-Methyl-2-pentanone	9.3	1.0	10.00	0	92.7	70	130				
Acetone	8.8	1.0	10.00	0	87.5	70	130				
Benzene	8.4	1.0	9.600	0	87.8	70	130				
Benzyl chloride	9.0	1.0	9.700	0	92.7	70	130				
Bromodichloromethane	9.4	1.0	9.600	0	98.1	70	130				
Bromoform	9.1	1.0	9.600	0	94.5	70	130				
Bromomethane	8.6	1.0	9.300	0	92.6	70	130				
Carbon disulfide	10	1.0	9.700	0	108	70	130				
Carbon tetrachloride	8.6	1.0	9.500	0	90.6	70	130				
Chlorobenzene	9.4	1.0	9.900	0	95.5	70	130				
Chlorodibromomethane	9.3	1.0	9.200	0	101	70	130				
Chloroethane	8.4	1.0	9.800	0	86.2	70	130				
Chloroform	9.3	1.0	9.400	0	99.3	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB

Batch ID: **R52627**

Sample ID:	**CCV VOA1 100312**	Samp Type:	**CCV**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52627**
Client ID:	**CCV**	Batch ID:	**R52627**	TestNo:	**TO-15**			Analysis Date:	**10/3/2012**	SeqNo:	**1032857**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	9.5	1.0	9.800	0	96.9	70	130				
cis-1,2-Dichloroethene	8.9	1.0	9.800	0	90.7	70	130				
cis-1,3-dichloropropene	8.3	1.0	9.500	0	87.4	70	130				
Cyclohexane	10	2.0	9.800	0	102	70	130				
Dichlorodifluoromethane	8.8	1.0	9.200	0	95.5	70	130				
Ethyl acetate	8.8	1.0	9.800	0	90.1	70	130				
Ethylbenzene	9.5	2.0	9.800	0	96.9	70	130				
Heptane	11	1.0	9.900	0	110	70	130				
Hexachlorobutadiene	7.7	2.0	9.400	0	81.6	70	130				
m,p-Xylene	20	2.0	19.20	0	105	70	130				
Methylene chloride	9.4	5.0	10.00	0	94.0	70	130				
n-Hexane	9.8	2.0	10.10	0	96.6	70	130				
Naphthalene	7.5	1.0	9.200	0	81.5	70	130				
o-Xylene	9.8	1.0	10.00	0	98.4	70	130				
Propylene	9.6	1.0	10.20	0	93.8	70	130				
Styrene	9.8	1.0	9.800	0	100	70	130				
tert-Butyl Methyl Ether	7.9	1.0	9.900	0	79.8	70	130				
Tetrachloroethene	9.7	1.0	9.600	0	101	70	130				
Tetrahydrofuran	9.4	1.0	10.00	0	94.2	70	130				
Toluene	10	1.0	9.800	0	104	70	130				
trans-1,2-Dichloroethene	9.6	1.0	9.800	0	97.4	70	130				
trans-1,3-dichloropropene	9.1	1.0	9.100	0	99.8	70	130				
Trichloroethene	9.7	1.0	9.600	0	101	70	130				
Trichlorofluoromethane	8.9	1.0	9.600	0	93.0	70	130				
Vinyl acetate	8.4	1.0	9.900	0	85.1	70	130				
Vinyl chloride	8.4	1.0	9.400	0	89.1	70	130				
Xylenes, Total	30	3.0	29.20	0	103	70	130				
Surr: 4-Bromofluorobenzene	12		12.50		99.0	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52627**

Sample ID:	**MBLK/CC_3 VOA1 1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52627**
Client ID:	**PBW**	Batch ID:	**R52627**	TestNo:	**TO-15**			Analysis Date:	**10/3/2012**	SeqNo:	**1032859**

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#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52627**

Sample ID:	**MBLK/CC_3 VOA1 1**	Samp Type:	**MBLK**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52627**
Client ID:	**PBW**	Batch ID:	**R52627**	TestNo:	**TO-15**			Analysis Date:	**10/3/2012**	SeqNo:	**1032859**

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		94.3	70	130				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52627**

Sample ID:	**1210027-002Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52627**
Client ID:	**ZZZZZZ**	Batch ID:	**R52627**	TestNo:	**TO-15**			Analysis Date:	**10/3/2012**	SeqNo:	**1032862**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	8.0						0	0	25	U
1,1,2,2-Tetrachloroethane	ND	8.0						0	0	25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	8.0						0	0	25	U
1,1,2-Trichloroethane	ND	8.0						0	0	25	U
1,1-Dichloroethane	ND	8.0						0	0	25	U
1,1-Dichloroethene	ND	8.0						0	0	25	U
1,2,4-Trichlorobenzene	ND	8.0						0	0	25	U
1,2,4-Trimethylbenzene	ND	8.0						0	0	25	U
1,2-Dibromoethane	ND	8.0						0	0	25	U
1,2-Dichlorobenzene	ND	8.0						0	0	25	U
1,2-Dichloroethane	ND	8.0						0	0	25	U
1,2-Dichloropropane	ND	8.0						0	0	25	U
1,3,5-Trimethylbenzene	ND	8.0						0	0	25	U
1,3-Butadiene	ND	8.0						0	0	25	U
1,3-Dichlorobenzene	ND	8.0						0	0	25	U
1,4-Dichlorobenzene	ND	8.0						0	0	25	U
2-Butanone	ND	8.0						8.400	200	25	RU
2-Hexanone	ND	8.0						0	0	25	U
4-Methyl-2-pentanone	ND	8.0						0	0	25	U
Acetone	29	8.0						33.68	13.4	25	
Benzene	ND	8.0						0	0	25	U
Benzyl chloride	ND	8.0						0	0	25	U
Bromodichloromethane	ND	8.0						0	0	25	U
Bromoform	ND	8.0						0	0	25	U
Bromomethane	ND	8.0						0	0	25	U
Carbon disulfide	ND	8.0						0	0	25	U
Carbon tetrachloride	ND	8.0						0	0	25	U
Chlorobenzene	ND	8.0						0	0	25	U
Chlorodibromomethane	ND	8.0						0	0	25	U
Chloroethane	ND	8.0						0	0	25	U
Chloroform	ND	8.0						0	0	25	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52627**

Sample ID:	**1210027-002Adup**	Samp Type:	**DUP**	Test Code:	**EPA_TO15**	Units:	**ppbv**	Prep Date:		RunNo:	**52627**
Client ID:	**ZZZZZZ**	Batch ID:	**R52627**	TestNo:	**TO-15**			Analysis Date:	**10/3/2012**	SeqNo:	**1032862**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Chloromethane	ND	8.0						0	0	25	U
cis-1,2-Dichloroethene	ND	8.0						0	0	25	U
cis-1,3-dichloropropene	ND	8.0						0	0	25	U
Cyclohexane	ND	16						0	0	25	U
Dichlorodifluoromethane	ND	8.0						0	0	25	U
Ethyl acetate	ND	8.0						0	0	25	U
Ethylbenzene	ND	16						0	0	25	U
Heptane	ND	8.0						0	0	25	U
Hexachlorobutadiene	ND	16						0	0	25	U
m,p-Xylene	15	16						16.08	4.06	25	J
Methylene chloride	ND	40						0	0	25	U
n-Hexane	ND	16						0	0	25	U
Naphthalene	ND	8.0						0	0	25	U
o-Xylene	ND	8.0						0	0	25	U
Propylene	66	8.0						65.04	0.735	25	
Styrene	ND	8.0						0	0	25	U
tert-Butyl Methyl Ether	ND	8.0						0	0	25	U
Tetrachloroethene	ND	8.0						0	0	25	U
Tetrahydrofuran	ND	8.0						0	0	25	U
Toluene	24	8.0						25.36	5.51	25	
trans-1,2-Dichloroethene	ND	8.0						0	0	25	U
trans-1,3-dichloropropene	ND	8.0						0	0	25	U
Trichloroethene	ND	8.0						0	0	25	U
Trichlorofluoromethane	ND	8.0						0	0	25	U
Vinyl acetate	ND	8.0						0	0	25	U
Vinyl chloride	ND	8.0						0	0	25	U
Xylenes, Total	15	24						16.08	4.06	25	J
Surr: 4-Bromofluorobenzene	97		100.0		97.0	70	130		0	25	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52628**

Sample ID:	**CCV VOA9 100312**	Samp Type:	**CCV**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52628**
Client ID:	**CCV**	Batch ID:	**R52628**	TestNo:	**MA_APH**			Analysis Date:	**10/3/2012**	SeqNo:	**1032977**

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	90		89.50		101	70	130				

Sample ID:	**MBLK VOA9 100312**	Samp Type:	**MBLK**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52628**
Client ID:	**PBW**	Batch ID:	**R52628**	TestNo:	**MA_APH**			Analysis Date:	**10/3/2012**	SeqNo:	**1032979**

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	87		89.50		96.7	70	130				

Sample ID:	**1209801-039Adup**	Samp Type:	**DUP**	Test Code:	**MA_APH**	Units:	**µg/m³**	Prep Date:		RunNo:	**52628**
Client ID:	**VA1813**	Batch ID:	**R52628**	TestNo:	**MA_APH**			Analysis Date:	**10/3/2012**	SeqNo:	**1032983**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
C5-C8 Aliphatic Hydrocarbons	27,000	4,700						26,750	1.59	30	
C9-C10 Aromatic Hydrocarbons	ND	5,300						0	0	30	U
C9-C12 Aliphatic Hydrocarbons	1,900	7,600						1,722	7.62	30	J
Surr: 4-Bromofluorobenzene	3,600		3,580		101	70	130		0	30	

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52765**

Sample ID:	**LCS-100512 TCD-A**	Samp Type:	**LCS**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**52765**
Client ID:	**LCSW**	Batch ID:	**R52765**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/5/2012**	SeqNo:	**1036290**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.5	0.10	2.500	0	101	70	130	2.634	4.03	20	
Carbon Monoxide	2.7	0.10	2.500	0	106	70	130	2.683	0.786	20	
Methane	1.8	0.50	2.000	0	90.0	70	130	2.069	13.9	20	
Nitrogen	2.7	0.10	2.500	0	108	70	130	2.824	4.67	20	
Oxygen	2.6	0.10	2.500	0	103	70	130	2.628	2.00	20	

Sample ID:	**1209801-020BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**52765**
Client ID:	**VA1737**	Batch ID:	**R52765**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/5/2012**	SeqNo:	**1036302**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.51	0.10						0.5130	0	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	79	0.10						78.39	1.28	20	
Oxygen	21	0.10						20.47	1.24	20	

Sample ID:	**CCV-100512 TCD-B**	Samp Type:	**CCV**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**52765**
Client ID:	**CCV**	Batch ID:	**R52765**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/5/2012**	SeqNo:	**1036303**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.5	0.10	2.500	0	98.9	85	115				
Carbon Monoxide	2.6	0.10	2.500	0	106	85	115				
Methane	1.9	0.50	2.000	0	96.9	85	115				
Nitrogen	2.8	0.10	2.500	0	110	85	115				
Oxygen	2.6	0.10	2.500	0	103	85	115				

Sample ID:	**1209801-027BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**52765**
Client ID:	**VA1777**	Batch ID:	**R52765**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/5/2012**	SeqNo:	**1036311**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.54	0.10						0.5400	0	20	
Carbon Monoxide	ND	0.10						0	0	20	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52765**

Sample ID:	**1209801-027BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**52765**
Client ID:	**VA1777**	Batch ID:	**R52765**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/5/2012**	SeqNo:	**1036311**

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	79	0.10						78.77	0.222	20	
Oxygen	20	0.10						19.86	0.236	20	

Sample ID:	**CCV-100512 TCD-C**	Samp Type:	**CCV**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**52765**
Client ID:	**CCV**	Batch ID:	**R52765**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/5/2012**	SeqNo:	**1036312**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.5	0.10	2.500	0	99.0	85	115				
Carbon Monoxide	2.6	0.10	2.500	0	106	85	115				
Methane	1.9	0.50	2.000	0	97.0	85	115				
Nitrogen	2.7	0.10	2.500	0	108	85	115				
Oxygen	2.6	0.10	2.500	0	102	85	115				

Sample ID:	**MBLK-100512 TCD-A**	Samp Type:	**MBLK**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**52765**
Client ID:	**PBW**	Batch ID:	**R52765**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/5/2012**	SeqNo:	**1036334**

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

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52766**

Sample ID: **MBLK-100812 TCD-A** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **52766**
Client ID: **PBW** Batch ID: **R52766** TestNo: **ASTM-D2504** Analysis Date: **10/8/2012** SeqNo: **1036314**

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: **CCV-100812 TCD-A** Samp Type: **CCV** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **52766**
Client ID: **CCV** Batch ID: **R52766** TestNo: **ASTM-D2504** Analysis Date: **10/8/2012** SeqNo: **1036315**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.5	0.10	2.500	0	99.7	85	115				
Carbon Monoxide	2.7	0.10	2.500	0	106	85	115				
Methane	1.9	0.50	2.000	0	96.6	85	115				
Nitrogen	2.8	0.10	2.500	0	112	85	115				
Oxygen	2.6	0.10	2.500	0	104	85	115				

Sample ID: **LCS-100812 TCD-A** Samp Type: **LCS** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **52766**
Client ID: **LCSW** Batch ID: **R52766** TestNo: **ASTM-D2504** Analysis Date: **10/8/2012** SeqNo: **1036316**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.5	0.10	2.500	0	99.0	70	130	2.492	0.725	20	
Carbon Monoxide	2.6	0.10	2.500	0	106	70	130	2.654	0.151	20	
Methane	1.9	0.50	2.000	0	96.4	70	130	1.931	0.207	20	
Nitrogen	2.7	0.10	2.500	0	107	70	130	2.789	4.14	20	
Oxygen	2.6	0.10	2.500	0	102	70	130	2.595	1.40	20	

Sample ID: **1209801-037BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **52766**
Client ID: **VA1791** Batch ID: **R52766** TestNo: **ASTM-D2504** Analysis Date: **10/8/2012** SeqNo: **1036328**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.39	0.10						0.3960	2.56	20	
Carbon Monoxide	ND	0.10						0	0	20	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52766**

Sample ID:	**1209801-037BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**52766**
Client ID:	**VA1791**	Batch ID:	**R52766**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/8/2012**	SeqNo:	**1036328**

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	79	0.10						79.87	0.734	20	
Oxygen	19	0.10						19.33	0.763	20	

Sample ID:	**CCV-100812 TCD-B**	Samp Type:	**CCV**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**52766**
Client ID:	**CCV**	Batch ID:	**R52766**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/8/2012**	SeqNo:	**1036329**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.5	0.10	2.500	0	99.1	85	115				
Carbon Monoxide	2.6	0.10	2.500	0	106	85	115				
Methane	1.9	0.50	2.000	0	95.9	85	115				
Nitrogen	2.7	0.10	2.500	0	108	85	115				
Oxygen	2.6	0.10	2.500	0	103	85	115				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52770**

Sample ID: **MBLK-100412 TCD-A** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **52770**
Client ID: **PBW** Batch ID: **R52770** TestNo: **ASTM-D2504** Analysis Date: **10/4/2012** SeqNo: **1036403**

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: **CCV-100412 TCD-A** Samp Type: **CCV** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **52770**
Client ID: **CCV** Batch ID: **R52770** TestNo: **ASTM-D2504** Analysis Date: **10/4/2012** SeqNo: **1036404**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.5	0.10	2.500	0	101	85	115				
Carbon Monoxide	2.6	0.10	2.500	0	105	85	115				
Methane	2.1	0.50	2.000	0	103	85	115				
Nitrogen	2.6	0.10	2.500	0	104	85	115				
Oxygen	2.6	0.10	2.500	0	103	85	115				

Sample ID: **LCS-100412 TCD-A** Samp Type: **LCS** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **52770**
Client ID: **LCSW** Batch ID: **R52770** TestNo: **ASTM-D2504** Analysis Date: **10/4/2012** SeqNo: **1036405**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.5	0.10	2.500	0	101	70	130	2.530	0.197	20	
Carbon Monoxide	2.7	0.10	2.500	0	107	70	130	2.636	1.24	20	
Methane	2.0	0.50	2.000	0	99.2	70	130	2.068	4.15	20	
Nitrogen	2.7	0.10	2.500	0	108	70	130	2.610	3.06	20	
Oxygen	2.6	0.10	2.500	0	103	70	130	2.566	0.272	20	

Sample ID: **1209801-010BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **52770**
Client ID: **VA1681** Batch ID: **R52770** TestNo: **ASTM-D2504** Analysis Date: **10/4/2012** SeqNo: **1036417**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.94	0.10						0.9330	1.17	20	
Carbon Monoxide	ND	0.10						0	0	20	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52770**

Sample ID:	**1209801-010BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**52770**
Client ID:	**VA1681**	Batch ID:	**R52770**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/4/2012**	SeqNo:	**1036417**

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						83.77	0.354	20	
Oxygen	18	0.10						17.69	0.400	20	

Sample ID:	**CCV-100412 TCD-B**	Samp Type:	**CCV**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**52770**
Client ID:	**CCV**	Batch ID:	**R52770**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/4/2012**	SeqNo:	**1036418**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.5	0.10	2.500	0	102	85	115				
Carbon Monoxide	2.7	0.10	2.500	0	108	85	115				
Methane	2.0	0.50	2.000	0	97.6	85	115				
Nitrogen	2.7	0.10	2.500	0	110	85	115				
Oxygen	2.6	0.10	2.500	0	104	85	115				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52806**

Sample ID: **MBLK-100912 TCD-A** Samp Type: **MBLK** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **52806**
Client ID: **PBW** Batch ID: **R52806** TestNo: **ASTM-D2504** Analysis Date: **10/9/2012** SeqNo: **1037164**

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: **CCV-100912 TCD-A** Samp Type: **CCV** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **52806**
Client ID: **CCV** Batch ID: **R52806** TestNo: **ASTM-D2504** Analysis Date: **10/9/2012** SeqNo: **1037165**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.5	0.10	2.500	0	100	85	115				
Carbon Monoxide	2.6	0.10	2.500	0	105	85	115				
Methane	2.0	0.50	2.000	0	101	85	115				
Nitrogen	2.7	0.10	2.500	0	107	85	115				
Oxygen	2.5	0.10	2.500	0	102	85	115				

Sample ID: **LCS-100912 TCD-A** Samp Type: **LCS** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **52806**
Client ID: **LCSW** Batch ID: **R52806** TestNo: **ASTM-D2504** Analysis Date: **10/9/2012** SeqNo: **1037166**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.5	0.10	2.500	0	100	70	130	2.510	0	20	
Carbon Monoxide	2.6	0.10	2.500	0	105	70	130	2.627	0.228	20	
Methane	2.0	0.50	2.000	0	101	70	130	2.024	0.197	20	
Nitrogen	2.7	0.10	2.500	0	106	70	130	2.670	0.714	20	
Oxygen	2.5	0.10	2.500	0	102	70	130	2.544	0.118	20	

Sample ID: **1209801-047BDUP** Samp Type: **DUP** Test Code: **ASTM-D2504** Units: **% v/v** Prep Date: RunNo: **52806**
Client ID: **VA1861** Batch ID: **R52806** TestNo: **ASTM-D2504** Analysis Date: **10/9/2012** SeqNo: **1037178**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.21	0.10						0.2130	2.38	20	
Carbon Monoxide	ND	0.10						0	0	20	U

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52806**

Sample ID:	**1209801-047BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**52806**
Client ID:	**VA1861**	Batch ID:	**R52806**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/9/2012**	SeqNo:	**1037178**

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	81	0.10						81.79	1.41	20	
Oxygen	19	0.10						19.56	0.456	20	

Sample ID:	**CCV-100912 TCD-B**	Samp Type:	**CCV**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**52806**
Client ID:	**CCV**	Batch ID:	**R52806**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/9/2012**	SeqNo:	**1037179**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.5	0.10	2.500	0	98.6	85	115				
Carbon Monoxide	2.6	0.10	2.500	0	105	85	115				
Methane	1.9	0.50	2.000	0	96.9	85	115				
Nitrogen	2.7	0.10	2.500	0	109	85	115				
Oxygen	2.6	0.10	2.500	0	102	85	115				

Sample ID:	**1209801-057BDUP**	Samp Type:	**DUP**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**52806**
Client ID:	**VA1930**	Batch ID:	**R52806**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/9/2012**	SeqNo:	**1037190**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	0.56	0.10						0.5530	0.721	20	
Carbon Monoxide	ND	0.10						0	0	20	U
Methane	ND	0.50						0	0	20	U
Nitrogen	80	0.10						80.14	0.175	20	
Oxygen	19	0.10						19.19	0.317	20	

Sample ID:	**CCV-100912 TCD-C**	Samp Type:	**CCV**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**52806**
Client ID:	**CCV**	Batch ID:	**R52806**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/9/2012**	SeqNo:	**1037191**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Carbon dioxide	2.5	0.10	2.500	0	99.5	85	115				
Carbon Monoxide	2.6	0.10	2.500	0	105	85	115				
Methane	1.9	0.50	2.000	0	97.0	85	115				
Nitrogen	2.6	0.10	2.500	0	106	85	115				

RTI Laboratories - QC SUMMARY REPORT

WO#: 1209801

Date Reported: 10/12/2012
Revision v1

Client: Shaw Environmental & Infrastructure, Inc

Project: Kirtland AFB **Batch ID:** **R52806**

Sample ID:	**CCV-100912 TCD-C**	Samp Type:	**CCV**	Test Code:	**ASTM-D2504**	Units:	**% v/v**	Prep Date:		RunNo:	**52806**
Client ID:	**CCV**	Batch ID:	**R52806**	TestNo:	**ASTM-D2504**			Analysis Date:	**10/9/2012**	SeqNo:	**1037191**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Value	%RPD	RPDLimit	Qual
Oxygen	2.5	0.10	2.500	0	101	85	115				

RTI Laboratories

Run ID: VOA1_120925A **Run No.:** 52341

Analytical Run Date: 9/25/2012 **InstrumentID:** VOA1

Analyst: Rachel Dear **Column:**

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

Column Length: 60m

Run Comments: ch rev 9/28/12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 092512	BFB_TUNE	TUNE	R52341	9/25/2012 10:44:00 AM	Celeste Hoitash		
CCV VOA1 092512	EPA_TO15	CCV	R52341	9/25/2012 11:26:00 AM	Celeste Hoitash		
RLVS VOA1 092512	EPA_TO15	RLVS	R52341	9/25/2012 12:10:00 PM	Celeste Hoitash		
MBLK/CC_23 VOA1	EPA_TO15	MBLK	R52341	9/25/2012 2:35:00 PM	Celeste Hoitash		
1209527-024A	EPA_TO15	SAMP	R52341	9/25/2012 4:49:00 PM	Celeste Hoitash		
1209527-023A	EPA_TO15	SAMP	R52341	9/25/2012 5:36:00 PM	Celeste Hoitash		
1209527-022A	EPA_TO15	SAMP	R52341	9/25/2012 6:18:00 PM	Celeste Hoitash		High hydrocarbons-cannot run at a lower dilution.
1209527-021A	EPA_TO15	SAMP	R52341	9/25/2012 7:01:00 PM	Celeste Hoitash		
1209527-009A	EPA_TO15	SAMP	R52341	9/25/2012 9:14:00 PM	Celeste Hoitash		
1209527-010A	EPA_TO15	SAMP	R52341	9/25/2012 9:55:00 PM	Celeste Hoitash		
1209527-011A	EPA_TO15	SAMP	R52341	9/25/2012 10:37:00 PM	Celeste Hoitash		
1209527-012A	EPA_TO15	SAMP	R52341	9/25/2012 11:18:00 PM	Celeste Hoitash		
1209527-012Adup	EPA_TO15	DUP	R52341	9/26/2012	Celeste Hoitash		
1209527-019A	EPA_TO15	SAMP	R52341	9/26/2012 12:41:00 AM	Celeste Hoitash		
1209527-020A	EPA_TO15	SAMP	R52341	9/26/2012 1:22:00 AM	Celeste Hoitash		
1209801-001A	EPA_TO15	SAMP	R52341	9/26/2012 2:07:00 AM	Celeste Hoitash		
1209801-002A	EPA_TO15	SAMP	R52341	9/26/2012 2:49:00 AM	Celeste Hoitash		
1209801-003A	EPA_TO15	SAMP	R52341	9/26/2012 3:30:00 AM	Celeste Hoitash		
1209801-004A	EPA_TO15	SAMP	R52341	9/26/2012 4:11:00 AM	Celeste Hoitash		
1209801-006A	EPA_TO15	SAMP	R52341	9/26/2012 5:37:00 AM	Celeste Hoitash		
RLVS2 VOA1 09251	EPA_TO15	RLVS	R52341	9/26/2012 6:20:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

12-Oct-12

RunNo 52341

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1026167	BFB VOA1 092512	BFB_TUNE	TUNE	.\1\DATA\092512'	9/25/2012 10:44	1	R52341		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0.6	0.6		100	0	0	0	0	0	1%	0	2	0%	
174	M		74.7	74.7		100	0	0	0	0	0	75%	50	120	0%	
175	M		7.3	7.3		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		19	19		100	0	0	0	0	0	19%	8	40	0%	
75	M		45.7	45.7		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		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1026175	CCV VOA1 092512	EPA_TO15	CCV	.\1\DATA\092512'	9/25/2012 11:26	1	R52341		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	9.57	9.57		9.6	0	0	0.107	1	50	100%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.02	10.02		10	0	0	0.211	1	50	100%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.84	10.84		9.8	0	0	0.108	1	50	111%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.57	9.57		9.8	0	0	0.2	1	50	98%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.48	9.48		9.7	0	0	0.111	1	50	98%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.91	10.91		9.9	0	0	0.097	1	50	110%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	9.3	9.3		9.1	0	0	0.271	1	50	102%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10	10		9.8	0	0	0.245	1	50	102%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.51	9.51		9.6	0	0	0.186	1	50	99%	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	9.16	9.16		9.7	0	0	0.196	1	50	94%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.33	9.33		9.8	0	0	0.224	1	50	95%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.68	9.68		9.7	0	0	0.24	1	50	100%	70	130	0%	
1,3-Butadiene	A	ppbv	8.39	8.39		9.8	0	0	0.152	1	50	86%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.84	9.84		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
1026175	CCV VOA1 092512	EPA_TO15	CCV	\1\DATA\092512	9/25/2012 11:26	1	R52341		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.78	9.78		9.6	0	0	0.194	1	50	102%	70	130	0%	
1,4-Dioxane	A	ppbv	9.77	9.77		9.6	0	0	0.128	1	50	102%	70	130	0%	
2-Butanone	A	ppbv	9.65	9.65		9.9	0	0	0.287	1	50	97%	70	130	0%	
2-Hexanone	A	ppbv	9.74	9.74		9.8	0	0	0.135	1	50	99%	70	130	0%	
2-Propanol	A	ppbv	10.26	10.26		10.1	0	0	0.329	1	50	102%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.04	10.04		10	0	0	0.157	1	50	100%	70	130	0%	
Acetone	A	ppbv	9.33	9.33		10	0	0	0.43	1	50	93%	70	130	0%	
Benzene	A	ppbv	9.21	9.21		9.6	0	0	0.126	1	50	96%	70	130	0%	
Benzyl chloride	A	ppbv	10.24	10.24		9.7	0	0	0.155	1	50	106%	70	130	0%	
Bromodichloromethane	A	ppbv	9.83	9.83		9.6	0	0	0.156	1	50	102%	70	130	0%	
Bromoform	A	ppbv	9.71	9.71		9.6	0	0	0.197	1	50	101%	70	130	0%	
Bromomethane	A	ppbv	9.91	9.91		9.3	0	0	0.075	1	50	107%	70	130	0%	
Carbon disulfide	A	ppbv	11.95	11.95		9.7	0	0	0.093	1	50	123%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.38	9.38		9.5	0	0	0.114	1	50	99%	70	130	0%	
Chlorobenzene	A	ppbv	9.9	9.9		9.9	0	0	0.275	1	50	100%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.81	9.81		9.2	0	0	0.165	1	50	107%	70	130	0%	
Chloroethane	A	ppbv	9.64	9.64		9.8	0	0	0.063	1	50	98%	70	130	0%	
Chloroform	A	ppbv	9.66	9.66		9.4	0	0	0.126	1	50	103%	70	130	0%	
Chloromethane	A	ppbv	9.3	9.3		9.8	0	0	0.104	1	50	95%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.98	9.98		9.8	0	0	0.107	1	50	102%	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	10.46	10.46		9.8	0	0	0.684	2	50	107%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.66	9.66		9.2	0	0	0.086	1	50	105%	70	130	0%	
Ethanol	A	ppbv	8.68	8.68		9.2	0	0	1.962	5	50	94%	70	130	0%	
Ethyl acetate	A	ppbv	9.41	9.41		9.8	0	0	0.157	1	50	96%	70	130	0%	
Ethylbenzene	A	ppbv	9.71	9.71		9.8	0	0	0.737	2	50	99%	70	130	0%	
Heptane	A	ppbv	10.27	10.27		9.9	0	0	0.249	1	50	104%	70	130	0%	
Hexachlorobutadiene	A	ppbv	8.89	8.89		9.4	0	0	0.374	2	50	95%	70	130	0%	
m,p-Xylene	A	ppbv	19.86	19.86		19.2	0	0	0.524	2	100	103%	70	130	0%	
Methylene chloride	A	ppbv	9.86	9.86		10	0	0	2.077	5	50	99%	70	130	0%	
n-Hexane	A	ppbv	10.3	10.3		10.1	0	0	0.692	2	50	102%	70	130	0%	
Naphthalene	A	ppbv	9.34	9.34		9.2	0	0	0.247	1	50	102%	70	130	0%	
o-Xylene	A	ppbv	10.16	10.16		10	0	0	0.258	1	50	102%	70	130	0%	
Propylene	A	ppbv	9.96	9.96		10.2	0	0	0.075	1	50	98%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1026175	CCV VOA1 092512	EPA_TO15	CCV	.\1\DATA\092512	9/25/2012 11:26	1	R52341		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	10.09	10.09		9.8	0	0	0.263	1	50	103%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	9.24	9.24		9.9	0	0	0.228	1	50	93%	70	130	0%	
Tetrachloroethene	A	ppbv	9.84	9.84		9.6	0	0	0.148	1	50	103%	70	130	0%	
Tetrahydrofuran	A	ppbv	9.34	9.34		10	0	0	0.201	1	50	93%	70	130	0%	
Toluene	A	ppbv	10.46	10.46		9.8	0	0	0.158	1	50	107%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.65	10.65		9.8	0	0	0.117	1	50	109%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.59	9.59		9.1	0	0	0.171	1	50	105%	70	130	0%	
Trichloroethene	A	ppbv	9.93	9.93		9.6	0	0	0.119	1	50	103%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.91	9.91		9.6	0	0	0.148	1	50	103%	70	130	0%	
Vinyl acetate	A	ppbv	9.14	9.14		9.9	0	0	0.266	1	50	92%	70	130	0%	
Vinyl chloride	A	ppbv	7.89	7.89		9.4	0	0	0.072	1	50	84%	70	130	0%	
Xylenes, Total	C	ppbv	30.02	30.02		29.2	0	0	0.782	3	150	103%	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	12.66	12.66		12.5	0	0	0	0	0	101%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1026176	RLVS VOA1 092512	EPA_TO15	RLVS	.\1\DATA\092512	9/25/2012 12:10	1	R52341		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	0.99	0.99		0.996	0	0	0.107	1	50	99%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.02	1.02		1	0	0	0.211	1	50	102%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	0.99	0.99		0.98	0	0	0.108	1	50	101%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	1.03	1.03		0.98	0	0	0.2	1	50	105%	70	130	0%	
1,1-Dichloroethane	A	ppbv	0.99	0.99		0.97	0	0	0.111	1	50	102%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.96	0.96		0.99	0	0	0.097	1	50	97%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	0.8	0.8		0.91	0	0	0.271	1	50	88%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	0.99	0.99		0.98	0	0	0.245	1	50	101%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.97	0.97		0.96	0	0	0.186	1	50	101%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	0.94	0.94		0.97	0	0	0.208	1	50	97%	70	130	0%	
1,2-Dichloroethane	A	ppbv	1.02	1.02		0.97	0	0	0.196	1	50	105%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1.03	1.03		0.98	0	0	0.224	1	50	105%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\092512\09251202.D Vial: 2
Acq On : 25 Sep 2012 11:26 am Operator: RACHEL HILL
Sample : CCV VOA1 092512 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	113	0.00
2	T	Propylene	1.204	1.175	2.4	107	0.00
3	T	Dichlorodifluoromethane	3.520	3.694	-4.9	117	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.215	2.380	-7.4	120	0.00
5	T	Chloromethane	1.450	1.419	2.1	108	0.00
6	T	Vinyl chloride	1.437	1.206	16.1	88	0.00
7	T	1,3-Butadiene	0.924	0.791	14.4	88	0.00
8	T	Bromomethane	1.358	1.446	-6.5	121	0.00
9	T	Chloroethane	0.879	0.921	-4.8	119	0.00
10	T	Trichlorofluoromethane	3.226	3.328	-3.2	117	0.00
11	T	Ethanol	0.411	0.388	5.6	104	0.00
12	T	Freon113	2.247	2.485	-10.6	118	0.00
13	T	1,1-Dichloroethene	2.155	2.375	-10.2	120	0.00
14	T	Acetone	1.838	1.715	6.7	97	0.00
15	T	Carbon disulfide	3.135	3.863	-23.2	137	0.00
16	T	2-Propanol	1.910	1.940	-1.6	106	0.00
17	T	Methylene chloride	1.590	1.567	1.4	108	0.00
18	T	tert-Butyl Methyl Ether	2.752	2.568	6.7	99	0.00
19	T	trans-1,2-Dichloroethene	1.938	2.106	-8.7	117	0.00
20	T	n-Hexane	2.289	2.335	-2.0	109	0.00
21	T	1,1-Dichloroethane	2.399	2.345	2.3	105	0.00
22	T	Vinyl acetate	2.903	2.679	7.7	92	0.00
23	T	cis-1,2-Dichloroethene	1.195	1.217	-1.8	110	0.00
24	T	2-Butanone	1.940	1.890	2.6	94	0.00
25	T	Ethyl acetate	2.518	2.418	4.0	96	0.00
26	T	Tetrahydrofuran	1.172	1.095	6.6	91	0.00
27	T	Chloroform	2.145	2.115	1.4	103	0.00
28	T	1,1,1-Trichloroethane	2.189	2.181	0.4	104	0.00
29	T	Cyclohexane	2.231	2.381	-6.7	107	0.00
30	T	Carbon tetrachloride	2.281	2.253	1.2	106	0.00
31	T	Benzene	3.318	3.182	4.1	102	0.00
32	T	1,2-Dichloroethane	1.518	1.433	5.6	99	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	116	0.00
34	T	Heptane	0.541	0.562	-3.9	101	0.00
35	T	Trichloroethene	0.377	0.390	-3.4	109	0.00
36	T	1,2-Dichloropropane	0.374	0.356	4.8	99	0.00
37	T	1,4-Dioxane	0.171	0.174	-1.8	106	0.00
38	T	Bromodichloromethane	0.581	0.595	-2.4	107	0.00
39	T	cis-1,3-Dichloropropene	0.503	0.475	5.6	99	0.00
40	T	4-Methyl-2-pentanone	0.296	0.298	-0.7	102	0.00
41	T	Toluene	0.980	1.045	-6.6	110	0.00
42	T	trans-1,3-Dichloropropene	0.456	0.481	-5.5	111	0.00
43	T	1,1,2-Trichloroethane	0.341	0.333	2.3	102	0.00
44	T	Tetrachloroethene	0.454	0.466	-2.6	107	0.00
45	T	2-Hexanone	0.536	0.533	0.6	94	0.00
46	T	Chlorodibromomethane	0.531	0.532	-0.2	103	0.00
47	T	1,2-Dibromoethane	0.494	0.490	0.8	102	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	116	0.00
49	T	Chlorobenzene	0.842	0.841	0.1	102	0.00
50	T	Ethylbenzene	1.405	1.393	0.9	100	0.00
51	T	m,p-Xylene	1.026	1.061	-3.4	99	0.00
52	T	o-Xylene	1.092	1.109	-1.6	101	0.00
53	T	Styrene	0.794	0.818	-3.0	101	0.00
54	T	Bromoform	0.544	0.550	-1.1	104	0.00
55	S	4-Bromofluorobenzene	0.618	0.626	-1.3	117	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\092512\09251202.D Vial: 2
Acq On : 25 Sep 2012 11:26 am Operator: RACHEL HILL
Sample : CCV VOA1 092512 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.758	0.760	-0.3	102	0.00
57	T	4-Ethyltoluene	1.348	1.342	0.4	100	0.00
58	T	1,3,5-Trimethylbenzene	1.144	1.142	0.2	100	0.00
59	T	1,2,4-Trimethylbenzene	1.063	1.085	-2.1	103	0.00
60	T	1,3-Dichlorobenzene	0.576	0.584	-1.4	106	0.00
61	T	1,4-Dichlorobenzene	0.544	0.554	-1.8	106	0.00
62	T	Benzyl chloride	0.715	0.755	-5.6	107	0.00
63	T	1,2-Dichlorobenzene	0.490	0.486	0.8	104	0.00
64	T	1,2,4-Trichlorobenzene	0.127	0.130	-2.4	113	0.00
65	T	Hexachlorobutadiene	0.244	0.231	5.3	104	0.00
66		Naphthalene	0.245	0.249	-1.6	113	0.00

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\092512\09251202.D Vial: 2
Acq On : 25 Sep 2012 11:26 am Operator: RACHEL HILL
Sample : CCV VOA1 092512 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Sep 26 12:47 2012 Quant Results File: 092412V1.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.52	130	355275	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.62	114	1378099	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.47	117	1127634	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.11	95	706003	12.66	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 101.28%

Target Compounds						Qvalue
2) Propylene	5.43	41	340755	9.96	ppbv	99
3) Dichlorodifluoromethane	5.51	85	966002	9.66	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.77	135	642560	10.21	ppbv #	66
5) Chloromethane	5.93	50	383268	9.30	ppbv	98
6) Vinyl chloride	6.14	62	322136	7.89	ppbv	95
7) 1,3-Butadiene	6.20	39	220239	8.39	ppbv #	61
8) Bromomethane	6.77	94	382316	9.91	ppbv	100
9) Chloroethane	6.93	64	240868	9.64	ppbv	100
10) Trichlorofluoromethane	7.26	101	908108	9.91	ppbv	98
11) Ethanol	7.49	45	101363	8.68	ppbv	98
12) Freon113	7.92	101	692201	10.84	ppbv #	86
13) 1,1-Dichloroethene	8.02	61	668284	10.91	ppbv #	87
14) Acetone	8.11	43	487470	9.33	ppbv #	92
15) Carbon disulfide	8.39	76	1065052	11.95	ppbv #	100
16) 2-Propanol	8.16	45	556976	10.26	ppbv #	1
17) Methylene chloride	8.68	49	445390	9.86	ppbv	87
18) tert-Butyl Methyl Ether	8.88	73	722605	9.24	ppbv #	93
19) trans-1,2-Dichloroethene	8.97	61	586705	10.65	ppbv #	82
20) n-Hexane	9.15	57	670152	10.30	ppbv #	85
21) 1,1-Dichloroethane	9.52	63	646462	9.48	ppbv #	96
22) Vinyl acetate	9.46	43	753823	9.14	ppbv	98
23) cis-1,2-Dichloroethene	10.21	96	338944	9.98	ppbv #	81
24) 2-Butanone	10.17	43	531888	9.65	ppbv	96
25) Ethyl acetate	10.13	43	673479	9.41	ppbv #	99
26) Tetrahydrofuran	10.51	42	311132	9.34	ppbv	100
27) Chloroform	10.53	83	589039	9.66	ppbv	99
28) 1,1,1-Trichloroethane	10.78	97	595152	9.57	ppbv #	94
29) Cyclohexane	10.79	56	663247	10.46	ppbv #	80
30) Carbon tetrachloride	10.95	117	608206	9.38	ppbv	98
31) Benzene	11.22	78	868225	9.21	ppbv	95
32) 1,2-Dichloroethane	11.30	62	395021	9.16	ppbv #	97
34) Heptane	11.28	43	613262	10.27	ppbv #	92
35) Trichloroethene	11.96	130	413097	9.93	ppbv	94
36) 1,2-Dichloropropane	12.31	63	385127	9.33	ppbv #	94
37) 1,4-Dioxane	12.39	88	184339	9.77	ppbv #	84
38) Bromodichloromethane	12.60	83	629552	9.83	ppbv	99
39) cis-1,3-Dichloropropene	13.15	75	497008	8.96	ppbv	97
40) 4-Methyl-2-pentanone	13.26	58	328215	10.04	ppbv #	90
41) Toluene	13.55	91	1129315	10.46	ppbv	99
42) trans-1,3-Dichloropropene	13.86	75	482688	9.59	ppbv	98
43) 1,1,2-Trichloroethane	14.13	97	359541	9.57	ppbv	97
44) Tetrachloroethene	14.26	166	492966	9.84	ppbv	96
45) 2-Hexanone	14.34	43	576111	9.74	ppbv	86
46) Chlorodibromomethane	14.68	129	574511	9.81	ppbv	98
47) 1,2-Dibromoethane	14.91	107	518129	9.51	ppbv	99
49) Chlorobenzene	15.51	112	751334	9.90	ppbv #	92
50) Ethylbenzene	15.55	91	1231475	9.71	ppbv	95
51) m,p-Xylene	15.70	91	1838426	19.86	ppbv	93
52) o-Xylene	16.30	91	1000570	10.16	ppbv #	92

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

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\092512\09251202.D Vial: 2
Acq On : 25 Sep 2012 11:26 am Operator: RACHEL HILL
Sample : CCV VOA1 092512 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Sep 26 12:47 2012 Quant Results File: 092412V1.RES

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

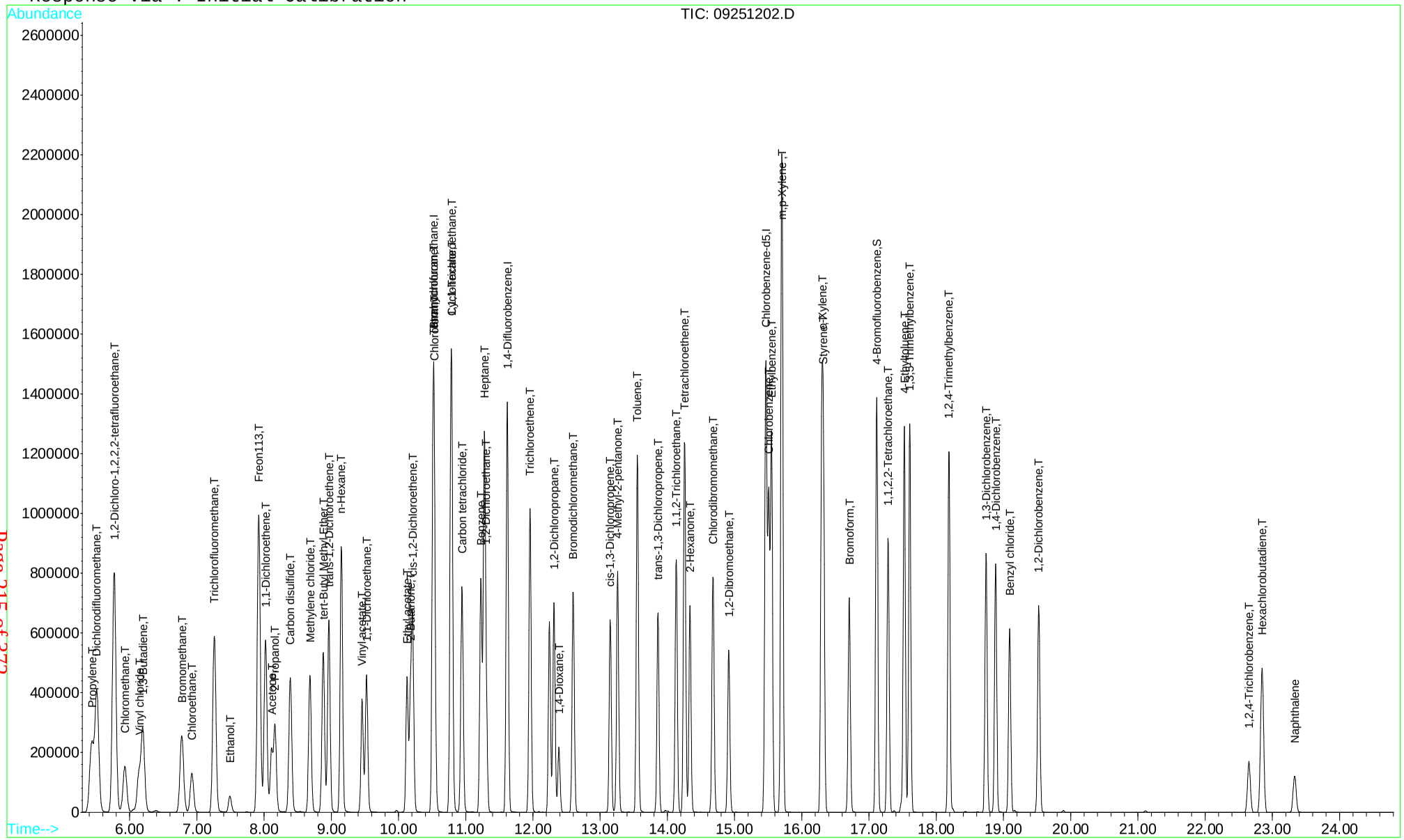
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.32	104	722861	10.09	ppbv		97
54)	Bromoform	16.71	173	476384	9.71	ppbv	#	98
56)	1,1,2,2-Tetrachloroethane	17.28	83	685264	10.02	ppbv	#	99
57)	4-Ethyltoluene	17.53	105	1186015	9.75	ppbv		97
58)	1,3,5-Trimethylbenzene	17.61	105	999061	9.68	ppbv		96
59)	1,2,4-Trimethylbenzene	18.19	105	958858	10.00	ppbv		97
60)	1,3-Dichlorobenzene	18.74	146	511124	9.84	ppbv		95
61)	1,4-Dichlorobenzene	18.88	146	480043	9.78	ppbv		95
62)	Benzyl chloride	19.09	91	660613	10.24	ppbv		97
63)	1,2-Dichlorobenzene	19.52	146	425344	9.62	ppbv		96
64)	1,2,4-Trichlorobenzene	22.65	180	106945	9.30	ppbv		96
65)	Hexachlorobutadiene	22.85	225	195944	8.89	ppbv		99
66)	Naphthalene	23.33	128	206299	9.34	ppbv		99

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\092512\09251202.D Vial: 2
Acq On : 25 Sep 2012 11:26 am Operator: RACHEL HILL
Sample : CCV VOA1 092512 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Sep 26 12:47 2012 Quant Results File: 092412V1.RES

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



RTI Laboratories

Run ID: **VOA1_120926A** **Run No.:** 52404

Analytical Run Date: 9/26/2012 **InstrumentID:** VOA1

Analyst: Rachel Dear **Column:**

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

Column Length: 60m

Run Comments: ch rev 9/28/12/PR AW 9.27.12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 092612	BFB_TUNE	TUNE	R52404	9/26/2012 9:31:00 AM	Celeste Hoitash		
CCV VOA1 092612	EPA_TO15	CCV	R52404	9/26/2012 10:14:00 AM	Celeste Hoitash		
RLVS VOA1 092612	EPA_TO15	RLVS	R52404	9/26/2012 11:01:00 AM	Celeste Hoitash		
MBLK/CC_33 VOA1	EPA_TO15	MBLK	R52404	9/26/2012 12:01:00 PM	Celeste Hoitash		
~~1209527-008A~~	EPA_TO15	SAMP	R52404	9/26/2012 12:49:00 PM	Celeste Hoitash		
1209801-005A	EPA_TO15	SAMP	R52404	9/26/2012 1:34:00 PM	Celeste Hoitash		
1209801-005Adup	EPA_TO15	DUP	R52404	9/26/2012 2:18:00 PM	Celeste Hoitash		
1209801-008A	EPA_TO15	SAMP	R52404	9/26/2012 2:59:00 PM	Celeste Hoitash		
1209801-009A	EPA_TO15	SAMP	R52404	9/26/2012 3:40:00 PM	Celeste Hoitash		
1209801-007A	EPA_TO15	SAMP	R52404	9/26/2012 4:29:00 PM	Celeste Hoitash		
1209801-010A	EPA_TO15	SAMP	R52404	9/26/2012 5:18:00 PM	Celeste Hoitash		
1209801-011A	EPA_TO15	SAMP	R52404	9/26/2012 5:59:00 PM	Celeste Hoitash		
1209801-014A	EPA_TO15	SAMP	R52404	9/26/2012 11:50:00 PM	Celeste Hoitash		
1209801-015A	EPA_TO15	SAMP	R52404	9/27/2012 12:38:00 AM	Celeste Hoitash		
1209801-016A	EPA_TO15	SAMP	R52404	9/27/2012 1:26:00 AM	Celeste Hoitash		
RLVS2 VOA1 09261	EPA_TO15	RLVS	R52404	9/27/2012 4:12:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

15-Oct-12

RunNo 52404

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1027317	BFB VOA1 092612	BFB_TUNE	TUNE	.\1\DATA\092612\	9/26/2012 9:31:0	1	R52404		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0.6	0.6		100	0	0	0	0	0	1%	0	2	0%	
174	M		75.5	75.5		100	0	0	0	0	0	76%	50	120	0%	
175	M		7.3	7.3		100	0	0	0	0	0	7%	4	9	0%	
176	M		96.1	96.1		100	0	0	0	0	0	96%	93	101	0%	
177	M		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	
50	M		21.6	21.6		100	0	0	0	0	0	22%	8	40	0%	
75	M		48.1	48.1		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		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
1027318	CCV VOA1 092612	EPA_TO15	CCV	.\1\DATA\092612\	9/26/2012 10:14:	1	R52404		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	8.39	8.39		9.6	0	0	0.107	1	50	87%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	8.95	8.95		10	0	0	0.211	1	50	90%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	9.4	9.4		9.8	0	0	0.108	1	50	96%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	8.46	8.46		9.8	0	0	0.2	1	50	86%	70	130	0%	
1,1-Dichloroethane	A	ppbv	8.22	8.22		9.7	0	0	0.111	1	50	85%	70	130	0%	
1,1-Dichloroethene	A	ppbv	9.68	9.68		9.9	0	0	0.097	1	50	98%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	7.26	7.26		9.1	0	0	0.271	1	50	80%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	8.89	8.89		9.8	0	0	0.245	1	50	91%	70	130	0%	
1,2-Dibromoethane	A	ppbv	8.34	8.34		9.6	0	0	0.186	1	50	87%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	8.21	8.21		9.7	0	0	0.208	1	50	85%	70	130	0%	
1,2-Dichloroethane	A	ppbv	8.16	8.16		9.7	0	0	0.196	1	50	84%	70	130	0%	
1,2-Dichloropropane	A	ppbv	8.33	8.33		9.8	0	0	0.224	1	50	85%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	8.72	8.72		9.7	0	0	0.24	1	50	90%	70	130	0%	
1,3-Butadiene	A	ppbv	6.96	6.96		9.8	0	0	0.152	1	50	71%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	8.36	8.36		9.7	0	0	0.202	1	50	86%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1027318	CCV VOA1 092612	EPA_TO15	CCV	\1\DATA\092612\	9/26/2012 10:14:	1	R52404		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	8.29	8.29		9.6	0	0	0.194	1	50	86%	70	130	0%	
1,4-Dioxane	A	ppbv	8.53	8.53		9.6	0	0	0.128	1	50	89%	70	130	0%	
2-Butanone	A	ppbv	8.6	8.6		9.9	0	0	0.287	1	50	87%	70	130	0%	
2-Hexanone	A	ppbv	9.59	9.59		9.8	0	0	0.135	1	50	98%	70	130	0%	
2-Propanol	A	ppbv	9.62	9.62		10.1	0	0	0.329	1	50	95%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	9.26	9.26		10	0	0	0.157	1	50	93%	70	130	0%	
Acetone	A	ppbv	8.66	8.66		10	0	0	0.43	1	50	87%	70	130	0%	
Benzene	A	ppbv	7.81	7.81		9.6	0	0	0.126	1	50	81%	70	130	0%	
Benzyl chloride	A	ppbv	8.38	8.38		9.7	0	0	0.155	1	50	86%	70	130	0%	
Bromodichloromethane	A	ppbv	8.77	8.77		9.6	0	0	0.156	1	50	91%	70	130	0%	
Bromoform	A	ppbv	8.36	8.36		9.6	0	0	0.197	1	50	87%	70	130	0%	
Bromomethane	A	ppbv	8.41	8.41		9.3	0	0	0.075	1	50	90%	70	130	0%	
Carbon disulfide	A	ppbv	10.25	10.25		9.7	0	0	0.093	1	50	106%	70	130	0%	
Carbon tetrachloride	A	ppbv	8.1	8.1		9.5	0	0	0.114	1	50	85%	70	130	0%	
Chlorobenzene	A	ppbv	8.89	8.89		9.9	0	0	0.275	1	50	90%	70	130	0%	
Chlorodibromomethane	A	ppbv	8.65	8.65		9.2	0	0	0.165	1	50	94%	70	130	0%	
Chloroethane	A	ppbv	8.33	8.33		9.8	0	0	0.063	1	50	85%	70	130	0%	
Chloroform	A	ppbv	8.84	8.84		9.4	0	0	0.126	1	50	94%	70	130	0%	
Chloromethane	A	ppbv	9.09	9.09		9.8	0	0	0.104	1	50	93%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	8.51	8.51		9.8	0	0	0.107	1	50	87%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	7.65	7.65		9.5	0	0	0.166	1	50	81%	70	130	0%	
Cyclohexane	A	ppbv	9.7	9.7		9.8	0	0	0.684	2	50	99%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	8.55	8.55		9.2	0	0	0.086	1	50	93%	70	130	0%	
Ethanol	A	ppbv	7.9	7.9		9.2	0	0	1.962	5	50	86%	70	130	0%	
Ethyl acetate	A	ppbv	9.01	9.01		9.8	0	0	0.157	1	50	92%	70	130	0%	
Ethylbenzene	A	ppbv	8.81	8.81		9.8	0	0	0.737	2	50	90%	70	130	0%	
Heptane	A	ppbv	10.22	10.22		9.9	0	0	0.249	1	50	103%	70	130	0%	
Hexachlorobutadiene	A	ppbv	7.7	7.7		9.4	0	0	0.374	2	50	82%	70	130	0%	
m,p-Xylene	A	ppbv	18.72	18.72		19.2	0	0	0.524	2	100	98%	70	130	0%	
Methylene chloride	A	ppbv	9.31	9.31		10	0	0	2.077	5	50	93%	70	130	0%	
n-Hexane	A	ppbv	9.43	9.43		10.1	0	0	0.692	2	50	93%	70	130	0%	
Naphthalene	A	ppbv	7.31	7.31		9.2	0	0	0.247	1	50	79%	70	130	0%	
o-Xylene	A	ppbv	9.32	9.32		10	0	0	0.258	1	50	93%	70	130	0%	
Propylene	A	ppbv	9.52	9.52		10.2	0	0	0.075	1	50	93%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1027318	CCV VOA1 092612	EPA_TO15	CCV	\1\DATA\092612\	9/26/2012 10:14:	1	R52404		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	9.23	9.23		9.8	0	0	0.263	1	50	94%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	7.61	7.61		9.9	0	0	0.228	1	50	77%	70	130	0%	
Tetrachloroethene	A	ppbv	8.87	8.87		9.6	0	0	0.148	1	50	92%	70	130	0%	
Tetrahydrofuran	A	ppbv	9.16	9.16		10	0	0	0.201	1	50	92%	70	130	0%	
Toluene	A	ppbv	9.34	9.34		9.8	0	0	0.158	1	50	95%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	9.3	9.3		9.8	0	0	0.117	1	50	95%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	8.32	8.32		9.1	0	0	0.171	1	50	91%	70	130	0%	
Trichloroethene	A	ppbv	8.63	8.63		9.6	0	0	0.119	1	50	90%	70	130	0%	
Trichlorofluoromethane	A	ppbv	8.71	8.71		9.6	0	0	0.148	1	50	91%	70	130	0%	
Vinyl acetate	A	ppbv	8.18	8.18		9.9	0	0	0.266	1	50	83%	70	130	0%	
Vinyl chloride	A	ppbv	8.18	8.18		9.4	0	0	0.072	1	50	87%	70	130	0%	
Xylenes, Total	C	ppbv	28.04	28.04		29.2	0	0	0.782	3	150	96%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.29	12.29		12.5	0	0	0	0	0	98%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1027319	RLVS VOA1 092612	EPA_TO15	RLVS	\1\DATA\092612\	9/26/2012 11:01:	1	R52404		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	0.98	0.98		1	0	0	0.211	1	50	98%	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	0.96	0.96		0.98	0	0	0.2	1	50	98%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1	1		0.97	0	0	0.111	1	50	103%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.97	0.97		0.99	0	0	0.097	1	50	98%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	0.78	0.78		0.91	0	0	0.271	1	50	86%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	0.94	0.94		0.98	0	0	0.245	1	50	96%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.91	0.91		0.96	0	0	0.186	1	50	95%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	0.85	0.85		0.97	0	0	0.208	1	50	88%	70	130	0%	
1,2-Dichloroethane	A	ppbv	1.04	1.04		0.97	0	0	0.196	1	50	107%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1.02	1.02		0.98	0	0	0.224	1	50	104%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\092612\09261202.D Vial: 2
Acq On : 26 Sep 2012 10:14 am Operator: RACHEL HILL
Sample : CCV VOA1 092612 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	94	0.00
2	T	Propylene	1.204	1.124	6.6	86	0.00
3	T	Dichlorodifluoromethane	3.520	3.271	7.1	86	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.215	2.025	8.6	85	0.00
5	T	Chloromethane	1.450	1.387	4.3	88	0.00
6	T	Vinyl chloride	1.437	1.250	13.0	76	0.00
7	T	1,3-Butadiene	0.924	0.656	29.0	61	0.00
8	T	Bromomethane	1.358	1.227	9.6	86	0.00
9	T	Chloroethane	0.879	0.795	9.6	85	0.00
10	T	Trichlorofluoromethane	3.226	2.927	9.3	86	0.00
11	T	Ethanol	0.411	0.353	14.1	79	0.00
12	T	Freon113	2.247	2.155	4.1	85	0.00
13	T	1,1-Dichloroethene	2.155	2.108	2.2	89	0.00
14	T	Acetone	1.838	1.591	13.4	75	0.00
15	T	Carbon disulfide	3.135	3.312	-5.6	98	0.00
16	T	2-Propanol	1.910	1.820	4.7	83	0.00
17	T	Methylene chloride	1.590	1.480	6.9	85	0.00
18	T	tert-Butyl Methyl Ether	2.752	2.116	23.1	68	0.00
19	T	trans-1,2-Dichloroethene	1.938	1.840	5.1	85	0.00
20	T	n-Hexane	2.289	2.138	6.6	83	0.00
21	T	1,1-Dichloroethane	2.399	2.032	15.3	76	0.00
22	T	Vinyl acetate	2.903	2.397	17.4	68	0.00
23	T	cis-1,2-Dichloroethene	1.195	1.037	13.2	78	0.00
24	T	2-Butanone	1.940	1.685	13.1	70	0.00
25	T	Ethyl acetate	2.518	2.314	8.1	77	0.00
26	T	Tetrahydrofuran	1.172	1.074	8.4	75	0.00
27	T	Chloroform	2.145	1.934	9.8	79	0.00
28	T	1,1,1-Trichloroethane	2.189	1.913	12.6	76	0.00
29	T	Cyclohexane	2.231	2.207	1.1	83	0.00
30	T	Carbon tetrachloride	2.281	1.945	14.7	76	0.00
31	T	Benzene	3.318	2.699	18.7	72	0.00
32	T	1,2-Dichloroethane	1.518	1.276	15.9	73	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	94	0.00
34	T	Heptane	0.541	0.559	-3.3	81	0.00
35	T	Trichloroethene	0.377	0.339	10.1	77	0.00
36	T	1,2-Dichloropropane	0.374	0.318	15.0	72	0.00
37	T	1,4-Dioxane	0.171	0.152	11.1	75	0.00
38	T	Bromodichloromethane	0.581	0.531	8.6	78	0.00
39	T	cis-1,3-Dichloropropene	0.503	0.405	19.5	69	0.00
40	T	4-Methyl-2-pentanone	0.296	0.274	7.4	76	0.00
41	T	Toluene	0.980	0.933	4.8	80	0.00
42	T	trans-1,3-Dichloropropene	0.456	0.417	8.6	78	0.00
43	T	1,1,2-Trichloroethane	0.341	0.294	13.8	74	0.00
44	T	Tetrachloroethene	0.454	0.420	7.5	79	0.00
45	T	2-Hexanone	0.536	0.525	2.1	75	0.00
46	T	Chlorodibromomethane	0.531	0.469	11.7	74	0.00
47	T	1,2-Dibromoethane	0.494	0.429	13.2	73	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	94	0.00
49	T	Chlorobenzene	0.842	0.756	10.2	75	0.00
50	T	Ethylbenzene	1.405	1.264	10.0	74	0.00
51	T	m,p-Xylene	1.026	1.001	2.4	76	0.00
52	T	o-Xylene	1.092	1.018	6.8	76	0.00
53	T	Styrene	0.794	0.748	5.8	76	0.00
54	T	Bromoform	0.544	0.473	13.1	73	0.00
55	S	4-Bromofluorobenzene	0.618	0.608	1.6	93	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\092612\09261202.D Vial: 2
Acq On : 26 Sep 2012 10:14 am Operator: RACHEL HILL
Sample : CCV VOA1 092612 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.758	0.678	10.6	74	0.00
57	T	4-Ethyltoluene	1.348	1.221	9.4	74	0.00
58	T	1,3,5-Trimethylbenzene	1.144	1.028	10.1	74	0.00
59	T	1,2,4-Trimethylbenzene	1.063	0.964	9.3	75	0.00
60	T	1,3-Dichlorobenzene	0.576	0.496	13.9	74	0.00
61	T	1,4-Dichlorobenzene	0.544	0.470	13.6	73	0.00
62	T	Benzyl chloride	0.715	0.618	13.6	72	0.00
63	T	1,2-Dichlorobenzene	0.490	0.415	15.3	73	0.00
64	T	1,2,4-Trichlorobenzene	0.127	0.102	19.7	72	0.00
65	T	Hexachlorobutadiene	0.244	0.200	18.0	74	0.00
66		Naphthalene	0.245	0.195	20.4	72	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092612\09261202.D Vial: 2
Acq On : 26 Sep 2012 10:14 am Operator: RACHEL HILL
Sample : CCV VOA1 092612 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Sep 26 10:39 2012 Quant Results File: 092412V1.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.52	130	296062	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.62	114	1119839	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.47	117	920689	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.11	95	559855	12.29	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 98.32%

Target Compounds						Qvalue
2) Propylene	5.43	41	271501	9.52	ppbv	98
3) Dichlorodifluoromethane	5.51	85	712792	8.55	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.77	135	455595	8.69	ppbv #	62
5) Chloromethane	5.93	50	312189	9.09	ppbv	98
6) Vinyl chloride	6.14	62	278350	8.18	ppbv	95
7) 1,3-Butadiene	6.20	39	152283	6.96	ppbv #	58
8) Bromomethane	6.78	94	270347	8.41	ppbv	98
9) Chloroethane	6.92	64	173316	8.33	ppbv	98
10) Trichlorofluoromethane	7.26	101	665545	8.71	ppbv	98
11) Ethanol	7.50	45	76886	7.90	ppbv	99
12) Freon113	7.92	101	500211	9.40	ppbv #	84
13) 1,1-Dichloroethene	8.02	61	494211	9.68	ppbv #	85
14) Acetone	8.11	43	376906	8.66	ppbv #	93
15) Carbon disulfide	8.39	76	760982	10.25	ppbv #	99
16) 2-Propanol	8.16	45	435496	9.62	ppbv #	1
17) Methylene chloride	8.68	49	350591	9.31	ppbv #	79
18) tert-Butyl Methyl Ether	8.88	73	496096	7.61	ppbv #	89
19) trans-1,2-Dichloroethene	8.96	61	427151	9.30	ppbv #	80
20) n-Hexane	9.15	57	511566	9.43	ppbv #	87
21) 1,1-Dichloroethane	9.52	63	466807	8.22	ppbv #	95
22) Vinyl acetate	9.46	43	562161	8.18	ppbv	97
23) cis-1,2-Dichloroethene	10.21	96	240721	8.51	ppbv #	77
24) 2-Butanone	10.18	43	395131	8.60	ppbv	93
25) Ethyl acetate	10.13	43	537099	9.01	ppbv #	100
26) Tetrahydrofuran	10.51	42	254379	9.16	ppbv	94
27) Chloroform	10.53	83	448905	8.84	ppbv	99
28) 1,1,1-Trichloroethane	10.78	97	434960	8.39	ppbv #	92
29) Cyclohexane	10.79	56	512388	9.70	ppbv #	78
30) Carbon tetrachloride	10.95	117	437705	8.10	ppbv	98
31) Benzene	11.22	78	613770	7.81	ppbv	93
32) 1,2-Dichloroethane	11.30	62	293184	8.16	ppbv #	96
34) Heptane	11.28	43	495656	10.22	ppbv #	89
35) Trichloroethene	11.96	130	291604	8.63	ppbv	93
36) 1,2-Dichloropropane	12.31	63	279258	8.33	ppbv #	93
37) 1,4-Dioxane	12.39	88	130757	8.53	ppbv #	80
38) Bromodichloromethane	12.60	83	456603	8.77	ppbv	99
39) cis-1,3-Dichloropropene	13.15	75	344801	7.65	ppbv	97
40) 4-Methyl-2-pentanone	13.26	58	245857	9.26	ppbv #	89
41) Toluene	13.56	91	819550	9.34	ppbv	98
42) trans-1,3-Dichloropropene	13.86	75	340281	8.32	ppbv	97
43) 1,1,2-Trichloroethane	14.13	97	258458	8.46	ppbv	97
44) Tetrachloroethene	14.26	166	361072	8.87	ppbv	96
45) 2-Hexanone	14.34	43	461095	9.59	ppbv	90
46) Chlorodibromomethane	14.68	129	411562	8.65	ppbv	98
47) 1,2-Dibromoethane	14.91	107	369271	8.34	ppbv	99
49) Chlorobenzene	15.51	112	551308	8.89	ppbv #	90
50) Ethylbenzene	15.55	91	912480	8.81	ppbv	93
51) m,p-Xylene	15.71	91	1415139	18.72	ppbv	92
52) o-Xylene	16.30	91	749787	9.32	ppbv #	89

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092612\09261202.D Vial: 2
Acq On : 26 Sep 2012 10:14 am Operator: RACHEL HILL
Sample : CCV VOA1 092612 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Sep 26 10:39 2012 Quant Results File: 092412V1.RES

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

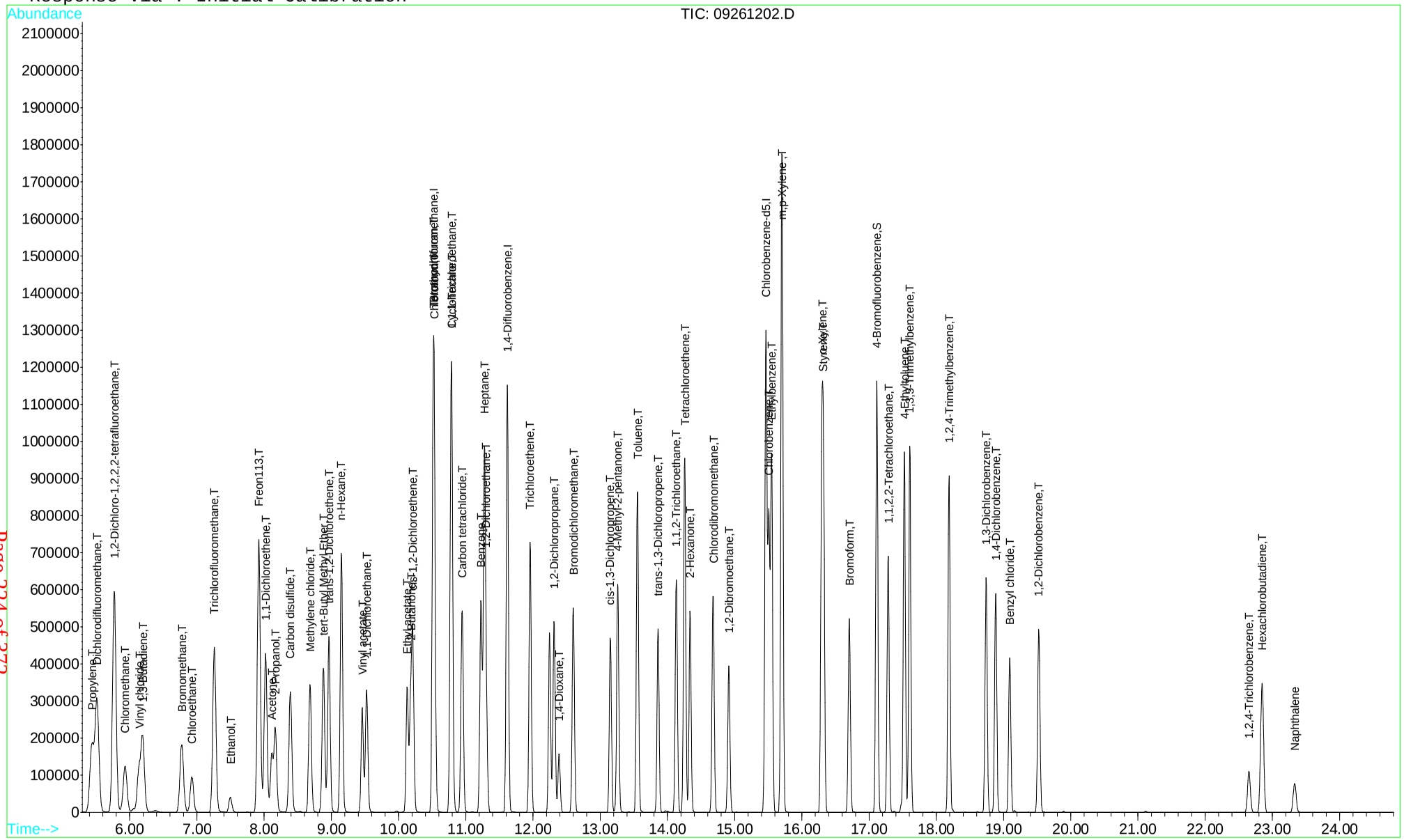
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.32	104	540190	9.23	ppbv		97
54)	Bromoform	16.71	173	334682	8.36	ppbv	#	98
56)	1,1,2,2-Tetrachloroethane	17.29	83	499725	8.95	ppbv	#	99
57)	4-Ethyltoluene	17.53	105	881494	8.88	ppbv		95
58)	1,3,5-Trimethylbenzene	17.60	105	734633	8.72	ppbv		96
59)	1,2,4-Trimethylbenzene	18.19	105	695700	8.89	ppbv		96
60)	1,3-Dichlorobenzene	18.74	146	354520	8.36	ppbv		95
61)	1,4-Dichlorobenzene	18.89	146	332328	8.29	ppbv		95
62)	Benzyl chloride	19.10	91	441405	8.38	ppbv		97
63)	1,2-Dichlorobenzene	19.52	146	296389	8.21	ppbv		95
64)	1,2,4-Trichlorobenzene	22.65	180	68158	7.26	ppbv		98
65)	Hexachlorobutadiene	22.85	225	138653	7.70	ppbv		99
66)	Naphthalene	23.33	128	131854	7.31	ppbv		99

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\092612\09261202.D Vial: 2
Acq On : 26 Sep 2012 10:14 am Operator: RACHEL HILL
Sample : CCV VOA1 092612 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Sep 26 10:39 2012 Quant Results File: 092412V1.RES

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



RTI Laboratories

Run ID: VOA1_120927A **Run No.:** 52446

Analytical Run Date: 9/27/2012 **InstrumentID:** VOA1

Analyst: Rachel Dear **Column:**

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

Column Length: 60m

Run Comments: ch rev 10/8/12/pr rh3 100212 MAC09-1209862: Cannot run at a lower dilution due to high concentrated non-target analyte
Called client to see if they are adding tracer gas. They are not - mt 10/5/12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 092712	BFB_TUNE	TUNE	R52446	9/27/2012 9:44:00 AM	Celeste Hoitash		
CCV VOA1 092712	EPA_TO15	CCV	R52446	9/27/2012 10:26:00 AM	Celeste Hoitash		
RLVS VOA1 092712	EPA_TO15	RLVS	R52446	9/27/2012 11:11:00 AM	Celeste Hoitash		
MBLK/CC_8 VOA1 0	EPA_TO15	MBLK	R52446	9/27/2012 12:11:00 PM	Celeste Hoitash		
1209801-012A	EPA_TO15	SAMP	R52446	9/27/2012 1:06:00 PM	Celeste Hoitash		
1209801-013A	EPA_TO15	SAMP	R52446	9/27/2012 1:48:00 PM	Celeste Hoitash		
1209862-002A	EPA_TO15	SAMP	R52446	9/27/2012 2:33:00 PM	Celeste Hoitash		Cannot run at a lower dilution due to high concentrated non-target analytes
1209862-001A	EPA_TO15	SAMP	R52446	9/27/2012 3:14:00 PM	Celeste Hoitash		Cannot run at a lower dilution due to high concentrated non-target analytes
1209862-003A	EPA_TO15	SAMP	R52446	9/27/2012 3:55:00 PM	Celeste Hoitash		Cannot run at a lower dilution due to high concentrated non-target analytes
1209862-004A	EPA_TO15	SAMP	R52446	9/27/2012 4:37:00 PM	Celeste Hoitash		Cannot run at a lower dilution due to high concentrated non-target analytes
1209862-005A	EPA_TO15	SAMP	R52446	9/27/2012 5:18:00 PM	Celeste Hoitash		Cannot run at a lower dilution due to high concentrated non-target analytes
1209862-006A	EPA_TO15	SAMP	R52446	9/27/2012 6:00:00 PM	Celeste Hoitash		Cannot run at a lower dilution due to high concentrated non-target analytes
1209801-017A	EPA_TO15	SAMP	R52446	9/27/2012 6:41:00 PM	Celeste Hoitash		
1209801-017Adup	EPA_TO15	DUP	R52446	9/27/2012 7:23:00 PM	Celeste Hoitash		
1209801-018A	EPA_TO15	SAMP	R52446	9/27/2012 8:04:00 PM	Celeste Hoitash		
1209801-019A	EPA_TO15	SAMP	R52446	9/27/2012 8:52:00 PM	Celeste Hoitash		
1209801-021A	EPA_TO15	SAMP	R52446	9/27/2012 9:40:00 PM	Celeste Hoitash		
1209801-022A	EPA_TO15	SAMP	R52446	9/27/2012 10:28:00 PM	Celeste Hoitash		
1209801-020A	EPA_TO15	SAMP	R52446	9/28/2012 1:54:00 AM	Celeste Hoitash		
1209801-023A	EPA_TO15	SAMP	R52446	9/28/2012 2:36:00 AM	Celeste Hoitash		
1209801-026A	EPA_TO15	SAMP	R52446	9/28/2012 3:17:00 AM	Celeste Hoitash		
RLVS2 VOA1 09271	EPA_TO15	RLVS	R52446	9/28/2012 3:59:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

15-Oct-12

RunNo 52446

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1028116	BFB VOA1 092712	BFB_TUNE	TUNE	.\1\DATA\092712\	9/27/2012 9:44:0	1	R52446		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		77.2	77.2		100	0	0	0	0	0	77%	50	120	0%	
175	M		7	7		100	0	0	0	0	0	7%	4	9	0%	
176	M		95.3	95.3		100	0	0	0	0	0	95%	93	101	0%	
177	M		6.5	6.5		100	0	0	0	0	0	7%	5	9	0%	
50	M		22.3	22.3		100	0	0	0	0	0	22%	8	40	0%	
75	M		47.9	47.9		100	0	0	0	0	0	48%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.9	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
1028117	CCV VOA1 092712	EPA_TO15	CCV	.\1\DATA\092712\	9/27/2012 10:26:	1	R52446		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	9.31	9.31		9.6	0	0	0.107	1	50	97%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	9.81	9.81		10	0	0	0.211	1	50	98%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.44	10.44		9.8	0	0	0.108	1	50	107%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.39	9.39		9.8	0	0	0.2	1	50	96%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.37	9.37		9.7	0	0	0.111	1	50	97%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.63	10.63		9.9	0	0	0.097	1	50	107%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	7.99	7.99		9.1	0	0	0.271	1	50	88%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	9.62	9.62		9.8	0	0	0.245	1	50	98%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.24	9.24		9.6	0	0	0.186	1	50	96%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	8.95	8.95		9.7	0	0	0.208	1	50	92%	70	130	0%	
1,2-Dichloroethane	A	ppbv	9.16	9.16		9.7	0	0	0.196	1	50	94%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.39	9.39		9.8	0	0	0.224	1	50	96%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.53	9.53		9.7	0	0	0.24	1	50	98%	70	130	0%	
1,3-Butadiene	A	ppbv	8.83	8.83		9.8	0	0	0.152	1	50	90%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.08	9.08		9.7	0	0	0.202	1	50	94%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1028117	CCV VOA1 092712	EPA_TO15	CCV	\1\DATA\092712\	9/27/2012 10:26:	1	R52446		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.07	9.07		9.6	0	0	0.194	1	50	94%	70	130	0%	
1,4-Dioxane	A	ppbv	9.32	9.32		9.6	0	0	0.128	1	50	97%	70	130	0%	
2-Butanone	A	ppbv	10.35	10.35		9.9	0	0	0.287	1	50	105%	70	130	0%	
2-Hexanone	A	ppbv	10.45	10.45		9.8	0	0	0.135	1	50	107%	70	130	0%	
2-Propanol	A	ppbv	10.57	10.57		10.1	0	0	0.329	1	50	105%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.16	10.16		10	0	0	0.157	1	50	102%	70	130	0%	
Acetone	A	ppbv	10.15	10.15		10	0	0	0.43	1	50	102%	70	130	0%	
Benzene	A	ppbv	9.09	9.09		9.6	0	0	0.126	1	50	95%	70	130	0%	
Benzyl chloride	A	ppbv	9.2	9.2		9.7	0	0	0.155	1	50	95%	70	130	0%	
Bromodichloromethane	A	ppbv	9.45	9.45		9.6	0	0	0.156	1	50	98%	70	130	0%	
Bromoform	A	ppbv	9.1	9.1		9.6	0	0	0.197	1	50	95%	70	130	0%	
Bromomethane	A	ppbv	9.14	9.14		9.3	0	0	0.075	1	50	98%	70	130	0%	
Carbon disulfide	A	ppbv	11.38	11.38		9.7	0	0	0.093	1	50	117%	70	130	0%	
Carbon tetrachloride	A	ppbv	8.95	8.95		9.5	0	0	0.114	1	50	94%	70	130	0%	
Chlorobenzene	A	ppbv	9.68	9.68		9.9	0	0	0.275	1	50	98%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.36	9.36		9.2	0	0	0.165	1	50	102%	70	130	0%	
Chloroethane	A	ppbv	9.26	9.26		9.8	0	0	0.063	1	50	94%	70	130	0%	
Chloroform	A	ppbv	9.68	9.68		9.4	0	0	0.126	1	50	103%	70	130	0%	
Chloromethane	A	ppbv	10.56	10.56		9.8	0	0	0.104	1	50	108%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.68	9.68		9.8	0	0	0.107	1	50	99%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	8.51	8.51		9.5	0	0	0.166	1	50	90%	70	130	0%	
Cyclohexane	A	ppbv	11.06	11.06		9.8	0	0	0.684	2	50	113%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.08	9.08		9.2	0	0	0.086	1	50	99%	70	130	0%	
Ethanol	A	ppbv	8.58	8.58		9.2	0	0	1.962	5	50	93%	70	130	0%	
Ethyl acetate	A	ppbv	10.32	10.32		9.8	0	0	0.157	1	50	105%	70	130	0%	
Ethylbenzene	A	ppbv	9.7	9.7		9.8	0	0	0.737	2	50	99%	70	130	0%	
Heptane	A	ppbv	11.29	11.29		9.9	0	0	0.249	1	50	114%	70	130	0%	
Hexachlorobutadiene	A	ppbv	8.05	8.05		9.4	0	0	0.374	2	50	86%	70	130	0%	
m,p-Xylene	A	ppbv	20.45	20.45		19.2	0	0	0.524	2	100	107%	70	130	0%	
Methylene chloride	A	ppbv	10.69	10.69		10	0	0	2.077	5	50	107%	70	130	0%	
n-Hexane	A	ppbv	10.76	10.76		10.1	0	0	0.692	2	50	107%	70	130	0%	
Naphthalene	A	ppbv	7.86	7.86		9.2	0	0	0.247	1	50	85%	70	130	0%	
o-Xylene	A	ppbv	10.12	10.12		10	0	0	0.258	1	50	101%	70	130	0%	
Propylene	A	ppbv	10.63	10.63		10.2	0	0	0.075	1	50	104%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1028117	CCV VOA1 092712	EPA_TO15	CCV	\1\DATA\092712\	9/27/2012 10:26:	1	R52446		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	10.04	10.04		9.8	0	0	0.263	1	50	102%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	8.74	8.74		9.9	0	0	0.228	1	50	88%	70	130	0%	
Tetrachloroethene	A	ppbv	9.56	9.56		9.6	0	0	0.148	1	50	100%	70	130	0%	
Tetrahydrofuran	A	ppbv	10.75	10.75		10	0	0	0.201	1	50	108%	70	130	0%	
Toluene	A	ppbv	10.32	10.32		9.8	0	0	0.158	1	50	105%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.5	10.5		9.8	0	0	0.117	1	50	107%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.15	9.15		9.1	0	0	0.171	1	50	101%	70	130	0%	
Trichloroethene	A	ppbv	9.46	9.46		9.6	0	0	0.119	1	50	99%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.19	9.19		9.6	0	0	0.148	1	50	96%	70	130	0%	
Vinyl acetate	A	ppbv	9.84	9.84		9.9	0	0	0.266	1	50	99%	70	130	0%	
Vinyl chloride	A	ppbv	9.82	9.82		9.4	0	0	0.072	1	50	104%	70	130	0%	
Xylenes, Total	C	ppbv	30.57	30.57		29.2	0	0	0.782	3	150	105%	70	130	0%	
1,4-Difluorobenzene	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Bromochloromethane	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
Chlorobenzene-d5	I	ppbv	12.5	12.5		12.5	0	0	0	0	0	100%			0%	
4-Bromofluorobenzene	S	ppbv	12.3	12.3		12.5	0	0	0	0	0	98%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1028118	RLVS VOA1 092712	EPA_TO15	RLVS	\1\DATA\092712\	9/27/2012 11:11:	1	R52446		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	1	1		0.996	0	0	0.107	1	50	100%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.04	1.04		1	0	0	0.211	1	50	104%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1.03	1.03		0.98	0	0	0.108	1	50	105%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	1.01	1.01		0.98	0	0	0.2	1	50	103%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.07	1.07		0.97	0	0	0.111	1	50	110%	70	130	0%	
1,1-Dichloroethene	A	ppbv	1	1		0.99	0	0	0.097	1	50	101%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	0.71	0.71		0.91	0	0	0.271	1	50	78%	70	130	0%	
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	0.94	0.94		0.96	0	0	0.186	1	50	98%	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	1.09	1.09		0.97	0	0	0.196	1	50	112%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1.06	1.06		0.98	0	0	0.224	1	50	108%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\092712\09271202.D Vial: 2
Acq On : 27 Sep 2012 10:26 am Operator: RACHEL HILL
Sample : CCV VOA1 092712 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	82	0.00
2	T	Propylene	1.204	1.255	-4.2	83	0.00
3	T	Dichlorodifluoromethane	3.520	3.475	1.3	79	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.215	2.188	1.2	80	0.00
5	T	Chloromethane	1.450	1.612	-11.2	89	0.01
6	T	Vinyl chloride	1.437	1.501	-4.5	79	0.00
7	T	1,3-Butadiene	0.924	0.833	9.8	67	0.00
8	T	Bromomethane	1.358	1.335	1.7	81	0.00
9	T	Chloroethane	0.879	0.885	-0.7	82	0.00
10	T	Trichlorofluoromethane	3.226	3.087	4.3	79	0.00
11	T	Ethanol	0.411	0.383	6.8	74	0.00
12	T	Freon113	2.247	2.393	-6.5	82	0.00
13	T	1,1-Dichloroethene	2.155	2.314	-7.4	85	0.00
14	T	Acetone	1.838	1.866	-1.5	76	0.00
15	T	Carbon disulfide	3.135	3.678	-17.3	95	0.00
16	T	2-Propanol	1.910	1.998	-4.6	79	0.00
17	T	Methylene chloride	1.590	1.700	-6.9	85	0.00
18	T	tert-Butyl Methyl Ether	2.752	2.428	11.8	68	0.00
19	T	trans-1,2-Dichloroethene	1.938	2.078	-7.2	84	0.00
20	T	n-Hexane	2.289	2.438	-6.5	82	0.00
21	T	1,1-Dichloroethane	2.399	2.316	3.5	75	0.00
22	T	Vinyl acetate	2.903	2.884	0.7	71	0.00
23	T	cis-1,2-Dichloroethene	1.195	1.180	1.3	77	0.00
24	T	2-Butanone	1.940	2.029	-4.6	73	0.00
25	T	Ethyl acetate	2.518	2.651	-5.3	76	0.00
26	T	Tetrahydrofuran	1.172	1.260	-7.5	76	0.00
27	T	Chloroform	2.145	2.120	1.2	75	0.00
28	T	1,1,1-Trichloroethane	2.189	2.122	3.1	74	0.00
29	T	Cyclohexane	2.231	2.518	-12.9	82	0.00
30	T	Carbon tetrachloride	2.281	2.149	5.8	73	0.00
31	T	Benzene	3.318	3.143	5.3	73	0.00
32	T	1,2-Dichloroethane	1.518	1.434	5.5	71	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	84	0.00
34	T	Heptane	0.541	0.618	-14.2	80	0.00
35	T	Trichloroethene	0.377	0.372	1.3	75	0.00
36	T	1,2-Dichloropropane	0.374	0.359	4.0	72	0.00
37	T	1,4-Dioxane	0.171	0.166	2.9	73	0.00
38	T	Bromodichloromethane	0.581	0.572	1.5	75	0.00
39	T	cis-1,3-Dichloropropene	0.503	0.451	10.3	68	0.00
40	T	4-Methyl-2-pentanone	0.296	0.301	-1.7	75	0.00
41	T	Toluene	0.980	1.032	-5.3	79	0.00
42	T	trans-1,3-Dichloropropene	0.456	0.459	-0.7	77	0.00
43	T	1,1,2-Trichloroethane	0.341	0.327	4.1	73	0.00
44	T	Tetrachloroethene	0.454	0.452	0.4	76	0.00
45	T	2-Hexanone	0.536	0.572	-6.7	73	0.00
46	T	Chlorodibromomethane	0.531	0.507	4.5	71	0.00
47	T	1,2-Dibromoethane	0.494	0.475	3.8	72	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	84	0.00
49	T	Chlorobenzene	0.842	0.823	2.3	72	0.00
50	T	Ethylbenzene	1.405	1.391	1.0	72	0.00
51	T	m,p-Xylene	1.026	1.093	-6.5	74	0.00
52	T	o-Xylene	1.092	1.105	-1.2	73	0.00
53	T	Styrene	0.794	0.813	-2.4	73	0.00
54	T	Bromoform	0.544	0.516	5.1	71	0.00
55	S	4-Bromofluorobenzene	0.618	0.609	1.5	82	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\092712\09271202.D Vial: 2
Acq On : 27 Sep 2012 10:26 am Operator: RACHEL HILL
Sample : CCV VOA1 092712 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.758	0.744	1.8	72	0.00
57	T	4-Ethyltoluene	1.348	1.331	1.3	72	0.00
58	T	1,3,5-Trimethylbenzene	1.144	1.124	1.7	71	0.00
59	T	1,2,4-Trimethylbenzene	1.063	1.043	1.9	72	0.00
60	T	1,3-Dichlorobenzene	0.576	0.539	6.4	71	0.00
61	T	1,4-Dichlorobenzene	0.544	0.514	5.5	71	0.00
62	T	Benzyl chloride	0.715	0.678	5.2	70	0.00
63	T	1,2-Dichlorobenzene	0.490	0.452	7.8	70	0.00
64	T	1,2,4-Trichlorobenzene	0.127	0.112	11.8	70	0.00
65	T	Hexachlorobutadiene	0.244	0.209	14.3	68	0.00
66		Naphthalene	0.245	0.209	14.7	69	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092712\09271202.D Vial: 2
Acq On : 27 Sep 2012 10:26 am Operator: RACHEL HILL
Sample : CCV VOA1 092712 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Sep 27 10:51 2012 Quant Results File: 092412V1.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.52	130	257021	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.62	114	999626	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.46	117	817105	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.12	95	497224	12.30	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 98.40%

Target Compounds						Qvalue
2) Propylene	5.43	41	263228	10.63	ppbv	98
3) Dichlorodifluoromethane	5.51	85	657364	9.08	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.77	135	427406	9.39	ppbv #	60
5) Chloromethane	5.93	50	314811	10.56	ppbv	99
6) Vinyl chloride	6.14	62	290063	9.82	ppbv	95
7) 1,3-Butadiene	6.19	39	167816	8.83	ppbv #	64
8) Bromomethane	6.78	94	255276	9.14	ppbv	98
9) Chloroethane	6.93	64	167414	9.26	ppbv	98
10) Trichlorofluoromethane	7.26	101	609267	9.19	ppbv	98
11) Ethanol	7.50	45	72535	8.58	ppbv	98
12) Freon113	7.92	101	482154	10.44	ppbv #	83
13) 1,1-Dichloroethene	8.02	61	471103	10.63	ppbv #	85
14) Acetone	8.11	43	383685	10.15	ppbv #	92
15) Carbon disulfide	8.39	76	733591	11.38	ppbv #	99
16) 2-Propanol	8.17	45	415016	10.57	ppbv #	1
17) Methylene chloride	8.68	49	349497	10.69	ppbv #	79
18) tert-Butyl Methyl Ether	8.88	73	494322	8.74	ppbv #	87
19) trans-1,2-Dichloroethene	8.96	61	418641	10.50	ppbv #	80
20) n-Hexane	9.15	57	506277	10.76	ppbv #	87
21) 1,1-Dichloroethane	9.53	63	462010	9.37	ppbv #	96
22) Vinyl acetate	9.46	43	587110	9.84	ppbv #	97
23) cis-1,2-Dichloroethene	10.21	96	237845	9.68	ppbv #	78
24) 2-Butanone	10.17	43	413009	10.35	ppbv	92
25) Ethyl acetate	10.13	43	534267	10.32	ppbv #	100
26) Tetrahydrofuran	10.51	42	259158	10.75	ppbv	92
27) Chloroform	10.54	83	427170	9.68	ppbv	100
28) 1,1,1-Trichloroethane	10.78	97	418900	9.31	ppbv #	92
29) Cyclohexane	10.79	56	507331	11.06	ppbv #	78
30) Carbon tetrachloride	10.94	117	419786	8.95	ppbv	98
31) Benzene	11.23	78	620468	9.09	ppbv	93
32) 1,2-Dichloroethane	11.30	62	285985	9.16	ppbv #	96
34) Heptane	11.27	43	489033	11.29	ppbv #	89
35) Trichloroethene	11.96	130	285606	9.46	ppbv	93
36) 1,2-Dichloropropane	12.31	63	281084	9.39	ppbv #	93
37) 1,4-Dioxane	12.39	88	127549	9.32	ppbv #	81
38) Bromodichloromethane	12.60	83	439168	9.45	ppbv	99
39) cis-1,3-Dichloropropene	13.15	75	342470	8.51	ppbv	97
40) 4-Methyl-2-pentanone	13.26	58	240930	10.16	ppbv #	88
41) Toluene	13.55	91	808510	10.32	ppbv	98
42) trans-1,3-Dichloropropene	13.86	75	334015	9.15	ppbv	97
43) 1,1,2-Trichloroethane	14.13	97	256027	9.39	ppbv	97
44) Tetrachloroethene	14.25	166	347108	9.56	ppbv	97
45) 2-Hexanone	14.34	43	448269	10.45	ppbv	90
46) Chlorodibromomethane	14.68	129	397551	9.36	ppbv	98
47) 1,2-Dibromoethane	14.91	107	365010	9.24	ppbv	100
49) Chlorobenzene	15.51	112	532397	9.68	ppbv #	91
50) Ethylbenzene	15.55	91	891366	9.70	ppbv	93
51) m,p-Xylene	15.70	91	1372042	20.45	ppbv	92
52) o-Xylene	16.29	91	722416	10.12	ppbv #	89

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092712\09271202.D Vial: 2
Acq On : 27 Sep 2012 10:26 am Operator: RACHEL HILL
Sample : CCV VOA1 092712 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Sep 27 10:51 2012 Quant Results File: 092412V1.RES

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

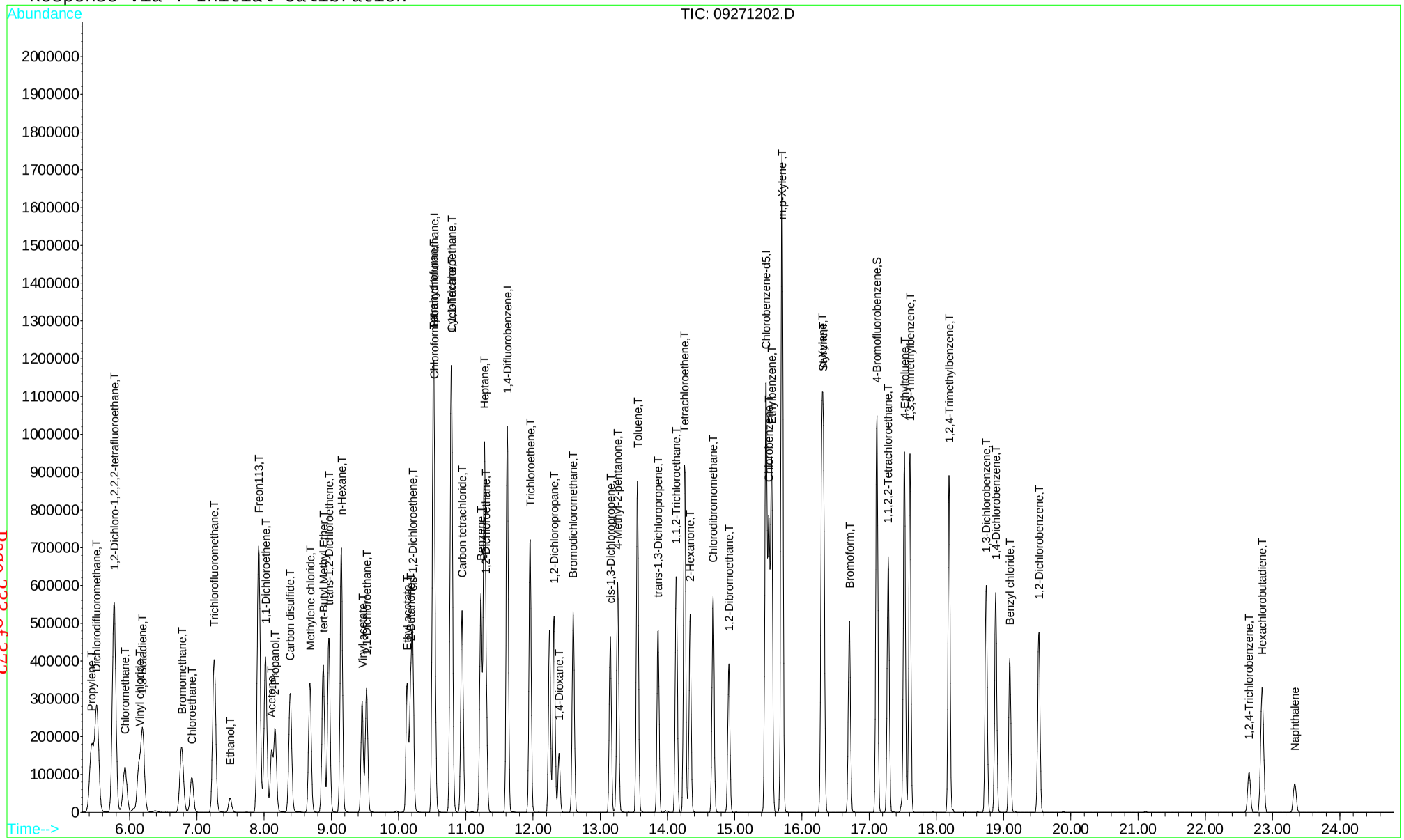
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.32	104	521100	10.04	ppbv		98
54)	Bromoform	16.71	173	323540	9.10	ppbv	#	97
56)	1,1,2,2-Tetrachloroethane	17.28	83	486071	9.81	ppbv	#	98
57)	4-Ethyltoluene	17.52	105	852642	9.68	ppbv		96
58)	1,3,5-Trimethylbenzene	17.61	105	712387	9.53	ppbv		96
59)	1,2,4-Trimethylbenzene	18.19	105	668268	9.62	ppbv		96
60)	1,3-Dichlorobenzene	18.74	146	341772	9.08	ppbv		95
61)	1,4-Dichlorobenzene	18.88	146	322511	9.07	ppbv		95
62)	Benzyl chloride	19.09	91	430183	9.20	ppbv		96
63)	1,2-Dichlorobenzene	19.53	146	286762	8.95	ppbv		95
64)	1,2,4-Trichlorobenzene	22.65	180	66615	7.99	ppbv		96
65)	Hexachlorobutadiene	22.84	225	128609	8.05	ppbv		99
66)	Naphthalene	23.33	128	125711	7.86	ppbv		100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\092712\09271202.D Vial: 2
Acq On : 27 Sep 2012 10:26 am Operator: RACHEL HILL
Sample : CCV VOA1 092712 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Sep 27 10:51 2012 Quant Results File: 092412V1.RES

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



RTI Laboratories

Run ID: **VOA1_120928A** **Run No.:** 52507

Analytical Run Date: 9/28/2012 **InstrumentID:** VOA1

Analyst: Rachel Dear **Column:**

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

Column Length: 60m

Run Comments: ch rev 10/5/12/pr rh3 100212

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 092812	BFB_TUNE	TUNE	R52507	9/28/2012 9:56:00 AM	Celeste Hoitash		
CCV VOA1 092812	EPA_TO15	CCV	R52507	9/28/2012 1:34:00 PM	Celeste Hoitash		
RLVS VOA1 092812	EPA_TO15	RLVS	R52507	9/28/2012 2:24:00 PM	Celeste Hoitash		
MBLK/CC_35 VOA1	EPA_TO15	MBLK	R52507	9/28/2012 3:19:00 PM	Celeste Hoitash		
1209801-028A	EPA_TO15	SAMP	R52507	9/28/2012 9:45:00 PM	Celeste Hoitash		
1209801-027A	EPA_TO15	SAMP	R52507	9/28/2012 11:11:00 PM	Celeste Hoitash		
1209801-025A	EPA_TO15	SAMP	R52507	9/28/2012 11:52:00 PM	Celeste Hoitash		
1209801-024A	EPA_TO15	SAMP	R52507	9/29/2012 12:34:00 AM	Celeste Hoitash		
1209801-022A	EPA_TO15	SAMP	R52507	9/29/2012 1:18:00 AM	Celeste Hoitash		
1209801-018A	EPA_TO15	SAMP	R52507	9/29/2012 2:06:00 AM	Celeste Hoitash		
1209801-017A	EPA_TO15	SAMP	R52507	9/29/2012 2:54:00 AM	Celeste Hoitash		
1209801-035A	EPA_TO15	SAMP	R52507	9/29/2012 3:39:00 AM	Celeste Hoitash		
1209801-035ADUP	EPA_TO15	DUP	R52507	9/29/2012 4:24:00 AM	Celeste Hoitash		
RLVS2 VOA1 09281	EPA_TO15	RLVS	R52507	9/29/2012 5:06:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

15-Oct-12

RunNo 52507

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1029823	BFB VOA1 092812	BFB_TUNE	TUNE	.\1\DATA\092812\	9/28/2012 9:56:0	1	R52507		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0.6	0.6		100	0	0	0	0	0	1%	0	2	0%	
174	M		74.5	74.5		100	0	0	0	0	0	75%	50	120	0%	
175	M		7.2	7.2		100	0	0	0	0	0	7%	4	9	0%	
176	M		96.8	96.8		100	0	0	0	0	0	97%	93	101	0%	
177	M		6.5	6.5		100	0	0	0	0	0	7%	5	9	0%	
50	M		22.7	22.7		100	0	0	0	0	0	23%	8	40	0%	
75	M		47.4	47.4		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		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1029824	CCV VOA1 092812	EPA_TO15	CCV	.\1\DATA\092812\	9/28/2012 1:34:0	1	R52507		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	9.2	9.2		9.6	0	0	0.107	1	50	96%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.1	10.1		10	0	0	0.211	1	50	101%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.14	10.14		9.8	0	0	0.108	1	50	103%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.68	9.68		9.8	0	0	0.2	1	50	99%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.09	9.09		9.7	0	0	0.111	1	50	94%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.19	10.19		9.9	0	0	0.097	1	50	103%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	9.44	9.44		9.1	0	0	0.271	1	50	104%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.04	10.04		9.8	0	0	0.245	1	50	102%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.61	9.61		9.6	0	0	0.186	1	50	100%	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	9.1	9.1		9.7	0	0	0.196	1	50	94%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.58	9.58		9.8	0	0	0.224	1	50	98%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.89	9.89		9.7	0	0	0.24	1	50	102%	70	130	0%	
1,3-Butadiene	A	ppbv	7.71	7.71		9.8	0	0	0.152	1	50	79%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.69	9.69		9.7	0	0	0.202	1	50	100%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1029824	CCV VOA1 092812	EPA_TO15	CCV	\1\DATA\092812\	9/28/2012 1:34:0	1	R52507		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.63	9.63		9.6	0	0	0.194	1	50	100%	70	130	0%	
1,4-Dioxane	A	ppbv	9.84	9.84		9.6	0	0	0.128	1	50	103%	70	130	0%	
2-Butanone	A	ppbv	9.86	9.86		9.9	0	0	0.287	1	50	100%	70	130	0%	
2-Hexanone	A	ppbv	10.89	10.89		9.8	0	0	0.135	1	50	111%	70	130	0%	
2-Propanol	A	ppbv	10.51	10.51		10.1	0	0	0.329	1	50	104%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.44	10.44		10	0	0	0.157	1	50	104%	70	130	0%	
Acetone	A	ppbv	9.8	9.8		10	0	0	0.43	1	50	98%	70	130	0%	
Benzene	A	ppbv	8.98	8.98		9.6	0	0	0.126	1	50	94%	70	130	0%	
Benzyl chloride	A	ppbv	10.02	10.02		9.7	0	0	0.155	1	50	103%	70	130	0%	
Bromodichloromethane	A	ppbv	9.7	9.7		9.6	0	0	0.156	1	50	101%	70	130	0%	
Bromoform	A	ppbv	9.55	9.55		9.6	0	0	0.197	1	50	99%	70	130	0%	
Bromomethane	A	ppbv	9.16	9.16		9.3	0	0	0.075	1	50	98%	70	130	0%	
Carbon disulfide	A	ppbv	11.01	11.01		9.7	0	0	0.093	1	50	114%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.02	9.02		9.5	0	0	0.114	1	50	95%	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	9.88	9.88		9.2	0	0	0.165	1	50	107%	70	130	0%	
Chloroethane	A	ppbv	9.01	9.01		9.8	0	0	0.063	1	50	92%	70	130	0%	
Chloroform	A	ppbv	9.51	9.51		9.4	0	0	0.126	1	50	101%	70	130	0%	
Chloromethane	A	ppbv	9.96	9.96		9.8	0	0	0.104	1	50	102%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.5	9.5		9.8	0	0	0.107	1	50	97%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	8.84	8.84		9.5	0	0	0.166	1	50	93%	70	130	0%	
Cyclohexane	A	ppbv	10.45	10.45		9.8	0	0	0.684	2	50	107%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.09	9.09		9.2	0	0	0.086	1	50	99%	70	130	0%	
Ethanol	A	ppbv	8.9	8.9		9.2	0	0	1.962	5	50	97%	70	130	0%	
Ethyl acetate	A	ppbv	10.13	10.13		9.8	0	0	0.157	1	50	103%	70	130	0%	
Ethylbenzene	A	ppbv	9.94	9.94		9.8	0	0	0.737	2	50	101%	70	130	0%	
Heptane	A	ppbv	11.1	11.1		9.9	0	0	0.249	1	50	112%	70	130	0%	
Hexachlorobutadiene	A	ppbv	8.86	8.86		9.4	0	0	0.374	2	50	94%	70	130	0%	
m,p-Xylene	A	ppbv	20.99	20.99		19.2	0	0	0.524	2	100	109%	70	130	0%	
Methylene chloride	A	ppbv	9.88	9.88		10	0	0	2.077	5	50	99%	70	130	0%	
n-Hexane	A	ppbv	10.22	10.22		10.1	0	0	0.692	2	50	101%	70	130	0%	
Naphthalene	A	ppbv	9.5	9.5		9.2	0	0	0.247	1	50	103%	70	130	0%	
o-Xylene	A	ppbv	10.39	10.39		10	0	0	0.258	1	50	104%	70	130	0%	
Propylene	A	ppbv	10.06	10.06		10.2	0	0	0.075	1	50	99%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1029824	CCV VOA1 092812	EPA_TO15	CCV	\1\DATA\092812\	9/28/2012 1:34:0	1	R52507		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	10.34	10.34		9.8	0	0	0.263	1	50	106%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	8.97	8.97		9.9	0	0	0.228	1	50	91%	70	130	0%	
Tetrachloroethene	A	ppbv	9.86	9.86		9.6	0	0	0.148	1	50	103%	70	130	0%	
Tetrahydrofuran	A	ppbv	10.35	10.35		10	0	0	0.201	1	50	104%	70	130	0%	
Toluene	A	ppbv	10.71	10.71		9.8	0	0	0.158	1	50	109%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	9.99	9.99		9.8	0	0	0.117	1	50	102%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.59	9.59		9.1	0	0	0.171	1	50	105%	70	130	0%	
Trichloroethene	A	ppbv	9.78	9.78		9.6	0	0	0.119	1	50	102%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.21	9.21		9.6	0	0	0.148	1	50	96%	70	130	0%	
Vinyl acetate	A	ppbv	9.62	9.62		9.9	0	0	0.266	1	50	97%	70	130	0%	
Vinyl chloride	A	ppbv	8.69	8.69		9.4	0	0	0.072	1	50	92%	70	130	0%	
Xylenes, Total	C	ppbv	31.38	31.38		29.2	0	0	0.782	3	150	107%	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	12.14	12.14		12.5	0	0	0	0	0	97%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1029825	RLVS VOA1 092812	EPA_TO15	RLVS	\1\DATA\092812\	9/28/2012 2:24:0	1	R52507		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	0.98	0.98		1	0	0	0.211	1	50	98%	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	0.97	0.97		0.98	0	0	0.2	1	50	99%	70	130	0%	
1,1-Dichloroethane	A	ppbv	0.95	0.95		0.97	0	0	0.111	1	50	98%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.91	0.91		0.99	0	0	0.097	1	50	92%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	0.86	0.86		0.91	0	0	0.271	1	50	95%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	0.92	0.92		0.98	0	0	0.245	1	50	94%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.92	0.92		0.96	0	0	0.186	1	50	96%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	0.86	0.86		0.97	0	0	0.208	1	50	89%	70	130	0%	
1,2-Dichloroethane	A	ppbv	0.97	0.97		0.97	0	0	0.196	1	50	100%	70	130	0%	
1,2-Dichloropropane	A	ppbv	0.96	0.96		0.98	0	0	0.224	1	50	98%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\092812\09281204.D Vial: 4
Acq On : 28 Sep 2012 1:34 pm Operator: RACHEL HILL
Sample : CCV VOA1 092812 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	88	0.00
2	T	Propylene	1.204	1.188	1.3	85	0.00
3	T	Dichlorodifluoromethane	3.520	3.476	1.3	86	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.215	2.200	0.7	87	0.00
5	T	Chloromethane	1.450	1.521	-4.9	90	0.00
6	T	Vinyl chloride	1.437	1.329	7.5	76	0.00
7	T	1,3-Butadiene	0.924	0.727	21.3	63	0.00
8	T	Bromomethane	1.358	1.337	1.5	88	0.00
9	T	Chloroethane	0.879	0.861	2.0	86	0.00
10	T	Trichlorofluoromethane	3.226	3.096	4.0	85	0.00
11	T	Ethanol	0.411	0.397	3.4	83	0.00
12	T	Freon113	2.247	2.325	-3.5	86	0.00
13	T	1,1-Dichloroethene	2.155	2.219	-3.0	88	0.00
14	T	Acetone	1.838	1.800	2.1	79	0.00
15	T	Carbon disulfide	3.135	3.560	-13.6	99	0.00
16	T	2-Propanol	1.910	1.987	-4.0	84	0.00
17	T	Methylene chloride	1.590	1.572	1.1	84	0.00
18	T	tert-Butyl Methyl Ether	2.752	2.492	9.4	75	0.00
19	T	trans-1,2-Dichloroethene	1.938	1.977	-2.0	86	0.00
20	T	n-Hexane	2.289	2.317	-1.2	84	0.00
21	T	1,1-Dichloroethane	2.399	2.249	6.3	78	0.00
22	T	Vinyl acetate	2.903	2.821	2.8	75	0.00
23	T	cis-1,2-Dichloroethene	1.195	1.158	3.1	81	0.00
24	T	2-Butanone	1.940	1.932	0.4	75	0.00
25	T	Ethyl acetate	2.518	2.603	-3.4	81	0.00
26	T	Tetrahydrofuran	1.172	1.213	-3.5	79	0.00
27	T	Chloroform	2.145	2.081	3.0	79	0.00
28	T	1,1,1-Trichloroethane	2.189	2.097	4.2	78	0.00
29	T	Cyclohexane	2.231	2.378	-6.6	83	0.00
30	T	Carbon tetrachloride	2.281	2.166	5.0	80	0.00
31	T	Benzene	3.318	3.104	6.4	77	0.00
32	T	1,2-Dichloroethane	1.518	1.423	6.3	76	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	87	0.00
34	T	Heptane	0.541	0.607	-12.2	82	0.00
35	T	Trichloroethene	0.377	0.384	-1.9	81	0.00
36	T	1,2-Dichloropropane	0.374	0.366	2.1	76	0.00
37	T	1,4-Dioxane	0.171	0.175	-2.3	80	0.00
38	T	Bromodichloromethane	0.581	0.587	-1.0	80	0.00
39	T	cis-1,3-Dichloropropene	0.503	0.468	7.0	73	0.00
40	T	4-Methyl-2-pentanone	0.296	0.309	-4.4	80	0.00
41	T	Toluene	0.980	1.070	-9.2	85	0.00
42	T	trans-1,3-Dichloropropene	0.456	0.481	-5.5	84	0.00
43	T	1,1,2-Trichloroethane	0.341	0.337	1.2	78	0.00
44	T	Tetrachloroethene	0.454	0.467	-2.9	81	0.00
45	T	2-Hexanone	0.536	0.596	-11.2	79	0.00
46	T	Chlorodibromomethane	0.531	0.536	-0.9	78	0.00
47	T	1,2-Dibromoethane	0.494	0.495	-0.2	78	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	88	0.00
49	T	Chlorobenzene	0.842	0.849	-0.8	79	0.00
50	T	Ethylbenzene	1.405	1.425	-1.4	78	0.00
51	T	m,p-Xylene	1.026	1.122	-9.4	80	0.00
52	T	o-Xylene	1.092	1.135	-3.9	79	0.00
53	T	Styrene	0.794	0.838	-5.5	79	0.00
54	T	Bromoform	0.544	0.541	0.6	78	0.00
55	S	4-Bromofluorobenzene	0.618	0.601	2.8	86	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\092812\09281204.D Vial: 4
Acq On : 28 Sep 2012 1:34 pm Operator: RACHEL HILL
Sample : CCV VOA1 092812 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.758	0.766	-1.1	78	0.00
57	T	4-Ethyltoluene	1.348	1.384	-2.7	79	0.00
58	T	1,3,5-Trimethylbenzene	1.144	1.166	-1.9	78	0.00
59	T	1,2,4-Trimethylbenzene	1.063	1.089	-2.4	79	0.00
60	T	1,3-Dichlorobenzene	0.576	0.575	0.2	80	0.00
61	T	1,4-Dichlorobenzene	0.544	0.546	-0.4	80	0.00
62	T	Benzyl chloride	0.715	0.739	-3.4	80	0.00
63	T	1,2-Dichlorobenzene	0.490	0.479	2.2	78	0.00
64	T	1,2,4-Trichlorobenzene	0.127	0.132	-3.9	88	0.00
65	T	Hexachlorobutadiene	0.244	0.230	5.7	79	0.00
66		Naphthalene	0.245	0.253	-3.3	87	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092812\09281204.D Vial: 4
Acq On : 28 Sep 2012 1:34 pm Operator: RACHEL HILL
Sample : CCV VOA1 092812 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Sep 28 13:58 2012 Quant Results File: 092412V1.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.51	130	277149	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.62	114	1038637	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.47	117	861589	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.11	95	517442	12.14	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 97.12%

Target Compounds						Qvalue
2) Propylene	5.43	41	268621	10.06	ppbv	98
3) Dichlorodifluoromethane	5.51	85	709108	9.09	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.77	135	463422	9.44	ppbv #	64
5) Chloromethane	5.93	50	320381	9.96	ppbv	99
6) Vinyl chloride	6.14	62	276904	8.69	ppbv	95
7) 1,3-Butadiene	6.19	39	157860	7.71	ppbv #	60
8) Bromomethane	6.77	94	275701	9.16	ppbv	99
9) Chloroethane	6.91	64	175617	9.01	ppbv	98
10) Trichlorofluoromethane	7.25	101	658992	9.21	ppbv	98
11) Ethanol	7.49	45	81072	8.90	ppbv	99
12) Freon113	7.91	101	505214	10.14	ppbv #	85
13) 1,1-Dichloroethene	8.02	61	487130	10.19	ppbv #	86
14) Acetone	8.11	43	399101	9.80	ppbv #	91
15) Carbon disulfide	8.38	76	765537	11.01	ppbv #	99
16) 2-Propanol	8.16	45	444977	10.51	ppbv #	1
17) Methylene chloride	8.68	49	348452	9.88	ppbv #	81
18) tert-Butyl Methyl Ether	8.88	73	547102	8.97	ppbv #	90
19) trans-1,2-Dichloroethene	8.96	61	429512	9.99	ppbv #	81
20) n-Hexane	9.15	57	518927	10.22	ppbv #	86
21) 1,1-Dichloroethane	9.52	63	483602	9.09	ppbv #	95
22) Vinyl acetate	9.46	43	619106	9.62	ppbv	97
23) cis-1,2-Dichloroethene	10.20	96	251704	9.50	ppbv #	80
24) 2-Butanone	10.17	43	424108	9.86	ppbv	94
25) Ethyl acetate	10.13	43	565574	10.13	ppbv #	100
26) Tetrahydrofuran	10.51	42	268994	10.35	ppbv	95
27) Chloroform	10.53	83	452138	9.51	ppbv	100
28) 1,1,1-Trichloroethane	10.78	97	446360	9.20	ppbv #	92
29) Cyclohexane	10.78	56	516705	10.45	ppbv #	78
30) Carbon tetrachloride	10.94	117	456300	9.02	ppbv	98
31) Benzene	11.22	78	660742	8.98	ppbv	94
32) 1,2-Dichloroethane	11.30	62	306093	9.10	ppbv #	96
34) Heptane	11.27	43	499417	11.10	ppbv #	89
35) Trichloroethene	11.96	130	306674	9.78	ppbv	94
36) 1,2-Dichloropropane	12.31	63	298029	9.58	ppbv #	94
37) 1,4-Dioxane	12.39	88	139825	9.84	ppbv #	82
38) Bromodichloromethane	12.59	83	468371	9.70	ppbv	99
39) cis-1,3-Dichloropropene	13.15	75	369326	8.84	ppbv	97
40) 4-Methyl-2-pentanone	13.26	58	257012	10.44	ppbv #	89
41) Toluene	13.55	91	871379	10.71	ppbv	98
42) trans-1,3-Dichloropropene	13.86	75	363908	9.59	ppbv	97
43) 1,1,2-Trichloroethane	14.13	97	274052	9.68	ppbv	96
44) Tetrachloroethene	14.25	166	372134	9.86	ppbv	97
45) 2-Hexanone	14.34	43	485174	10.89	ppbv	88
46) Chlorodibromomethane	14.68	129	436074	9.88	ppbv	99
47) 1,2-Dibromoethane	14.91	107	394481	9.61	ppbv	100
49) Chlorobenzene	15.51	112	579605	9.99	ppbv #	92
50) Ethylbenzene	15.54	91	962722	9.94	ppbv	93
51) m,p-Xylene	15.70	91	1485045	20.99	ppbv	93
52) o-Xylene	16.29	91	782310	10.39	ppbv #	90

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092812\09281204.D Vial: 4
Acq On : 28 Sep 2012 1:34 pm Operator: RACHEL HILL
Sample : CCV VOA1 092812 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Sep 28 13:58 2012 Quant Results File: 092412V1.RES

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

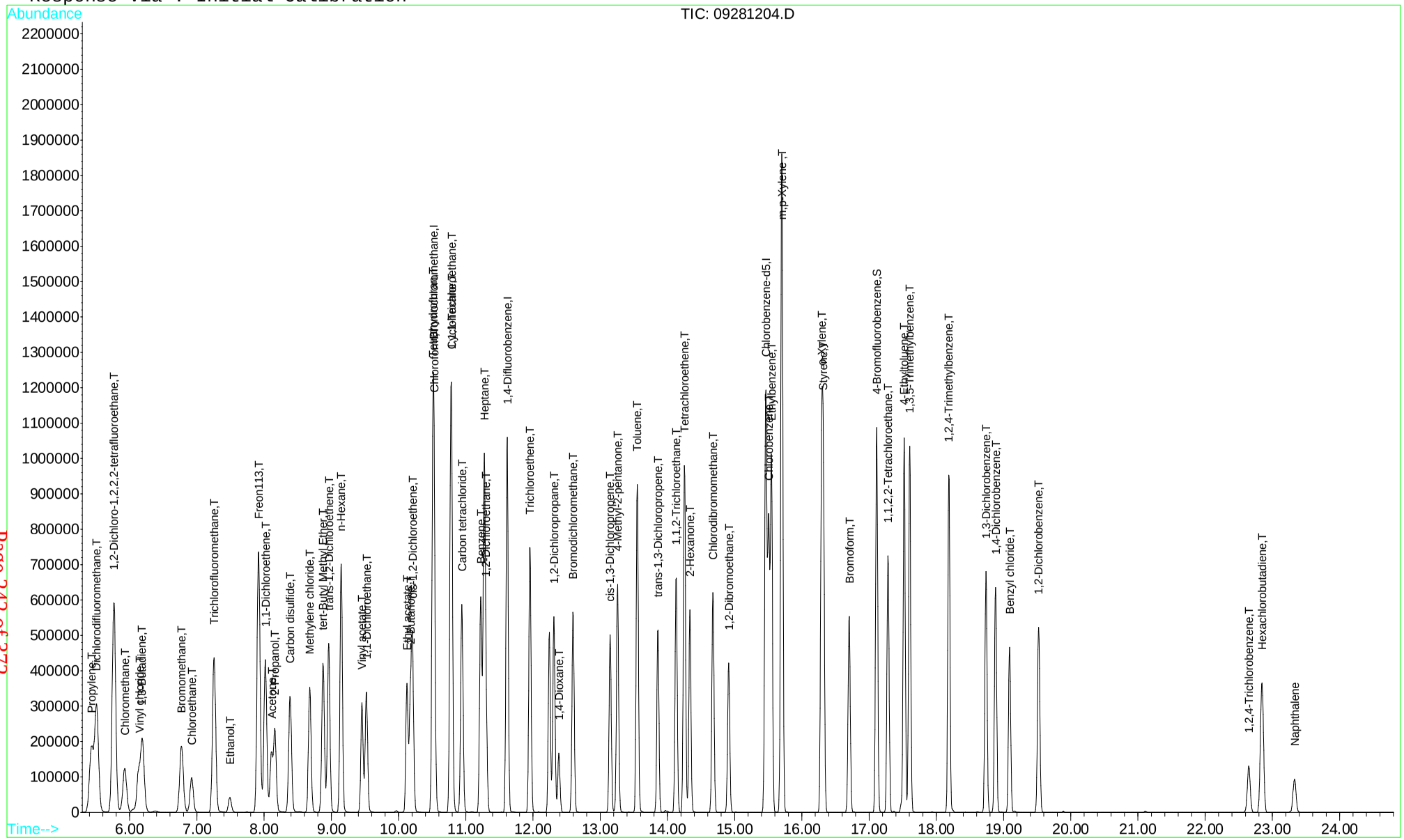
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.32	104	566021	10.34	ppbv		98
54)	Bromoform	16.71	173	357784	9.55	ppbv	#	97
56)	1,1,2,2-Tetrachloroethane	17.28	83	527872	10.10	ppbv	#	99
57)	4-Ethyltoluene	17.52	105	934625	10.06	ppbv		96
58)	1,3,5-Trimethylbenzene	17.60	105	779450	9.89	ppbv		96
59)	1,2,4-Trimethylbenzene	18.19	105	735889	10.04	ppbv		96
60)	1,3-Dichlorobenzene	18.74	146	384296	9.69	ppbv		95
61)	1,4-Dichlorobenzene	18.88	146	361190	9.63	ppbv		96
62)	Benzyl chloride	19.09	91	493910	10.02	ppbv		97
63)	1,2-Dichlorobenzene	19.52	146	320245	9.48	ppbv		95
64)	1,2,4-Trichlorobenzene	22.65	180	82924	9.44	ppbv		98
65)	Hexachlorobutadiene	22.85	225	149247	8.86	ppbv		99
66)	Naphthalene	23.33	128	160388	9.50	ppbv		100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\092812\09281204.D Vial: 4
Acq On : 28 Sep 2012 1:34 pm Operator: RACHEL HILL
Sample : CCV VOA1 092812 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Sep 28 13:58 2012 Quant Results File: 092412V1.RES

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



RTI Laboratories

Run ID: VOA1_121001A **Run No.:** 52540

Analytical Run Date: 10/1/2012 **InstrumentID:** VOA1

Analyst: Rachel Dear **Column:**

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

Column Length: 60m

Run Comments: ch rev 10/8/12/pr rh3 100212

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 100112	BFB_TUNE	TUNE	R52540	10/1/2012 10:21:00 AM	Celeste Hoitash		
CCV VOA1 100112	EPA_TO15	CCV	R52540	10/1/2012 11:01:00 AM	Celeste Hoitash		
RLVS VOA1 100112	EPA_TO15	RLVS	R52540	10/1/2012 12:49:00 PM	Celeste Hoitash		
MBLK/CC_4 VOA1 1	EPA_TO15	MBLK	R52540	10/1/2012 1:52:00 PM	Celeste Hoitash		
1209801-038A	EPA_TO15	SAMP	R52540	10/1/2012 2:39:00 PM	Celeste Hoitash		
1209801-038Adup	EPA_TO15	DUP	R52540	10/1/2012 3:24:00 PM	Celeste Hoitash		
1209801-039A	EPA_TO15	SAMP	R52540	10/1/2012 4:12:00 PM	Celeste Hoitash		
1209801-029A	EPA_TO15	SAMP	R52540	10/1/2012 5:37:00 PM	Celeste Hoitash		
1209801-044A	EPA_TO15	SAMP	R52540	10/1/2012 6:19:00 PM	Celeste Hoitash		
1209801-045A	EPA_TO15	SAMP	R52540	10/1/2012 7:00:00 PM	Celeste Hoitash		
1209801-046A	EPA_TO15	SAMP	R52540	10/1/2012 7:41:00 PM	Celeste Hoitash		
1209801-047A	EPA_TO15	SAMP	R52540	10/1/2012 8:23:00 PM	Celeste Hoitash		
1209801-030A	EPA_TO15	SAMP	R52540	10/1/2012 9:04:00 PM	Celeste Hoitash		
1209801-031A	EPA_TO15	SAMP	R52540	10/1/2012 9:45:00 PM	Celeste Hoitash		
1209801-032A	EPA_TO15	SAMP	R52540	10/1/2012 10:27:00 PM	Celeste Hoitash		
1209801-033A	EPA_TO15	SAMP	R52540	10/1/2012 11:08:00 PM	Celeste Hoitash		
1209801-034A	EPA_TO15	SAMP	R52540	10/1/2012 11:49:00 PM	Celeste Hoitash		
1209801-036A	EPA_TO15	SAMP	R52540	10/2/2012 12:37:00 AM	Celeste Hoitash		
1209801-037A	EPA_TO15	SAMP	R52540	10/2/2012 1:22:00 AM	Celeste Hoitash		
1209801-040A	EPA_TO15	SAMP	R52540	10/2/2012 2:10:00 AM	Celeste Hoitash		
1209801-041A	EPA_TO15	SAMP	R52540	10/2/2012 2:57:00 AM	Celeste Hoitash		
1209801-043A	EPA_TO15	SAMP	R52540	10/2/2012 4:27:00 AM	Celeste Hoitash		
1209801-058A	EPA_TO15	SAMP	R52540	10/2/2012 5:11:00 AM	Celeste Hoitash		
RLVS2 VOA1 10011	EPA_TO15	RLVS	R52540	10/2/2012 5:54:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

15-Oct-12

RunNo 52540

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1030632	BFB VOA1 100112	BFB_TUNE	TUNE	.\1\DATA\100112`10/1/2012 10:21		1	R52540		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0.7	0.7		100	0	0	0	0	0	1%	0	2	0%	
174	M		75.2	75.2		100	0	0	0	0	0	75%	50	120	0%	
175	M		7.1	7.1		100	0	0	0	0	0	7%	4	9	0%	
176	M		97.7	97.7		100	0	0	0	0	0	98%	93	101	0%	
177	M		6.9	6.9		100	0	0	0	0	0	7%	5	9	0%	
50	M		22.5	22.5		100	0	0	0	0	0	23%	8	40	0%	
75	M		47.2	47.2		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		6.5	6.5		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
1030633	CCV VOA1 100112	EPA_TO15	CCV	.\1\DATA\100112`10/1/2012 11:01		1	R52540		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	9.63	9.63		9.6	0	0	0.107	1	50	100%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	10.63	10.63		10	0	0	0.211	1	50	106%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.57	10.57		9.8	0	0	0.108	1	50	108%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	9.94	9.94		9.8	0	0	0.2	1	50	101%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.55	9.55		9.7	0	0	0.111	1	50	98%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.78	10.78		9.9	0	0	0.097	1	50	109%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	9.63	9.63		9.1	0	0	0.271	1	50	106%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	10.63	10.63		9.8	0	0	0.245	1	50	108%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.95	9.95		9.6	0	0	0.186	1	50	104%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	10.21	10.21		9.7	0	0	0.208	1	50	105%	70	130	0%	
1,2-Dichloroethane	A	ppbv	9.47	9.47		9.7	0	0	0.196	1	50	98%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.94	9.94		9.8	0	0	0.224	1	50	101%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	10.46	10.46		9.7	0	0	0.24	1	50	108%	70	130	0%	
1,3-Butadiene	A	ppbv	8.37	8.37		9.8	0	0	0.152	1	50	85%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	10.32	10.32		9.7	0	0	0.202	1	50	106%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1030633	CCV VOA1 100112	EPA_TO15	CCV	\1\DATA\100112	10/1/2012 11:01	1	R52540		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	10.36	10.36		9.6	0	0	0.194	1	50	108%	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	9.99	9.99		9.9	0	0	0.287	1	50	101%	70	130	0%	
2-Hexanone	A	ppbv	11.44	11.44		9.8	0	0	0.135	1	50	117%	70	130	0%	
2-Propanol	A	ppbv	11.23	11.23		10.1	0	0	0.329	1	50	111%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	10.88	10.88		10	0	0	0.157	1	50	109%	70	130	0%	
Acetone	A	ppbv	10.46	10.46		10	0	0	0.43	1	50	105%	70	130	0%	
Benzene	A	ppbv	9.28	9.28		9.6	0	0	0.126	1	50	97%	70	130	0%	
Benzyl chloride	A	ppbv	10.8	10.8		9.7	0	0	0.155	1	50	111%	70	130	0%	
Bromodichloromethane	A	ppbv	10.05	10.05		9.6	0	0	0.156	1	50	105%	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	9.43	9.43		9.3	0	0	0.075	1	50	101%	70	130	0%	
Carbon disulfide	A	ppbv	11.55	11.55		9.7	0	0	0.093	1	50	119%	70	130	0%	
Carbon tetrachloride	A	ppbv	9.37	9.37		9.5	0	0	0.114	1	50	99%	70	130	0%	
Chlorobenzene	A	ppbv	10.33	10.33		9.9	0	0	0.275	1	50	104%	70	130	0%	
Chlorodibromomethane	A	ppbv	10.32	10.32		9.2	0	0	0.165	1	50	112%	70	130	0%	
Chloroethane	A	ppbv	9.3	9.3		9.8	0	0	0.063	1	50	95%	70	130	0%	
Chloroform	A	ppbv	10.03	10.03		9.4	0	0	0.126	1	50	107%	70	130	0%	
Chloromethane	A	ppbv	10.36	10.36		9.8	0	0	0.104	1	50	106%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.99	9.99		9.8	0	0	0.107	1	50	102%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	9.08	9.08		9.5	0	0	0.166	1	50	96%	70	130	0%	
Cyclohexane	A	ppbv	11.31	11.31		9.8	0	0	0.684	2	50	115%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.42	9.42		9.2	0	0	0.086	1	50	102%	70	130	0%	
Ethanol	A	ppbv	8.86	8.86		9.2	0	0	1.962	5	50	96%	70	130	0%	
Ethyl acetate	A	ppbv	10.32	10.32		9.8	0	0	0.157	1	50	105%	70	130	0%	
Ethylbenzene	A	ppbv	10.3	10.3		9.8	0	0	0.737	2	50	105%	70	130	0%	
Heptane	A	ppbv	12	12		9.9	0	0	0.249	1	50	121%	70	130	0%	
Hexachlorobutadiene	A	ppbv	8.99	8.99		9.4	0	0	0.374	2	50	96%	70	130	0%	
m,p-Xylene	A	ppbv	21.88	21.88		19.2	0	0	0.524	2	100	114%	70	130	0%	
Methylene chloride	A	ppbv	10.72	10.72		10	0	0	2.077	5	50	107%	70	130	0%	
n-Hexane	A	ppbv	10.85	10.85		10.1	0	0	0.692	2	50	107%	70	130	0%	
Naphthalene	A	ppbv	9.59	9.59		9.2	0	0	0.247	1	50	104%	70	130	0%	
o-Xylene	A	ppbv	10.82	10.82		10	0	0	0.258	1	50	108%	70	130	0%	
Propylene	A	ppbv	10.86	10.86		10.2	0	0	0.075	1	50	106%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1030633	CCV VOA1 100112	EPA_TO15	CCV	\1\DATA\100112\	10/1/2012 11:01	1	R52540		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	10.85	10.85		9.8	0	0	0.263	1	50	111%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	9.15	9.15		9.9	0	0	0.228	1	50	92%	70	130	0%	
Tetrachloroethene	A	ppbv	10.2	10.2		9.6	0	0	0.148	1	50	106%	70	130	0%	
Tetrahydrofuran	A	ppbv	11.14	11.14		10	0	0	0.201	1	50	111%	70	130	0%	
Toluene	A	ppbv	11.03	11.03		9.8	0	0	0.158	1	50	113%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.61	10.61		9.8	0	0	0.117	1	50	108%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.9	9.9		9.1	0	0	0.171	1	50	109%	70	130	0%	
Trichloroethene	A	ppbv	10	10		9.6	0	0	0.119	1	50	104%	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	10.17	10.17		9.9	0	0	0.266	1	50	103%	70	130	0%	
Vinyl chloride	A	ppbv	9.08	9.08		9.4	0	0	0.072	1	50	97%	70	130	0%	
Xylenes, Total	C	ppbv	32.7	32.7		29.2	0	0	0.782	3	150	112%	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	12.44	12.44		12.5	0	0	0	0	0	100%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1030634	RLVS VOA1 100112	EPA_TO15	RLVS	\1\DATA\100112\	10/1/2012 12:49	1	R52540		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	0.95	0.95		0.996	0	0	0.107	1	50	95%	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	0.93	0.93		0.98	0	0	0.108	1	50	95%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	0.97	0.97		0.98	0	0	0.2	1	50	99%	70	130	0%	
1,1-Dichloroethane	A	ppbv	0.98	0.98		0.97	0	0	0.111	1	50	101%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.92	0.92		0.99	0	0	0.097	1	50	93%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	0.66	0.66		0.91	0	0	0.271	1	50	73%	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	0.93	0.93		0.96	0	0	0.186	1	50	97%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	0.85	0.85		0.97	0	0	0.208	1	50	88%	70	130	0%	
1,2-Dichloroethane	A	ppbv	1.01	1.01		0.97	0	0	0.196	1	50	104%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1.01	1.01		0.98	0	0	0.224	1	50	103%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\100112\10011202.D Vial: 2
Acq On : 1 Oct 2012 11:01 am Operator: RACHEL HILL
Sample : CCV VOA1 100112 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	88	0.00
2	T	Propylene	1.204	1.283	-6.6	91	0.00
3	T	Dichlorodifluoromethane	3.520	3.603	-2.4	88	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.215	2.307	-4.2	90	0.00
5	T	Chloromethane	1.450	1.582	-9.1	93	0.00
6	T	Vinyl chloride	1.437	1.387	3.5	79	0.00
7	T	1,3-Butadiene	0.924	0.789	14.6	68	0.00
8	T	Bromomethane	1.358	1.376	-1.3	90	0.00
9	T	Chloroethane	0.879	0.888	-1.0	89	0.00
10	T	Trichlorofluoromethane	3.226	3.215	0.3	88	0.00
11	T	Ethanol	0.411	0.396	3.6	82	0.00
12	T	Freon113	2.247	2.423	-7.8	89	0.00
13	T	1,1-Dichloroethene	2.155	2.347	-8.9	92	0.00
14	T	Acetone	1.838	1.922	-4.6	84	0.00
15	T	Carbon disulfide	3.135	3.734	-19.1	103	0.00
16	T	2-Propanol	1.910	2.125	-11.3	90	0.00
17	T	Methylene chloride	1.590	1.704	-7.2	91	0.00
18	T	tert-Butyl Methyl Ether	2.752	2.544	7.6	76	0.00
19	T	trans-1,2-Dichloroethene	1.938	2.099	-8.3	91	0.00
20	T	n-Hexane	2.289	2.460	-7.5	89	0.00
21	T	1,1-Dichloroethane	2.399	2.361	1.6	82	0.00
22	T	Vinyl acetate	2.903	2.983	-2.8	79	0.00
23	T	cis-1,2-Dichloroethene	1.195	1.217	-1.8	85	0.00
24	T	2-Butanone	1.940	1.958	-0.9	75	0.00
25	T	Ethyl acetate	2.518	2.652	-5.3	82	0.00
26	T	Tetrahydrofuran	1.172	1.306	-11.4	84	0.00
27	T	Chloroform	2.145	2.196	-2.4	83	0.00
28	T	1,1,1-Trichloroethane	2.189	2.196	-0.3	81	0.00
29	T	Cyclohexane	2.231	2.575	-15.4	90	0.00
30	T	Carbon tetrachloride	2.281	2.250	1.4	82	0.00
31	T	Benzene	3.318	3.208	3.3	79	0.00
32	T	1,2-Dichloroethane	1.518	1.481	2.4	79	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	88	0.00
34	T	Heptane	0.541	0.656	-21.3	89	0.00
35	T	Trichloroethene	0.377	0.393	-4.2	83	0.00
36	T	1,2-Dichloropropane	0.374	0.380	-1.6	80	0.00
37	T	1,4-Dioxane	0.171	0.177	-3.5	81	0.00
38	T	Bromodichloromethane	0.581	0.608	-4.6	83	0.00
39	T	cis-1,3-Dichloropropene	0.503	0.481	4.4	76	0.00
40	T	4-Methyl-2-pentanone	0.296	0.322	-8.8	84	0.00
41	T	Toluene	0.980	1.103	-12.6	88	0.00
42	T	trans-1,3-Dichloropropene	0.456	0.496	-8.8	87	0.00
43	T	1,1,2-Trichloroethane	0.341	0.346	-1.5	81	0.00
44	T	Tetrachloroethene	0.454	0.483	-6.4	84	0.00
45	T	2-Hexanone	0.536	0.626	-16.8	84	0.00
46	T	Chlorodibromomethane	0.531	0.559	-5.3	82	0.00
47	T	1,2-Dibromoethane	0.494	0.512	-3.6	81	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	89	0.00
49	T	Chlorobenzene	0.842	0.878	-4.3	82	0.00
50	T	Ethylbenzene	1.405	1.477	-5.1	81	0.00
51	T	m,p-Xylene	1.026	1.169	-13.9	84	0.00
52	T	o-Xylene	1.092	1.181	-8.2	83	0.00
53	T	Styrene	0.794	0.879	-10.7	84	0.00
54	T	Bromoform	0.544	0.572	-5.1	83	0.00
55	S	4-Bromofluorobenzene	0.618	0.615	0.5	88	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\100112\10011202.D Vial: 2
Acq On : 1 Oct 2012 11:01 am Operator: RACHEL HILL
Sample : CCV VOA1 100112 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.758	0.806	-6.3	83	0.00
57	T	4-Ethyltoluene	1.348	1.448	-7.4	83	0.00
58	T	1,3,5-Trimethylbenzene	1.144	1.233	-7.8	83	0.00
59	T	1,2,4-Trimethylbenzene	1.063	1.153	-8.5	84	0.00
60	T	1,3-Dichlorobenzene	0.576	0.612	-6.3	86	0.00
61	T	1,4-Dichlorobenzene	0.544	0.587	-7.9	86	0.00
62	T	Benzyl chloride	0.715	0.797	-11.5	87	0.00
63	T	1,2-Dichlorobenzene	0.490	0.516	-5.3	85	0.00
64	T	1,2,4-Trichlorobenzene	0.127	0.135	-6.3	90	0.00
65	T	Hexachlorobutadiene	0.244	0.234	4.1	81	0.00
66		Naphthalene	0.245	0.255	-4.1	89	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100112\10011202.D Vial: 2
Acq On : 1 Oct 2012 11:01 am Operator: RACHEL HILL
Sample : CCV VOA1 100112 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 1 11:26 2012 Quant Results File: 092412V1.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.52	130	275240	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.62	114	1044144	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.47	117	866515	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.11	95	533295	12.44	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 99.52%

Target Compounds						Qvalue
2) Propylene	5.44	41	288050	10.86	ppbv	98
3) Dichlorodifluoromethane	5.51	85	729804	9.42	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.77	135	482668	9.90	ppbv #	63
5) Chloromethane	5.93	50	330933	10.36	ppbv	99
6) Vinyl chloride	6.13	62	287122	9.08	ppbv	95
7) 1,3-Butadiene	6.19	39	170265	8.37	ppbv #	62
8) Bromomethane	6.77	94	281861	9.43	ppbv	99
9) Chloroethane	6.92	64	179892	9.30	ppbv	97
10) Trichlorofluoromethane	7.26	101	679559	9.57	ppbv	98
11) Ethanol	7.49	45	80201	8.86	ppbv	98
12) Freon113	7.92	101	522760	10.57	ppbv #	84
13) 1,1-Dichloroethene	8.02	61	511519	10.78	ppbv #	85
14) Acetone	8.11	43	423296	10.46	ppbv #	93
15) Carbon disulfide	8.39	76	797442	11.55	ppbv #	100
16) 2-Propanol	8.16	45	472564	11.23	ppbv #	1
17) Methylene chloride	8.68	49	375231	10.72	ppbv #	79
18) tert-Butyl Methyl Ether	8.88	73	554612	9.15	ppbv #	88
19) trans-1,2-Dichloroethene	8.96	61	453044	10.61	ppbv #	80
20) n-Hexane	9.15	57	547030	10.85	ppbv #	88
21) 1,1-Dichloroethane	9.52	63	504311	9.55	ppbv #	95
22) Vinyl acetate	9.46	43	650206	10.17	ppbv	97
23) cis-1,2-Dichloroethene	10.21	96	262697	9.99	ppbv #	79
24) 2-Butanone	10.18	43	426901	9.99	ppbv	94
25) Ethyl acetate	10.13	43	572321	10.32	ppbv #	99
26) Tetrahydrofuran	10.51	42	287476	11.14	ppbv	92
27) Chloroform	10.53	83	473859	10.03	ppbv	100
28) 1,1,1-Trichloroethane	10.78	97	464225	9.63	ppbv #	92
29) Cyclohexane	10.79	56	555568	11.31	ppbv #	78
30) Carbon tetrachloride	10.95	117	470736	9.37	ppbv	97
31) Benzene	11.22	78	678094	9.28	ppbv	93
32) 1,2-Dichloroethane	11.30	62	316351	9.47	ppbv #	96
34) Heptane	11.28	43	542784	12.00	ppbv #	89
35) Trichloroethene	11.96	130	315129	10.00	ppbv	94
36) 1,2-Dichloropropane	12.31	63	310789	9.94	ppbv #	93
37) 1,4-Dioxane	12.38	88	141641	9.91	ppbv #	79
38) Bromodichloromethane	12.60	83	487452	10.05	ppbv	99
39) cis-1,3-Dichloropropene	13.15	75	381686	9.08	ppbv	97
40) 4-Methyl-2-pentanone	13.26	58	269305	10.88	ppbv #	88
41) Toluene	13.55	91	902927	11.03	ppbv	98
42) trans-1,3-Dichloropropene	13.86	75	377406	9.90	ppbv	97
43) 1,1,2-Trichloroethane	14.13	97	282955	9.94	ppbv	97
44) Tetrachloroethene	14.26	166	387020	10.20	ppbv	96
45) 2-Hexanone	14.34	43	512408	11.44	ppbv	90
46) Chlorodibromomethane	14.68	129	457763	10.32	ppbv	99
47) 1,2-Dibromoethane	14.91	107	410751	9.95	ppbv	100
49) Chlorobenzene	15.51	112	602586	10.33	ppbv #	91
50) Ethylbenzene	15.55	91	1003083	10.30	ppbv	93
51) m,p-Xylene	15.70	91	1556386	21.88	ppbv	92
52) o-Xylene	16.30	91	818903	10.82	ppbv #	89

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100112\10011202.D Vial: 2
Acq On : 1 Oct 2012 11:01 am Operator: RACHEL HILL
Sample : CCV VOA1 100112 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 1 11:26 2012 Quant Results File: 092412V1.RES

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

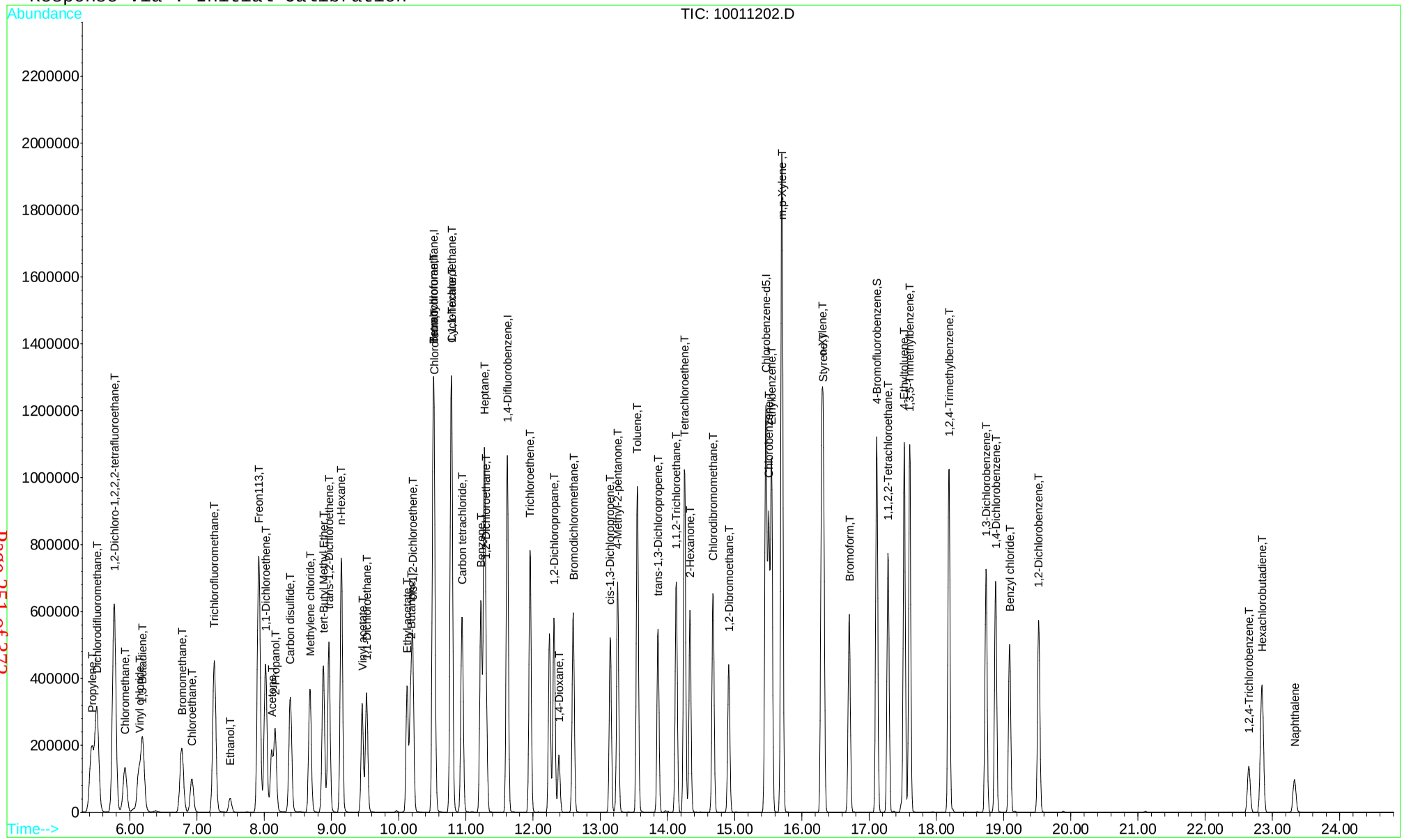
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.32	104	597160	10.85	ppbv		98
54)	Bromoform	16.70	173	380496	10.10	ppbv	#	97
56)	1,1,2,2-Tetrachloroethane	17.28	83	558945	10.63	ppbv	#	99
57)	4-Ethyltoluene	17.52	105	983605	10.53	ppbv		96
58)	1,3,5-Trimethylbenzene	17.60	105	829212	10.46	ppbv		96
59)	1,2,4-Trimethylbenzene	18.19	105	783177	10.63	ppbv		96
60)	1,3-Dichlorobenzene	18.74	146	411797	10.32	ppbv		95
61)	1,4-Dichlorobenzene	18.89	146	390787	10.36	ppbv		95
62)	Benzyl chloride	19.09	91	535805	10.80	ppbv		97
63)	1,2-Dichlorobenzene	19.52	146	346948	10.21	ppbv		96
64)	1,2,4-Trichlorobenzene	22.65	180	85121	9.63	ppbv		97
65)	Hexachlorobutadiene	22.85	225	152347	8.99	ppbv		98
66)	Naphthalene	23.33	128	162793	9.59	ppbv		100

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\100112\10011202.D Vial: 2
Acq On : 1 Oct 2012 11:01 am Operator: RACHEL HILL
Sample : CCV VOA1 100112 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 1 11:26 2012 Quant Results File: 092412V1.RES

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



RTI Laboratories

Run ID: VOA1_121002A **Run No.:** 52584

Analytical Run Date: 10/2/2012 **InstrumentID:** VOA1

Analyst: Rachel Dear **Column:**

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

Column Length: 60m

Run Comments: ch rev 10/8/12/pr rh3 100312

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 100212	BFB_TUNE	TUNE	R52584	10/2/2012 10:39:00 AM	Celeste Hoitash		
CCV VOA1 100212	EPA_TO15	CCV	R52584	10/2/2012 11:27:00 AM	Celeste Hoitash		
RLVS VOA1 100212	EPA_TO15	RLVS	R52584	10/2/2012 12:13:00 PM	Celeste Hoitash		
MBLK/CC_25 VOA1	EPA_TO15	MBLK	R52584	10/2/2012 1:02:00 PM	Celeste Hoitash		
1209801-042A	EPA_TO15	SAMP	R52584	10/2/2012 4:58:00 PM	Celeste Hoitash		
1209801-042Adup	EPA_TO15	DUP	R52584	10/2/2012 5:40:00 PM	Celeste Hoitash		
1209801-048A	EPA_TO15	SAMP	R52584	10/2/2012 6:21:00 PM	Celeste Hoitash		
1209801-049A	EPA_TO15	SAMP	R52584	10/2/2012 7:02:00 PM	Celeste Hoitash		
1209801-052A	EPA_TO15	SAMP	R52584	10/2/2012 9:06:00 PM	Celeste Hoitash		
1209801-053A	EPA_TO15	SAMP	R52584	10/2/2012 9:48:00 PM	Celeste Hoitash		
1209801-054A	EPA_TO15	SAMP	R52584	10/2/2012 10:29:00 PM	Celeste Hoitash		
1209801-055A	EPA_TO15	SAMP	R52584	10/2/2012 11:10:00 PM	Celeste Hoitash		
1209801-056A	EPA_TO15	SAMP	R52584	10/2/2012 11:52:00 PM	Celeste Hoitash		
1209801-057A	EPA_TO15	SAMP	R52584	10/3/2012 12:33:00 AM	Celeste Hoitash		
1210027-001A	EPA_TO15	SAMP	R52584	10/3/2012 1:14:00 AM	Celeste Hoitash		Cannot run at a lower dilution due to high concentrated non-target analytes
1210027-004A	EPA_TO15	SAMP	R52584	10/3/2012 3:18:00 AM	Celeste Hoitash		
1209801-050A	EPA_TO15	SAMP	R52584	10/3/2012 4:03:00 AM	Celeste Hoitash		
1209801-052A	EPA_TO15	SAMP	R52584	10/3/2012 5:34:00 AM	Celeste Hoitash		
1209801-053A	EPA_TO15	SAMP	R52584	10/3/2012 6:22:00 AM	Celeste Hoitash		
1209801-054A	EPA_TO15	SAMP	R52584	10/3/2012 7:10:00 AM	Celeste Hoitash		
1209801-055A	EPA_TO15	SAMP	R52584	10/3/2012 7:58:00 AM	Celeste Hoitash		
RLVS2 VOA1 10021	EPA_TO15	RLVS	R52584	10/3/2012 8:40:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

15-Oct-12

RunNo 52584

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1031795	BFB VOA1 100212	BFB_TUNE	TUNE	.\1\DATA\100212\	10/2/2012 10:39:	1	R52584		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		75.1	75.1		100	0	0	0	0	0	75%	50	120	0%	
175	M		7.2	7.2		100	0	0	0	0	0	7%	4	9	0%	
176	M		95.4	95.4		100	0	0	0	0	0	95%	93	101	0%	
177	M		6.4	6.4		100	0	0	0	0	0	6%	5	9	0%	
50	M		23.4	23.4		100	0	0	0	0	0	23%	8	40	0%	
75	M		49	49		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		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1031796	CCV VOA1 100212	EPA_TO15	CCV	.\1\DATA\100212\	10/2/2012 11:27:	1	R52584		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	9.36	9.36		9.6	0	0	0.107	1	50	98%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	9.51	9.51		10	0	0	0.211	1	50	95%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	10.45	10.45		9.8	0	0	0.108	1	50	107%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	8.97	8.97		9.8	0	0	0.2	1	50	92%	70	130	0%	
1,1-Dichloroethane	A	ppbv	9.59	9.59		9.7	0	0	0.111	1	50	99%	70	130	0%	
1,1-Dichloroethene	A	ppbv	10.7	10.7		9.9	0	0	0.097	1	50	108%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	8.45	8.45		9.1	0	0	0.271	1	50	93%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	9.29	9.29		9.8	0	0	0.245	1	50	95%	70	130	0%	
1,2-Dibromoethane	A	ppbv	8.88	8.88		9.6	0	0	0.186	1	50	93%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	8.89	8.89		9.7	0	0	0.208	1	50	92%	70	130	0%	
1,2-Dichloroethane	A	ppbv	8.86	8.86		9.7	0	0	0.196	1	50	91%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.07	9.07		9.8	0	0	0.224	1	50	93%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.13	9.13		9.7	0	0	0.24	1	50	94%	70	130	0%	
1,3-Butadiene	A	ppbv	8.42	8.42		9.8	0	0	0.152	1	50	86%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	8.99	8.99		9.7	0	0	0.202	1	50	93%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1031796	CCV VOA1 100212	EPA_TO15	CCV	\1\DATA\100212\	10/2/2012 11:27:	1	R52584		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	8.9	8.9		9.6	0	0	0.194	1	50	93%	70	130	0%	
1,4-Dioxane	A	ppbv	8.91	8.91		9.6	0	0	0.128	1	50	93%	70	130	0%	
2-Butanone	A	ppbv	10.18	10.18		9.9	0	0	0.287	1	50	103%	70	130	0%	
2-Hexanone	A	ppbv	10.26	10.26		9.8	0	0	0.135	1	50	105%	70	130	0%	
2-Propanol	A	ppbv	10.59	10.59		10.1	0	0	0.329	1	50	105%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	9.75	9.75		10	0	0	0.157	1	50	98%	70	130	0%	
Acetone	A	ppbv	10.08	10.08		10	0	0	0.43	1	50	101%	70	130	0%	
Benzene	A	ppbv	8.82	8.82		9.6	0	0	0.126	1	50	92%	70	130	0%	
Benzyl chloride	A	ppbv	9.1	9.1		9.7	0	0	0.155	1	50	94%	70	130	0%	
Bromodichloromethane	A	ppbv	9.17	9.17		9.6	0	0	0.156	1	50	96%	70	130	0%	
Bromoform	A	ppbv	8.75	8.75		9.6	0	0	0.197	1	50	91%	70	130	0%	
Bromomethane	A	ppbv	9.16	9.16		9.3	0	0	0.075	1	50	98%	70	130	0%	
Carbon disulfide	A	ppbv	11.24	11.24		9.7	0	0	0.093	1	50	116%	70	130	0%	
Carbon tetrachloride	A	ppbv	8.95	8.95		9.5	0	0	0.114	1	50	94%	70	130	0%	
Chlorobenzene	A	ppbv	9.26	9.26		9.9	0	0	0.275	1	50	94%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.02	9.02		9.2	0	0	0.165	1	50	98%	70	130	0%	
Chloroethane	A	ppbv	9.14	9.14		9.8	0	0	0.063	1	50	93%	70	130	0%	
Chloroform	A	ppbv	9.67	9.67		9.4	0	0	0.126	1	50	103%	70	130	0%	
Chloromethane	A	ppbv	10.38	10.38		9.8	0	0	0.104	1	50	106%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	9.82	9.82		9.8	0	0	0.107	1	50	100%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	8.18	8.18		9.5	0	0	0.166	1	50	86%	70	130	0%	
Cyclohexane	A	ppbv	11.51	11.51		9.8	0	0	0.684	2	50	117%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	9.25	9.25		9.2	0	0	0.086	1	50	101%	70	130	0%	
Ethanol	A	ppbv	8.49	8.49		9.2	0	0	1.962	5	50	92%	70	130	0%	
Ethyl acetate	A	ppbv	9.9	9.9		9.8	0	0	0.157	1	50	101%	70	130	0%	
Ethylbenzene	A	ppbv	9.24	9.24		9.8	0	0	0.737	2	50	94%	70	130	0%	
Heptane	A	ppbv	11.29	11.29		9.9	0	0	0.249	1	50	114%	70	130	0%	
Hexachlorobutadiene	A	ppbv	8.18	8.18		9.4	0	0	0.374	2	50	87%	70	130	0%	
m,p-Xylene	A	ppbv	19.69	19.69		19.2	0	0	0.524	2	100	103%	70	130	0%	
Methylene chloride	A	ppbv	11.18	11.18		10	0	0	2.077	5	50	112%	70	130	0%	
n-Hexane	A	ppbv	11.25	11.25		10.1	0	0	0.692	2	50	111%	70	130	0%	
Naphthalene	A	ppbv	8.5	8.5		9.2	0	0	0.247	1	50	92%	70	130	0%	
o-Xylene	A	ppbv	9.75	9.75		10	0	0	0.258	1	50	98%	70	130	0%	
Propylene	A	ppbv	10.9	10.9		10.2	0	0	0.075	1	50	107%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1031796	CCV VOA1 100212	EPA_TO15	CCV	\1\DATA\100212\	10/2/2012 11:27:	1	R52584		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	9.7	9.7		9.8	0	0	0.263	1	50	99%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	8.16	8.16		9.9	0	0	0.228	1	50	82%	70	130	0%	
Tetrachloroethene	A	ppbv	9.33	9.33		9.6	0	0	0.148	1	50	97%	70	130	0%	
Tetrahydrofuran	A	ppbv	10.39	10.39		10	0	0	0.201	1	50	104%	70	130	0%	
Toluene	A	ppbv	9.93	9.93		9.8	0	0	0.158	1	50	101%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	10.85	10.85		9.8	0	0	0.117	1	50	111%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	8.8	8.8		9.1	0	0	0.171	1	50	97%	70	130	0%	
Trichloroethene	A	ppbv	9.18	9.18		9.6	0	0	0.119	1	50	96%	70	130	0%	
Trichlorofluoromethane	A	ppbv	9.22	9.22		9.6	0	0	0.148	1	50	96%	70	130	0%	
Vinyl acetate	A	ppbv	9.39	9.39		9.9	0	0	0.266	1	50	95%	70	130	0%	
Vinyl chloride	A	ppbv	9.12	9.12		9.4	0	0	0.072	1	50	97%	70	130	0%	
Xylenes, Total	C	ppbv	29.44	29.44		29.2	0	0	0.782	3	150	101%	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	12.21	12.21		12.5	0	0	0	0	0	98%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1031797	RLVS VOA1 100212	EPA_TO15	RLVS	\1\DATA\100212\	10/2/2012 12:13:	1	R52584		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	1.08	1.08		0.996	0	0	0.107	1	50	108%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	1.1	1.1		1	0	0	0.211	1	50	110%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	1.08	1.08		0.98	0	0	0.108	1	50	110%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	1.06	1.06		0.98	0	0	0.2	1	50	108%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1.13	1.13		0.97	0	0	0.111	1	50	116%	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	0.8	0.8		0.91	0	0	0.271	1	50	88%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	1	1		0.98	0	0	0.245	1	50	102%	70	130	0%	
1,2-Dibromoethane	A	ppbv	1	1		0.96	0	0	0.186	1	50	104%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	0.94	0.94		0.97	0	0	0.208	1	50	97%	70	130	0%	
1,2-Dichloroethane	A	ppbv	1.15	1.15		0.97	0	0	0.196	1	50	119%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1.12	1.12		0.98	0	0	0.224	1	50	114%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\100212\10021202.D Vial: 2
Acq On : 2 Oct 2012 11:27 am Operator: RACHEL HILL
Sample : CCV VOA1 100212 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	77	0.00
2	T	Propylene	1.204	1.287	-6.9	80	-0.02
3	T	Dichlorodifluoromethane	3.520	3.539	-0.5	76	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.215	2.177	1.7	74	0.00
5	T	Chloromethane	1.450	1.585	-9.3	82	0.00
6	T	Vinyl chloride	1.437	1.394	3.0	69	-0.01
7	T	1,3-Butadiene	0.924	0.794	14.1	60	0.00
8	T	Bromomethane	1.358	1.338	1.5	76	0.00
9	T	Chloroethane	0.879	0.873	0.7	76	0.00
10	T	Trichlorofluoromethane	3.226	3.097	4.0	74	0.00
11	T	Ethanol	0.411	0.380	7.5	69	0.00
12	T	Freon113	2.247	2.396	-6.6	77	0.00
13	T	1,1-Dichloroethene	2.155	2.329	-8.1	80	0.00
14	T	Acetone	1.838	1.852	-0.8	71	0.00
15	T	Carbon disulfide	3.135	3.631	-15.8	87	0.00
16	T	2-Propanol	1.910	2.003	-4.9	74	0.00
17	T	Methylene chloride	1.590	1.778	-11.8	83	0.00
18	T	tert-Butyl Methyl Ether	2.752	2.269	17.6	60	0.00
19	T	trans-1,2-Dichloroethene	1.938	2.147	-10.8	81	0.00
20	T	n-Hexane	2.289	2.550	-11.4	80	0.00
21	T	1,1-Dichloroethane	2.399	2.370	1.2	72	0.00
22	T	Vinyl acetate	2.903	2.755	5.1	64	0.00
23	T	cis-1,2-Dichloroethene	1.195	1.197	-0.2	73	0.00
24	T	2-Butanone	1.940	1.996	-2.9	67	0.00
25	T	Ethyl acetate	2.518	2.545	-1.1	69	0.00
26	T	Tetrahydrofuran	1.172	1.218	-3.9	69	0.00
27	T	Chloroform	2.145	2.116	1.4	70	0.00
28	T	1,1,1-Trichloroethane	2.189	2.134	2.5	69	0.00
29	T	Cyclohexane	2.231	2.620	-17.4	80	0.00
30	T	Carbon tetrachloride	2.281	2.149	5.8	69	0.00
31	T	Benzene	3.318	3.049	8.1	66	0.00
32	T	1,2-Dichloroethane	1.518	1.386	8.7	65	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	79	0.00
34	T	Heptane	0.541	0.617	-14.0	75	0.00
35	T	Trichloroethene	0.377	0.361	4.2	69	0.00
36	T	1,2-Dichloropropane	0.374	0.346	7.5	65	0.00
37	T	1,4-Dioxane	0.171	0.159	7.0	66	0.00
38	T	Bromodichloromethane	0.581	0.555	4.5	68	0.00
39	T	cis-1,3-Dichloropropene	0.503	0.433	13.9	62	0.00
40	T	4-Methyl-2-pentanone	0.296	0.289	2.4	68	0.00
41	T	Toluene	0.980	0.992	-1.2	71	0.00
42	T	trans-1,3-Dichloropropene	0.456	0.441	3.3	69	0.00
43	T	1,1,2-Trichloroethane	0.341	0.312	8.5	65	0.00
44	T	Tetrachloroethene	0.454	0.442	2.6	69	0.00
45	T	2-Hexanone	0.536	0.561	-4.7	68	0.00
46	T	Chlorodibromomethane	0.531	0.489	7.9	65	0.00
47	T	1,2-Dibromoethane	0.494	0.457	7.5	65	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	80	0.00
49	T	Chlorobenzene	0.842	0.787	6.5	66	0.00
50	T	Ethylbenzene	1.405	1.326	5.6	66	0.00
51	T	m,p-Xylene	1.026	1.052	-2.5	68	0.00
52	T	o-Xylene	1.092	1.064	2.6	67	0.00
53	T	Styrene	0.794	0.786	1.0	67	0.00
54	T	Bromoform	0.544	0.496	8.8	65	0.00
55	S	4-Bromofluorobenzene	0.618	0.604	2.3	78	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\100212\10021202.D Vial: 2
Acq On : 2 Oct 2012 11:27 am Operator: RACHEL HILL
Sample : CCV VOA1 100212 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.758	0.721	4.9	67	0.00
57	T	4-Ethyltoluene	1.348	1.274	5.5	66	0.00
58	T	1,3,5-Trimethylbenzene	1.144	1.076	5.9	65	0.00
59	T	1,2,4-Trimethylbenzene	1.063	1.007	5.3	66	0.00
60	T	1,3-Dichlorobenzene	0.576	0.534	7.3	67	0.00
61	T	1,4-Dichlorobenzene	0.544	0.504	7.4	67	0.00
62	T	Benzyl chloride	0.715	0.671	6.2	66	0.00
63	T	1,2-Dichlorobenzene	0.490	0.449	8.4	66	0.00
64	T	1,2,4-Trichlorobenzene	0.127	0.118	7.1	71	0.00
65	T	Hexachlorobutadiene	0.244	0.213	12.7	66	0.00
66		Naphthalene	0.245	0.226	7.8	71	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100212\10021202.D Vial: 2
Acq On : 2 Oct 2012 11:27 am Operator: RACHEL HILL
Sample : CCV VOA1 100212 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 2 11:52 2012 Quant Results File: 092412V1.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.52	130	240741	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.62	114	939030	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.47	117	779122	12.50	ppbv	0.00

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.11	95	470556	12.21	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 97.68%

Target Compounds						Qvalue
2) Propylene	5.42	41	252822	10.90	ppbv	98
3) Dichlorodifluoromethane	5.50	85	627002	9.25	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.76	135	398253	9.34	ppbv #	58
5) Chloromethane	5.93	50	289985	10.38	ppbv	99
6) Vinyl chloride	6.13	62	252279	9.12	ppbv	94
7) 1,3-Butadiene	6.18	39	149794	8.42	ppbv #	65
8) Bromomethane	6.77	94	239606	9.16	ppbv	98
9) Chloroethane	6.93	64	154634	9.14	ppbv	97
10) Trichlorofluoromethane	7.25	101	572668	9.22	ppbv #	98
11) Ethanol	7.49	45	67253	8.49	ppbv	99
12) Freon113	7.91	101	452269	10.45	ppbv #	83
13) 1,1-Dichloroethene	8.02	61	444045	10.70	ppbv #	85
14) Acetone	8.11	43	356745	10.08	ppbv #	92
15) Carbon disulfide	8.39	76	678404	11.24	ppbv #	99
16) 2-Propanol	8.16	45	389691	10.59	ppbv #	71
17) Methylene chloride	8.68	49	342402	11.18	ppbv #	78
18) tert-Butyl Methyl Ether	8.88	73	432637	8.16	ppbv #	86
19) trans-1,2-Dichloroethene	8.96	61	405225	10.85	ppbv #	80
20) n-Hexane	9.15	57	495956	11.25	ppbv #	87
21) 1,1-Dichloroethane	9.52	63	442818	9.59	ppbv #	95
22) Vinyl acetate	9.46	43	525261	9.39	ppbv #	97
23) cis-1,2-Dichloroethene	10.21	96	225925	9.82	ppbv #	78
24) 2-Butanone	10.17	43	380564	10.18	ppbv #	91
25) Ethyl acetate	10.13	43	480261	9.90	ppbv #	100
26) Tetrahydrofuran	10.51	42	234506	10.39	ppbv	91
27) Chloroform	10.53	83	399345	9.67	ppbv	100
28) 1,1,1-Trichloroethane	10.78	97	394597	9.36	ppbv #	91
29) Cyclohexane	10.79	56	494584	11.51	ppbv #	78
30) Carbon tetrachloride	10.94	117	393106	8.95	ppbv	97
31) Benzene	11.22	78	563772	8.82	ppbv	93
32) 1,2-Dichloroethane	11.30	62	258877	8.86	ppbv #	96
34) Heptane	11.27	43	459100	11.29	ppbv #	88
35) Trichloroethene	11.96	130	260112	9.18	ppbv	93
36) 1,2-Dichloropropane	12.31	63	255089	9.07	ppbv #	93
37) 1,4-Dioxane	12.39	88	114514	8.91	ppbv #	80
38) Bromodichloromethane	12.60	83	400191	9.17	ppbv	98
39) cis-1,3-Dichloropropene	13.15	75	309141	8.18	ppbv	97
40) 4-Methyl-2-pentanone	13.26	58	217172	9.75	ppbv #	87
41) Toluene	13.55	91	730583	9.93	ppbv	97
42) trans-1,3-Dichloropropene	13.86	75	301651	8.80	ppbv	97
43) 1,1,2-Trichloroethane	14.13	97	229658	8.97	ppbv	96
44) Tetrachloroethene	14.25	166	318472	9.33	ppbv	97
45) 2-Hexanone	14.34	43	413349	10.26	ppbv	91
46) Chlorodibromomethane	14.68	129	359787	9.02	ppbv	98
47) 1,2-Dibromoethane	14.91	107	329701	8.88	ppbv	99
49) Chlorobenzene	15.51	112	485501	9.26	ppbv #	90
50) Ethylbenzene	15.55	91	809689	9.24	ppbv	93
51) m,p-Xylene	15.70	91	1259523	19.69	ppbv	92
52) o-Xylene	16.29	91	663496	9.75	ppbv #	88

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100212\10021202.D Vial: 2
Acq On : 2 Oct 2012 11:27 am Operator: RACHEL HILL
Sample : CCV VOA1 100212 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 2 11:52 2012 Quant Results File: 092412V1.RES

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

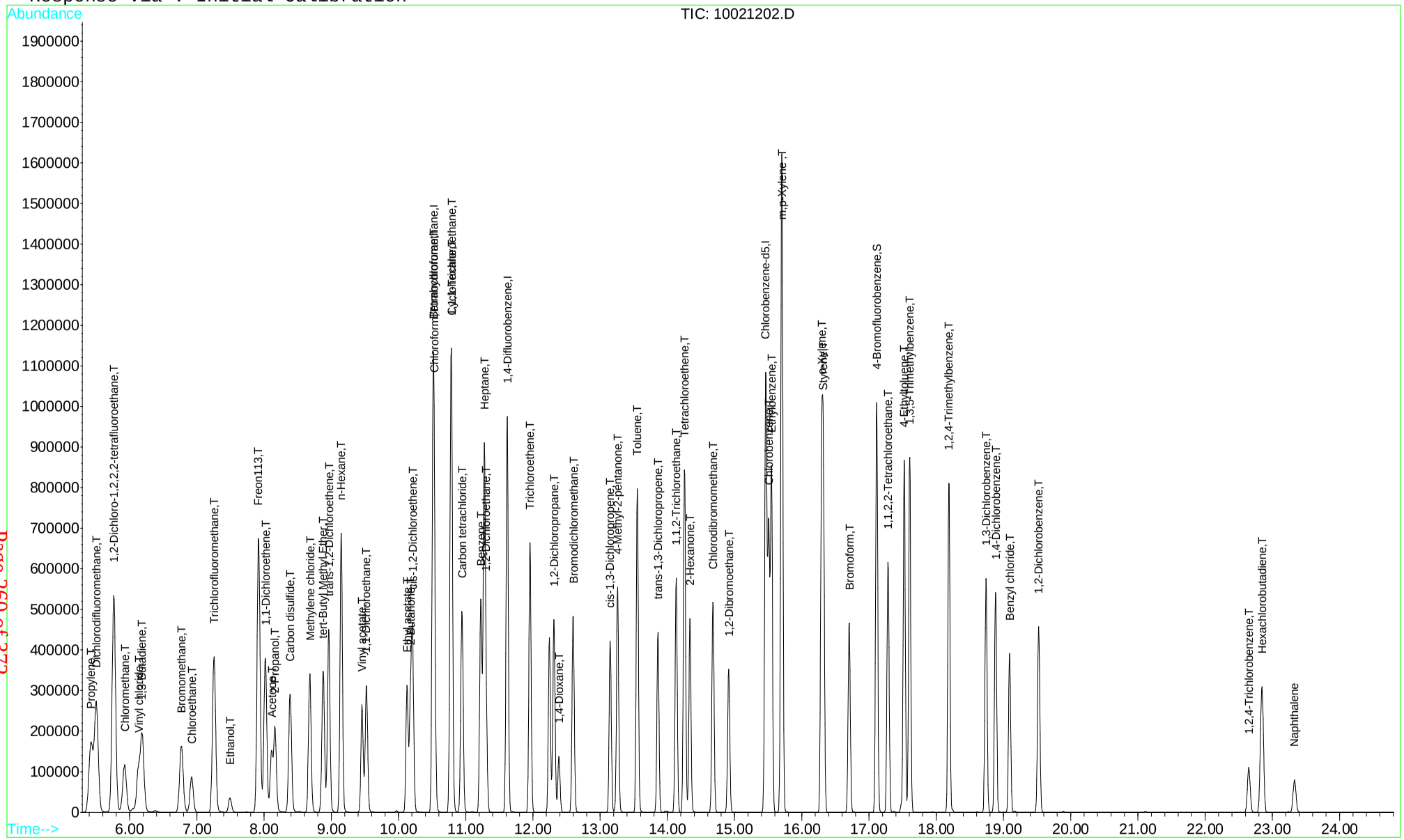
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.32	104	480125	9.70	ppbv		98
54)	Bromoform	16.71	173	296601	8.75	ppbv	#	97
56)	1,1,2,2-Tetrachloroethane	17.28	83	449322	9.51	ppbv	#	99
57)	4-Ethyltoluene	17.52	105	778222	9.26	ppbv		95
58)	1,3,5-Trimethylbenzene	17.61	105	650809	9.13	ppbv		95
59)	1,2,4-Trimethylbenzene	18.19	105	615222	9.29	ppbv		96
60)	1,3-Dichlorobenzene	18.74	146	322691	8.99	ppbv		95
61)	1,4-Dichlorobenzene	18.88	146	301835	8.90	ppbv		95
62)	Benzyl chloride	19.09	91	405529	9.10	ppbv		96
63)	1,2-Dichlorobenzene	19.52	146	271630	8.89	ppbv		95
64)	1,2,4-Trichlorobenzene	22.65	180	67180	8.45	ppbv		97
65)	Hexachlorobutadiene	22.85	225	124561	8.18	ppbv		98
66)	Naphthalene	23.33	128	129758	8.50	ppbv		99

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\100212\10021202.D Vial: 2
Acq On : 2 Oct 2012 11:27 am Operator: RACHEL HILL
Sample : CCV VOA1 100212 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 2 11:52 2012 Quant Results File: 092412V1.RES

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



RTI Laboratories

Run ID: VOA1_121003A **Run No.:** 52627

Analytical Run Date: 10/3/2012 **InstrumentID:** VOA1

Analyst: Rachel Dear **Column:**

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

Column Length: 60m

Run Comments: ch rev 10/11/12/PR AW 10.9.12 - non target peak may be tracer gas used in field sampling (1,1-difluoroethane) - mt

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA1 100312	BFB_TUNE	TUNE	R52627	10/3/2012 10:14:00 AM	Celeste Hoitash		
CCV VOA1 100312	EPA_TO15	CCV	R52627	10/3/2012 11:40:00 AM	Celeste Hoitash		
RLVS VOA1 100312	EPA_TO15	RLVS	R52627	10/3/2012 12:23:00 PM	Celeste Hoitash		
MBLK/CC_3 VOA1 1	EPA_TO15	MBLK	R52627	10/3/2012 1:26:00 PM	Celeste Hoitash		
1209801-051A	EPA_TO15	SAMP	R52627	10/3/2012 2:11:00 PM	Celeste Hoitash		Cannot run at a lower dilution due to high concentrated non-target analytes
1210027-002A	EPA_TO15	SAMP	R52627	10/3/2012 7:36:00 PM	Celeste Hoitash		
1210027-002Adup	EPA_TO15	DUP	R52627	10/3/2012 8:18:00 PM	Celeste Hoitash		
1210027-003A	EPA_TO15	SAMP	R52627	10/3/2012 9:01:00 PM	Celeste Hoitash		
1209B55-001A	EPA_TO15	SAMP	R52627	10/4/2012 2:13:00 AM	Celeste Hoitash		Cannot run at a lower dilution due to high concentrated non-target analytes
1209B55-002A	EPA_TO15	SAMP	R52627	10/4/2012 2:56:00 AM	Celeste Hoitash		
1209B55-003A	EPA_TO15	SAMP	R52627	10/4/2012 3:39:00 AM	Celeste Hoitash		
1209B55-004A	EPA_TO15	SAMP	R52627	10/4/2012 4:22:00 AM	Celeste Hoitash		
1209B55-005A	EPA_TO15	SAMP	R52627	10/4/2012 5:05:00 AM	Celeste Hoitash		
1209B55-006A	EPA_TO15	SAMP	R52627	10/4/2012 5:47:00 AM	Celeste Hoitash		
RLVS2 VOA1 10031	EPA_TO15	RLVS	R52627	10/4/2012 6:30:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

15-Oct-12

RunNo 52627

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1032856	BFB VOA1 100312	BFB_TUNE	TUNE	.\1\DATA\100312\	10/3/2012 10:14:	1	R52627		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0.6	0.6		100	0	0	0	0	0	1%	0	2	0%	
174	M		74.5	74.5		100	0	0	0	0	0	75%	50	120	0%	
175	M		7.4	7.4		100	0	0	0	0	0	7%	4	9	0%	
176	M		96.6	96.6		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		22.3	22.3		100	0	0	0	0	0	22%	8	40	0%	
75	M		48.3	48.3		100	0	0	0	0	0	48%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1032857	CCV VOA1 100312	EPA_TO15	CCV	.\1\DATA\100312\	10/3/2012 11:40:	1	R52627		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,1,1-Trichloroethane	A	ppbv	8.94	8.94		9.6	0	0	0.107	1	50	93%	70	130	0%	
1,1,2,2-Tetrachloroethane	A	ppbv	9.3	9.3		10	0	0	0.211	1	50	93%	70	130	0%	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	ppbv	9.48	9.48		9.8	0	0	0.108	1	50	97%	70	130	0%	
1,1,2-Trichloroethane	A	ppbv	8.99	8.99		9.8	0	0	0.2	1	50	92%	70	130	0%	
1,1-Dichloroethane	A	ppbv	8.49	8.49		9.7	0	0	0.111	1	50	88%	70	130	0%	
1,1-Dichloroethene	A	ppbv	9.95	9.95		9.9	0	0	0.097	1	50	101%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	7.87	7.87		9.1	0	0	0.271	1	50	86%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	9.43	9.43		9.8	0	0	0.245	1	50	96%	70	130	0%	
1,2-Dibromoethane	A	ppbv	9.04	9.04		9.6	0	0	0.186	1	50	94%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	9.08	9.08		9.7	0	0	0.208	1	50	94%	70	130	0%	
1,2-Dichloroethane	A	ppbv	8.76	8.76		9.7	0	0	0.196	1	50	90%	70	130	0%	
1,2-Dichloropropane	A	ppbv	9.09	9.09		9.8	0	0	0.224	1	50	93%	70	130	0%	
1,3,5-Trimethylbenzene	A	ppbv	9.32	9.32		9.7	0	0	0.24	1	50	96%	70	130	0%	
1,3-Butadiene	A	ppbv	7.13	7.13		9.8	0	0	0.152	1	50	73%	70	130	0%	
1,3-Dichlorobenzene	A	ppbv	9.32	9.32		9.7	0	0	0.202	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
1032857	CCV VOA1 100312	EPA_TO15	CCV	\1\DATA\100312\	10/3/2012 11:40:	1	R52627		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
1,4-Dichlorobenzene	A	ppbv	9.22	9.22		9.6	0	0	0.194	1	50	96%	70	130	0%	
1,4-Dioxane	A	ppbv	8.67	8.67		9.6	0	0	0.128	1	50	90%	70	130	0%	
2-Butanone	A	ppbv	9.05	9.05		9.9	0	0	0.287	1	50	91%	70	130	0%	
2-Hexanone	A	ppbv	9.74	9.74		9.8	0	0	0.135	1	50	99%	70	130	0%	
2-Propanol	A	ppbv	9.53	9.53		10.1	0	0	0.329	1	50	94%	70	130	0%	
4-Methyl-2-pentanone	A	ppbv	9.27	9.27		10	0	0	0.157	1	50	93%	70	130	0%	
Acetone	A	ppbv	8.75	8.75		10	0	0	0.43	1	50	88%	70	130	0%	
Benzene	A	ppbv	8.43	8.43		9.6	0	0	0.126	1	50	88%	70	130	0%	
Benzyl chloride	A	ppbv	8.99	8.99		9.7	0	0	0.155	1	50	93%	70	130	0%	
Bromodichloromethane	A	ppbv	9.42	9.42		9.6	0	0	0.156	1	50	98%	70	130	0%	
Bromoform	A	ppbv	9.07	9.07		9.6	0	0	0.197	1	50	94%	70	130	0%	
Bromomethane	A	ppbv	8.61	8.61		9.3	0	0	0.075	1	50	93%	70	130	0%	
Carbon disulfide	A	ppbv	10.45	10.45		9.7	0	0	0.093	1	50	108%	70	130	0%	
Carbon tetrachloride	A	ppbv	8.61	8.61		9.5	0	0	0.114	1	50	91%	70	130	0%	
Chlorobenzene	A	ppbv	9.45	9.45		9.9	0	0	0.275	1	50	95%	70	130	0%	
Chlorodibromomethane	A	ppbv	9.33	9.33		9.2	0	0	0.165	1	50	101%	70	130	0%	
Chloroethane	A	ppbv	8.45	8.45		9.8	0	0	0.063	1	50	86%	70	130	0%	
Chloroform	A	ppbv	9.33	9.33		9.4	0	0	0.126	1	50	99%	70	130	0%	
Chloromethane	A	ppbv	9.5	9.5		9.8	0	0	0.104	1	50	97%	70	130	0%	
cis-1,2-Dichloroethene	A	ppbv	8.89	8.89		9.8	0	0	0.107	1	50	91%	70	130	0%	
cis-1,3-dichloropropene	A	ppbv	8.3	8.3		9.5	0	0	0.166	1	50	87%	70	130	0%	
Cyclohexane	A	ppbv	9.95	9.95		9.8	0	0	0.684	2	50	102%	70	130	0%	
Dichlorodifluoromethane	A	ppbv	8.79	8.79		9.2	0	0	0.086	1	50	96%	70	130	0%	
Ethanol	A	ppbv	7.59	7.59		9.2	0	0	1.962	5	50	83%	70	130	0%	
Ethyl acetate	A	ppbv	8.83	8.83		9.8	0	0	0.157	1	50	90%	70	130	0%	
Ethylbenzene	A	ppbv	9.5	9.5		9.8	0	0	0.737	2	50	97%	70	130	0%	
Heptane	A	ppbv	10.9	10.9		9.9	0	0	0.249	1	50	110%	70	130	0%	
Hexachlorobutadiene	A	ppbv	7.67	7.67		9.4	0	0	0.374	2	50	82%	70	130	0%	
m,p-Xylene	A	ppbv	20.11	20.11		19.2	0	0	0.524	2	100	105%	70	130	0%	
Methylene chloride	A	ppbv	9.4	9.4		10	0	0	2.077	5	50	94%	70	130	0%	
n-Hexane	A	ppbv	9.76	9.76		10.1	0	0	0.692	2	50	97%	70	130	0%	
Naphthalene	A	ppbv	7.5	7.5		9.2	0	0	0.247	1	50	82%	70	130	0%	
o-Xylene	A	ppbv	9.84	9.84		10	0	0	0.258	1	50	98%	70	130	0%	
Propylene	A	ppbv	9.57	9.57		10.2	0	0	0.075	1	50	94%	70	130	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1032857	CCV VOA1 100312	EPA_TO15	CCV	\1\DATA\100312\	10/3/2012 11:40:	1	R52627		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Styrene	A	ppbv	9.84	9.84		9.8	0	0	0.263	1	50	100%	70	130	0%	
tert-Butyl Methyl Ether	A	ppbv	7.9	7.9		9.9	0	0	0.228	1	50	80%	70	130	0%	
Tetrachloroethene	A	ppbv	9.67	9.67		9.6	0	0	0.148	1	50	101%	70	130	0%	
Tetrahydrofuran	A	ppbv	9.42	9.42		10	0	0	0.201	1	50	94%	70	130	0%	
Toluene	A	ppbv	10.16	10.16		9.8	0	0	0.158	1	50	104%	70	130	0%	
trans-1,2-Dichloroethene	A	ppbv	9.55	9.55		9.8	0	0	0.117	1	50	97%	70	130	0%	
trans-1,3-dichloropropene	A	ppbv	9.08	9.08		9.1	0	0	0.171	1	50	100%	70	130	0%	
Trichloroethene	A	ppbv	9.71	9.71		9.6	0	0	0.119	1	50	101%	70	130	0%	
Trichlorofluoromethane	A	ppbv	8.93	8.93		9.6	0	0	0.148	1	50	93%	70	130	0%	
Vinyl acetate	A	ppbv	8.42	8.42		9.9	0	0	0.266	1	50	85%	70	130	0%	
Vinyl chloride	A	ppbv	8.38	8.38		9.4	0	0	0.072	1	50	89%	70	130	0%	
Xylenes, Total	C	ppbv	29.95	29.95		29.2	0	0	0.782	3	150	103%	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	12.38	12.38		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
1032858	RLVS VOA1 100312	EPA_TO15	RLVS	\1\DATA\100312\	10/3/2012 12:23:	1	R52627		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	1.01	1.01		1	0	0	0.211	1	50	101%	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	1.02	1.02		0.98	0	0	0.2	1	50	104%	70	130	0%	
1,1-Dichloroethane	A	ppbv	1	1		0.97	0	0	0.111	1	50	103%	70	130	0%	
1,1-Dichloroethene	A	ppbv	0.96	0.96		0.99	0	0	0.097	1	50	97%	70	130	0%	
1,2,4-Trichlorobenzene	A	ppbv	0.81	0.81		0.91	0	0	0.271	1	50	89%	70	130	0%	
1,2,4-Trimethylbenzene	A	ppbv	0.94	0.94		0.98	0	0	0.245	1	50	96%	70	130	0%	
1,2-Dibromoethane	A	ppbv	0.96	0.96		0.96	0	0	0.186	1	50	100%	70	130	0%	
1,2-Dichlorobenzene	A	ppbv	0.87	0.87		0.97	0	0	0.208	1	50	90%	70	130	0%	
1,2-Dichloroethane	A	ppbv	1.05	1.05		0.97	0	0	0.196	1	50	108%	70	130	0%	
1,2-Dichloropropane	A	ppbv	1.05	1.05		0.98	0	0	0.224	1	50	107%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\100312\10031203.D Vial: 3
Acq On : 3 Oct 2012 11:40 am Operator: RACHEL HILL
Sample : CCV VOA1 100312 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	83	0.00
2	T	Propylene	1.204	1.130	6.1	75	0.00
3	T	Dichlorodifluoromethane	3.520	3.363	4.5	77	0.00
4	T	1,2-Dichloro-1,2,2,2-tetraf	2.215	2.082	6.0	77	0.00
5	T	Chloromethane	1.450	1.450	0.0	80	0.01
6	T	Vinyl chloride	1.437	1.281	10.9	68	0.00
7	T	1,3-Butadiene	0.924	0.672	27.3	54	0.00
8	T	Bromomethane	1.358	1.258	7.4	77	0.00
9	T	Chloroethane	0.879	0.807	8.2	76	0.00
10	T	Trichlorofluoromethane	3.226	2.999	7.0	77	0.00
11	T	Ethanol	0.411	0.339	17.5	66	0.00
12	T	Freon113	2.247	2.174	3.2	75	0.00
13	T	1,1-Dichloroethene	2.155	2.166	-0.5	80	0.00
14	T	Acetone	1.838	1.608	12.5	66	0.00
15	T	Carbon disulfide	3.135	3.379	-7.8	88	0.00
16	T	2-Propanol	1.910	1.802	5.7	72	0.00
17	T	Methylene chloride	1.590	1.495	6.0	75	0.00
18	T	tert-Butyl Methyl Ether	2.752	2.194	20.3	62	0.00
19	T	trans-1,2-Dichloroethene	1.938	1.889	2.5	77	0.00
20	T	n-Hexane	2.289	2.213	3.3	75	0.00
21	T	1,1-Dichloroethane	2.399	2.099	12.5	68	0.00
22	T	Vinyl acetate	2.903	2.470	14.9	62	0.00
23	T	cis-1,2-Dichloroethene	1.195	1.083	9.4	71	0.00
24	T	2-Butanone	1.940	1.773	8.6	64	0.00
25	T	Ethyl acetate	2.518	2.268	9.9	66	0.00
26	T	Tetrahydrofuran	1.172	1.104	5.8	67	0.00
27	T	Chloroform	2.145	2.042	4.8	73	0.00
28	T	1,1,1-Trichloroethane	2.189	2.040	6.8	71	0.00
29	T	Cyclohexane	2.231	2.266	-1.6	74	0.00
30	T	Carbon tetrachloride	2.281	2.067	9.4	71	0.00
31	T	Benzene	3.318	2.913	12.2	68	0.00
32	T	1,2-Dichloroethane	1.518	1.371	9.7	69	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	82	0.00
34	T	Heptane	0.541	0.596	-10.2	76	0.00
35	T	Trichloroethene	0.377	0.382	-1.3	75	0.00
36	T	1,2-Dichloropropane	0.374	0.347	7.2	68	0.00
37	T	1,4-Dioxane	0.171	0.154	9.9	66	0.00
38	T	Bromodichloromethane	0.581	0.570	1.9	73	0.00
39	T	cis-1,3-Dichloropropene	0.503	0.439	12.7	65	0.00
40	T	4-Methyl-2-pentanone	0.296	0.275	7.1	67	0.00
41	T	Toluene	0.980	1.015	-3.6	76	0.00
42	T	trans-1,3-Dichloropropene	0.456	0.456	0.0	74	0.00
43	T	1,1,2-Trichloroethane	0.341	0.313	8.2	68	0.00
44	T	Tetrachloroethene	0.454	0.458	-0.9	75	0.00
45	T	2-Hexanone	0.536	0.533	0.6	67	0.00
46	T	Chlorodibromomethane	0.531	0.506	4.7	69	0.00
47	T	1,2-Dibromoethane	0.494	0.465	5.9	69	0.00
48	I	Chlorobenzene-d5	1.000	1.000	0.0	84	0.00
49	T	Chlorobenzene	0.842	0.803	4.6	70	0.00
50	T	Ethylbenzene	1.405	1.362	3.1	71	0.00
51	T	m,p-Xylene	1.026	1.075	-4.8	73	0.00
52	T	o-Xylene	1.092	1.075	1.6	71	0.00
53	T	Styrene	0.794	0.798	-0.5	72	0.00
54	T	Bromoform	0.544	0.514	5.5	70	0.00
55	S	4-Bromofluorobenzene	0.618	0.612	1.0	83	0.00

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA\100312\10031203.D Vial: 3
Acq On : 3 Oct 2012 11:40 am Operator: RACHEL HILL
Sample : CCV VOA1 100312 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	1,1,2,2-Tetrachloroethane	0.758	0.705	7.0	68	0.00
57	T	4-Ethyltoluene	1.348	1.289	4.4	70	0.00
58	T	1,3,5-Trimethylbenzene	1.144	1.099	3.9	70	0.00
59	T	1,2,4-Trimethylbenzene	1.063	1.023	3.8	70	0.00
60	T	1,3-Dichlorobenzene	0.576	0.553	4.0	73	0.00
61	T	1,4-Dichlorobenzene	0.544	0.523	3.9	72	0.00
62	T	Benzyl chloride	0.715	0.663	7.3	68	0.00
63	T	1,2-Dichlorobenzene	0.490	0.459	6.3	71	0.00
64	T	1,2,4-Trichlorobenzene	0.127	0.110	13.4	69	0.00
65	T	Hexachlorobutadiene	0.244	0.199	18.4	65	0.00
66		Naphthalene	0.245	0.200	18.4	65	0.00

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100312\10031203.D Vial: 3
Acq On : 3 Oct 2012 11:40 am Operator: RACHEL HILL
Sample : CCV VOA1 100312 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 3 12:05 2012 Quant Results File: 092412V1.RES

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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	10.52	130	259093	12.50	ppbv	0.00
33) 1,4-Difluorobenzene	11.62	114	974726	12.50	ppbv	0.00
48) Chlorobenzene-d5	15.46	117	817038	12.50	ppbv	0.00
System Monitoring Compounds						
55) 4-Bromofluorobenzene	17.11	95	500171	12.38	ppbv	0.00
Spiked Amount 12.500	Range 70 - 113		Recovery = 99.04%			
Target Compounds						Qvalue
2) Propylene	5.44	41	238972	9.57	ppbv	99
3) Dichlorodifluoromethane	5.51	85	641205	8.79	ppbv	99
4) 1,2-Dichloro-1,2,2,2-tetra	5.77	135	409940	8.93	ppbv #	62
5) Chloromethane	5.93	50	285514	9.50	ppbv	99
6) Vinyl chloride	6.13	62	249618	8.38	ppbv	95
7) 1,3-Butadiene	6.19	39	136580	7.13	ppbv #	58
8) Bromomethane	6.77	94	242428	8.61	ppbv	99
9) Chloroethane	6.92	64	153916	8.45	ppbv	97
10) Trichlorofluoromethane	7.26	101	596772	8.93	ppbv	98
11) Ethanol	7.49	45	64712	7.59	ppbv	99
12) Freon113	7.92	101	441616	9.48	ppbv #	84
13) 1,1-Dichloroethene	8.02	61	444398	9.95	ppbv #	85
14) Acetone	8.11	43	333235	8.75	ppbv #	92
15) Carbon disulfide	8.39	76	679271	10.45	ppbv #	99
16) 2-Propanol	8.16	45	377273	9.53	ppbv #	1
17) Methylene chloride	8.68	49	309862	9.40	ppbv #	80
18) tert-Butyl Methyl Ether	8.88	73	450309	7.90	ppbv #	89
19) trans-1,2-Dichloroethene	8.97	61	383712	9.55	ppbv #	80
20) n-Hexane	9.15	57	463341	9.76	ppbv #	87
21) 1,1-Dichloroethane	9.53	63	421961	8.49	ppbv #	95
22) Vinyl acetate	9.46	43	506815	8.42	ppbv	97
23) cis-1,2-Dichloroethene	10.21	96	220078	8.89	ppbv #	77
24) 2-Butanone	10.17	43	363906	9.05	ppbv	92
25) Ethyl acetate	10.13	43	460785	8.83	ppbv #	100
26) Tetrahydrofuran	10.51	42	228861	9.42	ppbv	95
27) Chloroform	10.53	83	414847	9.33	ppbv	100
28) 1,1,1-Trichloroethane	10.78	97	405876	8.94	ppbv #	92
29) Cyclohexane	10.79	56	460298	9.95	ppbv #	79
30) Carbon tetrachloride	10.94	117	407081	8.61	ppbv	98
31) Benzene	11.23	78	579662	8.43	ppbv	93
32) 1,2-Dichloroethane	11.30	62	275735	8.76	ppbv #	96
34) Heptane	11.27	43	460256	10.90	ppbv #	89
35) Trichloroethene	11.96	130	285803	9.71	ppbv	93
36) 1,2-Dichloropropane	12.31	63	265263	9.09	ppbv #	93
37) 1,4-Dioxane	12.39	88	115612	8.67	ppbv #	81
38) Bromodichloromethane	12.60	83	426652	9.42	ppbv	98
39) cis-1,3-Dichloropropene	13.15	75	325493	8.30	ppbv	97
40) 4-Methyl-2-pentanone	13.26	58	214310	9.27	ppbv #	88
41) Toluene	13.55	91	775940	10.16	ppbv	97
42) trans-1,3-Dichloropropene	13.86	75	323271	9.08	ppbv	97
43) 1,1,2-Trichloroethane	14.13	97	238981	8.99	ppbv	96
44) Tetrachloroethene	14.25	166	342486	9.67	ppbv	97
45) 2-Hexanone	14.34	43	407410	9.74	ppbv	90
46) Chlorodibromomethane	14.68	129	386441	9.33	ppbv	98
47) 1,2-Dibromoethane	14.91	107	348201	9.04	ppbv	100
49) Chlorobenzene	15.51	112	519531	9.45	ppbv #	90
50) Ethylbenzene	15.55	91	872464	9.50	ppbv	93
51) m,p-Xylene	15.70	91	1348912	20.11	ppbv	92
52) o-Xylene	16.29	91	702738	9.84	ppbv #	88

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100312\10031203.D Vial: 3
Acq On : 3 Oct 2012 11:40 am Operator: RACHEL HILL
Sample : CCV VOA1 100312 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 3 12:05 2012 Quant Results File: 092412V1.RES

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

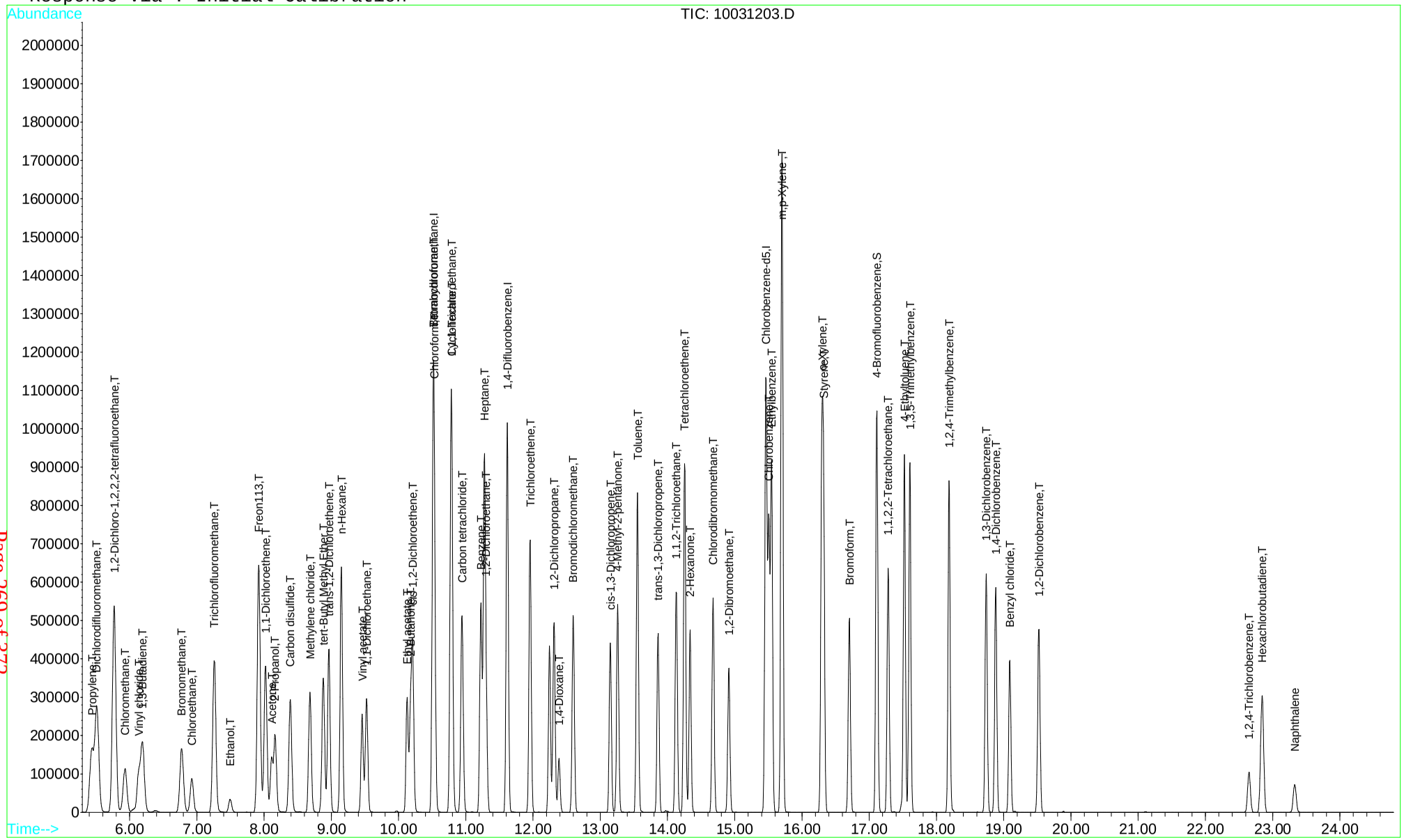
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.32	104	511084	9.84	ppbv		97
54)	Bromoform	16.71	173	322230	9.07	ppbv	#	97
56)	1,1,2,2-Tetrachloroethane	17.28	83	460942	9.30	ppbv	#	99
57)	4-Ethyltoluene	17.52	105	825602	9.37	ppbv		95
58)	1,3,5-Trimethylbenzene	17.61	105	696551	9.32	ppbv		95
59)	1,2,4-Trimethylbenzene	18.19	105	655442	9.43	ppbv		96
60)	1,3-Dichlorobenzene	18.74	146	350657	9.32	ppbv		95
61)	1,4-Dichlorobenzene	18.88	146	328021	9.22	ppbv		95
62)	Benzyl chloride	19.09	91	420490	8.99	ppbv		96
63)	1,2-Dichlorobenzene	19.53	146	290892	9.08	ppbv		95
64)	1,2,4-Trichlorobenzene	22.65	180	65573	7.87	ppbv		96
65)	Hexachlorobutadiene	22.84	225	122567	7.67	ppbv		98
66)	Naphthalene	23.33	128	120020	7.50	ppbv		99

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\100312\10031203.D Vial: 3
Acq On : 3 Oct 2012 11:40 am Operator: RACHEL HILL
Sample : CCV VOA1 100312 Inst : VOA 1
Misc : CCV EPA_TO15 Multiplr: 1.00
MS Integration Params: CLME.P
Quant Time: Oct 3 12:05 2012 Quant Results File: 092412V1.RES

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



Response Factor Report VOA 1

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

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

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

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

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

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

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

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

Compound List Report VOA 1

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

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

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

Evaluate Continuing Calibration Report

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

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

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

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

(#) = Out of Range

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

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

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

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

Quantitation Report (QT Reviewed)

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

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

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

System Monitoring Compounds

55) 4-Bromofluorobenzene	17.12	95	663187	12.46	ppbv	0.00

Spiked Amount 12.500 Range 70 - 113 Recovery = 99.68%

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

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

Quantitation Report (QT Reviewed)

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

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

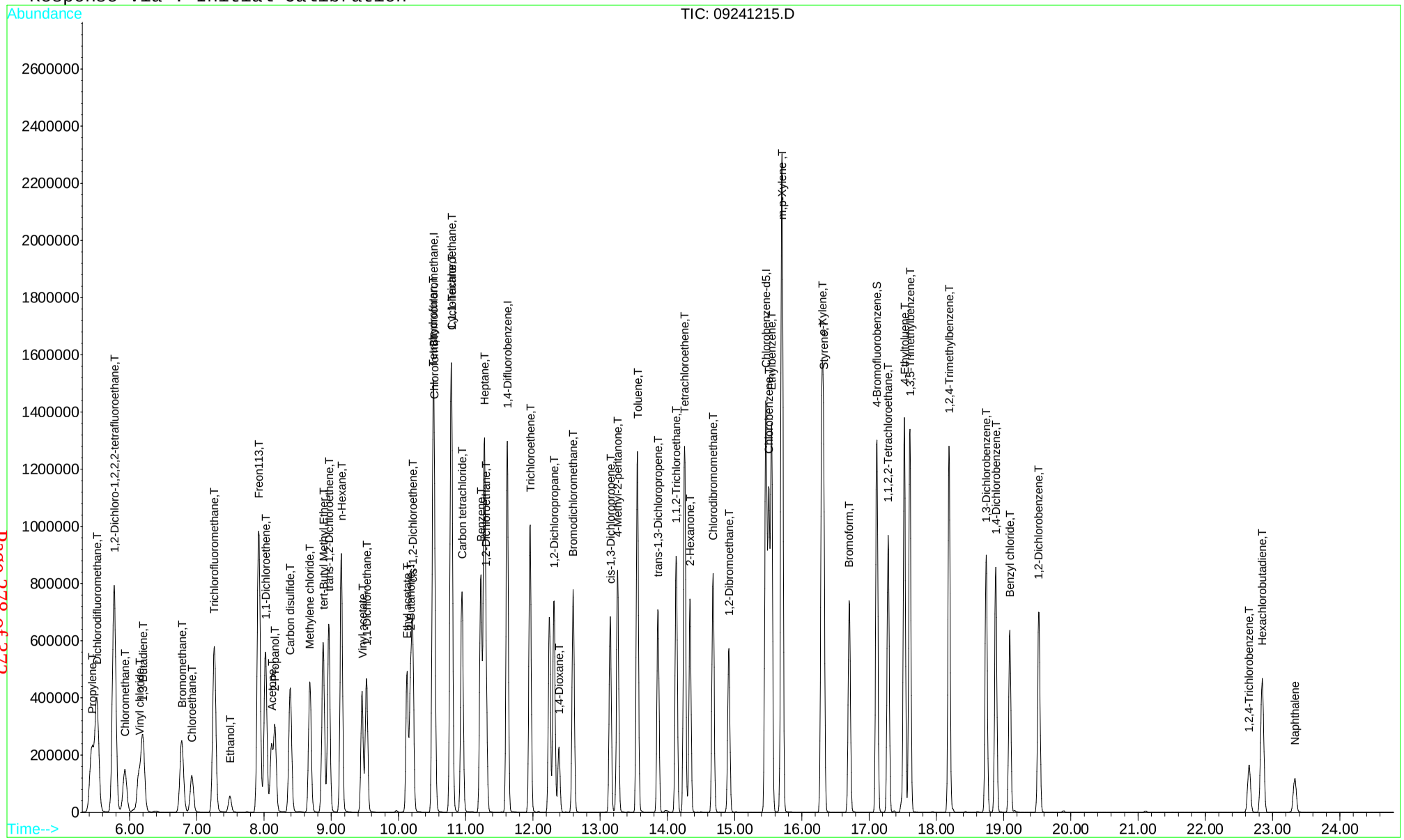
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
53)	Styrene	16.33	104	765783	11.20	ppbv		97
54)	Bromoform	16.70	173	499550	10.68	ppbv	#	97
56)	1,1,2,2-Tetrachloroethane	17.28	83	715806	10.97	ppbv	#	99
57)	4-Ethyltoluene	17.52	105	1261496	10.87	ppbv		96
58)	1,3,5-Trimethylbenzene	17.61	105	1042107	10.59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

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

Quantitation Report

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

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



RTI Laboratories

Run ID: **VOA9_120925A** **Run No.:** 52334

Analytical Run Date: 9/25/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 52087 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 9/28/12/PR AW 9.26.12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 092512	BFB_TUNE	TUNE	R52334	9/25/2012 10:50:00 AM	Celeste Hoitash		
CCV VOA9 092512	MA_APH	CCV	R52334	9/25/2012 12:06:00 PM	Celeste Hoitash		
RLVS VOA9 092512	MA_APH	RLVS	R52334	9/25/2012 12:49:00 PM	Celeste Hoitash		
MBLK VOA9 092512	MA_APH	MBLK	R52334	9/25/2012 1:37:00 PM	Celeste Hoitash		
~~1209527-006A~~	MA_APH	SAMP	R52334	9/25/2012 2:21:00 PM	Celeste Hoitash		
1209801-001A	MA_APH	SAMP	R52334	9/25/2012 11:41:00 PM	Celeste Hoitash		
1209801-002A	MA_APH	SAMP	R52334	9/26/2012 12:25:00 AM	Celeste Hoitash		
1209801-002ADUP	MA_APH	DUP	R52334	9/26/2012 1:08:00 AM	Celeste Hoitash		
1209801-004A	MA_APH	SAMP	R52334	9/26/2012 2:35:00 AM	Celeste Hoitash		
1209801-005A	MA_APH	SAMP	R52334	9/26/2012 3:19:00 AM	Celeste Hoitash		
1209801-006A	MA_APH	SAMP	R52334	9/26/2012 4:04:00 AM	Celeste Hoitash		
1209801-007A	MA_APH	SAMP	R52334	9/26/2012 4:49:00 AM	Celeste Hoitash		
1209801-008A	MA_APH	SAMP	R52334	9/26/2012 5:38:00 AM	Celeste Hoitash		
1209801-009A	MA_APH	SAMP	R52334	9/26/2012 6:27:00 AM	Celeste Hoitash		
RLVS2 VOA9 09251	MA_APH	RLVS	R52334	9/26/2012 9:59:00 AM	Celeste Hoitash		

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ANALYTICAL RUN Summary

15-Oct-12

RunNo 52334

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1025975	BFB VOA9 092512	BFB_TUNE	TUNE	.\1\DATA\092512\	9/25/2012 10:50:	1	R52334		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		88.4	88.4		100	0	0	0	0	0	88%	50	120	0%	
175	M		7.7	7.7		100	0	0	0	0	0	8%	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		15.8	15.8		100	0	0	0	0	0	16%	8	40	0%	
75	M		35.8	35.8		100	0	0	0	0	0	36%	30	66	0%	
95	M		100	100		100	0	0	0	0	0	100%	100	100	0%	
96	M		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1025999	CCV VOA9 092512	MA_APH	CCV	.\1\DATA\092512\	9/25/2012 12:06:	1	R52334		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	224.88	224.88		234	0	0	0	0	0	96%	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	277.24	277.24		266	0	0	0	0	0	104%	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	389.06	389.06		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	85.77	85.77		89.5	0	0	0	0	0	96%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\092512\09251202.D Vial: 2
Acq On : 25 Sep 2012 12:06 pm Operator: RACHEL HILL
Sample : CCV VOA9 092512 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	C5-C8 Aliphatic HC	29.200	27.879	4.5	81	0.00
2	L1	C5-C8 Aliphatic HC {2}	36.400	35.118	3.5	80	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	40.911	2.1	82	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	33.389	5.7	79	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	40.525	4.0	80	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	47.105	3.9	80	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	224.883	3.9	80	0.00
8	L1	C9-C12 Aliphatic HC	54.600	55.857	-2.3	84	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	53.442	2.1	84	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	61.488	-0.5	85	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	64.121	-5.5	89	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	77.454	-10.6	92	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	77.848	-1.1	85	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	389.055	-2.9	86	0.00
15	L1	C9-C10 Aromatic HC	51.700	53.884	-4.2	87	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	52.292	-2.1	86	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	53.476	-2.4	85	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	61.812	-5.3	90	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	56.569	-7.5	92	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	60.754	-3.5	87	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	277.241	-4.2	88	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.08#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.28#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.16#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.93#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.70#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.15#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.28#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.28#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.49#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.38#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.49#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.66#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.31#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.21#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.66#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.85#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.20#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.20#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	115	0.00
41	S	4-Bromofluorobenzene	89.500	85.773	4.2	111	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092512\09251202.D Vial: 2
Acq On : 25 Sep 2012 12:06 pm Operator: RACHEL HILL
Sample : CCV VOA9 092512 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 25 12:37 2012 Quant Results File: 091812V9.RES

Quant Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Initial Calibration
DataAcq Meth : 091812V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.38	117	1207964	12.50	ug/m3	0.00

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.21	95	892291	85.77	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 95.83%

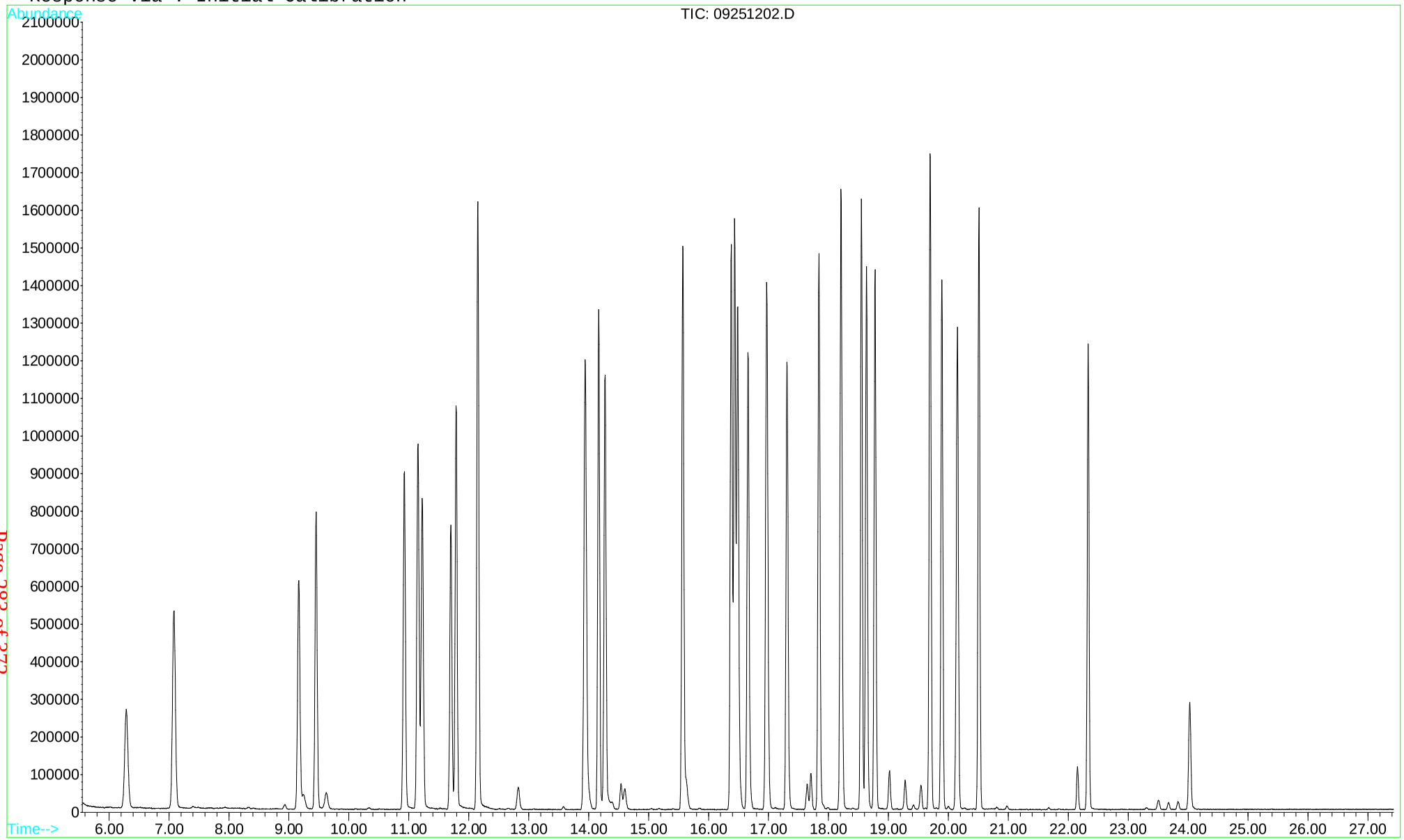
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.09	TIC	1818489	27.88	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.45	TIC	2023673	35.12	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.16	TIC	2612417	40.91	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.22	TIC	2124882	33.39	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.79	TIC	2516417	40.53	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.17	TIC	2931726	47.11	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.09	TIC	14027604m	224.88	ug/m3	
8) C9-C12 Aliphatic HC	15.57	TIC	3769379	55.86	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.43	TIC	3540282	53.44	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.55	TIC	3477711	61.49	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.69	TIC	4000940	64.12	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.51	TIC	3413710	77.45	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.33	TIC	2629762	77.85	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.57	TIC	20831784m	389.06	ug/m3	
15) C9-C10 Aromatic HC	17.84	120	334024	53.88	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.64	120	342924	52.29	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.78	120	507458	53.48	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.89	120	113771	61.81	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.15	120	401931	56.57	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.89	134	236871	60.75	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.84	TIC	1936979m	277.24	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\092512\09251202.D Vial: 2
Acq On : 25 Sep 2012 12:06 pm Operator: RACHEL HILL
Sample : CCV VOA9 092512 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 25 12:37 2012 Quant Results File: 091812V9.RES

Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA9_120926A **Run No.:** 52384

Analytical Run Date: 9/26/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 52087 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 9/28/12/PR AW 9.27.12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 092612	BFB_TUNE	TUNE	R52384	9/26/2012 10:47:00 AM	Celeste Hoitash		
CCV VOA9 092612	MA_APH	CCV	R52384	9/26/2012 11:57:00 AM	Celeste Hoitash		
RLVS VOA9 092612	MA_APH	RLVS	R52384	9/26/2012 12:40:00 PM	Celeste Hoitash		
MBLK VOA9 092612	MA_APH	MBLK	R52384	9/26/2012 1:29:00 PM	Celeste Hoitash		
1209801-003A	MA_APH	SAMP	R52384	9/26/2012 2:12:00 PM	Celeste Hoitash		
1209801-003Adup	MA_APH	DUP	R52384	9/26/2012 2:55:00 PM	Celeste Hoitash		
1209801-010A	MA_APH	SAMP	R52384	9/26/2012 3:38:00 PM	Celeste Hoitash		
1209801-011A	MA_APH	SAMP	R52384	9/26/2012 5:08:00 PM	Celeste Hoitash		
1209801-012A	MA_APH	SAMP	R52384	9/27/2012 12:30:00 AM	Celeste Hoitash		
1209801-013A	MA_APH	SAMP	R52384	9/27/2012 1:19:00 AM	Celeste Hoitash		
1209801-014A	MA_APH	SAMP	R52384	9/27/2012 2:08:00 AM	Celeste Hoitash		
RLVS2 VOA9 09261	MA_APH	RLVS	R52384	9/27/2012 4:29:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

15-Oct-12

RunNo 52384

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1026962	BFB VOA9 092612	BFB_TUNE	TUNE	.\1\DATA\092612\	9/26/2012 10:47:	1	R52384		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		89.3	89.3		100	0	0	0	0	0	89%	50	120	0%	
175	M		7.6	7.6		100	0	0	0	0	0	8%	4	9	0%	
176	M		99.3	99.3		100	0	0	0	0	0	99%	93	101	0%	
177	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	
50	M		16	16		100	0	0	0	0	0	16%	8	40	0%	
75	M		36	36		100	0	0	0	0	0	36%	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
1026963	CCV VOA9 092612	MA_APH	CCV	.\1\DATA\092612\	9/26/2012 11:57:	1	R52384		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	250.78	250.78		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	267.88	267.88		266	0	0	0	0	0	101%	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	414.15	414.15		378	0	0	0	0	0	110%	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	85.15	85.15		89.5	0	0	0	0	0	95%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\092612\09261202.D Vial: 2
Acq On : 26 Sep 2012 11:57 am Operator: RACHEL HILL
Sample : CCV VOA9 092612 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	C5-C8 Aliphatic HC	29.200	31.522	-8.0	91	0.00
2	L1	C5-C8 Aliphatic HC {2}	36.400	39.333	-8.1	89	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	45.143	-8.0	90	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	37.309	-5.4	88	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	45.106	-6.9	89	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	52.416	-7.0	89	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	250.777	-7.2	89	0.00
8	L1	C9-C12 Aliphatic HC	54.600	59.116	-8.3	89	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	60.168	-10.2	95	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	64.464	-5.3	89	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	64.989	-6.9	90	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	81.823	-16.9	97	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	85.639	-11.2	94	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	414.152	-9.6	92	0.00
15	L1	C9-C10 Aromatic HC	51.700	52.844	-2.2	85	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	51.416	-0.4	85	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	52.536	-0.6	83	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	60.154	-2.5	87	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	52.228	0.7	85	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	58.082	1.1	83	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	267.877	-0.7	85	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.08#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.28#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.16#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.93#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.70#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.15#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.28#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.28#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.49#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.38#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.49#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.66#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.31#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.21#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.66#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.85#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.20#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.20#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	96	0.00
41	S	4-Bromofluorobenzene	89.500	85.154	4.9	92	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092612\09261202.D Vial: 2
Acq On : 26 Sep 2012 11:57 am Operator: RACHEL HILL
Sample : CCV VOA9 092612 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 26 14:25 2012 Quant Results File: 091812V9.RES

Quant Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Initial Calibration
DataAcq Meth : 091812V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.38	117	1005727	12.50	ug/m3	0.00

System Monitoring Compounds
41) 4-Bromofluorobenzene 18.21 95 737541 85.15 ug/m3 0.00
Spiked Amount 89.500 Range 70 - 130 Recovery = 95.14%

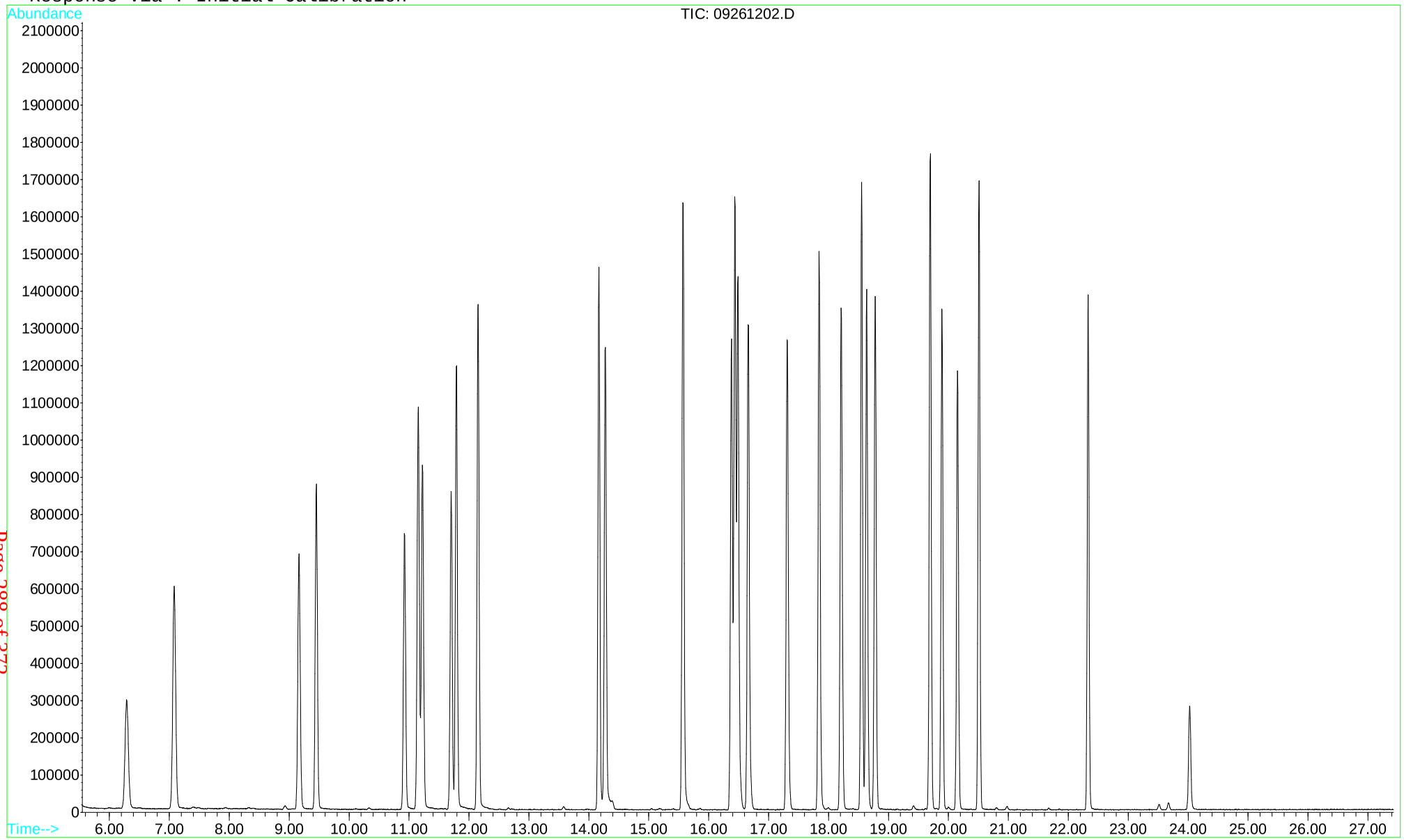
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.08	TIC	2056147	31.52	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.45	TIC	2266519	39.33	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.16	TIC	2882676	45.14	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.22	TIC	2374332	37.31	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.79	TIC	2800844	45.11	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.17	TIC	3262269	52.42	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.08	TIC	15642787m	250.78	ug/m3	
8) C9-C12 Aliphatic HC	15.57	TIC	3989318	59.12	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.44	TIC	3985872	60.17	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.55	TIC	3646040	64.46	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.70	TIC	4055104	64.99	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.51	TIC	3606295	81.82	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.33	TIC	2892943	85.64	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.57	TIC	22175572m	414.15	ug/m3	
15) C9-C10 Aromatic HC	17.84	120	327578	52.84	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.64	120	337179	51.42	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.78	120	498538	52.54	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.89	120	110718	60.15	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.15	120	371088	52.23	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.89	134	226453	58.08	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.84	TIC	1871554m	267.88	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\092612\09261202.D Vial: 2
Acq On : 26 Sep 2012 11:57 am Operator: RACHEL HILL
Sample : CCV VOA9 092612 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 26 14:25 2012 Quant Results File: 091812V9.RES

Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA9_120927A **Run No.:** 52434

Analytical Run Date: 9/27/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 52087 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 10/8/12/pr rh3 100212

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 092712	BFB_TUNE	TUNE	R52434	9/27/2012 9:38:00 AM	Celeste Hoitash		
CCV VOA9 092712	MA_APH	CCV	R52434	9/27/2012 10:21:00 AM	Celeste Hoitash		
RLVS VOA9 092712	MA_APH	RLVS	R52434	9/27/2012 11:49:00 AM	Celeste Hoitash		
MBLK VOA9 092712	MA_APH	MBLK	R52434	9/27/2012 12:47:00 PM	Celeste Hoitash		
1209801-019A	MA_APH	SAMP	R52434	9/27/2012 2:25:00 PM	Celeste Hoitash		
1209801-017A	MA_APH	SAMP	R52434	9/27/2012 3:13:00 PM	Celeste Hoitash		
1209801-018A	MA_APH	SAMP	R52434	9/27/2012 3:56:00 PM	Celeste Hoitash		
1209801-015A	MA_APH	SAMP	R52434	9/27/2012 4:41:00 PM	Celeste Hoitash		
1209801-016A	MA_APH	SAMP	R52434	9/27/2012 6:13:00 PM	Celeste Hoitash		
1209801-016Adup	MA_APH	DUP	R52434	9/27/2012 6:58:00 PM	Celeste Hoitash		
1209801-021A	MA_APH	SAMP	R52434	9/27/2012 8:37:00 PM	Celeste Hoitash		
1209801-022A	MA_APH	SAMP	R52434	9/27/2012 9:20:00 PM	Celeste Hoitash		
RLVS2 VOA9 09271	MA_APH	RLVS	R52434	9/28/2012 2:47:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

15-Oct-12

RunNo 52434

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1027981	BFB VOA9 092712	BFB_TUNE	TUNE	.\1\DATA\092712	9/27/2012 9:38:	1	R52434		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		89.4	89.4		100	0	0	0	0	0	89%	50	120	0%	
175	M		7.7	7.7		100	0	0	0	0	0	8%	4	9	0%	
176	M		98	98		100	0	0	0	0	0	98%	93	101	0%	
177	M		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	
50	M		15.8	15.8		100	0	0	0	0	0	16%	8	40	0%	
75	M		35.4	35.4		100	0	0	0	0	0	35%	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
1027982	CCV VOA9 092712	MA_APH	CCV	.\1\DATA\092712	9/27/2012 10:21	1	R52434		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	243.93	243.93		234	0	0	0	0	0	104%	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	258.75	258.75		266	0	0	0	0	0	97%	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	384.9	384.9		378	0	0	0	0	0	102%	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	89.86	89.86		89.5	0	0	0	0	0	100%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\092712\09271202.D Vial: 2
Acq On : 27 Sep 2012 10:21 am Operator: RACHEL HILL
Sample : CCV VOA9 092712 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	C5-C8 Aliphatic HC	29.200	31.877	-9.2	92	0.00
2	L1	C5-C8 Aliphatic HC {2}	36.400	37.474	-3.0	85	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	43.345	-3.7	87	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	36.662	-3.6	87	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	43.374	-2.8	85	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	51.142	-4.4	86	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	243.934	-4.2	87	0.00
8	L1	C9-C12 Aliphatic HC	54.600	56.401	-3.3	85	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	57.935	-6.1	91	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	62.323	-1.8	86	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	62.964	-3.6	87	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	68.017	2.8	81	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	74.419	3.4	81	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	384.904	-1.8	86	0.00
15	L1	C9-C10 Aromatic HC	51.700	50.272	2.8	81	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	49.622	3.1	82	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	51.039	2.2	81	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	56.445	3.8	82	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	51.078	2.9	83	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	56.322	4.1	81	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	258.748	2.7	82	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.08#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.28#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.16#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.93#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.70#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.15#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.28#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.28#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.49#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.38#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.49#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.66#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.31#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.21#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.66#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.85#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.20#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.20#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	91	0.00
41	S	4-Bromofluorobenzene	89.500	89.861	-0.4	91	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092712\09271202.D Vial: 2
Acq On : 27 Sep 2012 10:21 am Operator: RACHEL HILL
Sample : CCV VOA9 092712 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 27 13:26 2012 Quant Results File: 091812V9.RES

Quant Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Initial Calibration
DataAcq Meth : 091812V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.38	117	948660	12.50	ug/m3	0.00

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.21	95	734141	89.86	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 100.40%

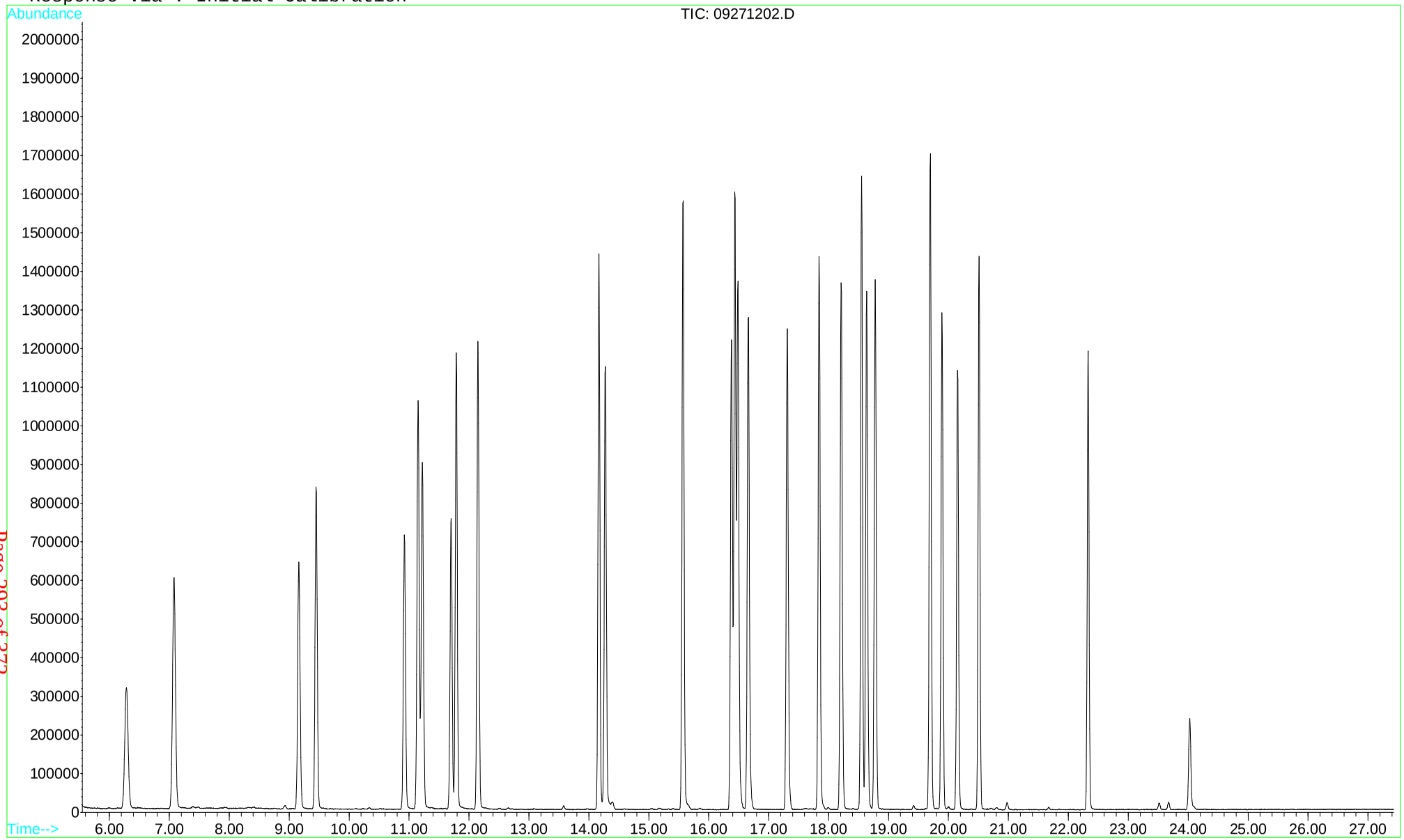
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.08	TIC	2079274	31.88	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.45	TIC	2159430	37.47	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.15	TIC	2767843	43.34	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.22	TIC	2333142	36.66	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.79	TIC	2693291	43.37	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.17	TIC	3182977	51.14	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.08	TIC	15215957m	243.93	ug/m3	
8) C9-C12 Aliphatic HC	15.57	TIC	3806086	56.40	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.43	TIC	3837945	57.94	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.55	TIC	3524939	62.32	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.70	TIC	3928758	62.96	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.51	TIC	2997796	68.02	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.33	TIC	2513950	74.42	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.57	TIC	20609474m	384.90	ug/m3	
15) C9-C10 Aromatic HC	17.84	120	311634	50.27	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.64	120	325416	49.62	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.78	120	484330	51.04	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.89	120	103891	56.44	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.16	120	362915	51.08	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.89	134	219592	56.32	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.84	TIC	1807778m	258.75	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\092712\09271202.D Vial: 2
Acq On : 27 Sep 2012 10:21 am Operator: RACHEL HILL
Sample : CCV VOA9 092712 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 27 13:26 2012 Quant Results File: 091812V9.RES

Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA9_120928A **Run No.:** 52495

Analytical Run Date: 9/28/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 52087 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 10/4/12/pr rh3 100212

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 092812	BFB_TUNE	TUNE	R52495	9/28/2012 9:53:00 AM	Celeste Hoitash		
CCV VOA9 092812	MA_APH	CCV	R52495	9/28/2012 10:36:00 AM	Celeste Hoitash		
RLVS VOA9 092812	MA_APH	RLVS	R52495	9/28/2012 11:19:00 AM	Celeste Hoitash		
MBLK VOA9 092812	MA_APH	MBLK	R52495	9/28/2012 12:08:00 PM	Celeste Hoitash		
1209801-020A	MA_APH	SAMP	R52495	9/28/2012 12:56:00 PM	Celeste Hoitash		
1209801-024A	MA_APH	SAMP	R52495	9/28/2012 2:24:00 PM	Celeste Hoitash		
1209801-025A	MA_APH	SAMP	R52495	9/28/2012 3:07:00 PM	Celeste Hoitash		
1209801-027A	MA_APH	SAMP	R52495	9/28/2012 3:50:00 PM	Celeste Hoitash		
1209801-028A	MA_APH	SAMP	R52495	9/28/2012 4:33:00 PM	Celeste Hoitash		
1209801-023A	MA_APH	SAMP	R52495	9/28/2012 5:15:00 PM	Celeste Hoitash		
1209801-026A	MA_APH	SAMP	R52495	9/29/2012 1:31:00 AM	Celeste Hoitash		
1209801-026ADUP	MA_APH	DUP	R52495	9/29/2012 2:15:00 AM	Celeste Hoitash		
1209801-032A	MA_APH	SAMP	R52495	9/29/2012 4:41:00 AM	Celeste Hoitash		
RLVS2 VOA9 09281	MA_APH	RLVS	R52495	9/29/2012 7:01:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

15-Oct-12

RunNo 52495

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1029679	BFB VOA9 092812	BFB_TUNE	TUNE	.\1\DATA\092812\	9/28/2012 9:53:0	1	R52495		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
173	M		0	0		100	0	0	0	0	0	0%	0	2	0%	
174	M		90.4	90.4		100	0	0	0	0	0	90%	50	120	0%	
175	M		7.7	7.7		100	0	0	0	0	0	8%	4	9	0%	
176	M		99.4	99.4		100	0	0	0	0	0	99%	93	101	0%	
177	M		6.7	6.7		100	0	0	0	0	0	7%	5	9	0%	
50	M		15.8	15.8		100	0	0	0	0	0	16%	8	40	0%	
75	M		36.2	36.2		100	0	0	0	0	0	36%	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
1029680	CCV VOA9 092812	MA_APH	CCV	.\1\DATA\092812\	9/28/2012 10:36:	1	R52495		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	229.39	229.39		234	0	0	0	0	0	98%	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	239.22	239.22		266	0	0	0	0	0	90%	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	351.63	351.63		378	0	0	0	0	0	93%	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	89.34	89.34		89.5	0	0	0	0	0	100%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\092812\09281202.D Vial: 2
Acq On : 28 Sep 2012 10:36 am Operator: RACHEL HILL
Sample : CCV VOA9 092812 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	C5-C8 Aliphatic HC	29.200	30.427	-4.2	88	0.00
2	L1	C5-C8 Aliphatic HC {2}	36.400	35.363	2.8	80	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	40.927	2.1	82	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	34.077	3.7	80	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	40.693	3.6	80	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	47.833	2.4	81	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	229.385	2.0	82	0.00
8	L1	C9-C12 Aliphatic HC	54.600	53.194	2.6	80	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	50.744	7.1	80	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	57.377	6.2	79	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	57.952	4.7	80	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	62.061	11.3	73	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	67.491	12.3	74	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	351.627	7.0	78	0.00
15	L1	C9-C10 Aromatic HC	51.700	46.783	9.5	76	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	46.079	10.0	76	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	46.899	10.2	74	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	52.750	10.1	77	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	46.654	11.3	76	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	52.717	10.2	76	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	239.220	10.1	76	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.08#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.28#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.16#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.93#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.70#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.15#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.28#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.28#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.49#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.38#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.49#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.66#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.31#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.21#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.66#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.85#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.20#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.20#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	94	0.00
41	S	4-Bromofluorobenzene	89.500	89.343	0.2	95	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\092812\09281202.D Vial: 2
Acq On : 28 Sep 2012 10:36 am Operator: RACHEL HILL
Sample : CCV VOA9 092812 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 28 12:42 2012 Quant Results File: 091812V9.RES

Quant Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Initial Calibration
DataAcq Meth : 091812V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.38	117	987295	12.50	ug/m3	0.00

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.21	95	759637	89.34	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 99.82%

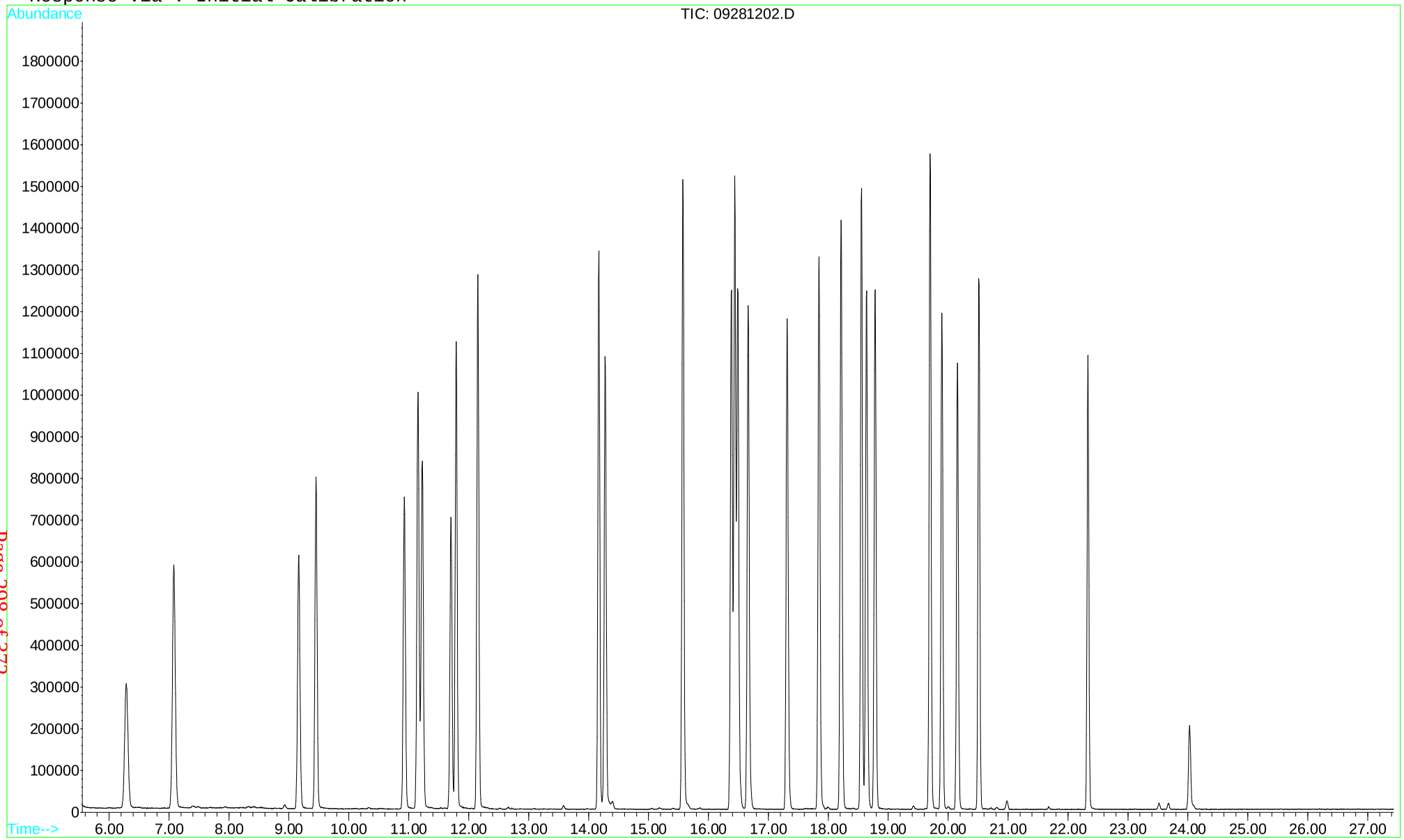
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.08	TIC	1984710	30.43	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.45	TIC	2037765	35.36	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.15	TIC	2613458	40.93	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.23	TIC	2168636	34.08	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.79	TIC	2526844	40.69	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.17	TIC	2977011	47.83	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.08	TIC	14308424m	229.39	ug/m3	
8) C9-C12 Aliphatic HC	15.57	TIC	3589723	53.19	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.44	TIC	3361573	50.74	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.56	TIC	3245201	57.38	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.70	TIC	3616027	57.95	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.51	TIC	2735274	62.06	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.33	TIC	2279919	67.49	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.57	TIC	18827717m	351.63	ug/m3	
15) C9-C10 Aromatic HC	17.85	120	290004	46.78	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.63	120	302181	46.08	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.78	120	445049	46.90	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.90	120	97090	52.75	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.16	120	331483	46.65	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.90	134	205537	52.72	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.85	TIC	1671344m	239.22	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\092812\09281202.D Vial: 2
Acq On : 28 Sep 2012 10:36 am Operator: RACHEL HILL
Sample : CCV VOA9 092812 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 28 12:42 2012 Quant Results File: 091812V9.RES

Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: **VOA9_121002A** **Run No.:** 52572

Analytical Run Date: 10/2/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 52087 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

Run Comments: ch rev 10/8/12/pr rh3 100312

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 100212	BFB_TUNE	TUNE	R52572	10/2/2012 10:31:00 AM	Celeste Hoitash		
CCV VOA9 100212	MA_APH	CCV	R52572	10/2/2012 11:20:00 AM	Celeste Hoitash		
RLVS VOA9 100212	MA_APH	RLVS	R52572	10/2/2012 12:03:00 PM	Celeste Hoitash		
MBLK VOA9 100212	MA_APH	MBLK	R52572	10/2/2012 4:18:00 PM	Celeste Hoitash		
1209801-029A	MA_APH	SAMP	R52572	10/2/2012 5:03:00 PM	Celeste Hoitash		
1209801-030A	MA_APH	SAMP	R52572	10/2/2012 5:48:00 PM	Celeste Hoitash		
1209801-031A	MA_APH	SAMP	R52572	10/2/2012 6:35:00 PM	Celeste Hoitash		
1209801-035A	MA_APH	SAMP	R52572	10/2/2012 8:53:00 PM	Celeste Hoitash		
1209801-035Adup	MA_APH	DUP	R52572	10/2/2012 9:40:00 PM	Celeste Hoitash		
1209801-036A	MA_APH	SAMP	R52572	10/2/2012 10:28:00 PM	Celeste Hoitash		
1209801-037A	MA_APH	SAMP	R52572	10/2/2012 11:13:00 PM	Celeste Hoitash		
1209801-038A	MA_APH	SAMP	R52572	10/3/2012	Celeste Hoitash		
1209801-044A	MA_APH	SAMP	R52572	10/3/2012 4:07:00 AM	Celeste Hoitash		
1209801-045A	MA_APH	SAMP	R52572	10/3/2012 4:53:00 AM	Celeste Hoitash		
1209801-046A	MA_APH	SAMP	R52572	10/3/2012 5:38:00 AM	Celeste Hoitash		
1209801-047A	MA_APH	SAMP	R52572	10/3/2012 6:23:00 AM	Celeste Hoitash		
RLVS2 VOA9 10021	MA_APH	RLVS	R52572	10/3/2012 8:38:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

15-Oct-12

RunNo 52572

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1031450	BFB VOA9 100212	BFB_TUNE	TUNE	.\1\DATA\100212`10/2/2012 10:31		1	R52572		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		89.4	89.4		100	0	0	0	0	0	89%	50	120	0%	
175	M		7.7	7.7		100	0	0	0	0	0	8%	4	9	0%	
176	M		99.1	99.1		100	0	0	0	0	0	99%	93	101	0%	
177	M		6.6	6.6		100	0	0	0	0	0	7%	5	9	0%	
50	M		16.2	16.2		100	0	0	0	0	0	16%	8	40	0%	
75	M		36.2	36.2		100	0	0	0	0	0	36%	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
1031451	CCV VOA9 100212	MA_APH	CCV	.\1\DATA\100212`10/2/2012 11:20		1	R52572		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	254.24	254.24		234	0	0	0	0	0	109%	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	271	271		266	0	0	0	0	0	102%	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	408.39	408.39		378	0	0	0	0	0	108%	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	90.62	90.62		89.5	0	0	0	0	0	101%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\100212\10021202.D Vial: 2
Acq On : 2 Oct 2012 11:20 am Operator: RACHEL HILL
Sample : CCV VOA9 100212 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	C5-C8 Aliphatic HC	29.200	32.498	-11.3	94	-0.01
2	L1	C5-C8 Aliphatic HC {2}	36.400	39.534	-8.6	90	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	44.952	-7.5	90	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	38.051	-7.5	90	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	45.152	-7.0	89	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	54.073	-10.4	91	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	254.242	-8.7	91	-0.01
8	L1	C9-C12 Aliphatic HC	54.600	59.580	-9.1	90	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	57.325	-5.0	90	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	66.283	-8.3	91	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	66.273	-9.0	92	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	77.021	-10.0	91	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	82.009	-6.5	90	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	408.394	-8.0	91	0.00
15	L1	C9-C10 Aromatic HC	51.700	52.227	-1.0	84	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	52.112	-1.8	86	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	53.116	-1.8	84	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	59.918	-2.1	87	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	53.445	-1.6	87	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	59.964	-2.2	86	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	270.996	-1.9	86	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.08#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.28#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.16#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.93#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.70#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.15#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.28#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.28#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.49#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.38#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.49#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.66#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.31#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.21#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.66#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.85#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.20#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.20#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	91	0.00
41	S	4-Bromofluorobenzene	89.500	90.618	-1.2	93	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100212\10021202.D Vial: 2
Acq On : 2 Oct 2012 11:20 am Operator: RACHEL HILL
Sample : CCV VOA9 100212 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 3 8:57 2012 Quant Results File: 091812V9.RES

Quant Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Initial Calibration
DataAcq Meth : 091812V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.38	117	952114	12.50	ug/m3	0.00

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.21	95	743025	90.62	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 101.25%

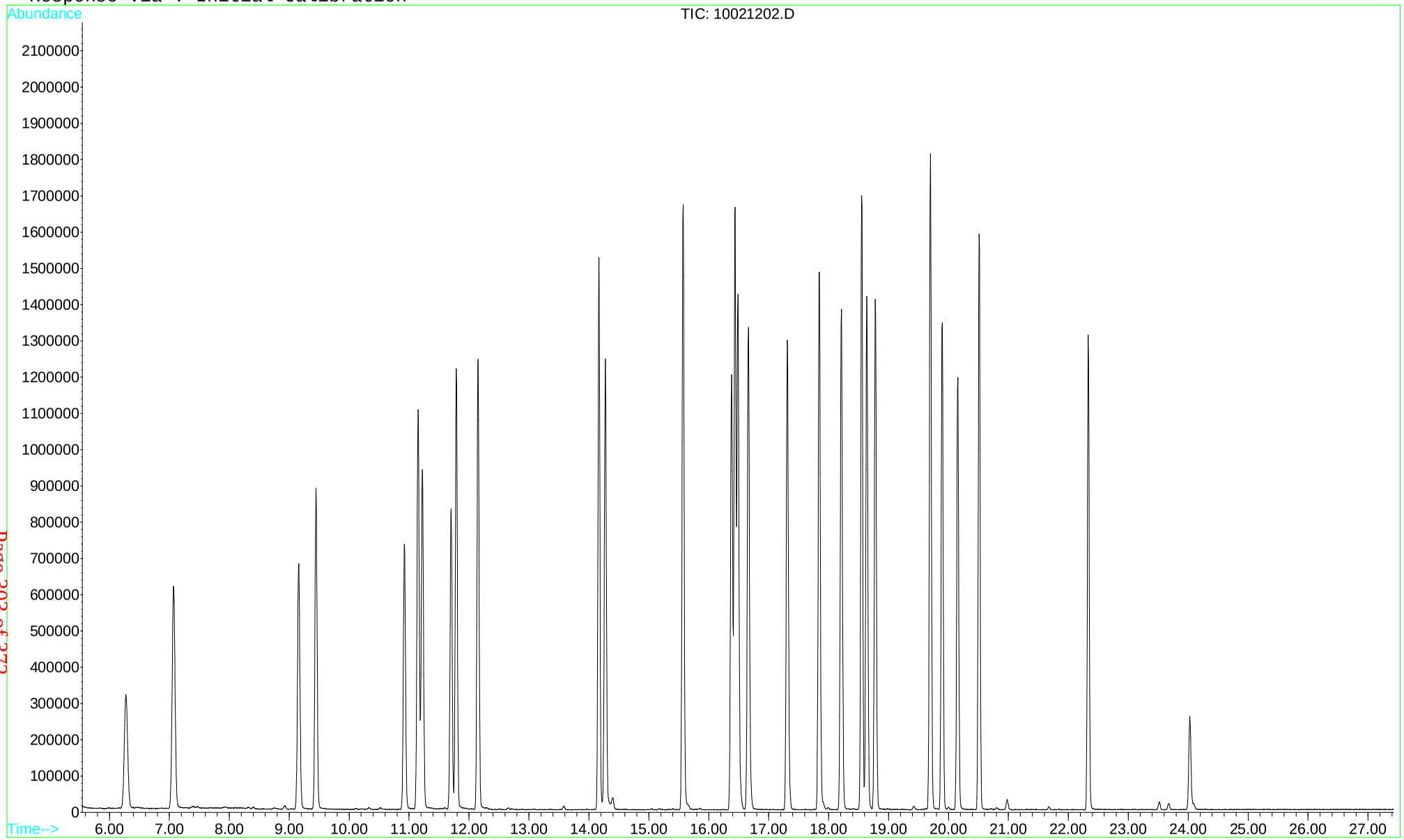
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.07	TIC	2119782	32.50	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.45	TIC	2278100	39.53	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.15	TIC	2870445	44.95	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.22	TIC	2421531	38.05	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.79	TIC	2803718	45.15	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.17	TIC	3365367	54.07	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.07	TIC	15858943m	254.24	ug/m3	
8) C9-C12 Aliphatic HC	15.57	TIC	4020647	59.58	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.44	TIC	3797515	57.32	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.55	TIC	3748913	66.28	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.70	TIC	4135227	66.27	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.51	TIC	3394637	77.02	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.33	TIC	2770333	82.01	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.57	TIC	21867272m	408.39	ug/m3	
15) C9-C10 Aromatic HC	17.85	120	323750	52.23	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.64	120	341743	52.11	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.78	120	504045	53.12	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.89	120	110284	59.92	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.16	120	379731	53.44	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.90	134	233792	59.96	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.84	TIC	1893345m	271.00	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\100212\10021202.D Vial: 2
Acq On : 2 Oct 2012 11:20 am Operator: RACHEL HILL
Sample : CCV VOA9 100212 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 3 8:57 2012 Quant Results File: 091812V9.RES

Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: VOA9_121003A **Run No.:** 52628

Analytical Run Date: 10/3/2012 **InstrumentID:** VOA9

Analyst: Rachel Dear **Column:**

Calibration ID: 52087 **Column ID:** 0.25mm, 1.4umFT

Column Length: 60m

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

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
BFB VOA9 100312	BFB_TUNE	TUNE	R52628	10/3/2012 9:34:00 AM	Celeste Hoitash		
CCV VOA9 100312	MA_APH	CCV	R52628	10/3/2012 10:18:00 AM	Celeste Hoitash		
RLVS VOA9 100312	MA_APH	RLVS	R52628	10/3/2012 11:02:00 AM	Celeste Hoitash		
MBLK VOA9 100312	MA_APH	MBLK	R52628	10/3/2012 11:58:00 AM	Celeste Hoitash		
1209801-033A	MA_APH	SAMP	R52628	10/3/2012 12:42:00 PM	Celeste Hoitash		
1209801-034A	MA_APH	SAMP	R52628	10/3/2012 1:27:00 PM	Celeste Hoitash		
1209801-039A	MA_APH	SAMP	R52628	10/3/2012 2:11:00 PM	Celeste Hoitash		
1209801-039Adup	MA_APH	DUP	R52628	10/3/2012 2:56:00 PM	Celeste Hoitash		
1209801-040A	MA_APH	SAMP	R52628	10/3/2012 3:40:00 PM	Celeste Hoitash		
1209801-041A	MA_APH	SAMP	R52628	10/3/2012 4:26:00 PM	Celeste Hoitash		
1209801-048A	MA_APH	SAMP	R52628	10/3/2012 6:44:00 PM	Celeste Hoitash		
1209801-049A	MA_APH	SAMP	R52628	10/3/2012 7:30:00 PM	Celeste Hoitash		
1209801-050A	MA_APH	SAMP	R52628	10/3/2012 8:16:00 PM	Celeste Hoitash		
1209801-051A	MA_APH	SAMP	R52628	10/4/2012	Celeste Hoitash		
1209801-052A	MA_APH	SAMP	R52628	10/4/2012 12:46:00 AM	Celeste Hoitash		
1209801-057A	MA_APH	SAMP	R52628	10/4/2012 1:32:00 AM	Celeste Hoitash		
1209801-053A	MA_APH	SAMP	R52628	10/4/2012 2:18:00 AM	Celeste Hoitash		
1209801-054A	MA_APH	SAMP	R52628	10/4/2012 3:04:00 AM	Celeste Hoitash		
1209801-042A	MA_APH	SAMP	R52628	10/4/2012 3:48:00 AM	Celeste Hoitash		
1209801-043A	MA_APH	SAMP	R52628	10/4/2012 4:32:00 AM	Celeste Hoitash		
1209801-055A	MA_APH	SAMP	R52628	10/4/2012 5:18:00 AM	Celeste Hoitash		
1209801-056A	MA_APH	SAMP	R52628	10/4/2012 6:02:00 AM	Celeste Hoitash		
RLVS2 VOA9 10031	MA_APH	RLVS	R52628	10/4/2012 8:59:00 AM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

15-Oct-12

RunNo 52628

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1032976	BFB VOA9 100312	BFB_TUNE	TUNE	.\1\DATA\100312\	10/3/2012 9:34:0	1	R52628		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		88.1	88.1		100	0	0	0	0	0	88%	50	120	0%	
175	M		7.7	7.7		100	0	0	0	0	0	8%	4	9	0%	
176	M		99.3	99.3		100	0	0	0	0	0	99%	93	101	0%	
177	M		6.8	6.8		100	0	0	0	0	0	7%	5	9	0%	
50	M		15.3	15.3		100	0	0	0	0	0	15%	8	40	0%	
75	M		36	36		100	0	0	0	0	0	36%	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
1032977	CCV VOA9 100312	MA_APH	CCV	.\1\DATA\100312\	10/3/2012 10:18:	1	R52628		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	212.41	212.41		234	0	0	0	0	0	91%	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	223.91	223.91		266	0	0	0	0	0	84%	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	326.32	326.32		378	0	0	0	0	0	86%	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	90.08	90.08		89.5	0	0	0	0	0	101%	70	130	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\100312\10031202.D Vial: 2
Acq On : 3 Oct 2012 10:18 am Operator: RACHEL HILL
Sample : CCV VOA9 100312 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	C5-C8 Aliphatic HC	29.200	28.612	2.0	83	-0.02
2	L1	C5-C8 Aliphatic HC {2}	36.400	32.180	11.6	73	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	37.554	10.2	75	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	31.562	10.8	75	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	37.849	10.3	75	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	44.538	9.1	75	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	212.409	9.2	76	-0.02
8	L1	C9-C12 Aliphatic HC	54.600	49.008	10.2	74	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	47.178	13.6	74	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	53.431	12.7	74	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	54.577	10.2	76	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	57.806	17.4	68	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	61.123	20.6	67	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	326.318	13.7	73	0.00
15	L1	C9-C10 Aromatic HC	51.700	44.031	14.8	71	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	43.102	15.8	71	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	44.145	15.4	70	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	49.729	15.3	72	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	43.345	17.6	70	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	48.820	16.8	70	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	223.907	15.8	71	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.08#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.28#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.16#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.93#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.70#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.15#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.28#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.28#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.49#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.38#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.49#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.66#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.31#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.21#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.66#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.85#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.20#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.20#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	82	0.00
41	S	4-Bromofluorobenzene	89.500	90.076	-0.6	83	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\100312\10031202.D Vial: 2
Acq On : 3 Oct 2012 10:18 am Operator: RACHEL HILL
Sample : CCV VOA9 100312 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 3 10:58 2012 Quant Results File: 091812V9.RES

Quant Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Initial Calibration
DataAcq Meth : 091812V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.38	117	855901	12.50	ug/m3	0.00

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.21	95	663944	90.08	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 100.65%

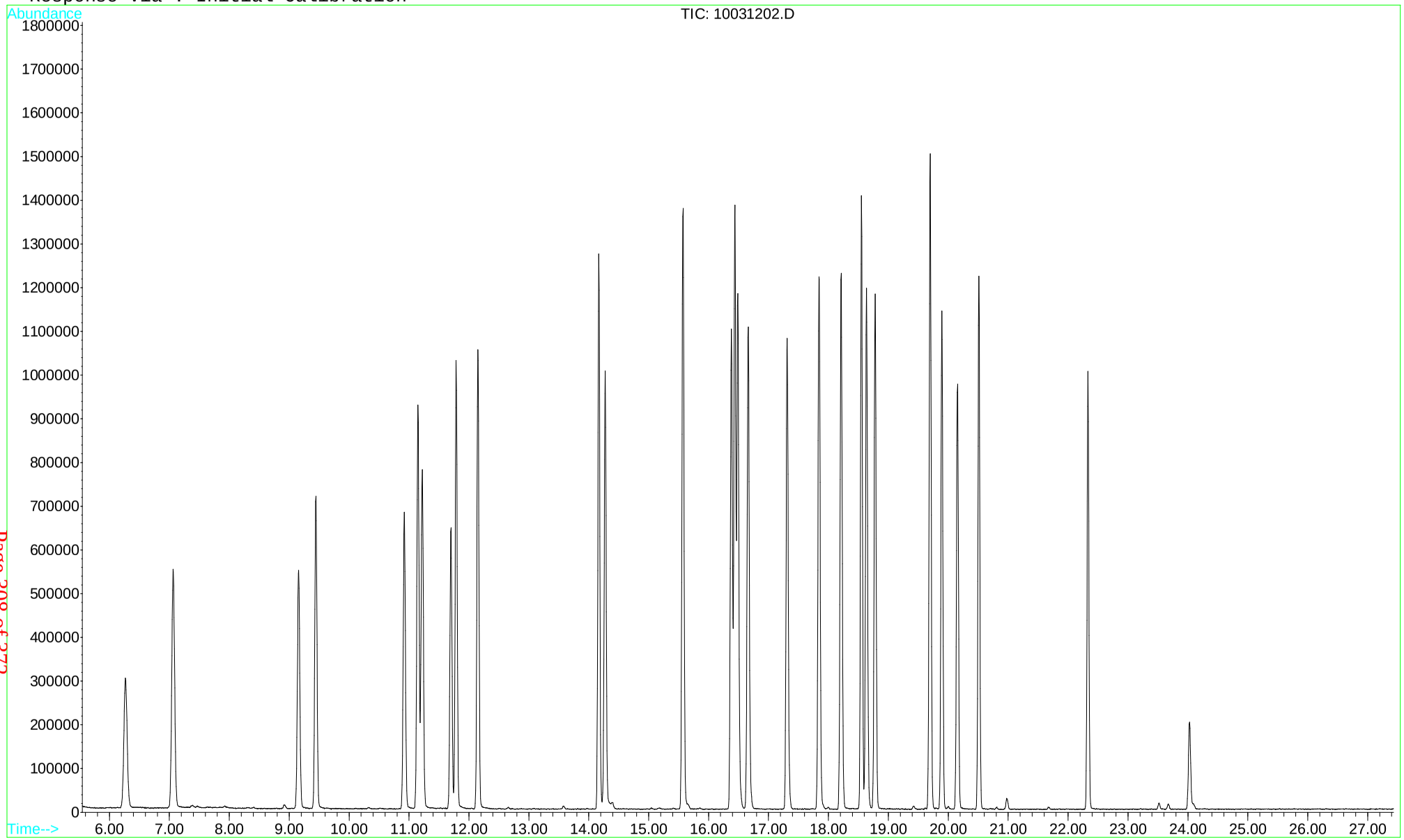
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.06	TIC	1866295	28.61	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.45	TIC	1854336	32.18	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.15	TIC	2398081	37.55	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.22	TIC	2008620	31.56	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.79	TIC	2350232	37.85	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.17	TIC	2771922	44.54	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.06	TIC	13249486m	212.41	ug/m3	
8) C9-C12 Aliphatic HC	15.57	TIC	3307210	49.01	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.44	TIC	3125336	47.18	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.55	TIC	3022050	53.43	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.70	TIC	3405432	54.58	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.51	TIC	2547743	57.81	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.33	TIC	2064789	61.12	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.57	TIC	17472560m	326.32	ug/m3	
15) C9-C10 Aromatic HC	17.84	120	272943	44.03	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.63	120	282655	43.10	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.78	120	418911	44.14	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.89	120	91530	49.73	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.16	120	307970	43.34	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.89	134	190345	48.82	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.84	TIC	1564354m	223.91	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\100312\10031202.D Vial: 2
Acq On : 3 Oct 2012 10:18 am Operator: RACHEL HILL
Sample : CCV VOA9 100312 Inst : GC/MS Ins
Misc : CCV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Oct 3 10:58 2012 Quant Results File: 091812V9.RES

Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Initial Calibration



Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Initial Calibration

Calibration Files
1 =09181203.D 2 =09181204.D 3 =09181205.D
4 =09181206.D 5 =09181207.D 6 =09181208.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)	L1	C5-C8 Aliphatic HC	7.492	7.729	6.707	6.252	6.251	5.921	6.523	E4	13.14
2)	L1	C5-C8 Aliphatic HC	6.709	6.962	6.018	5.423	5.390	5.075	5.762	E4	14.39
3)	L1	C5-C8 Aliphatic HC	7.657	7.634	6.643	6.022	5.952	5.590	6.386	E4	15.13
4)	L1	C5-C8 Aliphatic HC	7.187	7.615	6.597	6.083	5.982	5.728	6.364	E4	12.73
5)	L1	C5-C8 Aliphatic HC	7.281	7.465	6.451	5.895	5.872	5.440	6.209	E4	14.56
6)	L1	C5-C8 Aliphatic HC	7.392	7.510	6.564	5.921	5.855	5.403	6.224	E4	15.71
7)	L1	C5-C8 Aliphatic HC	7.294	7.482	6.491	5.930	5.877	5.502	6.238	E4	14.36
8)	L1	C9-C12 Aliphatic HC	8.100	8.180	7.060	6.476	6.348	5.823	6.748	E4	16.35
9)	L1	C9-C12 Aliphatic HC	8.040	7.691	6.299	6.454	6.315	6.165	6.625	E4	13.87
10)	L1	C9-C12 Aliphatic HC	6.568	6.716	5.998	5.482	5.418	4.916	5.656	E4	14.54
11)	L1	C9-C12 Aliphatic HC	7.260	7.404	6.589	6.072	5.928	5.476	6.240	E4	14.47
12)	L1	C9-C12 Aliphatic HC	4.706	5.319	4.523	4.246	4.231	4.059	4.407	E4	11.43
13)	L1	C9-C12 Aliphatic HC	3.326	4.017	3.495	3.379	3.402	3.119	3.378	E4	10.20
14)	L1	C9-C12 Aliphatic HC	6.110	6.374	5.511	5.206	5.134	4.793	5.354	E4	13.26
15)	L1	C9-C10 Aromatic HC	6.906	7.426	6.451	5.936	5.949	5.594	6.199	E3	12.68
16)	L1	C9-C10 Aromatic HC	7.080	7.745	6.887	6.355	6.352	5.960	6.558	E3	11.30
17)	L1	C9-C10 Aromatic HC	1.032	1.144	0.992	0.929	0.915	0.851	0.949	E4	12.68
18)	L1	C9-C10 Aromatic HC	1.918	2.161	1.938	1.796	1.822	1.700	1.841	E3	10.54
19)	L1	C9-C10 Aromatic HC	7.381	8.314	7.428	6.885	6.981	6.605	7.105	E3	9.76
20)	L1	C9-C10 Aromatic HC	4.143	4.627	4.163	3.781	3.848	3.535	3.899	E3	11.95
21)	L1	C9-C10 Aromatic HC	7.527	8.322	7.321	6.764	6.771	6.359	6.987	E3	11.67
22)		C5-C8 Aliphatic	7.294	7.482	6.491	5.930	5.877	5.502	6.238	E4	14.36
23)	L1	non C5-C8	5.649	5.590	5.117	4.880	4.591	4.338	4.900	E4	12.02
24)	L1	non C5-C8 {2}	5.146	5.780	4.898	4.231	4.220	4.124	4.625	E4	14.44
25)	L1	non C5-C8 {3}	3.233	3.110	3.202	3.174	3.170	3.173	3.162	E4	1.74
26)	L1	non C5-C8 {4}	6.653	7.227	5.882	5.123	5.233	5.000	5.714	E4	15.95
27)	L1	non C5-C8 {5}	5.606	5.264	5.613	5.763	5.691	5.702	5.609	E4	2.90
28)	L1	non C5-C8 {6}	8.176	8.500	7.177	6.548	6.664	6.311	7.038	E4	13.82
29)	L1	non C5-C8 - TOTAL	5.099	5.552	5.185	4.926	4.969	4.874	5.046	E4	5.35
30)		C9-C12 Aliphatic	6.110	6.374	5.511	5.206	5.134	4.793	5.354	E4	13.26
31)	L1	non C9-C12	5.564	5.262	5.587	5.505	5.626	5.570	5.521	E4	2.18
32)	L1	non C9-C12 {2}	7.627	8.370	7.259	6.248	6.013	5.754	6.575	E4	18.86
33)	L1	non C9-C12 {3}	7.827	8.252	7.197	6.539	6.501	6.142	6.873	E4	13.53
34)	L1	non C9-C12 {4}	7.597	8.053	6.996	6.344	6.360	5.961	6.686	E4	13.62
35)	L1	non C9-C12 {5}	4.222	4.077	4.345	4.329	4.374	4.393	4.306	E4	2.73
36)	L1	non C9-C12 - TOTAL	5.046	5.301	4.995	4.636	4.600	4.376	4.698	E4	9.83
37)	L1	C9-C10 Aromatic	7.527	8.322	7.321	6.764	6.771	6.359	6.987	E3	11.67
38)	L1	C9-C10 Aromatic {2}	7.527	8.322	7.321	6.764	6.771	6.359	6.987	E3	11.67
39)	L1	C9-C10 Aromatic - T	7.527	8.322	7.321	6.764	6.771	6.359	6.987	E3	11.67
40)	I	Chlorobenzene-d5	----------ISTD----------								
41)	S	4-Bromofluorobenzen	0.105	0.107	0.107	0.107	0.108	0.108	0.108		1.95

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

Compound List Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Initial Calibration
Total Cpnds : 41

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

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

091812V9.M Wed Sep 19 12:04:43 2012

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\091812\09181211.D Vial: 11
Acq On : 18 Sep 2012 4:43 pm Operator: RACHEL HILL
Sample : ICV VOA9 091812 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	L1	C5-C8 Aliphatic HC	29.200	31.838	-9.0	92	0.00
2	L1	C5-C8 Aliphatic HC {2}	36.400	39.046	-7.3	89	0.00
3	L1	C5-C8 Aliphatic HC {3}	41.800	45.308	-8.4	91	0.00
4	L1	C5-C8 Aliphatic HC {4}	35.400	37.264	-5.3	88	0.00
5	L1	C5-C8 Aliphatic HC {5}	42.200	44.759	-6.1	88	0.00
6	L1	C5-C8 Aliphatic HC {6}	49.000	52.432	-7.0	89	0.00
7	L1	C5-C8 Aliphatic HC - TOTAL	234.000	250.635	-7.1	89	0.00
8	L1	C9-C12 Aliphatic HC	54.600	58.656	-7.4	89	0.00
9	L1	C9-C12 Aliphatic HC {2}	54.600	56.380	-3.3	89	0.00
10	L1	C9-C12 Aliphatic HC {3}	61.200	64.962	-6.1	89	0.00
11	L1	C9-C12 Aliphatic HC {4}	60.800	66.389	-9.2	92	0.00
12	L1	C9-C12 Aliphatic HC {5}	70.000	74.899	-7.0	89	0.00
13	L1	C9-C12 Aliphatic HC {6}	77.000	77.236	-0.3	84	0.00
14	L1	C9-C12 Aliphatic HC - TOTAL	378.000	400.045	-5.8	89	0.00
15	L1	C9-C10 Aromatic HC	51.700	54.388	-5.2	88	0.00
16	L1	C9-C10 Aromatic HC {2}	51.200	53.269	-4.0	88	0.00
17	L1	C9-C10 Aromatic HC {3}	52.200	55.231	-5.8	88	0.00
18	L1	C9-C10 Aromatic HC {4}	58.700	61.571	-4.9	89	0.00
19	L1	C9-C10 Aromatic HC {5}	52.600	55.197	-4.9	90	0.00
20	L1	C9-C10 Aromatic HC {6}	58.700	61.673	-5.1	89	0.00
21	L1	C9-C10 Aromatic HC - TOTAL	266.000	280.041	-5.3	88	0.00
22		C5-C8 Aliphatic	234.000	0.000	100.0#	0	-7.08#
23	L1	non C5-C8	22.800	0.000	100.0#	0	-6.28#
24	L1	non C5-C8 {2}	36.800	0.000	100.0#	0	-9.16#
25	L1	non C5-C8 {3}	66.100	0.000	100.0#	0	-10.93#
26	L1	non C5-C8 {4}	32.500	0.000	100.0#	0	-11.70#
27	L1	non C5-C8 {5}	58.400	0.000	100.0#	0	-12.15#
28	L1	non C5-C8 {6}	39.200	0.000	100.0#	0	-14.28#
29	L1	non C5-C8 - TOTAL	256.000	0.000	100.0#	0	-6.28#
30		C9-C12 Aliphatic	378.000	0.000	100.0#	0	-16.49#
31	L1	non C9-C12	60.100	0.000	100.0#	0	-16.38#
32	L1	non C9-C12 {2}	45.600	0.000	100.0#	0	-16.49#
33	L1	non C9-C12 {3}	46.000	0.000	100.0#	0	-16.66#
34	L1	non C9-C12 {4}	45.100	0.000	100.0#	0	-17.31#
35	L1	non C9-C12 {5}	89.500	0.000	100.0#	0	-18.21#
36	L1	non C9-C12 - TOTAL	340.600	0.000	100.0#	0	-16.66#
37	L1	C9-C10 Aromatic	266.000	0.000	100.0#	0	-17.85#
38	L1	C9-C10 Aromatic {2}	266.000	0.000	100.0#	0	-17.20#
39	L1	C9-C10 Aromatic - TOTAL	266.000	0.000	100.0#	0	-17.20#
40	I	Chlorobenzene-d5	12.500	12.500	0.0	93	0.00
41	S	4-Bromofluorobenzene	89.500	90.524	-1.1	95	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\091812\09181211.D Vial: 11
Acq On : 18 Sep 2012 4:43 pm Operator: RACHEL HILL
Sample : ICV VOA9 091812 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 19 12:02 2012 Quant Results File: 091812V9.RES

Quant Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Initial Calibration
DataAcq Meth : 091812V9

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chlorobenzene-d5	16.38	117	975047	12.50	ug/m3	0.00

System Monitoring Compounds

41) 4-Bromofluorobenzene	18.21	95	760134	90.52	ug/m3	0.00

Spiked Amount 89.500 Range 70 - 130 Recovery = 101.14%

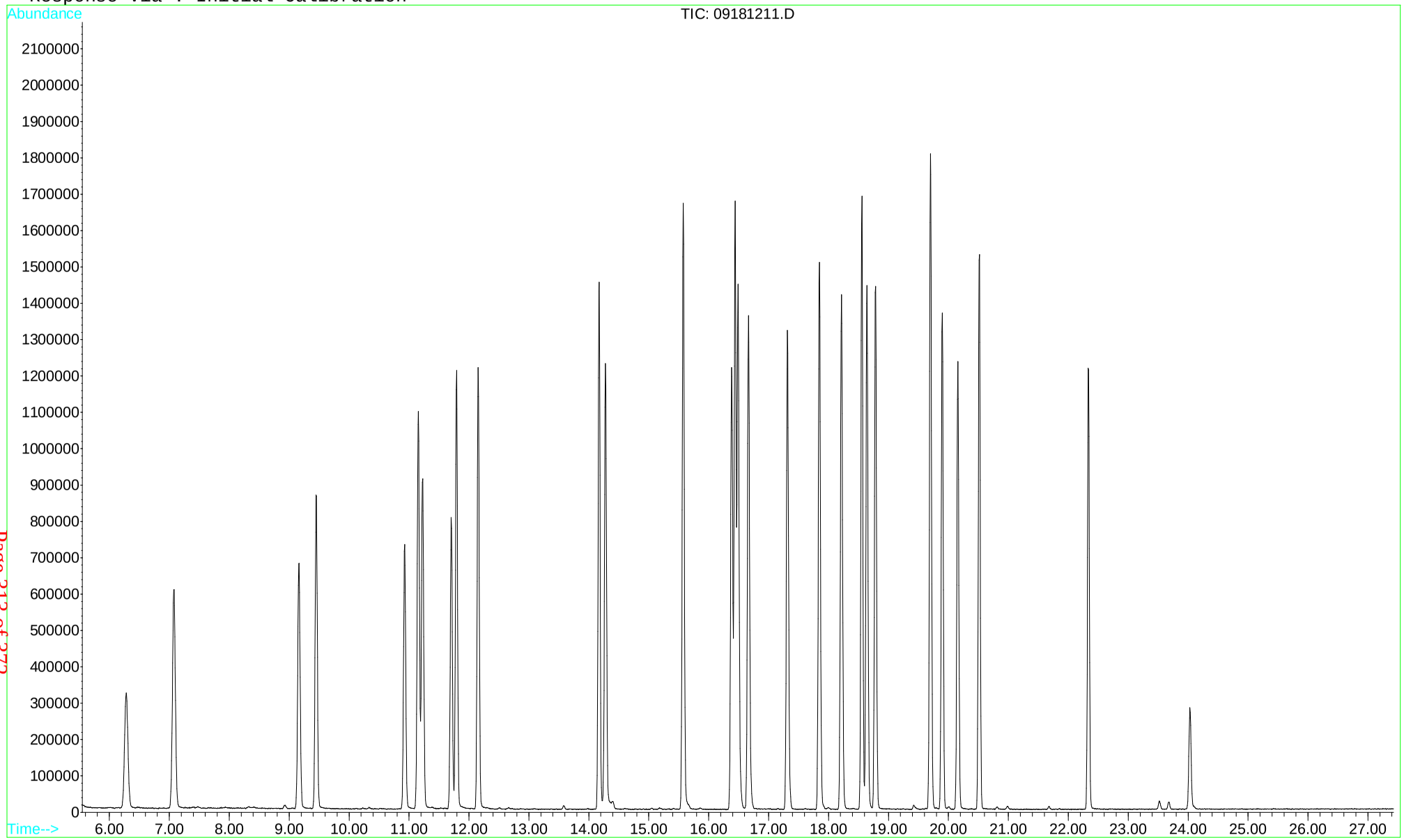
Target Compounds						Qvalue
1) C5-C8 Aliphatic HC	7.07	TIC	2076724	31.84	ug/m3	100
2) C5-C8 Aliphatic HC {2}	9.45	TIC	2249994	39.05	ug/m3	100
3) C5-C8 Aliphatic HC {3}	11.16	TIC	2893194	45.31	ug/m3	100
4) C5-C8 Aliphatic HC {4}	11.23	TIC	2371442	37.26	ug/m3	100
5) C5-C8 Aliphatic HC {5}	11.79	TIC	2779297	44.76	ug/m3	100
6) C5-C8 Aliphatic HC {6}	14.17	TIC	3263256	52.43	ug/m3	100
7) C5-C8 Aliphatic HC - TOTAL	7.07	TIC	15633907m	250.63	ug/m3	
8) C9-C12 Aliphatic HC	15.58	TIC	3958304	58.66	ug/m3	100
9) C9-C12 Aliphatic HC {2}	16.44	TIC	3734942	56.38	ug/m3	100
10) C9-C12 Aliphatic HC {3}	18.56	TIC	3674246	64.96	ug/m3	100
11) C9-C12 Aliphatic HC {4}	19.70	TIC	4142501	66.39	ug/m3	100
12) C9-C12 Aliphatic HC {5}	20.52	TIC	3301129	74.90	ug/m3	100
13) C9-C12 Aliphatic HC {6}	22.33	TIC	2609089	77.24	ug/m3	100
14) C9-C12 Aliphatic HC - TOTA	15.58	TIC	21420211m	400.04	ug/m3	
15) C9-C10 Aromatic HC	17.85	120	337146	54.39	ug/m3	100
16) C9-C10 Aromatic HC {2}	18.64	120	349330	53.27	ug/m3	100
17) C9-C10 Aromatic HC {3}	18.79	120	524108	55.23	ug/m3	100
18) C9-C10 Aromatic HC {4}	19.90	120	113326	61.57	ug/m3	100
19) C9-C10 Aromatic HC {5}	20.16	120	392178	55.20	ug/m3	100
20) C9-C10 Aromatic HC {6}	19.90	134	240457	61.67	ug/m3	100
21) C9-C10 Aromatic HC - TOTAL	17.85	TIC	1956545m	280.04	ug/m3	

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA\091812\09181211.D Vial: 11
Acq On : 18 Sep 2012 4:43 pm Operator: RACHEL HILL
Sample : ICV VOA9 091812 Inst : GC/MS Ins
Misc : ICV MA_APH Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Sep 19 12:02 2012 Quant Results File: 091812V9.RES

Method : C:\HPCHEM\1\METHODS\091812V9.M (RTE Integrator)
Title : MASS APH
Last Update : Tue Sep 18 16:13:00 2012
Response via : Initial Calibration



RTI Laboratories

Run ID: GC-TCD 1_121004A **Run No.:** 52770

Analytical Run Date: 10/4/2012 **InstrumentID:** GC-TCD 1

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

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

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

Run Comments: ch rev 10/11/12/pr -msb 10/10/12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-100412 TCD-A	ASTM-D2504	MBLK	R52770	10/4/2012 10:14:00 AM	Celeste Hoitash		
CCV-100412 TCD-A	ASTM-D2504	CCV	R52770	10/4/2012 10:48:00 AM	Celeste Hoitash		
LCS-100412 TCD-A	ASTM-D2504	LCS	R52770	10/4/2012 11:03:00 AM	Celeste Hoitash		
CRQL-100412 TCD-A	ASTM-D2504	CRQL	R52770	10/4/2012 11:33:00 AM	Celeste Hoitash		
1209801-001B	ASTM-D2504	SAMP	R52770	10/4/2012 1:34:00 PM	Celeste Hoitash		
1209801-002B	ASTM-D2504	SAMP	R52770	10/4/2012 1:48:00 PM	Celeste Hoitash		
1209801-003B	ASTM-D2504	SAMP	R52770	10/4/2012 2:03:00 PM	Celeste Hoitash		
1209801-004B	ASTM-D2504	SAMP	R52770	10/4/2012 2:20:00 PM	Celeste Hoitash		
1209801-005B	ASTM-D2504	SAMP	R52770	10/4/2012 3:05:00 PM	Celeste Hoitash		
1209801-007B	ASTM-D2504	SAMP	R52770	10/4/2012 3:37:00 PM	Celeste Hoitash		
1209801-008B	ASTM-D2504	SAMP	R52770	10/4/2012 4:30:00 PM	Celeste Hoitash		
1209801-009B	ASTM-D2504	SAMP	R52770	10/4/2012 4:46:00 PM	Celeste Hoitash		
1209801-010B	ASTM-D2504	SAMP	R52770	10/4/2012 5:09:00 PM	Celeste Hoitash		
1209801-006B	ASTM-D2504	SAMP	R52770	10/4/2012 5:24:00 PM	Celeste Hoitash		
1209801-010BDUP	ASTM-D2504	DUP	R52770	10/4/2012 5:59:00 PM	Celeste Hoitash		
CCV-100412 TCD-B	ASTM-D2504	CCV	R52770	10/4/2012 6:21:00 PM	Celeste Hoitash		
CRQL-100412 TCD-B	ASTM-D2504	CRQL	R52770	10/4/2012 6:40:00 PM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

12-Oct-12

RunNo 52770

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1036403	MBLK-100412 TCD-A	ASTM-D2504	MBLK	)\100412\100412	10/4/2012 10:14	1	R52770		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
1036404	CCV-100412 TCD-A	ASTM-D2504	CCV	)\100412\100412	10/4/2012 10:48	1	R52770		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.53	2.53		2.5	0	0	0.025	0.1	0	101%	85	115	0%	
Carbon Monoxide	A	% v/v	2.636	2.636		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Methane	A	% v/v	2.068	2.068		2	0	0	0.025	0.5	0	103%	85	115	0%	
Nitrogen	A	% v/v	2.61	2.61		2.5	0	0	0.025	0.1	0	104%	85	115	0%	
Oxygen	A	% v/v	2.566	2.566		2.5	0	0	0.025	0.1	0	103%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1036405	LCS-100412 TCD-A	ASTM-D2504	LCS	)\100412\100412	10/4/2012 11:03	1	R52770		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	2.535	2.535		2.5	0	2.53	0.025	0.1	0	101%	70	130	0%	
Carbon Monoxide	A	% v/v	2.669	2.669		2.5	0	2.636	0.025	0.1	0	107%	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
1036418	CCV-100412 TCD-B	ASTM-D2504	CCV	)\100412\100412	10/4/2012 6:21:	1	R52770		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.547	2.547		2.5	0	0	0.025	0.1	0	102%	85	115	0%	
Carbon Monoxide	A	% v/v	2.696	2.696		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	1.953	1.953		2	0	0	0.025	0.5	0	98%	85	115	0%	
Nitrogen	A	% v/v	2.738	2.738		2.5	0	0	0.025	0.1	0	110%	85	115	0%	
Oxygen	A	% v/v	2.596	2.596		2.5	0	0	0.025	0.1	0	104%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1036419	CRQL-100412 TCD-B	ASTM-D2504	CRQL	)\100412\100412	10/4/2012 6:40:	1	R52770		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.31	0.31		0.3	0	0	0.025	0.1	0	103%	80	120	0%	
Carbon Monoxide	A	% v/v	0.139	0.139		0.14	0	0	0.025	0.1	0	99%	80	120	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	80	120	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	80	120	0%	U
Methane	A	% v/v	0.073	0.073		0.09	0	0	0.025	0.5	0	81%	80	120	0%	
Nitrogen	A	% v/v	1.391	1.391		1.39	0	0	0.025	0.1	0	100%	80	120	0%	
Oxygen	A	% v/v	0.077	0.077		0.08	0	0	0.025	0.1	0	96%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\100412\10041202.D Vial: 1
Acq On : 4 Oct 2012 10:48 am Operator:
Sample : CCV-100412 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

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

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.566	-2.6	0	0.00
2	Nitrogen	2.500	2.610	-4.4	0	0.00
3	Carbon Monoxide	2.500	2.636	-5.4	0	0.00
4	Methane	2.000	2.068	-3.4	0	0.00
5	Carbon dioxide	2.500	2.530	-1.2	0	0.00

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\100412\10041202.D              Vial: 1
Acq On    :  4 Oct 2012  10:48 am                    Operator:
Sample    : CCV-100412 TCD-A                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

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

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

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\100412\10041202.D Vial: 1
Acq On : 4 Oct 2012 10:48 am Operator:
Sample : CCV-100412 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 9 9:15 2012 Quant Results File: 062512.RES

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

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.12	384439	2.566 % v/v
2)	Nitrogen	2.30	453961	2.610 % v/v
3)	Carbon Monoxide	2.99	429301	2.636 % v/v
4)	Methane	5.61	296383	2.068 % v/v
5)	Carbon dioxide	9.19	523674	2.530 % v/v

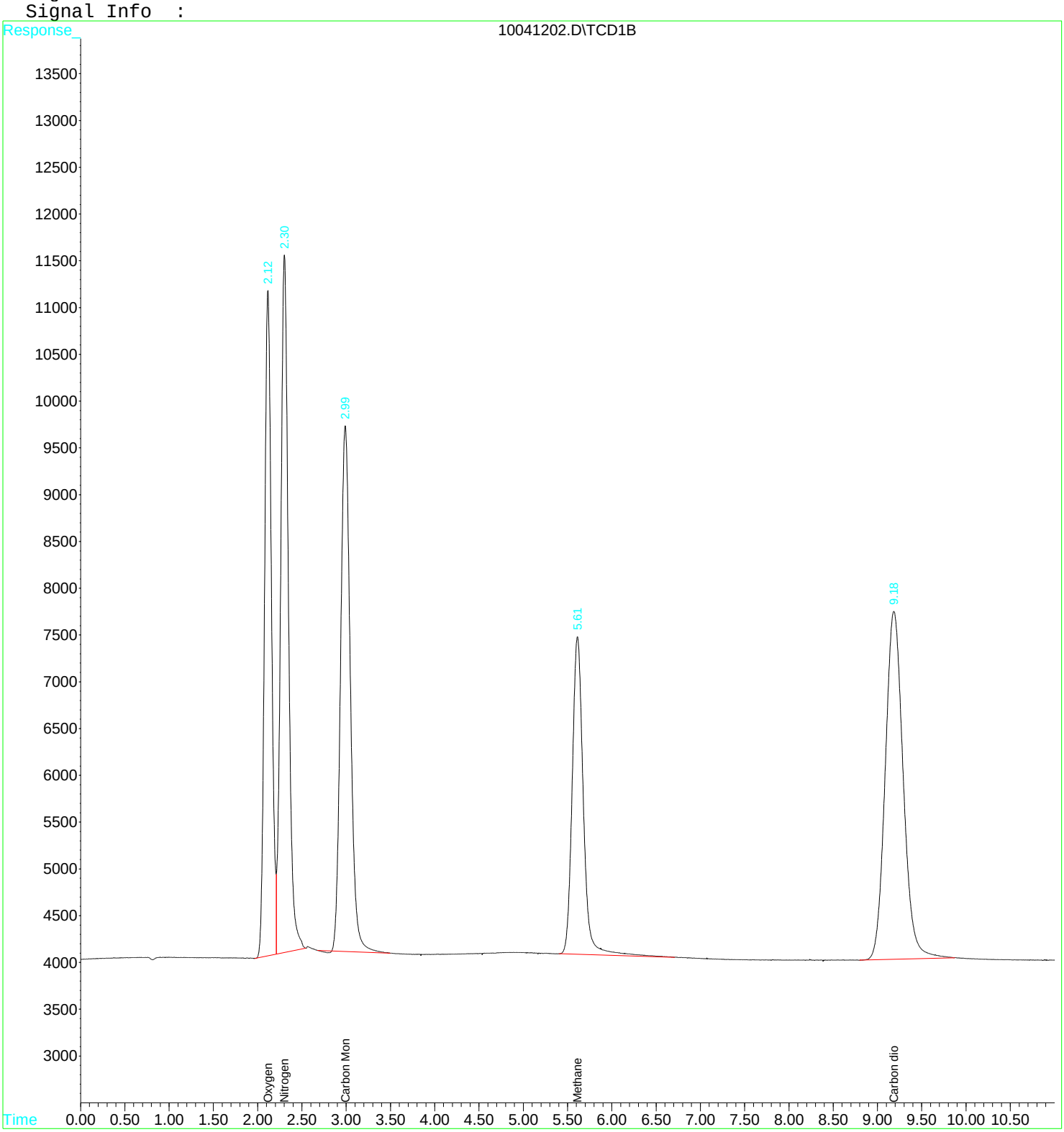
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\100412\10041202.D Vial: 1
Acq On : 4 Oct 2012 10:48 am Operator:
Sample : CCV-100412 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 9 9:15 2012 Quant Results File: 062512.RES

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

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\100412\10041216.D Vial: 1
Acq On : 4 Oct 2012 6:21 pm Operator:
Sample : CCV-100412 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

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

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.596	-3.8	0	0.00
2	Nitrogen	2.500	2.738	-9.5	0	0.00
3	Carbon Monoxide	2.500	2.696	-7.8	0	0.00
4	Methane	2.000	1.953	2.3	0	0.00
5	Carbon dioxide	2.500	2.547	-1.9	0	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
10041216.D 062512.M Tue Oct 09 10:22:35 2012

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\100412\10041216.D              Vial: 1
Acq On    :  4 Oct 2012   6:21 pm                    Operator:
Sample    : CCV-100412 TCD-B                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

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

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

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\100412\10041216.D Vial: 1
Acq On : 4 Oct 2012 6:21 pm Operator:
Sample : CCV-100412 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 4 18:12 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Thu Oct 04 19:11:16 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.13	389030	2.596 % v/v
2)	Nitrogen	2.31	476253	2.738 % v/v
3)	Carbon Monoxide	3.00	439008	2.696 % v/v
4)	Methane	5.62	279876	1.953 % v/v
5)	Carbon dioxide	9.19	527182	2.547 % v/v

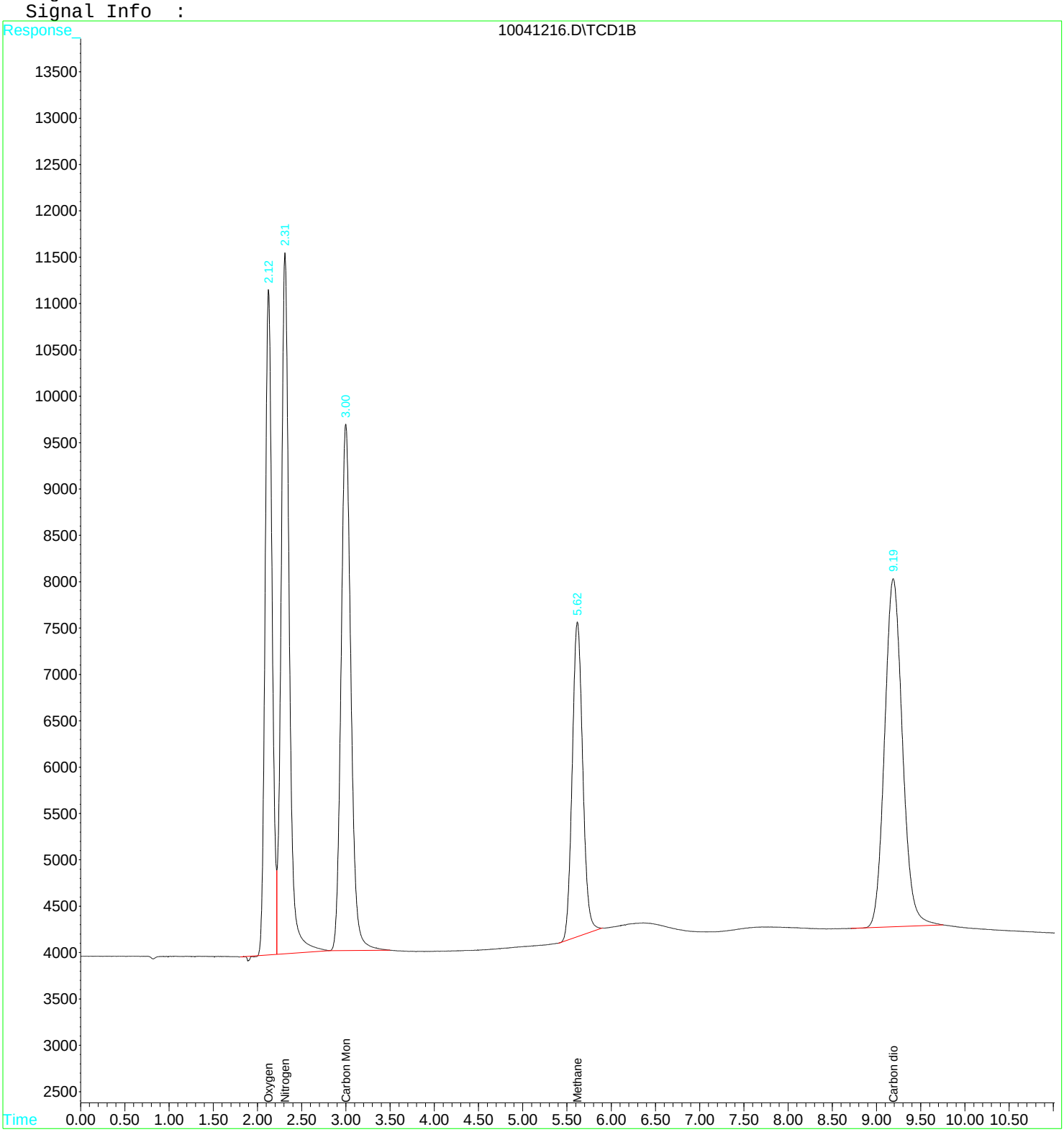
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\100412\10041216.D Vial: 1
Acq On : 4 Oct 2012 6:21 pm Operator:
Sample : CCV-100412 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 4 18:12 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Thu Oct 04 19:11:16 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



RTI Laboratories

Run ID: GC-TCD 1_121005A **Run No.:** 52765

Analytical Run Date: 10/5/2012 **InstrumentID:** GC-TCD 1

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

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

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

Run Comments: ch rev 10/11/12/pr msb 10/10/12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-100512 TCD-A	ASTM-D2504	MBLK	R52765	10/5/2012 9:37:00 AM	Celeste Hoitash		
CCV-100512 TCD-A	ASTM-D2504	CCV	R52765	10/5/2012 10:03:00 AM	Celeste Hoitash		
LCS-100512 TCD-A	ASTM-D2504	LCS	R52765	10/5/2012 10:19:00 AM	Celeste Hoitash		
CRQL-100512 TCD-A	ASTM-D2504	CRQL	R52765	10/5/2012 10:34:00 AM	Celeste Hoitash		
1209801-011B	ASTM-D2504	SAMP	R52765	10/5/2012 11:11:00 AM	Celeste Hoitash		
1209801-012B	ASTM-D2504	SAMP	R52765	10/5/2012 11:27:00 AM	Celeste Hoitash		
1209801-013B	ASTM-D2504	SAMP	R52765	10/5/2012 11:44:00 AM	Celeste Hoitash		
1209801-014B	ASTM-D2504	SAMP	R52765	10/5/2012 12:01:00 PM	Celeste Hoitash		
1209801-015B	ASTM-D2504	SAMP	R52765	10/5/2012 12:18:00 PM	Celeste Hoitash		
1209801-016B	ASTM-D2504	SAMP	R52765	10/5/2012 12:46:00 PM	Celeste Hoitash		
1209801-017B	ASTM-D2504	SAMP	R52765	10/5/2012 1:01:00 PM	Celeste Hoitash		
1209801-018B	ASTM-D2504	SAMP	R52765	10/5/2012 1:21:00 PM	Celeste Hoitash		
1209801-019B	ASTM-D2504	SAMP	R52765	10/5/2012 1:42:00 PM	Celeste Hoitash		
1209801-020B	ASTM-D2504	SAMP	R52765	10/5/2012 1:57:00 PM	Celeste Hoitash		
1209801-020BDUP	ASTM-D2504	DUP	R52765	10/5/2012 2:28:00 PM	Celeste Hoitash		
CCV-100512 TCD-B	ASTM-D2504	CCV	R52765	10/5/2012 2:59:00 PM	Celeste Hoitash		
1209801-021B	ASTM-D2504	SAMP	R52765	10/5/2012 3:17:00 PM	Celeste Hoitash		
1209801-022B	ASTM-D2504	SAMP	R52765	10/5/2012 3:32:00 PM	Celeste Hoitash		
1209801-023B	ASTM-D2504	SAMP	R52765	10/5/2012 3:48:00 PM	Celeste Hoitash		
1209801-024B	ASTM-D2504	SAMP	R52765	10/5/2012 4:07:00 PM	Celeste Hoitash		
1209801-025B	ASTM-D2504	SAMP	R52765	10/5/2012 4:23:00 PM	Celeste Hoitash		
1209801-026B	ASTM-D2504	SAMP	R52765	10/5/2012 4:37:00 PM	Celeste Hoitash		
1209801-027B	ASTM-D2504	SAMP	R52765	10/5/2012 4:53:00 PM	Celeste Hoitash		
1209801-027BDUP	ASTM-D2504	DUP	R52765	10/5/2012 5:09:00 PM	Celeste Hoitash		
CCV-100512 TCD-C	ASTM-D2504	CCV	R52765	10/5/2012 5:38:00 PM	Celeste Hoitash		
CRQL-100512 TCD-B	ASTM-D2504	CRQL	R52765	10/5/2012 6:08:00 PM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

12-Oct-12

RunNo 52765

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1036334	MBLK-100512 TCD-A	ASTM-D2504	MBLK	)\100512\100512	10/5/2012 9:37:	1	R52765		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
1036335	CCV-100512 TCD-A	ASTM-D2504	CCV	)\100512\100512	10/5/2012 10:03	1	R52765		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.634	2.634		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Carbon Monoxide	A	% v/v	2.683	2.683		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	2.069	2.069		2	0	0	0.025	0.5	0	103%	85	115	0%	
Nitrogen	A	% v/v	2.824	2.824		2.5	0	0	0.025	0.1	0	113%	85	115	0%	
Oxygen	A	% v/v	2.628	2.628		2.5	0	0	0.025	0.1	0	105%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1036290	LCS-100512 TCD-A	ASTM-D2504	LCS	)\100512\100512	10/5/2012 10:19	1	R52765		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	2.53	2.53		2.5	0	2.634	0.025	0.1	0	101%	70	130	4%	
Carbon Monoxide	A	% v/v	2.662	2.662		2.5	0	2.683	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
1036303	CCV-100512 TCD-B	ASTM-D2504	CCV	)\100512\100512	10/5/2012 2:59:	1	R52765		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.473	2.473		2.5	0	0	0.025	0.1	0	99%	85	115	0%	
Carbon Monoxide	A	% v/v	2.641	2.641		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Methane	A	% v/v	1.938	1.938		2	0	0	0.025	0.5	0	97%	85	115	0%	
Nitrogen	A	% v/v	2.761	2.761		2.5	0	0	0.025	0.1	0	110%	85	115	0%	
Oxygen	A	% v/v	2.583	2.583		2.5	0	0	0.025	0.1	0	103%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1036304	1209801-021B (Container-01 of 01)	ASTM-D2504	SAMP	)\100512\100512	10/5/2012 3:17:	1	R52765		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.742	0.742		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	79.327	79.327		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	% v/v	19.551	19.551		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
1036305	1209801-022B (Container-01 of 01)	ASTM-D2504	SAMP	)\100512\100512	10/5/2012 3:32:	1	R52765		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.362	0.362		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	78.461	78.461		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
1036310	1209801-027B (Container-01 of 01)	ASTM-D2504	SAMP	)\100512\100512	10/5/2012 4:53:	1	R52765		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Nitrogen	A	% v/v	78.774	78.774		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	% v/v	19.856	19.856		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
1036311	1209801-027BDUP	ASTM-D2504	DUP	)\100512\100512	10/5/2012 5:09:	1	R52765		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	0.54	0.54		0	0	0.54	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	78.949	78.949		0	0	78.774	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	% v/v	19.903	19.903		0	0	19.856	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
1036312	CCV-100512 TCD-C	ASTM-D2504	CCV	)\100512\100512	10/5/2012 5:38:	1	R52765		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.475	2.475		2.5	0	0	0.025	0.1	0	99%	85	115	0%	
Carbon Monoxide	A	% v/v	2.646	2.646		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Methane	A	% v/v	1.941	1.941		2	0	0	0.025	0.5	0	97%	85	115	0%	
Nitrogen	A	% v/v	2.692	2.692		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Oxygen	A	% v/v	2.562	2.562		2.5	0	0	0.025	0.1	0	102%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1036313	CRQL-100512 TCD-B	ASTM-D2504	CRQL	)\100512\100512	10/5/2012 6:08:	1	R52765		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\100512\10051202.D Vial: 1
Acq On : 5 Oct 2012 10:03 am Operator:
Sample : CCV-100512 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

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

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.628	-5.1	0	0.00
2	Nitrogen	2.500	2.824	-13.0	0	0.00
3	Carbon Monoxide	2.500	2.683	-7.3	0	-0.01
4	Methane	2.000	2.069	-3.4	0	-0.01
5	Carbon dioxide	2.500	2.634	-5.4	0	-0.02

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\100512\10051202.D              Vial: 1
Acq On    :  5 Oct 2012  10:03 am                    Operator:
Sample    : CCV-100512 TCD-A                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

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

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

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\100512\10051202.D Vial: 1
Acq On : 5 Oct 2012 10:03 am Operator:
Sample : CCV-100512 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 8 10:21 2012 Quant Results File: 062512.RES

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

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.11	393749	2.628 % v/v
2)	Nitrogen	2.30	491266	2.824 % v/v
3)	Carbon Monoxide	2.99	436864	2.683 % v/v
4)	Methane	5.61	296532	2.069 % v/v
5)	Carbon dioxide	9.17	545224	2.634 % v/v

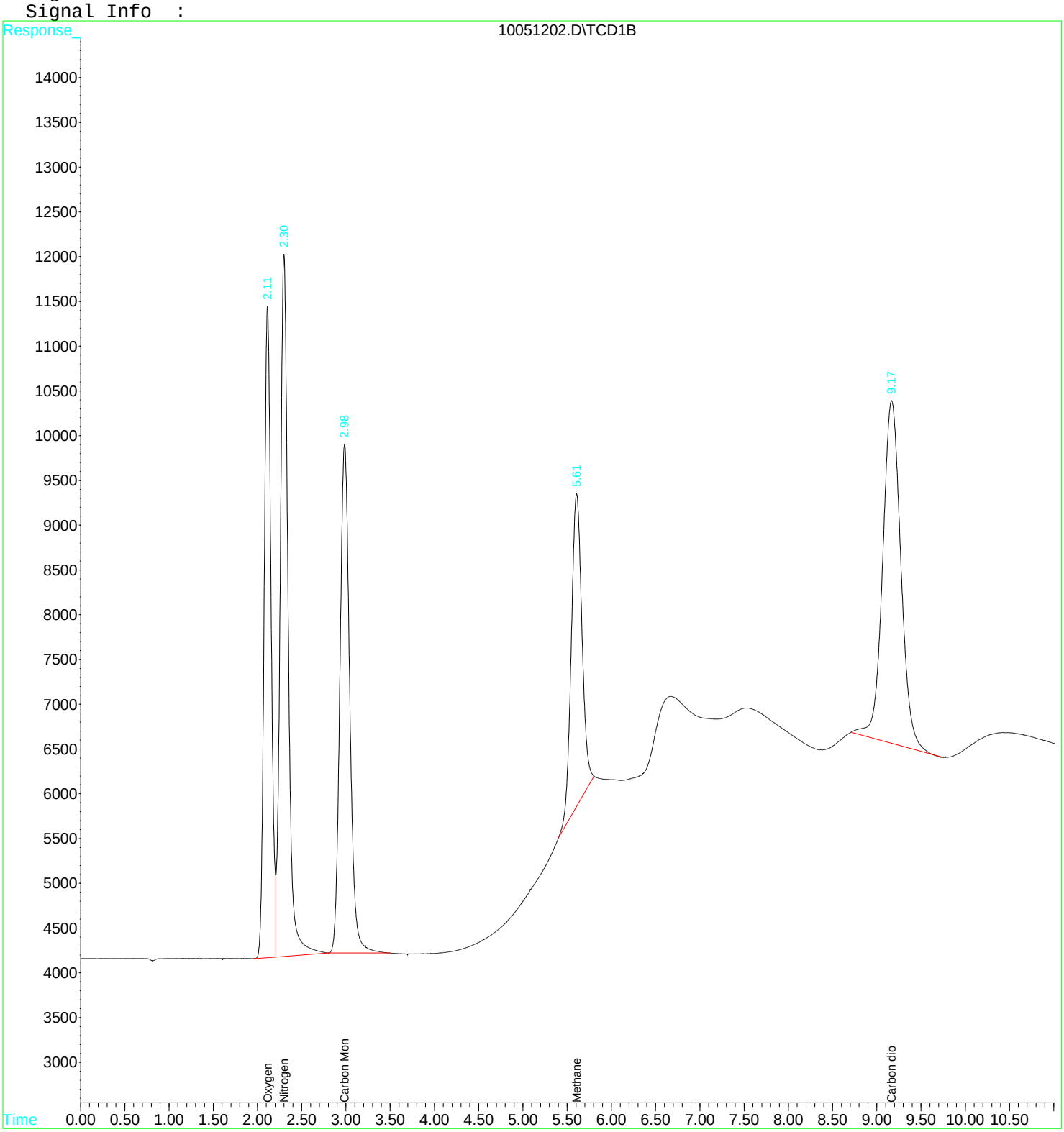
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\100512\10051202.D Vial: 1
Acq On : 5 Oct 2012 10:03 am Operator:
Sample : CCV-100512 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 8 10:21 2012 Quant Results File: 062512.RES

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

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\100512\10051216.D Vial: 1
Acq On : 5 Oct 2012 2:59 pm Operator:
Sample : CCV-100512 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

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

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.583	-3.3	0	0.00
2	Nitrogen	2.500	2.761	-10.4	0	-0.01
3	Carbon Monoxide	2.500	2.641	-5.6	0	-0.02
4	Methane	2.000	1.938	3.1	0	-0.02
5	Carbon dioxide	2.500	2.473	1.1	0	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
10051216.D 062512.M Tue Oct 09 09:28:51 2012

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\100512\10051216.D              Vial: 1
Acq On    :  5 Oct 2012   2:59 pm                    Operator:
Sample    : CCV-100512 TCD-B                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

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

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

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\100512\10051216.D Vial: 1
Acq On : 5 Oct 2012 2:59 pm Operator:
Sample : CCV-100512 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 5 16:29 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Thu Oct 04 19:11:16 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.11	387011	2.583 % v/v
2)	Nitrogen	2.30	480270	2.761 % v/v
3)	Carbon Monoxide	2.98	430079	2.641 % v/v
4)	Methane	5.60	277777	1.938 % v/v
5)	Carbon dioxide	9.17	511850	2.473 % v/v

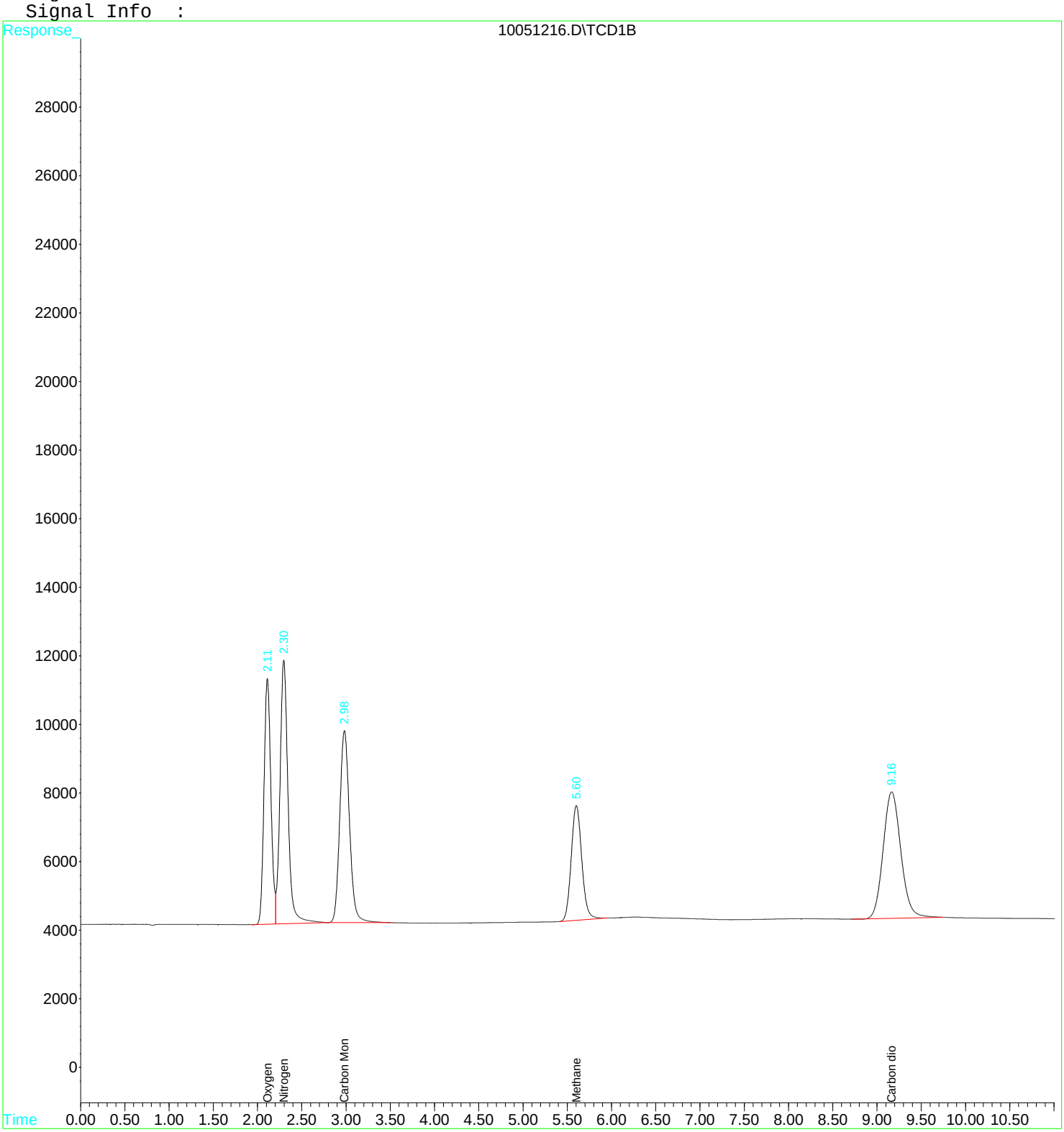
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\100512\10051216.D Vial: 1
Acq On : 5 Oct 2012 2:59 pm Operator:
Sample : CCV-100512 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 5 16:29 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Thu Oct 04 19:11:16 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\100512\10051225.D Vial: 1
Acq On : 5 Oct 2012 5:38 pm Operator:
Sample : CCV-100512 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

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

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.562	-2.5	0	-0.01
2	Nitrogen	2.500	2.692	-7.7	0	-0.02
3	Carbon Monoxide	2.500	2.646	-5.8	0	-0.02
4	Methane	2.000	1.941	2.9	0	-0.02
5	Carbon dioxide	2.500	2.475	1.0	0	-0.02

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\100512\10051225.D              Vial: 1
Acq On    :  5 Oct 2012   5:38 pm                    Operator:
Sample    : CCV-100512 TCD-C                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

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

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

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\100512\10051225.D Vial: 1
Acq On : 5 Oct 2012 5:38 pm Operator:
Sample : CCV-100512 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 5 16:49 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Thu Oct 04 19:11:16 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.11	383909	2.562 % v/v
2)	Nitrogen	2.29	468207	2.692 % v/v
3)	Carbon Monoxide	2.98	430876	2.646 % v/v
4)	Methane	5.60	278144	1.941 % v/v
5)	Carbon dioxide	9.17	512363	2.475 % v/v

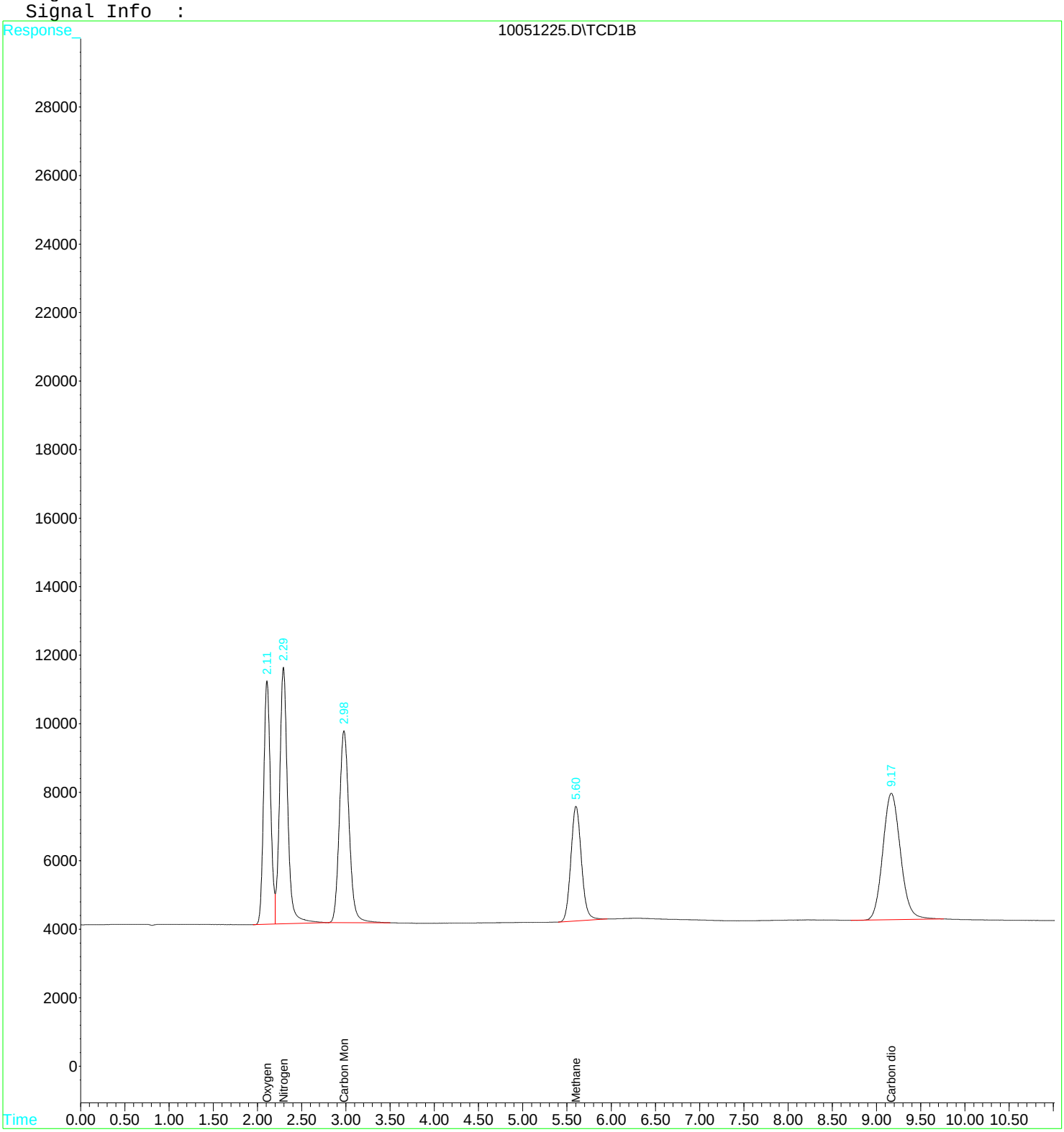
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\100512\10051225.D Vial: 1
Acq On : 5 Oct 2012 5:38 pm Operator:
Sample : CCV-100512 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 5 16:49 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Thu Oct 04 19:11:16 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :



RTI Laboratories

Run ID: GC-TCD 1_121008A **Run No.:** 52766

Analytical Run Date: 10/8/2012 **InstrumentID:** GC-TCD 1

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

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

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

Run Comments: ch rev 10/11/12/pr msb 10/10/12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-100812 TCD-A	ASTM-D2504	MBLK	R52766	10/8/2012 10:37:00 AM	Celeste Hoitash		
CCV-100812 TCD-A	ASTM-D2504	CCV	R52766	10/8/2012 11:23:00 AM	Celeste Hoitash		
LCS-100812 TCD-A	ASTM-D2504	LCS	R52766	10/8/2012 11:39:00 AM	Celeste Hoitash		
CRQL-100812 TCD-A	ASTM-D2504	CRQL	R52766	10/8/2012 11:57:00 AM	Celeste Hoitash		
1209801-028B	ASTM-D2504	SAMP	R52766	10/8/2012 12:18:00 PM	Celeste Hoitash		
1209801-029B	ASTM-D2504	SAMP	R52766	10/8/2012 12:40:00 PM	Celeste Hoitash		
1209801-030B	ASTM-D2504	SAMP	R52766	10/8/2012 1:00:00 PM	Celeste Hoitash		
1209801-031B	ASTM-D2504	SAMP	R52766	10/8/2012 1:15:00 PM	Celeste Hoitash		
1209801-032B	ASTM-D2504	SAMP	R52766	10/8/2012 1:44:00 PM	Celeste Hoitash		
1209801-033B	ASTM-D2504	SAMP	R52766	10/8/2012 2:27:00 PM	Celeste Hoitash		
1209801-034B	ASTM-D2504	SAMP	R52766	10/8/2012 2:43:00 PM	Celeste Hoitash		
1209801-035B	ASTM-D2504	SAMP	R52766	10/8/2012 2:59:00 PM	Celeste Hoitash		
1209801-036B	ASTM-D2504	SAMP	R52766	10/8/2012 3:36:00 PM	Celeste Hoitash		
1209801-037B	ASTM-D2504	SAMP	R52766	10/8/2012 3:53:00 PM	Celeste Hoitash		
1209801-037BDUP	ASTM-D2504	DUP	R52766	10/8/2012 4:08:00 PM	Celeste Hoitash		
CCV-100812 TCD-B	ASTM-D2504	CCV	R52766	10/8/2012 5:04:00 PM	Celeste Hoitash		
CRQL-100812 TCD-B	ASTM-D2504	CRQL	R52766	10/8/2012 5:21:00 PM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

12-Oct-12

RunNo 52766

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1036314	MBLK-100812 TCD-A	ASTM-D2504	MBLK	)\100812\100812	10/8/2012 10:37	1	R52766		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
1036315	CCV-100812 TCD-A	ASTM-D2504	CCV	)\100812\100812	10/8/2012 11:23	1	R52766		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.492	2.492		2.5	0	0	0.025	0.1	0	100%	85	115	0%	
Carbon Monoxide	A	% v/v	2.654	2.654		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Methane	A	% v/v	1.931	1.931		2	0	0	0.025	0.5	0	97%	85	115	0%	
Nitrogen	A	% v/v	2.789	2.789		2.5	0	0	0.025	0.1	0	112%	85	115	0%	
Oxygen	A	% v/v	2.595	2.595		2.5	0	0	0.025	0.1	0	104%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1036316	LCS-100812 TCD-A	ASTM-D2504	LCS	)\100812\100812	10/8/2012 11:39	1	R52766		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	2.474	2.474		2.5	0	2.492	0.025	0.1	0	99%	70	130	1%	
Carbon Monoxide	A	% v/v	2.65	2.65		2.5	0	2.654	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
1036329	CCV-100812 TCD-B	ASTM-D2504	CCV	)\100812\100812	10/8/2012 5:04:	1	R52766		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.477	2.477		2.5	0	0	0.025	0.1	0	99%	85	115	0%	
Carbon Monoxide	A	% v/v	2.639	2.639		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Methane	A	% v/v	1.918	1.918		2	0	0	0.025	0.5	0	96%	85	115	0%	
Nitrogen	A	% v/v	2.712	2.712		2.5	0	0	0.025	0.1	0	108%	85	115	0%	
Oxygen	A	% v/v	2.563	2.563		2.5	0	0	0.025	0.1	0	103%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1036330	CRQL-100812 TCD-B	ASTM-D2504	CRQL	)\100812\100812	10/8/2012 5:21:	1	R52766		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.282	0.282		0.3	0	0	0.025	0.1	0	94%	80	120	0%	
Carbon Monoxide	A	% v/v	0.136	0.136		0.14	0	0	0.025	0.1	0	97%	80	120	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	80	120	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	80	120	0%	U
Methane	A	% v/v	0.079	0.079		0.09	0	0	0.025	0.5	0	88%	80	120	0%	
Nitrogen	A	% v/v	1.362	1.362		1.39	0	0	0.025	0.1	0	98%	80	120	0%	
Oxygen	A	% v/v	0.075	0.075		0.08	0	0	0.025	0.1	0	94%	80	120	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\100812\10081202.D Vial: 1
Acq On : 8 Oct 2012 11:23 am Operator:
Sample : CCV-100812 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

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

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.595	-3.8	0	-0.01
2	Nitrogen	2.500	2.789	-11.6	0	-0.02
3	Carbon Monoxide	2.500	2.654	-6.2	0	-0.03
4	Methane	2.000	1.931	3.4	0	-0.03
5	Carbon dioxide	2.500	2.492	0.3	0	-0.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
10081202.D 062512.M Tue Oct 09 09:41:13 2012

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\100812\10081202.D              Vial: 1
Acq On    :  8 Oct 2012  11:23 am                    Operator:
Sample    : CCV-100812 TCD-A                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

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

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

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\100812\10081202.D Vial: 1
Acq On : 8 Oct 2012 11:23 am Operator:
Sample : CCV-100812 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 8 11:12 2012 Quant Results File: 062512.RES

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

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.11	388767	2.595 % v/v
2)	Nitrogen	2.29	485199	2.789 % v/v
3)	Carbon Monoxide	2.97	432180	2.654 % v/v
4)	Methane	5.59	276704	1.931 % v/v
5)	Carbon dioxide	9.15	515795	2.492 % v/v

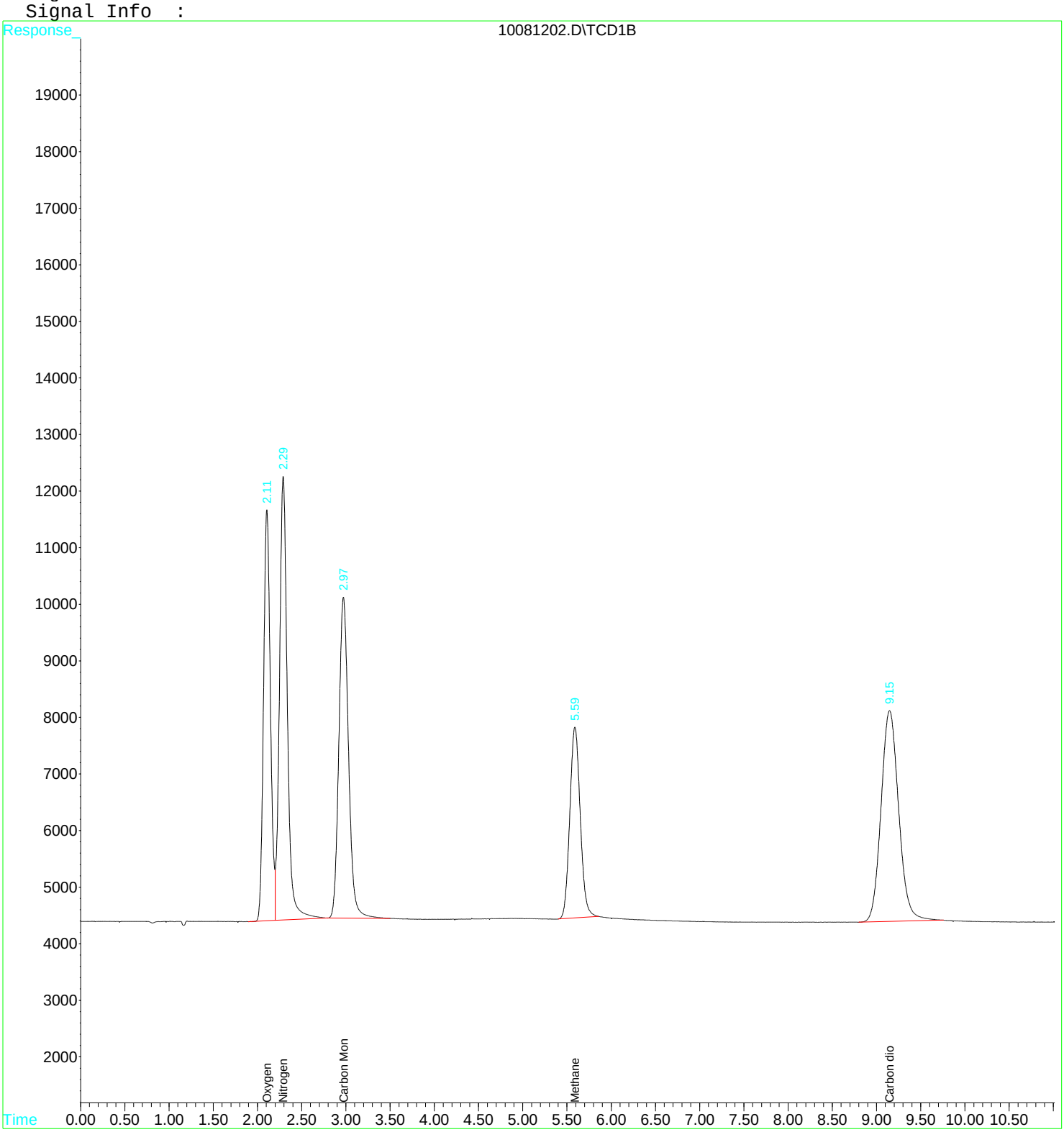
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\100812\10081202.D Vial: 1
Acq On : 8 Oct 2012 11:23 am Operator:
Sample : CCV-100812 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 8 11:12 2012 Quant Results File: 062512.RES

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

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\100812\10081216.D Vial: 1
Acq On : 8 Oct 2012 5:04 pm Operator:
Sample : CCV-100812 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

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

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.563	-2.5	0	-0.02
2	Nitrogen	2.500	2.712	-8.5	0	-0.02
3	Carbon Monoxide	2.500	2.639	-5.6	0	-0.03
4	Methane	2.000	1.918	4.1	0	-0.03
5	Carbon dioxide	2.500	2.477	0.9	0	-0.05

(#) = Out of Range SPCC's out = 0 CCC's out = 0
10081216.D 062512.M Tue Oct 09 09:41:06 2012

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\100812\10081216.D              Vial: 1
Acq On    :  8 Oct 2012   5:04 pm                    Operator:
Sample    : CCV-100812 TCD-B                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

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

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

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\100812\10081216.D Vial: 1
Acq On : 8 Oct 2012 5:04 pm Operator:
Sample : CCV-100812 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 8 16:20 2012 Quant Results File: 062512.RES

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

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.10	384071	2.563 % v/v
2)	Nitrogen	2.29	471694	2.712 % v/v
3)	Carbon Monoxide	2.97	429709	2.639 % v/v
4)	Methane	5.59	274935	1.918 % v/v
5)	Carbon dioxide	9.14	512822	2.477 % v/v

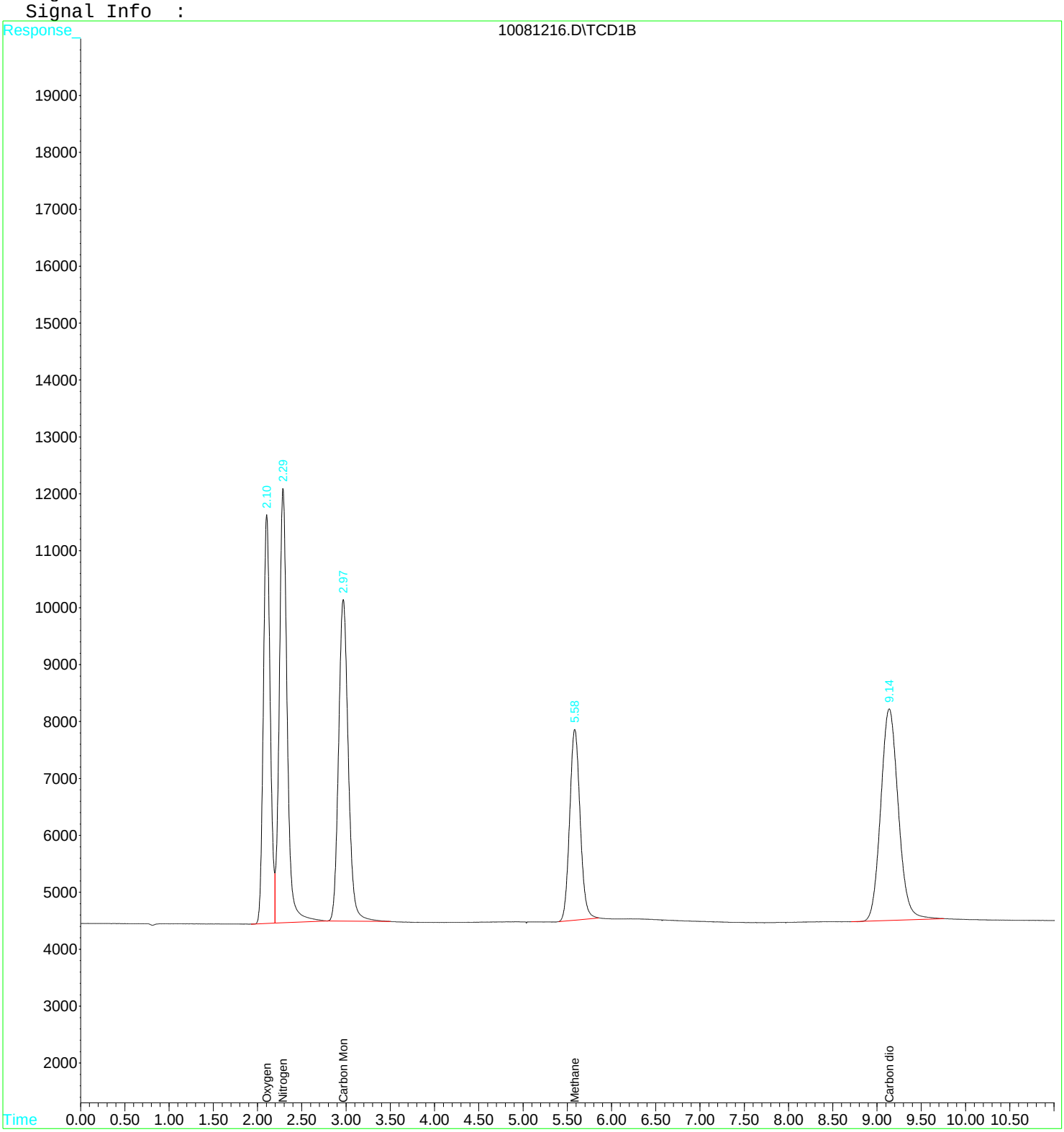
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\100812\10081216.D Vial: 1
Acq On : 8 Oct 2012 5:04 pm Operator:
Sample : CCV-100812 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 8 16:20 2012 Quant Results File: 062512.RES

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

Volume Inj. :
Signal Phase :
Signal Info :



RTI Laboratories

Run ID: GC-TCD 1_121009A **Run No.:** 52806

Analytical Run Date: 10/9/2012 **InstrumentID:** GC-TCD 1

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

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

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

Run Comments: ch rev 10/11/12/pr msb 10/10/12

SampID	TestCode	SampType	Batch ID	Analysis Date/Time	QA By	Q	Comments
MBLK-100912 TCD-A	ASTM-D2504	MBLK	R52806	10/9/2012 9:34:00 AM	Celeste Hoitash		
CCV-100912 TCD-A	ASTM-D2504	CCV	R52806	10/9/2012 10:06:00 AM	Celeste Hoitash		
LCS-100912 TCD-A	ASTM-D2504	LCS	R52806	10/9/2012 10:22:00 AM	Celeste Hoitash		
CRQL-100912 TCD-A	ASTM-D2504	CRQL	R52806	10/9/2012 10:40:00 AM	Celeste Hoitash		
1209801-038B	ASTM-D2504	SAMP	R52806	10/9/2012 10:56:00 AM	Celeste Hoitash		
1209801-039B	ASTM-D2504	SAMP	R52806	10/9/2012 11:12:00 AM	Celeste Hoitash		
1209801-040B	ASTM-D2504	SAMP	R52806	10/9/2012 11:26:00 AM	Celeste Hoitash		
1209801-041B	ASTM-D2504	SAMP	R52806	10/9/2012 11:41:00 AM	Celeste Hoitash		
1209801-042B	ASTM-D2504	SAMP	R52806	10/9/2012 11:56:00 AM	Celeste Hoitash		
1209801-043B	ASTM-D2504	SAMP	R52806	10/9/2012 12:25:00 PM	Celeste Hoitash		
1209801-044B	ASTM-D2504	SAMP	R52806	10/9/2012 12:51:00 PM	Celeste Hoitash		
1209801-045B	ASTM-D2504	SAMP	R52806	10/9/2012 1:06:00 PM	Celeste Hoitash		
1209801-046B	ASTM-D2504	SAMP	R52806	10/9/2012 1:21:00 PM	Celeste Hoitash		
1209801-047B	ASTM-D2504	SAMP	R52806	10/9/2012 1:51:00 PM	Celeste Hoitash		
1209801-047BDUP	ASTM-D2504	DUP	R52806	10/9/2012 2:05:00 PM	Celeste Hoitash		
CCV-100912 TCD-B	ASTM-D2504	CCV	R52806	10/9/2012 2:39:00 PM	Celeste Hoitash		
1209801-048B	ASTM-D2504	SAMP	R52806	10/9/2012 3:02:00 PM	Celeste Hoitash		
1209801-049B	ASTM-D2504	SAMP	R52806	10/9/2012 3:17:00 PM	Celeste Hoitash		
1209801-050B	ASTM-D2504	SAMP	R52806	10/9/2012 3:47:00 PM	Celeste Hoitash		
1209801-051B	ASTM-D2504	SAMP	R52806	10/9/2012 4:03:00 PM	Celeste Hoitash		
1209801-052B	ASTM-D2504	SAMP	R52806	10/9/2012 4:18:00 PM	Celeste Hoitash		
1209801-053B	ASTM-D2504	SAMP	R52806	10/9/2012 4:33:00 PM	Celeste Hoitash		
1209801-054B	ASTM-D2504	SAMP	R52806	10/9/2012 4:47:00 PM	Celeste Hoitash		
1209801-055B	ASTM-D2504	SAMP	R52806	10/9/2012 5:02:00 PM	Celeste Hoitash		
1209801-056B	ASTM-D2504	SAMP	R52806	10/9/2012 5:18:00 PM	Celeste Hoitash		
1209801-057B	ASTM-D2504	SAMP	R52806	10/9/2012 5:33:00 PM	Celeste Hoitash		
1209801-057BDUP	ASTM-D2504	DUP	R52806	10/9/2012 5:47:00 PM	Celeste Hoitash		
CCV-100912 TCD-C	ASTM-D2504	CCV	R52806	10/9/2012 6:19:00 PM	Celeste Hoitash		
CRQL-100912 TCD-B	ASTM-D2504	CRQL	R52806	10/9/2012 6:35:00 PM	Celeste Hoitash		

RTI Laboratories

ANALYTICAL RUN Summary

12-Oct-12

RunNo 52806

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1037164	MBLK-100912 TCD-A	ASTM-D2504	MBLK	)\100912\100912	10/9/2012 9:34:	1	R52806		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
1037165	CCV-100912 TCD-A	ASTM-D2504	CCV	)\100912\100912	10/9/2012 10:06	1	R52806		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.51	2.51		2.5	0	0	0.025	0.1	0	100%	85	115	0%	
Carbon Monoxide	A	% v/v	2.627	2.627		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Methane	A	% v/v	2.024	2.024		2	0	0	0.025	0.5	0	101%	85	115	0%	
Nitrogen	A	% v/v	2.67	2.67		2.5	0	0	0.025	0.1	0	107%	85	115	0%	
Oxygen	A	% v/v	2.544	2.544		2.5	0	0	0.025	0.1	0	102%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1037166	LCS-100912 TCD-A	ASTM-D2504	LCS	)\100912\100912	10/9/2012 10:22	1	R52806		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	2.51	2.51		2.5	0	2.51	0.025	0.1	0	100%	70	130	0%	
Carbon Monoxide	A	% v/v	2.633	2.633		2.5	0	2.627	0.025	0.1	0	105%	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
1037179	CCV-100912 TCD-B	ASTM-D2504	CCV	)\100912\100912	10/9/2012 2:39:	1	R52806		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.464	2.464		2.5	0	0	0.025	0.1	0	99%	85	115	0%	
Carbon Monoxide	A	% v/v	2.628	2.628		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Methane	A	% v/v	1.937	1.937		2	0	0	0.025	0.5	0	97%	85	115	0%	
Nitrogen	A	% v/v	2.719	2.719		2.5	0	0	0.025	0.1	0	109%	85	115	0%	
Oxygen	A	% v/v	2.561	2.561		2.5	0	0	0.025	0.1	0	102%	85	115	0%	

Seq No	Sample ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
1037180	1209801-048B (Container-01 of 01)	ASTM-D2504	SAMP	)\100912\100912	10/9/2012 3:02:	1	R52806		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.159	0.159		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	79.745	79.745		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	% v/v	21.405	21.405		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
1037181	1209801-049B (Container-01 of 01)	ASTM-D2504	SAMP	)\100912\100912	10/9/2012 3:17:	1	R52806		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.062	0.062		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	78.875	78.875		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
1037189	1209801-057B (Container-01 of 01)	ASTM-D2504	SAMP	)\100912\100912	10/9/2012 5:33:	1	R52806		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	0.553	0.553		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	80.136	80.136		0	0	0	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	% v/v	19.189	19.189		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
1037190	1209801-057BDUP	ASTM-D2504	DUP	)\100912\100912	10/9/2012 5:47:	1	R52806		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	0.557	0.557		0	0	0.553	0.025	0.1	0	0%	0	0	1%	
Carbon Monoxide	A	% v/v	0	0		0	0	0	0.025	0.1	0	0%	0	0	0%	U
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Methane	A	% v/v	0	0		0	0	0	0.025	0.5	0	0%	0	0	0%	U
Nitrogen	A	% v/v	79.996	79.996		0	0	80.136	0.025	0.1	0	0%	0	0	0%	
Oxygen	A	% v/v	19.25	19.25		0	0	19.189	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
1037191	CCV-100912 TCD-C	ASTM-D2504	CCV	)\100912\100912	10/9/2012 6:19:	1	R52806		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Carbon dioxide	A	% v/v	2.487	2.487		2.5	0	0	0.025	0.1	0	99%	85	115	0%	
Carbon Monoxide	A	% v/v	2.624	2.624		2.5	0	0	0.025	0.1	0	105%	85	115	0%	
Ethane	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Hydrogen	A	% v/v		0		0	0	0	0.025	0.5	0	0%	85	115	0%	U
Methane	A	% v/v	1.94	1.94		2	0	0	0.025	0.5	0	97%	85	115	0%	
Nitrogen	A	% v/v	2.642	2.642		2.5	0	0	0.025	0.1	0	106%	85	115	0%	
Oxygen	A	% v/v	2.52	2.52		2.5	0	0	0.025	0.1	0	101%	85	115	0%	

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\100912\10091202.D Vial: 1
Acq On : 9 Oct 2012 10:06 am Operator:
Sample : CCV-100912 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

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

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.544	-1.8	0	-0.02
2	Nitrogen	2.500	2.670	-6.8	0	-0.03
3	Carbon Monoxide	2.500	2.627	-5.1	0	-0.04
4	Methane	2.000	2.024	-1.2	0	-0.04
5	Carbon dioxide	2.500	2.510	-0.4	0	-0.06

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\100912\10091202.D              Vial: 1
Acq On    :  9 Oct 2012  10:06 am                    Operator:
Sample    : CCV-100912 TCD-A                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

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

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

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\100912\10091202.D Vial: 1
Acq On : 9 Oct 2012 10:06 am Operator:
Sample : CCV-100912 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 9 9:39 2012 Quant Results File: 062512.RES

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

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.10	381149	2.544 % v/v
2)	Nitrogen	2.28	464440	2.670 % v/v
3)	Carbon Monoxide	2.96	427838	2.627 % v/v
4)	Methane	5.58	290117	2.024 % v/v
5)	Carbon dioxide	9.13	519517	2.510 % v/v

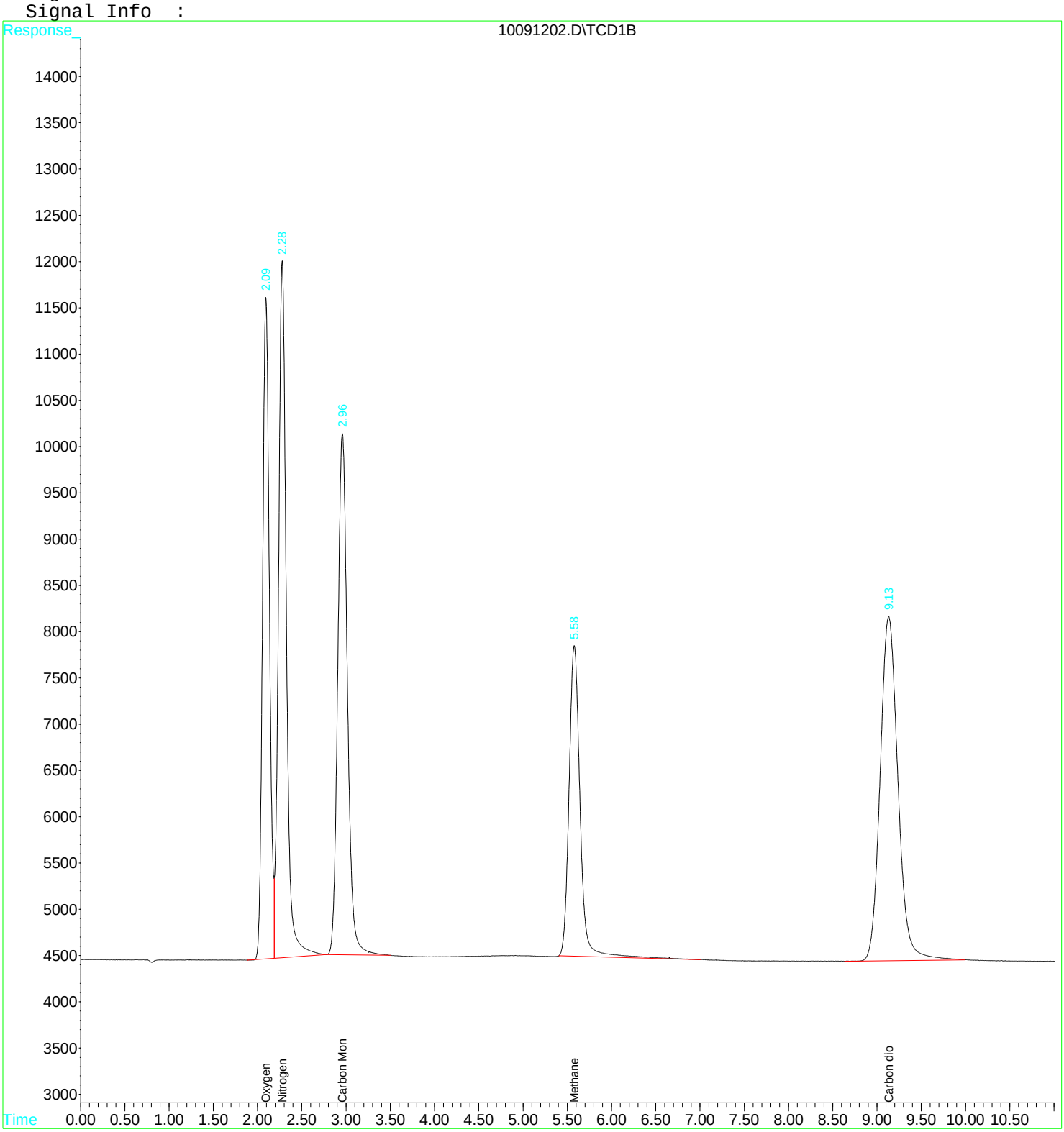
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\100912\10091202.D Vial: 1
Acq On : 9 Oct 2012 10:06 am Operator:
Sample : CCV-100912 TCD-A Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 9 9:39 2012 Quant Results File: 062512.RES

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

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\100912\10091216.D Vial: 1
Acq On : 9 Oct 2012 2:39 pm Operator:
Sample : CCV-100912 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

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

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.561	-2.4	0	-0.02
2	Nitrogen	2.500	2.719	-8.8	0	-0.02
3	Carbon Monoxide	2.500	2.628	-5.1	0	-0.03
4	Methane	2.000	1.937	3.1	0	-0.04
5	Carbon dioxide	2.500	2.464	1.4	0	-0.06

(#) = Out of Range SPCC's out = 0 CCC's out = 0
10091216.D 062512.M Wed Oct 10 09:51:33 2012

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\100912\10091216.D              Vial: 1
Acq On    :  9 Oct 2012   2:39 pm                    Operator:
Sample    : CCV-100912 TCD-B                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

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

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

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\100912\10091216.D Vial: 1
Acq On : 9 Oct 2012 2:39 pm Operator:
Sample : CCV-100912 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 9 16:49 2012 Quant Results File: 062512.RES

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

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.10	383684	2.561 % v/v
2)	Nitrogen	2.29	472891	2.719 % v/v
3)	Carbon Monoxide	2.97	427892	2.628 % v/v
4)	Methane	5.58	277591	1.937 % v/v
5)	Carbon dioxide	9.13	510115	2.464 % v/v

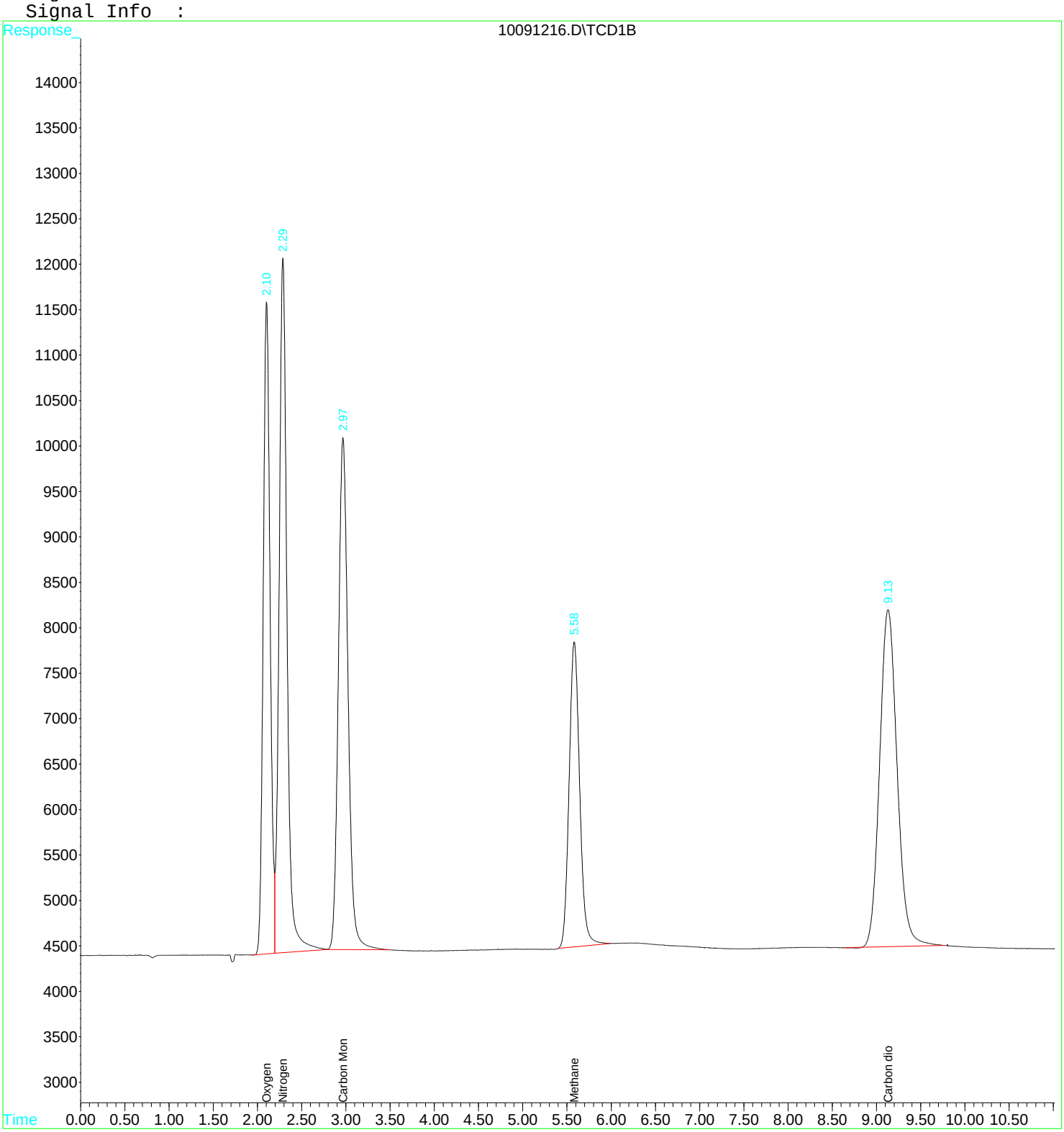
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\100912\10091216.D Vial: 1
Acq On : 9 Oct 2012 2:39 pm Operator:
Sample : CCV-100912 TCD-B Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 9 16:49 2012 Quant Results File: 062512.RES

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

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\100912\10091228.D Vial: 1
Acq On : 9 Oct 2012 6:19 pm Operator:
Sample : CCV-100912 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E

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

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.520	-0.8	0	-0.01
2	Nitrogen	2.500	2.642	-5.7	0	-0.02
3	Carbon Monoxide	2.500	2.624	-5.0	0	-0.03
4	Methane	2.000	1.940	3.0	0	-0.03
5	Carbon dioxide	2.500	2.487	0.5	0	-0.05

Evaluate Continuing Calibration Report - Not Founds

```
Data File : C:\HPCHEM\TCD\100912\10091228.D              Vial: 1
Acq On    :  9 Oct 2012   6:19 pm                    Operator:
Sample    : CCV-100912 TCD-C                         Inst    : GC/TCD
Misc      : CCV  ASTM-D2504                          Multiplr: 1.00
IntFile   : AUTOINT1.E

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

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

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\100912\10091228.D Vial: 1
Acq On : 9 Oct 2012 6:19 pm Operator:
Sample : CCV-100912 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Oct 9 18:02 2012 Quant Results File: 062512.RES

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

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1)	Oxygen	2.11	377516	2.520 % v/v
2)	Nitrogen	2.29	459562	2.642 % v/v
3)	Carbon Monoxide	2.97	427317	2.624 % v/v
4)	Methane	5.59	278012	1.940 % v/v
5)	Carbon dioxide	9.14	514925	2.487 % v/v

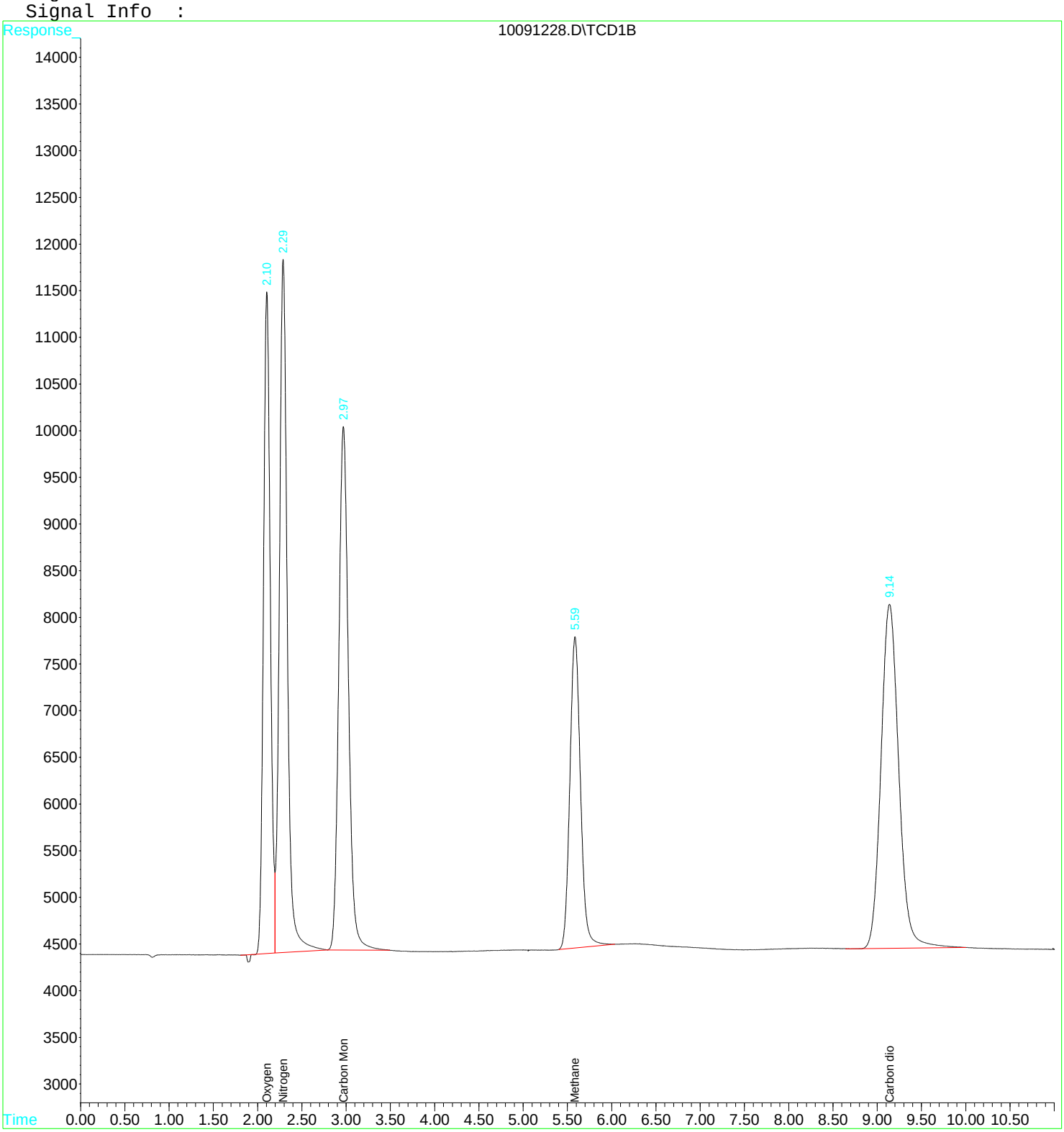
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\100912\10091228.D Vial: 1
Acq On : 9 Oct 2012 6:19 pm Operator:
Sample : CCV-100912 TCD-C Inst : GC/TCD
Misc : CCV ASTM-D2504 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Oct 9 18:02 2012 Quant Results File: 062512.RES

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

Volume Inj. :
Signal Phase :
Signal Info :



Response Factor Report GC/TCD

Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Tue Jun 26 10:08:21 2012

Calibration Files
1 =06251202.D 2 =06251203.D 3 =06251204.D
4 =06251205.D 5 =06251206.D 6 =06251207.D

	Compound	1	2	3	4	5	6	Avg		%RSD
1)	Oxygen	1.438	1.499	1.479	1.481	1.430	1.632	1.498	E5	4.54
2)	Nitrogen	1.776	1.733	1.737	1.720	1.663	1.790	1.739	E5	2.40
3)	Carbon Monoxide	1.695	1.642	1.639	1.623	1.559	1.612	1.628	E5	2.72
4)	Methane	1.499	1.452	1.448	1.443	1.416	1.341	1.433	E5	3.67
5)	Carbon dioxide	2.156	2.072	2.078	2.053	1.983	2.079	2.070	E5	2.68

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

062512.M Tue Jun 26 10:10:16 2012

Compound List Report GC/TCD

Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Tue Jun 26 10:08:21 2012
Response via : Initial Calibration
Total Cpnds : 5

PK#	Type	Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1		Oxygen	2.21	1.000	A	A	R
2		Nitrogen	2.38	1.000	A	A	R
3		Carbon Monoxide	3.13	1.000	A	A	R
4		Methane	5.75	1.000	A	A	R
5		Carbon dioxide	9.41	1.000	A	A	R

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

062512.M Tue Jun 26 10:10:22 2012

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\TCD\062512\06251210.D Vial: 1
Acq On : 25 Jun 2012 5:24 pm Operator:
Sample : ICV STD 1-2 Inst : GC/TCD
Misc : ICV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Mon Jun 25 17:07:33 2012
Response via : Multiple Level Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Oxygen	2.500	2.613	-4.5	0	0.00
2	Nitrogen	2.500	2.746	-9.8	0	0.02
3	Carbon Monoxide	2.500	2.664	-6.6	0	-0.01
4	Methane	2.000	2.139	-6.9	0	-0.01
5	Carbon dioxide	2.500	2.623	-4.9	0	-0.02

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\062512\06251210.D Vial: 1
Acq On : 25 Jun 2012 5:24 pm Operator:
Sample : ICV STD 1-2 Inst : GC/TCD
Misc : ICV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 25 16:36 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Mon Jun 25 17:07:33 2012
Response via : Initial Calibration
DataAcq Meth : TCD.M

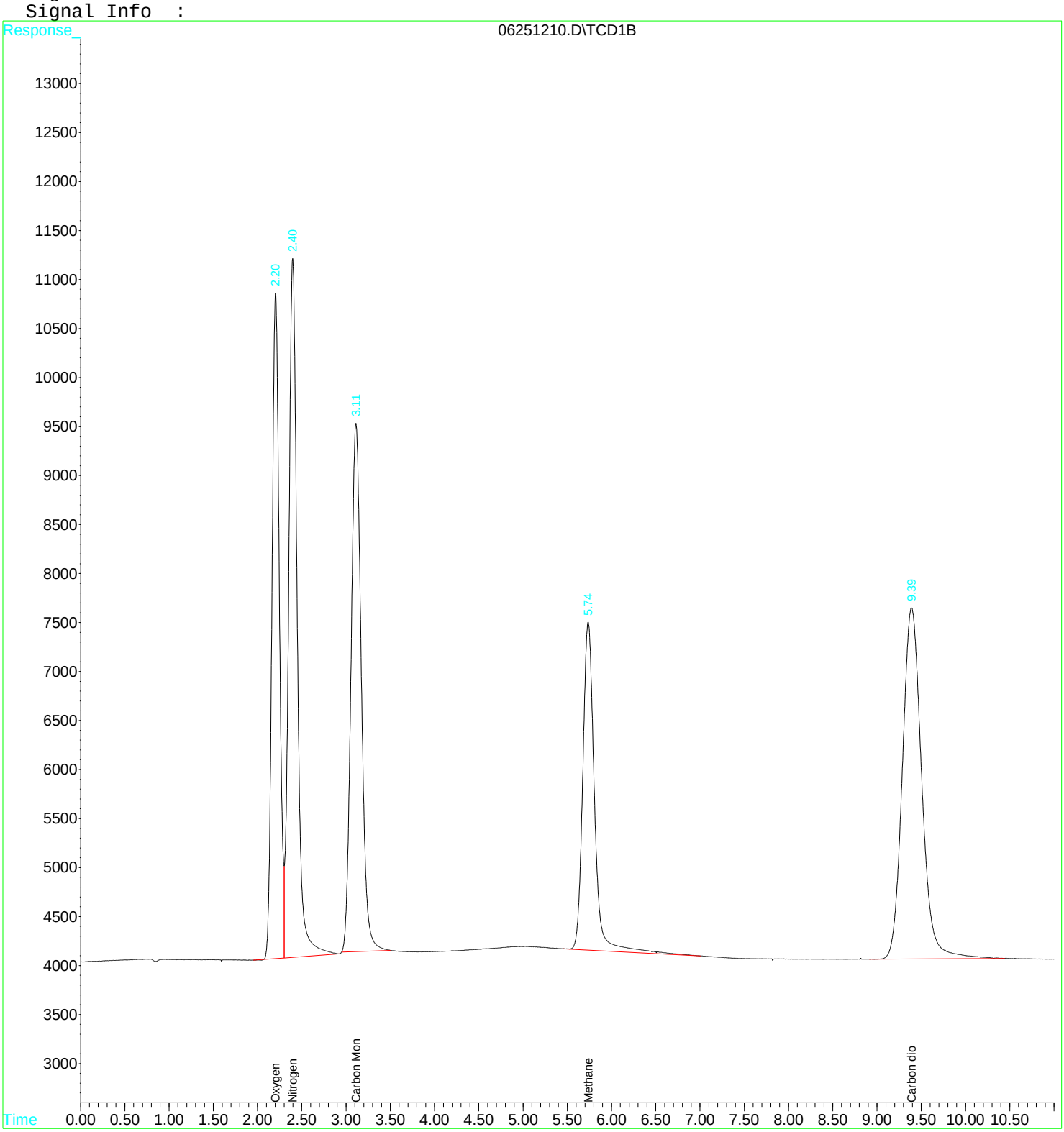
Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1)	Oxygen	2.20	391497	2.613	%
2)	Nitrogen	2.40	477577	2.746	%
3)	Carbon Monoxide	3.11	433851	2.664	%
4)	Methane	5.74	306500	2.139	%
5)	Carbon dioxide	9.39	542989	2.623	%

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\TCD\062512\06251210.D Vial: 1
Acq On : 25 Jun 2012 5:24 pm Operator:
Sample : ICV STD 1-2 Inst : GC/TCD
Misc : ICV ASTM-D2504 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Jun 25 16:36 2012 Quant Results File: 062512.RES

Quant Method : C:\HPCHEM\2\METHODS\062512.M (Chemstation Integrator)
Title :
Last Update : Mon Jun 25 17:07:33 2012
Response via : Multiple Level Calibration
DataAcq Meth : TCD.M

Volume Inj. :
Signal Phase :
Signal Info :